

PRODUCT SHORTFORM

PSF 3.3



Contents

Product Short Form

1		Over 50 years of innovations – worldwide	1
2		The world of spring clamp termination systems	2
3		WAGO-I/O-SYSTEM Flexible – Future-proof	3
4		Rail-mounted terminal blocks	4
5		Automation technology Interface and electronic modules	5
6		Connectors MULTI CONNECTION SYSTEM	6
7		PCB terminal blocks	7
8		Installation technology Push-wire connectors for junction boxes, lighting connectors WINSTA® connectors for building installation	8
9		Accessories	9
10		Index Technical explanations Addresses	10

Over 50 Years of

1951



► The first WAGO spring clamp:
patent No. 838778

1974



► WAGO push-wire connectors
for junction boxes. The original!

1977

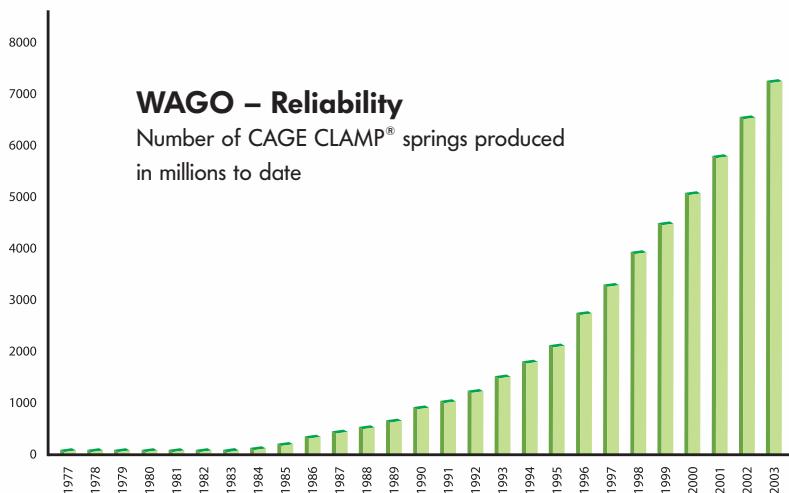


► Terminal blocks 0.08 mm² – 35 mm²
with CAGE CLAMP®

1995



► WAGO → I/O → SYSTEM



Innovations – Worldwide

The safe functioning of many devices, machines and installations depends on the absolute reliability of our products. As a result, the availability of the devices and machines produced by the WAGO customers can be increased and the image of their companies enhanced. The WAGO products can be found everywhere where electrical conductors need to be connected permanently and safely and in automation systems in different industrial applications.

More than 4600 employees worldwide are at the service of the customer, in development, production and marketing.

Global availability of our products and services is guaranteed by

- 9 main production sites
- 27 WAGO companies
- 31 WAGO representations

Main production sites



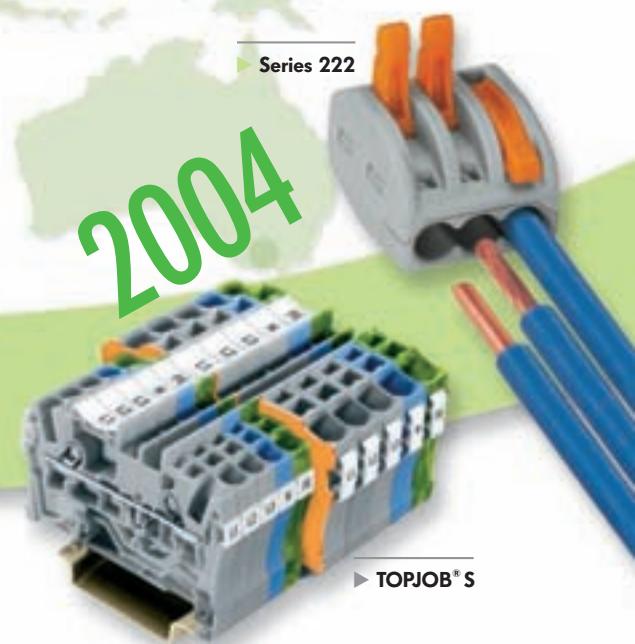
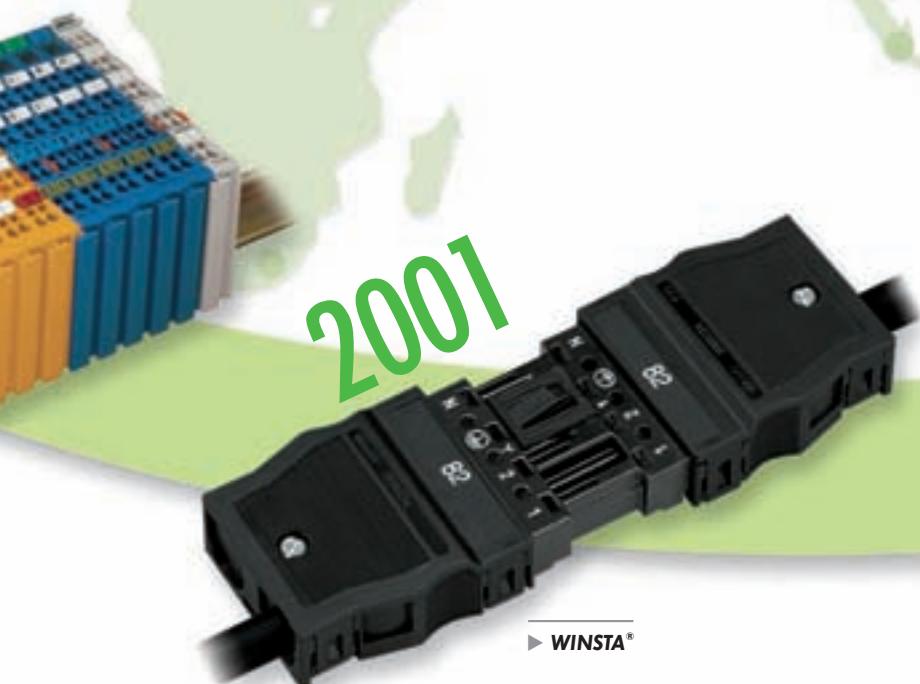
► Minden/Germany
Headquarters, development, production



► Sondershausen/Germany
Logistics centre, production



► Domdidier/Switzerland
Production



The Wide Variety of Applications...



...Years of Experience in Worldwide Applications



CCA GL LR NV

BV GL LR

In shipbuilding, on and offshore installations

■ Electrical installations in ships were among the first applications for WAGO rail-mounted terminal blocks with CAGE CLAMP® connection. Vibrations are always present on ships. Time and again, these vibrations lead to loose connections in screw clamp terminal blocks since screws tend to untighten. This then requires time and cost intensive routine maintenance work. The CAGE CLAMP® connection technology makes this work redundant. The WAGO → I/O → SYSTEM as well as WAGO terminal blocks and connectors are used successfully worldwide in the following: Sailing and motor boats, luxury liners, container and special vessels, high speed ferries, military catamarans, loading and container terminals, oil and gas platforms as well as different offshore applications. ■

In building installation

■ In 1974, WAGO revolutionised the wiring of distribution boxes in building installation with the WAGO push-wire connectors for junction boxes. Rail-mounted and installation multi-level terminal blocks with CAGE CLAMP® connection, the WINSTA connector system and TOPJOB®S rail-mounted terminal blocks with CAGE CLAMP®S connection are other groundbreaking WAGO products that contribute to making building installation more economical and to increasing long-term durability of the installations. Special components, including radio modules that don't require an external power supply, add to the WAGO → I/O → SYSTEM and allow flexible and future-oriented decentralised building automation via LONWORKS or ETHERNET. The hardware is supported by intelligent software solutions to a universal programming environment in accordance with IEC 61131-3. ■

In production and process automation

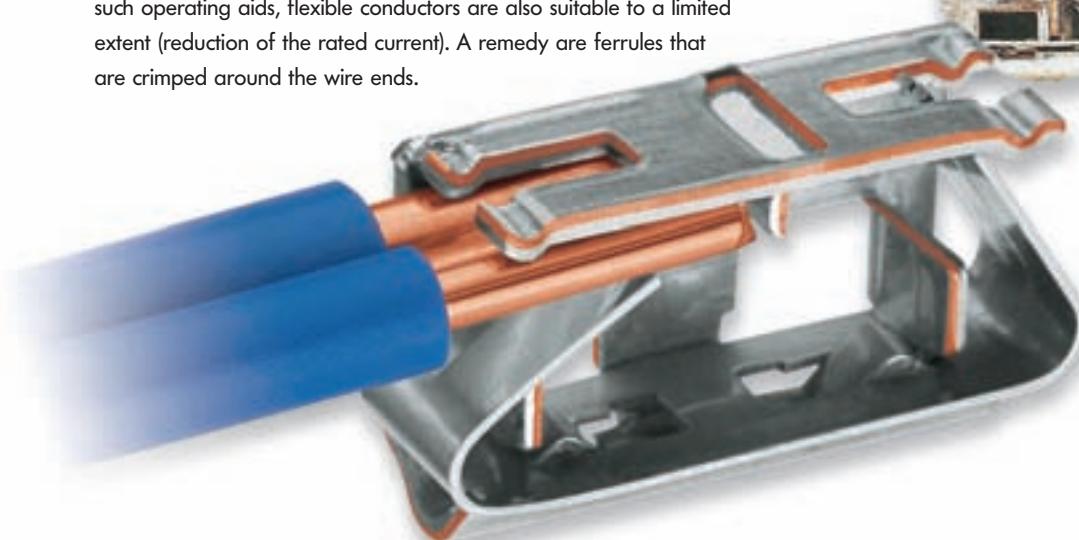
■ Ex applications require special components. In addition to WAGO Ex rail-mounted terminal blocks with IECEx and ATEX 100a approvals, the WAGO → I/O → SYSTEM is also suitable for use in hazardous areas. For a long time, standard components have already been used in Zone 2 applications. Using intrinsic I/O modules it is possible to directly connect sensors and actuators from Zones 1 and 0 to Zone 2. The PROFIsafe modules are ideal for safety applications, which represent 10 – 20%, up to category 4 in accordance with EN 945-1 or SIL 3 according to IEC 61508 and AK 6 (DIN V 19250). Standard, Ex and PROFIsafe components can be combined within one single fieldbus node. This means flexibility and economy. ■

WAGO – The World of Spring

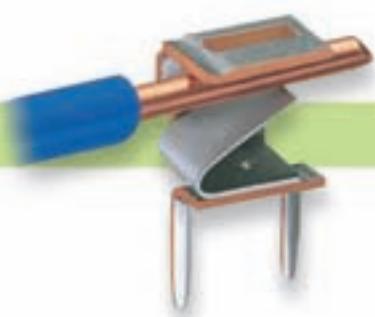
Since the foundation of the company in 1951, terminal blocks and connectors equipped with innovative spring clamp termination technology have been manufactured by WAGO. Many of the spring clamp termination systems that have been developed and patented by WAGO are now used worldwide, for example, in rail-mounted terminal blocks, in PCB terminal blocks, connectors, electronic modules, in the WAGO-I/O-System and other products as well.

LEAF SPRING CONNECTION

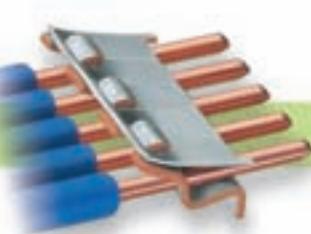
- ▶ In the first instance, clamping systems with **leaf springs** are appropriate for **push-wire connections** using solid conductors. You have to distinguish between systems with or without operating lever/push button, screwdriver. The latter systems are mere **push-wire connection** systems which are used exclusively for the connection of solid conductors with cross sections from 0.5 mm^2 to 4 mm^2 . When using such operating aids, flexible conductors are also suitable to a limited extent (reduction of the rated current). A remedy are ferrules that are crimped around the wire ends.



WAGO Connection Technologies for Countless Products and Applications



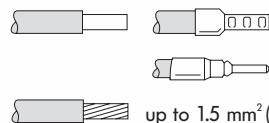
Leaf spring connection
up to 2.5 mm^2



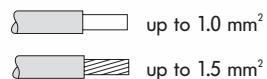
Push-wire connection
up to 4 mm^2



IDC connection



up to 1.5 mm^2 (with operating lever)



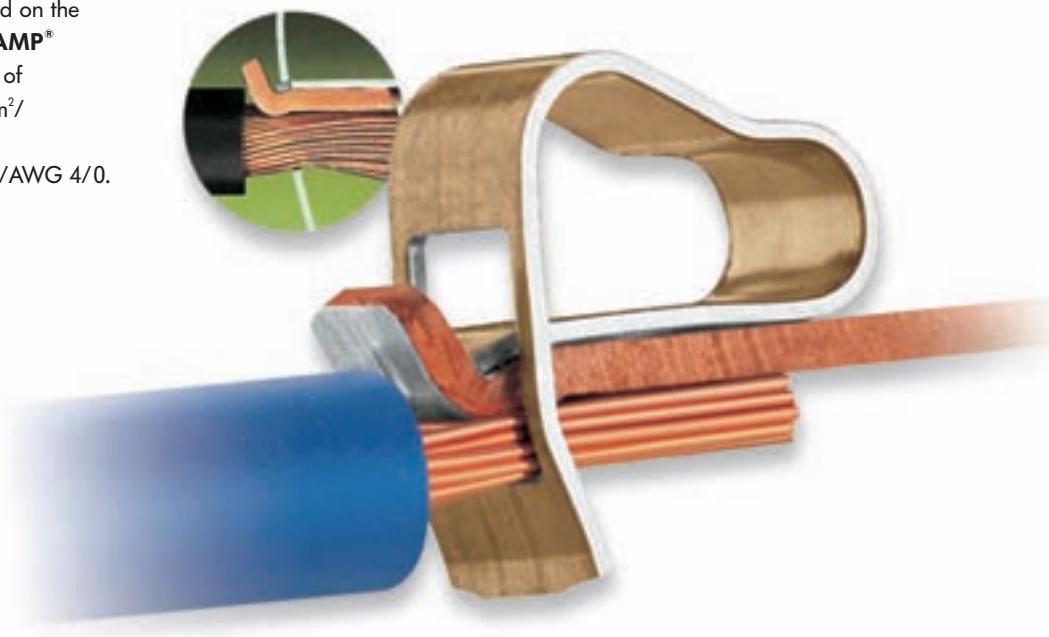
up to 1.0 mm^2

up to 1.5 mm^2

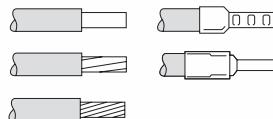
Clamp Termination Systems

CAGE CLAMP® CONNECTION

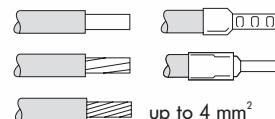
- ▶ Thousands of products and product variations from the WAGO range are based on the worldwide renowned **CAGE CLAMP® connection** suitable for all types of conductors ranging from 0.08 mm^2 /AWG 28 to 35 mm^2 /AWG 2, **POWER CLAMP** up to 95 mm^2 /AWG 4/0.



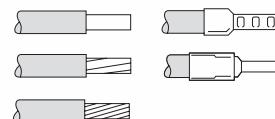
CAGE CLAMP®
up to 35 mm^2



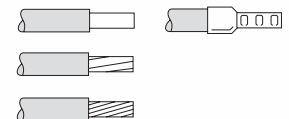
CAGE CLAMP® Compact
up to 2.5 mm^2 /AWG 12



CAGE CLAMP®S
up to 16 mm^2

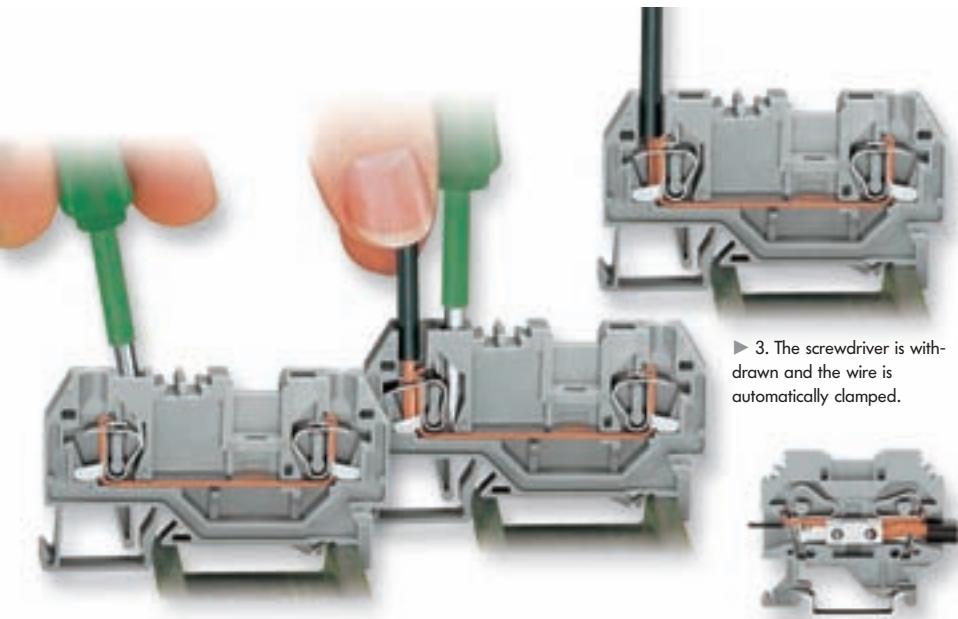


POWER CLAMP
up to 95 mm^2



The advantages of the CAGE CLAMP®

How is the operation of CAGE CLAMP® different from screw-clamp blocks?



► 1. The screwdriver is inserted with a rocking motion to the stop

► 2. The screwdriver is captivated, holding the CAGE CLAMP® open, while the wire is inserted.

► 3. The screwdriver is withdrawn and the wire is automatically clamped.



► Side entry: Operation of the CAGE CLAMP® from the top, wire entry from the side.

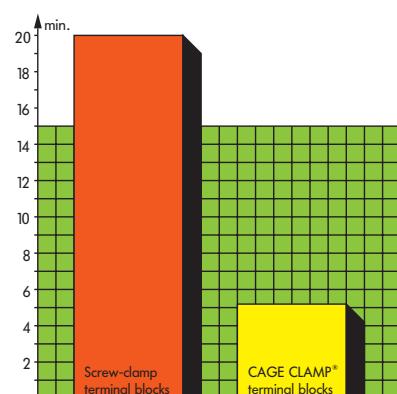
■ Screw connections are "operator-dependent". In other words, they require judgment on the part of the installer as to the tightness of the screw. This can be somewhat controlled in a factory setting with trained personnel, or with special torque screwdrivers. With field wiring, proper screw connections are more difficult to ensure. CAGE CLAMP®'s automatic clamping feature allows less skilled labor to make quality connections. A precise, uniform contact is made regardless of who makes the connection. CAGE CLAMP® requires no special tools and is operated with a standard straight-bladed screwdriver. Two styles of terminal blocks are available: side-entry and front-entry. ■

How does the wiring time for CAGE CLAMP® compare to screw-clamp blocks?

■ Public wiring competitions and major customer time studies have proven a reduction of wiring time by 75 % when comparing manual wiring of screw-type terminals with CAGE CLAMP® terminals. Even when powered screwdrivers are used for tightening the clamping screws, there is still a time savings advantage

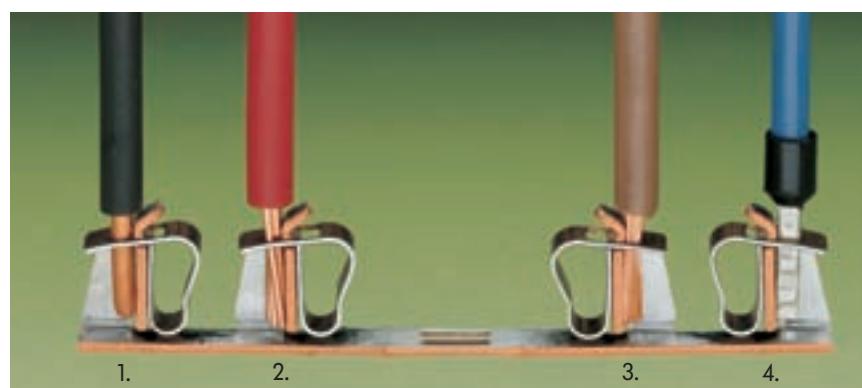
for CAGE CLAMP®. In cases where wire preparation such as crimps, ferrules or tinning can be eliminated, there are additional savings. ■

► Average wiring time for 100 connections each.



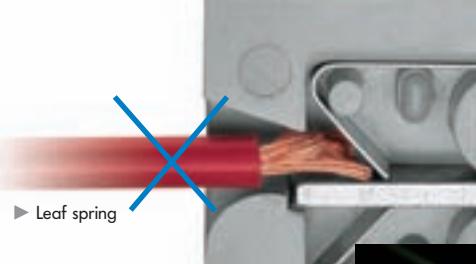
The CAGE CLAMP®

Suitable for all copper conductors – 1 conductor per clamping unit



■ A universal system: suitable for all copper conductors from AWG 26 (0.08 mm^2) up to AWG 2 (35 mm^2). Special conductor preparation not necessary – but possible. In many standards and specifications "1 conductor per clamping unit" is prescribed or recommended. ■

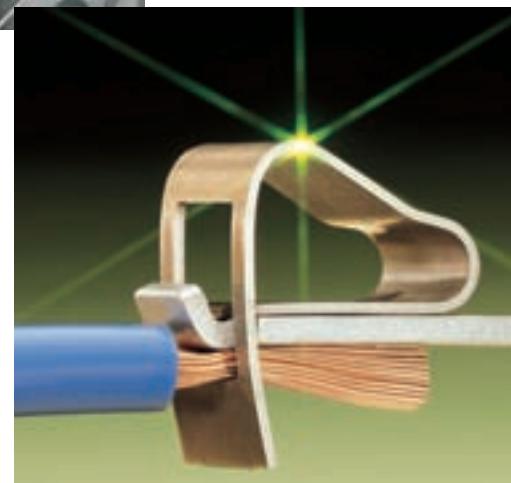
► Several clamping units per current bar but nevertheless "1 conductor per clamping unit"
 1. solid
 2. stranded
 3. flexible
 4. flexible with ferrule (gastight crimped)



What is CAGE CLAMP® and how is it different from other screwless systems?

■ CAGE CLAMP® is a unique, patented, stainless steel clamping mechanism designed to automatically connect solid or stranded wires. Various CAGE CLAMP® sizes are available to accommodate wire sizes from 0.08 mm^2 – 35 mm^2 . Other than stripping the wire, no special wire preparation such as crimps, ferrules or tinning is necessary. Most screwless systems

offered by other manufacturers are based on the leaf-spring principle. This type of connection is found in the back of many electrical outlets. Leaf-spring is only recommended for larger, solid wire since it has no sides to contain the strands and because of the sharp angle in which the wire is contacted. ■



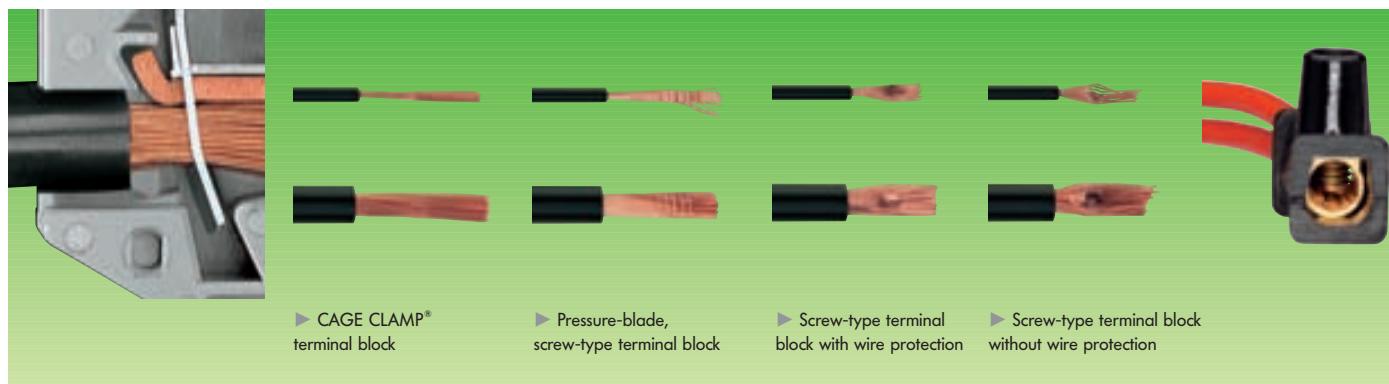
► The WAGO CAGE CLAMP®

How does the CAGE CLAMP® secure the wire without wire damage?

■ The CAGE CLAMP® is designed to give proportional clamping, dependent upon the wire size. The larger the wire, the higher the clamping force. The flat surface area of the CAGE CLAMP® coupled with the uniquely curved current bar provides a

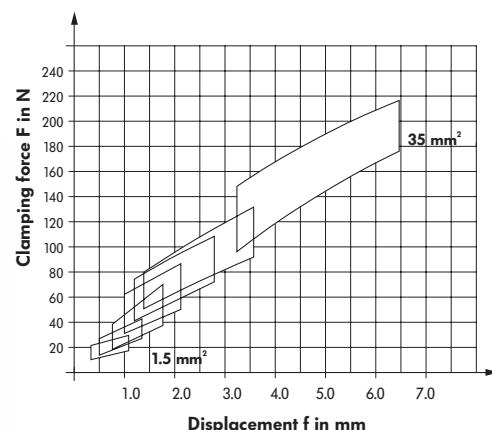
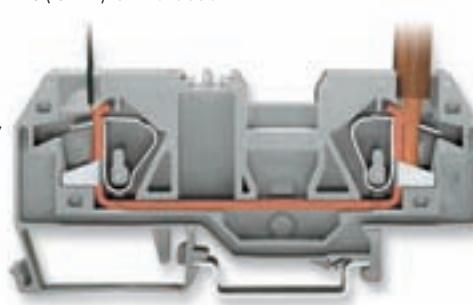
secure connection. Also, the angle in which the CAGE CLAMP® is positioned, increases the retention force when a pullout force is applied. Each of the photos below show an 0.18 mm^2 and 1.5 mm^2 wire that was connected to the terminal block indicated.

The tightening torque used for the screw-type terminal blocks was the torque specified by VDE 0609. In practical use this value varies and is dependent upon the operator, whereas, the CAGE CLAMP® connection is automatic and consistent everytime. ■



■ The clamping force adjusts automatically to the conductor cross section. The flat clamping face of the CAGE CLAMP® spring presses the conductor against the current bar without damage. Any deformation or movement of the conductor is compensated, thus eliminating the risk of a loose connection. ■

► An unlikely connection demonstrates the capability: a conductor of AWG 24 (0.2 mm^2) at the left and the nominal cross section of AWG 6 (16 mm^2) at the right in an AWG 6 (16 mm^2) terminal block.



What are the quality features of the CAGE CLAMP®?



■ One of the main quality criteria for electrical contacts are their long-term durability ensured by a gastight contact area. This is normally achieved through the conductor being embedded into the tin surface of the busbar. The contact area is hence protected permanently against corrosion.

Another significant factor that determines the quality of a terminal connection is contact pressure. The following example shows that CAGE CLAMP® connections provide a contact pressure in the same region as a properly tightened screw clamp connection:

Contact pressure P

$$P = \frac{\text{Force } F}{\text{Area } A} = \frac{550 \text{ N}}{4 \text{ mm}^2 \text{ (screw)}} = \frac{55 \text{ N}}{0.4 \text{ mm}^2} = 138 \text{ N/mm}^2 \text{ (CAGE CLAMP®)}$$

Moreover, CAGE CLAMP® connections are particularly reliable and are of the same quality as screw clamp connections that are re-tightened regularly. ■

Why is the CAGE CLAMP® connection resistant to corrosion?

- The contact materials used in WAGO terminal blocks and connectors are inherently corrosion resistant. The stainless-steel CAGE CLAMP® exerts a high specific pressure which embeds the conductors into the soft tin of the current bar. The resulting connection is "gas-tight", not allowing corrosive gases to penetrate and degrade it. ■



Why does CAGE CLAMP® perform well both in applications with low voltages (mV) and low currents (mA)?

- As long as the surfaces are clean and free of oxides at the time of wire insertion (low voltage signals can not "punch

through" oxidation), the gastight nature of CAGE CLAMP® will maintain the connection quality.

The CAGE CLAMP® system has also been used with excellent results for thermocouple connections. ■

Why is CAGE CLAMP® maintenance-free?

- Unlike most screw-type terminal blocks, CAGE CLAMP® connections do not require checking or retightening the loose connections resulting from vibration, temperature

cycling, settling strands, etc. The built-in reliability of CAGE CLAMP® can reduce downtime and service calls for the customer. Most service departments estimate that 35-

50 % of all service calls are the results of poor connections. Considering the high cost of service calls and the loss of production time, the savings can be significant. ■

What effect does high current or a short circuit have on CAGE CLAMP®?



■ VDE specifications limit the temperature rise of terminal blocks to 45 Kelvin under continuous load at nominal current. After a current load of 1.6 times the nominal current over a period of one hour, WAGO terminal blocks do not show any signs of damage. The short circuit test according to IEC 17B specifies that 120 A per square mm has to be applied for a period of one second. CAGE CLAMP® connections pass this test without damage or impairment of their function. The impractical test shown (a fused circuit would limit such an occurrence) demonstrates the contact capability of CAGE CLAMP®. The current through a 4 mm² terminal block is increased until the conductor glows red. The block remains undamaged. ■

Why is CAGE CLAMP® unaffected by shock and vibration?

■ The CAGE CLAMP® itself has very little mass in relation to the high force it produces. The way in which the CAGE CLAMP® is mounted on the current bar insures that a favorable division of masses (of current bar, conductor and CAGE CLAMP®) is obtained. These factors result in a connection which has high resistance to vibration and shock, without wire damage or measurable contact interruption. WAGO has tested CAGE CLAMP® for vibration up to 2000 Hz with accelera-

tions up to 20 G. Independent agencies have tested and passed CAGE CLAMP® for shock and vibration up to 2000 Hz with accelerations up to 109 G in each of three axes. CAGE CLAMP® also meets the vibration test requirements of VDE 0611 which incorporates a pull test while vibration is present.

The UL "waggle" test also puts a rotational force on the wire while a pull out force is applied. ■



How do the retention forces for CAGE CLAMP® compare to agency requirements?

Conductor cross section mm ²	Pull out forces according to IEC 947-7-1/EN 60947-7-1/ DIN VDE 0611, part 1		
	Pull out forces measured on CAGE CLAMP terminal blocks		
	Solid N	Flexible N	Stranded N
0.14	-	-	-
0.2	10	20	15
0.5	30	30	30
0.75	30	35	30
1.0	35	40	35
1.5	40	60	40
2.5	50	90	60
4	60	140	90
6	80	170	100
10	90	300	180
16	100	-	220
25	135	-	280
35	190	-	350
			400

■ Most agencies have minimum retention force requirements for both screw-type and screwless terminal blocks. As shown, the measured pull out values for CAGE CLAMP® meet and in most cases far exceed these values. ■

WAGO → I/O → SYSTEM

FIELDBUS INDEPENDENT

PROFIBUS

INTERBUS

ETHERNET TCP/IP

DeviceNet

CANopen

CAL

MODBUS

LONWORKS®

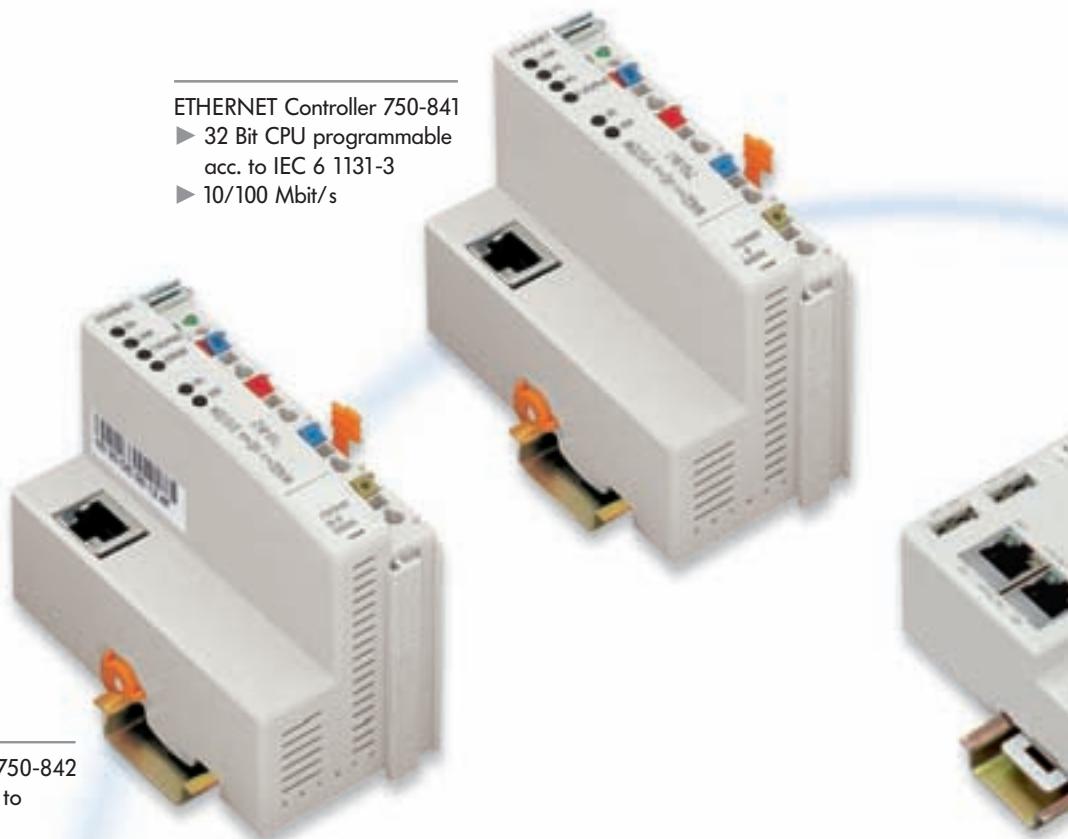
I/O-LIGHTBUS

Firewire

CC-Link

ETHERNET Controller 750-841

- ▶ 32 Bit CPU programmable acc. to IEC 6 1131-3
- ▶ 10/100 Mbit/s



ETHERNET Controller 750-842

- ▶ programmable acc. to IEC 6 1131-3
- ▶ 10 Mbit/s

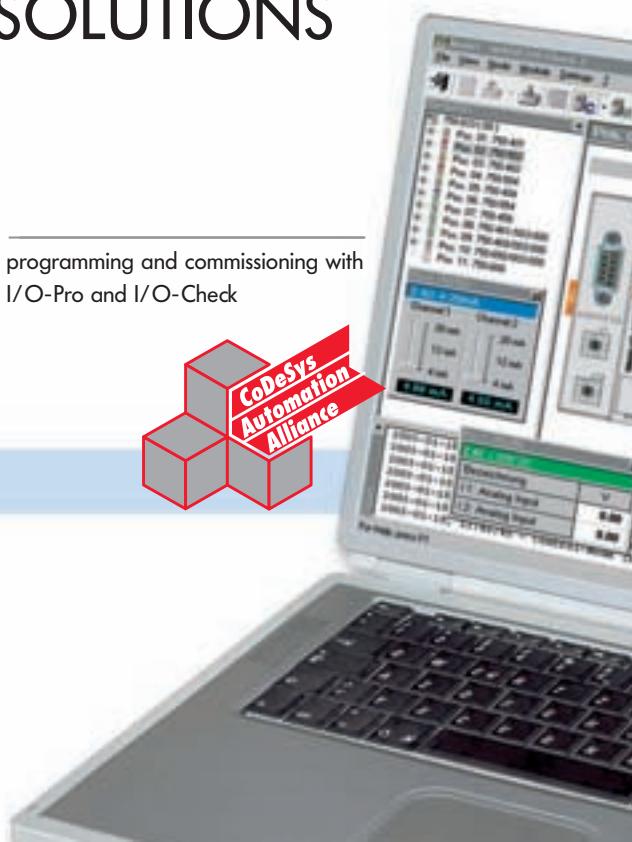
SCALABLE SOLUTIONS

ETHERNET coupler 750-341

- ▶ Modbus TCP
- ▶ 10/100 Mbit/s



programming and commissioning with I/O-Pro and I/O-Check

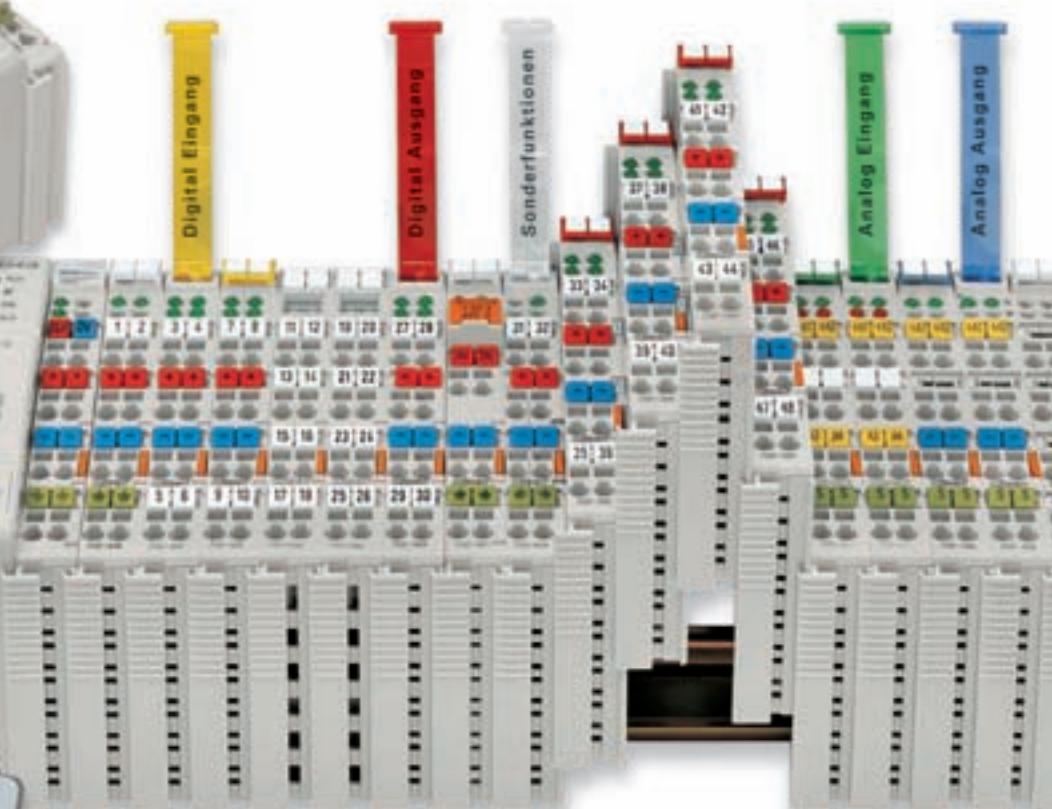
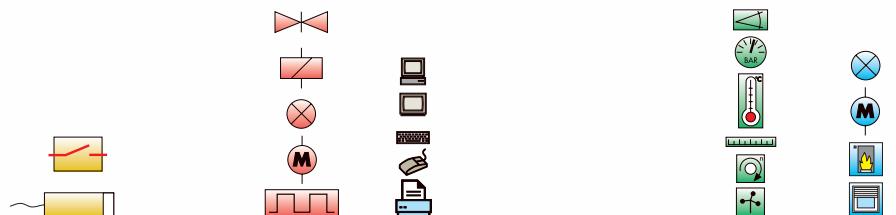


Flexible – Future-proof

MODULAR DOWN TO THE BIT

I/O IPC 758-870

- ▶ Pentium MMX compatible CPU
 - ▶ optional Profibus Master



LOCAL TO OPERATION



WAGO → I/O → SYSTEM



One solution – many applications



4 Rail-Mounted Terminal Blocks with CAGE CLAMP® Series 279 to 285

0 CAGE CLAMP® connection

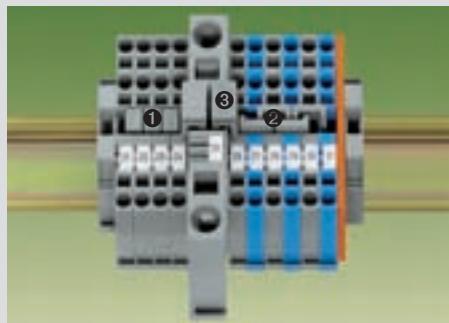


Wire connection with screwdriver



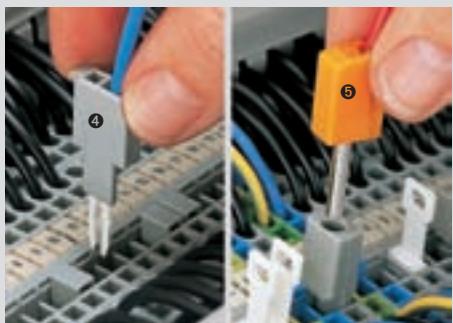
Wire removing with screwdriver

Commoning/Step-down jumper

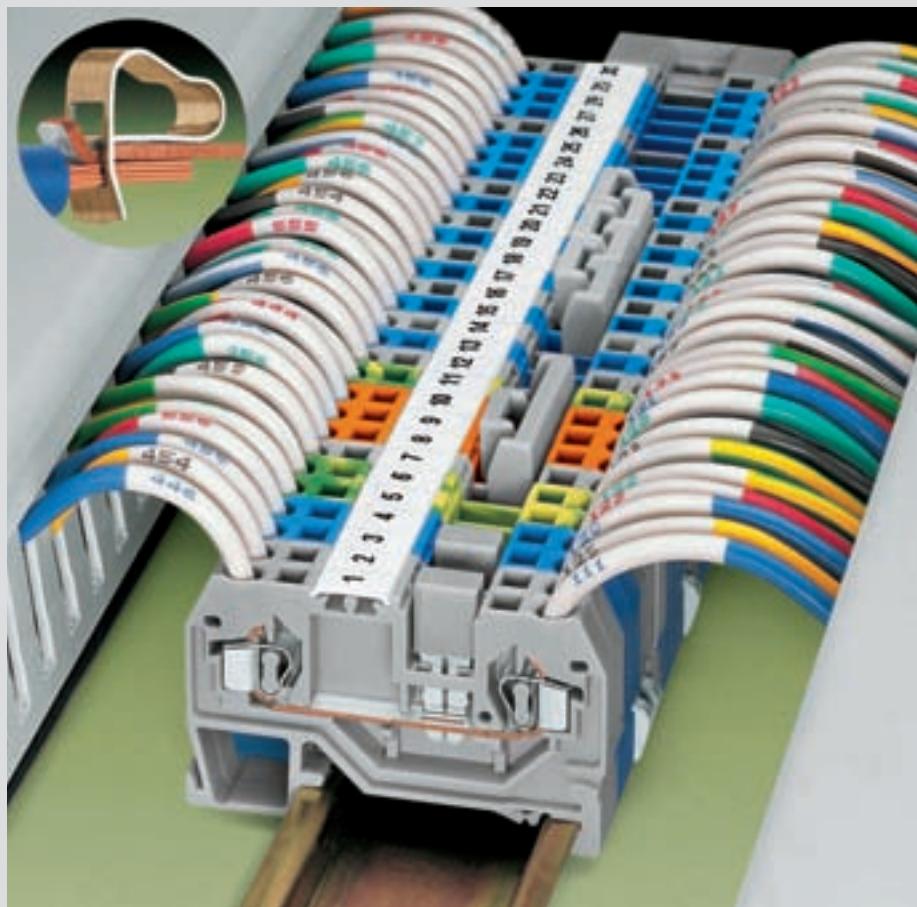


Commoning with adjacent jumpers ① or
staggered jumpers ②.
③ Commoning of terminal blocks of different sizes
- with step down jumpers

Testing



④ Test plug with CAGE CLAMP®
⑤ Banana plug Ø 4 mm/0.157 in using test plug
adapter 209-170

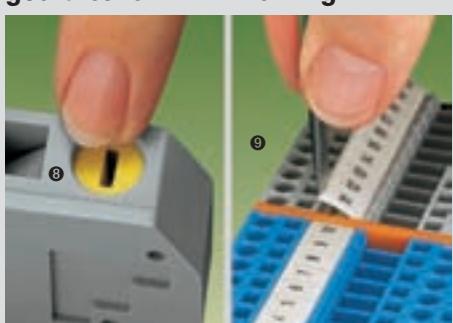


Protective warning marker Insulation stop



⑥ Protective warning markers inserted into
the operating slots
⑦ Insertion of insulation stop

Finger guard cover



⑧ Touch protection for unused clamping units
⑨ Marking with WMB multi marking system or
WSB quick marking system

Marking



Marking is done via the Plotter IP 350

Series 870 (see W4, Volume 1)



Rail mounted terminal blocks with
CAGE CLAMP® COMPACT



CAGE CLAMP®
clamps the following
copper wires:

solid



stranded



fine stranded,
also with tinned
single strands

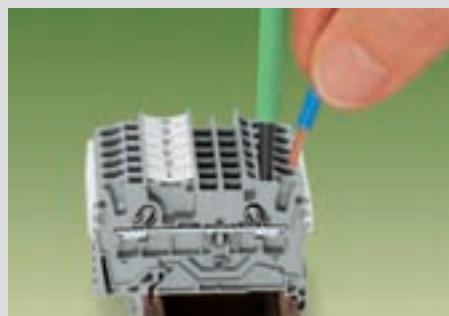
Rail-Mounted Terminal Blocks with CAGE CLAMP®S

Series 2001, 2002, 2004, 2006, 2010 and 2016

CAGE CLAMP®S connection

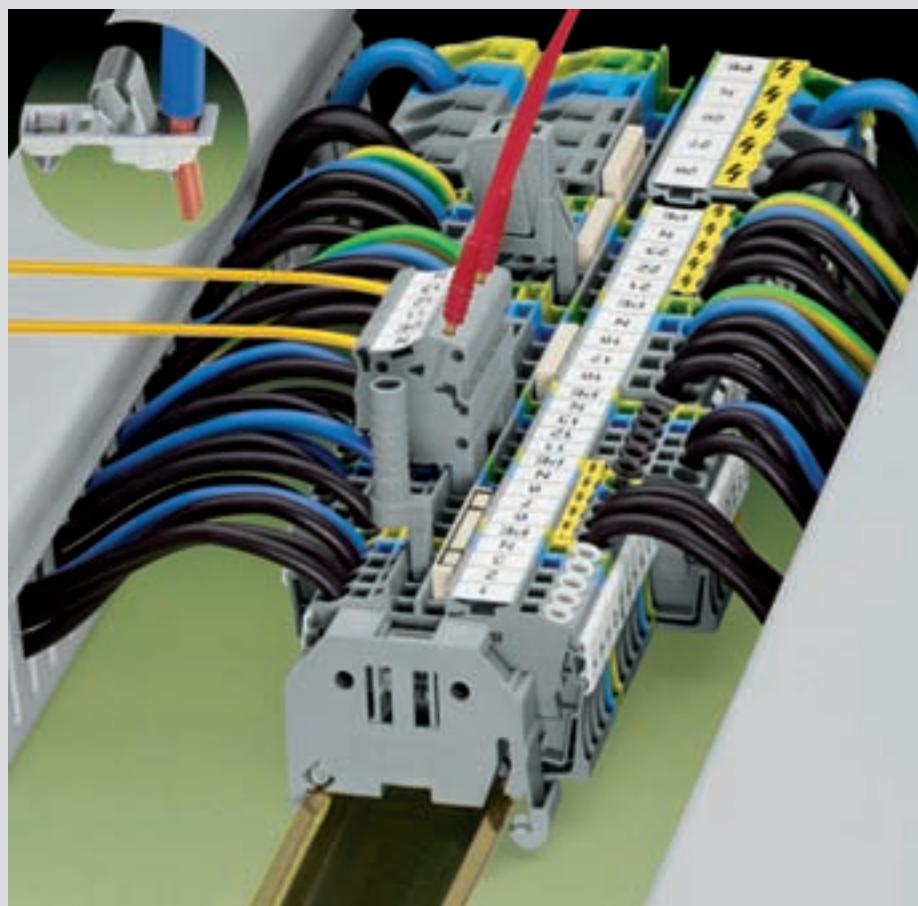


Direct insertion – Solid conductors with cross sections from either one cross section size above or up to two cross section sizes below the rated cross section can be pushed in directly - without tools.

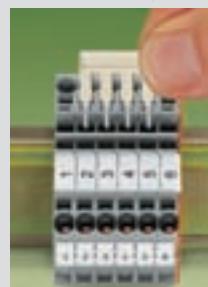


With screwdriver – the operation of the clamp remains the same for unprepared flexible conductors or small cross sections that don't allow direct insertion.

In exactly the same way as the original CAGE CLAMP®, CAGE CLAMP®S is operated using a screwdriver when removing the conductor.



Commoning

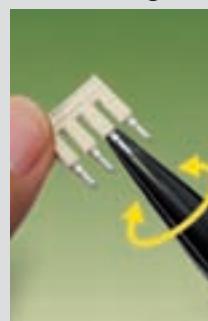


Twin integrated, spring-loaded jumper system allows the use of comb-type jumper bars and test plugs.



The rated voltage of the jumper bars is 800 V (ex works).

Commoning



Jumper contacts that are not required can be broken off and removed and the upper side of the jumper can then be marked accordingly. The rated voltage is then 500 V. Applies to series 2001, 2002 and 2004.

500 V



Testing



Testing of TOPJOB®S rail-mounted terminal blocks using test plug or testing tap.

Marking



A thermal transfer printer and the WAGO "smart designer" software generate the marking.



TOPJOB®S offers three marking positions for WMB markers, miniature WSB markers or a full length marking strip.

Connection possibility



Modular connectors with CAGE CLAMP®S connection provide an additional connection possibility for 2 mm Ø or 2.3 mm Ø test plugs.



fine-stranded wire, tip bonded

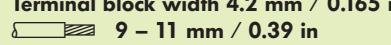
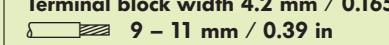
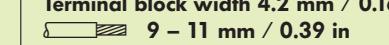


fine-stranded wire with crimped ferrule



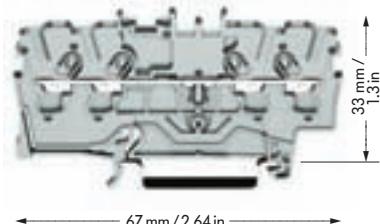
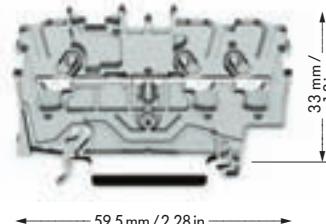
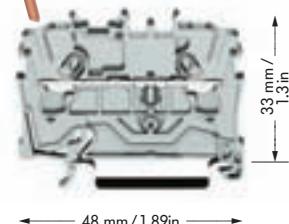
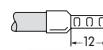
fine-stranded wire with crimped pin terminal

Through/Ground (Earth) and Ex Terminal Blocks 1.5 mm^2 ² with CAGE CLAMP®S Connection, Series 2001

0.25 – 1.5 (2.5) mm^2 ① 800 V/8 kV/3 18 A	AWG 22 – 14 600 V, 15 A	0.25 – 1.5 (2.5) mm^2 ① 800 V/8 kV/3 18 A	AWG 22 – 14 600 V, 15 A	0.25 – 1.5 (2.5) mm^2 ① 800 V/8 kV/3 18 A	AWG 22 – 14 600 V, 15 A
Terminal block width 4.2 mm / 0.165 in  9 – 11 mm / 0.39 in		Terminal block width 4.2 mm / 0.165 in  9 – 11 mm / 0.39 in		Terminal block width 4.2 mm / 0.165 in  9 – 11 mm / 0.39 in	

*    *    *    

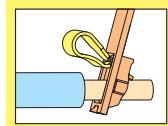
① can be connected: 0.25 mm^2 – 2.5 mm^2 "s + f-st";
can be pushed in directly: 0.5 mm^2 – 2.5 mm^2 "s" and 0.75 mm^2 – 1.5 mm^2 "Insulated ferrule, 12 mm"



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks								
grey 	2001-1201	100	grey 	2001-1301	100	grey 	2001-1401	100
blue 	2001-1204	100	blue 	2001-1304	100	blue 	2001-1404	100
orange 	2001-1202	100	orange 	2001-1302	100	orange 	2001-1402	100
more colours are being prepared			more colours are being prepared			more colours are being prepared		
2-conductor ground (earth) terminal block								
green-yellow 	2001-1207	100	green-yellow 	2001-1307	100	green-yellow 	2001-1407	100
End and intermediate plate, 0.8 mm/0.031 in thick								
	orange	2002-1292100 (4 x 25)		orange	2002-1392100 (4 x 25)		orange	2002-1492100 (4 x 25)
	grey	2002-1291100 (4 x 25)		grey	2002-1391100 (4 x 25)		grey	2002-1491100 (4 x 25)
Ex e/Ex i separator see page 4.5								

Accessories, Series 2001Appropriate marking system **WMB/Mini-WSB/marker strips**

Insulation stop, 5 pcs/strip 200 strips	Insulation stop, 5 pcs/strip 200 strips	Insulation stop, 5 pcs/strip 200 strips
 dark gr. 2001-172 0.75-1 mm^2	 dark gr. 2001-172 0.75-1 mm^2	 dark gr. 2001-172 0.75-1 mm^2
Push-in type jumper bars, light grey, insulated, I_N 18 A	Push-in type jumper bars, light grey, insulated, I_N 18 A	Push-in type jumper bars, light grey, insulated, I_N 18 A
2-way 2001-402 200 (8 x 25) 3-way 2001-403 200 (8 x 25) 4-way 2001-404 200 (8 x 25) 5-way 2001-405 100 (4 x 25) : 10-way 2001-410 100 (4 x 25)	2-way 2001-402 200 (8 x 25) 3-way 2001-403 200 (8 x 25) 4-way 2001-404 200 (8 x 25) 5-way 2001-405 100 (4 x 25) : 10-way 2001-410 100 (4 x 25)	2-way 2001-402 200 (8 x 25) 3-way 2001-403 200 (8 x 25) 4-way 2001-404 200 (8 x 25) 5-way 2001-405 100 (4 x 25) : 10-way 2001-410 100 (4 x 25)
Step down jumpers see page 4.7		
Push-in type jumper bars, light grey, insulated, I_N 18 A	Push-in type jumper bars, light grey, insulated, I_N 18 A	Push-in type jumper bars, light grey, insulated, I_N 18 A
1 - 3 2001-433 200 (8 x 25) 1 - 4 2001-434 200 (8 x 25) 1 - 5 2001-435 100 (4 x 25) : 1 - 10 2001-440 100 (4 x 25)	1 - 3 2001-433 200 (8 x 25) 1 - 4 2001-434 200 (8 x 25) 1 - 5 2001-435 100 (4 x 25) : 1 - 10 2001-440 100 (4 x 25)	1 - 3 2001-433 200 (8 x 25) 1 - 4 2001-434 200 (8 x 25) 1 - 5 2001-435 100 (4 x 25) : 1 - 10 2001-440 100 (4 x 25)
Modular TOPJOB®S connector, for jumper contact slot 1-pole 2001-501 100 (4 x 25)	Modular TOPJOB®S connector, for jumper contact slot 1-pole 2001-501 100 (4 x 25)	Modular TOPJOB®S connector, for jumper contact slot 1-pole 2001-501 100 (4 x 25)
Spacer module 2001-549 100 (4 x 25)	Spacer module 2001-549 100 (4 x 25)	Spacer module 2001-549 100 (4 x 25)
Test plug adapter, for test plug 4 mm/0.157 in Ø 2009-174 100 (4 x 25) Testing tap, for max. 2.5 mm^2 2009-182 100 (4 x 25)	Test plug adapter, for test plug 4 mm/0.157 in Ø 2009-174 100 (4 x 25) Testing tap, for max. 2.5 mm^2 2009-182 100 (4 x 25)	Test plug adapter, for test plug 4 mm/0.157 in Ø 2009-174 100 (4 x 25) Testing tap, for max. 2.5 mm^2 2009-182 100 (4 x 25)
Marker strips, white, plain, for central marking, 11 mm/0.433 in wide, on roll 50 m 2009-110 1 300 m 2009-130 1	Suitable for Ex i applications Ex e II applications in preparation	Screwdriver, with partially insulated shaft 210-619 (2.5 x 0.4) mm

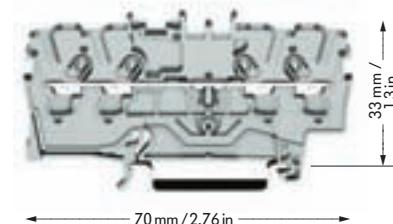
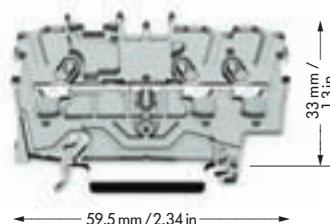
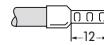


0.25 – 2.5 (4) mm² ① 800 V/8 kV/3 24 A	AWG 22 – 12 600 V, 20 A 600 V, 20 A
Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in	
*	

0.25 – 2.5 (4) mm² ① 800 V/8 kV/3 24 A	AWG 22 – 12 600 V, 20 A 600 V, 20 A
Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in	
*	

0.25 – 2.5 (4) mm² ① 800 V/8 kV/3 24 A	AWG 22 – 12 600 V, 20 A 600 V, 20 A
Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in	
*	

① can be connected: 0.25 mm² – 4 mm² "s + f-st";
can be pushed in directly: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "Insulated ferrules, 12 mm"



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks			3-conductor through terminal blocks					
grey	2002-1201	100	grey	2002-1301	100	grey	2002-1401	100
blue	2002-1204	100	blue	2002-1304	100	blue	2002-1404	100
orange	2002-1202	100	orange	2002-1302	100	orange	2002-1402	100
more colours are being prepared			more colours are being prepared					
2-conductor ground (earth) terminal block			3-conductor ground (earth) terminal block					
green-yellow	2002-1207	100	green-yellow	2002-1307	100	green-yellow	2002-1407	100
End and intermediate plate, 0.8 mm/0.031 in thick			End and intermediate plate, 0.8 mm/0.031 in thick					
orange	2002-1292100	(4 x 25)	orange	2002-1392100	(4 x 25)	orange	2002-1492100	(4 x 25)
grey	2002-1291100	(4 x 25)	grey	2002-1391100	(4 x 25)	grey	2002-1491100	(4 x 25)
Ex e/Ex i separator see page 4.5								

Accessories, Series 2002

Appropriate marking system WMB/Mini-WSB/marker strips

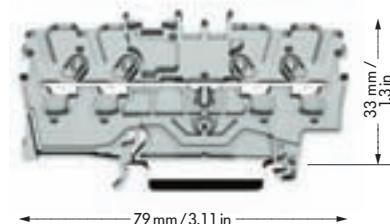
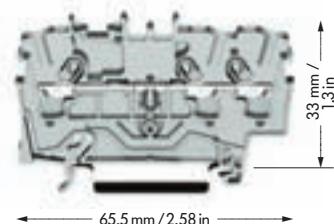
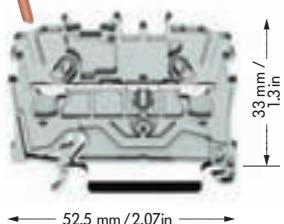
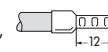
Insulation stop, 5 pcs/strip	200 strips	Insulation stop, 5 pcs/strip	200 strips	Insulation stop, 5 pcs/strip	200 strips
	light grey 2002-171 0.25-0.5 mm² dark gr. 2002-172 0.75-1 mm²		light grey 2002-171 0.25-0.5 mm² dark gr. 2002-172 0.75-1 mm²		light grey 2002-171 0.25-0.5 mm² dark gr. 2002-172 0.75-1 mm²
Push-in type jumper bars, light grey, insulated, I _N 25 A	2-way 2002-402 200 (8 x 25) 3-way 2002-403 200 (8 x 25) 4-way 2002-404 200 (8 x 25) 5-way 2002-405 100 (4 x 25) : 10-way 2002-410 100 (4 x 25)	Push-in type jumper bars, light grey, insulated, I _N 25 A	2-way 2002-402 200 (8 x 25) 3-way 2002-403 200 (8 x 25) 4-way 2002-404 200 (8 x 25) 5-way 2002-405 100 (4 x 25) : 10-way 2002-410 100 (4 x 25)	Push-in type jumper bars, light grey, insulated, I _N 25 A	2-way 2002-402 200 (8 x 25) 3-way 2002-403 200 (8 x 25) 4-way 2002-404 200 (8 x 25) 5-way 2002-405 100 (4 x 25) : 10-way 2002-410 100 (4 x 25)
Step down jumpers see page 4.7					
Push-in type jumper bars, light grey, insulated, I _N 25 A	1 - 3 2002-433 200 (8 x 25) 1 - 4 2002-434 200 (8 x 25) 1 - 5 2002-435 100 (4 x 25) : 1 - 10 2002-440 100 (4 x 25)	Push-in type jumper bars, light grey, insulated, I _N 25 A	1 - 3 2002-433 200 (8 x 25) 1 - 4 2002-434 200 (8 x 25) 1 - 5 2002-435 100 (4 x 25) : 1 - 10 2002-440 100 (4 x 25)	Push-in type jumper bars, light grey, insulated, I _N 25 A	1 - 3 2002-433 200 (8 x 25) 1 - 4 2002-434 200 (8 x 25) 1 - 5 2002-435 100 (4 x 25) : 1 - 10 2002-440 100 (4 x 25)
Protective warning marker, with high voltage symbol, for 5 terminal blocks	yellow 2002-115 100 (4 x 25)	Protective warning marker, with high voltage symbol, for 5 terminal blocks	yellow 2002-115 100 (4 x 25)	Protective warning marker, with high voltage symbol, for 5 terminal blocks	yellow 2002-115 100 (4 x 25)
Modular TOPJOB® S connector, for jumper contact slot	1-pole 2002-501 100 (4 x 25)	Screwdriver, with partially insulated shaft (3.5 x 0.5) mm	210-620 1	Modular TOPJOB® S connector, for jumper contact slot	1-pole 2002-501 100 (4 x 25)
Spacer module	2002-549 100 (4 x 25)			Spacer module	2002-549 100 (4 x 25)
Test plug adapter, for test plug 4 mm/0.157 in Ø	2009-174 100 (4 x 25)	② Suitable for Ex i applications Ex Suitable for Ex e II applications 550 V~, 22 A		Marker strips, white, plain, for central marking, 11 mm/0.433 in wide, on roll	11 mm/0.433 in wide, on roll 50 m 2009-110 1 300 m 2009-130 1
Testing tap, for max. 2.5 mm²	2009-182 100 (4 x 25)				

Through/Ground (Earth) and Terminal Blocks 4 mm² with CAGE CLAMP® S Connection, Series 2004

0.5 – 4 (6) mm ² ① 800 V/8 kV/3 32 A	AWG 20 – 10 600 V, 30 A	0.5 – 4 (6) mm ² ① 800 V/8 kV/3 32 A	AWG 20 – 10 600 V, 30 A	0.5 – 4 (6) mm ² ① 800 V/8 kV/3 32 A	AWG 20 – 10 600 V, 30 A
Terminal block width 6.2 mm / 0.244 in 11 – 13 mm / 0.47 in		Terminal block width 6.2 mm / 0.244 in 11 – 13 mm / 0.47 in		Terminal block width 6.2 mm / 0.244 in 11 – 13 mm / 0.47 in	

*

① can be connected: 0.5 mm² – 6 mm² "s+f-st";
can be pushed in directly: 1 mm² – 6 mm² "s" and 0.75 mm² – 4 mm² "Insulated ferrule, 12 mm"

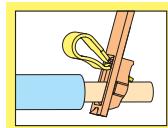


Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks								
grey	2004-1201	50	grey	2004-1301	50	grey	2004-1401	50
blue	2004-1204	50	blue	2004-1304	50	blue	2004-1404	50
orange	2004-1202	50	orange	2004-1302	50	orange	2004-1402	50
more colours are being prepared			more colours are being prepared			more colours are being prepared		
2-conductor ground (earth) terminal block								
green-yellow	2004-1207	50	green-yellow	2004-1307	50	green-yellow	2004-1407	50
End and intermediate plate, 1 mm/0.039 in thick								
orange	2004-1292100	(4 x 25)	orange	2004-1392100	(4 x 25)	orange	2004-1492100	(4 x 25)
grey	2004-1291100	(4 x 25)	grey	2004-1391100	(4 x 25)	grey	2004-1491100	(4 x 25)
Ex e/Ex i separator see page 4.5								

Accessories, Series 2004

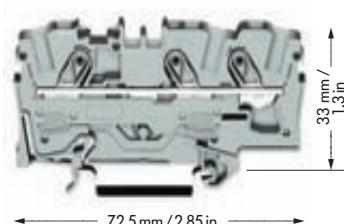
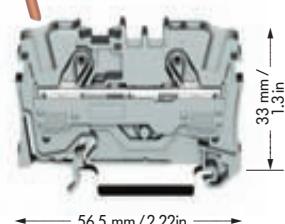
Appropriate marking system WMB/Mini-WSB/marker strips

Insulation stop, 5 pcs/strip	200 strips	Insulation stop, 5 pcs/strip	200 strips	Insulation stop, 5 pcs/strip	200 strips
light grey 2004-171 0.25-0.5 mm ² dark gr. 2004-172 0.75-1 mm ²		light grey 2004-171 0.25-0.5 mm ² dark gr. 2004-172 0.75-1 mm ²		light grey 2004-171 0.25-0.5 mm ² dark gr. 2004-172 0.75-1 mm ²	
Push-in type jumper bars, light grey, insulated, I _N 32 A 2-way 2004-402 100 (4 x 25) 3-way 2004-403 100 (4 x 25) 4-way 2004-404 100 (4 x 25) 5-way 2004-405 50 (2 x 25) :		Push-in type jumper bars, light grey, insulated, I _N 32 A 2-way 2004-402 100 (4 x 25) 3-way 2004-403 100 (4 x 25) 4-way 2004-404 100 (4 x 25) 5-way 2004-405 50 (2 x 25) :		Push-in type jumper bars, light grey, insulated, I _N 32 A 2-way 2004-402 100 (4 x 25) 3-way 2004-403 100 (4 x 25) 4-way 2004-404 100 (4 x 25) 5-way 2004-405 50 (2 x 25) :	
Step down jumpers see page 4.7		10-way 2004-410 50 (2 x 25)	10-way 2004-410 50 (2 x 25)	10-way 2004-410 50 (2 x 25)	10-way 2004-410 50 (2 x 25)
Push-in type jumper bars, light grey, insulated, I _N 32 A 1 - 3 2004-433 100 (4 x 25) 1 - 4 2004-434 100 (4 x 25) 1 - 5 2004-435 50 (2 x 25) : 1 - 10 2004-440 50 (2 x 25)		1 - 3 2004-433 100 (4 x 25) 1 - 4 2004-434 100 (4 x 25) 1 - 5 2004-435 50 (2 x 25) : 1 - 10 2004-440 50 (2 x 25)		1 - 3 2004-433 100 (4 x 25) 1 - 4 2004-434 100 (4 x 25) 1 - 5 2004-435 50 (2 x 25) : 1 - 10 2004-440 50 (2 x 25)	
Protective warning marker, with high voltage symbol, for 5 terminal blocks yellow 2004-115 100 (4 x 25)		Protective warning marker, with high voltage symbol, for 5 terminal blocks yellow 2004-115 100 (4 x 25)		Protective warning marker, with high voltage symbol, for 5 terminal blocks yellow 2004-115 100 (4 x 25)	
Modular TOPJOB® S connector, for jumper contact slot 1-pole 2004-501 100 (4 x 25)		Screwdriver, with partially insulated shaft (3.5 x 0.5) mm 210-620 1		Modular TOPJOB® S connector, for jumper contact slot 1-pole 2004-501 100 (4 x 25)	
Spacer module 2004-549 100 (4 x 25)				Spacer module 2004-549 100 (4 x 25)	
Test plug adapter, for test plug 4 mm/0.157 in Ø 2009-174 100 (4 x 25)		Suitable for Ex i applications Ex e II applications in preparation		Marker strips, white, plain, for central marking, 11 mm/0.433 in wide, on roll 50 m 2009-110 1 300 m 2009-130 1	
Testing tap, for max. 2.5 mm ² 2009-182 100 (4 x 25)					



0.5 – 6 (10) mm ² ① 800 V/8 kV/3 41 A Terminal block width 7.5 mm / 0.295 in 13 – 15 mm / 0.55 in * CCA LR	AWG 20 – 8 600 V, 50 A	0.5 – 6 (10) mm ² ① 800 V/8 kV/3 41 A Terminal block width 7.5 mm / 0.295 in 13 – 15 mm / 0.55 in * CCA LR	AWG 20 – 8 600 V, 50 A	Separator for Ex e/Ex i applications
--	---------------------------	--	---------------------------	--------------------------------------

① can be connected: 0.5 mm² – 10 mm² "s + f-st";
can be pushed in directly: 1.5 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "Insulated ferrule, 12 mm"



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
2-conductor through terminal blocks			3-conductor through terminal blocks			Separator for Ex e/Ex i applications,	
grey Ex	2006-1201	50	grey Ex	2006-1301	25	3 mm/0.118 in thick, orange	
blue Ex	2006-1204 ②	50	blue Ex	2006-1304 ②	25		
orange Ex	2006-1202	50	orange Ex	2006-1302	25	90 mm/3.54 in wide 209-190 50 (2x25)	
						120 mm/4.72 in wide 209-191 50 (2x25)	
2-conductor ground (earth) terminal block			3-conductor ground (earth) terminal block				
green-yellow Ex	2006-1207	50	green-yellow Ex	2006-1307	25		
End and intermediate plate, 1 mm/0.039 in thick			End and intermediate plate, 1 mm/0.039 in thick				
orange	2006-1292100 (4 x 25)		orange	2006-1392100 (4 x 25)			
grey	2006-1291100 (4 x 25)		grey	2006-1391100 (4 x 25)			

Accessories, Series 2006

Appropriate marking system WMB/Mini-WSB/marker strips

Push-in type jumper bars, light grey, insulated, I_N 41 A	Push-in type jumper bars, light grey, insulated, I_N 41 A	
2-way 2006-402 50 (2 x 25)	2-way 2006-402 50 (2 x 25)	
3-way 2006-403 50 (2 x 25)	3-way 2006-403 50 (2 x 25)	
4-way 2006-404 50 (2 x 25)	4-way 2006-404 50 (2 x 25)	
5-way 2006-405 50 (2 x 25)	5-way 2006-405 50 (2 x 25)	
Push-in type jumper bars, light grey, insulated, I_N 41 A	Push-in type jumper bars, light grey, insulated, I_N 41 A	
1 - 3 2006-433 50 (2 x 25)	1 - 3 2006-433 50 (2 x 25)	
1 - 4 2006-434 50 (2 x 25)	1 - 4 2006-434 50 (2 x 25)	
1 - 5 2006-435 50 (2 x 25)	1 - 5 2006-435 50 (2 x 25)	
Protective warning marker, with high voltage symbol, for 5 terminal blocks	Protective warning marker, with high voltage symbol, for 5 terminal blocks	
yellow 2006-115 100 (4 x 25)	yellow 2006-115 100 (4 x 25)	
Test plug adapter, for test plug 4 mm/0.157 in Ø	Test plug adapter, for test plug 4 mm/0.157 in Ø	
2009-174 100 (4 x 25)	2009-174 100 (4 x 25)	
Testing tap, for max. 2.5 mm ²	Testing tap, for max. 2.5 mm ²	
2009-182 100 (4 x 25)	2009-182 100 (4 x 25)	
Marker strips, white, plain, for central marking,	Marker strips, white, plain, for central marking,	
11 mm/0.433 in wide, on roll	11 mm/0.433 in wide, on roll	
50 m 2009-110 1	50 m 2009-110 1	
300 m 2009-130 1	300 m 2009-130 1	
Screwdriver, with partially insulated shaft		
(5.5 x 0.8) mm		
210-621 1		
	② Suitable for Ex i applications	
	Ex e II applications in preparation	

Separator for Ex e/Ex i applications

According to EN 50020 a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. When mounting WAGO Ex e and Ex i rail-mounted terminal blocks together on a common rail WAGO offers a space saving solution to the problem by using the Exe/Ex i separators.

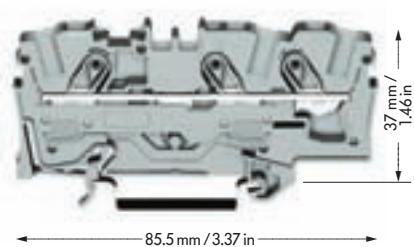
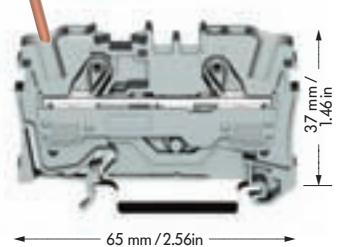
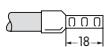
Suitable for series 279 to 282, 2001, 2002 and 2004.

209-190 for 2-conductor terminal blocks.
209-191 for 2-, 3-, 4-conductor terminal blocks.

Through/Ground (Earth) and Terminal Blocks 10 mm² with CAGE CLAMP® S Connection, Series 2010

0.5 – 10 (16) mm ² ❶ 800 V/8 kV/3 57 A	AWG 20 – 6 600 V, 55 A	0.5 – 10 (16) mm ² ❶ 800 V/8 kV/3 57 A	AWG 20 – 6 600 V, 55 A	
Terminal block width 10 mm / 0.394 in 17 – 19 mm / 0.71 in *		Terminal block width 10 mm / 0.394 in 17 – 19 mm / 0.71 in *		

❶ can be connected: 0.5 mm² – 16 mm² "s + f-st";
can be pushed in directly: 2.5 mm² – 16 mm² "s" and 2.5 mm² – 10 mm² "Insulated ferrule, 18 mm"

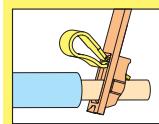


Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks					
grey	2010-1201	25	grey	2010-1301	25
blue	2010-1204	25	blue	2010-1304	25
orange	2010-1202	25	orange	2010-1302	25
2-conductor ground (earth) terminal block					
green-yellow	2010-1207	25	green-yellow	2010-1307	25
End and intermediate plate, 1 mm/0.039 in thick					
	orange 2010-1292100 (4 x 25)			orange 2010-1392100 (4 x 25)	
	grey 2010-1291100 (4 x 25)			grey 2010-1391100 (4 x 25)	

Accessories, Series 2010

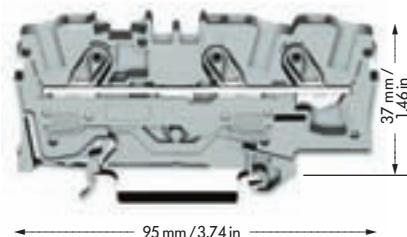
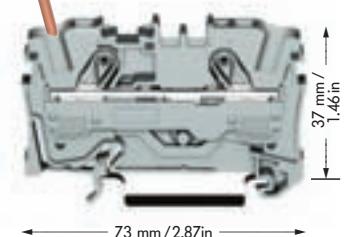
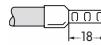
Appropriate marking system WMB/Mini-WSB/marker strips

Push-in type jumper bars , light grey, insulated, I _N 57 A	Push-in type jumper bars , light grey, insulated, I _N 57 A
2-way 2010-402 50 (2 x 25) 3-way 2010-403 50 (2 x 25) 4-way 2010-404 50 (2 x 25) 5-way 2010-405 50 (2 x 25)	2-way 2010-402 50 (2 x 25) 3-way 2010-403 50 (2 x 25) 4-way 2010-404 50 (2 x 25) 5-way 2010-405 50 (2 x 25)
Push-in type jumper bars , light grey, insulated, I _N 57 A	Push-in type jumper bars , light grey, insulated, I _N 57 A
1 - 3 2010-433 50 (2 x 25) 1 - 4 2010-434 50 (2 x 25) 1 - 5 2010-435 50 (2 x 25)	1 - 3 2010-433 50 (2 x 25) 1 - 4 2010-434 50 (2 x 25) 1 - 5 2010-435 50 (2 x 25)
Protective warning marker , with high voltage symbol, for 5 terminal blocks	Protective warning marker , with high voltage symbol, for 5 terminal blocks
	yellow 2010-115 50 (2 x 25)
Test plug adapter , for test plug 4 mm/0.157 in Ø	Test plug adapter , for test plug 4 mm/0.157 in Ø
2009-174 100 (4 x 25) Testing tap , for max. 2.5 mm ²	2009-174 100 (4 x 25) Testing tap , for max. 2.5 mm ²
2009-182 100 (4 x 25)	2009-182 100 (4 x 25)
Marker strips , white, plain, for central marking, 11 mm/0.433 in wide, on roll	Marker strips , white, plain, for central marking, 11 mm/0.433 in wide, on roll
50 m 2009-110 1 300 m 2009-130 1	50 m 2009-110 1 300 m 2009-130 1
Screwdriver , with partially insulated shaft (5.5 x 0.8) mm	 ❶ Suitable for Ex i applications Ex e II applications in preparation
210-621 1	



0.5 – 16 (25 "f-st") mm ² ① 800 V/8 kV/3 76 A Terminal block width 12 mm / 0.472 in 18 – 20 mm / 0.75 in * CCA LR	0.5 – 16 (25 "f-st") mm ² ① 800 V/8 kV/3 76 A Terminal block width 12 mm / 0.472 in 18 – 20 mm / 0.75 in * CCA LR	Step-down jumpers
---	---	-------------------

① can be connected: 0.5 mm² – 16 mm² "s+f-st", 25 mm² "f-st";
can be pushed in directly: 2.5 mm² – 16 mm² "s" and 2.5 mm² – 16 mm² "Insulated ferrule, 18 mm"



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
2-conductor through terminal blocks			3-conductor through terminal blocks			Step-down jumper, light grey, insulated,	
grey Ex	2016-1201	20	grey Ex	2016-1301	20	I_N 32 A	
blue Ex	2016-1204	20	blue Ex	2016-1304	20	from 6/4 mm ² to 4/2.5/1.5 mm ²	
orange Ex	2016-1202	20	orange Ex	2016-1302	20	2006-499	
2-conductor ground (earth) terminal block			3-conductor ground (earth) terminal block			Step-down jumper, light grey, insulated,	
green-yellow Ex	2016-1207	20	green-yellow Ex	2016-1307	20	I_N 57 A	
End and intermediate plate, 1 mm/0.039 in thick			End and intermediate plate, 1 mm/0.039 in thick			from 16/10 mm ² to 10/6/4/2.5 mm ²	
orange 2016-1292100 (4 x 25)			orange 2016-1392100 (4 x 25)			2016-499	
grey 2016-1291100 (4 x 25)			grey 2016-1391100 (4 x 25)				

Accessories, Series 2016

Appropriate marking system WMB/Mini-WSB/marker strips

Push-in type jumper bars, light grey, insulated, I_N 76 A	Push-in type jumper bars, light grey, insulated, I_N 76 A	
2-way 2016-402 50 (2 x 25) 3-way 2016-403 50 (2 x 25) 4-way 2016-404 50 (2 x 25) 5-way 2016-405 50 (2 x 25)	2-way 2016-402 50 (2 x 25) 3-way 2016-403 50 (2 x 25) 4-way 2016-404 50 (2 x 25) 5-way 2016-405 50 (2 x 25)	
Push-in type jumper bars, light grey, insulated, I_N 76 A	Push-in type jumper bars, light grey, insulated, I_N 76 A	
1 - 3 2016-433 50 (2 x 25) 1 - 4 2016-434 50 (2 x 25) 1 - 5 2016-435 50 (2 x 25)	1 - 3 2016-433 50 (2 x 25) 1 - 4 2016-434 50 (2 x 25) 1 - 5 2016-435 50 (2 x 25)	
Protective warning marker,, with high voltage symbol, for 5 terminal blocks	Protective warning marker, with high voltage symbol, for 5 terminal blocks	
yellow 2016-115 50 (2 x 25)	yellow 2016-115 50 (2 x 25)	
Test plug adapter, for test plug 4 mm/0.157 in Ø	Test plug adapter, for test plug 4 mm/0.157 in Ø	
2009-174 100 (4 x 25) Testing tap, for max. 2.5 mm ² 2009-182 100 (4 x 25)	2009-174 100 (4 x 25) Testing tap, for max. 2.5 mm ² 2009-182 100 (4 x 25)	
Marker strips, white, plain, for central marking, 11 mm/0.433 in wide, on roll	Marker strips, white, plain, for central marking, 11 mm/0.433 in wide, on roll	
50 m 2009-110 1 300 m 2009-130 1	50 m 2009-110 1 300 m 2009-130 1	
Screwdriver, with partially insulated shaft		
(5.5 x 0.8) mm 210-621 1	② Suitable for Ex i applications Ex e II applications in preparation	

Reduction of cross section	Push-in type jumper bar	Step-down jumper
16 to 10 mm ²	X	
16 to 6 mm ²	X	
16 to 4 mm ²		X
16 to 2.5 mm ²		X
10 to 6 mm ²	X	
10 to 4 mm ²	X	
10 to 2.5 mm ²		X
6 to 4 mm ²	X	
6 to 2.5 mm ²	X	

0.25 – 2.5 (4) mm² ①	AWG 22 – 12
500 V/6 kV/3 ②	
24 A	
Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in	

*

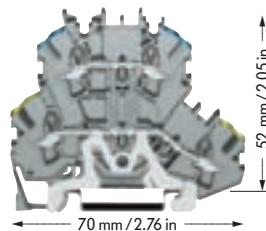
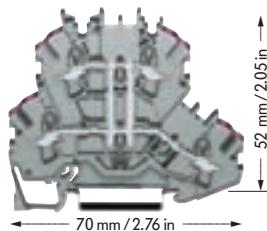
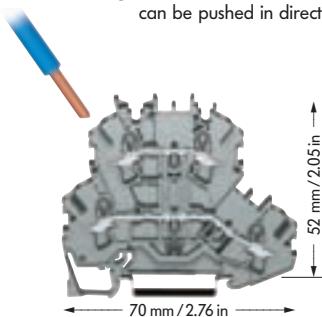
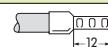
0.25 – 2.5 (4) mm² ①	AWG 22 – 12
500 V/6 kV/3 ②	
24 A	
Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in	

*

0.25 – 2.5 (4) mm² ①	AWG 22 – 12
500 V/6 kV/3 ②	
24 A	
Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in	

*

① can be connected: 0.25 mm² – 4 mm² "s+f-st";
can be pushed in directly: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "Insulated ferrule, 12 mm"



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Double deck terminal blocks, for DIN 35 rail			Double deck terminal blocks, for DIN 35 rail			Double deck terminal blocks, for DIN 35 rail		
Through-/through terminal blocks, conductor entry positions are marked in different colours			4-conductor through terminal block, internal commoning, conductor entry position coloured in violet			Ground (earth) conductor/through terminal block, conductor entry positions are marked in different colours		
grey 2002-2201 50			grey 2002-2208 50			grey (PE/N) 2002-2217 50		
grey (N/L) 2002-2202 50						grey (PE/L) 2002-2227 50		
grey (L/N) 2002-2203 50			4-conductor through terminal block, internal commoning, conductor entry position coloured in violet blue	2002-2209 ③ 50		4-conductor ground (earth) terminal block, internal commoning		
blue 2002-2204 ③ 50			violet blue 2002-2209 ③ 50			green-yellow 2002-2207 50		
End and intermediate plate, 0.8 mm/0.032 in thick			End and intermediate plate, 0.8 mm/0.032 in thick			End and intermediate plate, 0.8 mm/0.032 in thick		
orange 2002-2292 100 (4 x 25)			orange 2002-2292 100 (4 x 25)			orange 2002-2292 100 (4 x 25)		
grey 2002-2291 100 (4 x 25)			grey 2002-2291 100 (4 x 25)			grey 2002-2291 100 (4 x 25)		

Accessories, Series 2002 ④

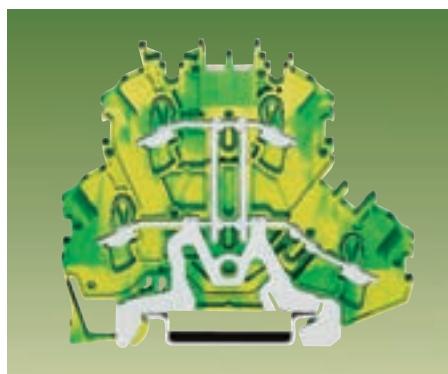
appropriate marking system WMB/Mini-WSB/marker-strips

Insulation stop, 5 pcs/strip	200 strips	Push-in type jumper bars, light grey, insulated, I_N 24 A	Two-way marking adapter,
light grey 2002-171 0.25-0.5 mm ²		1 - 3 2002-433 200 (8 x 25)	2002-121 50 (4 x 25)
dark grey 2002-172 0.75-1 mm ²		1 - 4 2002-434 200 (8 x 25)	
Push-in type jumper bars, light grey, insulated, I_N 24 A		1 - 5 2002-435 100 (4 x 25)	Marker strips, white, plain
2-way 2002-402 200 (8 x 25)		: : 1 - 10 2002-440 100 (4 x 25)	11 mm wide, on roll 50 m 2009-110 1
3-way 2002-403 200 (8 x 25)			300 m 2009-130 1
4-way 2002-404 200 (8 x 25)			Screwdriver, with partially insulated shaft
5-way 2002-405 100 (4 x 25)			(3.5 x 0.5) mm 210-620 1
: :			
10-way 2002-410 100 (4 x 25)			

③ Suitable for Ex i applications

Application notes

Height: 62 mm/2.44 in (including marking adapter)



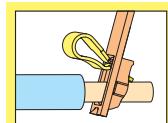
Automatic contact to the rail

② 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see General Catalogue W4, Volume 1, section 15)

④ Please note the application notes in our
General Catalogue W4, Volume 1, section 1

TOPJOB® S

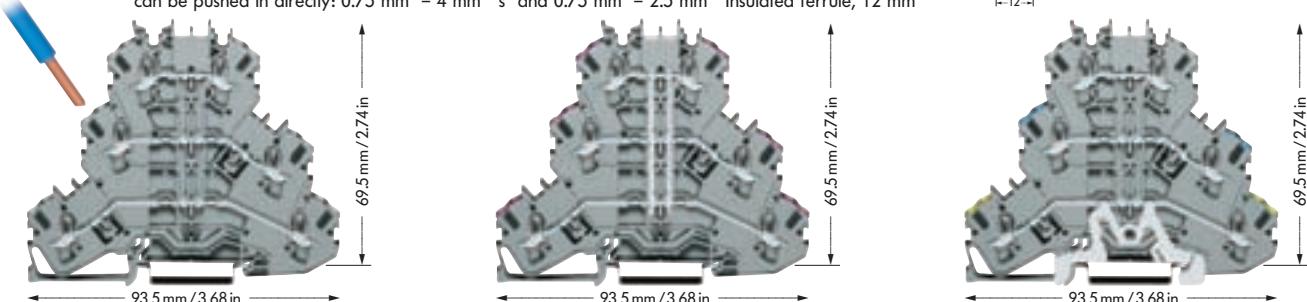
Triple Deck Terminal Blocks 2.5 mm², Series 2002



4
9

0.25 – 2.5 (4) mm² ① 500 V/6 kV/3 ② 24 A	0.25 – 2.5 (4) mm² ① 500 V/6 kV/3 ② 24 A	0.25 – 2.5 (4) mm² ① 500 V/6 kV/3 ② 24 A
Terminal block width 5.2 mm / 0.205 in * 10 – 12 mm / 0.43 in	Terminal block width 5.2 mm / 0.205 in * 10 – 12 mm / 0.43 in	Terminal block width 5.2 mm / 0.205 in * 10 – 12 mm / 0.43 in

① can be connected: 0.25 mm² – 4 mm² "s + f-st";
can be pushed in directly: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "Insulated ferrule, 12 mm"



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Triple deck terminal block, for DIN 35 rail			Triple deck terminal block, for DIN 35 rail			Triple deck terminal block, for DIN 35 rail		
Through/through/through terminal blocks, conductor entry positions are marked in different colours			6-conductor through terminal block, internal commoning,			Ground (earth)/through/through terminal blocks, conductor entry positions are marked in different colours		
grey 2002-3201 50			conductor entry position coloured in violet			grey (PE/N/L) 2002-3217 50		
grey (L/L/N) 2002-3203 50			grey 2002-3208 50			grey (PE/L/L) 2002-3227 50		
						Shield (screen)/through/through terminal blocks, conductor entry positions are marked in different colours		
						grey (shield/N/L) 2002-3218 50		
						grey (shield/L/L) 2002-3228 50		
						6-conductor ground (earth) terminal block, internal commoning		
						green-yellow 2002-3207 50		
End and intermediate plate, 0.8 mm/0.032 in thick			End and intermediate plate, 0.8 mm/0.032 in thick			End and intermediate plate, 0.8 mm/0.032 in thick		
	orange 2002-3292 100 (4 x 25)			orange 2002-3292 100 (4 x 25)			orange 2002-3292 100 (4 x 25)	
grey 2002-3291 100 (4 x 25)			grey 2002-3291 100 (4 x 25)			grey 2002-3291 100 (4 x 25)		

Accessories, Series 2002 ③

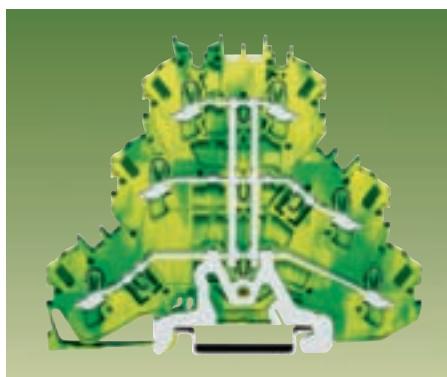
appropriate marking system WMB/Mini-WSB/marker-strips

Insulation stop, 5 pcs/strip	200 strips	Push-in type jumper bars, light grey, insulated, I_N 24 A	Three-way marking adapter,
	light grey 2002-171 0.25-0.5 mm ² dark grey 2002-172 0.75-1 mm ²		
Push-in type jumper bars, light grey, insulated, I_N 24 A		1 - 3 2002-433 200 (8 x 25) 1 - 4 2002-434 200 (8 x 25) 1 - 5 2002-435 100 (4 x 25)	2002-131 50 (4 x 25)
2-way 2002-402 200 (8 x 25)		: : : 1 - 10 2002-440 100 (4 x 25)	
3-way 2002-403 200 (8 x 25)			Marker strips, white, plain
4-way 2002-404 200 (8 x 25)			11 mm wide, on roll
5-way 2002-405 100 (4 x 25)			50 m 2009-110 1
: :			300 m 2009-130 1
10-way 2002-410 100 (4 x 25)			Screwdriver, with partially insulated shaft
			(3.5 x 0.5) mm
			210-620 1

Application notes



Height: 81.5 mm/3.21 in (including marking adapter)



Automatic contact to the rail

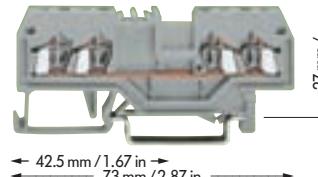
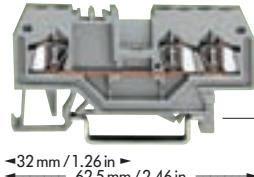
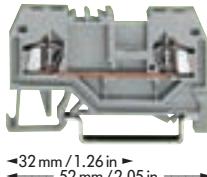
② 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see General Catalogue W4, Volume 1, section 15)

③ Please note the application notes in our
General Catalogue W4, Volume 1, section 1

Through/Ground (Earth)/Shield (Screen) and Terminal Blocks

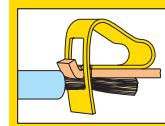
1.5 mm², Series 279

0.08 – 1.5 mm² 800 V/8 kV/3 18 A	AWG 28 – 16 600 V, 10 A 600 V, 10 A	0.08 – 1.5 mm² 800 V/8 kV/3 18 A	AWG 28 – 16 600 V, 10 A 600 V, 10 A	0.08 – 1.5 mm² 800 V/8 kV/3 18 A	AWG 28 – 16 600 V, 10 A 600 V, 10 A
Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in		Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in		Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in	
* CCA GL BV LR NV		* CCA GL BV LR NV		* CCA GL BV LR NV	

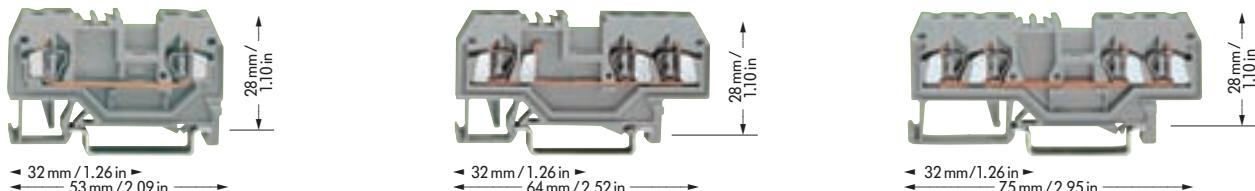


Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	
2-conductor through terminal blocks			3-conductor through terminal blocks			4-conductor through terminal blocks			
grey	279-901	100	grey	279-681	100	grey	279-831	100	
blau	279-904	100	blue	279-684	100	blue	279-834	100	
orange	279-902	100	orange	279-682	100	orange	279-832	100	
red	279-903	100	red	279-683	100	red	279-833	100	
black	279-905	100	black	279-685	100	black	279-835	100	
yellow	279-906	100	yellow	279-686	100	yellow	279-836	100	
light grey	279-992	100	light grey	279-993	100	light grey	279-994	100	
2-conductor ground (earth) terminal blocks			3-conductor ground (earth) terminal blocks			4-conductor ground (earth) terminal blocks			
green-yellow	279-907	100	green-yellow	279-687	100	green-yellow	279-837	100	
green-yellow	279-907/999-950	100	green-yellow	279-687/999-950	100	green-yellow	279-837/999-950	100	
4-conductor shield (screen) terminal blocks			4-conductor shield (screen) terminal blocks			4-conductor shield (screen) terminal blocks			
							white	279-838	100
Other terminal blocks with the same shape			Other terminal blocks with the same shape			Other terminal blocks with the same shape			
diode	279-915/...-...		diode	279-673/...-...		double potential	279-826		
			LED	279-674/...-...		diode	279-815/...-...		
						LED	279-809/...-...		
End and intermediate plate, 2 mm/0.079 in thick			End and intermediate plate, 2 mm/0.079 in thick			End and intermediate plate, 2 mm/0.079 in thick			
orange	279-328 100 (4x25)		orange	279-339 100 (4x25)		orange	279-346 100 (4x25)		
grey	279-325 100 (4x25)		grey	279-308 100 (4x25)		grey	279-344 100 (4x25)		
light grey	279-330 100 (4x25)		light grey	279-341 100 (4x25)		light grey	279-348 100 (4x25)		
Separator plate, oversized, 2 mm/0.079 in thick			Separator plate, oversized, 2 mm/0.079 in thick			Separator plate, oversized, 2 mm/0.079 in thick			
orange	279-329 100 (4x25)		orange	279-340 100 (4x25)		orange	279-347 100 (4x25)		
grey	279-326 100 (4x25)		grey	279-309 100 (4x25)		grey	279-345 100 (4x25)		
light grey	279-331 100 (4x25)		light grey	279-342 100 (4x25)		light grey	279-349 100 (4x25)		
Ex e/Ex i separator see page 4.5			Ex e/Ex i separator see page 4.5			Ex e/Ex i separator see page 4.5			
Accessories, Series 279			Appropriate marking system WMB/WSB/WFB						
Adjacent jumper, insulated, I_N 15 A			Alternate comb type jumper bar, insulated,			Protective warning marker, with high voltage symbol, for 5 terminal blocks			
grey	279-402 200 (8x25)		I _N = I _N of terminal block			yellow	279-415 100 (4x25)		
yellowgreen	279-422 200 (8x25)		2-way	279-492 200 (8x25)					
Alternate jumper, insulated, I_N 15 A			Operating tool, insulated			Screwless end stop,			
grey	279-409 100 (4x25)		2-way	279-432 1		6 mm wide	249-116 100 (4x25)		
			3-way	279-433 1		10 mm wide	249-117 50 (2x25)		
			10-way	279-440 1					
Push-in type wire jumper, insulated, I_N 9 A			Insulation stop,			Test plug adapter, suitable for terminal blocks 1.5 - 4 mm²			
L = 60 mm	249-125 10		5 pcs/strip			5 mm/0.197 in wide	280-404 100 (4x25)		
L = 110 mm	249-126 10		200 strips			for test plug 210-137			
L = 250 mm	249-127 10								
Comb type jumper bar, insulated, I_N = I_N of term. bl.			Test plug adapter, suitable for terminal blocks 1.5 - 10 mm²			Banana plugs, only for protective extra-low voltage (42 V),			
2-way	279-482 200 (8x25)		white	279-470 0.08 mm ² - 0.2 mm ²		black	215-311 50		
3-way	279-483 200 (8x25)		dark grey	279-471 0.25 mm ²		red	215-212 50		
10-way	279-490 50 (2x25)					blue	215-711 50		
Screwdriver, with partially insulated shaft									
(2.5 x 0.4) mm	210-619 1		AWG 24 – 16						
			other colours and technical data see page 9.5						
1 Suitable for Ex i applications									
Ex Suitable for Ex e II applications									
0.2 – 1.5 mm ²									
550 V~, 15 A									

Through/Ground (Earth)/Shield (Screen) and Terminal Blocks 2.5 mm², Series 280



0.08 – 2.5 mm² 800 V/8 kV/3 24 A	AWG 28 – 12** 600 V, 20 A 600 V, 25 A	0.08 – 2.5 mm² 800 V/8 kV/3 24 A	AWG 28 – 12** 600 V, 20 A 600 V, 25 A	0.08 – 2.5 mm² 800 V/8 kV/3 20 A	AWG 28 – 12** 600 V, 20 A 600 V, 15 A
Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in		Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in		Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in	
*	CCA GL BV LR NV	*		*	



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks			3-conductor through terminal blocks			4-conductor through terminal blocks		
grey	280-901	100	grey	280-681	100	grey	280-833	100
blue	280-904	100	blue	280-684	100	blue	280-834	100
orange	280-902	100	orange	280-650	100	orange	280-835	100
red	280-903	100	red	280-653	100	red	280-830	100
black	280-905	100	black	280-671	100	black	280-831	100
yellow	280-906	100	yellow	280-672	100	yellow	280-832	100
light grey	280-992	100	light grey	280-993	100	light grey	280-994	100
2-conductor ground (earth) terminal blocks			3-conductor ground (earth) terminal blocks			4-conductor ground (earth) terminal blocks		
green-yellow	280-907	100	green-yellow	280-687	100	green-yellow	280-837	100
green-yellow	280-907/999-950	100	green-yellow	280-687/999-950	100	green-yellow	280-837/999-950	100
Other terminal blocks with the same shape								
diode	280-915/.		diode	280-673/.		double potential	280-826	
disconnect	280-912	page 4.25	disconnect	280-683	page 4.25	LED	280-809/.	
carrier	280-916		carrier	280-610		carrier	280-816	
End and intermediate plate, 2.5 mm/0.098 in thick								
orange	280-309	100 (4x25)	orange	280-326	100 (4x25)	orange	280-315	100 (4x25)
grey	280-308	100 (4x25)	grey	280-324	100 (4x25)	grey	280-314	100 (4x25)
light grey	280-356	100 (4x25)	light grey	280-358	100 (4x25)	light grey	280-352	100 (4x25)
Separator plate, oversized, 2 mm/0.079 in thick								
orange	280-311	100 (4x25)	orange	280-346	100 (4x25)	orange	280-335	100 (4x25)
grey	280-310	100 (4x25)	grey	280-344	100 (4x25)	grey	280-334	100 (4x25)
light grey	280-357	100 (4x25)	light grey	280-359	100 (4x25)	light grey	280-353	100 (4x25)
Ex e/Ex i separator see page 4.5								
Ex e/Ex i separator see page 4.5								

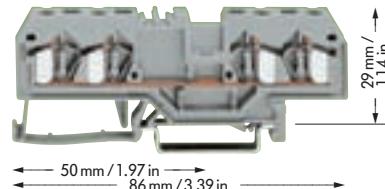
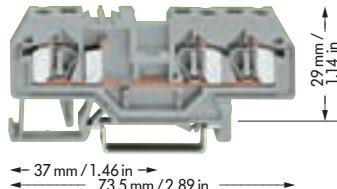
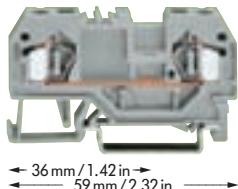
Accessories, Series 280		Appropriate marking system WMB/WSB/WFB		
Adjacent jumper, insulated, I_N 24 A	grey 280-402 200 (8x25) yellow/green 280-422 200 (8x25)	Comb type jumper bar, insulated, I_N = I_N of term. bl.	2-way 280-482 200 (8x25) 3-way 280-483 200 (8x25) 10-way 280-490 50 (2x25)	Protective warning marker, with high voltage symbol, for 5 terminal blocks
Alternate jumper, insulated, I_N 24 A	grey 280-409 100 (4x25)	Operating tool, insulated	2-way 280-432 1 3-way 280-433 1 10-way 280-440 1	Screwless end stop, 6 mm wide 249-116 100 (4x25) 10 mm wide 249-117 50 (2x25)
Staggered jumper, insulated, I_N 24 A, width 5 mm/0.197 in	from 1 to 2 780-452 100 (4x25) from 1 to 3 780-453 100 (4x25) from 1 to 4 780-454 100 (4x25) from 1 to 5 780-455 50 (2x25) : : from 1 to 8 780-458 50 (2x25)	Insulation stop,	5 pcs/strip 200 strips	Test plug adapter, suitable for terminal blocks 1.5 - 4 mm² 5 mm/0.197 in wide 280-404 100 (4x25) for test plug 210-137
Push-in type wire jumper, insulated, I_N 9 A	L = 60 mm 249-125 10 L = 110 mm 249-126 10 L = 250 mm 249-127 10	Suitable for Ex i applications Suitable for Ex e II applications 0.2 – 2.5 mm ² 550 V~, 20 A	AWG 24 – 12	Test plug adapter, suitable for terminal blocks 1.5 - 10 mm² 8 mm/0.315 in wide 209-170 50 (2x25) for test plug 4 mm/0.157 in Ø
				Test plug, 6 mm/0.236 in wide, with CAGE CLAMP® for 0.08 – 2.5 mm ² /AWG 28 – 14 I _N 24 A 281-407 100 (4x25)

Please find the entire product range in our General Catalogue W4, Volume 1. More information at www.wago.com.

**AWG 12: THHN, THWN

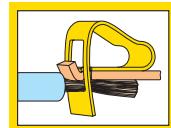
Through/Ground (Earth)/Shield(Screen) and Ex Terminal Blocks 4 mm², Series 281

0.08 – 4 mm² 800 V/8 kV/3 32 A	AWG 28 – 12 600 V, 20 A	0.08 – 4 mm² 800 V/8 kV/3 32 A	AWG 28 – 12 600 V, 20 A	0.08 – 4 mm² 800 V/8 kV/3 26 A	AWG 28 – 12 600 V, 20 A
Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in	* CCA N D P S T GL BV LR NV	Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in	* CCA N D P S T GL BV LR NV	Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in	* CCA N D P S T GL BV LR NV



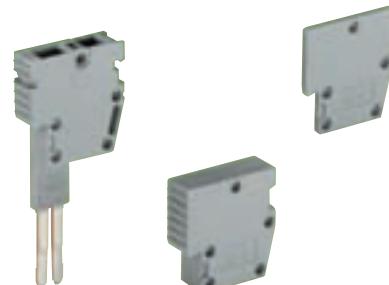
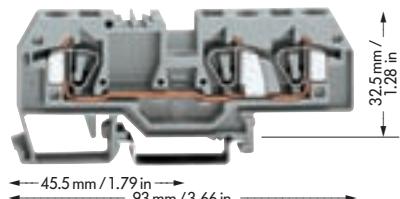
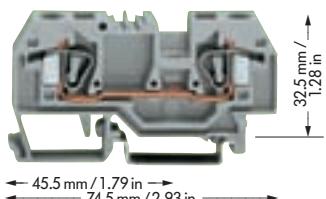
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks								
grey	281-901	50	grey	281-681	50	grey	281-652	50
blue	281-904	50	blue	281-684	50	blue	281-654	50
orange	281-902	50	orange	281-682	50	orange	281-653	50
red	281-903	50	red	281-683	50	red	281-663	50
black	281-905	50	black	281-685	50	black	281-664	50
yellow	281-906	50	yellow	281-686	50	yellow	281-668	50
light grey Ex	281-992	50	light grey Ex	281-993	50	light grey Ex	281-994	50
2-conductor ground (earth) terminal blocks								
green-yellow	281-907	50	green-yellow	281-687	50	green-yellow	281-657	50
green-yellow Ex	281-907/999-950	50	green-yellow Ex	281-687/999-950	50	green-yellow Ex	281-657/999-950	50
3-conductor through terminal blocks								
grey	281-681	50	grey	281-681	50	grey	281-652	50
blue	281-684	50	blue	281-684	50	blue	281-654	50
orange	281-682	50	orange	281-682	50	orange	281-653	50
red	281-683	50	red	281-683	50	red	281-663	50
black	281-685	50	black	281-685	50	black	281-664	50
yellow	281-686	50	yellow	281-686	50	yellow	281-668	50
light grey Ex	281-993	50	light grey Ex	281-993	50	light grey Ex	281-994	50
3-conductor ground (earth) terminal blocks								
green-yellow	281-687	50	green-yellow	281-687	50	green-yellow	281-657	50
green-yellow Ex	281-687/999-950	50	green-yellow Ex	281-687/999-950	50	green-yellow Ex	281-657/999-950	50
4-conductor through terminal blocks								
grey	281-652	50	grey	281-652	50	grey	281-665/...-...	
blue	281-654	50	blue	281-654	50	blue	281-659	
orange	281-653	50	orange	281-653	50	orange	281-659	
red	281-663	50	red	281-663	50	red	281-656	
black	281-664	50	black	281-664	50	black	281-656	
yellow	281-668	50	yellow	281-668	50	yellow	281-647	
light grey Ex	281-994	50	light grey Ex	281-994	50	light grey Ex	281-994	
4-conductor ground (earth) terminal blocks								
green-yellow	281-657	50	green-yellow	281-657	50	green-yellow	281-659	
green-yellow Ex	281-657/999-950	50	green-yellow Ex	281-657/999-950	50	green-yellow Ex	281-656	
4-conductor shield (screen) terminal block								
white	281-658	50	white	281-658	50	white	281-658	50
Other terminal blocks with the same shape								
diode	281-915/...-...		diode	281-673/...-...		diode	281-665/...-...	
disconnect	281-912	page 4.25	disconnect	281-683	page 4.25	disconnect	281-659	page 4.25
carrier	281-916	page 4.24	carrier	281-610	page 4.24	carrier	281-656	page 4.24
End and intermediate plate, 2.5 mm/0.098 in thick								
orange	281-329	100 (4x25)	orange	281-326	100 (4x25)	orange	281-335	100 (4x25)
grey	281-328	100 (4x25)	grey	281-324	100 (4x25)	grey	281-334	100 (4x25)
light grey	281-349	100 (4x25)	light grey	281-355	100 (4x25)	light grey	281-345	100 (4x25)
Separator plate, oversized, 2 mm/0.079 in thick								
orange	281-331	100 (4x25)	orange	281-346	100 (4x25)	orange	281-339	100 (4x25)
grey	281-330	100 (4x25)	grey	281-344	100 (4x25)	grey	281-338	100 (4x25)
light grey	281-350	100 (4x25)	light grey	281-356	100 (4x25)	light grey	281-347	100 (4x25)
Ex e/Ex i separator see page 4.5								
Ex e/Ex i separator see page 4.5								
Accessories, Series 281								
Appropriate marking system WMB/WSB/WFB								
Adjacent jumper, insulated, I_N 32 A			Comb type jumper bar, insulated, $I_N = I_{\text{term. block}}$			Protective warning marker, with high voltage symbol, for 5 terminal blocks		
grey	281-402	200 (8x25)	2-way	281-482	100 (4x25)	yellow	281-415	100 (4x25)
yellow green	281-422	200 (8x25)	3-way	281-483	100 (4x25)			
			5-way	281-485	100 (4x25)			
Alternate jumper, insulated, I_N 32 A			Operating tool, insulated			Screwless end stop,		
grey	281-409	100 (4x25)	2-way	280-432	1	6 mm wide	249-116	100 (4x25)
			3-way	280-433	1	10 mm wide	249-117	50 (2x25)
			5-way	280-440	1			
Staggered jumper, insulated, I_N 32 A, width 6 mm/0.236 in			Insulation stop,			Test plug adapter, suitable for terminal blocks 1.5 - 4 mm²		
from 1 to 2	781-452	100 (4x25)	5 pcs/strip			5 mm/0.197 in wide	280-404	100 (4x25)
from 1 to 3	781-453	100 (4x25)	200 strips			for test plug 210-137		
from 1 to 4	781-454	100 (4x25)						
from 1 to 5	781-455	50 (2x25)	white	281-470	0.08 mm ² - 0.2 mm ²	8 mm/0.315 in wide	209-170	50 (2x25)
from 1 to 6	781-456	50 (2x25)	light grey	281-471	0.25 mm ² - 0.5 mm ²	for test plug 4 mm/0.157 in Ø		
			dark grey	281-472	0.75 mm ² - 1.5 mm ²			
Push-in type wire jumper, insulated, I_N 9 A			Test plug, 6 mm/0.236 in wide, with CAGE CLAMP®			Test plug, 6 mm/0.236 in wide, with CAGE CLAMP®		
L = 60 mm	249-125	10	L = 60 mm	249-125	10	for 0.08 - 2.5 mm ² /AWG 28 - 14		
L = 110 mm	249-126	10	L = 110 mm	249-126	10	I_N 24 A	281-407	100 (4x25)
L = 250 mm	249-127	10						
(1) Suitable for Ex i applications			(2) Suitable for Ex e II applications			(3) Suitable for Ex e II applications		
			0.2 - 4 mm ²			0.2 - 4 mm ²		
			AWG 24 - 12			AWG 24 - 12		
			550 V~, 30 A			550 V~, 30 A		

Through/Ground (Earth) and Terminal Blocks 6 mm², Series 282 Test Plug Modules with CAGE CLAMP®, Series 709



0.2 – 6 mm² 800 V/8 kV/3 41 A	AWG 24 – 10 600 V, 30 A 600 V, 40 A	0.2 – 6 mm² 800 V/8 kV/3 41 A	AWG 24 – 10 600 V, 30 A 600 V, 10 A	Test plug module for rail-mounted terminal blocks of Series 282 and 284 0.2 – 6 mm² AWG 24 – 10 Module width 8 mm / 0.315 in 12 – 13 mm / 0.49 in Test voltage 800 V / 8 kV Test current 32 A
Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in	*	Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in	*	

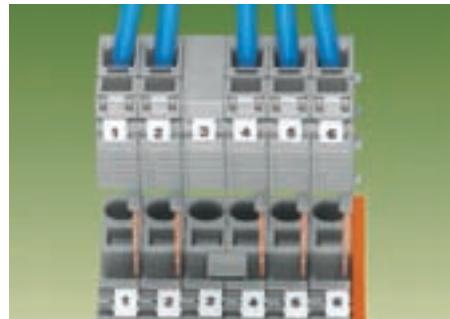
* GL BV LR NV



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
2-conductor through terminal blocks		3-conductor through terminal blocks					
grey	282-901	50	grey	282-681	25	Test plug module with CAGE CLAMP® ,	
blue	282-904	50	blue	282-684	25	version using jumper contact position in current bar,	
orange	282-902	50	orange	282-682	25	grey, module width 8 mm / 0.315 in, suitable for all	
light grey	282-992	50	light grey	282-993	25	series 282 rail-mounted terminal blocks	
2-conductor ground (earth) terminal blocks		3-conductor ground (earth) terminal blocks					
green-yellow	282-907	50	green-yellow	282-687	25	709-310	100 (4 x 25)
green-yellow	282-907/999-950	50	green-yellow	282-687/999-950	25	Spacer module ,	
						for bridging over commoned terminal blocks, grey,	
						modul width 8 mm / 0.315 in	
						709-311	100 (4 x 25)
						Spacer plate , – only for Series 284 –	
						modular, grey, width 2 mm / 0.079 in,	
						snap on test plug modules 709-310 and	
						spacer module 709-311 for testing of series 284	
						rail-mounted terminal blocks	
						709-312	100 (4 x 25)
						Strain relief plate	
						6 mm ²	10 mm ²
						2 poles	709-332
						4 poles	709-334
						6 poles	709-336



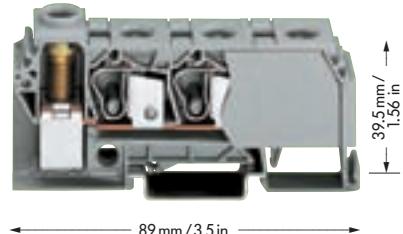
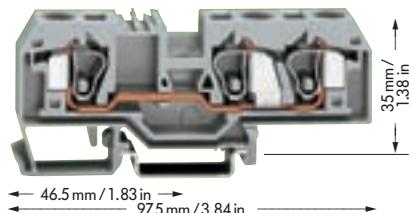
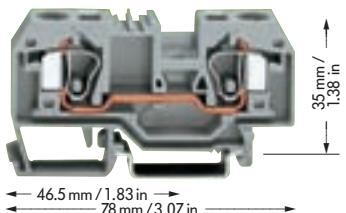
Snapping together of test plug adapter, end and spacer modules to assemble a multipole test plug adapter strip (10 poles max.)



Test plug adapter strips are directly inserted into the jumper contact slots in the current bar

Through/Ground (Earth)/ and Distribution Terminal Blocks 10 mm², Series 284

0.2 – 10 mm² 800 V/8 kV/3 57 A	AWG 24 – 8 600 V, 50 A 600 V, 54 A	0.2 – 10 mm² 800 V/8 kV/3 57 A	AWG 24 – 8 600 V, 50 A 600 V, 54 A	3 x 0.2 – 10 mm² ① 1 x 6 – 35 mm ² ② 800 V/8 kV/3; 125 A	AWG 24 – 8 ① AWG 10 – 2 ② 600 V, 115 A
Terminal block width 10 mm / 0.394 in 12 – 13 mm / 0.49 in	* CCA P GL LR NV	Terminal block width 10 mm / 0.394 in 12 – 13 mm / 0.49 in	* CCA P GL LR NV	Terminal block width 17.5 mm / 0.689 in 12 – 14 mm / 0.51 in	* CCA CB GL BV LR NV



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks								
grey	284-901	25	grey	284-681	25	grey	284-621	15
blue	284-904	25	blue	284-684	25	blue	284-624	15
orange	284-902	25	orange	284-682	25			
light grey	284-992	25	light grey	284-993	25			
2-conductor ground (earth) terminal blocks								
green-yellow	284-907	25	green-yellow	284-687	25			
green-yellow	284-907/999-950	25	green-yellow	284-687/999-950	25			
3-conductor through terminal blocks								
grey	284-681	25	grey	284-328	100 (4x25)	orange	284-339	100 (4x25)
blue	284-684	25	grey	284-325	100 (4x25)	grey	284-308	100 (4x25)
orange	284-682	25	light grey	284-330	100 (4x25)	light grey	284-341	100 (4x25)
light grey	284-993	25						
3-conductor ground (earth) terminal blocks								
green-yellow	284-687	25	green-yellow	284-687/999-950	25	green-yellow	284-687/999-950	25



Connection of conductor 35 mm²/AWG 2
screw clamp connection, side-entry



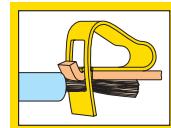
Connection of conductor 10 mm²/AWG 8
CAGE CLAMP® connection, front-entry

Accessories, Series 284

Appropriate marking system **WMB/WSB/WFB**

Adjacent jumper , insulated, I _N 57 A grey 284-402 100 (4x25) yellow green 284-422 100 (4x25)	Protective warning marker , with high voltage symbol, for 5 terminal blocks yellow 284-415 50 (2x25)
Alternate jumper , insulated, I _N 57 A grey 284-409 50 (2x25)	Separator plate , oversized, 2 mm/0.079 in thick orange 284-329 100 (4x25) grey 284-326 100 (4x25) light grey 284-331 100 (4x25)
Test plug adapter , suitable for terminal blocks 1.5–10 mm ² 8 mm/0.315 in wide 209-170 50 (2x25) for test plug 4 mm/0.157 in Ø	Finger guard cover , serves as touch protection for unused clamping units yellow 283-400 100 (4x25)
Step-down jumper , see page 4.13	Screwless end stop , 6 mm wide 249-116 100 (4x25) 10 mm wide 249-117 50 (2x25)
Cover plate , for step-down jumper application only, 1 mm/0.039 thick, for 2-conductor terminal blocks grey 284-357 25	Test plug module and spacer module , both with spacer plate, see page 4.13
for 3-conductor terminal blocks grey 284-358 25	Suitable for Ex e II applications 0.5 – 10 mm ² 550 V~, 53 A AWG 20 – 8
	Comb type jumper bar , insulated, Individual arrangement I _N 125 A – 2 jumpers combined in one clamping unit 100 A 2-way grey 284-412 100 (4x25)

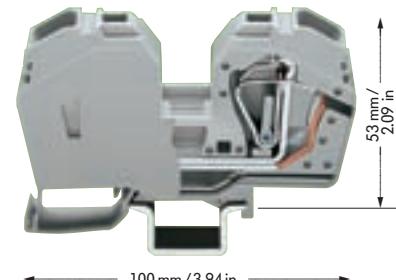
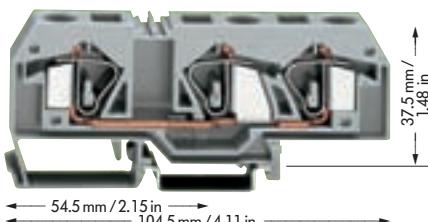
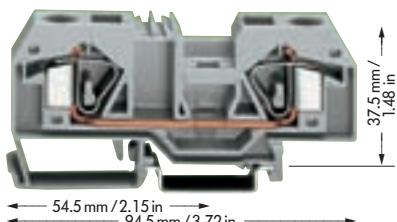
Through/Ground (Earth) and Terminal Blocks 16 mm² and 35 mm², Series 283 and 285



4

15

0.2 – 16 mm² 800 V/8 kV/3 76 A	AWG 24 – 6 600 V, 65 A 600 V, 70 A	0.2 – 16 mm² 800 V/8 kV/3 76 A	AWG 24 – 6 600 V, 65 A 600 V, 70 A	6 – 35 mm² 1000 V/8 kV/3 125 A	AWG 8 – 2 600 V, 115 A 600 V, 140 A
Terminal block width 12 mm / 0.472 in 16 – 17 mm / 0.65 in		Terminal block width 12 mm / 0.472 in 16 – 17 mm / 0.65 in		Terminal block width 16 mm / 0.63 in 23 mm / 0.91 in [16 mm/0.63 in for 35 mm ² "stranded"]	
* CCA GL BV LR NV		*	CCA GL BV LR NV	* CCA GL	



Colour	Item No. Nr.	Pack.-unit pcs	Colour	Item No. Nr.	Pack.-unit pcs	Colour	Item No. Nr.	Pack.-unit pcs
2-conductor through terminal blocks								
grey	283-901	20	grey	283-671	20	grey	285-635	15
blue	283-904	20	blue	283-674	20	blue	285-634	15
orange	283-902	20	orange	283-672	20	light grey	283-992	15
light grey	283-992	20	light grey	283-993	20	2-conductor ground (earth) terminal blocks		
green-yellow	283-907	20	green-yellow	283-677	20	green-yellow	285-637	15
green-yellow	283-907/999-950	20	green-yellow	283-677/999-950	20	green-yellow	285-637/999-950	15
Attention! Cannot be used with jumpers!								

End and intermediate plate, 2.5 mm/0.098 in thick	End and intermediate plate, 2.5 mm/0.098 in thick
orange 283-328 50 (2x25)	orange 283-352 50 (2x25)
grey 283-325 50 (2x25)	grey 283-350 50 (2x25)
light grey 283-330 50 (2x25)	light grey 283-354 50 (2x25)
Separator plate, oversized, 2 mm/0.079 in thick	Separator plate, oversized, 2 mm/0.079 in thick
orange 283-329 50 (2x25)	orange 283-353 50 (2x25)
grey 283-326 50 (2x25)	grey 283-351 50 (2x25)
light grey 283-331 50 (2x25)	light grey 283-355 50 (2x25)

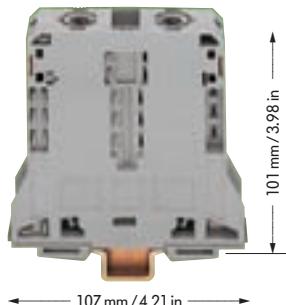
Connection of conductor 35 mm²/AWG 2

Accessories, Series 283	Appropriate marking system WMB/WSB/WFB	Series 285 Appropriate marking system Mini-WSB WMB/WSB
Adjacent jumper, insulated, I_N 70 A grey 283-402 50 (2x25) yellow green 283-422 50 (2x25)	Protective warning marker, for 5 terminal blocks, fits into screwdriver slot yellow 283-415 50 (2x25)	Adjacent jumper, insulated, I_N 85 A grey 285-435 50 (2x25)
Alternate jumper, insulated, I_N 76 A grey 283-409 50 (2x25)	Finger guard cover, serves as touch protection for unused clamping units yellow 283-400 100 (4x25)	Step-down jumper, insulated, I_N 32 A grey 283-414 50 (2x25)
Test plug adapter, suitable for term. blocks 1.5-16 mm², 11.6 mm/0.457 in wide 283-404 25 for test plug 4 mm/0.157 in Ø	Adjustable height group marker carriers, suitable for end stops 249-116/-117 for 1 marker card ① 249-119 ① 50 (2x25)	Protective warning marker, with high voltage symbol, for 5 terminal blocks fits into screwdriver slot yellow 285-416 50 (2x25)
Step-down jumper, insulated, I_N 32 A, 16 mm ² /AWG 6 → 4 mm ² /AWG 12 grey 283-414 50 (2x25)	for 2 WSB Quick markers each or 1 x continuous marking strip 249-118 ② 100 (4x25)	Finger guard cover, yellow 285-401 100 (4x25)
Cover plate, for step-down jumper application only, 1 mm/0.039 thick, for 2-conductor terminal blocks grey 283-357 25	Suitable for Ex e II applications 0.5 – 16 mm ² 550 V~, 68 A	Suitable for Ex e II applications 6 – 35 mm ² 750 V~, 120 A 6 – 25 mm ² for ground (earth) terminal blocks

4 95 mm²/AWG 000 Rail-Mounted High Current Terminal Blocks, Series 285

16 Side-entry

25 – 95 mm ² 1000 V/8 kV/3 232 A	AWG 4 – 000 600 V, 200 A 600 V, 210 A
Terminal block width 25 mm / 0.98 in 35 mm / 1.38 in	
* CCA GL	



Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks		
grey	285-195	5
blue	285-194	5
light grey	285-995	5
2-conductor ground (earth) terminal blocks		
green-yellow	285-197	5
green-yellow	285-197/999-950	5
Accessories		
Adjacent jumper, insulated, I _N 232 A for 1 jumper	WMB	
I _N 192 A for 2 to 4 jumper		
grey	285-495	25
Voltage tap, I _N 57 A, 0.2 – 10/16 mm ²		
Module width 20 mm / 0.787 in		
grey	285-407	5
Hex wrench with partially insulated shaft		
8 mm/0.32 in	285-172	1
Touch protection cover, for unused clamping units and jumper slots		
yellow	285-169	25
Protective warning marker, with high voltage symbol, for 5 terminal blocks		
yellow	285-170	50 (2x25)
Carrier rail 35 x 15 mm, 2.3 mm thick, unslotted, acc. to EN60715, copper, unplated		
	210-198	10
Suitable for Ex e II applications		
25 – 95 mm ²	AWG 4 – 000	
750 V~, 195 A		
20 – 70 mm ²	AWG 2 – 00	
for ground (earth) conductor terminal blocks		

Wire connection



Commoning



Commoning with adjacent jumper. Insertion of jumper above the conductor entry hole, without tools. Rated cross section is still 95 mm²/AWG 000.



Anti-clockwise rotation using a hex wrench. Latch holds clamp in open position.

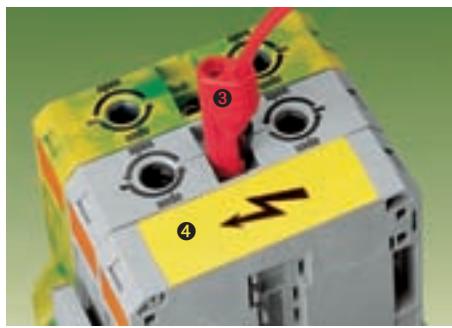


Introduce stripped wire (stripped length 35 mm!) into the clamping unit up to the stop and hold it in position . . .



. . . A small anti-clockwise rotation releases the latch ①. Once the operating tool ② has been removed the conductor is safely clamped.

Testing/Protective warning marker



- ③ Testing with test plug 4 mm/0.157 in diameter.
- ④ Protective warning marker may indicate:
Attention! Voltage may be present despite main circuit being switched off!

Voltage tap



Reliable and simple tap directly onto the power supply. Insert the unwired tap before opening the pressure spring.

Touch protection



Jumper contact slots can also be sealed individually.

The POWER CLAMP connection clamps the following copper wires:



solid



stranded



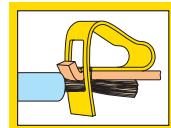
fine-stranded



with crimped ferrule

* You can find approvals on the Internet at www.wago.com.

Through/Ground (Earth) and Ex Terminal Blocks, Angled Types



4

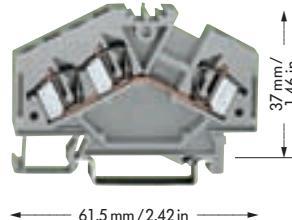
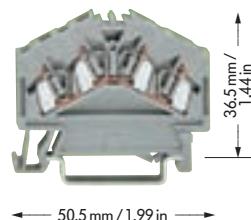
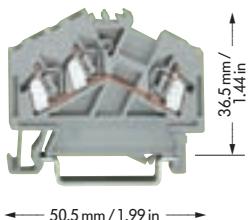
17

0.08 – 2.5 mm² 800 V/8 kV/3 24 A	AWG 28 – 12 600 V, 20 A 600 V, 25 A	0.08 – 2.5 mm² 800 V/8 kV/3 24 A	AWG 28 – 12 600 V, 20 A 600 V, 25 A	0.08 – 4 mm² 800 V/8 kV/3 32 A	AWG 28 – 12 600 V, 20 A 600 V, 15 A
Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in		Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in		Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in	

* CCA GL BV LR NV

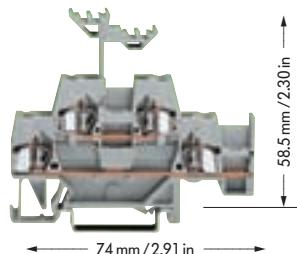
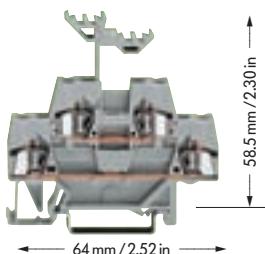
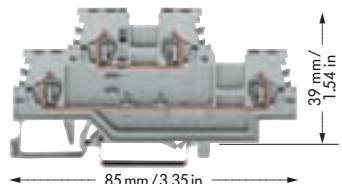
* CCA GL BV LR NV

* CCA GL BV LR NV

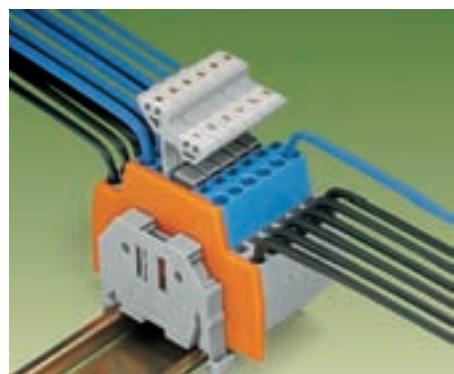


Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs		
3-conductor through terminal blocks			4-conductor through terminal blocks			3-conductor through terminal blocks				
grey	280-641	100	grey	280-646	100	grey	281-631	100		
blue	280-651	100	blue	280-656	100	blue	281-651	100		
orange	280-654	100	orange	280-946	100	light grey	281-998	100		
light grey	280-998	100	light grey	280-996	100	3-conductor ground (earth) terminal blocks				
2-conductor ground (earth) terminal blocks			Attention! Cannot be used with jumpers!			green-yellow 281-637 100				
green-yellow	280-637	100	green-yellow	280-637/999-950	100	green-yellow	281-637/999-950	100		
3-conductor shield (screen) terminal block										
white	280-640	100								
Other terminal blocks with the same shape										
spacer	280-654/056-000									
End and intermediate plate, 2.5 mm/0.098 in thick			End and intermediate plate, 2.5 mm/0.098 in thick			End and intermediate plate, 2.5 mm/0.098 in thick				
orange	280-313	100 (4x25)	orange	280-313	100 (4x25)	orange	281-313	100 (4x25)		
grey	280-312	100 (4x25)	grey	280-312	100 (4x25)	grey	281-312	100 (4x25)		
light grey	280-354	100 (4x25)	light grey	280-354	100 (4x25)	light grey	281-357	100 (4x25)		
Separator plate, oversized, 2.5 mm/0.098 in thick			Separator plate, oversized, 2.5 mm/0.098 in thick			Separator plate, oversized, 2 mm/0.079 in thick				
orange	280-318	100 (4x25)	orange	280-318	100 (4x25)	orange	281-318	100 (4x25)		
grey	280-348	100 (4x25)	grey	280-348	100 (4x25)	grey	281-348	100 (4x25)		
light grey	280-355	100 (4x25)	light grey	280-355	100 (4x25)	light grey	281-358	100 (4x25)		
Accessories, Series 280 Appropriate marking system WMB/WSB/WFB										
Adjacent jumper, insulated, I_N 24 A			Protective warning marker, with high voltage symbol, for 5 terminal blocks			Series 281 Appropriate marking system WMB/WSB/WFB				
grey	280-402	200 (8x25)	yellow	280-415	100 (4x25)	grey	281-402	200 (8x25)		
yell. green	280-422	200 (8x25)				yell. green	281-422	200 (8x25)		
Alternate jumper, insulated, I_N 24 A			Screwless end stop,			Alternate jumper, insulated, I_N 32 A				
grey	280-409	100 (4x25)	6 mm wide	249-116	100 (4x25)	grey	281-409	100 (4x25)		
			10 mm wide	249-117	50 (2x25)					
Staggered jumper, insulated, I_N 24 A / width 5 mm/0.197 in			Test plug adapter, suitable for terminal blocks 1.5 - 4 mm² / 5 mm/0.197 in wide			Staggered jumper, insulated, I_N 32 A / width 6 mm/0.236 in				
from 1 to 2	780-452	100 (4x25)	280-404	100 (4x25)		from 1 to 2	781-452	100 (4x25)		
from 1 to 3	780-453	100 (4x25)	for test plug 210-137				from 1 to 3	781-453	100 (4x25)	
from 1 to 4	780-454	100 (4x25)	5 pcs/strip				from 1 to 4	781-454	100 (4x25)	
from 1 to 5	780-455	50 (2x25)	200 strips				from 1 to 5	781-455	50 (2x25)	
:										
from 1 to 8	780-458	50 (2x25)	More accessories see page 4.11				from 1 to 6	781-456	50 (2x25)	
Push-in type wire jumper, insulated, I_N 9 A										
L = 60 mm	249-125	10	white	280-470	0.08 mm ² - 0.2 mm ²					
L = 110 mm	249-126	10	light grey	280-471	0.25 mm ² - 0.5 mm ²					
L = 250 mm	249-127	10	dark grey	280-472	0.75 mm ² - 1 mm ²					
Screwdriver, with partially insulated shaft,										
	210-620	(3.5 x 0.5) mm								
Suitable for Ex i applications			Suitable for Ex i applications							
Suitable for Ex e II applications			Suitable for Ex e II applications							
0.2 – 2.5 mm ²			0.2 – 4 mm ²							
550 V~, 20 A			550 V~, 30 A							

0.08 – 1.5 mm² AWG 28 – 16 500 V/6 kV/3 18 A	0.08 – 2.5 mm² AWG 28 – 12 500 V/6 kV/3 20 A	0.08 – 2.5 mm² AWG 28 – 12 500 V/6 kV/3 20 A
Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in	Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in	Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in
* KEMA ABS	* UL CUL CCA N D P E GL BV LR NV	* UL CUL CCA N D P E GL BV LR NV



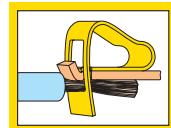
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs						
Through/through terminal blocks														
conductor entry positions are marked in different colours														
grey	279-501	50	grey	280-519	50	grey	280-520	50						
grey (N/L)	279-512	50	blue	280-529 ①	50	blue	280-530 ①	50						
grey (L/N)	279-513	50	blue/grey	280-523	50	blue/grey	280-524	50						
blue (N/N)	279-504	50	grey/blue	280-533	50	grey/blue	280-534	50						
4-conductor through terminal blocks, internal commoning, conductor entry position coloured in violet														
blue	279-509 ①	50	green-yellow/grey	280-527	50									
grey	279-508	50	green-yellow/blue	280-537	50									
Ground (earth) conductor/through terminal blocks, conductor entry positions are marked in different colours														
grey (PE/N)	279-517	50	green-yellow	280-517	50									
grey (PE/L)	279-527	50												
4-conductor ground (earth) terminal blocks, internal commoning														
green-yellow	279-507	50												
End and intermediate plate, 2 mm/0.079 in thick														
orange	279-519 100 (4x25)		orange	280-341 100 (4x25)		orange	280-343 100 (4x25)							
grey	279-518 100 (4x25)		grey	280-340 100 (4x25)		grey	280-342 100 (4x25)							
Accessories, Series 279 Appropriate marking system WMB/WSB														
WSB double marker carrier														
	279-529	50 (2x25)	① Suitable for Ex i applications			Vertical jumper, insulated, I_N 24 A								
More accessories see page 4.10														
Application notes														
Double deck terminal block with WSB double marker carrier														
Double deck terminal blocks used for the connection of a three-phase motor														
Double deck terminal blocks used as control wire terminals; for ex. for magnetic valves. Upper deck commoned.														



Double Deck Terminal Blocks, Series 281

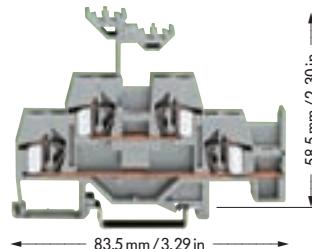
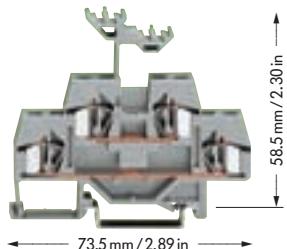
4

19



0.08 – 4 mm² 500 V/6 kV/3 ① 26 A	AWG 28 – 12 600 V, 20 A ④ 600 V, 10 A ③	0.08 – 4 mm² 500 V/6 kV/3 ① 26 A	AWG 28 – 12 600 V, 20 A ④ 600 V, 10 A ③	
Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in		Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in		

* ① CCA ② KET ③ CCA ④ PCT ⑤ GL BV LR NV ⑥



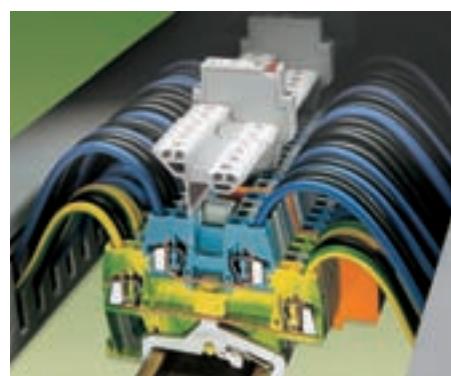
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	
Through/through terminal blocks						
grey	281-619	50	grey	281-620	50	
blue	281-629 ①	50	blue	281-630 ①	50	
Other terminal blocks with the same shape						
diode	281-6xx/281-...					
End and intermediate plate, 2.5 mm/0.098 thick			End and intermediate plate, 2.5 mm/0.098 thick			
orange	281-341 50 (2x25)		orange	281-343 100 (4x25)		
grey	281-340 50 (2x25)		grey	281-342 100 (4x25)		
Accessories, Series 281		Appropriate marking system WMB/WSB				
Vertical jumper, insulated, I_N 24 A			Screwdriver, with partially insulated shaft			
grey 281-421 200 (8x25)			(3.5 x 0.5) mm 210-620 1			
More accessories see page 4.12						
Application notes						



Wire connection



Connection of conductors



Example of a mixed assembly with double deck terminal blocks

0.08 – 2.5 mm² | AWG 28 – 12
500 V/6 kV/3 | 300/600 V, 15/5 A
20 A | 300/600 V, 20/5 A

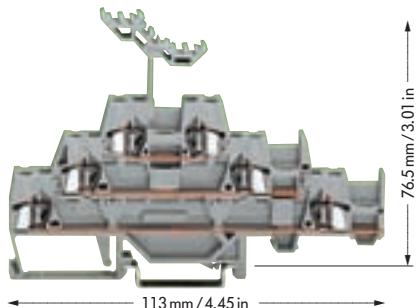
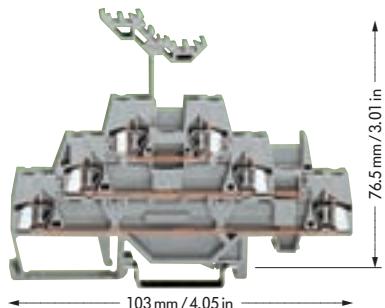
Terminal block width 5 mm / 0.197 in
 8 – 9 mm / 0.33 in

* CCA GL BV LR NV

0.08 – 2.5 mm² | AWG 28 – 12
500 V/6 kV/3 | 300/600 V, 15/5 A
20 A | 300/600 V, 20/5 A

Terminal block width 5 mm / 0.197 in
 8 – 9 mm / 0.33 in

* CCA GL BV LR NV



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Through/through/through terminal blocks					
grey	280-549	40	grey	280-550	40
blue	280-551	40			
grey/grey/blue	280-552	40			
Ground (earth)/through/through terminal blocks					
green-yel./blue/grey	280-547	40			
green-yel./grey/grey	280-557	40			
6-conductor ground (earth) terminal blocks, internal commoning					
green-yellow	280-597	40			
End and intermediate plate, 2.5 mm/0.098 in thick					
orange	280-304 50 (2x25)		orange	280-306 100 (4x25)	
grey	280-303 50 (2x25)		grey	280-305 100 (4x25)	
Intermediate plate, 1.1 mm/0.043 in thick					
orange	280-336 50 (2x25)		orange	280-339 50 (2x25)	

Accessories, Series 280

Appropriate marking system **WMB/WSB**

Vertical jumper, insulated, I_N 24 A



grey **281-421** 200 (8x25)

Suitable for Ex i applications

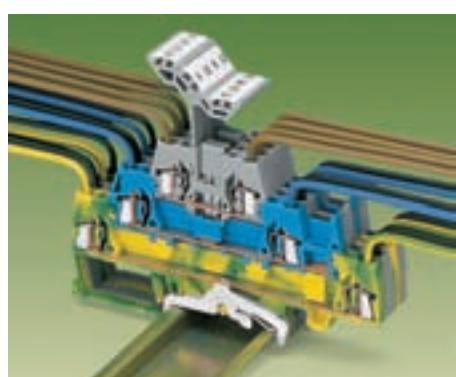
Screwdriver, with partially insulated shaft



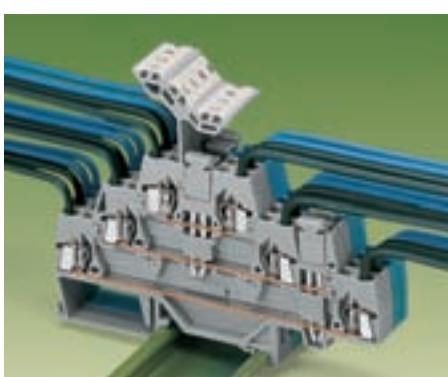
(3.5 x 0.5) mm
210-620 1

More accessories see page 4.11

Application notes



3-wire power circuit with additional branch circuit tapping



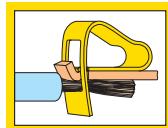
Connection of conductors



Combined horizontal and vertical commoning

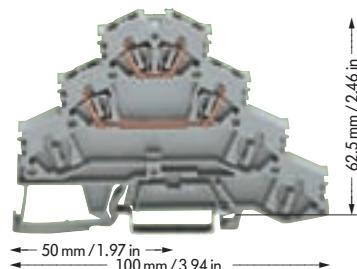
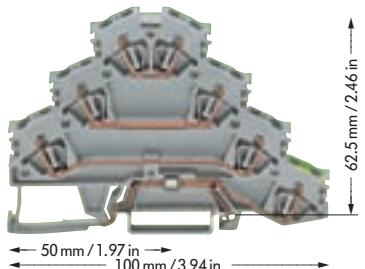
Rail Mounted Quadruple Deck Terminal Blocks for Wiring of Electric Motors, Series 281

4

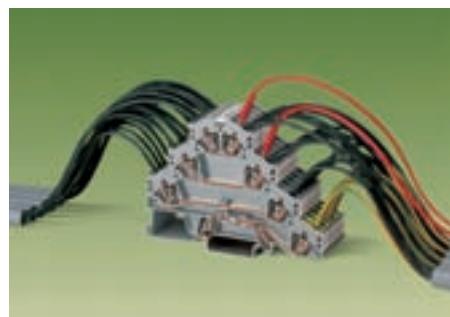


21

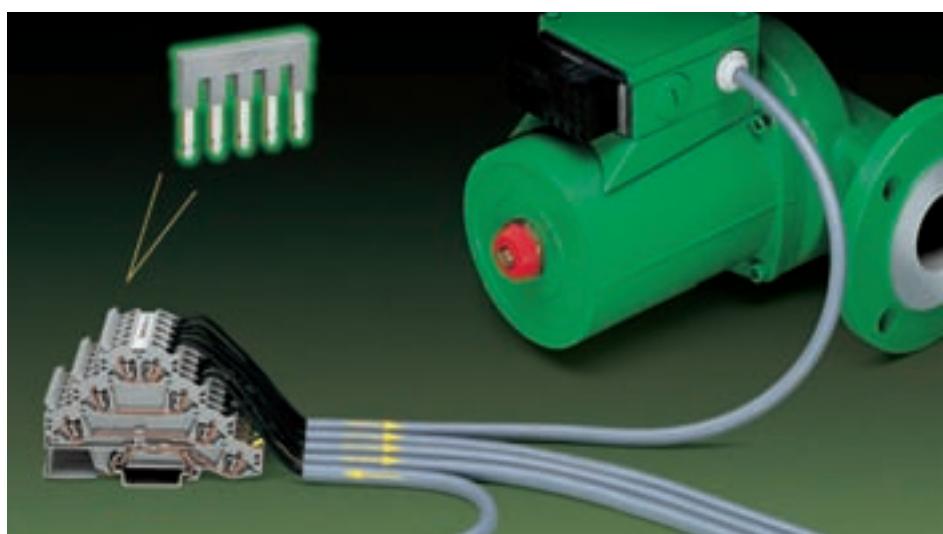
0.08 – 4 mm² 400 V/6 kV/3 20 A (2.5mm ²) 25 A (4mm ²)	AWG 28 – 12 300 V, 20 A	0.08 – 4 mm² 400 V/6 kV/3 20 A (2.5mm ²) 25 A (4mm ²)	AWG 28 – 12	Application notes
Terminal block width 6 mm / 0.236 in 8 – 9 mm / 0.33 in		Terminal block width 6 mm / 0.236 in 8 – 9 mm / 0.33 in		* CCA GL BV LR NV



Commoning

3 phases and ground (earth) conductor in one terminal block
Compact design

Testing with test plug 2 mm / 0.079 in Ø



Marking clamping units with WMB multi-marking system or WSB quick marking system (see section 9). Group marking with marking strips Item No. 709-177

Fused Disconnect Terminal Blocks, Pluggable Fuse Modules, Disconnect Terminal Blocks for Test and Measurement . . .

Fused Disconnect Terminal Blocks



Blown fuse indication by LED or neon lamp

Commoning



Distribution of current to several fuse protected circuits by using insulated touchproof jumpers

Disconnect terminal blocks



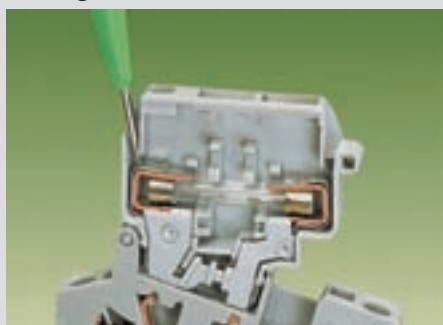
Disconnecting by pulling the disconnecting tab (red = disconnected)

Exchange of fuse 1



Before exchanging the fuse, pivot the fuse holder in the locked open position

Testing



Voltage test, either at input or output with fuse holder in closed position (live)

Commoning



Commoning with comb type jumper bars

Exchange of fuse 2



One end of the fuse is automatically ejected from the holder when opening the cover

Testing



Voltage testing at input with test plug adapter 280-404 (shown) or test plug 281-407

Disconnect lock



As soon as the disconnecting tab is in the disconnect position, it can be protected against unintentional reconnection by using the disconnect lock

More fused terminal blocks

Pluggable fuse modules



Fuse module with blown fuse indication on a 3-conductor carrier terminal block

CAGE CLAMP®
clamps the following copper wires:

solid

Mini-automotive blade-type fuses



Fuse terminal blocks for mini-automotive blade-type fuses

solid

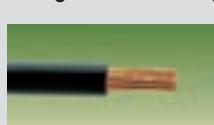
stranded

More disconnect terminal blocks

Double deck terminal blocks



Pulling the disconnecting tab



fine-stranded,
also with tinned
single strands

... Description and Handling

Disconnect terminal blocks



Disconnecting by knife disconnect

Test slot:
for test plug Ø 2 mm or Ø 2.3 mm -
direct contact to the current bar

Longitudinal disconnect term. blocks



Disconnecting by disconnect link

Test slots Ø 4 mm/0.157 in are integrated

Disconnect terminal blocks . . .



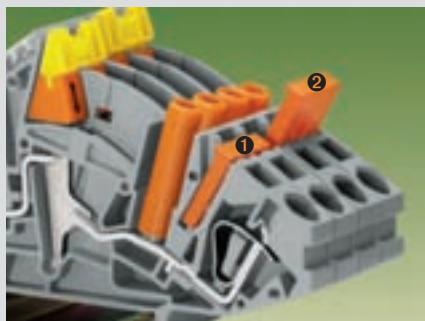
e.g. for current or voltage transformer circuits

Staggered jumper



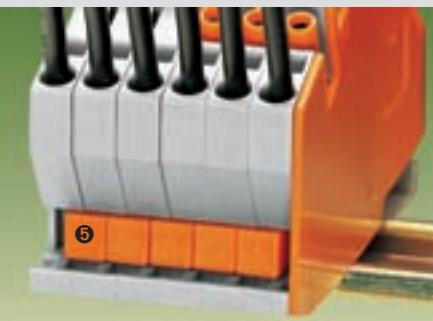
Staggered jumper for sophisticated wiring jobs.
Push jumpers down FIRMLY until FULLY inserted

Commoning



Longitudinal disconnect terminal block with jumper
① in locking and ② pre-locking position

Commoning



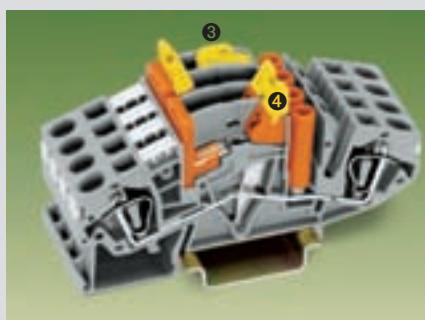
Terminal strip for current transformer circuits with
short circuit jumpers ⑤

Power distribution



Power distribution using knife disconnect in supply
line, disconnecting all outputs

Transverse switch terminal blocks



For current transformer circuits with
③ lock-out and
④ coupling device

Locking cover and lock-out seal



⑥ Transparent locking cover for 1-4 disconnect
links can be snapped on for mechanical
interlocking for multipole switching
⑦ A lock-out seal can be used on the disconnect
link in notched position „I“

Disconnect terminal block 6 mm²

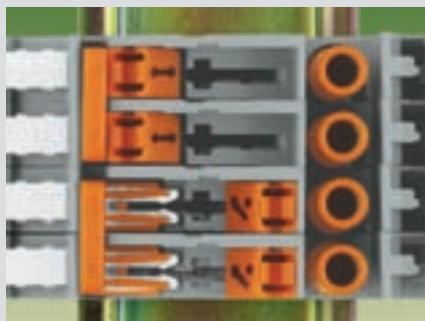


Testing a 6 mm² disconnect terminal block



fine-stranded wire -
tip bonded

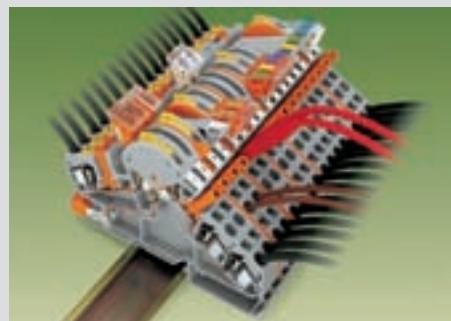
Switch positions



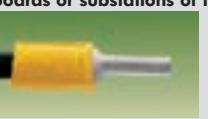
closed open



fine-stranded wire
with crimped ferrule ⑧



Transformer terminal strip, e.g. for use in meter
boards or substations of the power supply industry

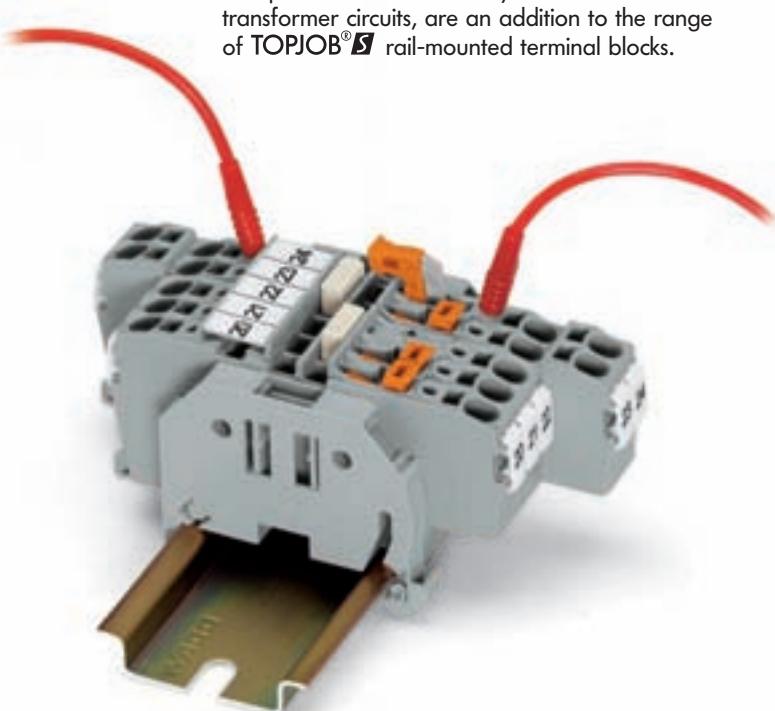


fine-stranded wire
with crimped pin terminal

⑧ When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than max. rating of terminal block.

2- and 4-conductor disconnect terminal blocks

The 5.2 mm wide 2- and 4-conductor disconnect terminal blocks, that can be used in both control and process measurement systems as well as transformer circuits, are an addition to the range of TOPJOB® S rail-mounted terminal blocks.



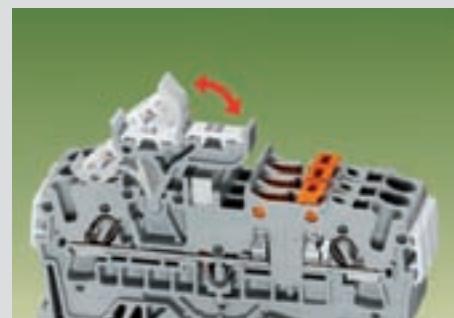
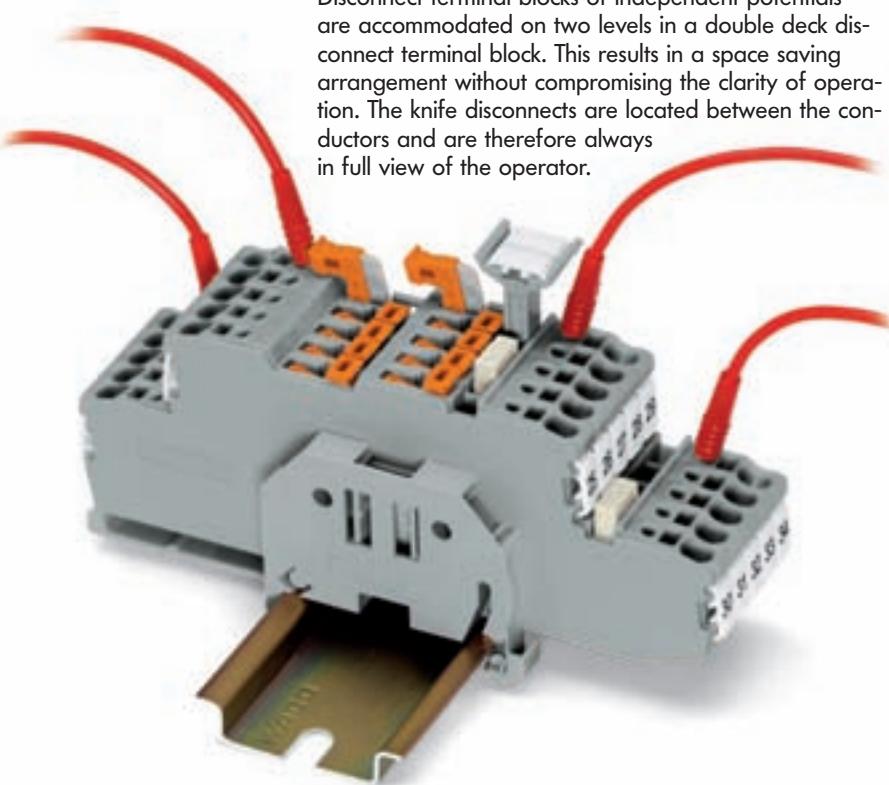
Movable knife disconnects clearly indicate the circuit state.



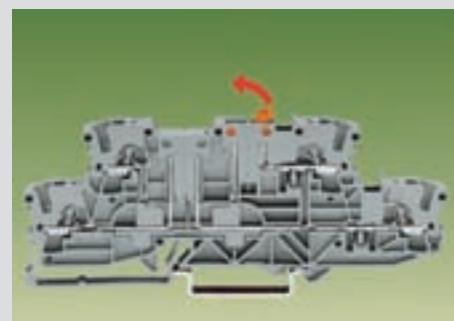
Two lateral and one centre marker receptacle for WMB markers or marking strips. Dual jumper slots, in the same position as the other 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on which is the power supply side.

Double deck double disconnect terminal blocks

Disconnect terminal blocks of independent potentials are accommodated on two levels in a double deck disconnect terminal block. This results in a space saving arrangement without compromising the clarity of operation. The knife disconnects are located between the conductors and are therefore always in full view of the operator.



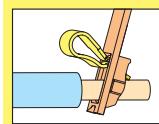
Additional marking option using pivoting marking adapters.



One disconnect and one through terminal block are accommodated on two levels in a terminal block that is only 5.2 mm wide.

TOPJOB® S

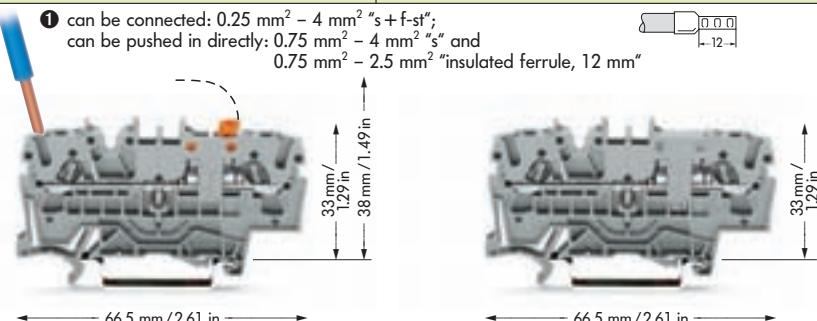
Disconnect Terminal Blocks, Series 2002



4

25

0.25 – 2.5 (4) mm² ① 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in *	0.25 – 2.5 (4) mm² ① 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in *	
---	---	--



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	
2-conductor disconnect terminal block for test and measurement			2-conductor through terminal blocks, same profile as disconnect terminal block			
grey	2002-1671	●	grey	2002-1601	●	
blue	2002-1674	●	blue	2002-1604	●	
orange	2002-1672	●	orange	2002-1602	●	

Item-specific accessories

End and intermediate plate, 1 mm/0.039 in thick orange 2002-1692 100 (4 x 25) grey 2002-1691 100 (4 x 25)	End and intermediate plate, 1 mm/0.039 in thick orange 2002-1692 100 (4 x 25) grey 2002-1691 100 (4 x 25)
--	--

Accessories Series 2002 appropriate marker system WMB/Marker strips/WMB Inline

Insulation stop, 5 pcs/strip light grey 2002-171 0.25-0.5 mm ² dark grey 2002-172 0.75-1 mm ²	Protective warning marker, for 5 terminal blocks yellow 2002-115 100 (4 x 25)
Push-in type jumper bars, light grey, insulated, I_N 25 A 2-way 2002-402 200 (8 x 25) 3-way 2002-403 200 (8 x 25) 4-way 2002-404 200 (8 x 25) 5-way 2002-405 100 (4 x 25) : 10-way 2002-410 100 (4 x 25)	Staggered jumper, light grey, insulated, I_N 25 A 2-way 2002-472 100 (4 x 25) 3-way 2002-473 100 (4 x 25) 4-way 2002-474 100 (4 x 25) 5-way 2002-475 50 (2 x 25) : 12-way 2002-482 50 (2 x 25)
Push-in type jumper bars, light grey, insulated, I_N 25 A 1 - 3 2002-433 200 (8 x 25) 1 - 4 2002-434 200 (8 x 25) 1 - 5 2002-435 100 (4 x 25) : 1 - 10 2002-440 100 (4 x 25)	Test plug adapter, for test plug 4 mm/0.157 in Ø 2009-174 100 (4 x 25)
	Testing tap, for max. 2.5 mm² 2009-182 100 (4 x 25)
Modular TOPJOB® S connector, for jumper contact slot 1 pole 2002-511 100 (4 x 25)	Two-way marking adapter, pivotable 2002-121 50 (4 x 25)
Spacer, modular 2002-549 100 (4 x 25)	
Test plug, with cable 500 mm/1'7.7" 2 mm/0.079 in Ø red 210-136 50 (5 x 10)	

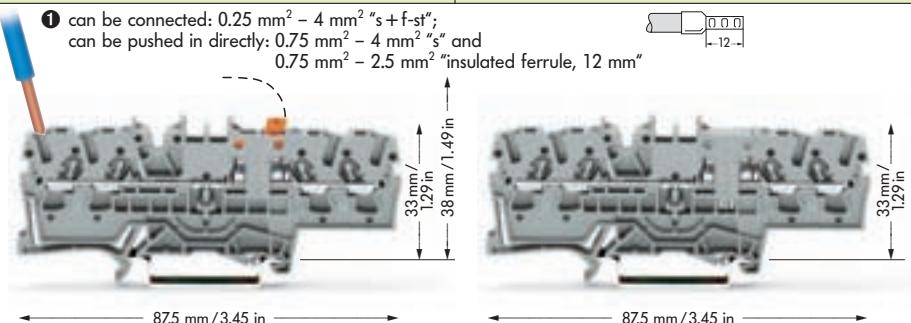
* Approvals pending

Technical explanations and abbreviations see page 10.2.

TOPJOB® S

Disconnect Terminal Blocks, Series 2002

0.25 – 2.5 (4) mm² ① AWG 22 – 12 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in *	0.25 – 2.5 (4) mm² ① AWG 22 – 12 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in 10 – 12 mm / 0.43 in *	
---	---	--



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
4-conductor disconnect terminal block for test and measurement			4-conductor through terminal blocks, same profile as disconnect terminal block		
grey	2002-1871	1	grey	2002-1801	1
blue	2002-1874	1	blue	2002-1804	1
orange	2002-1872	1	orange	2002-1802	1

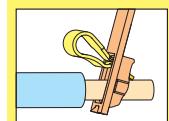
Item-specific accessories

End and intermediate plate, 1 mm / 0.039 in thick orange 2002-1892 100 (4 x 25) grey 2002-1891 100 (4 x 25)	End and intermediate plate, 1 mm / 0.039 in thick orange 2002-1892 100 (4 x 25) grey 2002-1891 100 (4 x 25)
--	--

Accessories Series 2002 appropriate marker system WMB/Marker strips/WMB Inline

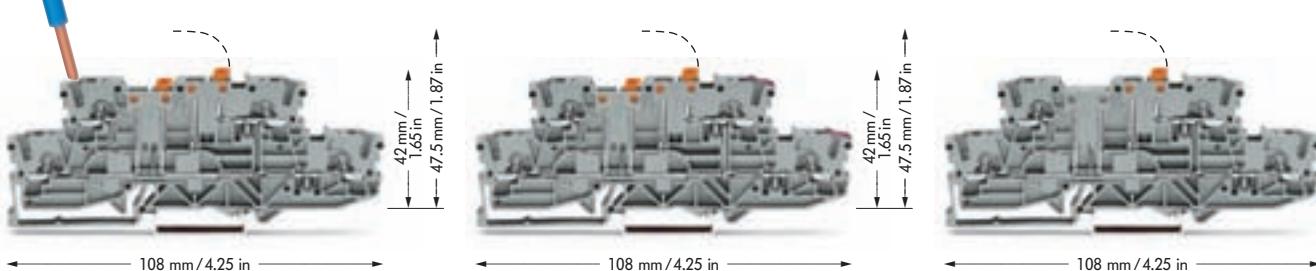
Insulation stop, 5 pcs/strip light grey 2002-171 0.25-0.5 mm ² dark grey 2002-172 0.75-1 mm ²	Protective warning marker, for 5 terminal blocks yellow 2002-115 100 (4 x 25)
Push-in type jumper bars, light grey, insulated, I_N 25 A 2-way 2002-402 200 (8 x 25) 3-way 2002-403 200 (8 x 25) 4-way 2002-404 200 (8 x 25) 5-way 2002-405 100 (4 x 25) : 10-way 2002-410 100 (4 x 25)	Staggered jumper, light grey, insulated, I_N 25 A 2-way 2002-472 100 (4 x 25) 3-way 2002-473 100 (4 x 25) 4-way 2002-474 100 (4 x 25) 5-way 2002-475 50 (2 x 25) : 12-way 2002-482 50 (2 x 25)
Push-in type jumper bars, light grey, insulated, I_N 25 A 1 - 3 2002-433 200 (8 x 25) 1 - 4 2002-434 200 (8 x 25) 1 - 5 2002-435 100 (4 x 25) : 1 - 10 2002-440 100 (4 x 25)	Test plug adapter, for test plug 4 mm/0.157 in Ø 2009-174 100 (4 x 25)
	Testing tap, for max. 2.5 mm² 2009-182 100 (4 x 25)
Modular TOPJOB® S connector, for jumper contact slot 1 pole 2002-511 100 (4 x 25)	Two-way marking adapter, pivotable 2002-121 50 (4 x 25)
Spacer, modular 2002-549 100 (4 x 25)	
Test plug, with cable 500 mm/17.7" 2 mm/0.079 in Ø red 210-136 50 (5 x 10)	

* Approvals pending

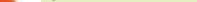
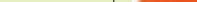


0.25 – 2.5 (4) mm²  AWG 22 – 12 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in  10 – 12 mm / 0.43 in *	0.25 – 2.5 (4) mm²  AWG 22 – 12 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in  10 – 12 mm / 0.43 in *	0.25 – 2.5 (4) mm²  AWG 22 – 12 400 V/6 kV/3 16 A Terminal block width 5.2 mm / 0.205 in  10 – 12 mm / 0.43 in *
---	---	---

① can be connected: $0.25 \text{ mm}^2 - 4 \text{ mm}^2$ "s+f-st";
 can be pushed in directly: $0.75 \text{ mm}^2 - 4 \text{ mm}^2$ "s" and $0.75 \text{ mm}^2 - 2.5 \text{ mm}^2$ "insulated ferrule, 12 mm"



Item-specific accessories

End and intermediate plate, 1 mm / 0.039 in thick	End and intermediate plate, 1 mm / 0.039 in thick	End and intermediate plate, 1 mm / 0.039 in thick			
orange grey	2002-2992 100 (4 x 25) 2002-2991 100 (4 x 25)	orange grey	2002-2992 100 (4 x 25) 2002-2991 100 (4 x 25)	orange grey	2002-2992 100 (4 x 25) 2002-2991 100 (4 x 25)
					

Accessories Series 2002

appropriate marker system **WMB/Marker strips/WMB Inline**

Series 281 and 282

0.08 – 4 mm ²	AWG 28 – 12
1 800 V/8 kV/3	600 V, 10 A
1 10 A max.	
Terminal block width 8 mm / 0.315 in	
Terminal block width 10 mm / 0.394 in	
9 – 10 mm / 0.37 in	

*

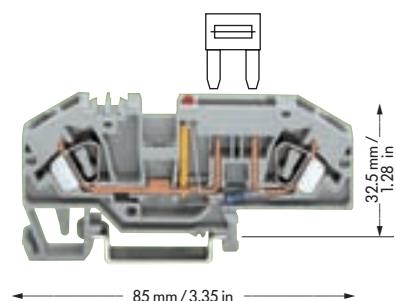
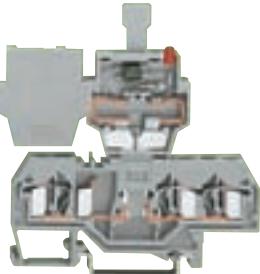
1 250 V max.
1 6.3 A max.
Fuse plug width 6 mm / 0.236 in

0.2 – 6 mm ²	AWG 24 – 10
1 400 V/6 kV/3	
1 30 A	

Terminal block width 8 mm / 0.315 in
12 – 13 mm / 0.49 in

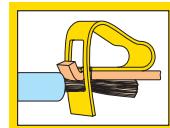
*

(1) Electrical ratings are given by the fuse or nominal voltage of the indicator lamp respectively!



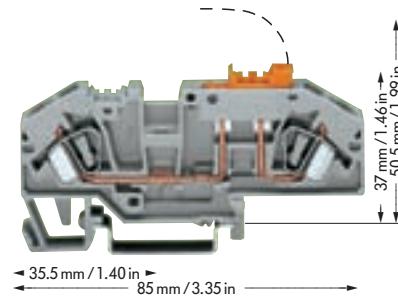
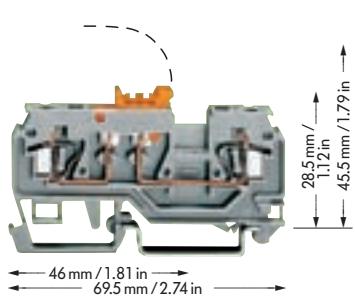
Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Fused disconnect terminal blocks, grey for miniature fuses, terminal block width 8 mm/0.315 in		Fuse plug, 6 mm/0.236 in wide, with pull-tab		2-cond. fuse term. bl. for mini-automotive fuses, with testing facility, without blown fuse indication	
5 x 20 mm 281-611 50		for miniature metric fuses		grey 282-696 25	
5 x 20 mm 281-611/281-541① 50		5 x 20 mm and 5 x 25 mm		with blown fuse indication by LED, 12 V	
5 x 20 mm 281-611/281-417② 50		without blown-fuse indication		Circuit I, grey 282-698/281-429 25	
		281-511 50		Circuit II, grey 282-698/281-449 25	
5 x 25 mm 281-612 50		with LED			
5 x 25 mm 281-612/281-541① 50		24 V AC/DC 281-512/281-501 50			
5 x 25 mm 281-612/281-417② 50		with neon lamp			
		120 V AC/DC 281-512/281-418 50			
		230 V AC/DC 281-512/281-417 50			
Terminal block width 10 mm/0.394 in				3-conductor through terminal block of same shape, with test facility,	
0.25" x 1" 281-613 50		Carrier term. bl., 0.08 – 4 mm², 9 – 10 mm/0.37 in		grey 282-699 25	
0.25" x 1" 281-613/281-541① 50		2-cond. 281-916 100 (4x25)		blue 282-694 25	
0.25" x 1" 281-613/281-417② 50		3-cond. 281-610 100 (4x25)			
		4-cond. 281-656 100 (4x25)			
0.25" x 1.25" 281-623 50		End plate, 2.5 mm/0.098 in thick		I	
0.25" x 1.25" 281-623/281-541① 50		for 2-conductor terminal block		II	
0.25" x 1.25" 281-623/281-417② 50		orange 281-329 100 (4x25)			
		grey 281-328 100 (4x25)			
with blown fuse indication by					
① LED 15-30 V ≈					
② neon lamp 230 V ≈					
other voltages upon request					
End and intermediate plate, 2.5 mm/0.098 in thick					
orange 281-309 100 (4x25)					
grey 281-311 100 (4x25)					
Accessories, Series 281	Appropriate marking system WMB/WSB	Accessories, Series 281	Appropriate marking system WSB 4 mm wide	Accessories, Series 282	Appropriate marking system WMB/WSB
Adjacent jumper, insulated, I_N 32 A		Comb type jumper bar, insulated, I_N 32 A		Adjacent jumper, insulated, I_N 41 A	
grey 281-402 200 (8x25)		2-way 281-482 100 (4x25)		grey 282-402 100 (4x25)	
		3-way 281-483 100 (4x25)			
		10-way 281-490 50 (2x25)			
Interlocking link, for mechanical locking of several fuse holders, 1 m/3'3" long, transparent		Alternate comb type jumper bar, insulated, I_N 32 A		Alternate jumper, insulated, I_N 41 A	
210-254 1		2-way 281-492 100 (4x25)		grey 282-409 100 (4x25)	
Test plug adapter, suitable for terminal bl. 1.5 - 4 mm²		Operating tool, insulated		Screwdriver, with partially insulated shaft	
5 mm/0.197 in wide		2-way 280-432 1		(3.5 x 0.5) mm	
280-404 100 (4x25)		3-way 280-433 1		210-620 1	
for test plug 2.3 mm Ø		5-way 281-440 1			
Test plug, 6 mm/0.236 in wide, with CAGE CLAMP®		Shorting link, 5 x 20 mm/0.20 x 0.79 in, 6.3 A			
for 0.08 - 2.5 mm ² /AWG 28-14		if the fuse plug is used as			
I _N 24 A		disconnect plug			
281-407 100 (4x25)		281-503 250 (10x25)			
for test plug 4 mm Ø					

Disconnect Terminal Blocks, Series 280, 281 and 282



4
29

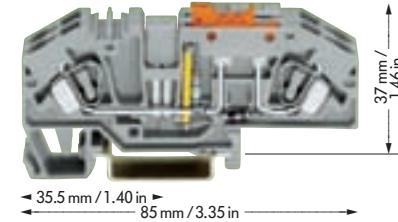
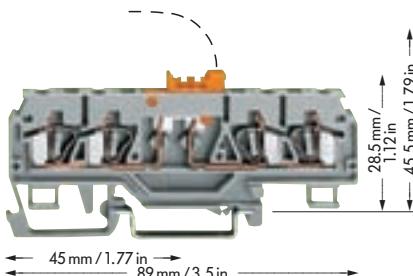
0.08 – 2.5 mm² 400 V/8 kV/3 10 A	AWG 28 – 12** 300 V, 15 A 300 V, 15 A	0.08 – 2.5 mm² 400 V/6 kV/3 16 A	AWG 28 – 12** 600 V, 15 A 300 V, 15 A	0.2 – 6 mm² 400 V/6 kV/3 30 A	AWG 24 – 10 600 V, 30 A 300 V, 36 A
Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in					
* CCA GL BV LR NV					



Colour	Item-No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Disconnect terminal blocks series 280,								
2-conductor disconnect terminal blocks								
grey	280-912	50	housing	knife disc.		2-conductor disconnect terminal blocks,		
blue	280-914	50	grey	280-870	100	with testing facility,		
orange	280-913	50	grey	280-868	100	of same shape as fuse terminal blocks		
3-conductor disconnect terminal block								
grey	280-683	50	blue	280-876	100	grey	282-697	25
4-conductor disconnect terminal blocks								
grey	280-836	50	orange	280-879	100	blue	282-695	25
blue	280-839	50				3-conductor through term. blocks of same shape,		
orange	280-805	50				with testing facility,		
						grey	282-699	25
						blue	282-694	25

0.08 – 4 mm² 400 V/8 kV/3 10 A	AWG 28 – 12** 300 V, 15 A 300 V, 15 A
Terminal block width 6 mm / 0.236 in 8 – 10 mm / 0.37 in	

* CCA GL BV LR NV



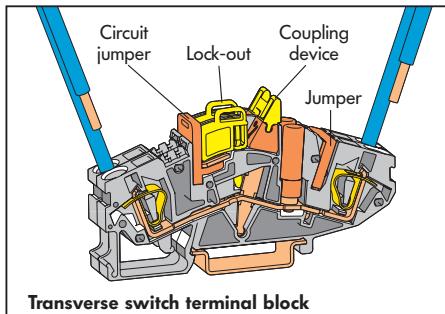
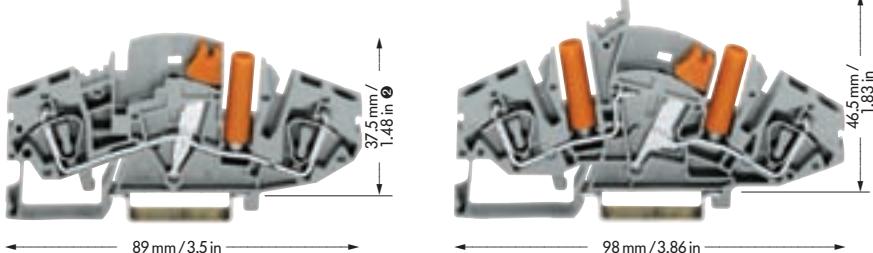
Item-No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Voltage	Item No.	Pack.-unit pcs
Disconnect terminal blocks series 281,							
2-conductor							
grey	281-912	50	housing	knife disc.	Ground (earth) cond. disconnect term. bl., grey 		
2-conductor	281-912	50	grey	280-874	50	terminal block width 16 mm / 0.63 in	
3-conductor	281-683	50	grey	280-881	50	f. AC/DC 24 V 282-640 12	
4-conductor	281-659	50	blue	280-885	50	f. AC/DC 48 V 282-641 12	
			orange	280-883	50	f. AC/DC 120 V 282-638 12	
						f. AC/DC 230 V 282-639 12	
Accessories, Series 280/281		Accessories, Series 280		Accessories, Series 282			
Appropriate marking system WMB/WSB		Appropriate marking system WMB/WSB		Appropriate marking system WMB/WSB			
End plate		End plate, 2.5 mm/0.098 in thick		End plate, 2 mm/0.079 in thick			
series 280		for 2-conductor terminal blocks		orange 282-333 100 (4x25)			
f. 2-cond. term. bl.		orange 280-309 281-329		grey 282-334 100 (4x25)			
grey 280-308 281-328		grey 280-371 100 (4x25)		Adjacent jumper, insulated, I_N 41 A			
f. 3-cond. term. bl.		grey 280-374 100 (4x25)		grey 282-402 100 (4x25)			
orange 280-326 281-326		for 4-conductor terminal blocks					
grau 280-324 281-324		orange 280-373 100 (4x25)		Screwdriver, with partially insulated shaft			
f. 4-cond. term. bl.		grey 280-376 100 (4x25)		(3.5 x 0.5) mm			
orange 280-315 281-335		210-620 1		Alternate jumper, insulated, I_N 41 A			
grey 280-314 281-334		(5.5 x 0.8) mm		grey 282-409 100 (4x25)			
Test sockets, insulated,		2.3 mm/0.091 in Ø					
2 mm/0.079 in Ø		yellow 209-108 100 (2x50)		③ Application notes see page 4.35			
red 209-107 100 (2x50)		210-621 1					

Please find the entire product range in our General Catalogue W4, Volume 1. More information at www.wago.com.

**AWG 12: THHN, THWN

WAGO®

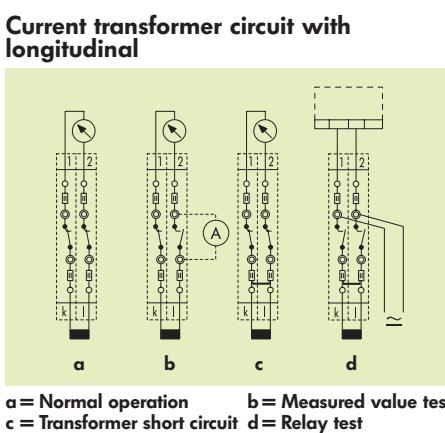
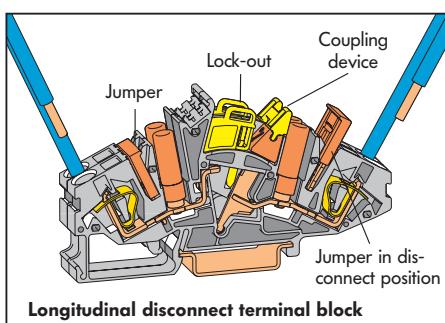
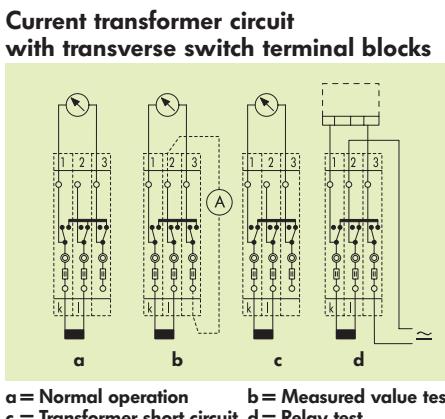
0.2 – 6 mm² 500 V/6 kV/3 30 A	AWG 24 – 10 600 V, 30 A	0.2 – 6 mm² 500 V/6 kV/3 30 A	AWG 24 – 10 600 V, 30 A	Application notes
Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in *	Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in *			



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor transverse switch terminal block, with (orange) touchproof test socket, 4 mm/0.157 in Ø grey	282-811	20	2-conductor longitudinal disconnect terminal block, with (orange) touchproof test socket, 4 mm/0.157 in Ø grey	282-821	20
End and intermediate plate, 1.5 mm/0.059 in thick orange 282-366 50 (2x25) grey 282-361 50 (2x25)			End and intermediate plate, 1.5 mm/0.059 in thick orange 282-365 50 (2x25) grey 282-360 50 (2x25)		
Accessories, Series 282					
Lock-out, for disconnect link yellow 282-370 100 (4x25)			Lock-out, for disconnect link yellow 282-370 100 (4x25)		
Coupling device, yellow, to couple several disconnect links 2-way 282-372 50 (5x10) 3-way 282-373 50 (5x10) 4-way 282-374 50 (5x10)			Coupling device, yellow, to couple several disconnect links 2-way 282-372 50 (5x10) 3-way 282-373 50 (5x10) 4-way 282-374 50 (5x10)		
Jumper, insulated, I_N 30 A, orange 2-way 282-432 50 (5x10) 3-way 282-433 50 (5x10) : 10-way 282-440 50 (5x10)			Jumper, insulated, I_N 30 A, orange 2-way 282-432 50 (5x10) 3-way 282-433 50 (5x10) : 10-way 282-440 50 (5x10)		
Special versions, e.g. 1–3–5, on request					
Circuit jumper, insulated, I_N 30 A, 2-way 282-442 50 (5x10) 3-way 282-443 50 (5x10) 4-way 282-444 50 (5x10)			Collective carrier for jumpers, 282-369 25		
Protective warning marker, with high voltage symbol, for 5 terminal blocks yellow 282-415 100 (4x25)			Protective warning marker, with high voltage symbol, for 5 terminal blocks yellow 282-415 100 (4x25)		
Banana plugs, only for protective extra-low voltage (42 V), black 215-311 50 red 215-212 50 blue 215-711 50			Screwdriver, with partially insulated shaft (5.5 x 0.8) mm 210-621 1		
other colours and technical data see page 9.5					
Sticker for operating instructions 210-424 100			Sticker for operating instructions 210-423 100		
WMB Marker cards, 10 strips with 10 markers each, with printing blue yellow white white	U/V (50 each) k/l (50 each) 1...10 (10 each) 11...20 (10 each)	794-5554/000-006 1 card 794-5553/000-002 1 card 793-5552 5 cards 793-5553 5 cards			

* You can find approvals on the Internet at www.wago.com.

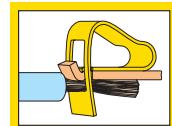
Technical explanations and abbreviations see page 10.2.



Disconnect Terminal Blocks for Test and Measurement, Series 282

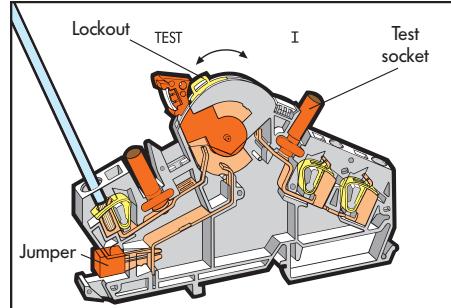
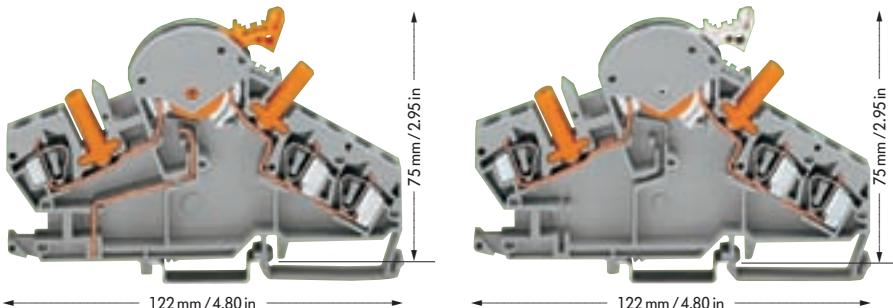
4

31

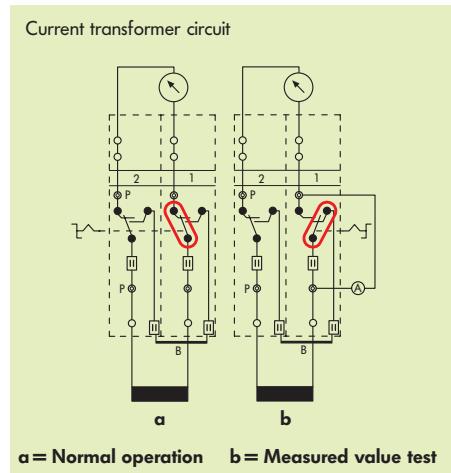
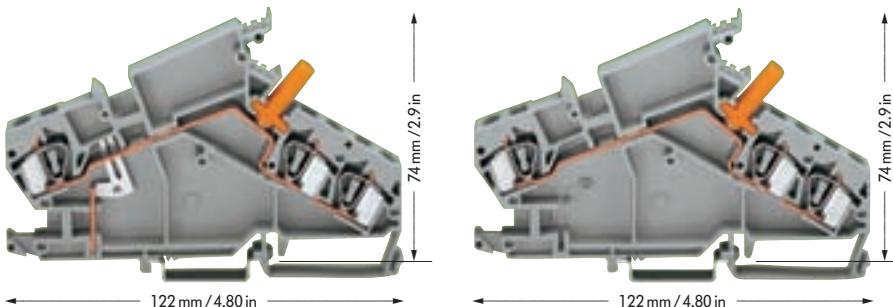


0.2 – 6 mm ² 500 V/6 kV/3 30 A	AWG 24 – 10 600 V, 30 A	0.2 – 6 mm ² 500 V/6 kV/3 30 A	AWG 24 – 10 600 V, 30 A	Application notes
Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in		Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in		

* KEMA CCA GL BV LR NV



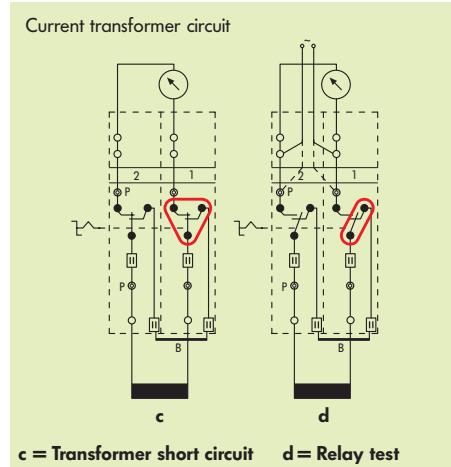
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Disconnect/Test terminal blocks,					
example for current transformer circuits, with (orange) touchproof test socket, 4 mm/0.157 in Ø, disconnect link orange	grey 282-870	20	example for voltage transformer circuits, with (orange) touchproof test socket, 4 mm/0.157 in Ø, disconnect link light grey	grey 282-860	20



Colour	Item-No.	Pack.-unit pcs	Colour	Item-No.	Pack.-unit pcs
Through terminal block,					
example for current transformer circuits, with (orange) touchproof test socket, 4 mm/0.157 in Ø, grey 282-865	20	example for voltage transformer circuits, with (orange) touchproof test socket, 4 mm/0.157 in Ø, grey 282-866	20		

Accessories, Series 282 appropriate marking system WMB/WSB

End and intermediate plate, for disconnect term. bl. 1.5 mm/0.059 in thick orange 282-387 50 (5 x 10) grey 282-392 50 (5 x 10)	Adjacent jumper, insulated, I_N 41 A grey 282-402 100 (4 x 25) orange 282-424 100 (4 x 25)
End and intermediate plate, for through term. blocks 1.5 mm/0.059 in thick orange 282-385 50 (5 x 10) grey 282-390 50 (5 x 10)	Wire commoning chain, insulated, black, 4 connections, 24 A, 2.5 mm ² 3 x 80 mm 709-110 1
Lock-out for disconnect link yellow 282-384 100 (5 x 20)	Wire commoning chain, insulated, black, 3 connections, 24 A, 2.5 mm ² 2 x 90 mm 709-111 1 2 x 150 mm 709-112 1
Interlocking link, for mechanical locking of several links, 1 m/3'3" long, transparent 210-254 1	Protective warning marker, with high voltage symbol , for 5 terminal blocks yellow 282-415 100 (4 x 25)
Locking cover, for mechanical locking of several links, transparent 1-pole 282-881 50 (5 x 10) : 4-pole 282-884 50 (5 x 10)	Banana plugs, only for protective extra-low voltage (42 V), black 215-311 50 red 215-212 50 blue 215-711 50 other colours and technical data see page 9.5



Terminal blocks and accessories required:

2 x disconnect/test terminal block	282-870
1 x jumper, orange	282-424
1 x end plate, orange	282-386
1 x locking cover, transparent	282-882

in addition locking links, lock-outs

Assembly

Assembly on the carrier rail. Terminal blocks with ground (earth) connection automatically establish a direct contact to the rail.



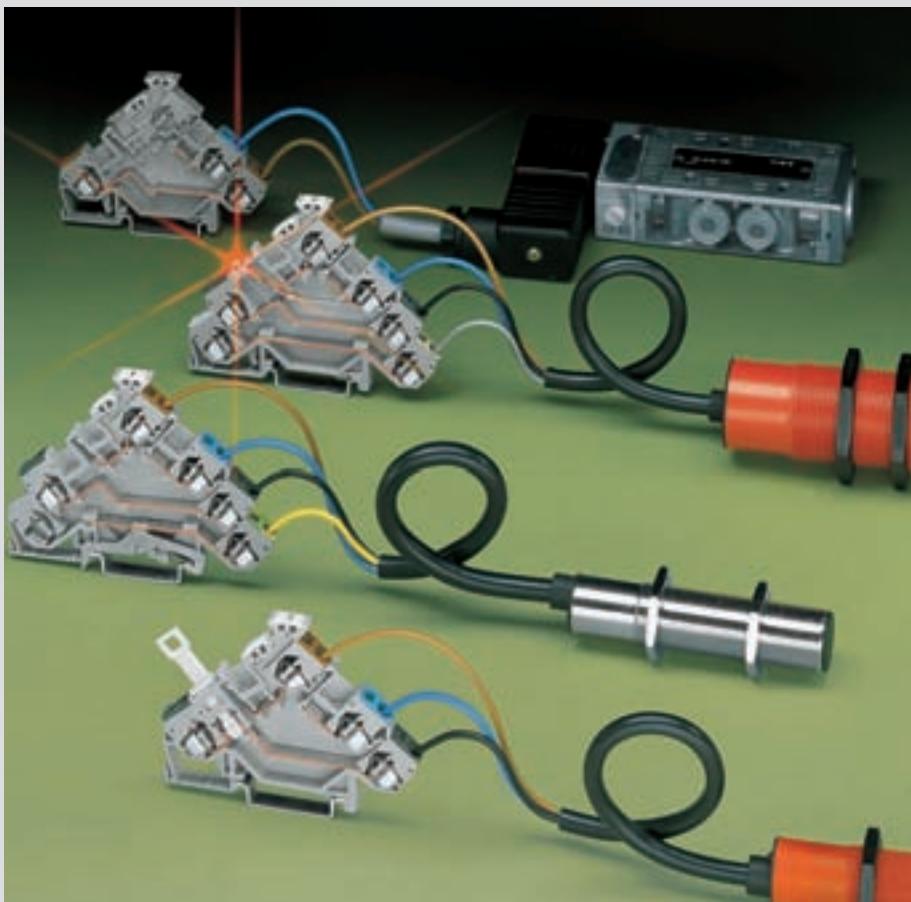
Removal from the carrier rail.
Attention - remove jumper contacts first!



CAGE CLAMP® connection
Connection of conductors with straight screwdriver 210-120

Commoning

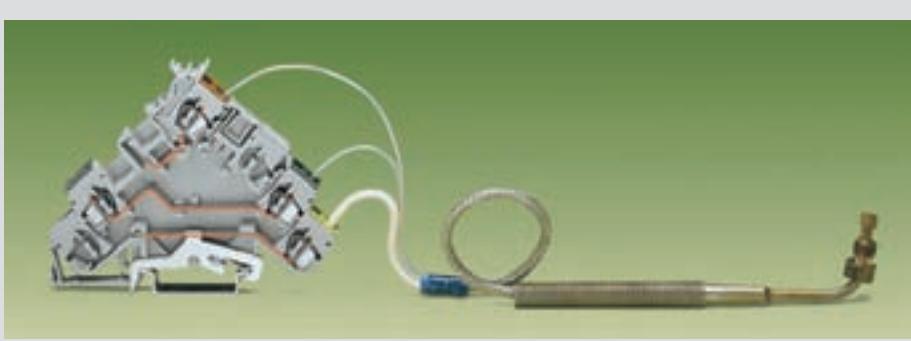
Commoning with adjacent jumpers. Push jumper down FIRMLY until FULLY inserted!



Voltage supply to assembly
Sensor terminal blocks.
Voltage supply from control panel side



Voltage supply to assembly
Sensor terminal blocks.
Voltage supply from sensor side



Actuator terminal blocks and a thermocouple and shield (screen) connection



CAGE CLAMP®
clamps the following
copper wires:^{*}

solid



stranded



fine-stranded,
also with tinned
single strands

... Description and Handling

Marking



Connection of conductors with angled screwdriver 210-258



Marking with WMB multi marking system or
WSB-quick marking system

Testing



Testing with banana plug and adapter 209-170

Actuator terminal blocks (see W4, Volume 1)



Actuator terminal blocks with fuse plugs 281-511
(requires additional intermediate plates)



Actuator terminal blocks with component plugs
280-801



Actuator disconnect terminal block with
ground (earth) connection, for line interruption

Series 289 (see W4, Volume 3)



Connection module
for 8 x 3-conductor sensors

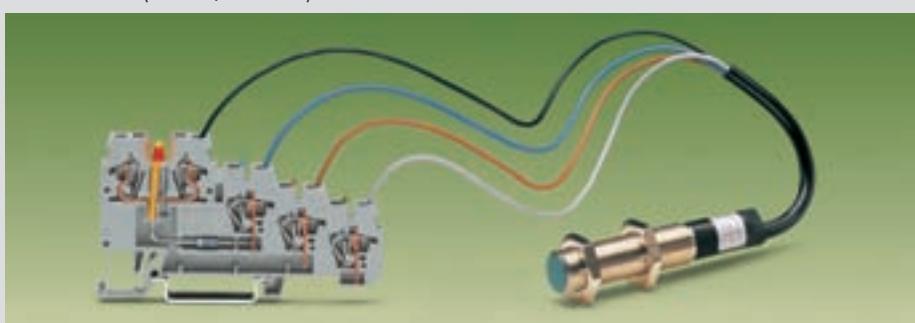


Connection module
for 8 x 3-conductor sensors, LED indicator



Connection module
for 8 actuators (2-conductor with ground (earth)
contact)

Series 270 (see W4, Volume 1)



Sensor LED terminal block



Commoning the voltage supply using uninsulated
push-in type jumper bars



fine-stranded wire –
tip bonded



fine-stranded wire
with crimped ferrule ①



fine-stranded wire
with crimped pin terminal

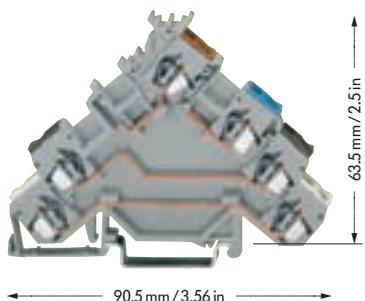
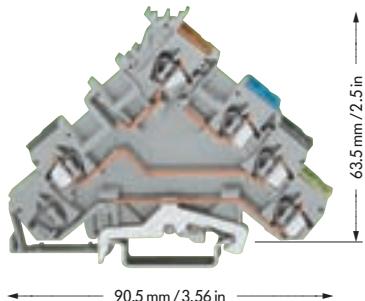
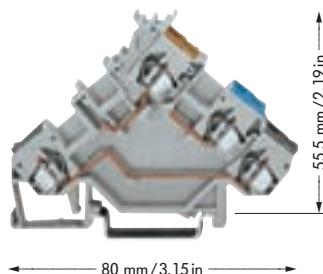
① When using wires with ferrules, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

Sensor Terminal Blocks, Series 280

Sensor terminal blocks for 3-cond. sensors
0.08 – 2.5 mm² AWG 28 – 12
Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in
* BV

Sensor term. bl. with ground (earth) conn.
0.08 – 2.5 mm² AWG 28 – 12
Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in
* BV

Sensor terminal blocks for 4-cond. sensors
0.08 – 2.5 mm² AWG 28 – 12
Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in
* BV



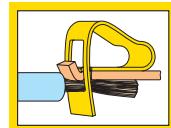
Item-No.	Pack.-unit pcs	Item-No.	Pack.-unit pcs	Item-No.	Pack.-unit pcs
 400 V/6 kV/3, 20 A 280-560	50	 400 V/6 kV/3, 20 A 280-570	50	 400 V/6 kV/3, 20 A 280-580	50
 DC 24 V, 20 A, LED red for PNP (positive) switching sensors 280-560/281-434	50	 DC 24 V, 20 A, LED red for PNP (positive) switching sensors 280-570/281-434	50	 DC 24 V, 20 A, LED red for PNP (positive) switching sensors 280-580/281-434	50
 DC 24 V, 20 A, LED red for NPN (negative) switching sensors 280-561/281-413	50	 DC 24 V, 20 A, LED red for NPN (negative) switching sensors 280-571/281-413	50	 DC 24 V, 20 A, LED red for NPN (negative) switching sensors 280-581/281-413	50
 voltage supply from sensor side 400 V/6 kV/3, 20 A 280-564	10	 voltage supply from sensor side 400 V/6 kV/3, 20 A 280-574	10	 voltage supply from sensor side 400 V/6 kV/3, 20 A 280-584	10
 voltage supply from sensor side DC 24 V, 20 A, LED green for PNP (positive) switching sensors 280-564/281-483	10	 voltage supply from sensor side DC 24 V, 20 A, LED green for PNP (positive) switching sensors 280-574/281-483	10	 DC 24 V, 20 A, LED green for PNP (positive) switching sensors 280-584/281-483	10
 voltage supply from sensor side DC 24 V, 20 A, LED green for NPN (negative) switching sensors 280-566/281-496	10	 voltage supply from sensor side DC 24 V, 20 A, LED green for NPN (negative) switching sensors 280-576/281-496	10	 DC 24 V, 20 A, LED green for NPN (negative) switching sensors 280-586/281-496	10
End and intermediate plate, 1 mm/0.039 in thick orange 280-321 100 (4x25) grey 280-319 100 (4x25)		End and intermediate plate, 1 mm/0.039 in thick orange 280-323 100 (4x25) grey 280-320 100 (4x25)		End and intermediate plate, 1 mm/0.039 in thick orange 280-323 100 (4x25) grey 280-320 100 (4x25)	

Accessories sensor terminal blocks

appropriate marking system **WMB/WSB**

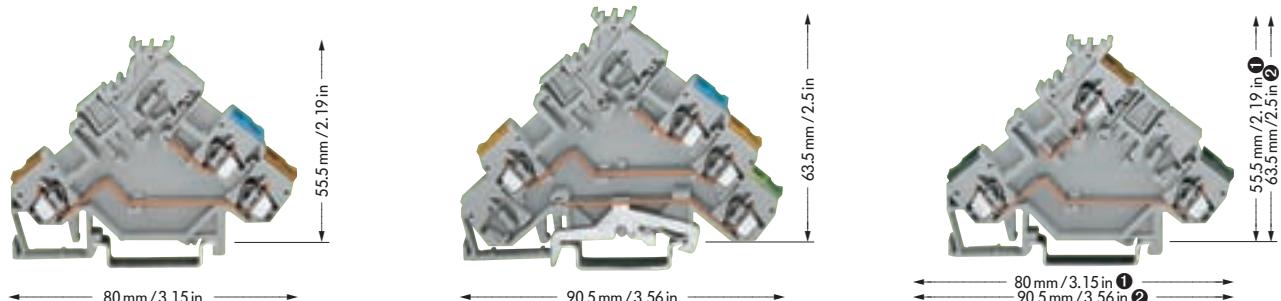
Adjacent jumper, insulated, I_N 24 A grey 280-402 200 (8x25)	Test plug adapter , suitable for terminal blocks 1.5 – 10 mm ² /AWG 16 – 8 8 mm/0.315 in wide 209-170 50 (2x25)	Insulation stop, 5 pcs/strip 200 strips
	for test plug 4 mm/0.157 in Ø 209-170 50 (2x25)	white 280-470 0.08 mm ² - 0.2 mm ² light grey 280-471 0.25 mm ² - 0.5 mm ² dark grey 280-472 0.75 mm ² - 1 mm ²

Actuator Terminal Blocks, Series 280



4
35

Actuator term. blocks for 2 cond. actuators 0.08 – 2.5 mm² AWG 28 – 12 Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in *	Actuator term. bl. with ground (earth) conn. 0.08 – 2.5 mm² AWG 28 – 12 Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in * BV	Actuator term. bl. with shield (screen) conn. 0.08 – 2.5 mm² AWG 28 – 12 Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in * BV
--	--	---



Item-No.	Pack.-unit pcs	Item-No.	Pack.-unit pcs	Item-No.	Pack.-unit pcs
Actuator terminal block (e.g. for magnetic valves) 400 V/6 kV/3, 20 A 280-562	50	Actuator terminal block with ground (earth) connection, 400 V/6 kV/3, 20 A 280-572	50	Actuator terminal block (e.g. for thermocouples) 400 V/6 kV/3, 20 A 280-555 1	50
Actuator terminal block with recovery diode 1 N 4007 250 V/4 kV/3, 20 A 280-562/281-411	50	Actuator terminal block with ground (earth) connection, with recovery diode 1 N 4007 250 V/4 kV/3, 20 A 280-572/281-411	50	Actuator terminal block (e.g. for pressure switches) 400 V/6 kV/3, 20 A 280-554 1	50
Actuator LED terminal block DC 24 V, 20 A, LED red 280-562/281-434	50	Actuator LED terminal block with ground (earth) connection, DC 24 V, 20 A, LED red 280-572/281-434	50	Actuator supply terminal block with end plate, terminal bl. width 6 mm/0.236 in, for 280-554 and 280-555 400 V/6 kV/3, 20 A 280-556 1	20
Actuator LED terminal block DC 24 V, LED red with recovery diode 1 N 4007 280-562/281-420	50	Actuator LED terminal block with ground (earth) connection, DC 24 V, 20 A, LED red 280-572/281-420	50	Actuator terminal block with shield (screen) connection 400 V/6 kV/3, 20 A 280-585 2	50
Actuator supply terminal block voltage supply from actuator side 400 V/6 kV/3, 20 A 280-592	10	Actuator supply terminal block with ground (earth) connection, voltage supply from actuator side 400 V/6 kV/3, 20 A 280-593	10	Actuator supply terminal block with shield (screen) connection, with end plate, terminal bl. width 6 mm/0.236 in 280-586 2	20
End and intermediate plate, 1 mm/0.039 in thick orange 280-321 100 (4x25) grey 280-319 100 (4x25)		End and intermediate plate, 1 mm/0.039 in thick orange 280-323 100 (4x25) grey 280-320 100 (4x25)		Actuator terminal block with shield (screen) conductor through contact 400 V/6 kV/3, 20 A 280-583 2	50
End and intermediate plate, 1 mm/0.039 in thick, for ① orange 280-323 100 (4x25) ① grey 280-319 100 (4x25) ② orange 280-323 100 (4x25) ② grey 280-320 100 (4x25)					

Accessories actuator terminal blocks

appropriate marking system **WMB/WSB**

Adjacent jumper, insulated, I_N 24 A grey 280-402 200 (8x25)	Test plug adapter , suitable for terminal blocks 1.5 - 10 mm ² /AWG 16 - 12 8 mm/0.315 in wide 209-170 50 (2x25) for test plug 4 mm/0.157 in Ø	Insulation stop, white 280-470 0.08 mm ² - 0.2 mm ² light grey 280-471 0.25 mm ² - 0.5 mm ² dark grey 280-472 0.75 mm ² - 1 mm ² 5 pcs/strip 200 strips
Test plug series 215 see page 9.5		

Rail-Mounted Terminal Blocks with CAGE CLAMP®, Series 279 to 284

Side-entry

36

CAGE CLAMP® connection



Open the clamping spring using a 2.5 mm screwdriver and insert the conductor as far as possible



The plunger is placed into the upper operating slot of the side-entry terminal block and the clamp is hooked into the lateral operating hole. The contact is fully opened by pressing the handles together until they engage.

Insert the conductor as far as possible.

Marking

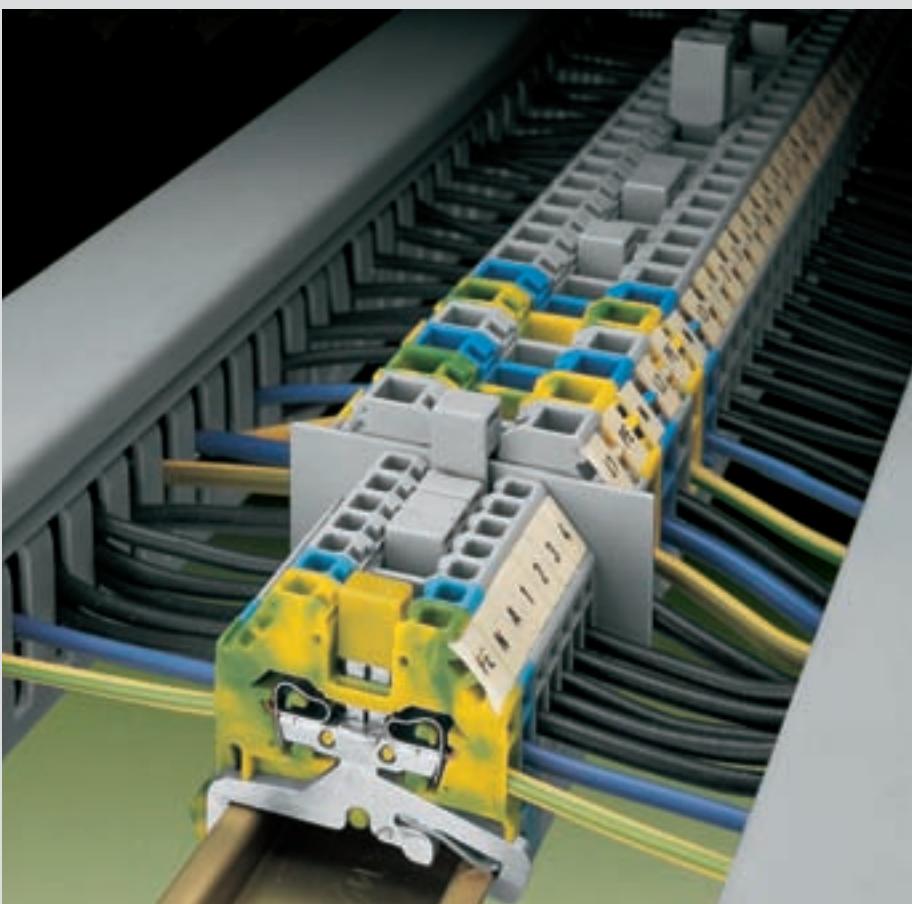


Marking with WMB Multi marking system or WSB Quick marking system

Testing



Testing with test plug adapter



Commoning . . .



Commoning with adjacent jumpers. Push jumper down FIRMLY until FULLY inserted!



. . . with step-down jumpers



Commoning of side-entry rail-mounted terminal blocks with step-down jumpers

Fused disconnect terminal blocks



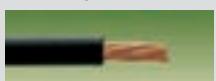
Replacing a fuse

Disconnect terminal blocks



Shifting the disconnect slide link

CAGE CLAMP® clamps the following copper wires:



solid



fine stranded



tip bonded

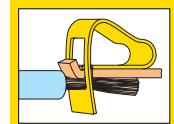


with crimped ferrule



with crimped pin terminal

Through and Ground (Earth) Conductor Terminal Blocks, Series 279 to 281, Side-Entry



0.08 – 1.5 mm² 800 V/8 kV/3 18 A	AWG 28 – 16 600 V, 10 A 600 V, 10 A	0.08 – 2.5 mm² 800 V/8 kV/3 24 A	AWG 28 – 12** 600 V, 20 A 600 V, 20 A	0.08 – 4 mm² 800 V/8 kV/3 32 A	AWG 28 – 12 600 V, 20 A 600 V, 25 A
Terminal block width 4 mm / 0.157 in 8 – 9 mm / 0.33 in		Terminal block width 5 mm / 0.197 in 8 – 9 mm / 0.33 in		Terminal block width 6 mm / 0.236 in 9 – 10 mm / 0.37 in	

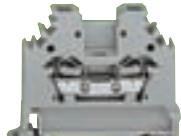
* CCA SAB GL BV LR NV

* CCA SAB GL BV LR NV

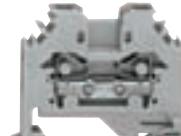
* CCA SAB GL BV LR NV



← 42.5 mm / 1.67 in →



← 42.5 mm / 1.67 in →



← 42.5 mm / 1.67 in →

30.5 mm / 1.2 in

30.5 mm / 1.2 in

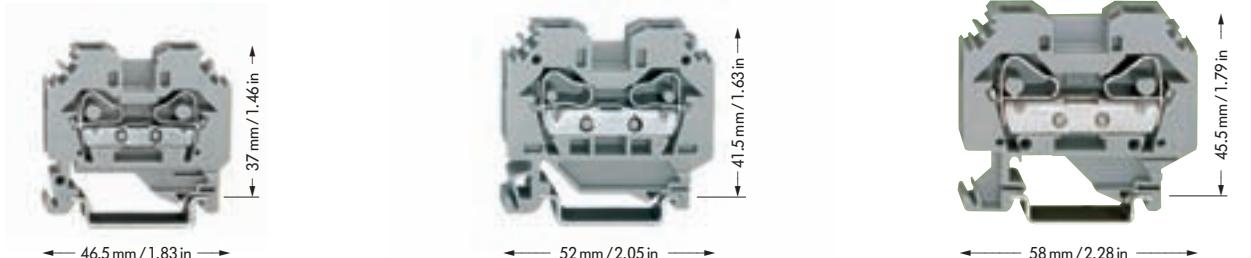
32.5 mm / 1.28 in

Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs			
2-conductor through terminal blocks			2-conductor through terminal blocks			2-conductor through terminal blocks					
grey	279-101	100	grey	280-101	100	grey	281-101	100			
blue	279-104	100	blue	280-104	100	blue	281-104	100			
2-conductor ground (earth) terminal block						2-conductor ground (earth) terminal block					
green-yellow	280-107	100	green-yellow	281-107	100						
End and intermediate plate, 2.5 mm/0.098 in thick			End and intermediate plate, 2.5 mm/0.098 in thick			End and intermediate plate, 3 mm/0.118 in thick					
orange	280-302	100 (4x25)	orange	280-302	100 (4x25)	orange	281-302	100 (4x25)			
grey	280-301	100 (4x25)	grey	280-301	100 (4x25)	grey	281-301	100 (4x25)			
Separator plate, oversized, 2 mm/0.079 in thick			Separator plate, oversized, 2 mm/0.079 in thick			Separator plate, oversized, 2 mm/0.079 in thick					
orange	280-322	100 (4x25)	orange	280-322	100 (4x25)	orange	281-322	100 (4x25)			
grey	280-332	100 (4x25)	grey	280-332	100 (4x25)	grey	281-332	100 (4x25)			
Accessories, Series 279	appropriate marking system WMB/WSB		Accessories, Series 280	appropriate marking system WMB/WSB		Accessories, Series 281	appropriate marking system WMB/WSB				
Adjacent jumper, insulated, I_N 15 A			Adjacent jumper, insulated, I_N 24 A			Adjacent jumper, insulated, I_N 32 A					
grey	279-402	200 (8x25)	grey	280-402	200 (8x25)	grey	281-402	200 (8x25)			
yell.-green	279-422	200 (8x25)	yell.-green	280-422	200 (8x25)	yell.-green	281-422	200 (8x25)			
Alternate jumper, insulated, I_N 15 A			Alternate jumper, insulated, I_N 24 A			Alternate jumper, insulated, I_N 32 A					
grey	279-409	100 (4x25)	grey	280-409	100 (4x25)	grey	281-409	100 (4x25)			
Staggered jumper, insulated, I_N 24 A			Staggered jumper, insulated, I_N 32 A			Staggered jumper, insulated, I_N 32 A					
width 5 mm/0.197 in from 1 to 2 780-452 100 (4x25) from 1 to 3 780-453 100 (4x25) from 1 to 4 780-454 100 (4x25) from 1 to 5 780-455 50 (2x25) ⋮ from 1 to 8 780-458 50 (2x25)								width 6 mm/0.236 in from 1 to 2 781-452 100 (4x25) from 1 to 3 781-453 100 (4x25) from 1 to 4 781-454 100 (4x25) from 1 to 5 781-455 50 (2x25) from 1 to 6 781-456 50 (2x25)			
Test plug adapter, for terminal blocks 1.5 - 10 mm²			Test plug adapter, for terminal blocks 1.5 - 10 mm²			Test plug adapter, for terminal blocks 1.5 - 10 mm²					
8 mm/0.315 in wide 209-170 50 (2x25) for test plug 4 mm/0.157 in Ø						8 mm/0.315 in wide 209-170 50 (2x25) for test plug 4 mm/0.157 in Ø					
Protective warning marker, with high voltage symbol, for 5 terminal blocks			Protective warning marker, with high voltage symbol, for 5 terminal blocks			Protective warning marker, with high voltage symbol, for 5 terminal blocks					
yellow	279-405	100 (4x25)	yellow	280-405	100 (4x25)	yellow	281-405	100 (4x25)			
Operating tool, for side-entry rail-mounted terminal blocks			Operating tool, for side-entry rail-mounted terminal blocks			Operating tool, for side-entry rail-mounted terminal blocks					
	210-143	1		210-143	1		210-141	1			
Screwdriver, with partially insulated shaft			Screwdriver, with partially insulated shaft			Screwdriver, with partially insulated shaft					
(3.5 x 0.5) mm 210-620 1						(3.5 x 0.5) mm 210-620 1					
 Suitable for Ex i applications											

* You can find approvals on the Internet at www.wago.com.

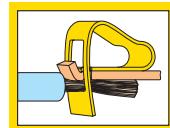
** AWG 12: THHN, THWN

0.2 – 6 mm² 800 V/8 kV/3 41 A	AWG 24 – 10 600 V, 30 A	0.2 – 10 mm² 800 V/8 kV/3 57 A	AWG 24 – 8 600 V, 50 A	0.2 – 16 mm² 800 V/8 kV/3 76 A	AWG 24 – 6 600 V, 65 A
Terminal block width 8 mm / 0.315 in 12 – 13 mm / 0.49 in		Terminal block width 10 mm / 0.394 in 12 – 13 mm / 0.49 in		Terminal block width 12 mm / 0.472 in 16 – 17 mm / 0.65 in	
* CCA SABS GL BV LR NV		* CCA SABS GL BV LR NV		* CCA SABS GL BV LR NV	



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
2-conductor through terminal blocks								
grey	282-101	50	grey	284-101	50	grey	283-101	50
blue	282-104	50	blue	284-104	50	blue	283-104	50
2-conductor ground (earth) terminal block								
green-yellow	282-107	50	green-yellow	284-107	50	green-yellow	283-107	50
End and intermediate plate, 4 mm/0.157 in thick								
orange	282-302 100 (4x25)		orange	284-302 100 (4x25)		orange	283-302 100 (4x25)	
grey	282-301 100 (4x25)		grey	284-301 100 (4x25)		grey	283-301 100 (4x25)	
Separator plate, oversized, 2 mm/0.079 in thick								
orange	282-322 100 (4x25)		orange	284-322 100 (4x25)		orange	283-322 100 (4x25)	
grey	282-332 100 (4x25)		grey	284-332 100 (4x25)		grey	283-332 100 (4x25)	
Accessories, Series 282 appropriate marking system WMB/WSB								
Adjacent jumper, insulated, I _N 41 A	282-402	100 (4x25)	Adjacent jumper, insulated, I _N 57 A	284-402	100 (4x25)	Adjacent jumper, insulated, I _N 70 A	283-402	50 (2x25)
grey	282-402 100 (4x25)		grey	284-402 100 (4x25)		grey	283-402 50 (2x25)	
yell.-green	282-422 100 (4x25)		yell.-green	284-422 100 (4x25)		yell.-green	283-422 50 (2x25)	
Alternate jumper, insulated, I_N 41 A								
grey	282-409 100 (4x25)		grey	284-409 100 (4x25)		grey	283-409 50 (2x25)	
Test plug adapter, for terminal blocks 1.5 – 10 mm²								
8 mm/0.315 in wide	209-170	50 (2x25)	8 mm/0.315 in wide	209-170	50 (2x25)	11.6/0.457 in wide	283-404	25
for test plug 4 mm/0.157 in Ø			for test plug 4 mm/0.157 in Ø			for test plug 4 mm/0.157 in Ø		
Step-down jumper, insulated, I_N 15 A								
10/6 mm ² /AWG 8/10 to			10/6 mm ² /AWG 8/10 to			16 mm ² /AWG 6 to		
4/2.5/1.5 mm ² /AWG 12/14/16			6/4 mm ² /AWG 10/12			4 mm ² /AWG 12		
grey	284-414	50 (2x25)	grey	284-413	50 (2x25)	grey	283-414	50 (2x25)
Protective warning marker, with high voltage symbol, for 5 terminal blocks								
yellow	282-405	100 (4x25)	yellow	284-405	50 (2x25)	yellow	283-405	50 (2x25)
Operating tool, for side-entry rail-mounted terminal blocks								
	210-141	1		210-141	1		210-141	1
Screwdriver, with partially insulated shaft								
(5.5 x 0.8) mm	210-621	1						
			Suitable for Ex i applications					
Banana plugs, only for protective extra-low voltage (42 V),								
black	215-311	50						
red	215-212	50						
blue	215-711	50						
other colors and technical data see page 9.5								

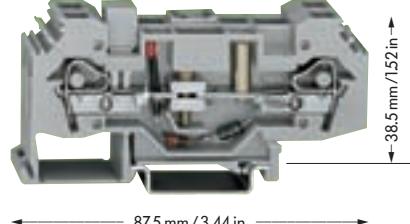
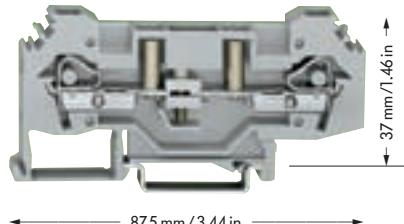
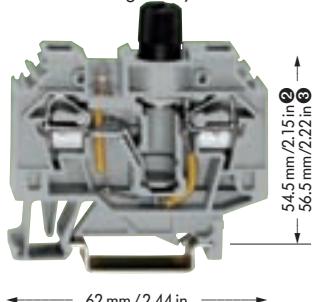
Fuse, Disconnect and Ground (Earth) Conductor Terminal Blocks, Series 282, Side-Entry



4
39

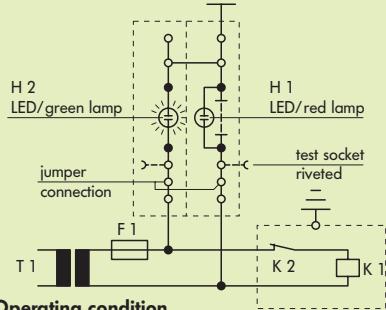
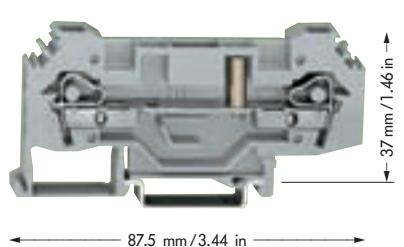
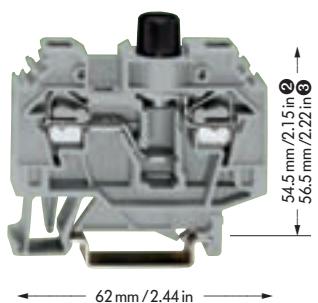
0.2 – 6 mm² 220 V ≈ ① 10 A max. ①	AWG 24 – 10 600 V, 10 A ①  220 V, 10 A ① 	0.2 – 6 mm² 400 V/6 kV/3 41 A	AWG 24 – 10 300 V, 30 A  300 V, 40 A 	0.2 – 6 mm²	AWG 24 – 10
Terminal block width 13 mm / 0.512 in  12 – 13 mm / 0.49 in		Terminal block width 8 mm / 0.315 in  12 – 13 mm / 0.49 in		Terminal block width 16 mm / 0.63 in  12 – 13 mm / 0.49 in	

① The electrical data are given by the fuse.

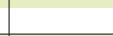


Ground (earth) disconnect terminal blocks with front-entry
see page 4.25.

Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs		
Fuse terminal blocks, grey, with neon lamp AC 250 V/DC 220 V			Disconnect terminal block for test purposes, with test sockets 4 mm/0.157 in Ø		Ground (earth) cond. disconnect term. blocks, grey			
f. cartridges 5x20 mm	282-124 ②	40	grey	282-131	25	f. AC/DC 24 V	282-140	12
f. cartridges $\frac{1}{4}''$ x $1\frac{1}{4}''$	282-128/281-417 ③	40	Disconnect terminal block for test purposes, without test sockets		f. AC/DC 48 V	282-141	12	
with neon lamp AC/DC 120 V			grey	282-135	25	f. AC/DC 120 V	282-138	12
f. cartridges $\frac{1}{4}''$ x $1\frac{1}{4}''$	282-128/281-418 ③	40			f. AC/DC 230 V	282-139	12	
with LED DC 24 V								
f. cartridges $\frac{1}{4}''$ x $1\frac{1}{4}''$	282-128/281-413 ③	40						



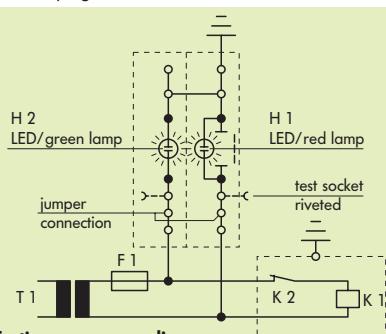
Slide link closed, auxiliary circuit grounded (earthed), green lamp lights.

Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Fuse terminal blocks, grey, without indicator 500 V / 6 kV / 3 max.		Through terminal block, grey	282-133	25
f. cartridges 5 x 20 mm 282-122 ②	40			
f. cartridges $\frac{1}{4}$ " x 1" 282-120 ③	40			
f. cartridges $\frac{1}{4}$ " x $1\frac{1}{4}$ " 282-128 ③	40			
End and intermediate plate, 4 mm/0.157 in thick		End and intermediate plate, 4 mm/0.157 in thick		
	orange 282-312 50 (2 x 25) grey 282-311 50 (2 x 25)		orange 282-315 50 (2 x 25) grey 282-314 50 (2 x 25)	

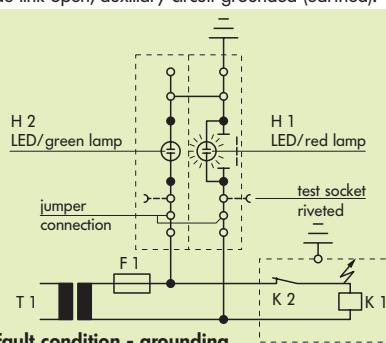
Accessories, Series 282

appropriate marking system **WMB/WSB**

Miniature fuses , without indicator, 5 x 20 mm 282-451 6,3 A <i>1/4" x 1"</i> 282-458 10 A <i>1/4" x 1 1/4"</i> 282-457 10 A	200 (20x10)	Adjacent jumper , insulated, I _N 41 A grey 282-402 100 (4 x 25)
Test plug adapter , for terminal blocks 1.5 - 10 mm ² 8 mm/0.315 in wide 209-170 50 (2x25) for test plug 4 mm/0.157 in Ø		Alternate jumper , insulated, I _N 41 A grey 282-409 100 (4 x 25)
Test plug , 6 mm/0.236 in wide, with CAGE CLAMP® for 0.08 - 2.5 mm ² /AWG 28-14 I _N 24 A		Lock-out , snap-in type, to prevent reclosing of slide link orange 282-137 100 (4 x 25)
	281-407 100 (4x25)	



Testing - no grounding



Slide link open, auxiliary circuit not grounded (earthed), red lamp lights.

Modular Terminal Blocks and Terminal Strips with CAGE CLAMP®, Series 260 to 262, Side-Entry

Assembly



Assembly of modular terminal blocks to terminal strips



Mounting of an end plate

Fixing



Terminal strip with fixing flange, screw fixing

CAGE CLAMP® connection



Connection of conductors



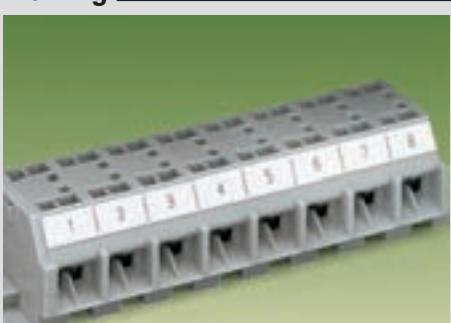
Connection of conductors, with push buttons

Fixing



Terminal strip with fixing flange, screw fixing of mounting adapter 209-123

Marking

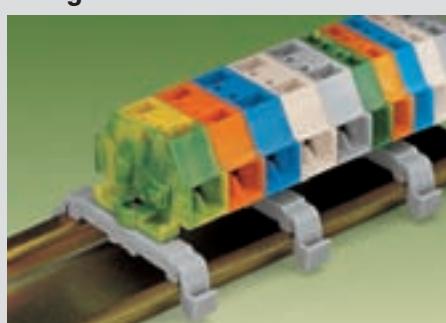


Marking with self-adhesive marker strips



Marking by direct printing (on request)

Fixing

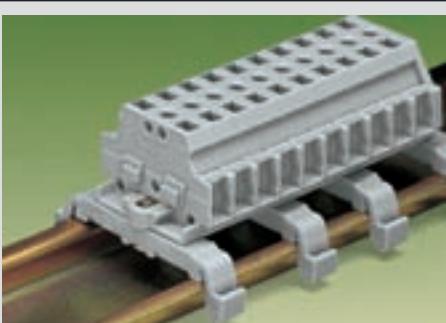


Terminal strip with fixing flange, on DIN 35 rail

Types



Terminal strip with push buttons on one side



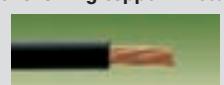
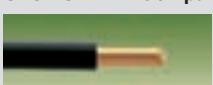
Terminal strip with marker receptacle for miniature WSB Quick marking system

Commoning



Commoning with jumper bar

CAGE CLAMP® clamps the following copper wires:



solid

stranded

fine-stranded

tip-bonded



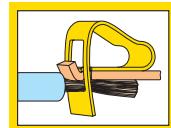
with crimped ferrule*



with crimped pin terminal

* When using wires with ferrules, it is necessary to use a terminal block one size larger than the nominal cross section of the wire

Modular Terminal Blocks and Terminal Strips with Fixing Flange, Series 260 to 262, Side-Entry



4
41

0.08 – 1.5 mm² 400 V/6 kV/3 18 A 2-cond. terminal block width 5 mm/0.197 in 4-cond. terminal block width 8 mm/0.315 in 8 – 9 mm / 0.33 in	AWG 28 – 16 300 V, 10 A 300 V, 15 A * CCA GL BV LR NV	0.08 – 2.5 mm² 500 V/6 kV/3 24 A 2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in 8 – 9 mm / 0.33 in	AWG 28 – 14 300/600 V, 15/5 A 300/600 V, 20/5 A * CCA GL BV LR NV	0.08 – 4 mm² 630 V/8 kV/3 24 A 2-cond. terminal block width 7 mm/0.276 in 4-cond. terminal block width 12 mm/0.472 in 9 – 10 mm / 0.37 in	AWG 28 – 12 300/600 V, 20/5 A 300/600 V, 20/5 A * CCA GL BV LR NV
--	---	---	---	--	---



17 mm/
0.67 in

25 mm / 0.98 in



18 mm/
0.71 in

28 mm / 1.1 in



23 mm/
0.9 in

33.4 mm / 1.32 in

Colour	Item No. 2-cond.	Item No. 4-cond.	Pack.-unit pcs	Colour	Item No. 2-cond.	Item No. 4-cond.	Pack.-unit pcs	Colour	Item No. 2-cond.	Item No. 4-cond.	Pack.-unit pcs
grey	260-301	260-331	300 (6 x 50)	grey	261-301	261-331	200 (4 x 50)	grey	262-301	262-331	100 (2 x 50)
light grey	260-303	260-333	300 (6 x 50)	light grey	261-303	261-333	200 (4 x 50)	light grey	262-130	262-230	100 (2 x 50)
blue	260-304	260-334	300 (6 x 50)	blue	261-304	261-334	200 (4 x 50)	blue	262-304	262-334	100 (2 x 50)
orange	260-306	260-336	300 (6 x 50)	orange	261-306	261-336	200 (4 x 50)	orange	262-306	262-336	100 (2 x 50)
green-yellow	260-307	260-337	300 (6 x 50)	green-yellow	261-307	261-337	200 (4 x 50)	green-yellow	262-307	262-337	100 (2 x 50)
Versions with push buttons see bottom right											



No. of poles	Item No. 2-cond.	Item No. 4-cond.	Pack.-unit pcs	No. of poles	Item No. 2-cond.	Item No. 4-cond.	Pack.-unit pcs	No. of poles	Item No. 2-cond.	Item No. 4-cond.	Pack.-unit pcs
Terminal strips with fixing flange, grey											
2	260-102	260-202	100	2	261-102	261-202	100	2	262-102	262-202	100
3	260-103	260-203	100	3	261-103	261-203	100	3	262-103	262-203	100
:	:	:	:	:	:	:	:	:	:	:	:
12	260-112	260-212	25	12	261-112	261-212	25	12	262-112	262-212	25

Accessories, Series 260/261/262

appropriate marking system see section 9

End plate with fixing flange, grey for series 260 260-361 100 (2 x 50) for series 261 261-361 100 (2 x 50) for series 262 262-361 50	Mounting adapter with screw, 6 mm/0.236 in wide, for terminal blocks with fixing flange, for DIN 35 rail, grey 209-123 25	Additional item numbers for terminal blocks and terminal strips with fixing flanges, for series 261 only with push buttons on one side 261-.../331-000 261-.../332-000
Comb type jumper bar, insulated, 2-way series I_N reduce wire to Pack.-unit 260-402 10 A 1 mm ² /AWG 18 25 pcs 261-402 16 A 1.5 mm ² /AWG 16 25 pcs 262-402 16 A 2.5 mm ² /AWG 14 25 pcs	locking device series module width with without 260 5 mm/0.197 in 260-404 249-135 8 mm/0.315 in 260-405 249-138 261 6 mm/0.236 in 261-404 249-136 10 mm/0.394 in 261-405 249-139 262 7 mm/0.276 in 249-137 12 mm/0.472 in 249-140	with push buttons on both sides 261-.../341-000 261-.../342-000
Operating tool, insulated, 2-way, for connecting the comb type jumper bar 209-132 1	 Suitable for Ex i applications Suitable for Ex e II applications	Screwdriver, with partially insulated shaft (3.5 x 0.5) mm 210-620 1

* You can find applications on the Internet at www.wago.com.

Technical explanations and abbreviations see page 10.2.

Please find the entire product range in our General Catalogue W4, Volume 1.

WAGO®

Assembly



Assembly of modular terminal strips



Mounting of an "end terminal block" with fixing flange

Fixing

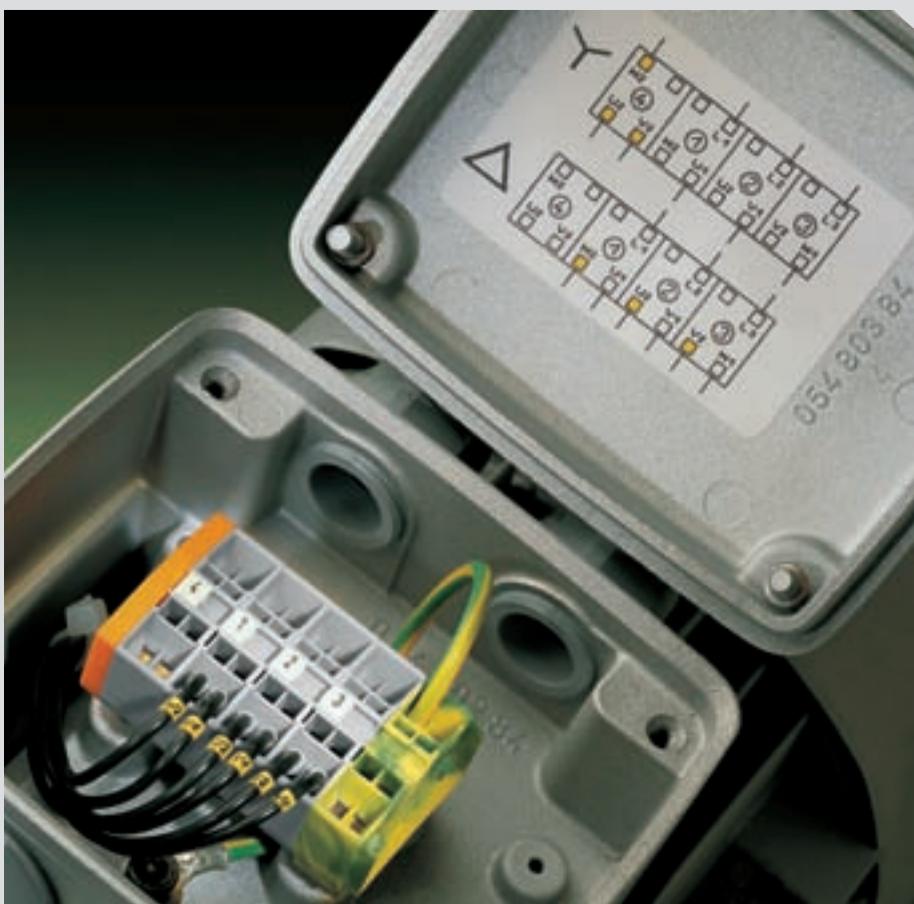


Terminal strip with fixing flange, screw fixing

CAGE CLAMP® connection



Connection of conductors



Removal



Removal of a terminal block

Commoning



Commoning with jumper bar

Testing



Testing with modular test plug adapters - touch contact

Marking



Marking with miniature WSB Quick marking system

CAGE CLAMP® clamps the following copper wires:



solid



stranded



fine-stranded



tip-bonded



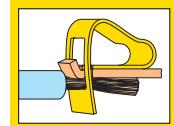
with crimped ferrule*



with crimped pin terminal

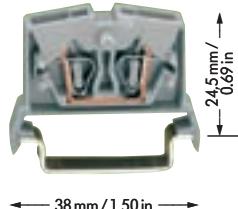
* When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than the max. rating of terminal block

Terminal Blocks for DIN 35 Rail, Modular Terminal Blocks and Terminal Strips with Fixing Flanges, Series 264



4
43

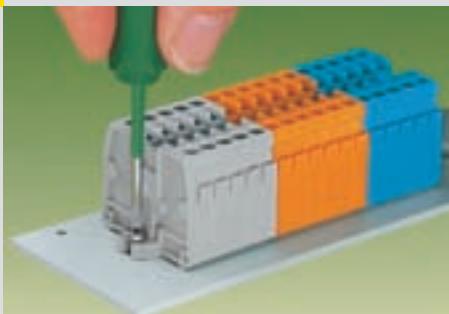
0.08 – 2.5 mm² 800 V/8 kV/3 24 A 2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in 8 – 9 mm / 0.33 in	AWG 28 – 12** 600 V, 20 A 600 V, 20 A 2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in 8 – 9 mm / 0.33 in	0.08 – 2.5 mm² 800 V/8 kV/3 24 A 2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in 8 – 9 mm / 0.33 in	AWG 28 – 12** 800 V/8 kV/3 24 A 2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in 8 – 9 mm / 0.33 in
* CCA GL BV LR	* CCA GL BV LR	* CCA GL BV LR NV	* CCA GL BV LR NV



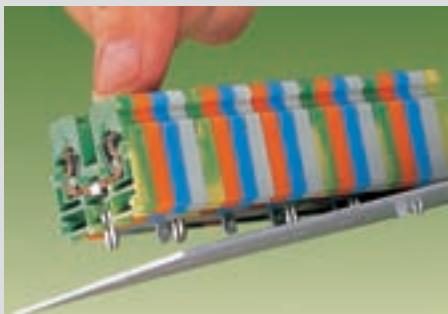
Colour	Item No.	Pack.-unit	Colour	Item No.	Pack.-unit	No. of poles	Item No.	Pack.-unit
	2-cond.	4-cond.		2-cond.	4-cond.		2-cond.	4-cond.
Through terminal blocks, for DIN 35 rail								
grey	264-711	264-731	grey	264-321	264-351	2	264-102	264-202
blue	264-714	264-734	blue	264-324	264-354	3	264-103	264-203
orange	264-716	264-736	orange	264-326	264-356	4	264-104	264-204
light grey	264-125	264-225	green-yellow	264-327	264-357	:	:	:
			light grey	264-131	264-231	10	264-110	264-210
						11	264-111	264-211
						12	264-112	264-212
Center terminal blocks								
grey	264-321	264-351	grey	264-102	264-202	100		
blue	264-324	264-354	blue	264-103	264-203	100		
orange	264-326	264-356	orange	264-104	264-204	100		
green-yellow	264-327	264-357	green-yellow	264-110	264-210	25		
light grey	264-131	264-231	light grey	264-111	264-211	25		
						12	264-112	264-212
End terminal blocks with fixing flange								
grey	264-301	264-331	grey	264-102	264-202	100		
blue	264-304	264-334	blue	264-103	264-203	100		
orange	264-306	264-336	orange	264-104	264-204	100		
green-yellow	264-307	264-337	green-yellow	264-110	264-210	25		
light grey	264-130	264-230	light grey	264-111	264-211	25		
						12	264-112	264-212
Terminal strips with snap-in mounting feet, grey								
grey	264-152	264-252	grey	264-152	264-252	100		
blue	264-153	264-253	blue	264-153	264-253	100		
orange	264-154	264-254	orange	264-154	264-254	100		
green-yellow	264-160	264-260	green-yellow	264-160	264-260	25		
light grey	264-161	264-261	light grey	264-161	264-261	25		
						12	264-162	264-262
Terminal blocks with snap-in mounting foot								
grey	264-311	264-341	grey	264-160	264-260	100		
blue	264-314	264-344	blue	264-161	264-261	100		
orange	264-316	264-346	orange	264-162	264-262	100		
green-yellow	264-317	264-347	green-yellow	264-162	264-262	25		
light grey	264-180	264-280	light grey	264-180	264-280	100		
Assemblies of different colours upon request								
4-conductor ground (earth) terminal block, for DIN 35 rail								
green-yellow	264-737	100						
green-yellow	264-737/999-950	100						
End plate for DIN 35 rail,								
orange	264-369	25						
grey	264-368	25						
light grey	264-370	25						
End plate with fixing flange,								
grey	264-361	25						
orange	264-364	25						
light grey	264-363	25						
End plate, for terminal blocks with snap-in mounting								
grey	264-371	25						
orange	264-374	25						
light grey	264-373	25						
Accessories, Series 264								
appropriate marking system Mini-WSB								
Comb type jumper bar, insulated, I_N 16 A, 2-way			Operating tool, insulated, 2-way			Test plug modules		
264-402 200 (8 x 25)			for comb type jumper bar			6 mm/0.236 in wide		
reduces wire to 1.5 mm ² /AWG 16 max.			280-432 1			249-136 100 (4 x 25)		
Alternate comb type jumper bar, insulated,			Aluminium carrier rail, 1000 x 18 x 7 mm			10 mm/0.394 in wide		
I _N = I _N of terminal block for 2-conductor terminal blocks			3/8" x 0.709 x 0.276 in			249-139 100 (4 x 25)		
280-492 200 (8 x 25)			210-154 1			Test plug, with cable 500 mm/17.7"		
for 4-conductor terminal blocks			f. version w. mounting feet			2 mm Ø, red 210-136 50		
281-492 100 (4 x 25)			Plastic end stop, with WSB marking facility,			2.3 mm Ø, yellow 210-137 50		
Separator for Ex e/Ex i applications,			6 mm/0.236 in wide,			Screwdriver, with partially insulated shaft		
66 mm/2.598 in wide			for aluminium rail 210-154			(3.5 x 0.5) mm		
4 mm/0.157 in thick			grey 209-122 1			210-620 1		
orange 264-367 25			Suitable for Ex i applications Suitable for Ex e II applications					
DIN 35 rails and end stops see chapter 9								

Compact Block Terminal Strips with CAGE CLAMP® COMPACT Connection Description and Handling – Series 869

Fixing



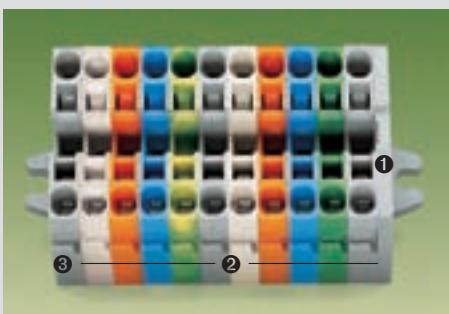
Terminal strip with fixing flange,
screw fixing



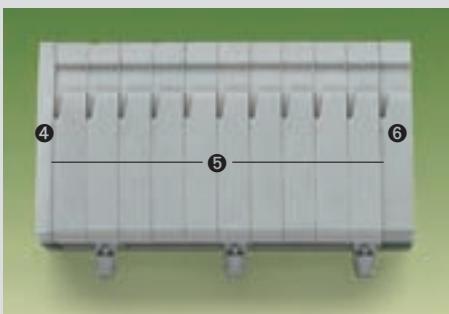
Terminal strip with snap-in mounting feet,
fixing in holes



Terminal strip with snap-in mounting feet,
assembly onto special aluminium rail

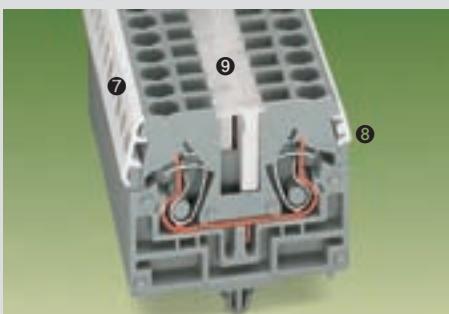


Terminal strip with fixing flanges, consisting of:
end plate with fixing flange ①
center terminal blocks ②
end terminal blocks with fixing flange ③



Terminal strip with mounting feet, consisting of:
end plate ④ center terminal blocks with/without
snap-in mounting feet ⑤ end terminal block
with/without snap-in mounting feet ⑥

Marking



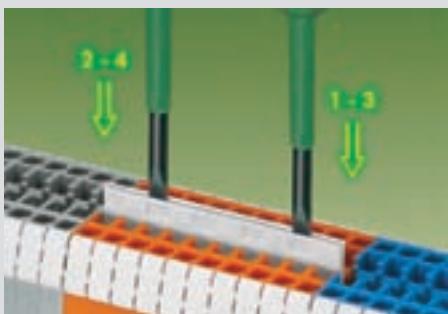
⑦ WAGO WMB Multi marking system,
⑧ WAGO miniature WSB Quick marking system or
⑨ WAGO marker strips

CAGE CLAMP® clamps the following copper wires:



solid

stranded



Push jumper bars down firmly until fully inserted!
When using multi-pole bars, push alternately on
right and then left side, successively until installed



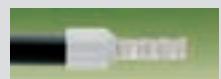
Terminal strips assembled by means of assembly
device
Item no. for the device 298-635



fine-stranded



tip-bonded



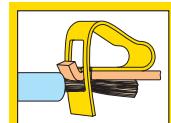
with crimped ferrule*



with crimped pin terminal

* When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than the max. rating of terminal block

Modular Terminal Blocks and Compact Block Terminal Strips, Series 869



4
45

0.08 – 2.5 mm²/4 mm² f-st"	AWG 28 – 12	0.08 – 2.5 mm²/4 mm² f-st"	AWG 28 – 12	0.08 – 2.5 mm²/4 mm² f-st"	AWG 28 – 12
500 V/6 kV/3	300 V, 10 A**	500 V/6 kV/3	300 V, 10 A**	500 V/6 kV/3	300 V, 10 A**
24 A	300 V, 25 A**	24 A	300 V, 25 A**	24 A	300 V, 25 A**
Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in	
6 – 7 mm / 0.26 in		6 – 7 mm / 0.26 in		6 – 7 mm / 0.26 in	
* CCA NV		* CCA NV		* CCA NV	



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	No. of poles	Item No.	Item No.	Pack.-unit pcs	
Center terminal blocks										
grey	869-321	100	grey	869-331	100		grey	869-102	light grey	
blue	869-324	100	blue	869-334	100	2	869-102	869-132	100	
orange	869-326	100	green-yellow	869-337	100	3	869-103	869-133	100	
green-yellow	869-327	100	light grey	869-339	100	4	869-104	869-134	100	
light grey	869-329	100				:	:	:	:	
End terminal blocks with snap-in mounting foot										
grey	869-311	100	grey	869-341	100	10	869-110	869-140	25	
blue	869-314	100	blue	869-344	100	11	869-111	869-141	25	
orange	869-316	100	green-yellow	869-347	100	12 ②	869-112	869-142	25	
green-yellow	869-317	100	light grey	869-349	100	2	869-202	869-232	100	
light grey	869-319	100	End terminal blocks with fixing flange M 3,				3	869-203	869-233	100
			3.2 mm Ø				4	869-204	869-234	100
Center terminal blocks with automatic push-connect ground (earth) contact,										
diameter of drilled hole: 3.5 ^{+0.1} mm,			grey	869-301	100	10	869-210	869-240	25	
terminal blocks cannot be commoned!			blue	869-304	100	11	869-211	869-241	25	
green-yellow	869-328	100	green-yellow	869-307	100	12 ②	869-212	869-242	25	
			light grey	869-309	100	Terminal strips with snap-in mounting feet,				
						2	869-152	869-182	100	
Center terminal blocks with snap-in mounting foot										
grey	869-311	100	End terminal blocks with fixing flange M 4,				3	869-153	869-183	100
blue	869-314	100	4.2 mm Ø				4	869-154	869-184	100
orange	869-316	100	grey	869-351	100		grey	869-210	869-240	25
green-yellow	869-317	100	blue	869-354	100	10	869-211	869-241	25	
light grey	869-319	100	green-yellow	869-357	100	11	869-161	869-191	25	
			light grey	869-359	100	12 ②	869-162	869-192	25	
End plate, for terminal blocks with snap-in mounting foot										
2.5 mm/0.098 in thick			End plate with fixing flange M3,				For longer strips and/or assemblies of different colours contact factory			
grey	869-375	100 (4 x 25)	2.5 mm/0.098 in thick							
blue	869-378	100 (4 x 25)	grey	869-385	100 (4 x 25)	End plate with fixing flange M4,				
green-yell.	869-379	100 (4 x 25)	blue	869-388	100 (4 x 25)	2.5 mm/0.098 in thick				
light grey	869-377	100 (4 x 25)	green-yell.	869-389	100 (4 x 25)	grey	869-395	100 (4 x 25)		
			light grey	869-387	100 (4 x 25)	blue	869-398	100 (4 x 25)		
						green-yell.	869-399	100 (4 x 25)		
						light grey	869-397	100 (4 x 25)		
Accessories, Series 869										
appropriate marking system WMB/Mini-WSB/marker strips										

Push-in type jumper bar, insulated, I_N 18 A, light grey	
2-way	870-402 200 (8 x 25)
3-way	870-403 200 (8 x 25)
4-way	870-404 200 (8 x 25)
:	
10-way	870-410 100 (4 x 25)
Push-in type jumper bar, insulated, I_N 18 A, light grey	
1 to 3	870-433 200 (8 x 25)
1 to 4	870-434 200 (8 x 25)
1 to 5	870-435 100 (4 x 25)
:	
1 to 10	870-440 100 (4 x 25)

Insulation stop,	
	5 pcs/strip
	200 strips
white	280-470 0.08 mm ² - 0.2 mm ²
light grey	280-471 0.25 mm ² - 0.5 mm ²
dark grey	280-472 0.75 mm ² - 1 mm ²

① Suitable for Ex i applications

Aluminium carrier rail, 1000 x 18 x 7 mm,	
3'3" x 0.709 in x 0.276 in	
210-154	1
f. version w. mounting feet	
Plastic end stop, with WSB marking facility,	
6 mm/0.236 in wide,	
for aluminium rail 210-154	
grey	209-122 1
Marker strip, transparent, 1000 x 7.5 mm/3'3" x 0.709 in	
for central marking	
- group marking -	
709-196	10

* You can find applications on the Internet at www.wago.com.

** 10 A for push-in type jumper bars with different potential, placed in parallel.

Technical explanations and abbreviations see page 10.2.

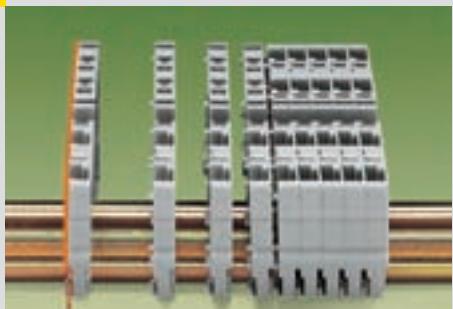
Please find the entire product range in our General Catalogue W4, Volume1.



X-COM® SYSTEM with CAGE CLAMP® Connection

Series 769 ...

Assembly



Snap individual base receptacle terminal blocks onto carrier rail

Removal



Unlock assembly with screwdriver (3.5 x 0.5 mm) and remove terminal block via release lever

CAGE CLAMP® connection

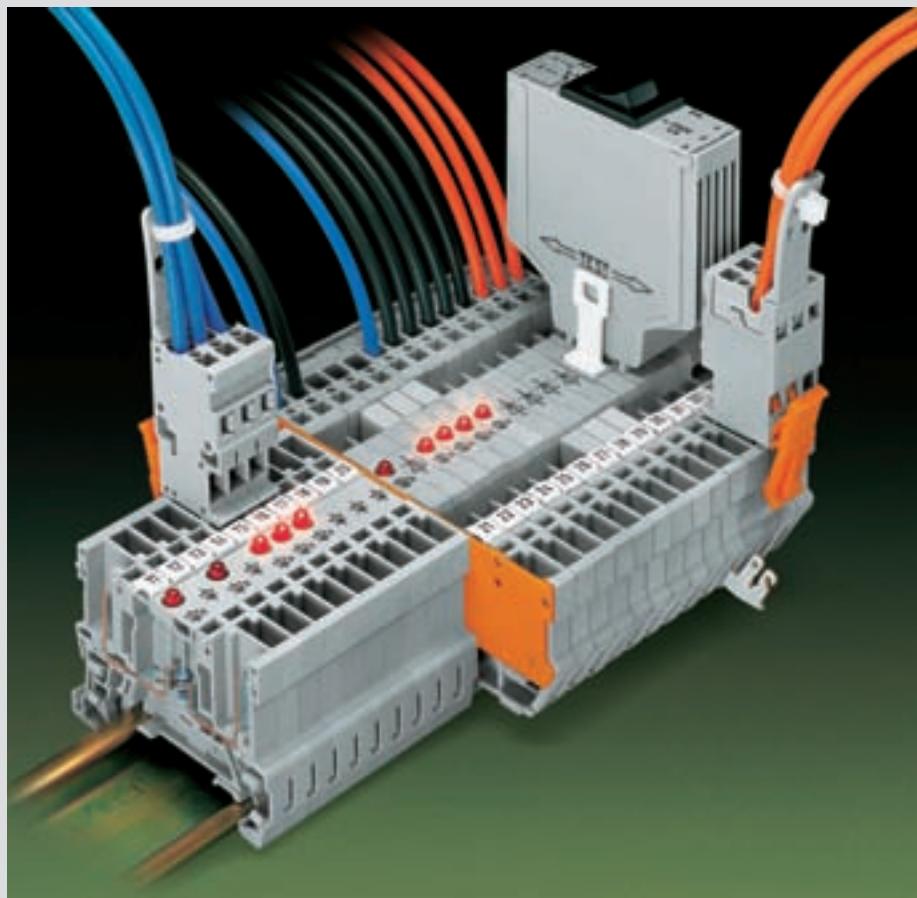


Receptacle terminal block: connection/removal of conductor with screwdriver (3.5 x 0.5) mm

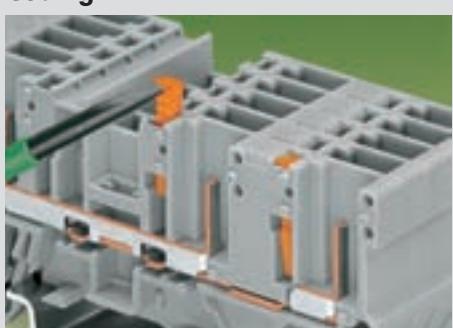
Coding



Coding a female plug - removal of coding finger(s). Do **not** break off the first and last latch position coding finger!

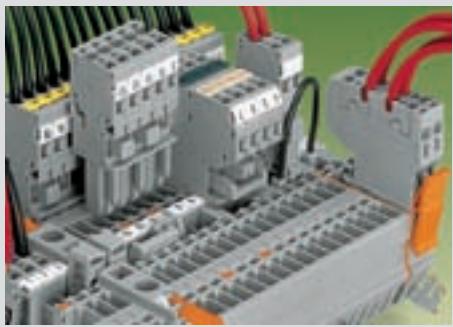


Coding



Snap coding pin in proper direction on receptacle terminal block. Removal of a coding pin from receptacle terminal block

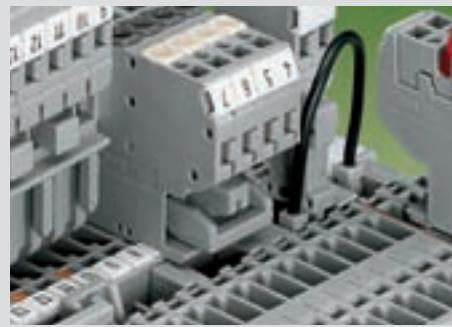
Commoning



Commoning with adjacent jumper or with staggered jumper. Push jumper down **FIRMLY** until **FULLY** inserted!



Commoning of receptacle terminal block with staggered jumper



Commoning of 2-conductor female plug with staggered jumper and commoning of receptacle terminal block with adjacent jumper



CAGE CLAMP® clamps the following copper wires:

solid



stranded



fine-stranded,
also with tinned
single strands

... Description and Handling



Female plug: connection/removal of conductor.
Operation 90° to wire also possible

Testing

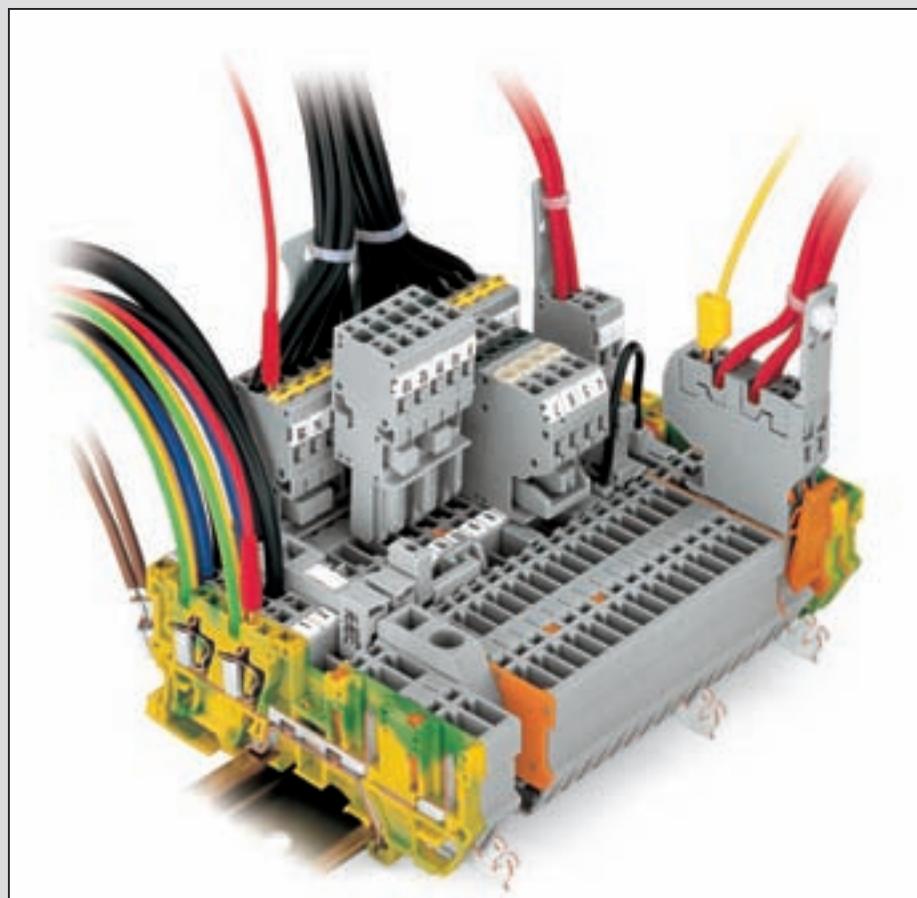


Testing with test plug Ø 2 mm (red)
or Ø 2.3 mm (yellow)

Locking lever



Snapping in/removal of locking lever



Locking lever

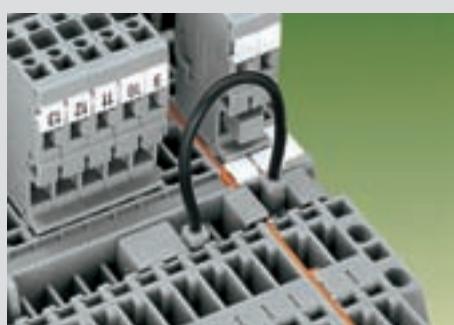


Female plug secured with locking lever in external area of receptacle terminal block

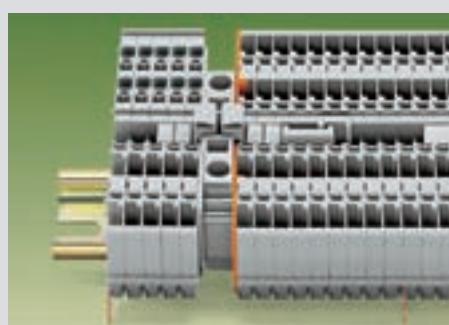
Strain relief



Removal of female plug, wires provided with strain relief plate



Commoning of receptacle terminal blocks with push-in type wire or adjacent jumpers, also over the intermediate plate



Step-down jumper used for commoning terminal blocks of different sizes



Commoning of 1-conductor female plugs with miniature adjacent jumper



fine-stranded,
tip bonded



fine-stranded,
with crimped ferrule ①

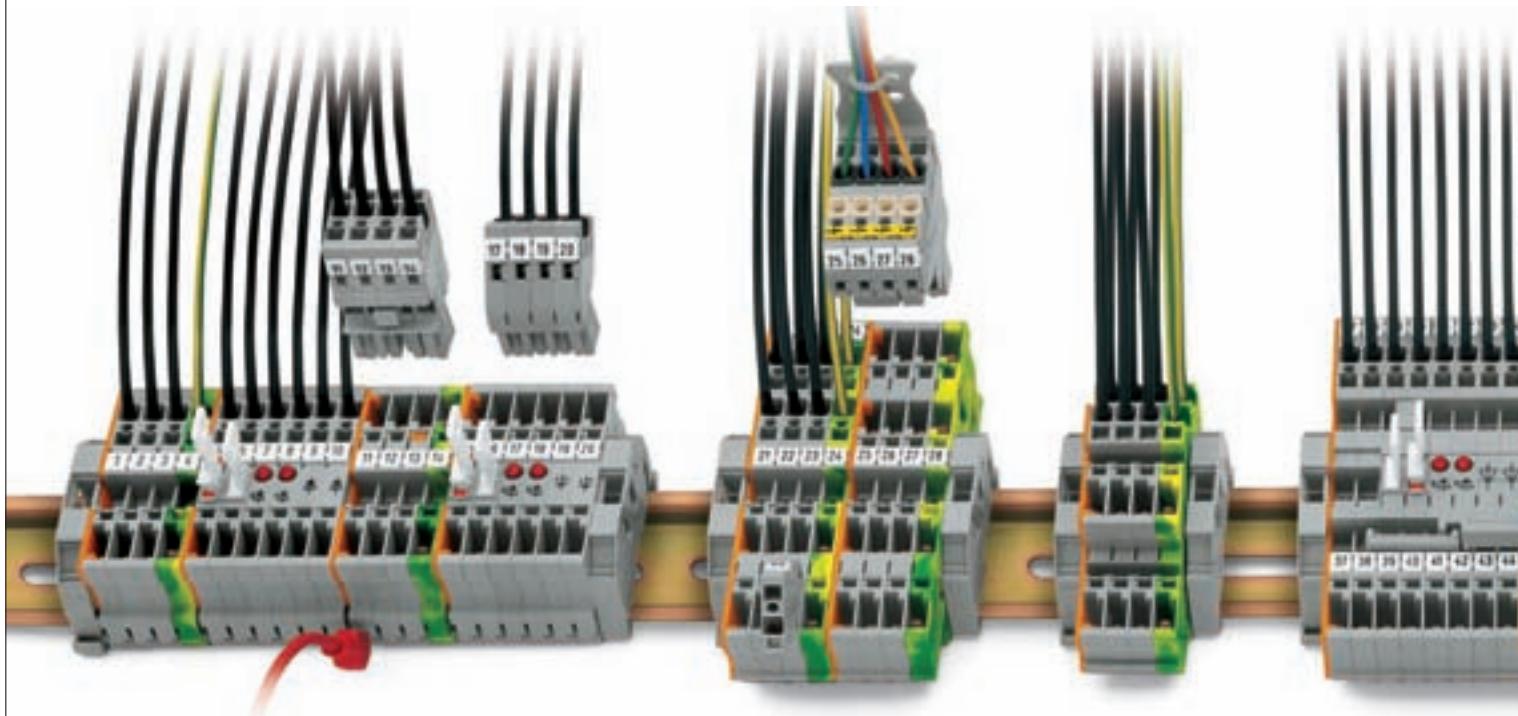


fine-stranded,
with crimped pin terminal

① When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than the max. rating of terminal block

Technical data female plugs:	0,08 – 4 mm ² 500 V/6 kV/3 16 A	AWG 28 – 12 300 V, 10 A 300 V, 20 A	Module width 5 mm / 0.197 in 8 – 9 mm / 0.33 in *
------------------------------	--	---	---

Female plug,	1-conductor,	1-conductor,	2-conductor,	Strain relief plate,
grey, with coding fingers	straight	angled	straight	grey
1-pole	769-101	769-101/022-000	769-121	1-pole 769-410
2-pole	769-102	769-102/022-000	769-122	2 to 3-pole 769-411
:	:	:	:	4 to 5-pole 769-412
14-pole	769-114	769-114/022-000	769-134	6 to 9-pole 769-413
15-pole	769-115	769-115/022-000	769-135	10 to 15-pole 769-414



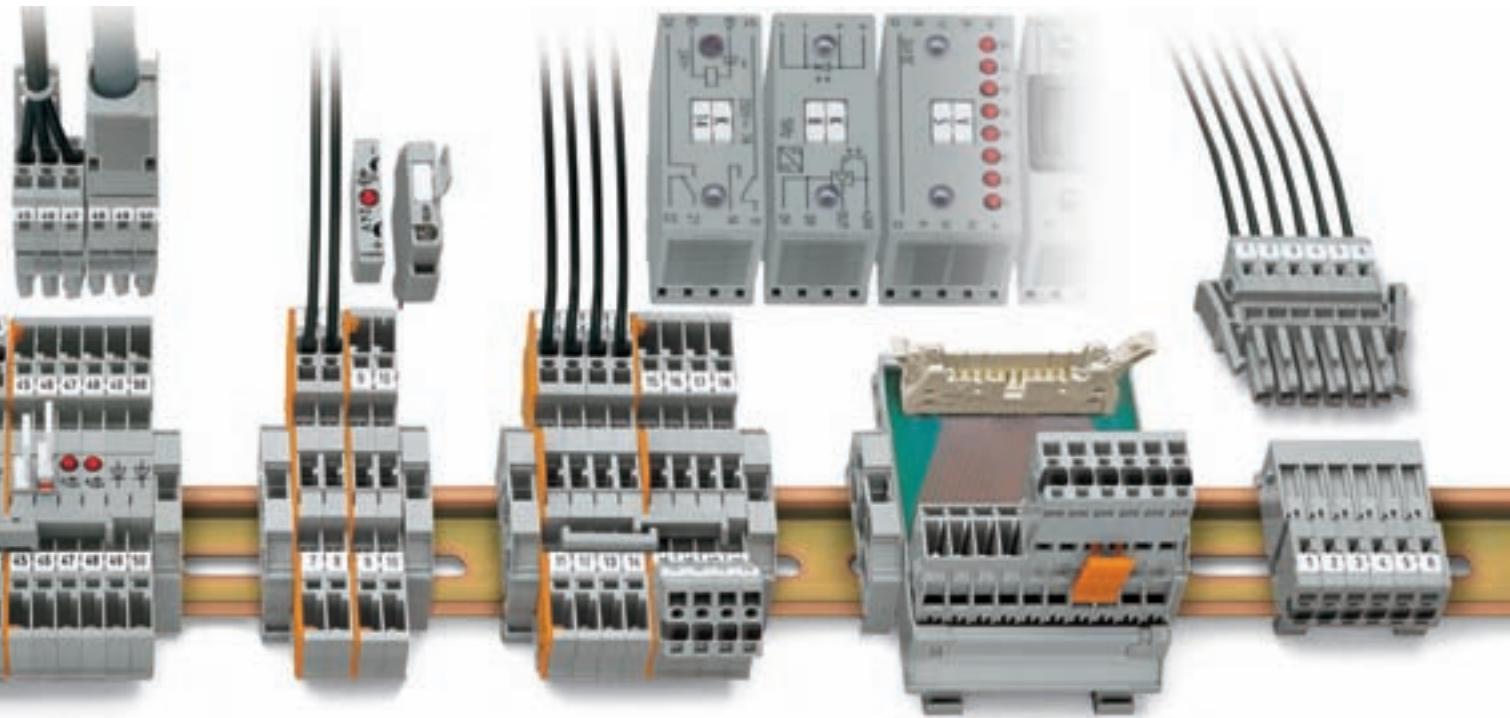
	1-cond./1-pin	2-pin	2-cond./1-Pin	2-cond./2-Pin	4-Pin	Double deck	Terminal blocks with several 3 jumper pos. 2 jumper pos.
Receptacle terminal bl. grey	769-176	769-156				1-cond./1-pin	1-cond./1-pin 1-cond./
Receptacle term. bl. with shield (screen) contact grey	769-231	769-221					
Ground (earth) receptacle terminal block yellow	769-237	769-227	769-251	769-211	769-201	2-cond./2-pin	
Disconnect rec. term. bl. grey	769-232	769-222	769-257	769-217	769-207	870-107	769-212
Disconnect rec. term. bl. with shield contact grey	769-233	769-223					769-213
Diode rec. term. bl. grey							
Cathode right side	769-238/281-410	769-228/281-410					769-218/
Cathode left side	769-238/281-411	769-228/281-411					769-218/
LED rec. term. bl. grey							
Cathode right side	769-239/281-413	769-229/281-413					769-219/
Cathode left side	769-239/281-434	769-229/281-434					769-219/
End plate	grey	769-307	769-305	769-320	769-301	870-118	769-315
	orange	769-308	769-306	769-321	769-302	870-119	769-316
Separator, oversized	orange						769-312
							769-314

Accessories

Coding pins, for coding of female plugs orange	769-435	Test plug, with cable 500 mm/17.7" 2 mm/0.079 in Ø, red 210-136 2.3 mm/0.091 in Ø, yellow 210-137	5 mm/0.197 in wide for test plug 210-137 280-404	6 mm/0.236 in wide 249-116 10 mm/0.394 in wide 249-117	showing the screwless end stop installed on a terminal block.
Insulation stop, 5 pcs/strip white 0.08 – 0.2 mm ² 769-470 light grey 0.25 – 0.5 mm ² 769-471 dark grey 0.75 – 1 mm ² 769-472		Test plug adapter, 5 mm/0.197 in wide for test plug 210-137			
Protective warning marker, with high voltage symbol, for 5 terminal blocks yellow 280-415		Screwless end stop 6 mm/0.236 in wide 249-116 10 mm/0.394 in wide 249-117			

Technical data base receptacle terminal block:	0,08 – 4 mm ² 500 V/6 kV/3 250 V/4 kV/3 16 A	AWG 28 – 12 300 V, 10 A 300 V, 20 A	Module width 5 mm / 0.197 in 8 – 9 mm / 0.33 in *
--	--	---	---

Strain relief housing,				Female plug with lateral locking lever
grey				2-pole 769-102/021-000
2-pole 769-1602				3-pole 769-103/021-000
3-pole 769-1603	Component plugs,	Electronic modules,		:
:	e.g. fuse, diode, LED, series 280 and 281	e.g. switching relay, optocoupler series 286, series 786		14-pole 769-114/021-000
14-pole 769-1614				15-pole 769-115/021-000
15-pole 769-1615				



jumper positions	Receptacle term. block	Receptacle terminal blocks	Headers	Male connectors with
2 jumper pos.	for pluggable modules of	for pluggable modules of	with solder pins, grey	CAGE CLAMP®
1-pin 2-pin	series 280 + 281	series 286	solder pin straight angled	connection
	1-conductor/1-pin	1-conductor/1-pin	2 poles 769-632 769-662	2 poles 769-602
	769-181	4 poles 769-182/769-314	3 poles 769-633 769-663	3 poles 769-603
		6 poles 769-183/769-314	4 poles 769-634 769-664	4 poles 769-604
	1-cond./1-cond.	8 poles 769-184/769-314	5 poles 769-635 769-665	5 poles 769-605
769-202	769-191	10 poles 769-185/769-314	:	:
			8 poles 769-638 769-668	8 poles 769-608
769-203	2-pin	2-pin	:	:
	769-161	4 poles 769-162/769-313	15 poles 769-645 769-675	15 poles 769-615
281-410 769-208/281-410		6 poles 769-163/769-313	Add. item-No.	
281-411 769-208/281-411		8 poles 769-164/769-313	Add. item-No.	for male connectors with snap-in mounting feet**
281-413 769-209/281-413		10 poles 769-165/769-313	for headers with solder pins and fixing flanges	...-.../001-000
281-434 769-209/281-434	1-cond./1-pin	2-pin	...-.../003-000	or fixing flanges
	769-309	769-311 769-309 769-317		or fixing flanges for feedthrough applications ...-.../002-000
	769-310	769-312 769-310 769-318	...-.../004-000	or snap-in flanges
	769-313	769-314 769-313 769-319	...-.../005-000	

** mounting adapter
for DIN 35 rail 209-137

Jumper systems:	Miniature adjacent jumper, for 1-conductor female plugs			Operating tool for female plugs and male connectors with CAGE CLAMP® connection
Adjacent jumper, I _N 24 A	280-402		I _N 16 A	Pliers 210-490
Alternate jumper, I _N 24 A	280-409		grey 769-402	Operating lever, loose 769-434
Staggered jumper, I _N 24 A				
1 to 2 780-452	1 to 5 780-455	Locking levers, for female plugs	1 pole 769-428 769-430	Miniature WSB Quick marking system (see section 9)
1 to 3 780-453	:		grey 769-429 769-431	
1 to 4 780-454	1 to 8 780-458		orange 769-429 769-431	
Push-in type wire jumpers, 9 A				
L = 60 mm/2.362 in	249-125	Screwdriver, with partially insulated shaft	3.5 x 0.5 mm 210-620	WMB Multi marking system
L = 110 mm/4.331 in	249-126			for double deck receptacle terminal blocks (see section 9)
L = 250 mm/9.842 in	249-127			
Push-in type jumper bars, for double deck receptacle terminal blocks, see page 4.41				

The universal basic module

Assembly



Assembly on the rail . . .
Bus coupler first!

Power jumper contacts on the field side



Safe, automatic connection by tinned, self-cleaning slide contact, ground (earth) contact makes first and breaks last

Data contacts



Safe, automatic connection by gold-plated, self-cleaning slide contacts with high contact safety

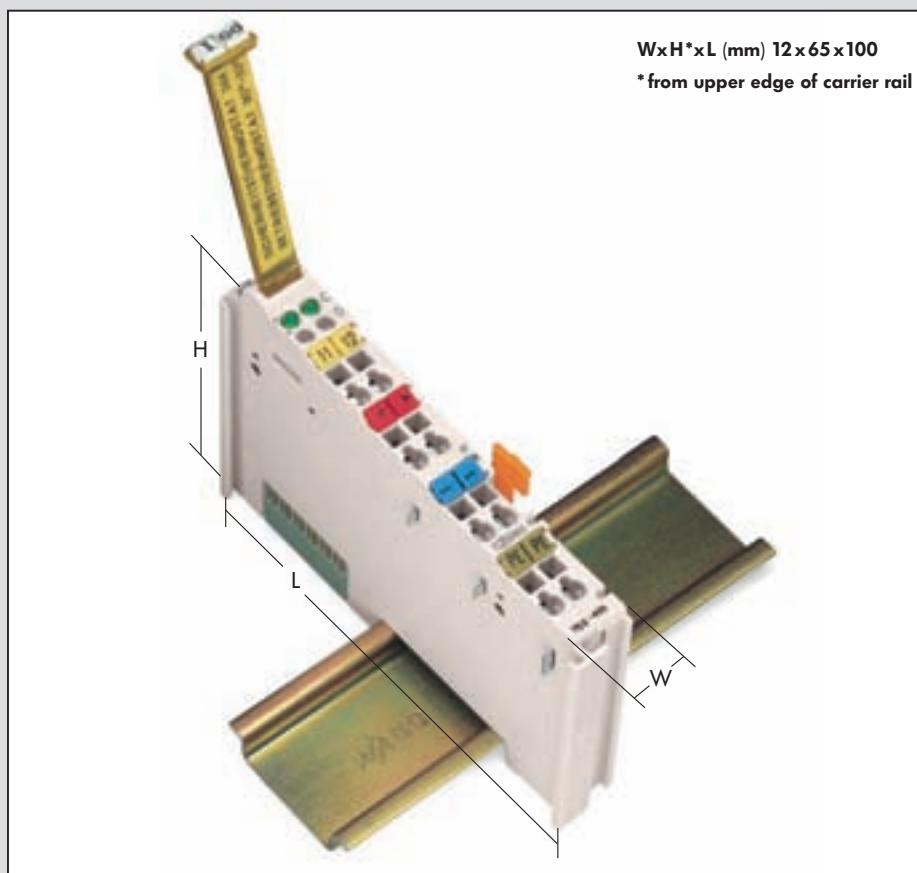


. . . secure connection with dovetails

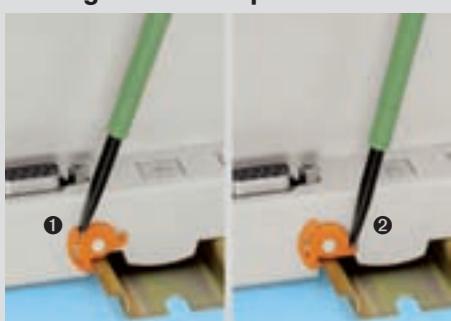
Exchange within the assembly



Quick exchange of an I/O module within the assembly – without tool



Locking the bus coupler



① locking

② releasing

Accessing the programming interface



Accessing the programming interface of the fieldbus coupler.
For WAGO-I/O-CHECK and WAGO-I/O-PRO

Don't forget the end module!



The end module terminates the fieldbus node physically and guarantees a safe data transmission.

Obvious handling by colour coding



Moulded marking of clamping units



Marking of clamping units by colored miniature WSB markers



Group marking carrier (can be withdrawn and replaced) with large area for self marking



yellow	- digital inputs
red	- digital outputs
green	- analogue inputs
blue	- analogue outputs
colourless	- supply and special function modules

Different functions marked by transparent coloured group marker carriers

CAGE CLAMP® connection



Vibration-proof, fast and maintenance-free wiring of 0.08 mm² - 2.5 mm² /AWG 28 - 14

Status indication



Diagnosis and status indication by LED for safe start-up and system control

Testing



Signal tracing with wired conductors

Fuse holder



Function at locked position 1:
Power output to I/O group is off



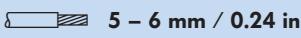
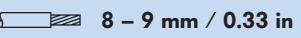
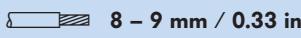
Function at locked position 2: Easy fuse replacement via hinged cover.
Use UL-recognised fuses only!

Pluggable wiring

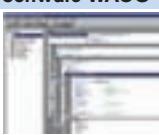


See General Catalogue W 4, Volume 3
or at www.wago.com

ECO Fieldbus Coupler, Fieldbus Coupler, Programmable Fieldbus Controller, Series 750

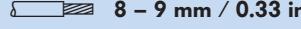
ECO Fieldbus Coupler* for digital and analogue signals 0.08 mm ² - 1.5 mm ² / AWG 28 - 16 Voltage supply 24 V (-15%..+20%) Module width 50 mm 	Fieldbus Coupler* for digital and analogue signals 0.08 mm ² - 2.5 mm ² / AWG 28 - 14 Voltage supply 24 V (-15%..+20%) Module width 51 mm 	Programmable Fieldbus Controller* for digital and analogue signals 0.08 mm ² - 2.5 mm ² / AWG 28 - 14 Voltage supply 24 V (-15%..+20%) Module width 51 mm 
--	---	---



Description	Baud rate	Item No.	Description	Baud rate	Item No.	Description	Baud rate	Item No.
PROFIBUS DP ECO	12 MBaud	750-343	PROFIBUS DP/FMS	12 MBaud	750-303	PROFIBUS DP/V1	12 MBaud	750-833
INTERBUS ECO	500 kBaud	750-344	PROFIBUS DP/V1	12 MBaud	750-333	INTERBUS	500 kBaud	750-804
INTERBUS ECO	2 MBaud	750-345	PROFIBUS	1.5 MBaud	750-331	ETHERNET TCP/IP	10 MBit/s	750-842
DeviceNet ECO	500 kBaud	750-346	INTERBUS	500 kBaud	750-304	ETHERNET TCP/IP	10/100 MBit/s	750-841
CANopen ECO MSS	10 kBd - 1 MBd	750-347	INTERBUS	500 kBaud	750-334	DeviceNet	500 kBaud	750-806
CANopen ECO	10 kBd - 1 MBd	750-348	with fibre optic connection			ETHERNET TCP/IP	10 MBit/s	750-342
						ETHERNET TCP/IP	10 MBit/s	750-341
						DeviceNet	500 kBaud	750-306
						CANopen	10 kBd - 1 MBd	750-307
						CANopen	10 kBd - 1 MBd	750-337
						CAL	10 kBd - 1 MBd	750-305
						MODBUS RS 485	150 - 19200 Bd	750-312
						MODBUS RS 485	1.2 - 115.2 kBd	750-315
Accessories, Series 750			Accessories, Fieldbus Controller					
Fieldbus connector,			MODBUS RS 232	150 - 19200 Bd	750-314	Software WAGO-I/O-PRO,		
	fast and maintenance-free CAGE CLAMP® connection		MODBUS RS 232	1.2 - 115.2 kBd	750-316	 see page 5.7		
PROFIBUS	750-960	with D-Sub male connector, 9-pole	CC-Link	156 kBd - 10 MBd	750-310			
PROFIBUS	750-970	with D-Sub male and female connector, 9-pole						
CANopen	750-963	with D-Sub female connector, 9-pole	Data exchange coupler	750-319/004-000				
INTERBUS (IN)	750-961	with D-Sub female connector, 9-pole	(Peer-to-peer)	78 kbps				
INTERBUS (OUT)	750-962	with D-Sub male connector, 9-pole	II/O-LIGHTBUS	2.5 MBaud	750-300			
CC-Link	750-965	with D-Sub male connector, 9-pole	Only for digital signals:					
			II/O-LIGHTBUS	2.5 MBaud	750-320			
You can find more accessories in the General Catalogue								

Industrial Compact PC, Series 758

Digital Input Modules and Digital Output Modules, Series 750

Industrial Compact PC*	Digital Input Modules (DI)*	Digital Output Modules (DO)*
<p>0.08 mm² - 2.5 mm² / AWG 28 - 16 Voltage supply 24 V (-15%..+20%) Dimensions 172 x 65 x 100 mm</p>	<p>0.08 mm² - 2.5 mm² / AWG 28 - 16 Voltage supply 24 V (-15%..+20%) Module width 12;24 mm / 0.472;0.945 in </p>	<p>0.08 mm² - 2.5 mm² / AWG 28 - 16 Voltage supply 24 V (-15%..+20%) Module width 12;24 mm / 0.472;0.945 in </p>



Description	Item No.	Description	Voltage	Item No.	Description	Voltage	Item No.
WAGO-I/O-PC	758-870	4-channel DI	DC 5 V, 0.2 ms	750-414	4-channel DO	DC 5 V, 20 mA	750-519
Industrial compact PC		high-side switching			high-side switching		
Interfaces:		2-channel DI	DC 24 V, 3 ms,	750-400	2-channel DO	DC 24 V, 0.5 A,	750-501
LAN	2 x 10Base-T/100Base-TX	high-side switching			high-side switching		
Fieldbus (option)		2-channel DI	DC 24 V, 0.2 ms,	750-401	2-channel DO	DC 24 V, 2 A,	750-502
Serial	1 x COM 1, RS 232 compliant	high-side switching			high-side switching		
USB	2 x USB-Ports acc. to specification 1.1	2-channel DI	DC 24 V, 3 ms,	750-410	2-channel DO	DC 24 V, 0.5 A,	750-506
Digital input	2 x DI, isolated	high-side switching, proximity switch			high-side switching, diagnostic		
Digital output	2 x DO, isolated	2-channel DI	DC 24 V, 0.2 ms,	750-411	2-channel DO	DC 24 V, 2 A,	750-507
		high-side switching, proximity switch			high-side switching, diagnostic		
WAGO-I/O-PC	758-870/000-001	2-channel DI	DC 24 V, 3 ms,	750-418	4-channel DO	DC 24 V, 0.5 A,	750-504
with PROFIBUS Master		high-side switching, diagn./acknol.			high-side switching		
WAGO-I/O-PC	758-870/000-002	2-channel DI	DC 24 V, 3 ms,	750-419	4-channel DO	DC 24 V, 0.5 A,	750-531
with CANopen Master		high-side switching, diagnostic			high-side switching		
WAGO-I/O-PC	758-870/000-003	4-channel DI	DC 24 V, 3 ms,	750-402	4-channel DO	DC 24 V, 0.5 A,	750-516
with DeviceNet Master		high-side switching			low-side switching		
		4-channel DI	DC 24 V	750-432	2-channel DO	AC 125 V, 0.5 A	750-514
		high-side switching			2 changeover contacts (SPDT)		
		4-channel DI	DC 24 V	750-433	1-channel DO	AC 230 V, 16 A	750-523
		high-side switching			1 make contact, bistable		
		2-channel DI	DC 24 V,	750-422	2-channel DO	AC/DC 230 V,	750-509
		high-side switching, puls extension			SSR 0.3 A		
		4-channel DI	DC 24 V, 3 ms,	750-408	2-channel DO	AC/DC 230 V,	750-522
		low-side switching			SSR 3.0 A (< 30 s)		
		4-channel DI	DC 24 V, 0.2 ms,	750-409	2-channel DO	AC 250 V, 1.0 A	750-517
		low-side switching			2 changeover contacts (SPDT)		
		8-channel DI	DC 24 V, 3 ms,	750-430	2-channel DO	AC 250 V, 2.0 A	750-512
		high-side switching			2 make contacts, non-floating		
		8-channel DI	DC 24 V, 0.2 ms,	750-431	2-channel DO	AC 250 V, 2.0 A	750-513
		high-side switching			2 make contacts, isolated outputs		
		2-channel DI	DC 24 V,	750-424			
		intruder detection					
		4-channel DI	AC/DC 24 V, 20 ms	750-415			
		4-channel DI	AC/DC 24 V, 50 ms	750-423			
		power contacts					
		4-channel DI	AC/DC 42 V	750-428			
		2-channel DI	DC 48 V, 3 ms	750-412			
		high-side switching					
		2-channel DI	DC 48 V, 3 ms	750-412			
		high-side switching					
		2-channel DI	DC 110 V	750-427			
		high-side or low-side switching					
		2-channel DI	AC 230 V	750-405			
		high-side switching					
		2-channel DI	NAMUR	750-425			

* You can find approvals and technical data in our General Catalogue W5, Volume 3 or at www.wago.com.

Analogue Input Modules, Analogue Output Modules, Specialty Modules

Series 750

Analogue input modules (AI)*	Analogue output modules (AO)*	Specialty modules*
<p>0.08 mm² - 2.5 mm² / AWG 28 - 16 Power supply 24 V (-15%..+20%) Module width 12 mm 24 mm </p>	<p>0.08 mm² - 2.5 mm² / AWG 28 - 16 Power supply 24 V (-15%..+20%) Module width 12 mm 24 mm </p>	<p>0.08 mm² - 2.5 mm² / AWG 28 - 16 Power supply 24 V (-15%..+20%) Module width 12 mm 24 mm 48 mm </p>



Description	Item No.	Description	Item No.	Description	Item No.
2-channel AI 0 - 20 mA differential inputs	750-452	2-channel AO 0 - 20 mA	750-552	Up/down counter	750-404
2-channel AI 4 - 20 mA differential inputs	750-454	2-channel AO 4 - 20 mA	750-554	DC 24 V, 100 kHz 2-channel up/down counter	750-638
2-channel AI 0 - 20 mA Single-ended	750-465	2-channel AO 0 - 10 V	750-550	DC 24 V, 500 Hz 2-channel pulse width output module	750-511
2-channel AI 4 - 20 mA Single-ended	750-466	2-channel AO ±10 V	750-556	DC 24 V, 0.1 A SSI transmitter interface	750-630
2-channel AI 0 - 20 mA, 16 Bit Single-ended	750-472	4-channel AO ±10 V	750-557	Incremental encoder interface	750-631
2-channel AI 4 - 20 mA, 16 Bit Single-ended	750-474	4-channel AO 0 - 10 V	750-559	Incremental encoder interface	750-637
2-channel AI 0 - 20 mA, differential inputs	750-480	2-channel AO 0 - 10 V, 24 V	750-560	Digital impulse interface	750-635
2-channel AI 4 - 20 mA, differential inputs	750-492			for magnetostrictive distance measurement sensors Serial interface RS 232 C	750-650
2-channel AI 0 - 1 A AC/DC differential inputs	750-475			1200 - 19200 Baud Serial interface RS 485	750-653
2-channel AI 0 - 10 V AC/DC differential inputs	750-477			1200 - 19200 Baud TTY interface 20 mA	750-651
2-channel AI 0 - 10 V DC Single-ended	750-467			Current Loop Data exchange module	750-654
4-channel AI 0 - 10 V DC Single-ended	750-468			62500 Baud DALI/DSI master module	750-641
2-channel AI ±10 V DC, 16 Bit Single-ended	750-476			Radio receiver module	750-642
2-channel AI 0 - 10 V DC, 16 Bit Single-ended	750-478			AS-Interface master module	750-655
4-channel AI ±10 V DC Single-ended	750-457				
4-channel AI 0 - 10 V DC Single-ended	750-459				
2-channel AI ±10 V DC differential inputs	750-456				
2-channel AI ±10 V DC differential measurements inputs	750-479				
2-channel AI ±10 V DC differential measurements inputs	750-483				
2-channel AI Pt100 / RTD	750-461				
4-channel AI Pt100 / RTD	750-460				
2-channel AI Thermocouple K/Diagnostic	750-469				
1-channel AI DMS	750-491				
4-channel AI 0 - 20 mA Single-ended	750-453				
4-channel AI 4 - 20 mA Single-ended	750-455				

PROFIsafe Modules*	Intrinsically Safe Modules EEx i*	System Modules*
0.08 mm² - 2.5 mm² / AWG 28 - 16 Power supply 24 V (-15%..+20%) Module width 24 mm  8 – 9 mm / 0.33 in	0.08 mm² - 2.5 mm² / AWG 28 - 16 Power supply 24 V (-15%..+20%) Module width 12 mm  8 – 9 mm / 0.33 in	0.08 mm² - 2.5 mm² / AWG 28 - 16 Power supply 24 V (-15%..+20%) Module width 12 mm 24 mm  8 – 9 mm / 0.33 in



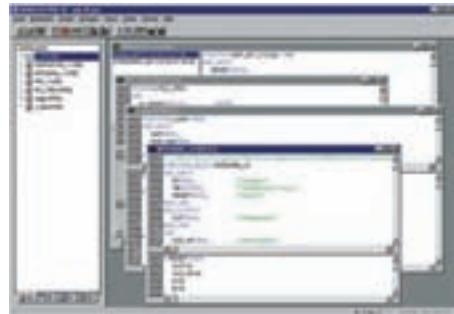
* You can find approvals and technical data in our General Catalogue W5, Volume 3 or at www.wago.com.

Digital Input/Output/Specialty and System Modules, Series 753

Sensor/Actuator Boxes, Series 757

Software, Series 759

Modules Series 753*	Modules Series 757*	Software WAGO-I/O-PRO 32
<p>0.08 mm² - 2.5 mm² / AWG 28 - 14 Power supply 24 V (-15%..+20%) Module width 12 mm  9 – 10 mm / 0.37 in</p>	<p>Operating voltage DC 10 V ... 30 V Dimensions (mm) W x H x L M12: 60 x 117/123/152 x 26 M 8: 30 x 117/123/152/175 x 20</p>	



Description	Item No.	Description	Item No.	Description	Item No.
Digital input modules (DI):		M12 sensor/actuator boxes with M23 connector		WAGO-I/O-PRO 32	759-332/000-001
2-channel DI DC 24 V	753-400, 753-401	4-way, 4-pole	757-144	German	
4-channel DI DC 24 V	753-402, 753-403	6-way, 4-pole	757-164	WAGO-I/O-PRO 32	759-332/000-002
2-channel DI AC 230 V	753-405	8-way, 4-pole	757-184	Englisch	
2-channel DI AC 120 V	753-406	4-way, 5-pole	757-145	OPC	759-310
4-channel DI DC 24 V	753-408, 753-409	6-way, 5-pole	757-165	Server Runtime License	
2-channel DI DC 24 V	753-410, 753-411	8-way, 5-pole	757-185	WAGO OPC-Server	759-311
2-channel DI DC 48 V	753-412			MODBUS/TCP	
4-channel DI AC/DC 24 V	753-415	M12 sensor/actuator boxes with 5m connec. cable		WAGO DLL	759-312
2-channel DI DC 24 V	753-418, 753-421	4-way, 4-pole	757-244/000-005	MODBUS/TCP	
2-channel DI DC 24 V	753-422	6-way, 4-pole	757-264/000-005		
4-channel DI AC/DC 24 V	753-423	8-way, 4-pole	757-284/000-005		
2-channel DI DC 24 V	753-424	4-way, 5-pole	757-245/000-005		
2-channel DI NAMUR	753-425	6-way, 5-pole	757-265/000-005		
2-channel DI DC 110 V	753-427	8-way, 5-pole	757-285/000-005		
4-channel DI AC/DC 42 V	753-428			Software WAGO-I/O-CHECK 2	
8-channel DI DC 24 V	753-430, 753-431	M8 sensor/actuator boxes with M16 connector			
4-channel DI DC 24 V	753-432, 753-433	4-way, 3-pole	757-343		
		6-way, 3-pole	757-363		
		8-way, 3-pole	757-383		
		10-way, 3-pole	757-303		
Digital output modules (DO):		M8 sensor/actuator boxes with 5m conn. cable			
2-channel DO DC 24 V	753-501, 753-502	4-way, 3-pole	757-443/000-005		
4-channel DO DC 24 V	753-504	6-way, 3-pole	757-463/000-005		
2-channel DO DC 24 V	753-506, 753-507	8-way, 3-pole	757-483/000-005		
2-channel DO AC/DC 230 V	753-509	10-way, 3-pole	757-403/000-005		
2-channel DO AC 250 V	753-512			Accessories Series 757	
2-channel DO AC 250 V	753-513				
2-channel DO AC 125 V	753-514				
4-channel DO DC 24 V	753-516	Blind module for sensor/actuator box			
2-channel DO AC 250 V	753-517	4-way	757-040		
8-channel DO DC 24 V	753-530	6-way	757-060		
4-channel DO DC 24 V	753-531	8-way	757-080		
		10-way	757-000		
Specialty modules:		M12 protective cap (sensor / actuator),		Description	Item No.
Up/down counter	753-404	for unused terminals		WAGO-I/O-CHECK 2	759-302
Digital pulse interface	753-635				
2-channel up/down counter	753-638				
Serial interface RS 232 C	753-650				
Serial interface RS 485	753-653				
System modules:		Marker strips for M8 sensor/actuator box			
Field side connection module	753-603	4-way	757-0041		
Field side connection module	753-604	6-way	757-0061		
Field side connection module	753-614	8-way	757-0081		
For technical data see 750 Series modules with same funtions		10-way	757-0001		
Other modules on request				Please find more accessories in our General Catalogue.	

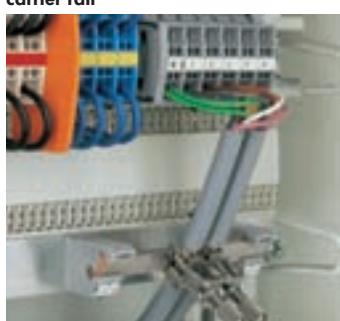
Shield (Screen) Connection System Series 790



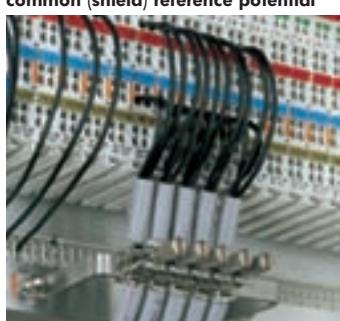
Snap into any metal plate up to max. thickness 3 mm/0.118 in



Mounting on a special slotted carrier rail

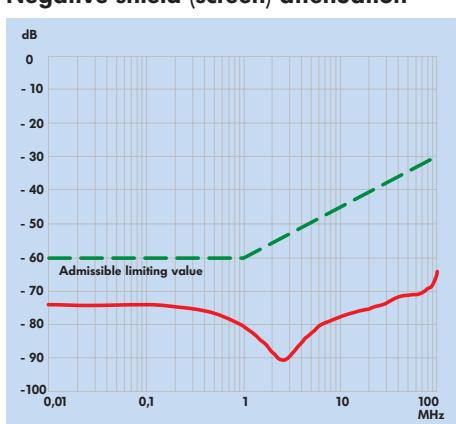


Isolated mounting carriers for a common (shield) reference potential



**U-shaped copper busbar
10 x 3 mm/0.394 x 0.118 in**

Negative shield (screen) attenuation



Shield (screen) clamping saddles

Saddle width	for conductors with diameter	Item No.	Pack.-unit pcs
11 mm	8 mm	790-108	50
19 mm	7 ... 16 mm	790-116	50
27 mm	6 ... 24 mm	790-124	50
43 mm	22 ... 40 mm	790-140	50

Accessories, Series 790

	Carrier with grounding foot, 45 mm/1.772 in long bar 90° to the rail, 790-113 25 Cu with tin plating 10 x 3 mm/0.394 x 0.118 in
	Carrier with grounding foot, 45 mm/1.772 in long bar parallel to the rail, 790-114 25 Cu with tin plating 10 x 3 mm/0.394 x 0.118 in
	Carrier with two grounding feet, 125 mm/4.921 in long bar parallel to the rail, 790-115 25 Cu with tin plating 10 x 3 mm/0.394 x 0.118 in
	Carrier rail, special slotted, 1000 mm/3.3' in long, Cu with tin plating 790-145 1 special lengths on request
	Stand off, for special slotted carrier rail, use M 5 size screw 790-144 200 (2x100)
	Straight busbar, 1000 mm 210-133 20 (20x1) Cu with tin plating, 30 mm 790-133 20 (20x1) 10 x 3 mm/0.394 x 0.118 in 50 mm 790-134 20 (20x1)
	Isolated mounting foot, for busbar, grey 790-100 50 (2x25) with standard screw M 4 x 8 mm
	Isolated mounting foot, for busbar, grey 790-101 50 (2x25) with sheet metal screw (3.5 x 9) mm
	U-shaped busbar, for I/O modules, Series 750 for 5 I/O 790-190 25 (5x5) Cu 10 mm x 3 mm for 8 I/O 790-191 25 (1x25)



**Carrier with grounding foot,
busbar 90° to the rail**



**Carrier with grounding foot,
busbar parallel to the rail**

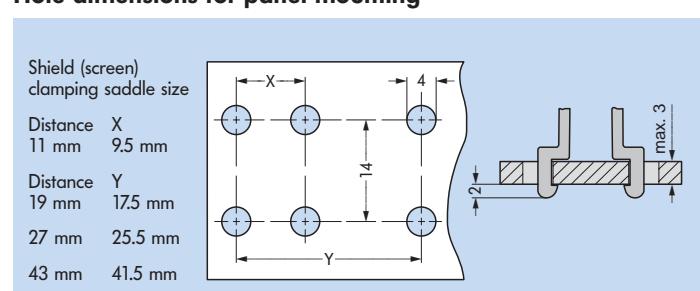


**Carrier with two grounding feet,
busbar parallel to the rail**



Carrier with grounding foot

Hole dimensions for panel mounting



The WAGO shield (screen) connection system is highly effective because the clamping unit can be brought very close to the unshielded part of the cable. Additionally, the spring material is part of the clamping saddle, giving good electrical connection and compensating for any deformation in the braiding. The system also acts as a partial strain relief.

Electronic Modules . . .

Plugging



Coding ensures correct polarity

Testing



Easy testing at touchproof contacts

Terminal blocks for pluggable modules



Pluggable electronic modules, for application on 2- or 4-conductor carrier terminal blocks

Clamping units



4-conductor terminal blocks - Two clamping units per side enable parallel feeding of voltage supply to multiple units

Pluggable electronic modules

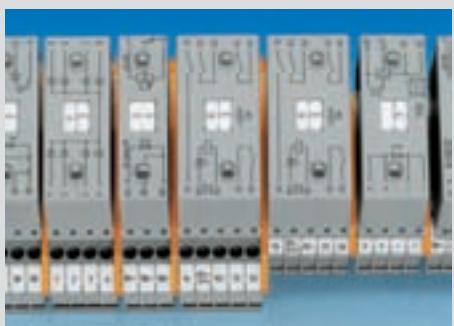


Marking



Marker plate for group or block marking

System circuits



Printed system circuits for quick recognition of function

Service



Pliers for removing electronic housing covers (see page 5.17)



CAGE CLAMP® ①
clamps the following
copper wires:

solid



stranded



fine-stranded,
also with tinned
single strands

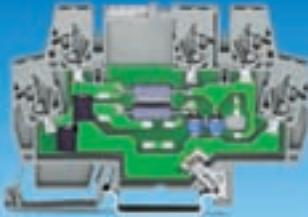
... Description and Handling

Series 859



Rail-mounted terminal blocks with coupler functions

Overvoltage protection



Rail-mounted terminal blocks with overvoltage protection

Interface modules



Commoning



Commoning using a 3-way push-in type jumper bar.
2-way to 10-way jumper bars are now available



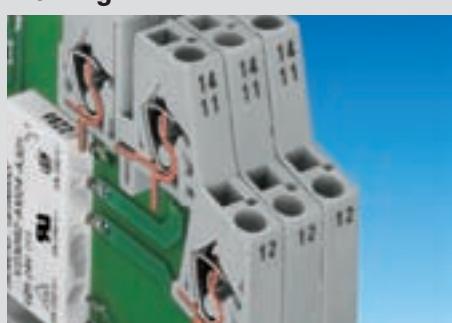
Rail-mounted terminal block with varistor

CAGE CLAMP® connection



Connection of conductor "front-entry"

Marking

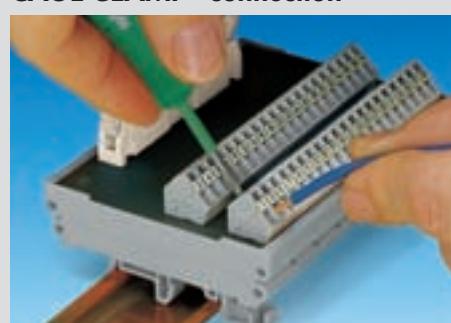


Each clamping unit is marked individually



Pluggable surge suppression

CAGE CLAMP® connection



Connection of conductor "side-entry"

Testing



Testing with test pin



Primary switch mode power supply units
see page 5.16

CAGE CLAMP®S connection



Solid conductors or flexible conductors with ultrasonically bonded wire ends or ferrules can be simply pushed in - without using a screwdriver



fine-stranded wire -
tip bonded



fine-stranded wire
with crimped ferrule ③

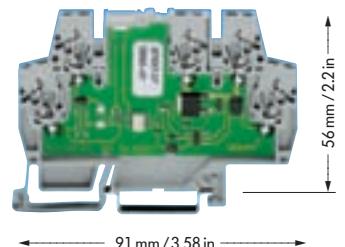
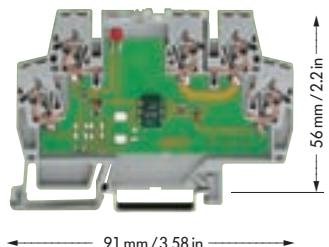
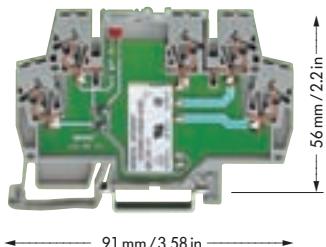


fine-stranded wire
with crimped pin terminal

③ When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than max. rating of terminal block

Rail-Mounted Terminal Blocks with Coupler Function, with CAGE CLAMP® COMPACT Connection

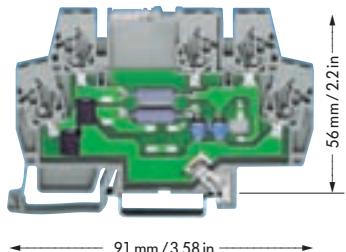
Relay with 1 change over contact	Optocoupler	Optocoupler
0.08 – 2.5 mm ² AWG 28 – 14 Terminal block width 6 mm/0.236 in 5 – 6 mm / 0.22 in	0.08 – 2.5 mm ² AWG 28 – 14 Terminal block width 6 mm/0.236 in 5 – 6 mm / 0.22 in	0.08 – 2.5 mm ² AWG 28 – 14 Terminal block width 6 mm/0.236 in 5 – 6 mm / 0.22 in



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
	25		25		25
859-302 DC 5 V		859-795 input: DC 5 V output: DC 24 V/100 mA		859-702 input: DC 5 V output: DC 24 V/0.5 A 25 kHz negative switching	
	25		25		25
859-303 DC 12 V		859-796 input: DC 24 V output: DC 24 V/100 mA		859-708 input: DC 24 V output: DC 24 V/0.5 A 25 kHz negative switching	
	25		25		25
859-304 DC 24 V		859-720 input: DC 24 V output: DC 24 V/3 A negative switching		859-706 input: DC 24 V output: DC 5 V/0.5 A 25 kHz negative switching	
	25		25		25
859-305 DC 48 V		859-730 input: DC 24 V output: DC 24 V/3 A		859-752 input: DC 5 V output: DC 24 V/0.5 A 10 kHz positive switching	
	25		25		25
859-306 DC 60 V		859-772 input: AC 230 V output: DC 24 V/0.5 A positive switching		859-758 input: DC 24 V output: DC 24 V/0.5 A 10 kHz positive switching	
	25		25		25
859-307 DC 120 V		859-712 input: AC 230 V output: DC 24 V/0.5 A negative switching		859-756 input: DC 24 V output: DC 5 V/0.5 A 10 kHz positive switching	
	25		1		25
859-308 DC 230 V		859-353 AC/DC 12 V		859-794 input: DC 16 V - 30 V output: DC 16 V - 60 V 100 mA	
	25		25		
859-354 AC/DC 24 V			25		
859-355 AC/DC 48 V			25		
	25		25		
859-357 AC 115 V			25		
	25		25		
859-358 AC 230 V					
	25				
859-314 DC 24 V					
	25				
859-317 DC 115 V					
	25				
859-360 AC 115 V					
	25				
859-359 AC 230 V					
	25				
859-368 AC 230 V					
Defined turn-on/turn-off threshold					

Rail-Mounted Terminal Blocks with Overvoltage Protection, with CAGE CLAMP® COMPACT Connection

Overvoltage protection in terminal blocks	Accessories for terminal blocks - with coupler function - with overvoltage protection	Accessories for terminal blocks - with coupler function - with overvoltage protection
0.08 – 2.5 mm² AWG 28 – 14 Terminal block width 6 mm/0.236 in 5 – 6 mm / 0.22 in		



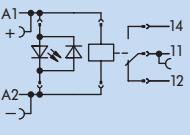
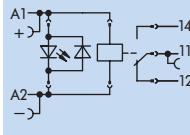
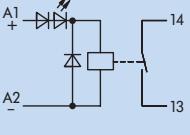
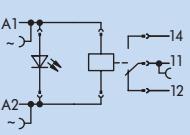
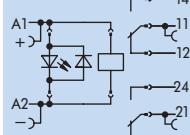
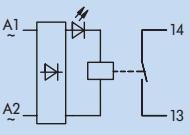
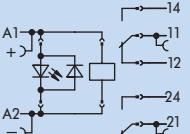
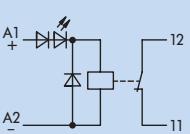
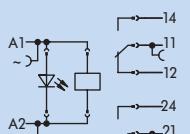
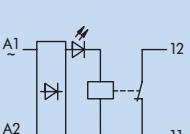
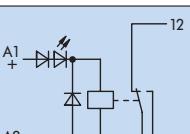
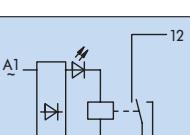
Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
 792-800 1 DC 24 V, ME24, for 2 single lines (line/protected ground), unbalanced interfaces as well as RS485 and RS422 interfaces, for information technology systems		End and intermediate plate 1 mm/0.039 in thick grey 859-525 100 (4 x 25)		Screwless end stop 6 mm wide 249-116 100 (4 x 25) 10 mm wide 249-117 50 (2 x 25)	
 792-801 1 DC 24 V, MD24, for balanced interfaces (line/line) with electrical iso- lation for information tech- nology systems (Telecommunication)		Push-in type jumper bar, light grey, insulated, I _N 18 A 2-way 859-402 200 (8 x 25) 3-way 859-403 200 (8 x 25) 4-way 859-404 200 (8 x 25) 5-way 859-405 200 (8 x 25) : : 10-way 859-410 100 (4 x 25)		Adjustable height group marker carriers, suitable for end stops 249-116 and 249-117 ① for 1 marker card ② 249-119 50 (2 x 25)	
 792-802 1 DC 24 V, SD24, for supply lines of informa- tion technology systems (power supply units)		Additional item no. for coloured push-in type jumper bars yellow .../000-029 blue .../000-006		for 2 WSB Quick markers each or 1 x continuous marking strip ② 249-118 100 (4 x 25)	
 792-803 1 DC 24 V, MDEX24, for information technology systems, blue		Test pin , 1 mm/0.039 in Ø, test wire for soldering onto test plug 859-500 1		Screwdriver , with partially insulated shaft (3.5 x 0.5) mm 210-620 1	
 792-804 1 DC 48 V, MD48LON, for IT networks and systems		Marking pen with fibre tip , for permanent marking 210-110 1			
 792-805 1 DC 5 V, MDHF5, for IT networks and systems		Miniature WSB Quick marking card , 10 strips at 10 markers, white with block printing		Marking plain 248-501 5 1 ... 10 (10x) 248-502 5 11 ... 20 (10x) 248-503 5 21 ... 30 (10x) 248-504 5 31 ... 40 (10x) 248-505 5 41 ... 50 (10x) 248-506 5 1 ... 50 (2x) 248-566 5 K 1 ... K 10 (10x) 248-450 5 K 11 ... K 20 (10x) 248-451 5 K 100 (10x) 248-452 5 U 1 ... U 10 (10x) 248-453 5 U 11 ... U 20 (10x) 248-454 5 U 100 (10x) 248-455 5	

Relay Socket with Small Switching Relay, Pluggable, Series 788

DIN-Rail-Mountable Modules - Switching Relays, Series 288

Relay socket with DC relay and status indication; 1 or 2 changeover contacts 0.34 – 2.5 mm ² AWG 22 – 14 Dimensions (W x H x L) 15 x 53 x 86 mm Relay height 15 mm 9 – 10 mm / 0.37 in	Relay socket with DC relay and status indication; 1 or 2 changeover contacts 0.34 – 2.5 mm ² AWG 22 – 14 Dimensions (W x H x L) 15 x 63 x 86 mm Relay height 25 mm 9 – 10 mm / 0.37 in	Relay direct soldered 0.08 – 2.5 mm ² AWG 28 – 14 5 – 6 mm / 0.22 in
---	---	---

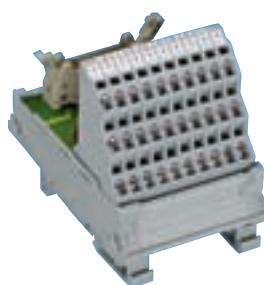
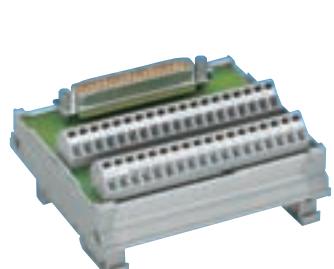


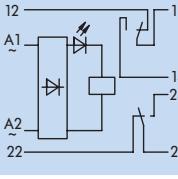
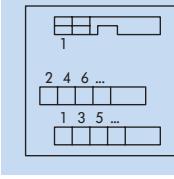
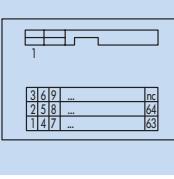
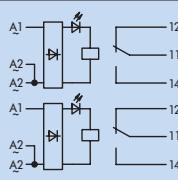
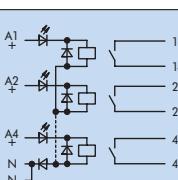
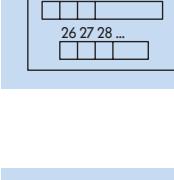
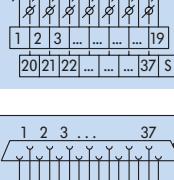
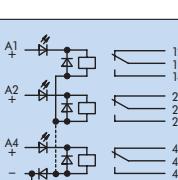
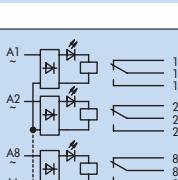
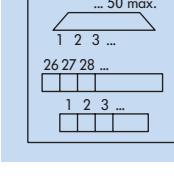
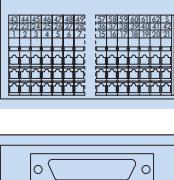
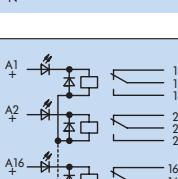
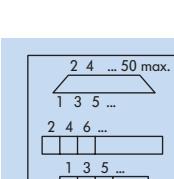
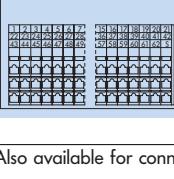
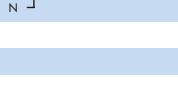
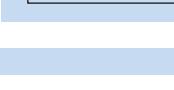
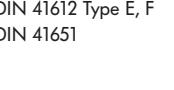
Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
1 changeover contact		1 changeover contact		1 make contact	
 788-303 DC 12 V 1 788-304 DC 24 V 1 788-305 DC 48 V 1 788-306 DC 60 V 1 788-307 DC 110 V 1		 788-324 1 DC 24 V 788-528 1 AC 230 V (no illustration)		 288-364 1 DC 24 V	
1 changeover contact		2 changeover contacts		1 make contact	
 788-506 AC 24 V 1 788-507 AC 115 V 1 788-508 AC 230 V 1		 788-334 1 DC 24 V 788-538 1 AC 230 V (no illustration)		 288-564 1 AC/DC 24 V 288-565 1 AC/DC 48 V 288-567 1 AC/DC 115 V	
2 changeover contacts		Accessories, Series 788	appropriate marking system WMB/WSB	1 break contact	
 788-311 DC 12 V 1 788-312 DC 24 V 1 788-313 DC 48 V 1 788-314 DC 60 V 1 788-315 DC 110 V 1		 Comb type jumper bar, 2-way 788-113 ① 859-402 ②		 288-368 1 DC 24 V	
2 changeover contacts		Status indication, with free-wheeling diode		1 break contact	
 788-512 DC 24 V 1 788-515 DC 115 V 1 788-516 DC 230 V 1		788-120 DC 24V 788-121 DC 48V 788-122 DC 110V 788-123 AC 24V 788-124 AC 115V 788-125 AC 230V		 288-568 1 AC/DC 24 V	
		WMB Multi marking system		1 changeover contact	
		10 strips with 10 markers, white with black marking		 288-304 1 DC 24 V	
		see also chapter 9			
		Screwdriver, with partially insulated shaft (3.5 x 0.5) mm			
		210-620 1			
Socket without relay for switching relay (15 mm high) 788-100 1 RT 15, 1 changeover contact		Socket without relay for switching relay (25 mm high) 788-101 1 RT 25, 1 changeover contact		1 changeover contact	
 788-102 1 RT 15, 2 changeover contacts		788-103 1 RT 25, 2 changeover contacts		 288-504 1 AC/DC 24 V 288-508 1 AC 230 V	

DIN-Rail-Mountable Modules, Series 287 and 288

Interface Modules, Series 289

Relay direct soldered/Relay in socket	Interface module CAGE CLAMP® terminal strips (series 236) mounting carrier for DIN rail 35	Interface module CAGE CLAMP® terminal strips (series 736 and 737) mounting carrier for DIN rail 35
0.08 – 2.5 mm²  5 – 6 mm / 0.22 in	AWG 28 – 14  5 – 6 mm / 0.22 in	AWG 28 – 12  5 – 6 mm / 0.22 in



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
 2 changeover contacts Relay direct soldered 288-512 1 AC/DC 24 V		 Interface module with header acc. to DIN 41 651		 Interface modules for ribbon cable connectors	
 2 Relays, with 1 change-over contact each Relay direct soldered 288-758 1 AC/DC 24 V		289-501 10 poles 1 289-502 14 poles 1 289-503 16 poles 1 289-504 20 poles 1 289-505 26 poles 1 289-506 34 poles 1 289-507 40 poles 1 289-508 50 poles 1 289-509 64 poles 1		289-611 10 poles 1 289-612 14 poles 1 289-613 16 poles 1 289-614 20 poles 1 289-615 26 poles 1 289-616 34 poles 1 289-617 40 poles 1 289-618 50 poles 1 289-619 64 poles 1	
 4 Relays, with 1 make contact each Relay direct soldered 287-474 1 DC 24 V		 Interface module with submin. D-male connector for mating connectors with solder connection		 Interface module with submin. D-male connector	
 4 Relays, with 1 change-over contact each Relay in socket 287-774 1 DC 24 V		289-545 9 poles 1 289-546 15 poles 1 289-547 25 poles 1 289-548 37 poles 1 289-549 50 poles 1		289-720 9 poles 1 289-721 15 poles 1 289-722 25 poles 1 289-723 37 poles 1	
 8 Relays, with 1 change-over contact each Relay in socket 287-834 1 AC/DC 24 V		 for mating connectors with IDC		 Interface module with submin. D-female conn.	
287-824 1 DC 24 V (no illustration)		289-540 9 poles 1 289-541 15 poles 1 289-542 25 poles 1 289-543 37 poles 1 289-544 50 poles 1		289-725 9 poles 1 289-726 15 poles 1 289-727 25 poles 1 289-728 37 poles 1	
 8 Relays, with 1 change-over contact each Relay in socket 287-853 1 DC 12 V		 for mating connectors with solder connection		 Interface module with HD submin. D-male connector	
287-854 1 DC 24 V (no illustration)		289-555 9 poles 1 289-556 15 poles 1 289-557 25 poles 1 289-558 37 poles 1 289-559 50 poles 1		289-597 44 poles 1 289-710 62 poles 1	
 8 Relays, with 1 change-over contact each Relay in socket 287-853 1 DC 12 V		 for mating connectors with IDC		 Interface module with HD submin. D-female conn.	
287-854 1 DC 24 V (no illustration)		289-550 9 poles 1 289-551 15 poles 1 289-552 25 poles 1 289-553 37 poles 1 289-554 50 poles 1		289-707 44 poles 1 289-708 62 poles 1	
				Also available for connectors acc. to: DIN 41612 Type E, F DIN 41651	

Pluggable Modules Series 286

Switching relay module

- ① Module width 10 mm / 0.394 in
- ② Module width 15 mm / 0.591 in

Switching relay module

- ② Module width 15 mm / 0.591 in
- ③ Module width 20 mm / 0.787 in
- ④ Module width 35 mm / 1.378 in

Optocoupler

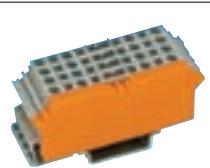
- ② Module width 15 mm / 0.591 in



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
① 1 make contact 286-364 1 DC 24 V / 5 A 286-365 1 DC 48 V / 5 A 286-366 1 DC 60 V / 5 A		① 1 changeover contact 286-502 1 AC/DC 5 V / 7 A 286-504 1 AC/DC 24 V / 7 A 286-508 1 AC/DC 230 V / 7 A		② Input DC 24 V negative switching 286-700 1 DC 5 V / 500 mA 286-701 1 DC 15 V / 500 mA 286-702 1 DC 24 V / 500 mA	
① 1 make contact 286-564 1 AC 24 V / 5 A 286-567 1 AC 230 V / 5 A		② 2 changeover contacts 286-310 1 DC 5 V / 7 A 286-312 1 DC 24 V / 7 A 286-316 1 DC 230 V / 7 A		② Input DC 24 V positive switching 286-750 1 DC 5 V / 500 mA 286-751 1 DC 15 V / 500 mA 286-752 1 DC 24 V / 500 mA	
① 1 break contact 286-368 1 DC 24 V / 5 A 286-369 1 DC 48 V / 5 A 286-370 1 DC 60 V / 5 A		② 2 changeover contacts 286-510 1 AC 5 V / 7 A 286-512 1 AC 24 V / 7 A 286-516 1 AC 230 V / 7 A		② Input AC 230 V negative switching 286-704 1 DC 5 V / 500 mA 286-706 1 DC 15 V / 500 mA 286-708 1 DC 24 V / 500 mA	
① 1 break contact 286-568 1 AC 24 V / 5 A		④ 4 changeover contacts 286-375 1 DC 24 V / 4 A		② Input AC 230 V positive switching 286-754 1 DC 5 V / 500 mA 286-756 1 DC 15 V / 500 mA 286-758 1 DC 24 V / 500 mA	
② 1 changeover contact 286-302 1 DC 5 V / 7 A 286-304 1 DC 24 V / 7 A 286-308 1 DC 230 V / 7 A		④ 4 changeover contacts 286-578 1 AC 110/120 V / 4 A 286-579 1 AC 230 V / 4 A		② Input DC 24 V negative switching 286-720 1 DC 24 V / 2 A 286-721 1 DC 24 V / 5 A	

Accessories, Series 286

appropriate marking system **WSB/WMB**



Terminal blocks for
pluggable modules
0.08–2.5 mm²/AWG 28–14

Stripped length
8–9 mm / 0.33 in

with 2-conductor terminal blocks, separator orange

12 mm wide ① **280-618** 1

17 mm wide ② **280-619** 1

22 mm wide ③ **280-638** 1

with 4-conductor terminal blocks, separator orange

12 mm wide ① **280-608** 1

17 mm wide ② **280-609** 1

22 mm wide ③ **280-628** 1

37 mm wide ④ **280-636** 1

Pluggable Modules Series 286

ELECTRONIC

5
15

Optocoupler	Temperature transducers Bridge rectifier	Surge suppression device Latching relay 1-pole changeover
② Module width 15 mm / 0.591 in ③ Module width 20 mm / 0.787 in	② Module width 15 mm / 0.591 in ③ Module width 20 mm / 0.787 in	② Module width 15 mm / 0.591 in ③ Module width 20 mm / 0.787 in



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
② Input DC 24 V positive switching 286-723 1 DC 24 V / 4 A		② Temperature transducer 2-wire 286-860 1 0 - 10 V 286-861 1 0 - 20 mA 286-862 1 4 - 20 mA		② AC current flow monitoring module AC 80 mA - 6 A 286-661 1	
② Output DC 110 V negative switching 286-726 1 DC 5 V 286-728 1 DC 12 V 286-730 1 DC 24 V		② Temperature transducer 3-wire 286-870 1 0 - 10 V 286-871 1 0 - 20 mA 286-872 1 4 - 20 mA		② Surge suppression single-stage suppression 286-836 1 AC/DC 24 V 286-835 1 AC 230 V	
② Output AC 230 V 286-732 1 DC 5 V 286-733 1 DC 12 V 286-734 1 DC 24 V		② Temperature transducer Thermocouple J: 0-750°C 286-863 1 0 - 10 V 286-865 1 0 - 20 mA 286-867 1 4 - 20 mA		② Surge suppression two-stage suppression 286-843 1 AC 110/120 V 286-841 1 DC 230 V 286-842 1 AC 230 V	
② 2 Inputs 2 x DC 24 V 286-792 1 2 x DC 24 V / 2 x 500 mA		② Temperature transducer Thermocouple K: 0-1000°C 286-864 1 0 - 10 V 286-866 1 0 - 20 mA 286-868 1 4 - 20 mA		② Latching relay 1 break and 1 make contact 286-571 1 DC 24 V (no illustration) 286-570 1 AC 230 V	
② Input DC 24 V 2 inverted outputs 286-790 1 2 x DC 24 V / 500 mA		② Bridge rectifier with varistor protection 286-830 1 AC 24 V / 1 A 286-840 1 AC 250 V / 1 A		② Switching module changeover rocker switch 286-895 1 momentary switch 286-896 1	

Accessories, Series 286

appropriate marking system **WSB/WMB**

Dimensions

	Terminal blocks for pluggable modules 0.08 - 2.5 mm²/AWG 28 - 14 Stripped length 8 - 9 mm / 0.33 in	with 4-conductor terminal blocks, marker plate 280-762 1 280-763 1 280-764 1	 X = 2-cond. 50 mm / 1.97 in 4-cond. 73 mm / 2.87 in	Entire height from upper edge of the carrier rail 32.5 mm / 1.28 in
--	---	--	--	--

Primary Switch Mode Power Supply Units Series 787

Output voltage DC 12 V	Output voltage DC 24 V	Output voltage DC 24 V
0.08 – 2.5 mm² / AWG 28 – 14 8 – 9 mm / 0.33 in	0.08 – 2.5 mm² / AWG 28 – 14 8 – 9 mm / 0.33 in	0.08 – 2.5 mm² / AWG 28 – 14 8 – 9 mm / 0.33 in



Output current	Item No.	Pack.-unit pcs	Output current	Item No.	Pack.-unit pcs	Output current	Item No.	Pack.-unit pcs
Primary switch mode power supply units, open circuit and short circuit protected, adjustable output voltage, LED status indication, suitable for DIN 35 rail	Primary switch mode power supply units, open circuit and short circuit protected, adjustable output voltage, LED status indication, suitable for DIN 35 rail		Primary switch mode power supply units, open circuit and short circuit protected, adjustable output voltage, LED status indication, suitable for DIN 35 rail					
Input voltage range AC 90V ... 264V			Input voltage range AC 90V ... 264V			Input voltage range AC 90V ... 264V		
Rated voltage AC 230 V			Rated voltage AC 230 V			Rated voltage AC 230 V		
DC 2 A 787-601 1	DC 1.3 A 787-602 1	Dimensions (mm) W x H x D: 40 x 95 x 90	DC 5 A 787-622 1	Dimensions (mm) W x H x D: 74 x 110 x 140				
			DC 2.5 A 787-612 1	Dimension (mm) W x H x D: 56 x 110 x 140				

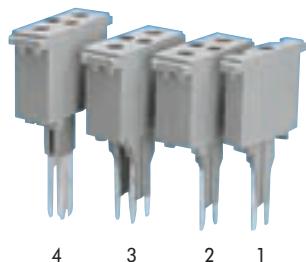


Additional products	Output current	Item No.	Pack.-unit pcs	Output current	Item No.	Pack.-unit pcs
Fused disconnect terminal block, 8 mm/0.315 in wide 0.08 – 4 mm ² /AWG 28 – 12 8 – 9 mm / 0.33 in see page 1.23	Primary switch mode power supply units, open circuit and short circuit protected, adjustable output voltage, LED status indication, suitable for DIN 35 rail			Primary switch mode power supply units, open circuit and short circuit protected, adjustable output voltage, LED status indication, suitable for DIN 35 rail		
Ground (earth) conductor disconnect term. block, 8 mm/0.315 in wide 0.2 – 6 mm ² /AWG 24 – 10 12–13 mm / 0.49 in see page 1.24	Input voltage range AC 85V ... 132V /176V ... 264V Rated voltage AC 230 V			Input voltage range AC 325V ... 550V Rated voltage AC 3 x 400 V		
Accessories, Series 787	DC 10 A 787-632 1	Dimensions (mm) W x H x D: 116 x 128 x 108	DC 10 A 787-640 1	Dimensions (mm) W x H x D: 115 x 128 x 100		
Screwdriver, with partially insulated shaft (3.5 x 0.5) mm 210-620 1			DC 20 A 787-642 1	Dimensions (mm) W x H x D: 220 x 128 x 95		
			DC 40 A 787-644 1	Dimensions (mm) W x H x D: 253 x 120 x 110		

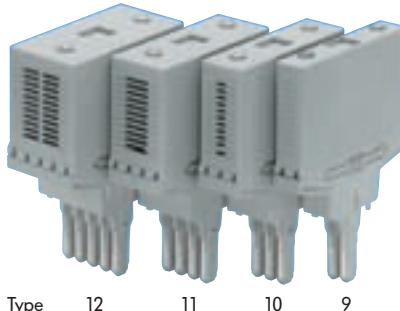
Empty Component Plug Housings for Building Custom Circuits

Series 280 and 286

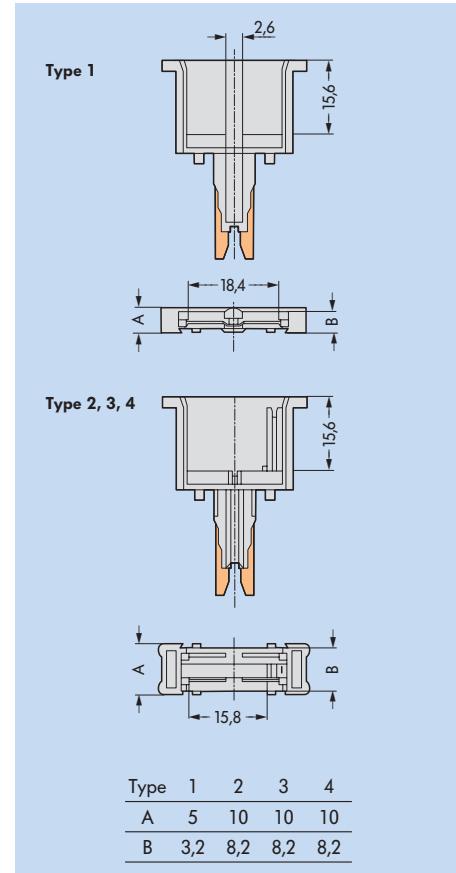
Plug width 5 mm / 0.197 in 10 mm / 0.394 in	Plug width 10 mm / 0.394 in 15 mm / 0.591 in 20 mm / 0.787 in 25 mm / 0.984 in	Dimensions
250 V/4 kV/3 6 A max.	250 V/4 kV/3 6 A max.	



Type 4 3 2 1



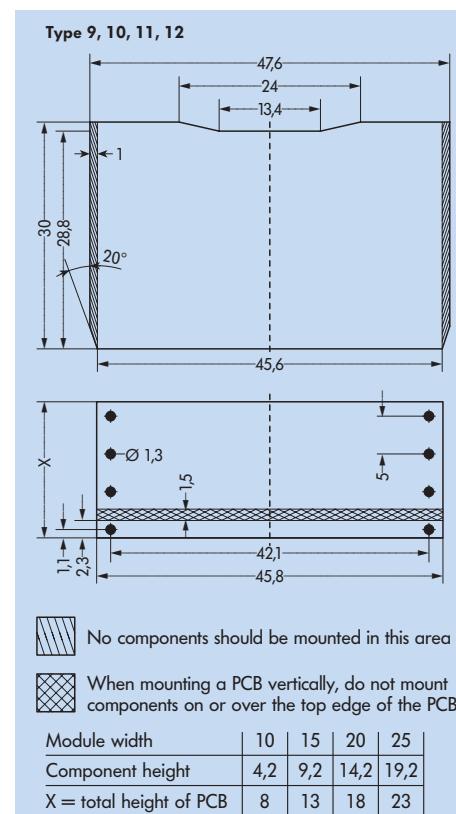
Type 12 11 10 9



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Empty component plug housing		Empty component plug housing	
type 1 280-801	100	type 9 286-110	1
2-pole, 5 mm / 0.197 in wide, inside dimensions		4-pole, 10 mm / 0.394 in wide	
W x H x D: 3.2 x 15 x 15 mm / 0.126 x 0.591 x 0.591 in			
type 2 280-802	50	type 10 286-111	1
2-pole, 10 mm / 0.394 in wide, inside dimensions		6-pole, 15 mm / 0.591 in wide	
W x H x D: 8.2 x 15 x 15 mm / 0.323 x 0.591 x 0.591 in			
type 3 280-804	50	type 11 286-112	1
4-pole, 10 mm / 0.394 in wide, inside dimensions		8-pole, 20 mm / 0.787 in wide	
W x H x D: 8.2 x 15 x 15 mm / 0.323 x 0.591 x 0.591 in			
Empty component plugs for through term. blocks		type 12 286-113	1
type 4 280-803	50	10-pole, 25 mm / 0.984 in wide	
2-pole, 10 mm / 0.394 in wide, inside dimensions		PCB dimensions and	
W x H x D: 8.2 x 15 x 15 mm / 0.323 x 0.591 x 0.591 in		component height see drawing and table	

Accessories, Series 280 and 286

2-conductor terminal block, 5 mm/0.197 in wide	Terminal block for pluggable modules, 2-conductor
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-916 100	terminal block, polarised, with orange separator 0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in
3-conductor terminal block, 5 mm/0.197 in wide	
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-610 100	4-pole, 12 mm wide 280-618 1 6-pole, 17 mm wide 280-619 1 8-pole, 22 mm wide 280-638 1 10-pole, 27 mm wide 280-639 1
4-conductor terminal block, 5 mm/0.197 in wide	Terminal block for pluggable modules, 4-conductor
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-686 100	terminal block, polarised, with orange separator 0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in
2-cond. through term. block, 5 mm/0.197 in wide	
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-901 100	4-pole, 12 mm wide 280-608 1 6-pole, 17 mm wide 280-609 1 8-pole, 22 mm wide 280-628 1 10-pole, 27 mm wide 280-629 1
3-cond. through term. block, 5 mm/0.197 in wide	
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-681 100	blocks for pluggable modules, with orange separator, 0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in
4-cond. through term. block, 5 mm/0.197 in wide	
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-833 100	4 poles, 11,1 mm 769-192/769-319 10 6 poles, 16,1 mm 769-193/769-319 5 8 poles, 21,1 mm 769-194/769-319 5 10 poles, 26,1 mm 769-195/769-319 5
2-cond. term. block, front-entry, 5 mm/0.197 in wide	Pliers for removing electronic housing cover
0.08 – 2.5 mm ² /AWG 28 – 14 8 – 9 mm / 0.33 in grey 280-101 100	210-492 1

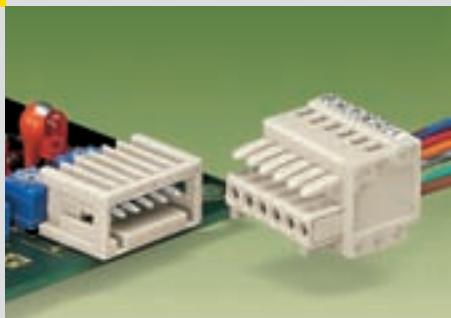


MULTI CONNECTION SYSTEM MICRO

Description and Handling

0

Protection against mismatching



Headers, male and female connectors –
100 % protected against mismatching

CAGE CLAMP® connection

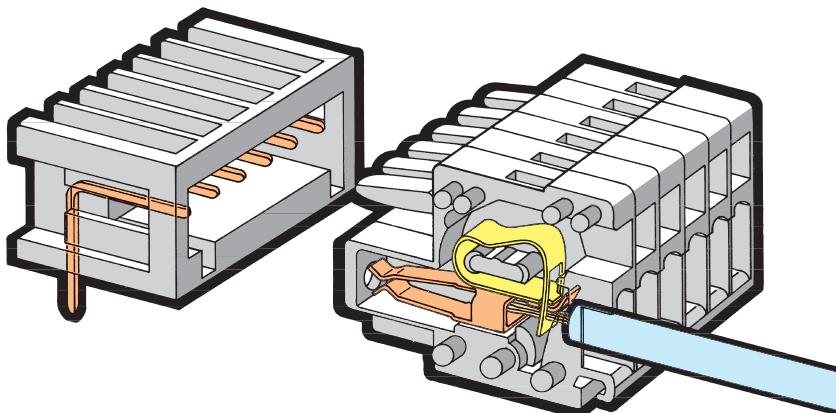


Connection of conductors – side-entry wiring
– with screwdriver (2.5 x 0.4) mm



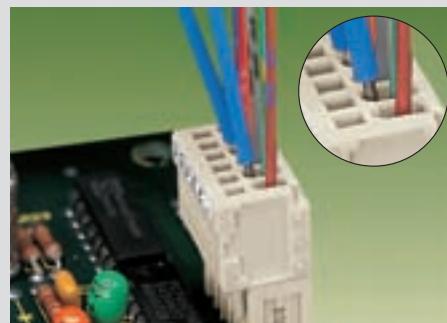
Connection of conductors – front-entry wiring
Series 733 – with operating tool 233-332

100 % protected against mismatching



MICRO Pin spacing 2.5 mm/0.098 in, series 733

Testing



Testing with test probe 1 mm/0.039 in Ø
Item No. 735-500

Marking



Marking with self-adhesive marker strips
(customised printing on request)

Coding

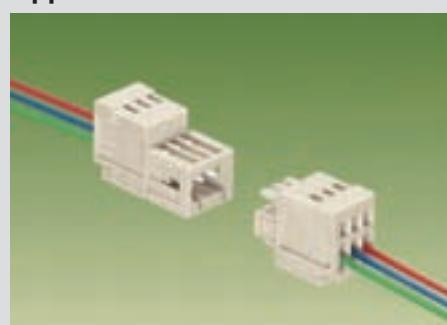


Coding of a header –
fitting of coding key(s)

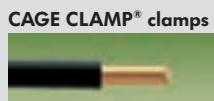


Coding of a female connector –
removal of coding finger(s)

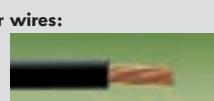
Application



Example:
flying lead



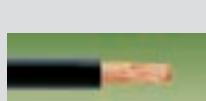
solid



stranded



fine-stranded



tip bonded

CAGE CLAMP® clamps the following copper wires:

MULTI CONNECTION SYSTEM MICRO – 100 % Protected against Mismating, Headers with Solder Pins; Male and Female Connectors with CAGE CLAMP®, Pin Spacing 2,5 mm/0.098 in

Pin spacing 2.5 mm/0.098 in, light grey 250 V/2.5 kV/2 4 A	Pin spacing 2.5 mm/0.098 in, light grey 0.08 – 0.5 mm² 250 V/2.5 kV/2 4 A	Pin spacing 2.5 mm/0.098 in, light grey 0.08 – 0.5 mm² 250 V/2.5 kV/2 4 A
150 V, 4 A	AWG 28 – 20 150 V, 4 A	AWG 28 – 20 150 V, 4 A

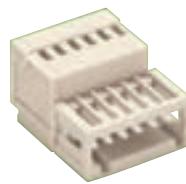
* CCA GL BV LR ABS

5 – 6 mm / 0.22 in

* CCA GL BV LR ABS

5 – 6 mm / 0.22 in

* CCA GL BV LR ABS

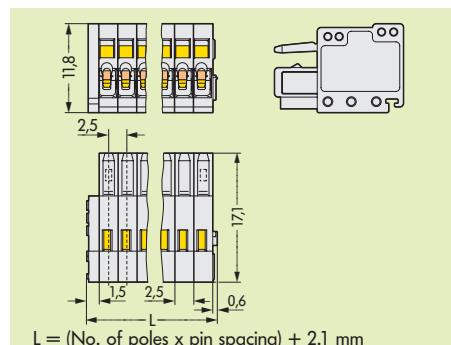
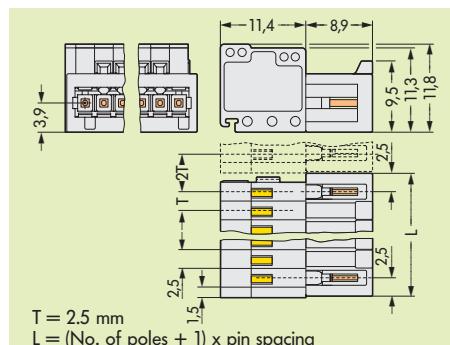
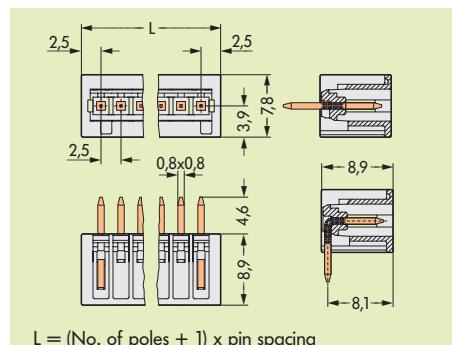


No. of poles	Item No.	Item-No.	No. of poles	Item No.	Item-No.	No. of poles	Item No.
Headers with solder pins, 100 % protected against mismating, light grey			Male connectors with CAGE CLAMP*, 100 % protected against mismating, light grey			Female connectors with CAGE CLAMP*, 100 % protected against mismating, with coding fingers, light grey	
solder pin 0.8 mm x 0.8 mm							
straight	733-362	733-362	2	733-202	733-202	2	733-102
right angled			3	733-203	733-203	3	733-103
	733-363	733-363	4	733-204	733-204	4	733-104
	733-364	733-364	5	733-205	733-205	5	733-105
	733-365	733-365	6	733-206	733-206	6	733-106
	733-366	733-366	7	733-207	733-207	7	733-107
	733-367	733-367	8	733-208	733-208	8	733-108
	733-368	733-368	10	733-210	733-210	10	733-110
	733-340	733-370	12	733-212	733-212	12	733-112

Accessories, Series 733

Coding key, snap-on type, light grey 733-330	Operating tool, partially insulated 233-335 of insulating material 233-332	Operating tool, partially insulated 233-335 of insulating material 233-332
	Coding key, snap-on type, light grey 733-330	Screwdriver, with partially insulated shaft (2.5 x 0.4) mm 210-619
Note: These connectors can only be mated and unmated at voltages below 42 V and in the "No load" condition. For mating and unmating at low power values, please request data.	Marker card, computer marked 100 self-adhesive strips per card, marking 1 – 16 (400x) 210-331/0250-0202	Marker card, computer marked 100 self-adhesive strips per card, marking 1 – 16 (400x) 210-331/0250-0202
	Strain relief plate, assembled additional item no. width 6 mm 12.5 mm .../032-000 .../033-000	Strain relief plate, assembled additional item no. width 6 mm 12.5 mm .../032-000 .../033-000

Dimensions (in mm) Diameter of drilled hole: 1.1^{+0.1} mm



6 MULTI CONNECTION SYSTEM MINI

Description and Handling

2 CAGE CLAMP® connection



Connection of conductors – side-entry wiring
– with screwdriver (2.5 x 0.4) mm

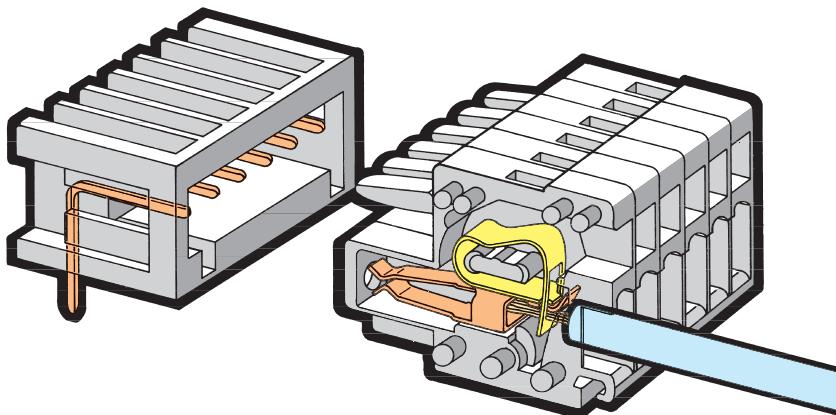


Connection of conductors – front-entry wiring
series 734 – with screwdriver (2.5 x 0.4) mm



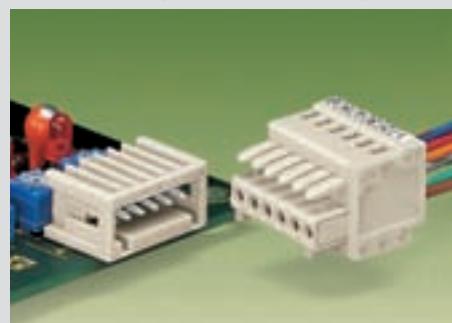
Connection of conductors – side-entry wiring
with snap-on lever

100 % protected against mismatching



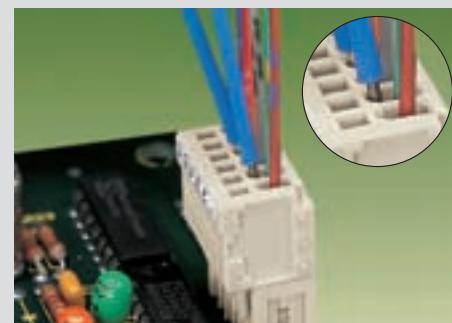
MINI Pin spacing 3.5 mm, series 734
3.81 mm, series 734

Protection against mismatching



Headers, male and female connectors –
100 % protected against mismatching

Testing

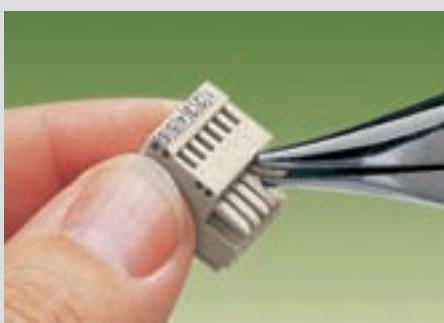


Testing with test probe 1 mm/0.039 in Ø
Item No. 735-500

Coding



Coding of a header –
fitting of coding key(s)



Coding of a female connector –
removal of coding finger(s)

Marking



Marking with self-adhesive marker strips
(customised printing on request)

CAGE CLAMP® clamps the following copper wires:



solid



stranded



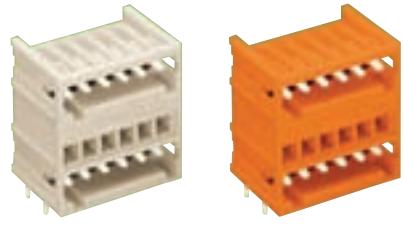
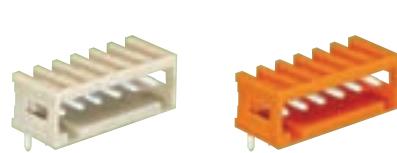
fine-stranded



tip bonded

MULTI CONNECTION SYSTEM MINI – 100 % Protected against Mismating, Headers with Solder Pins; Double Deck Headers with Solder Pins, Pin Spacings 3.5 mm/0.138 in and 3.81 mm/0.15 in

Pin spacing 3.5 mm/0.138 in, light grey Pin spacing 3.81 mm/0.15 in, orange 250 V/2.5 kV/2 300 V, 10 A  10 A 300 V, 10 A 	Pin spacing 3.5 mm/0.138 in, light grey Pin spacing 3.81 mm/0.15 in, orange 250 V/2.5 kV/2 300 V, 10 A  10 A 300 V, 10 A 	Pin spacing 3.5 mm/0.138 in, light grey Pin spacing 3.81 mm/0.15 in, orange 250 V/2.5 kV/2 300 V, 10 A  10 A 300 V, 10 A 
*  CCA  P  GL BV LR  ABS	*  CCA  P  GL BV LR  ABS	*  CCA ABS

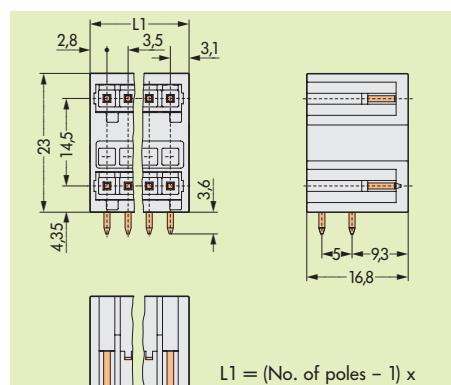
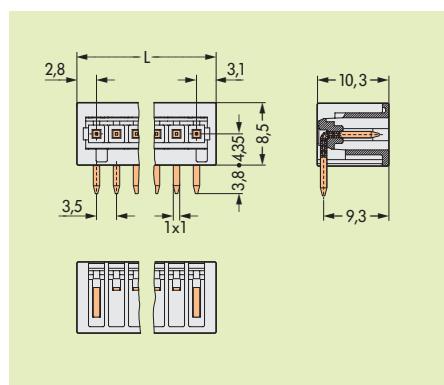
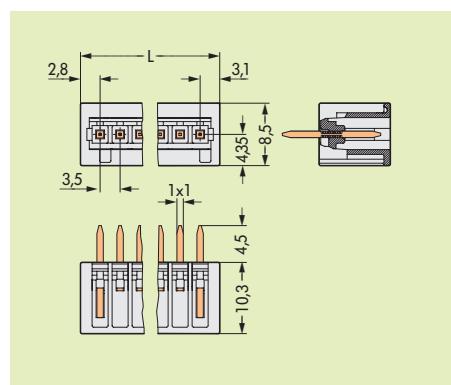


No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.
Headers with solder pins,			Headers with solder pins,					
100 % protected against mismating, straight solder pin, 1 mm x 1 mm			100 % protected against mismating, right angle solder pin, 1 mm x 1 mm					
pin spacing 3.5 mm light grey	3.81 mm orange		pin spacing 3.5 mm light grey	3.81 mm orange		pin spacing 3.5 mm light grey	3.81 mm orange	
2 734-132	734-232		2 734-162	734-262		2 734-402	734-432	
:	:	:	:	:	:	3 734-403	734-433	
6 734-136	734-236		6 734-166	734-266		4 734-404	734-434	
7 734-137	–		7 734-167	–		5 734-405	734-435	
8 734-138	734-238		8 734-168	734-268		6 734-406	734-436	
9 734-139	734-239		9 734-169	734-269		7 734-407	–	
10 734-140	734-240		10 734-170	734-270		8 734-408	734-438	
12 734-142	734-242		12 734-172	734-272		9 734-409	734-439	
13 734-143	–		13 734-173	–		10 734-410	734-440	
14 –	734-244		14 –	734-274		12 734-412	734-442	
16 734-146	734-246		16 734-176	734-276				
18 734-148	–		18 734-178	–				
20 734-150	734-250		20 734-180	734-280				
24 734-154	–		24 734-184	–				

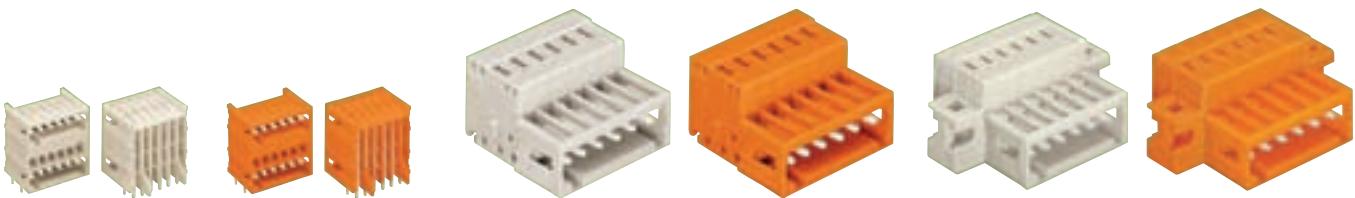
Accessories, Series 734

Coding key, snap-on type,  light grey 734-130	Coding key, snap-on type,  light grey 734-130	Coding key, to be snapped above top level,  light grey 734-130
Note: These connectors can only be mated and unmated at voltages below 42 V and in the "No load" condition. For mating and unmating at low power values, please request data.		Coding key, to be snapped above bottom level,  light grey 734-400

Dimensions (in mm) **Diameter of drilled hole: 1.4^{+0.1} mm**



Pin spacing 3.5 mm/0.138 in, light grey	Pin spacing 3.5 mm/0.138 in, light grey	Pin spacing 3.5 mm/0.138 in, light grey
Pin spacing 3.81 mm/0.15 in, orange	Pin spacing 3.81 mm/0.15 in, orange	Pin spacing 3.81 mm/0.15 in, orange
250 V/2.5 kV/2	0.08 – 1.5 mm ²	0.08 – 1.5 mm ²
10 A	AWG 28 – 14 **	AWG 28 – 14 **
300 V, 10 A 	250 V/2.5 kV/2	250 V/2.5 kV/2
300 V, 10 A 	10 A	10 A
 *  CCA   GL BV LR  ABS	 *  CCA   GL BV LR  ABS	 *  CCA   GL BV LR  ABS



No. of poles	Item No.	No. of poles	Item No.	No. of poles	Item No.	No. of poles	Item No.	No. of poles	Item No.
Double deck headers with support, 100 % protected against mismating, right angle solder pin, 1 mm x 1 mm				Male connectors with CAGE CLAMP®, 100 % protected against mismating,				Male connectors with CAGE CLAMP® and fixing flanges, 100 % protected against mismating	
pin spacing 3.5 mm	3.81 mm	light grey	orange	pin spacing 3.5 mm	3.81 mm	light grey	orange	pin spacing 3.5 mm	3.81 mm
2 734-402/001-000	2 734-432/001-000	2 734-302		2 734-332		2 734-302/019-000	2 734-332/019-000		
3 734-403/001-000	3 734-433/001-000	3 734-303		3 734-333		3 734-303/019-000	3 734-333/019-000		
4 734-404/001-000	4 734-434/001-000	:	:	:	:	:	:	:	:
5 734-405/001-000	5 734-435/001-000	9 734-309		6 734-336		9 734-309/019-000	6 734-336/019-000		
6 734-406/001-000	6 734-436/001-000	10 734-310		8 734-336		10 734-310/019-000	8 734-338/019-000		
7 734-407/001-000	–	12 734-312		9 734-339		12 734-312/019-000	9 734-339/019-000		
8 734-408/001-000	8 734-438/001-000	13 734-313		10 734-340		13 734-313/019-000	10 734-340/019-000		
9 734-409/001-000	9 734-439/001-000	16 734-316		12 734-342		16 734-316/019-000	12 734-342/019-000		
10 734-410/001-000	10 734-440/001-000	18 734-318		14 734-344		18 734-318/019-000	14 734-344/019-000		
12 734-412/001-000	12 734-442/001-000	20 734-320		16 734-346		20 734-320/019-000	16 734-346/019-000		
		24 734-324		20 734-350		24 734-324/019-000	20 734-350/019-000		

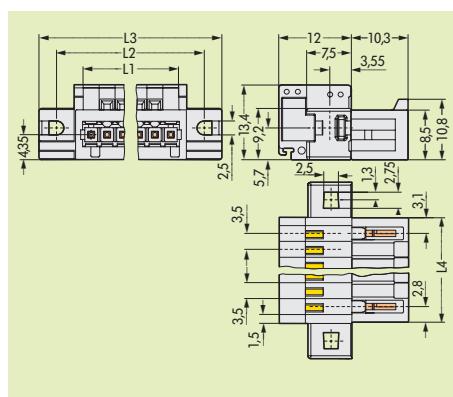
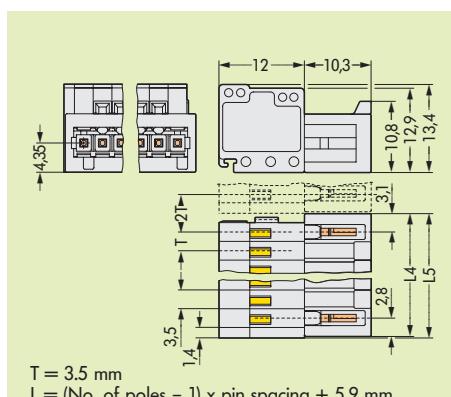
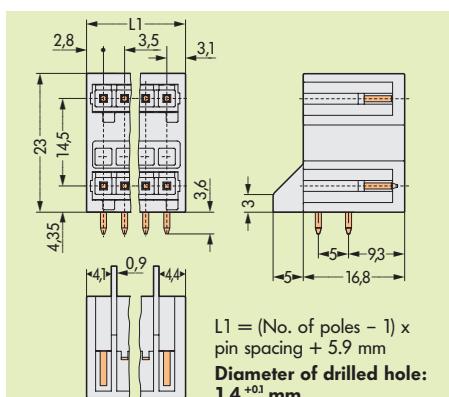
Special accessories

	Coding key , to be snapped above button level, light grey 734-400		Operating lever , for male connectors with CAGE CLAMP® 734-230		Screw with nut , M 2 x 12, for fixing elements 231-195
---	--	---	--	---	--

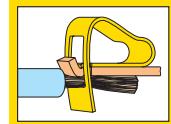
General accessories

	Coding key , to be snapped above top level, light grey 734-130	 Screwdriver , with partially insulated shaft (2.5 x 0.4) mm 210-619 1	 Marker card , computer marked, 80 self-adhesive strips per card, direct printing on request
Note: These connectors can only be mated and unmated at voltages below 42 V and in the "No load" condition. For mating and unmating at low power values, please request data.	 Test pin , 1 mm / 0.039 in Ø, 735-500 1 Test wire for sold. onto test plug	 Strain relief plates , see page 6.17	 Marking 1 - 16 (240x) Spac. 3.5 mm 210-332/0350-0202 17 - 32 (240x) Spac. 3.5 mm 210-332/0350-0204 1 - 16 (160x) Spac. 3.81 mm 210-332/0381-0202 17 - 32 (160x) Spac. 3.81 mm 210-332/0381-0204

$$\text{Dimensions (in mm)} \quad L_1 = \text{No. of poles} \times \text{pin spacing} \quad L_2 = L_1 + 8.8 \text{ mm} \quad L_3 = L_1 + 14.8 \text{ mm} \quad L_4 = (\text{No. of poles} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$$



MULTI CONNECTION SYSTEM MINI – 100 % Protected against Mismating, Female Connectors and Combi Strip with CAGE CLAMP®, Pin Spacings 3.5 mm/0.138 in and 3.81 mm/0.15 in



6

5

Pin spacing 3.5 mm/0.138 in, light grey	Pin spacing 3.5 mm/0.138 in, light grey	Pin spacing 3.5 mm/0.138 in, light grey
Pin spacing 3.81 mm/0.15 in, orange	Pin spacing 3.81 mm/0.15 in, orange	Pin spacing 3.81 mm/0.15 in, orange
0.08 – 1.5 mm²	0.08 – 1.5 mm²	0.08 – 1.5 mm²
AWG 28 – 14 **	AWG 28 – 14 **	AWG 28 – 14 **
250 V/2.5 kV/2	250 V/2.5 kV/2	250 V/2.5 kV/2
10 A	10 A	10 A
300 V, 10 A 	300 V, 10 A 	300 V, 10 A
300 V, 10 A 	300 V, 10 A 	300 V, 10 A
* 7 mm / 0.28 in	* 7 mm / 0.28 in	* 7 mm / 0.28 in
CCA ⊕ P ⊖ GL BV LR ⊕ ABS	CCA ⊕ P ⊖ GL BV LR ⊕ ABS	CCA ⊕ P ⊖ GL BV LR ⊕ ABS



No. of poles	Item No.	No. of poles	Item No.	No. of poles	Item No.	No. of poles	Item No.
Female connectors with CAGE CLAMP®,		Female connectors with CAGE CLAMP® and locking levers, 100 % protected against mismating, with coding fingers					
100 % protected against mismating, with coding fingers							
pin spacing 3.5 mm light grey	3.81 mm orange	pin spacing 3.5 mm light grey	3.81 mm orange				pin spacing 3.5 mm light grey
2 734-102	2 734-202	2 734-102/037-000	2 734-202/037-000	2 734-102/037-000	2 734-202/037-000	2 734-362	
3 734-103	3 734-203	3 734-103/037-000	3 734-203/037-000	3 734-103/037-000	3 734-203/037-000	3 734-363	
:	:	:	:	:	:	4 734-364	
9 734-109	6 734-206	9 734-109/037-000	6 734-206/037-000	6 734-206/037-000	6 734-206/037-000	5 734-365	
10 734-110	8 734-208	10 734-110/037-000	8 734-208/037-000	8 734-208/037-000	8 734-208/037-000	6 734-366	
12 734-112	9 734-209	12 734-112/037-000	9 734-209/037-000	9 734-209/037-000	9 734-209/037-000	7 734-367	
13 734-113	10 734-210	13 734-113/037-000	10 734-210/037-000	10 734-210/037-000	10 734-210/037-000	8 734-368	
16 734-116	12 734-212	16 734-116/037-000	12 734-212/037-000	12 734-212/037-000	12 734-212/037-000	9 734-369	
18 734-118	14 734-214	18 734-118/037-000	14 734-214/037-000	14 734-214/037-000	14 734-214/037-000	10 734-370	
20 734-120	16 734-216	20 734-120/037-000	16 734-216/037-000	16 734-216/037-000	16 734-216/037-000	12 734-372	
24 734-124	20 734-220	24 734-124/037-000	20 734-220/037-000	20 734-220/037-000	20 734-220/037-000		

Special accessories

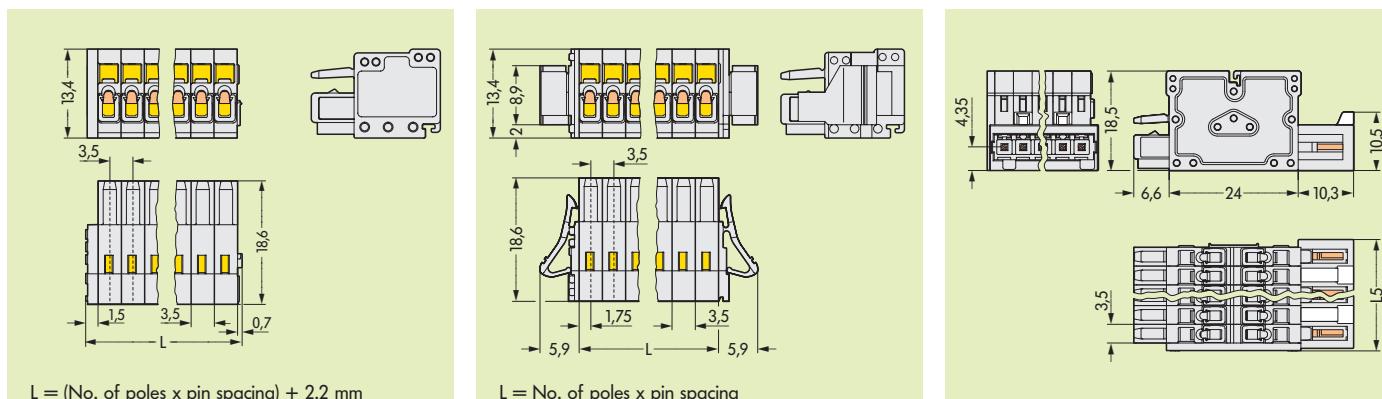
		Operating lever , for male connectors with CAGE CLAMP® 734-230		Coding key , to be snapped above top level, light grey 734-130
--	--	--	--	--

General accessories

	Screwdriver , with partially insulated shaft (2.5 x 0.4) mm 210-619 1		Marker card , computer marked, 80 self-adhesive strips per card, direct printing on request
	Test pin , 1 mm/0.039 in Ø 735-500 1		Marking 1 – 16 (240x) Spac. 3.5 mm 210-332/0350-0202
	Test wire for sold. onto test plug Strain relief plates, see page 6.17		17 – 32 (240x) Spac. 3.5 mm 210-332/0350-0204 1 – 16 (160x) Spac. 3.81 mm 210-332/0381-0202 17 – 32 (160x) Spac. 3.81 mm 210-332/0381-0204

Dimensions (in mm)

$$L_s = L_4 + 0.45 \text{ mm}$$



Please find the entire product range in our General Catalogue W4, Volume 2. More information at www.wago.com.

WAGO®

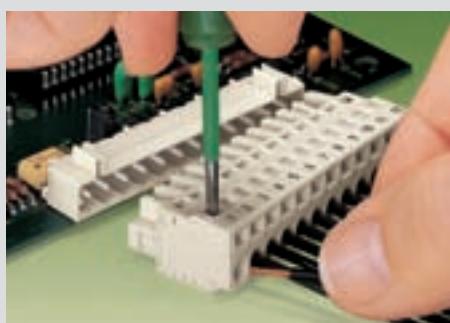
MULTI CONNECTION SYSTEM MIDI – 100 % Protected against Mismating

Description and Handling

CAGE CLAMP® connection



Connection of conductors – front-entry



Connection of conductors – side-entry



Connection of conductors – side-entry wiring with snap-on lever. Item No. 231-131

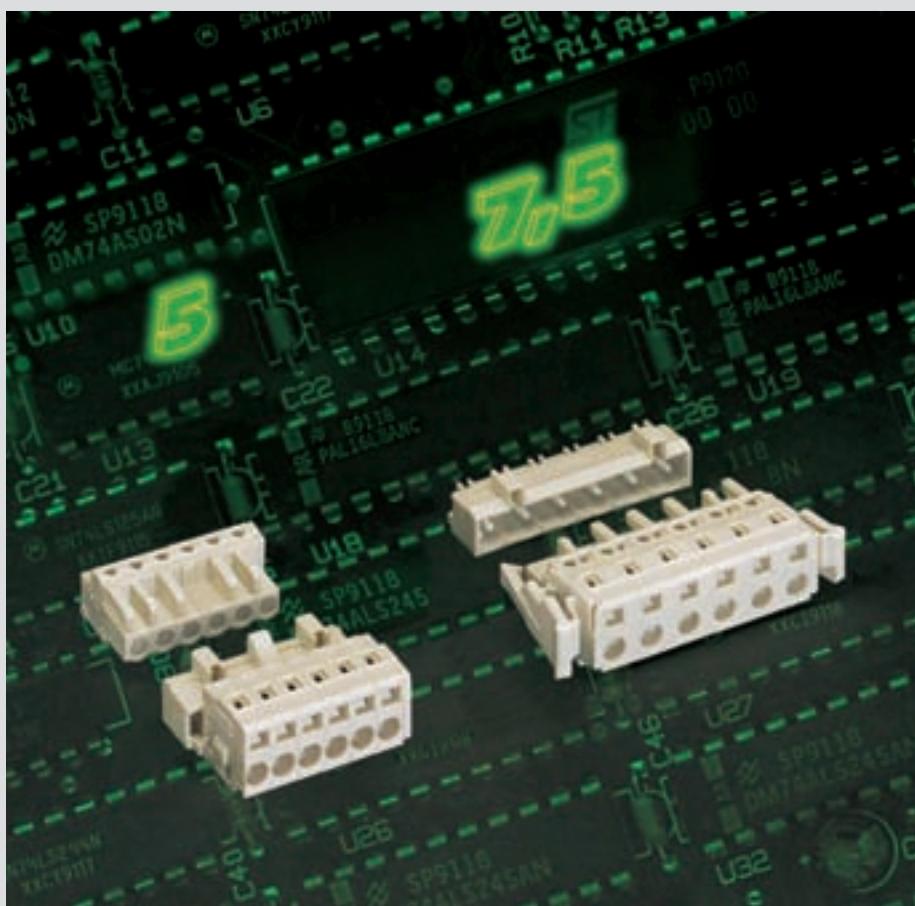
Insulation stop



Pin spacing 10 mm/0.394 in



Pin spacing 10 mm/0.395 in on request



Coding

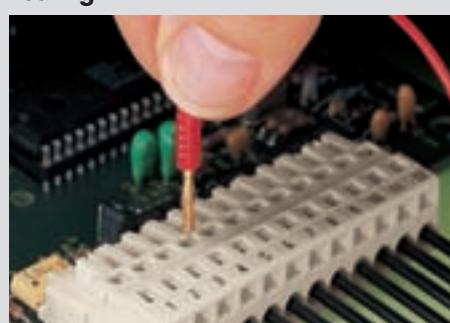


Coding of a header – fitting of coding key(s)



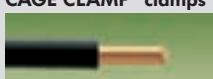
Coding of a female connector – removal of coding finger(s)

Testing



Testing with test plug 2 mm Ø oder 2.3 mm Ø

CAGE CLAMP® clamps the following copper wires:



solid



stranded



fine-stranded



tip bonded



with crimped ferrule



with crimped pin terminal

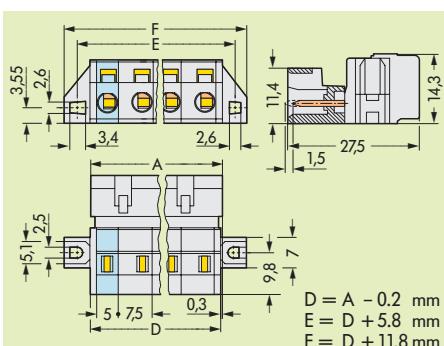
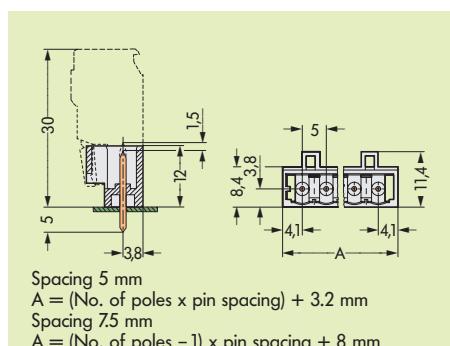
MULTI CONNECTION SYSTEM MIDI – 100 % Protected against Mismating, Headers with Solder Pins; Male Connectors with CAGE CLAMP®, Pin Spacings 5 mm/0.197 in and 7.5 mm/0.295 in

Pin spacing 5 mm/0.197 in, light grey 250 V/4 kV/3 300 V, 10 A 12 A 300 V, 15 A	Pin spacing 5 mm/0.197 in, light grey 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A 12 A 300 V, 15 A	Accessories
Pin spacing 7.5 mm/0.295 in, light grey 400 V/6 kV/3 300 V, 10 A 12 A 300 V, 15 A	Pin spacing 7.5 mm/0.295 in, light grey 400 V/6 kV/3 300 V, 15 A 12 A 300 V, 15 A	

*



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 721 and 723	Item No.
Closed end headers,		Male connectors with CAGE CLAMP®,					
100 % protected against mismatching, light grey		100 % protected against mismatching, light grey					
solder pin 1 mm x 1 mm							
Pin spacing 5 mm/0.197 in		Pin spacing 5 mm/0.197 in					
straight	angled						
2	721-132/001-000	721-432/001-000	2	721-602	721-602/019-000	Marker strips, self-adhesive	
3	721-133/001-000	721-433/001-000	3	721-603	721-603/019-000	Spacing 5 mm/0.197 in	
4	721-134/001-000	721-434/001-000	4	721-604	721-604/019-000	1-12 (300x) 210-331/0500-0103	
5	721-135/001-000	721-435/001-000	5	721-605	721-605/019-000	13-24 (300x) 210-331/0500-0104	
6	721-136/001-000	721-436/001-000	6	721-606	721-606/019-000	Spacing 7.5 mm/0.295 in	
7	721-137/001-000	721-437/001-000	7	721-607	721-607/019-000	1-16 (100x) 210-331/0750-0202	
8	721-138/001-000	721-438/001-000	8	721-608	721-608/019-000	Coding key, snap-on type,	
9	721-139/001-000	721-439/001-000	9	721-609	721-609/019-000	Spacing 5 mm/0.197 in	
10	721-140/001-000	721-440/001-000	10	721-610	721-610/019-000	light grey 231-129	
12	721-142/001-000	721-442/001-000	12	721-612	721-612/019-000	Spacing 7.5 mm/0.295 in	
14	721-144/001-000	721-444/001-000	14	721-614	721-614/019-000	light grey 231-130	
16	721-146/001-000	721-446/001-000	16	721-616	721-616/019-000	Insulation stop, 5 pcs/strip	
20	721-150/001-000	721-450/001-000	20	721-620	721-620/019-000	Spacing 5 mm/0.197 in	
Pin spacing 7.5 mm/0.295 in		Pin spacing 7.5 mm/0.295 in					
straight	angled						
2	721-232/001-000	721-832/001-000	2	723-602	723-602/019-000	0.08 - 0.2 mm² ①	
3	721-233/001-000	721-833/001-000	3	723-603	723-603/019-000	white 231-670	
4	721-234/001-000	721-834/001-000	4	723-604	723-604/019-000	0.25 - 0.5 mm ²	
5	721-235/001-000	721-835/001-000	5	723-605	723-605/019-000	light grey 231-671	
6	721-236/001-000	721-836/001-000	6	723-606	723-606/019-000	0.75 - 1 mm ²	
7	721-237/001-000	721-837/001-000	7	723-607	723-607/019-000	dark grey 231-672	
8	721-238/001-000	721-838/001-000	8	723-608	723-608/019-000	Spacing 7.5 mm/0.295 in	
9	721-239/001-000	721-839/001-000	9	723-609	723-609/019-000	0.08 - 0.2 mm ² ①	
10	721-240/001-000	721-840/001-000	10	723-610	723-610/019-000	white 231-673	
11	721-241/001-000	721-841/001-000	11	723-611	723-611/019-000	0.25 - 0.5 mm ²	
12	721-242/001-000	721-842/001-000	12	723-612	723-612/019-000	light grey 231-674	
Dimensions (in mm)		Diameter of drilled hole: 1.4^{+0.1} mm (solder pin 1 mm x 1 mm)					



* You can find approvals on the Internet at www.wago.com.
Technical explanations and abbreviations see page 10.2.

** AWG 12: THHN, THWN

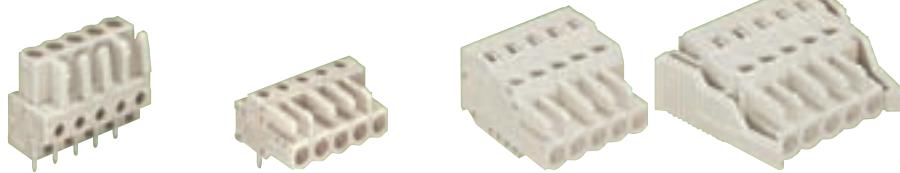
WAGO®

MULTI CONNECTION SYSTEM MIDI – 100 % Protected against Mismating, Female Connectors with Solder Pins, Pin Spacings 5 mm/0.197 in and 7.5 mm/0.295 in

Pin spacing 5 mm/0.197 in, light grey	Pin spacing 5 mm/0.197 in, light grey
250 V/4 kV/3 300 V, 10 A	0.08 – 2.5 mm ² AWG 28 – 12 **
12 A 300 V, 15 A	250 V/4 kV/3 300 V, 15 A
Pin spacing 7.5 mm/0.295 in, light grey	Pin spacing 7.5 mm/0.295 in, light grey
400 V/6 kV/3 300 V, 10 A	400 V/6 kV/3 300 V, 10 A
* CCA GL BV LR ABS	* CCA GL BV LR ABS

Pin spacing 5 mm/0.197 in, light grey	Pin spacing 5 mm/0.197 in, light grey
0.08 – 2.5 mm ² AWG 28 – 12 **	250 V/4 kV/3 300 V, 15 A
16 A	300 V, 15 A
Pin spacing 7.5 mm/0.295 in, light grey	Pin spacing 7.5 mm/0.295 in, light grey
400 V/6 kV/3 300 V, 10 A	400 V/6 kV/3 300 V, 10 A
* CCA GL BV LR ABS	* CCA GL BV LR ABS

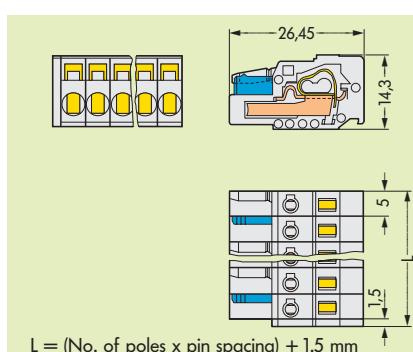
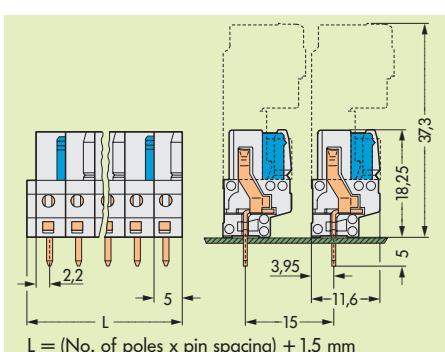
Accessories



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 721 and 722	Item No.
						Marker strips, 100 self-adhesive strips	
						Spacing 5 mm/0.197 in	
						1-12 (300x) 210-331/0500-0103	
						13-24 (300x) 210-331/0500-0104	
						Spacing 7.5 mm/0.295 in	
						1-16 (100x) 210-331/0750-0202	
						Insulation stop, 5 pcs/strip	
						Spacing 5 mm/0.197 in	
						0.08 - 0.2 mm ²	
						white 231-670	
						0.25 - 0.5 mm ²	
						light grey 231-671	
						0.75 - 1 mm ²	
						dark grey 231-672	
						Spacing 7.5 mm/0.295 in	
						0.08 - 0.2 mm ²	
						white 231-673	
						0.25 - 0.5 mm ²	
						light grey 231-674	
						0.75 - 1 mm ²	
						dark grey 231-675	
						0.2 mm ² "s" (0.14 mm ² f-st")	
						Test plug for female connectors,	
						with CAGE CLAMP®	
						pin spacings 5 mm and 5.08 mm	
						231-661	
						pin spacings 7.5 mm and 7.62 mm	
						231-662	
*** one latch only		*** one latch only					

Dimensions (in mm)

Diameter of drilled hole: 1.3 ^{+0.1} mm



Test plug, with cable 500 mm/1'7.7" long

- 2 mm Ø **210-136** red
- 2.3 mm Ø **210-137** yellow

Operating tool, for female connectors and male connectors with CAGE CLAMP®

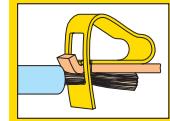
210-250

Operating lever, loose,

for female connectors and male connectors with CAGE CLAMP®

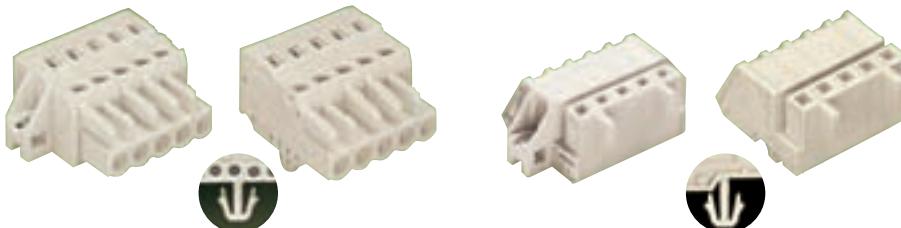
231-131

**MULTI CONNECTION SYSTEM MIDI – 100 % Protected against Mismating,
Female Connectors with CAGE CLAMP®,
Pin Spacing 5 mm/0.197 in and 7.5 mm/0.295 in**

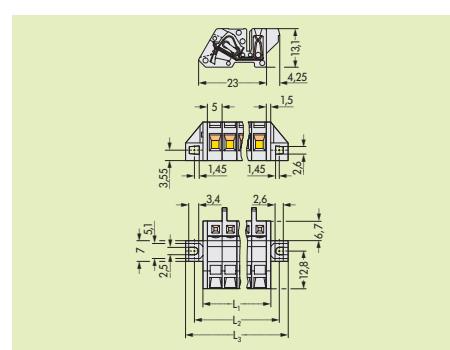
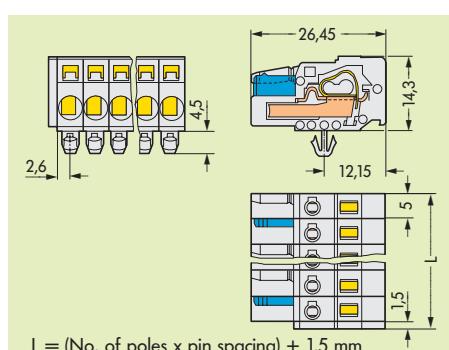


6
9

Pin spacing 5 mm/0.197 in, light grey 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A   12 A 300 V, 15 A   Pin spacing 7.5 mm/0.295 in, light grey 400 V/6 kV/3 300 V, 15 A  	Pin spacing 5 mm/0.197 in, light grey 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A   12 A 300 V, 15 A   Pin spacing 7.5 mm/0.295 in, light grey 400 V/6 kV/3 300 V, 15 A  	Accessories
*       	*       	



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 721	Item No.
Female connectors with CAGE CLAMP® and fixing flanges for panel mounting, 100 % protected against mismating, with coding fingers, with two latches, for screw or similar methods of fixing, light grey			Angled female connectors with CAGE CLAMP® and fixing flanges for panel mounting, 100 % protected against mismating, with two latches, for screw or similar methods of fixing, light grey			Marker strips, 100 self-adhesive strips	
and snap-in mounting feet, for plate thickness 0.6 mm - 1.2 mm, fixing hole Ø 3.5 mm, (or with mounting adapter 209-137 for DIN 35 rail)			and snap-in mounting feet, for plate thickness 0.6 mm - 1.2 mm, fixing hole Ø 3.5 mm			Spacing 5 mm/0.197 in	
Pin spacing 5 mm/0.197 in with fixing flanges			Pin spacing 5 mm/0.197 in with fixing flanges			Spacing 7.5 mm/0.295 in	
2*** 721-102/031-000	721-102/008-000		2 721-302/031-000	721-302/008-000		1-12 (300x) 210-331/0500-0103	
3 721-103/031-000	721-103/008-000		3 721-303/031-000	721-303/008-000		13-24 (300x) 210-331/0500-0104	
4 721-104/031-000	721-104/008-000		4 721-304/031-000	721-304/008-000			
5 721-105/031-000	721-105/008-000		5 721-305/031-000	721-305/008-000			
6 721-106/031-000	721-106/008-000		6 721-306/031-000	721-306/008-000			
:	:	:	:	:		Insulation stop, 5 pcs/strip	
10 721-110/031-000	721-110/008-000		10 721-310/031-000	721-310/008-000		Spacing 5 mm/0.197 in	
12 721-112/031-000	721-112/008-000		12 721-312/031-000	721-312/008-000		0.08 - 0.2 mm ² ①	
14 721-114/031-000	721-114/008-000		14 721-314/031-000	721-314/008-000		white 231-670	
16 721-116/031-000	721-116/008-000		16 721-316/031-000	721-316/008-000		0.25 - 0.5 mm ²	
20 721-120/031-000	721-120/008-000		20 721-320/031-000	721-320/008-000		light grey 231-671	
Pin spacing 7.5 mm/0.295 in with fixing flanges			Pin spacing 7.5 mm/0.295 in with fixing flanges			0.75 - 1 mm²	
2*** 721-202/031-000	721-202/008-000		2 721-332/031-000	721-332/008-000		dark grey 231-672	
3 721-203/031-000	721-203/008-000		3 721-333/031-000	721-333/008-000			
4 721-204/031-000	721-204/008-000		4 721-334/031-000	721-334/008-000			
5 721-205/031-000	721-205/008-000		5 721-335/031-000	721-335/008-000			
6 721-206/031-000	721-206/008-000		6 721-336/031-000	721-336/008-000			
:	:	:	:	:			
11 721-211/031-000	721-211/008-000		11 721-341/031-000	721-341/008-000		Mounting adapter, for DIN 35 rail,	
12 721-212/031-000	721-212/008-000		12 721-342/031-000	721-342/008-000		 grey 209-137	
*** one latch only						3 or more poles	
Dimensions	$L_1 = (\text{No. of poles} \times \text{pin spacing}) + 3 \text{ mm}$			$L_2 = (\text{No. of poles} \times \text{pin spacing}) + 8.8 \text{ mm}$		Tapping screw,	
	(No. of poles x pin spacing) + 1.4 mm						
						B 2.2 x 9.5 209-147	
						fixing hole Ø 1.8 mm	
						Test plug, with cable 500 mm/17.7" long	
							
						grey 210-166	



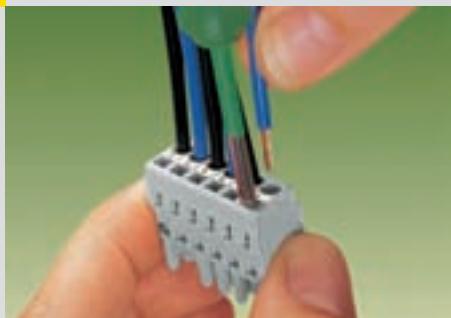
Please find the entire product range in our General Catalogue W4, Volume 2. More information at www.wago.com

WAGO

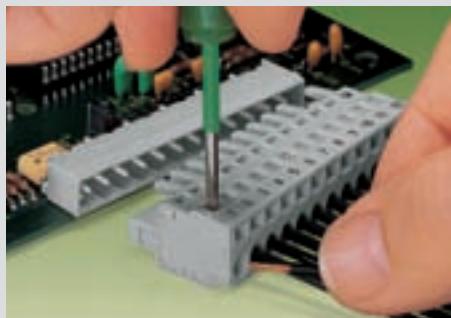
6 MULTI CONNECTION SYSTEM MIDI Description and Handling

10

CAGE CLAMP® connection



Connection of conductors – front-entry

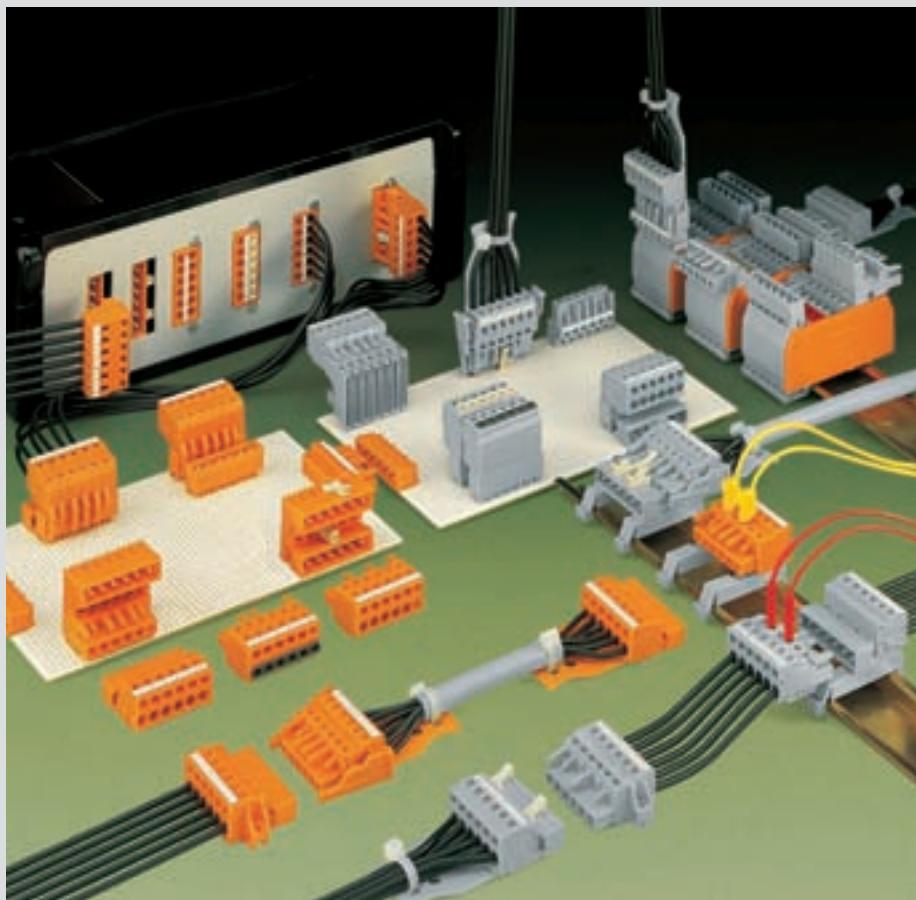


Connection of conductors – side-entry

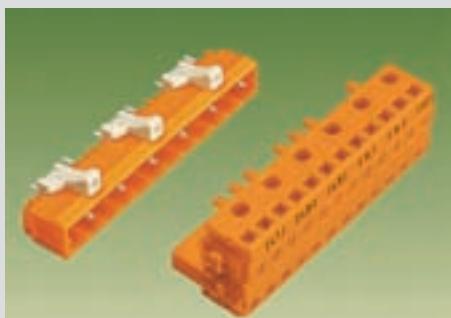


Connection of conductors – side-entry wiring with snap-on lever. Item No. 231-131

Insulation stop



Pin spacings 10 mm/0.394 in and
10.16 mm/0.4 in



Here shown with 10.16 mm/0.4 in spacing,
contact factory

Coding

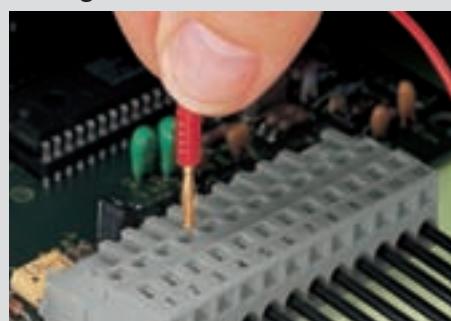


Coding of a header –
fitting of coding key(s)



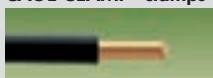
Coding of a female connector –
removal of coding finger(s)

Testing

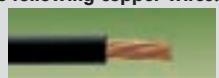


Testing with test plug
2 mm/0.079 in Ø or 2.3 mm/0.091 in Ø

CAGE CLAMP® clamps the following copper wires:



solid



stranded



fine-stranded



tip bonded

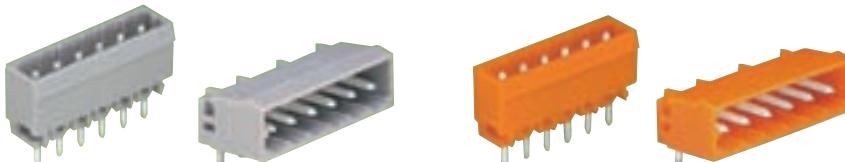


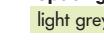
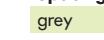
with crimped ferrule



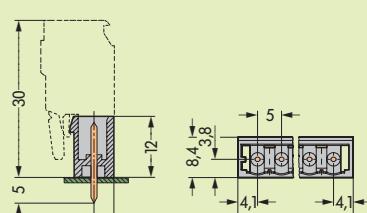
with crimped pin terminal

Pin spacing 5 mm/0.197 in, grey 250 V/4 kV/3 300 V, 10 A	Pin spacing 5.08 mm/0.2 in, orange 250 V/4 kV/3 300 V, 10 A	Accessories
Pin spacing 7.5 mm/0.295 in, grey 400 V/6 kV/3 300 V, 10 A	Pin spacing 7.62 mm/0.3 in, orange 400 V/6 kV/3 300 V, 10 A	

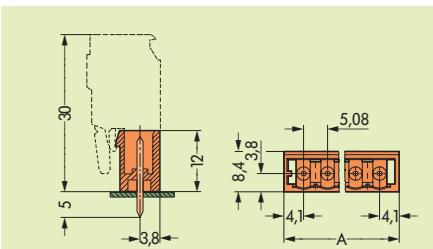


No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 231	Item No.
Headers with solder pins, grey		Headers with solder pins, orange,		Coding key, snap-on type,		Spacings 5 mm and 5.08 mm	
solder pin 1 mm x 1 mm		solder pin 1 mm x 1 mm					
Pin spacing 5 mm		Pin spacing 5.08 mm		Spacings 7.5 mm and 7.62 mm			
straight angled		straight angled		light grey 231-129			
2	231-132/001-000	231-432/001-000	2	231-332/001-000	231-532/001-000	light grey 231-130	
3	231-133/001-000	231-433/001-000	3	231-333/001-000	231-533/001-000	Fixing element, horizontal	
4	231-134/001-000	231-434/001-000	4	231-334/001-000	231-534/001-000	Spacings 5 mm and 7.5 mm	
:	:	:	:	:	:	grey 231-193	
12	231-142/001-000	231-442/001-000	12	231-342/001-000	231-542/001-000	Fixing element, horizontal	
:	:	:	:	:	:	Spac. 5.08 mm and 7.62 mm	
21	231-151/001-000	231-451/001-000	21	231-351/001-000	231-551/001-000		
22	231-152/001-000	231-452/001-000	22	231-352/001-000	231-552/001-000		
23	231-153/001-000	231-453/001-000	23	231-353/001-000	231-553/001-000	orange 231-393	
24	231-154/001-000	231-454/001-000	24	231-354/001-000	231-554/001-000	Tapping screw,	
Pin spacing 7.5 mm		Pin spacing 7.62 mm				B 2.2 x 13 231-194	
straight angled		straight angled		fixing hole Ø 1.8 mm			
2	231-232/001-000	231-832/001-000	2	231-732/001-000	231-932/001-000	Screw with nut,	
3	231-233/001-000	231-833/001-000	3	231-733/001-000	231-933/001-000		
4	231-234/001-000	231-834/001-000	4	231-734/001-000	231-934/001-000	M 2 x 12 231-195	
5	231-235/001-000	231-835/001-000	5	231-735/001-000	231-935/001-000	for fixing element	
6	231-236/001-000	231-836/001-000	6	231-736/001-000	231-936/001-000	Separator, for formation of groups,	
7	231-237/001-000	231-837/001-000	7	231-737/001-000	231-937/001-000		
8	231-238/001-000	231-838/001-000	8	231-738/001-000	231-938/001-000	light grey 231-500	
9	231-239/001-000	231-839/001-000	9	231-739/001-000	231-939/001-000		
10	231-240/001-000	231-840/001-000	10	231-740/001-000	231-940/001-000		
11	231-241/001-000	231-841/001-000	11	231-741/001-000	231-941/001-000		
12	231-242/001-000	231-842/001-000	12	231-742/001-000	231-942/001-000		
13	231-243/001-000	231-843/001-000					
16	231-246/001-000	231-846/001-000					

Dimensions (in mm) Diameter of drilled hole: $1.4^{+0.1}$ mm (solder pin 1mm x 1 mm)



Spacing 5 mm
 $A = (\text{No. of poles} \times \text{pin spacing}) + 3.2 \text{ mm}$
 Spacing 7.5 mm
 $A = (\text{No. of poles} - 1) \times \text{pin spacing} + 8 \text{ mm}$

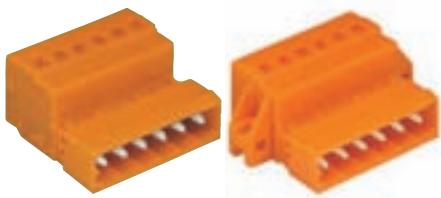
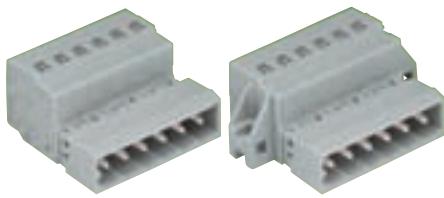


Spacing 5 mm
 $A = (\text{No. of poles} \times \text{pin spacing}) + 3.2 \text{ mm}$
 Spacing 7.5 mm
 $A = (\text{No. of poles} - 1) \times \text{pin spacing} + 8 \text{ mm}$

MULTI CONNECTION SYSTEM MIDI

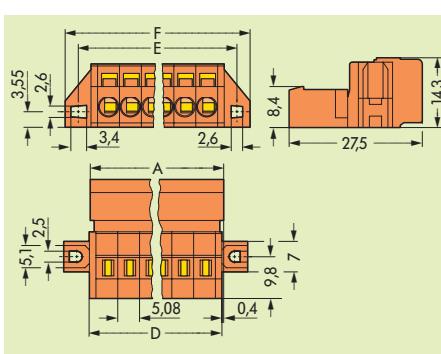
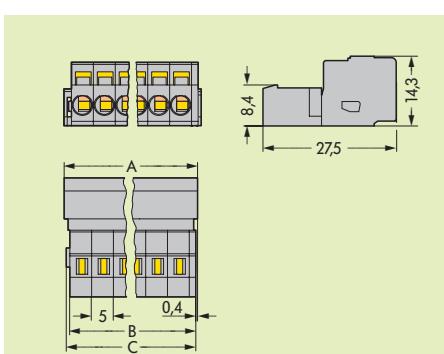
Male Connectors with CAGE CLAMP®, Pin Spacings 5 mm/0.197 in; 5.08 mm/0.2 in; 7.5 mm/0.295 in; 7.62 mm/0.3 in

Pin spacing 5 mm/0.197 in, grey 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A	Pin spacing 5.08 mm/0.2 in, orange 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A	Accessories
Pin spacing 7.5 mm/0.295 in, grey 400 V/6 kV/3 300 V, 15 A	Pin spacing 7.62 mm/0.3 in, orange 400 V/6 kV/3 300 V, 15 A	

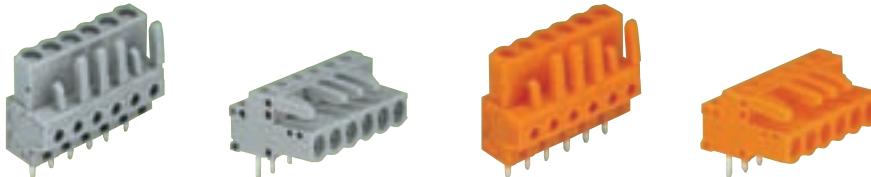


No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 231 and 731	Item No.
						Marker strips, 100 self-adhesive strips	
						Spacing 5 mm	
						1-12 (300x) 210-331/0500-0103	
						13-24 (300x) 210-331/0500-0104	
						Spacing 5.08 mm	
						1-12 (200x) 210-331/0508-0103	
						13-24 (200x) 210-331/0508-0104	
						Spacing 7.5 mm	
						1-16 (100x) 210-331/0750-0202	
						Spacing 7.62 mm	
						1-16 (100x) 210-331/0762-0202	
						Coding key, snap-on type,	
						Spacings 5 mm and 5.08 mm	
						light grey 231-129	
						Spacings 7.5 mm and 7.62 mm	
						light grey 231-130	
						Insulation stop, 5 pcs/strip	
						Spacings 5 mm and 5.08 mm	
						0.08 - 0.2 mm ²	
						white 231-670	
						0.25 - 0.5 mm ²	
						light grey 231-671	
						0.75 - 1 mm ²	
						dark grey 231-672	
						Spacings 7.5 mm and 7.62 mm	
						0.08 - 0.2 mm ²	
						white 231-673	
						0.25 - 0.5 mm ²	
						light grey 231-674	
						0.75 - 1 mm ²	
						dark grey 231-675	
						① 0.2 mm²"s" (0.14 mm²"f-st")	
						Tapping screw,	
						B 2.2 x 9.5 209-147	
						fixing hole Ø 1.8 mm	
						Separator, for formation of groups,	
						light grey 231-500	

Dimensions (in mm) A = (No. of poles x pin spacing) + 3.2 mm B = A – 1.7 mm C = A – 1.2 mm

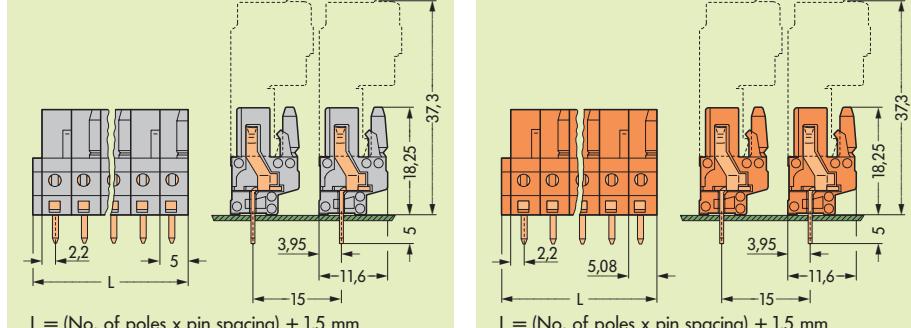


Pin spacing 5 mm/0.197 in, grey 250 V/4 kV/3 300 V, 15 A	Pin spacing 5.08 mm/0.2 in, orange 250 V/4 kV/3 300 V, 15 A	Accessories
Pin spacing 7.5 mm/0.295 in, grey 400 V/6 kV/3 300 V, 15 A	Pin spacing 7.62 mm/0.3 in, orange 400 V/6 kV/3 300 V, 15 A	*



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 232	Item No.
Female connectors with solder pins, with coding fingers, with two latches, grey, solder pin 0.6 mm x 1 mm			Female connectors with solder pins, with coding fingers, with two latches, orange, solder pin 0.6 mm x 1 mm			Marker strips, 100 self-adhesive strips	
						Spacing 5 mm	
						1-12 (300x)	210-331/0500-0103
						13-24 (300x)	210-331/0500-0104
Pin spacing 5 mm			Pin spacing 5.08 mm			Spacing 5.08 mm	
straight		angled	straight		angled	1-12 (200x)	210-331/0508-0103
2**	232-132	232-232	2**	232-162	232-262	13-24 (200x)	210-331/0508-0104
3**	232-133	232-233	3**	232-1333	232-263		
4	232-134	232-234	4	232-164	232-264	Spacing 7.5 mm	
5	232-135	232-235	5	232-165	232-265	1-16 (100x)	210-331/0750-0202
:	:	:	:	:	:		
12	232-142	232-242	12	232-172	232-272		
:	:	:	:	:	:	Spacing 7.62 mm	
21	232-151	232-251	21	232-181	232-281	1-16 (100x)	210-331/0762-0202
22	232-152	232-252	22	232-182	232-282		
23	232-153	232-253	23	232-183	232-283	Test plug, with cable 500 mm/17.7" long,	
24	232-154	232-254	24	232-184	232-284	2 mm Ø	210-136 red
Pin spacing 7.5 mm			Pin spacing 7.62 mm			2.3 mm Ø	210-137 yellow
straight		angled	straight		angled		
2**	232-732	232-832	2**	232-762	232-862		
3**	232-733	232-833	3**	232-763	232-863		
4	232-734	232-834	4	232-764	232-864		
5	232-735	232-835	5	232-765	232-865		
6	232-736	232-836	6	232-766	232-866		
7	232-737	232-837	7	232-767	232-867		
8	232-738	232-838	8	232-768	232-868		
9	232-739	232-839	9	232-769	232-869		
10	232-740	232-840	10	232-770	232-870		
11	232-741	232-841	11	232-771	232-871		
12	232-742	232-842	12	232-772	232-872		
13	232-743	232-843					
16	232-746	232-846					
**one latch only			**one latch only				

Digitized by srujanika@gmail.com



MULTI CONNECTION SYSTEM MIDI

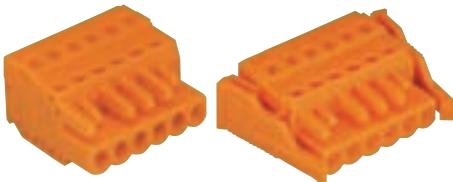
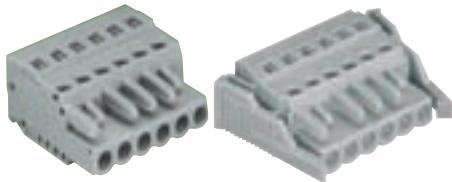
Female Connectors with CAGE CLAMP®

Pin Spacings 5 mm/0.197 in; 5.08 mm/0.2 in; 7.5 mm/0.295 in; 7.62 mm/0.3 in

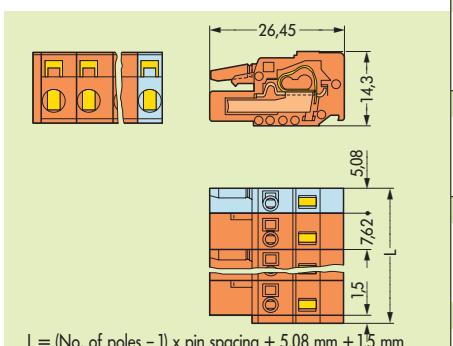
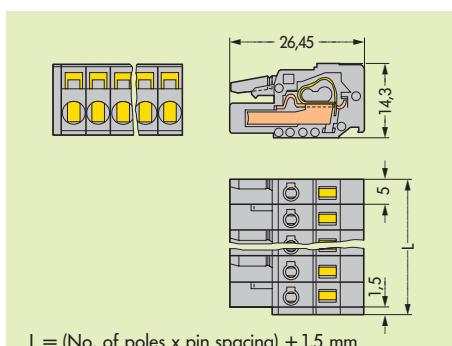
Pin spacing 5 mm/0.197 in, grey 0.08 – 2.5 mm ² 250 V/4 kV/3 16 A	AWG 28 – 12 ** 300 V, 15 A
Pin spacing 7.5 mm/0.295 in, grey 400 V/6 kV/3	300 V, 15 A

Pin spacing 5.08 mm/0.2 in, orange 0.08 – 2.5 mm ² 250 V/4 kV/3 16 A	AWG 28 – 12 ** 300 V, 15 A
Pin spacing 7.62 mm/0.3 in, orange 400 V/6 kV/3	300 V, 15 A

Accessories



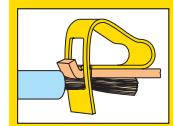
No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 231	Item No.			
Female connectors with CAGE CLAMP®, with coding fingers, with two latches, grey			Female connectors with CAGE CLAMP®, with coding fingers, with two latches, orange			Marker strips, 100 self-adhesive strips				
Pin spacing 5 mm			Pin spacing 5.08 mm			Spacing 5 mm 1-12 (300x) 210-331/0500-0103 13-24 (300x) 210-331/0500-0104				
2***	231-102/026-000	231-102/037-000	2***	231-302/026-000	231-302/037-000	Spacing 5.08 mm 1-12 (200x) 210-331/0508-0103 13-24 (200x) 210-331/0508-0104				
3***	231-103/026-000	231-103/037-000	3***	231-303/026-000	231-303/037-000					
4	231-104/026-000	231-104/037-000	4	231-304/026-000	231-304/037-000	Spacing 7.5 mm 1-16 (100x) 210-331/0750-0202				
5	231-105/026-000	231-105/037-000	5	231-305/026-000	231-305/037-000					
:	:	:	:	:	:					
12	231-112/026-000	231-112/037-000	12	231-312/026-000	231-312/037-000	Spacing 7.62 mm 1-16 (100x) 210-331/0762-0202				
:	:	:	:	:	:					
21	231-121/026-000	231-121/037-000	21	231-321/026-000	231-321/037-000	Insulation stop, 5 pcs/strip				
22	231-122/026-000	231-122/037-000	22	231-322/026-000	231-322/037-000	Spacing 5 mm and 5.08 mm 0.08 - 0.2 mm ²				
23	231-123/026-000	231-123/037-000	23	231-323/026-000	231-323/037-000	white 231-670				
24	231-124/026-000	231-124/037-000	24	231-324/026-000	231-324/037-000	0.25 - 0.5 mm ²				
Pin spacing 7.5 mm			Pin spacing 7.62 mm			0.75 - 1 mm ²				
with locking device			with locking device			spacing 7.5 mm and 7.62 mm 0.08 - 0.2 mm ²				
2***	231-202/026-000	231-202/037-000	2***	231-702/026-000	231-702/037-000	white 231-673				
3***	231-203/026-000	231-203/037-000	3***	231-703/026-000	231-703/037-000	0.25 - 0.5 mm ²				
4	231-204/026-000	231-204/037-000	4	231-704/026-000	231-704/037-000	dark grey 231-672				
5	231-205/026-000	231-205/037-000	5	231-705/026-000	231-705/037-000	Test plug, with cable 500 mm/17.7" long, 2 mm Ø 210-136 red 2.3 mm Ø 210-137 yellow				
6	231-206/026-000	231-206/037-000	6	231-706/026-000	231-706/037-000	Screwdriver, with partially insulated shaft (3.5 x 0.5) mm 210-620				
7	231-207/026-000	231-207/037-000	7	231-707/026-000	231-707/037-000	Operating tool, for female and male connectors with CAGE CLAMP® 210-250				
8	231-208/026-000	231-208/037-000	8	231-708/026-000	231-708/037-000	Operating lever, loose, for female and male connectors with CAGE CLAMP® 231-131				
9	231-209/026-000	231-209/037-000	9	231-709/026-000	231-709/037-000					
10	231-210/026-000	231-210/037-000	10	231-710/026-000	231-710/037-000					
11	231-211/026-000	231-211/037-000	11	231-711/026-000	231-711/037-000					
12	231-212/026-000	231-212/037-000	12	231-712/026-000	231-712/037-000					
13	231-213/026-000	231-213/037-000								
16	231-216/026-000	231-216/037-000								
*** one latch only			*** one latch only							
Dimensions (in mm)										
$L = (\text{No. of poles} \times \text{pin spacing}) + 1.5 \text{ mm}$										



MULTI CONNECTION SYSTEM MIDI

Female Connectors with CAGE CLAMP® and Snap-In Mounting Feet

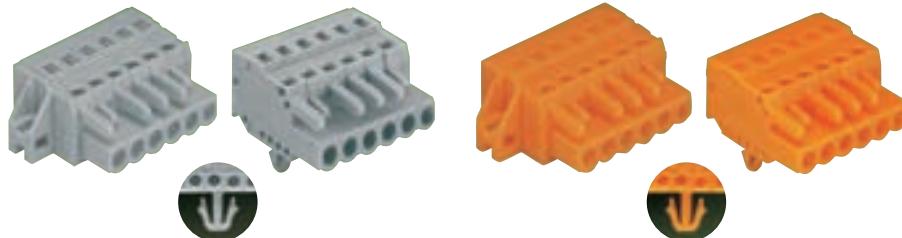
Pin Spacings 5 mm/0.197 in; 5.08 mm/0.2 in; 7.5 mm/0.295 in; 7.62 mm/0.3 in



6

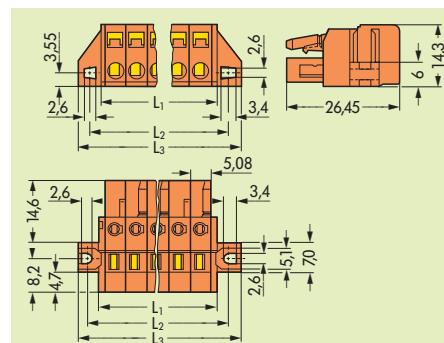
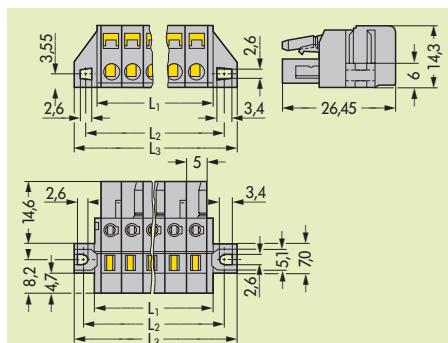
15

Pin spacing 5 mm/0.197 in, grey 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A	Pin spacing 5.08 mm/0.2 in, orange 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A	Accessories
Pin spacing 7.5 mm/0.295 in, grey 400 V/6 kV/3 300 V, 15 A	Pin spacing 7.62 mm/0.3 in, orange 400 V/6 kV/3 300 V, 15 A	



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	Accessories, Series 231	Item No.
Female connectors with CAGE CLAMP® and fixing flanges, for panel mounting, with coding fingers, with two latches, for screw fixing or similar methods, grey			Female connectors with CAGE CLAMP® and fixing flanges, for panel mounting, with coding fingers, with two latches, for screw fixing or similar methods, orange			Marker strips, 100 self-adhesive strips	
						Spacing 5 mm	1–12 (300x) 210-331/0500-0103 13–24 (300x) 210-331/0500-0104
and snap-in mounting feet, for plate thickness 0.6 mm – 1.2 mm, fixing hole Ø 3.5 mm, (or with mounting adapter 209-137 for DIN 35 rail)			and snap-in mounting feet, for plate thickness 0.6 mm – 1.2 mm, fixing hole Ø 3.5 mm, (or with mounting adapter 209-137 for DIN 35 rail)			Spacing 5.08 mm	1–12 (200x) 210-331/0508-0103 13–24 (200x) 210-331/0508-0104
Pin spacing 5 mm with fixing flanges with mounting feet			Pin spacing 5.08 mm with fixing flanges with mounting feet			Spacing 7.5 mm	1–16 (100x) 210-331/0750-0202
2***	231-102/031-000	231-102/008-000	2***	231-302/031-000	231-302/008-000		
3***	231-103/031-000	231-103/008-000	3***	231-303/031-000	231-303/008-000		
4	231-104/031-000	231-104/008-000	4	231-304/031-000	231-304/008-000		
5	231-105/031-000	231-105/008-000	5	231-305/031-000	231-305/008-000		
:	:	:	:	:	:		
12	231-112/031-000	231-112/008-000	12	231-312/031-000	231-312/008-000	Spacing 7.62 mm	1–16 (100x) 210-331/0762-0202
:	:	:	:	:	:		
22	231-122/031-000	231-122/008-000	22	231-322/031-000	231-322/008-000		
23	231-123/031-000	231-123/008-000	23	231-323/031-000	231-323/008-000		
24	231-124/031-000	231-124/008-000	24	231-324/031-000	231-324/008-000		
Pin spacing 7.5 mm with fixing flanges with mounting feet			Pin spacing 7.62 mm with fixing flanges with mounting feet			Insulation stop, 5 pcs/strip	
2***	231-202/008-000	231-202/031-000	2***	231-702/031-000	231-702/008-000	Spacing 5 mm and 5.08 mm	0.08 – 0.2 mm ² white 231-670
3***	231-203/031-000	231-203/008-000	3***	231-703/031-000	231-703/008-000		0.25 – 0.5 mm ² light grey 231-671
4	231-204/031-000	231-204/008-000	4	231-704/031-000	231-704/008-000		0.75 – 1 mm ² dark grey 231-672
5	231-205/031-000	231-205/008-000	5	231-705/031-000	231-705/008-000		
6	231-206/031-000	231-206/008-000	6	231-706/031-000	231-706/008-000		
7	231-207/031-000	231-207/008-000	7	231-707/031-000	231-707/008-000		
8	231-208/031-000	231-208/008-000	8	231-708/031-000	231-708/008-000		
:	:	:	:	:	:		
16	231-216/031-000	231-216/008-000	12	231-712/031-000	231-712/008-000		
*** one latch only			*** one latch only				

Dimensions L₁ = (No. of poles x pin spacing) + 3 mm L₂ = (No. of poles x pin spacing) + 8.8 mm
L₃ = (No. of poles x pin spacing) + 14.8 mm



① 0.2 mm²"s" (0.14 mm²"f-st")

Test plug, with cable 500 mm/17.7" long,
2 mm Ø 210-136 red
2.3 mm Ø 210-137 yellow

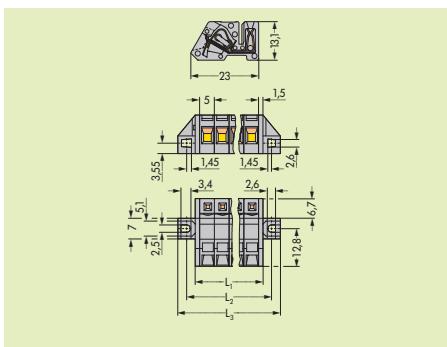
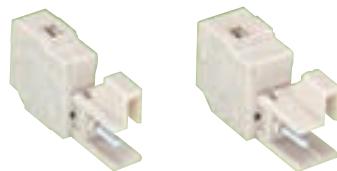
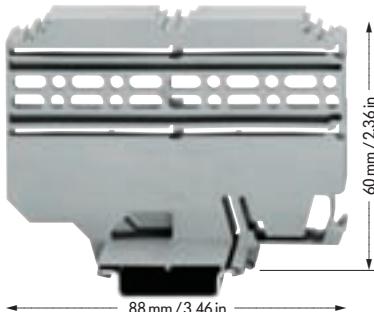
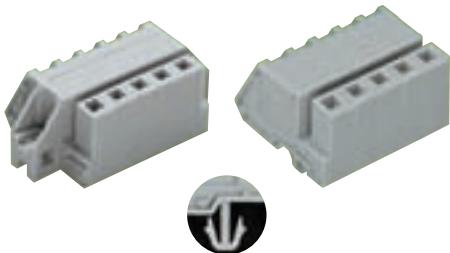
Mounting adapter, for DIN 35 rail,

grey 209-137
3 or more poles

Tapping screw,

B 2.2 x 9.5 209-147
fixing hole Ø 1.8 mm

Pin spacing 5 mm/0.197 in, grey 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3 300 V, 15 A	Multi mounting adapter for male and female connectors with snap-on mounting feet	Test plugs for female connectors Pin spacings 5 mm; 5.08 mm; 7.5 mm u. 7.62 mm 0.08 – 2.5 mm ² AWG 28 – 12 250 V/4 kV/3 12 A
Pin spacing 7.5 mm/0.295 in, grey 400 V/6 kV/3 300 V, 15 A	Adapter width 10 mm/0.394 in	8 – 9 mm / 0.33 in



* You can find approvals on the Internet at www.wago.com.
Technical explanations and abbreviations see page 10.2.

** AWG 12: THHN THWN

MULTI CONNECTION SYSTEM MINI and MIDI

**Strain Relief Plates and Snap-on Type Strain Relief Housings for Series 734,
Pin Spacings 5 mm/0.197 in; 5.08 mm/0.2 in; 7.5 mm/0.295 in; 7.62 mm/0.3 in**

Strain relief plates suitable for

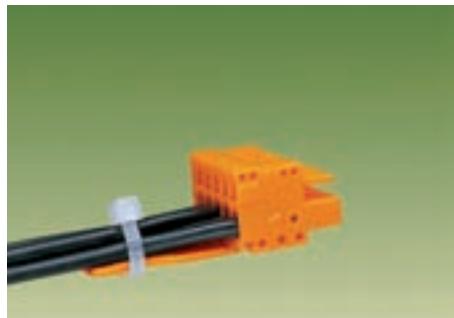
- Female connectors with CAGE CLAMP®
- Male connectors with CAGE CLAMP®

MULTI CONNECTION SYSTEM MINI
Series 734

MULTI CONNECTION SYSTEM MIDI
Series 231, 721 and 731

Snap-on type strain relief housings
suitable for

- straight and angled female connectors with CAGE CLAMP®
- male connectors with CAGE CLAMP®



Width	Additional Item No.	Width	Additional Item No.	No. of poles	Item No.	Item No.
Strain relief plate, assembled suitable for series 734		Strain relief plate, assembled suitable for series 231, 721 and 731			Snap-on type strain relief housings , consisting of: strain relief support and strain relief housing, suitable for series 734	
6 mm	.../032-000	11.5 mm	.../032-000		Spacing 3.5 mm	Spacing 3.81 mm
12.5 mm	.../033-000	20 mm	.../033-000		grey	orange
25 mm	.../034-000	30 mm	.../034-000	2	734-602*	734-632*
35 mm	.../035-000	50 mm	.../035-000	3	734-603*	734-633*
				:	:	:
Ordering examples:		Ordering examples:		6	734-606	734-636
Female connector, pin spacing 3.81 mm, orange, 5 poles, with strain relief plate 734-205/033-000		Male connector, pin spacing 5 mm, light grey, 8 poles with strain relief plate 721-608/034-000		7	734-607	-
				8	734-608	734-638
				9	734-609	734-639
				10	734-610	734-640
				12	734-612	734-642
series 231 and 721						
					Spacing 5 mm	Spacing 5.08 mm
234-127		232-602			232-632	
734-227		232-603			232-633	
					:	:
234-128		232-606			232-636	
734-228		232-607			-	
		232-608			232-638	
234-129		232-609			232-639	
734-229		232-610			232-640	
		232-612			232-642	
series 231, 721 and 731						
					Spacing 7.5 mm	Spacing 7.62 mm
234-126		232-662			232-682	
734-226		232-663			232-683	
		232-664			232-684	
234-125		232-665			232-685	
734-225		232-667			232-687	
Cable clamp, for strain relief					209-177	

Strain relief plate, loose suitable for series 734

Item No.	Colour	Width
734-127	light grey	6 mm
734-227	orange	
734-128	light grey	12.5 mm
734-228	orange	
734-129	light grey	25 mm
734-229	orange	
734-126	light grey	35 mm
734-226	orange	

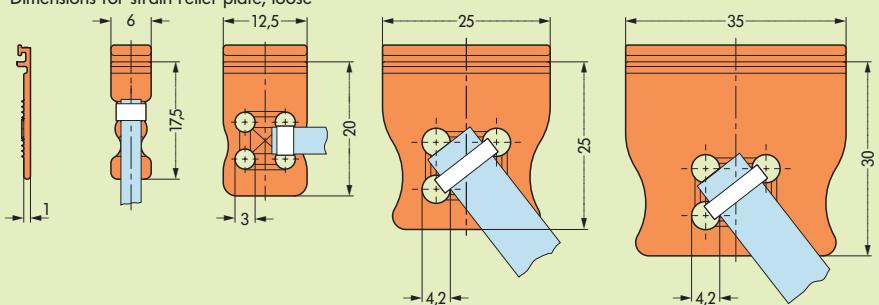
Male connectors as well as female connectors with CAGE CLAMP® can be supplied with assembled strain relief plate. Plates are offered in 4 different sizes.

An additional item number, referring to the width of the strain relief plate, is added to the "basic item number" and determines the type (see ordering examples).

It is therefore possible to order not only the "standard version" of male connectors or female connectors with strain relief plate, but also the version with fixing flanges or snap-in mounting feet.

The arrangement of the fixing holes for cable ties allows single conductors or multicore cables to be attached in several different orientations.

Dimensions for strain relief plate, loose



*2 up to 5 poles only suitable for cable ties (Series 734), 2- to 3-poles only for cable ties (Series 231, 721 and 731)



for No. of poles	Spacing/mm
6 to 12 poles	3.5 + 3.81
4 to 6 poles	5 + 5.08
3 poles	7.5 + 7.62

Cable clamp, for strain relief

from 7 poles	5 + 5.08
from 5 poles	7.5 + 7.62

Fixing screws, for cable clamp

for No. of poles	Spacing/mm
4 to 6 poles	5 + 5.08
3 poles	7.5 + 7.62

Fixing screws, for cable clamp

6 to 12 poles	3.5 + 3.81
from 7 poles	5 + 5.08
from 5 poles	7.5 + 7.62

Fixing screws, for cable clamp

for No. of poles	Spacing/mm
4 to 6 poles	5 + 5.08
3 poles	7.5 + 7.62

Fixing screws, for cable clamp

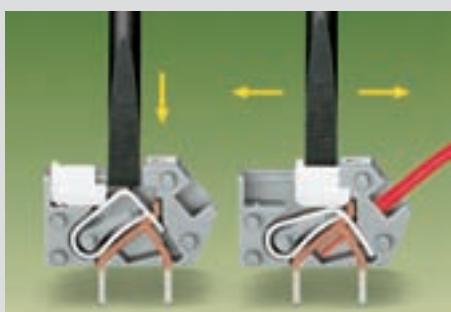
6 to 12 poles	3.5 + 3.81
from 7 poles	5 + 5.08
from 5 poles	7.5 + 7.62

Description and Handling

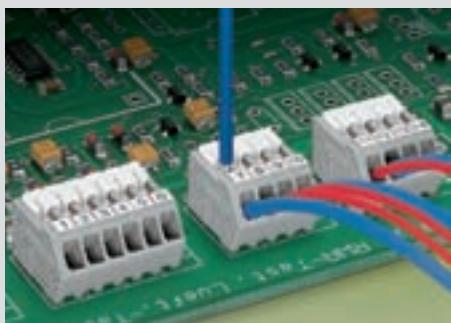
PCB Terminal Strips with CAGE CLAMP®

Series 218, 233 and 234

Series 218



Wire connection: open the clamping unit using a screwdriver or move the locking slide towards the conductor entry hole, fully insert stripped wire and move locking slide back to its original position (also possible without operating tool using a fingernail)



Testing – directly on the clamping spring
Marking with self-adhesive marker strips ...



... or with customised direct printing

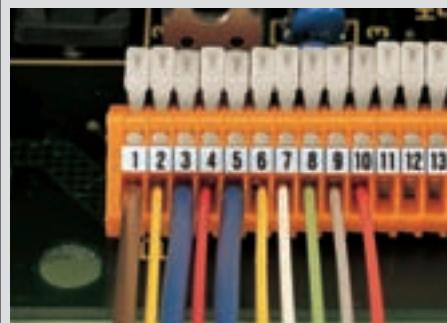


Size comparison between Series 218 and Series 745 high current terminal blocks

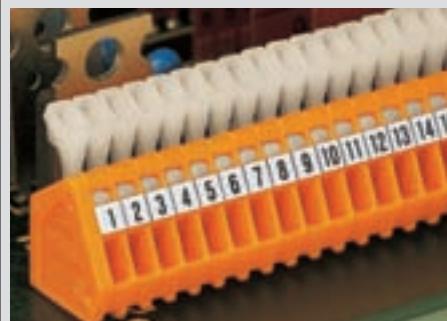
Series 233



Connection/removal of conductors



Nominal cross section 0.5 mm²/AWG 20,
in adjacent positions 0.75 mm²/AWG 18



Marking with self-adhesive marker strips
or with cusomised direct printing

Series 234



Connection/removal of conductors



Nominal cross section 0.5 mm²/AWG 20,
in adjacent positions 0.75 mm²/AWG 18

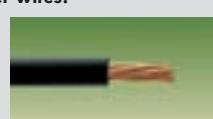


Marking with cusomised direct printing or with
self-adhesive marker strips

CAGE CLAMP® clamps the following copper wires:



solid



stranded

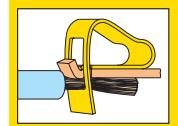


fine-stranded



tip-bonded

PCB Terminal Strips with Locking Slide, Pin Spacings 2.5 mm/0.098 in and 2.54 mm/0.1 in; Series 218

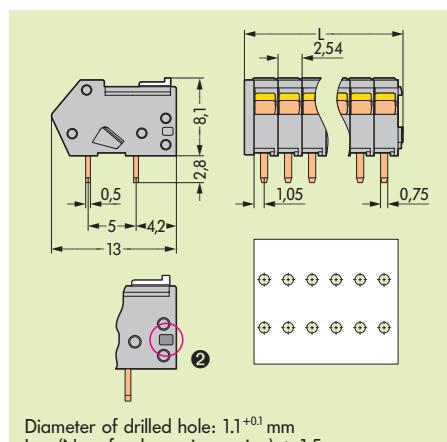
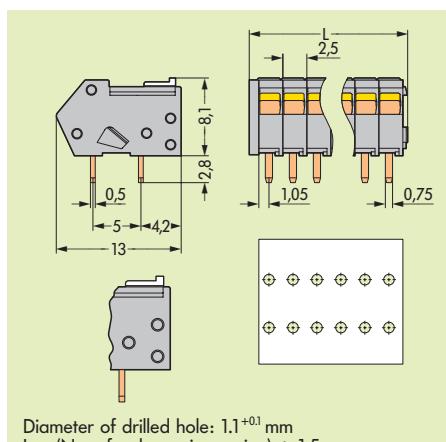


7
1

Pin spacing 2.5 mm / 0.098 in 0.08 – 0.5 mm ² ① AWG 28 – 20 ① 250 V/2.5 kV/2 6 A 5 – 6 mm / 0.22 in * CCA	Pin spacing 2.54 mm / 0.1 in 0.08 – 0.5 mm ² ① AWG 28 – 20 ① 250 V/2.5 kV/2 6 A 5 – 6 mm / 0.22 in * CCA	Accessories
---	--	--------------------



No. of poles	Item No.	Pack.-unit pcs	No. of poles	Item No.	Pack.-unit pcs	Accessories, Series 218 Item No.				
1-conductor terminal strips with locking slide,		1-conductor terminal strips with locking slide,								
2 solder pins/pole in line, grey, locking slide, white		2 solder pins/pole in line, grey, locking slide, white								
2	218-102	1000 (10x100)	2	218-502	1000 (10x100)	Marker cards,				
3	218-103	1000 (10x100)	3	218-503	1000 (10x100)	100 self-adhesive strips per card				
4	218-104	500 (5x100)	4	218-504	500 (5x100)	Pin spacing 2.5 mm				
5	218-105	500 (5x100)	5	218-505	500 (5x100)	1-16 (400x) 210-331/0250-0202				
6	218-106	280 (4x 70)	6	218-506	280 (4x 70)	17-32 (400x) 210-331/0250-0204				
7	218-107	240 (4x 60)	7	218-507	240 (4x 60)					
8	218-108	220 (4x 55)	8	218-508	220 (4x 55)	Pin spacing 2.54 mm				
9	218-109	200 (4x 50)	9	218-509	200 (4x 50)	1-16 (400x) 210-331/0254-0202				
10	218-110	180 (4x 45)	10	218-510	180 (4x 45)	17-32 (400x) 210-331/0254-0204				
11	218-111	160 (4x 40)	11	218-511	160 (4x 40)					
12	218-112	140 (4x 35)	12	218-512	140 (4x 35)					
13	218-113	140 (4x 35)	13	218-513	140 (4x 35)					
14	218-114	120 (4x 30)	14	218-514	120 (4x 30)	Direct printing on request				
15	218-115	120 (4x 30)	15	218-515	120 (4x 30)	Test pin, 1 mm/0.039 in Ø				
16	218-116	100 (4x 25)	16	218-516	100 (4x 25)	735-500 Test wire for sold. onto test plug				
:	:	:	:	:	:	Screwdriver, with partially insulated shaft (2.5 x 0.4) mm				
21	218-121	100 (4x 25)	21	218-521	100 (4x 25)	210-619				
22	218-122	100 (4x 25)	22	218-522	100 (4x 25)					
23	218-123	100 (4x 25)	23	218-523	100 (4x 25)					
24	218-124	80 (4x 20)	24	218-524	80 (4x 20)					
Additional item numbers for coloured terminal strips										
red	.../000-005		Ordering example							
blue	.../000-006		Terminal strips, pin spacing 2.5 mm, 8 poles, orange							
orange	.../000-012		2 solder pins in line 218-108/000-012							
green	.../000-023									
locking slide, white										
Dimensions (in mm)										



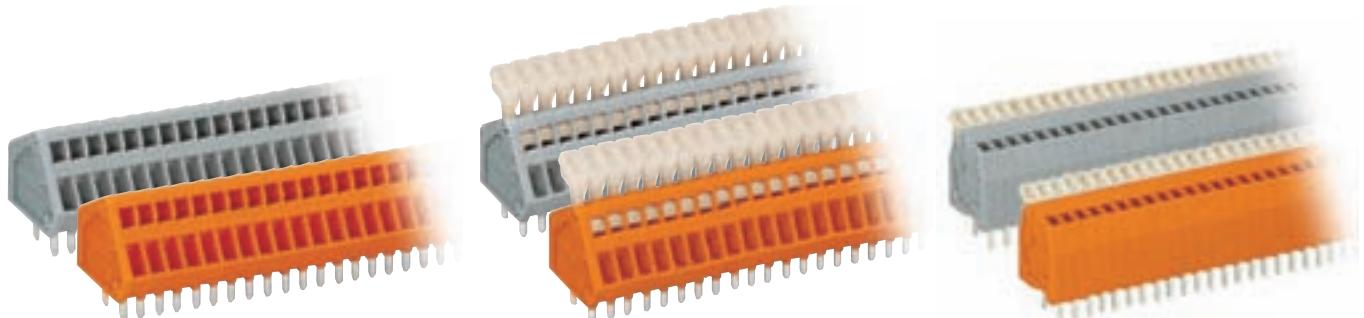
* You can find approvals on the Internet at www.wago.com.
Technical explanations and abbreviations see page 10.2.

PCB Terminal Strips 0.5 mm^2 , Pin Spacings 2.5 mm/0.098 in und 2.54 mm/0.1 in; Series 233 and 234

Pin spacing 2.5 mm/0.098 in	Pin spacing 2.54 mm/0.1 in
0.08 – 0.5 mm ² ①	AWG 28 – 20 ①
250 V/2.5 kV/2	150 V, 4 A ④ ⑤
6 A	
5 – 6 mm / 0.22 in	
* ④ ⑤ KEM ⑥ ⑦ P ⑧ GL BV ⑨ ⑩ ABS	

Pin spacing 2.5 mm/0.098 in	Pin spacing 2.54 mm/0.1 in
0.08 – 0.5 mm ² ①	AWG 28 – 20 ①
250 V/2.5 kV/2	150 V, 4 A ④ ⑤
6 A	
5 – 6 mm / 0.22 in	
* ④ ⑤ KEM ⑥ ⑦ P ⑧ GL BV ⑨ ⑩ ABS	

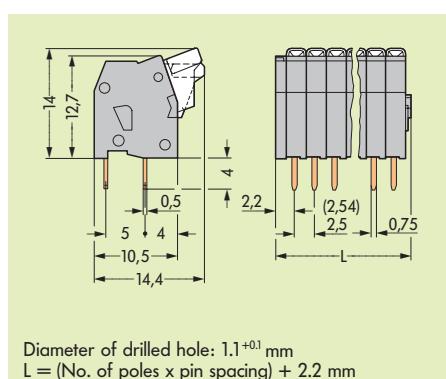
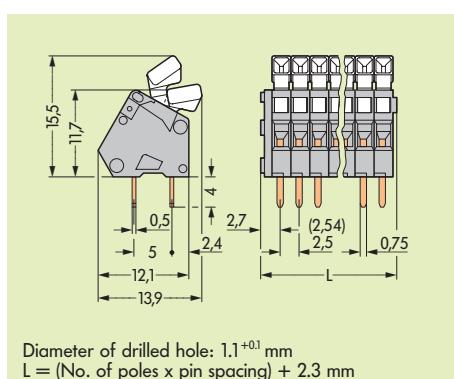
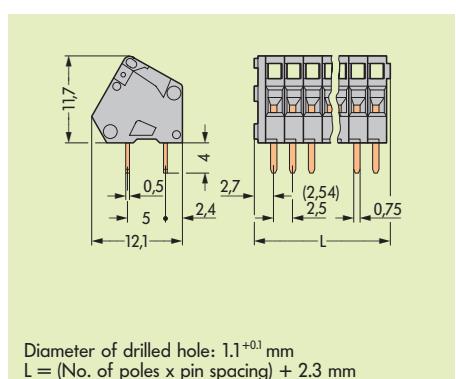
Pin spacing 2.5 mm/0.098 in	Pin spacing 2.54 mm/0.1 in
0.08 – 0.5 mm ² ①	AWG 28 – 20 ①
250 V/2.5 kV/2	150 V, 4 A ④ ⑤
6 A	
5 – 6 mm / 0.22 in	
* ④ ⑤ KEM ⑥ ⑦ P ⑧ GL BV ⑨ ⑩ ABS	



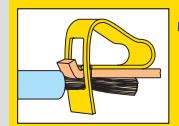
No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.
Terminal strips, standard length, for other lengths contact factory, 2 solder pins/pole			Terminal strips with push buttons, standard length, for other lengths contact factory, 2 solder pins/pole					
	Pin spacing 2.5 mm grey 2	233-102 233-402		Pin spacing 2.5 mm grey 2	233-202 233-502		Pin spacing 2.5 mm grey 2	234-202 234-502
3	233-103 233-403		3	233-203 233-503		3	234-203 234-503	
4	233-104 233-404	4	4	233-204 233-504	4	4	234-204 234-504	
5	233-105 233-405	5	5	233-205 233-505	5	5	234-205 234-505	
6	233-106 233-406	6	6	233-206 233-506	6	6	234-206 234-506	
7	233-107 233-407	7	7	233-207 233-507	7	7	234-207 234-507	
8	233-108 233-408	8	8	233-208 233-508	8	8	234-208 234-508	
9	233-109 233-409	9	9	233-209 233-509	9	9	234-209 234-509	
10	233-110 233-410	10	10	233-210 233-510	10	10	234-210 234-510	
12	233-112 233-412	12	12	233-212 233-512	12	12	234-212 234-512	
16	233-116 233-416	16	16	233-216 233-516	16	16	234-216 234-516	
24	233-124 233-424	24	24	233-224 233-524	24	24	234-224 234-524	
Terminal strips without push buttons cannot be retrofitted with push buttons!								
Other colours on request			Other colours on request					

Accessories, Series 233 and 234

Marker cards, 100 self-adhesive strips per card	Operating tool, for a professional wiring of terminal strips partially insulated of insulating material 233-335 233-332
Marking	Pin spacing 2.5 mm
1–16 (400 x)	210-331/0250-0202
17–32 (400 x)	210-331/0250-0204
33–48 (400 x)	210-331/0250-0206
Direct printing contact factory	
Dimensions (in mm)	



Description and Handling PCB Terminal Strips with CAGE CLAMP® Series 255, 256 and 257



Series 255



Connection/removal of conductors, series 255

Series 256



Connection/removal of conductors, series 256

Series 257



Connection/removal of conductors, series 257
Straight lever, front-entry
Angled lever, side-entry



Testing with test probes



Possible conductor arrangement with
staggered terminal strips
(for series 256 only)

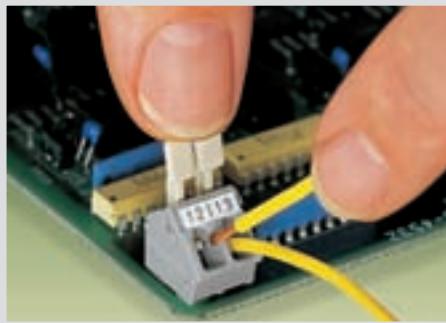


Testing with test plug adapter



Connection/removal of conductors, series 255
Finger operation

Terminal strips with finger operated levers
see General Catalogue



Connection/removal of conductors, series 256
Finger operation

Terminal strips with finger operated levers
see General Catalogue



Connection/removal of conductors, series 257
Finger operation

Terminal strips with finger operated levers
see General Catalogue



Marking with customised direct printing

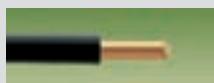


Marking with self-adhesive marker strips

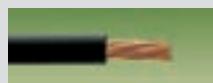


Series 255 256 257
Conductor entry angles

CAGE CLAMP® clamps the following copper wires:



solid



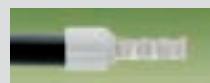
stranded



fine-stranded



tip-bonded



with crimped ferrule



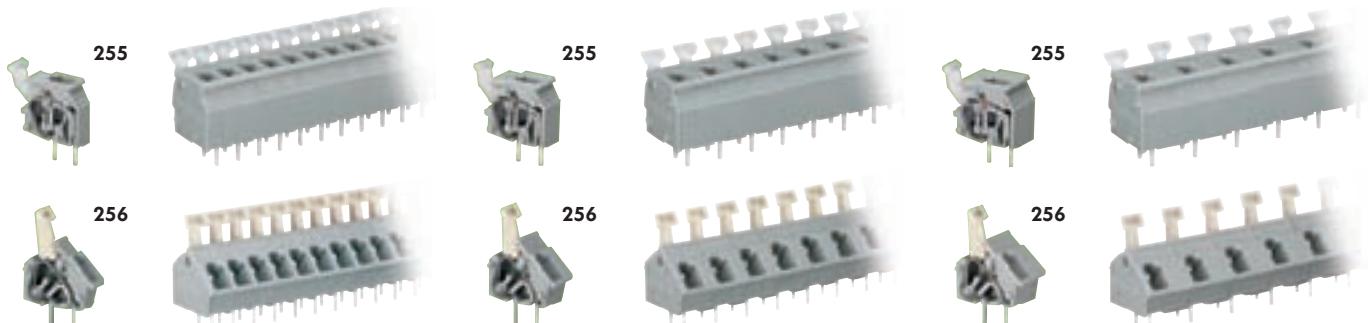
with crimped pin terminal

Modular PCB Terminal Blocks and Terminal Strips 2.5 mm²

Pin Spacings 5/5.08 mm/0.2 in, 7.5/7.62 mm/0.3 in and 10/10.16 mm/0.4 in;

Series 255 and 256

Pin spacing 5/5.08 mm / 0.2 in 0.08 – 2.5 mm ² AWG 28 – 12 ** 250 V/4 kV/3, 16 A 300 V, 15 A 500 V/4 kV/2, 16 A 300/600 V, 15/5 A 5 – 6 mm / 0.22 in	Pin spacing 7.5/7.62 mm / 0.3 in 0.08 – 2.5 mm ² AWG 28 – 12 ** 400 V/6 kV/3, 16 A 300 V, 15 A 800 V/6 kV/2, 16 A 300/600 V, 15/5 A 5 – 6 mm / 0.22 in	Pin spacing 10/10.16 mm / 0.4 in 0.08 – 2.5 mm ² AWG 28 – 12 ** 500 V/6 kV/3, 16 A 300 V, 15 A 1000 V/6 kV/2, 16 A 300/600 V, 15/5 A 5 – 6 mm / 0.22 in
* CCA GL BV ABS	* CCA GL BV ABS	* CCA GL BV ABS



Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.
Modular terminal blocks,								
2 solder pins/pole								
grey	255-401		grey	255-501		grey	255-601	
red	255-740		red	255-750		red	255-760	
dark grey	255-742		dark grey	255-752		dark grey	255-762	
light grey	255-743		light grey	255-753		light grey	255-763	
blue	255-744		blue	255-754		blue	255-764	
orange	255-746		orange	255-756		orange	255-766	
light green	255-747		light green	255-757		light green	255-767	
Terminal strips, grey, standard lengths,***								
2 solder pins/pole								
2	255-402	256-402	2	255-502	256-502	2	255-602	256-602
3	255-403	256-403	3	255-503	256-503	3	255-603	256-603
4	255-404	256-404	4	255-504	256-504	4	255-604	256-604
:	:	:	:	:	:	:	:	:
9	255-409	256-409	7	255-507	256-507	7	255-607	256-607
10	255-410	256-410	8	255-508	256-508	8	255-608	256-608
12	255-412	256-412	9	255-509	256-509	9	255-609	256-609
16	255-416	256-416	10	255-510	256-510	10	255-610	256-610
24	255-424	256-424	12	255-512	256-512	12	255-612	256-612
36	255-436	256-436	16	255-516	256-516	16	255-616	256-616
48	255-448	256-448	24	255-524	256-524	24	255-624	256-624

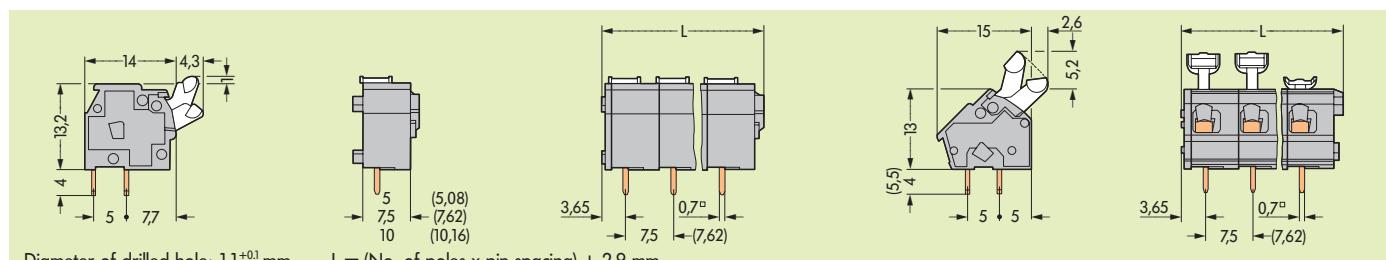
Accessories, Series 255 and 256 (Marker strips see section 9)

**Additional item numbers for coloured terminal strips see page 7.5

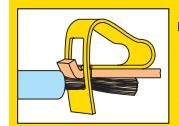
Spacer, 5/5.08 mm/0.2 in thick, grey 255-801 for doubling the pin spacing	Spacer, 7.5/7.62 mm/0.3 in thick, grey 255-811 for doubling the pin spacing	Spacer, 10/10.16 mm/0.4 in thick, grey 255-821 for doubling the pin spacing
End plates, snap-on type, 1 mm/0.039 in thick		
Series 255		
grey 255-100 100		
dark grey 255-200 100		
light grey 255-300 100		
blue 255-400 100		
red 255-500 100		
orange 255-600 100		
light green 255-700 100		
Series 256		
grey 256-100 100		
dark grey 256-200 100		
light grey 256-300 100		
blue 256-400 100		
red 256-500 100		
orange 256-600 100		
light green 256-700 100		

Dimensions (Adjustment of pin spacing is made by pulling on the end blocks so that they expand to satisfy the hole centers required.)

Terminal blocks for Ex e II applications
see General Catalogue W4, Volume 2

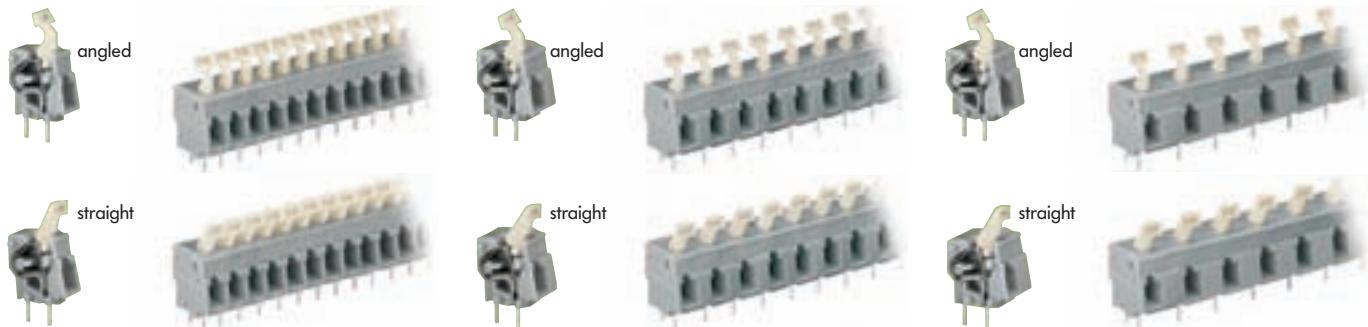


Modular PCB Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacings 5/5.08 mm/0.2 in, 7.5/7.62 mm/0.3 in and 10/10.16 mm/0.4 in, Series 257



7
5

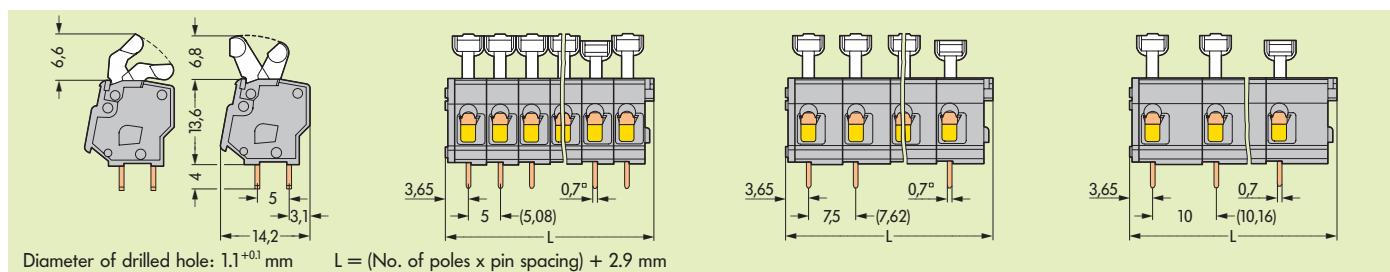
Pin spacing 5/5.08 mm / 0.2 in 0.08 – 2.5 mm ² 250 V/4 kV/3, 16 A 500 V/4 kV/2, 16 A 5 – 6 mm / 0.22 in	Pin spacing 7.5/7.62 mm / 0.3 in 0.08 – 2.5 mm ² 400 V/6 kV/3, 16 A 800 V/6 kV/2, 16 A 5 – 6 mm / 0.22 in	Pin spacing 10/10.16 mm / 0.4 in 0.08 – 2.5 mm ² 500 V/6 kV/3, 16 A 1000 V/6 kV/2, 16 A 5 – 6 mm / 0.22 in
*	*	*



Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.
Modular terminal blocks, 2 solder pins/pole			Modular terminal blocks, 2 solder pins/pole			Modular terminal blocks, 2 solder pins/pole		
angled lever						angled lever		
grey	257-451	257-401	grey	257-551	257-501	grey	257-651	257-601
red	257-840	257-740	red	257-850	257-750	red	257-860	257-760
dark grey	257-842	257-742	dark grey	257-852	257-752	dark grey	257-862	257-762
light grey	257-843	257-743	light grey	257-853	257-753	light grey	257-863	257-763
blue	257-844	257-744	blue	257-854	257-754	blue	257-864	257-764
orange	257-846	257-746	orange	257-856	257-756	orange	257-866	257-766
light green	257-847	257-747	light green	257-857	257-757	light green	257-867	257-767
Terminal strips, grey, standard lengths, 2 solder pins/pole			Terminal strips, grey, standard lengths, 2 solder pins/pole			Terminal strips, grey, standard lengths, 2 solder pins/pole		
2	257-452	257-402	2	257-552	257-502	2	257-652	257-602
3	257-453	257-403	3	257-553	257-503	3	257-653	257-603
:	:	:	4	257-554	257-504	4	257-654	257-604
10	257-460	257-410	:	:	:	:	:	:
12	257-462	257-412	9	257-559	257-509	9	257-659	257-609
16	257-466	257-416	10	257-560	257-510	10	257-660	257-610
24	257-474	257-424	12	257-562	257-512	12	257-662	257-612
36	257-486	257-436	16	257-566	257-516	16	257-666	257-616
48	257-498	257-448	24	257-574	257-524	24	257-674	257-624

Accessories, Series 257 (Marker strips see section 9)

 Spacer, 5/5.08 mm/0.2 in thick, grey 257-801 for doubling the pin spacing	 Spacer, 7.5/7.62 mm/0.3 in thick, grey 257-811 for doubling the pin spacing	 Spacer, 10/10.16 mm/0.4 in thick, grey 257-821 for doubling the pin spacing
End plates, snap-on type, 1 mm/0.039 in thick Series 257	 Series 257	Additional item numbers for coloured terminal strips red .../000-005 blue .../000-006 dark grey .../000-008 light grey .../000-009 orange .../000-012 light green .../000-017
Dimensions (Adjustment of pin spacing is made by pulling on the end blocks so that they expand to satisfy the hole centers required.)		 Marker strips (only for pin spacings 7.5/7.62 mm/0.3 in and 10/10.16 mm/0.4 in)

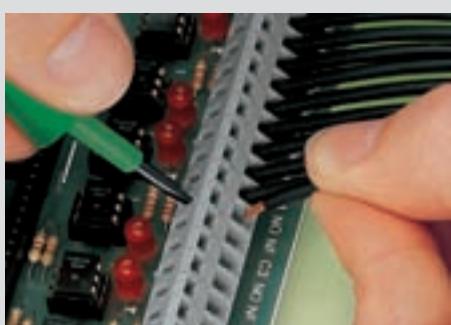


Description and Handling PCB Terminal Strips with CAGE CLAMP® Series 236, 736, 737, 738, 742 and 745

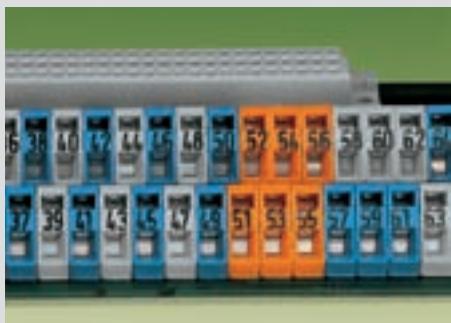
Series 236



Connection of conductors "Front-entry"



Connection of conductors "Side-entry"



Coloured mixed terminal strips,
with customised direct printing

Series 736, 737 and 738



Mix of double deck and triple deck terminal strips



Space saving with triple deck terminal strip



Wiring of 4-conductor sensors

Series 745



Connection of conductors using
screwdriver 5.5 mm



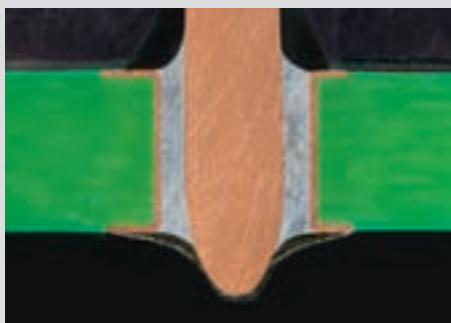
Coloured terminal strips on request

Series 742



Opening of disconnect

Reflow Technique



In the manufacture of electronic products, Surface Mount Technology has led to a rapid rise in productivity.

The integration of classic electromechanical components such as connectors or PCB terminal blocks into the reflow soldering process offers even more potential for economy.

By using high temperature resistant plastic and an optimised pin design the WAGO Through Hole Reflow PCB terminal blocks meet the requirement for SMT process capability while maintaining the necessary stability.

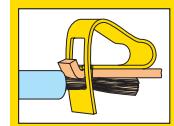
Press In Technique



Special features of the WAGO Press In Technique:

- press-in pin for PCB thickness from 1.4 mm to 3 mm – (similar to DIN EN 60352-5 EE 1.45 standard)
- press-in length of approx 3.2 mm – no unnecessary projection on underside of PCB
- low press-in force required – advantage for both PCB and components
- high retention force within the PCB – double the values required by DIN EN 60352-5
- good bonded connection
- excellent elastic spring behaviour
- no deformation of the metal-plated end hole
- length of the contact area ≥ 1.3 mm
- no deformation of multilayer PCBs
- only slight tin removal in the contact hole – advantage for PCB and the contact points
- application specific press-in tool – please contact factory

Modular PCB Terminal Blocks, 2.5 mm² Pin Spacings 5/5.08 mm/0.2 in, 7.5/7.62 mm/0.3 in and 10/10.16 mm/0.4 in; Series 236



7
7

Pin spacing 5/5.08 mm / 0.2 in	0.08 – 2.5 mm²	AWG 28 – 12
250 V/4 kV/3, 16 A	300 V, 15 A	■
500 V/4 kV/2, 16 A	300 V, 15 A	◎
5 – 6 mm / 0.22 in		

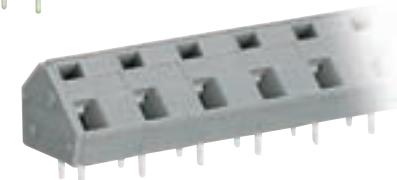
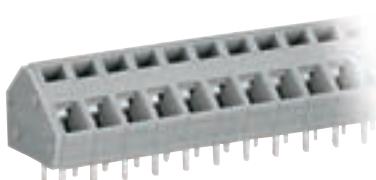
* ■ CCA N S D P □ ▲ BV GL ◎ ◇

Pin spacing 7.5/7.62 mm / 0.3 in	0.08 – 2.5 mm²	AWG 28 – 12
400 V/6 kV/3, 16 A	300 V, 15 A	■
800 V/6 kV/2, 16 A	300 V, 15 A	◎
5 – 6 mm / 0.22 in		

* ■ CCA N S D P □ ▲ BV GL ◎ ◇

Pin spacing 10/10.16 mm / 0.4 in	0.08 – 2.5 mm²	AWG 28 – 12
500 V/6 kV/3, 16 A	300 V, 15 A	■
1000 V/6 kV/2, 16 A	300 V, 15 A	◎
5 – 6 mm / 0.22 in		

* ■ CCA N S D P □ ▲ BV GL ◎ ◇



Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.
Modular terminal blocks,								
1 solder pin/pole, rear ①	2 solder pins/pole	236-401	1 solder pin/pole, rear ①	2 solder pins/pole	236-501	1 solder pin/pole, rear ①	2 solder pins/pole	236-601
grey 236-101	grey 236-401	grey 236-201	grey 236-701	grey 236-501	grey 236-301	grey 236-701	grey 236-601	grey 236-801
dark grey 236-712	dark grey 236-742	dark grey 236-722	dark grey 236-752	dark grey 236-732	dark grey 236-732	dark grey 236-732	dark grey 236-762	dark grey 236-762
light grey ⑥ 236-713	light grey ⑥ 236-743	light grey ⑥ 236-723	light grey ⑥ 236-753	light grey ⑥ 236-733	light grey ⑥ 236-733	light grey ⑥ 236-733	light grey ⑥ 236-763	light grey ⑥ 236-763
blue 236-714	blue 236-744	blue 236-724	blue 236-754	blue 236-734	blue 236-734	blue 236-734	blue 236-764	blue 236-764
green 236-715	green 236-745	green 236-725	green 236-755	green 236-735	green 236-735	green 236-735	green 236-765	green 236-765
orange 236-716	orange 236-746	orange 236-726	orange 236-756	orange 236-736	orange 236-736	orange 236-736	orange 236-766	orange 236-766
light green 236-717	light green 236-747	light green 236-727	light green 236-757	light green 236-737	light green 236-737	light green 236-737	light green 236-767	light green 236-767
black 236-854	black 236-851	black 236-855	black 236-852	black 236-856	black 236-856	black 236-856	black 236-853	black 236-853
Pieces per packing unit 600 (6 x 100)			Pieces per packing unit 400 (4 x 100)			Pieces per packing unit 300 (3 x 100)		
Terminal strips, grey, standard lengths,								
1 solder pin/pole, rear ①	2 solder pins/pole	236-202	1 solder pin/pole, rear ①	2 solder pins/pole	236-502	1 solder pin/pole, rear ①	2 solder pins/pole	236-602
2 236-102	236-402	2 236-202	3 236-203	3 236-503	3 236-303	3 236-303	3 236-603	3 236-603
3 236-103	236-403	4 236-204	4 236-504	4 236-304	4 236-304	4 236-304	4 236-604	4 236-604
:	:	6 236-206	6 236-506	6 236-306	6 236-306	6 236-306	6 236-606	6 236-606
8 236-108	236-408	8 236-208	8 236-508	8 236-308	8 236-308	8 236-308	8 236-608	8 236-608
12 236-112	236-412	12 236-212	12 236-512	12 236-312	12 236-312	12 236-312	12 236-612	12 236-612
16 236-116	236-416	16 236-216	16 236-516	16 236-316	16 236-316	16 236-316	16 236-616	16 236-616
24 236-124	236-424	24 236-224	24 236-524	24 236-324	24 236-324	24 236-324	24 236-624	24 236-624
36 236-136	236-436							
48 236-148	236-448							

Accessories, Series 236 (Marker strips see section 9)



Operating tool ④,

plastic 236-332

metal 236-335

End plates, snap-on type, 1 mm/0.039 in thick



Additional item numbers for coloured terminal strips

black .../...-004

blue .../...-006

dark grey .../...-008

light grey .../...-009

orange .../...-012

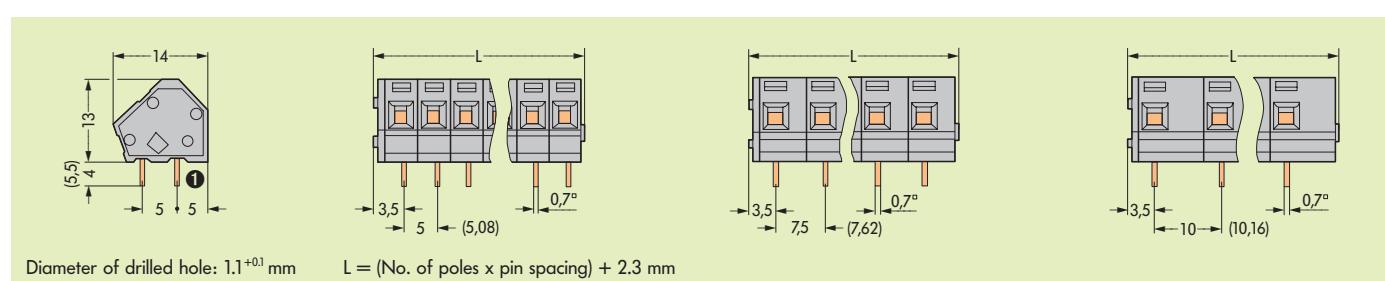
light green .../...-017

green .../...-023

Ex Terminal blocks for Ex e II applications
see General Catalogue W4, Volume 2

② Suitable for Ex i applications
(only for pin spacings 7.5/7.62 mm/0.3 in
and 10/10.16 mm/0.4 in)

Dimensions (Adjustment of pin spacing is made by pulling on the end blocks so that they expand to satisfy the hole centers required.)



* You can find approvals on the Internet at www.wago.com. Technical explanations and abbreviations see page 10.2.

① solder pin rear ③ for factory wiring of terminal strips

WAGO®

Double Deck and Triple Deck PCB Terminal Strips 2.5 mm²

Pin Spacings 5 mm/0.197 and 5.08 mm/0.2 in

Series 736 and 737

Pin spacing 5 mm / 0.197 in	
Pin spacing 5.08 mm / 0.2 in	
0.08 – 2.5 mm ²	AWG 28 – 12 **
250 V/4 kV/3 ①, 12 A	300 V, 10 A
500 V/4 kV/2 ①, 12 A	300/600 V, 10 A ②
5 – 6 mm / 0.22 in	

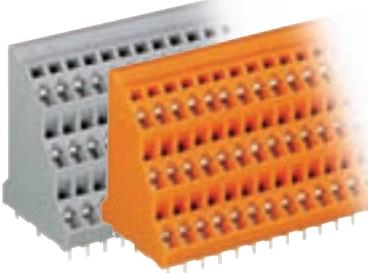
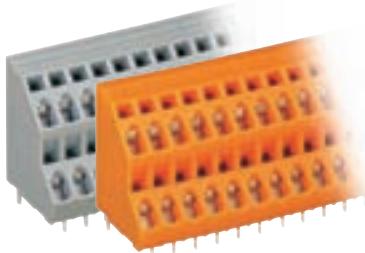
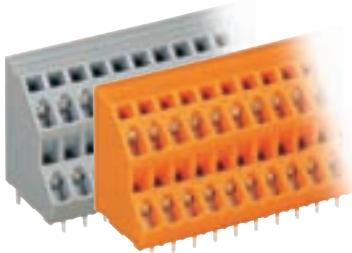
* ① CCA ② GL BV ③ ABS

Pin spacing 5 mm / 0.197 in	
Pin spacing 5.08 mm / 0.2 in	
0.08 – 2.5 mm ²	AWG 28 – 12 **
250 V/4 kV/3 ①, 12 A	300 V, 10 A
500 V/4 kV/2 ①, 12 A	300/600 V, 10 A ②
5 – 6 mm / 0.22 in	

* ① CCA ② GL BV ③ ABS

Pin spacing 5 mm / 0.197 in	
Pin spacing 5.08 mm / 0.2 in	
0.08 – 2.5 mm ²	AWG 28 – 12 **
250 V/4 kV/3 ①, 12 A	300 V, 10 A
500 V/4 kV/2 ①, 12 A	300/600 V, 10 A ②
5 – 6 mm / 0.22 in	

* ① CCA ② GL BV ③ ABS



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.
Double deck terminal strips,			Double deck terminal strips,					
2 solder pins in line			2 solder pins staggered by half the pin spacing					
Pin spacing 5 mm	5.08 mm		Pin spacing 5 mm	5.08 mm		Pin spacing 5 mm	5.08 mm	
grey	orange		grey	orange		grey	orange	
2 x 2	736-102	736-302	2 x 2	736-202	736-402	2 x 3	737-102	737-302
3 x 2	736-103	736-303	3 x 2	736-203	736-403	3 x 3	737-103	737-303
4 x 2	736-104	736-304	4 x 2	736-204	736-404	4 x 3	737-104	737-304
6 x 2	736-106	736-306	6 x 2	736-206	736-406	6 x 3	737-106	737-306
8 x 2	736-108	736-308	8 x 2	736-208	736-408	8 x 3	737-108	737-308
12 x 2	736-112	736-312	12 x 2	736-212	736-412	12 x 3	737-112	737-312
16 x 2	736-116	736-316	16 x 2	736-216	736-416	16 x 3	737-116	737-316
24 x 2	736-124	736-324	24 x 2	736-224	736-424	24 x 3	737-124	737-324
For other lengths, please contact factory			For other lengths, please contact factory					

Accessories, Series 736 and 737

Marker cards, 80 self-adhesive strips per card



Marking

1 – 16 (160x)

17 – 32 (160x)

33 – 48 (160x)

1 – 32 (80x)

Pin spacing 5 mm

210-332/0500-0202

210-332/0500-0204

210-332/0500-0206

210-332/0500-0205

Pin spacing 5.08 mm

210-332/0508-0202

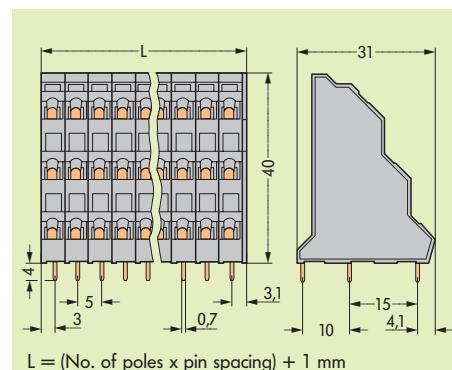
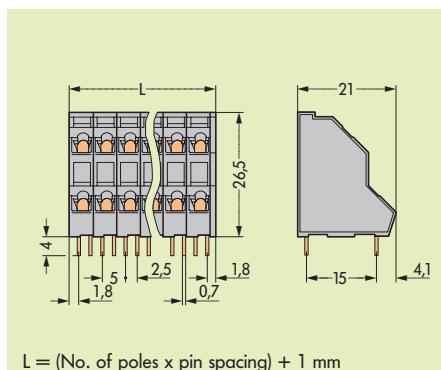
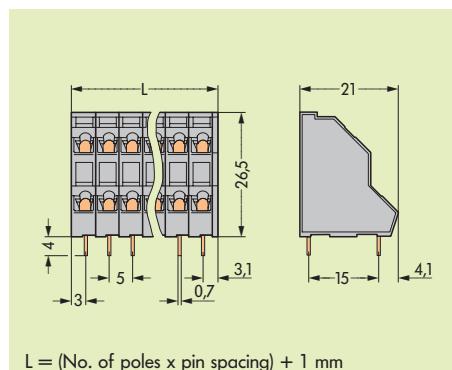
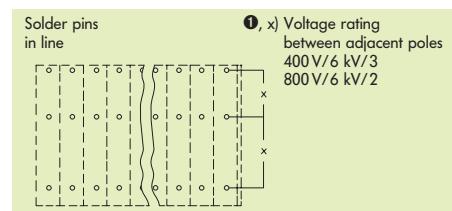
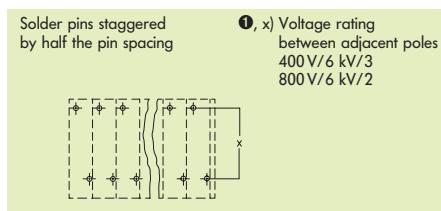
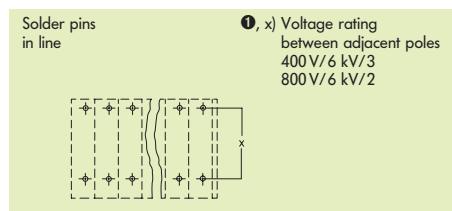
210-332/0508-0204

210-332/0508-0206

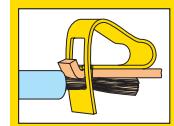
210-332/0508-0205

For direct printing, please contact factory

Dimensions **Diameter of drilled hole: 1.3^{+0.1} mm**

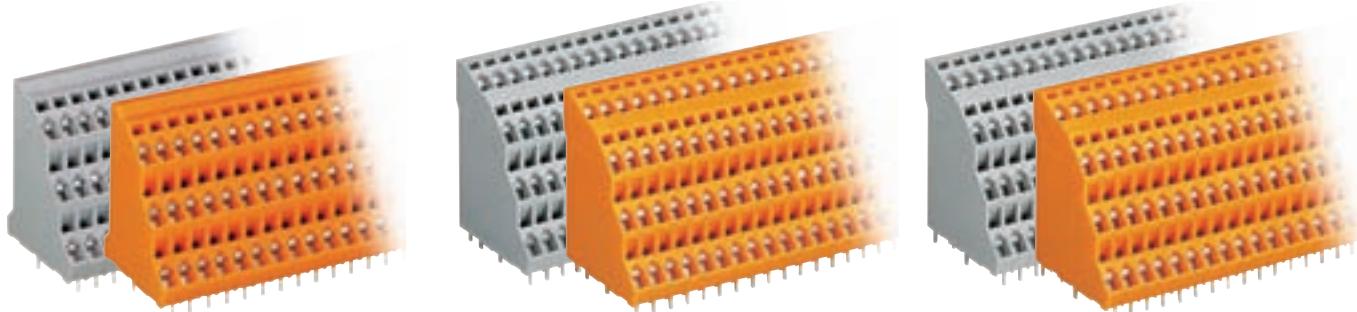


Triple Deck and Quadruple Deck Terminal Strips 2.5 mm² Pin Spacings 5 mm/0.197 in and 5.08 mm/0.2 in Series 737 and 738



7
9

Pin spacing 5 mm / 0.197 in	Pin spacing 5 mm / 0.197 in	Pin spacing 5 mm / 0.197 in
Pin spacing 5.08 mm / 0.2 in	Pin spacing 5.08 mm / 0.2 in	Pin spacing 5.08 mm / 0.2 in
0.08 – 2.5 mm ² 250 V/4 kV/3 ①, 12 A 500 V/4 kV/2 ①, 12 A 5 – 6 mm / 0.22 in	0.08 – 2.5 mm ² 250 V/4 kV/3 ①, 10 A 500 V/4 kV/2 ①, 10 A 5 – 6 mm / 0.22 in	0.08 – 2.5 mm ² 250 V/4 kV/3 ①, 10 A 500 V/4 kV/2 ①, 10 A 5 – 6 mm / 0.22 in
AWG 28 – 12 ** 300 V, 10 A 300/600 V, 10 A ② * ④ CCA ⑤ GL BV NV ⑥	AWG 28 – 12 ** 300 V, 10 A ② * ④ CCA ⑤ GL BV NV ⑥	AWG 28 – 12 ** 300 V, 10 A ② * ④ CCA ⑤ GL BV NV ⑥
* ④ CCA ⑤ GL BV NV ⑥		



No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.	No. of poles	Item No.	Item No.
Triple deck terminal strips, solder pins for deck 2 staggered by half the pin spacing			Quadruple deck terminal strips, 4 solder pins in line			Quadruple deck terminal strips, solder pins for deck 2 and 4 staggered by half the pin spacing		
Pin spacing 5 mm 5.08 mm grey orange			Pin spacing 5 mm 5.08 mm grey orange			Pin spacing 5 mm 5.08 mm grey orange		
2 x 3	737-202	737-402	2 x 4	738-102	738-302	2 x 4	738-202	738-402
3 x 3	737-203	737-403	3 x 4	738-103	738-303	3 x 4	738-203	738-403
4 x 3	737-204	737-404	4 x 4	738-104	738-304	4 x 4	738-204	738-404
6 x 3	737-206	737-406	6 x 4	738-106	738-306	6 x 4	738-206	738-406
8 x 3	737-208	737-408	8 x 4	738-108	738-308	8 x 4	738-208	738-408
12 x 3	737-212	737-412	12 x 4	738-112	738-312	12 x 4	738-212	738-412
16 x 3	737-216	737-416	16 x 4	738-116	738-316	16 x 4	738-216	738-416
24 x 3	737-224	737-424	24 x 4	738-124	738-324	24 x 4	738-224	738-424
For other lengths, please contact factory			For other lengths, please contact factory			For other lengths, please contact factory		

Accessories, Series 737 and 738

Marker cards, 80 self-adhesive strips per card

	Marking	Pin spacing 5 mm	Pin spacing 5.08 mm
1 – 16 (160x)		210-332/0500-0202	210-332/0508-0202
17 – 32 (160x)		210-332/0500-0204	210-332/0508-0204
33 – 48 (160x)		210-332/0500-0206	210-332/0508-0206
1 – 32 (80x)		210-332/0500-0205	210-332/0508-0205

For direct printing, please contact factory

Dimensions Diameter of drilled hole: 1.3^{+0.1} mm

7

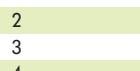
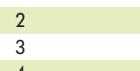
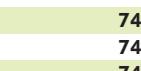
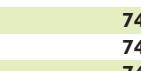
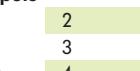
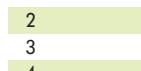
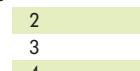
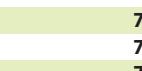
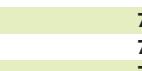
	Solder pins for deck 2 and 4 staggered by half the pin spacing ①, x) Voltage rating between adjacent poles 400V/6 kV/3 800V/6 kV/2		Solder pins in line ① Voltage rating between adjacent poles x 400V/6 kV/3 800V/6 kV/2 y 250V/4 kV/3 500V/4 kV/2		Solder pins for deck 2 and 4 staggered by half the pin spacing ① Voltage rating between adjacent poles x 400V/6 kV/3 800V/6 kV/2 y 250V/4 kV/3 500V/4 kV/2
--	---	--	--	--	---

	$L = (\text{No. of poles} \times \text{pin spacing}) + 1 \text{ mm}$		$L = (\text{No. of poles} \times \text{pin spacing}) + 1 \text{ mm}$
--	--	--	--

Modular PCB Terminal Blocks and Terminal Strips 4 mm²

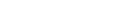
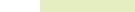
Pin Spacings 5 mm/0.197 in, 7.5 mm/0.295 in and 10 mm/0.394 in, Series 745

Pin spacing 5 mm / 0.197 in 0.08 – 4 mm ² 250 V/4 kV/3 20 A	Pin spacing 7.5 mm / 0.295 in 0.08 – 4 mm ² 500 V/6 kV/3 20 A	Pin spacing 10 mm / 0.394 in 0.08 – 4 mm ² 630 V/8 kV/3 20 A
 8 – 9 mm / 0.33 in	 8 – 9 mm / 0.33 in	 8 – 9 mm / 0.33 in

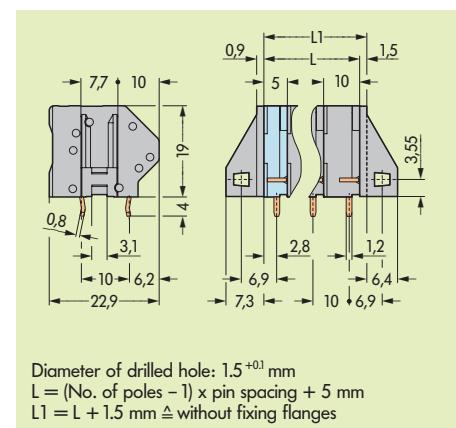
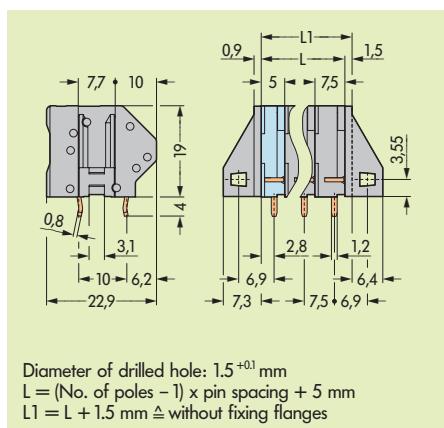
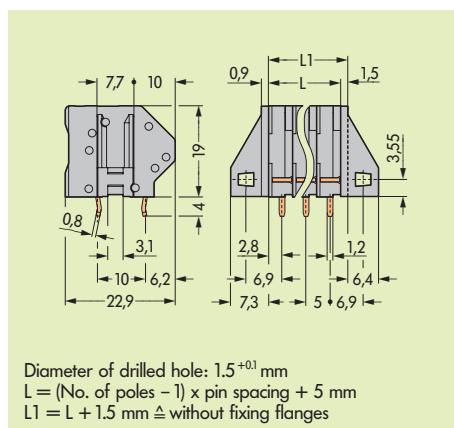
Colour	Item No.	Colour	Item No.	Colour	Item No.
Modular terminal blocks, 2 solder pins/pole		Modular terminal blocks, 2 solder pins/pole		Modular terminal blocks, 2 solder pins/pole	
grey 	745-801 	grey 	745-811 	grey 	745-821 
light grey 	745-803 	light grey 	745-813 	light grey 	745-823 
blue 	745-804 	blue 	745-814 	blue 	745-824 
green-yellow 	745-807 	green-yellow 	745-817 	green-yellow 	745-827 
light green 	745-808 	light green 	745-818 	light green 	745-828 
No. of poles	Item No.	No. of poles	Item No.	No. of poles	Item No.
Terminal strips without fixing flanges, grey, 2 solder pins/pole		Terminal strips without fixing flanges, grey, 2 solder pins/pole		Terminal strips without fixing flanges, grey, 2 solder pins/pole	
2 	745-102	2 	745-152	2 	745-202
3 	745-103	3 	745-153	3 	745-203
4 	745-104	4 	745-154	4 	745-204
5 	745-105	5 	745-155	5 	745-205
:	:	:	:	:	:
10 	745-110	10 	745-160	10 	745-210
12 	745-112	12 	745-162	12 	745-212

Accessories, Series 745

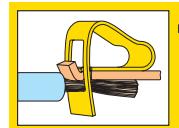
appropriate marking system **WMB/Mini-WSB**

	End plate, snap-on type, 1.5 mm/0.059 in thick, grey 745-100		End plate, snap-on type, 1.5 mm/0.059 in thick, grey 745-100		End plate, snap-on type, 1.5 mm/0.059 in thick, grey 745-100
	End plate with fixing flange grey 745-140		End plate with fixing flange grey 745-140		End plate with fixing flange grey 745-140
	End plate with fixing flange grey 745-145		End plate with fixing flange grey 745-145		End plate with fixing flange grey 745-145
	Test plug, w. cable 500 mm/17.7" 2 mm/0.079 in Ø, red 210-136		Screwdriver, with partially insulated shaft (3.5 x 0.5) mm 210-620		Test plug, w. cable 500 mm/17.7" 2 mm/0.079 in Ø, red 210-136
	Comb type jumper bar 1 to 3 745-181		Comb type jumper bar 1 to 3 745-191		Comb type jumper bar 1 to 3 745-281
	2-way 745-182		2-way 745-192		2-way 745-282
	3-way 745-183		3-way 745-193		3-way 745-283
	4-way 745-184		4-way 745-194		4-way 745-284
	5-way 745-185		5-way 745-195		5-way 745-285
	10-way 745-180		10-way 745-190		10-way 745-280

Dimensions (in mm)



Modular PCB Terminal Blocks and Terminal Strips 6 mm² Pin Spacing 7.5 mm/0.295 in and 10 mm/0.394 in, Series 745



7

11

Pin spacing 7.5 mm / 0.295 in 0.2 – 6 mm ² 400 V/6 kV/3 32 A 11 – 12 mm / 0.45 in <small>* cULus ENEC</small>	Pin spacing 10 mm / 0.394 in 0.2 – 6 mm ² 630 V/8 kV/3 32 A 11 – 12 mm / 0.45 in <small>* cULus ENEC</small>	
--	---	--

Colour	Item No.	Colour	Item No.	
Modular terminal blocks, 2 solder pins/pole		Modular terminal blocks, 2 solder pins/pole		
grey light grey blue green-yellow light green	745-831 745-833 745-834 745-837 745-838	grey light grey blue green-yellow light green	745-841 745-843 745-844 745-847 745-848	
No. of poles	Item No.	No. of poles	Item No.	
Terminal strips without fixing flanges, grey, 2 solder pins/pole		Terminal strips without fixing flanges, grey, 2 solder pins/pole		Additional item numbers for coloured terminal strips and end plates
2 3 4 5 : 10 12	745-302 745-303 745-304 745-305 : 745-310 745-312	2 3 4 5 : 10 12	745-352 745-353 745-354 745-355 : 745-360 745-362	blue .../...-006 light grey .../...-009 green-yellow .../...-016 light green .../...-017



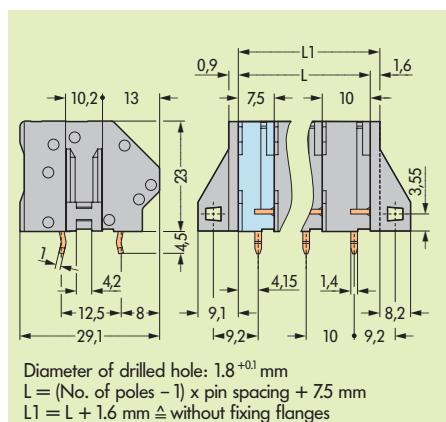
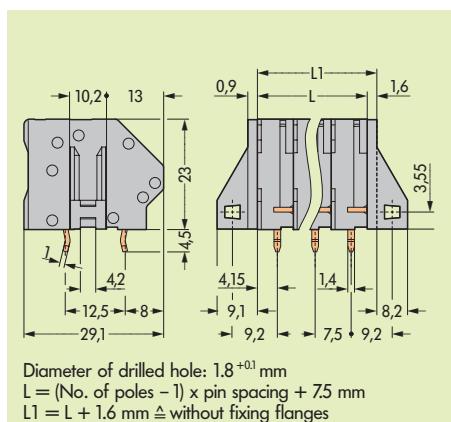
Accessories, Series 745

appropriate marking system **WMB/Mini-WSB**

	End plate, snap-on type, 1.5 mm/0.059 in thick, grey 745-300		End plate, snap-on type, 1.5 mm/0.059 in thick, grey 745-300	Ordering examples
	End plate with fixing flange grey 745-340		End plate with fixing flange grey 745-340	Terminal strip, pin spacing 7.5 mm 8 poles, light grey: 745-308/000-009
	End plate with fixing flange grey 745-345		End plate with fixing flange grey 745-345	Terminal strip with fixing flanges, pin spacing 10 mm 12 poles, blue: 745-362/005-006
	Test plug, w. cable 500 mm/17.7" 2 mm/0.079 in Ø, red 210-136 2.3 mm/0.091 in Ø, yel. 210-137		Screwdriver, with partially insulated shaft (5.5 x 0.8) mm 210-621	
	Comb type jumper bar 1 to 3 745-381		Comb type jumper bar 1 to 3 745-391	
	2-way 745-382		2-way 745-392	
	3-way 745-383		3-way 745-393	
	4-way 745-384		4-way 745-394	
	5-way 745-385		5-way 745-395	
	10-way 745-380		10-way 745-390	

Suitable for Ex i applications
(only for pin spacings 7.5 mm/0.295 in and 10 mm/0.394 in)

Dimensions (in mm)



Modular PCB Terminal Blocks and Terminal Strips 16 mm² Pin Spacing 10 mm/0.394 in, 15 mm/0.591 in and 20 mm/0.787 in, Series 745

Pin spacing 10 mm / 0.394 in
0.2 – 16 mm² | AWG 24 – 6
250 V/4 kV/3 | **300 V, 65 A**
76 A ①
12 – 13 mm / 0.49 in

* ENEC

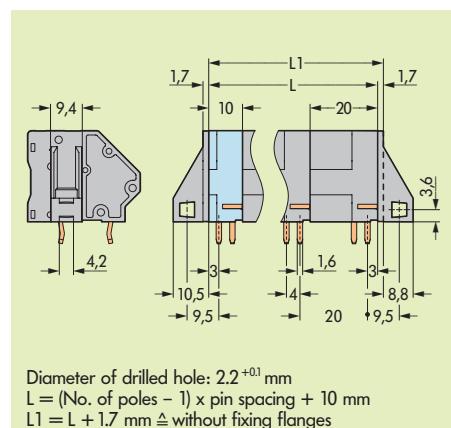
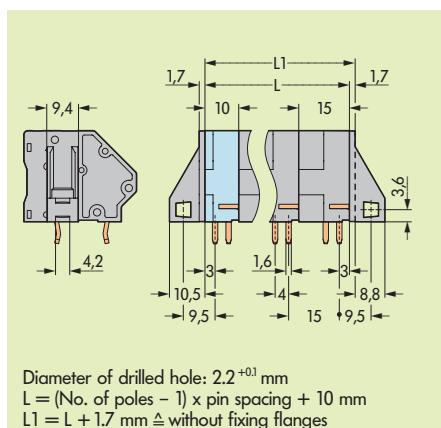
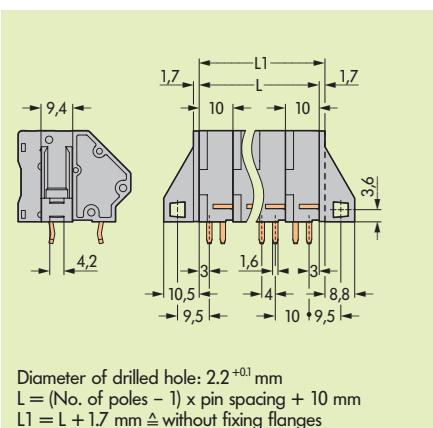
Pin spacing 15 mm / 0.591 in
0.2 – 16 mm² | AWG 24 – 6
630 V/8 kV/3 | **300 V, 65 A**
76 A ①
12 – 13 mm / 0.49 in

* ENEC

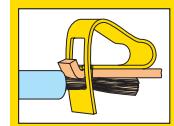
Pin spacing 20 mm / 0.787 in
0.2 – 16 mm² | AWG 24 – 6
1000 V/12 kV/3 | **600 V, 65 A**
76 A ①
12 – 13 mm / 0.49 in

* ENEC

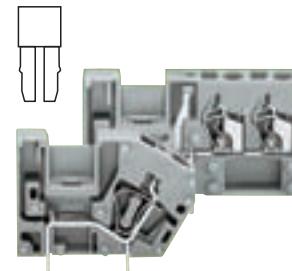
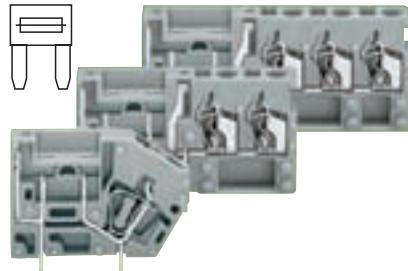
Colour	Item No.	Colour	Item No.	Colour	Item No.
Modular terminal blocks, 2 solder pins/pole		Modular terminal blocks, 2 solder pins/pole		Modular terminal blocks, 2 solder pins/pole	
grey 745-851/006-000		grey 745-871/006-000		grey 745-881/006-000	
light grey 745-853/006-000		light grey 745-873/006-000		light grey 745-883/006-000	
blue 745-854/006-000		blue 745-874/006-000 ②		blue 745-884/006-000 ②	
green-yel. 745-857/006-000		green-yel. 745-877/006-000		green-yel. 745-887/006-000	
light green 745-858/006-000		light green 745-878/006-000		light green 745-888/006-000	
Terminal strips without fixing flanges, grey, 4 solder pins/pole		Terminal strips without fixing flanges, grey, 4 solder pins/pole		Terminal strips without fixing flanges, grey, 4 solder pins/pole	
2 745-502/006-000		2 745-602/006-000		2 745-652/006-000	
3 745-503/006-000		3 745-603/006-000		3 745-653/006-000	
4 745-504/006-000		4 745-604/006-000		4 745-654/006-000	
5 745-505/006-000		5 745-605/006-000		5 745-655/006-000	
Accessories, Series 745	appropriate marking system WMB/Mini-WSB	② Suitable for Ex i applications (only for pin spacings 15 mm/0.591 in and 20 mm/0.787 in)			
	End plate, snap-on type, 1.7 mm/0.059 in thick, grey 745-500		End plate, snap-on type, 1.7 mm/0.059 in thick, grey 745-500		End plate, snap-on type, 1.7 mm/0.059 in thick, grey 745-500
	End plate with fixing flange grey 745-540		End plate with fixing flange grey 745-540		End plate with fixing flange grey 745-540
	End plate with fixing flange grey 745-545		End plate with fixing flange grey 745-545		End plate with fixing flange grey 745-545
	Test plug, w. cable 500 mm/1'7" 2 mm/0.079 in Ø, red 210-136 2.3 mm/0.091 in Ø, yel. 210-137		Screwdriver, with partially insulated shaft (5.5 x 0.8) mm 210-621		Test plug, w. cable 500 mm/1'7" 2 mm/0.079 in Ø, red 210-136 2.3 mm/0.091 in Ø, yel. 210-137
	Comb type jumper bar 1 to 3 745-581		Comb type jumper bar 1 to 3 745-631		Comb type jumper bar 1 to 3 745-681
	2-way 745-582		2-way 745-632		2-way 745-682
	3-way 745-583		3-way 745-633		3-way 745-683
	4-way 745-584		4-way 745-634		4-way 745-684
	5-way 745-585		5-way 745-635		5-way 745-685
Dimensions (in mm)					



Modular PCB Fuse and Disconnect Terminal Blocks; Modular PCB Terminal Blocks with Jumpering Possibility 2.5 mm², Pin Spacings 5 mm/0.197 in and 5.08 mm/0.2 in; Series 742

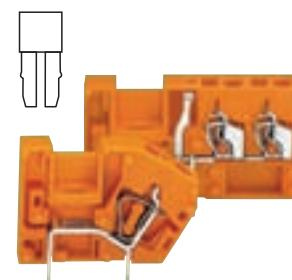
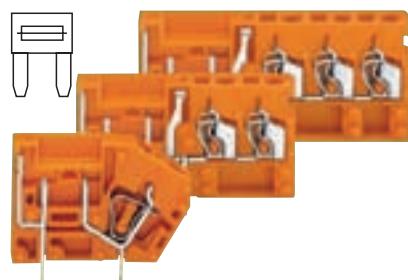


Pin spacing 5 mm / 0.197 in 0.08 – 2.5 mm ² 250 V/4 kV/3, 16 A 500 V/4 kV/2, 16 A 8 – 9 mm / 0.33 in * CCA GL BV NV	Pin spacing 5 mm / 0.197 in 0.08 – 2.5 mm ² 250 V/4 kV/3, 15 A 300 V, 10 A 500 V/4 kV/2, 15 A 300 V, 16 A 8 – 9 mm / 0.33 in *	Pin spacing 5 mm / 0.197 in 0.08 – 2.5 mm ² 250 V/4 kV/3, 16 A 500 V/4 kV/2, 16 A 8 – 9 mm / 0.33 in * CCA GL BV NV
---	---	---



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Modular 1-conductor disconnect/test term. block, 2 solder pins/pole, disconnect link orange	Modular 1-conductor fuse terminal block, 2 solder pins/pole	Modular 1-conductor terminal block with jumpering possibility, 2 solder pins/pole						
grey 742-101	grey 742-111	grey 742-121						
384	384	384						
Modular 2-conductor disconnect/test term. block	Modular 2-conductor fuse terminal block	Modular 2-conductor terminal blocks						
grey 742-151	grey 742-161	grey 742-171						
200 (4 x 50)	200 (4 x 50)	200 (4 x 50)						
Modular 3-conductor disconnect/test term. block	Modular 3-conductor fuse terminal block	Modular 3-conductor terminal blocks						
grey 742-153	grey 742-163	grey 742-174						
100 (2 x 50)	100 (2 x 50)	100 (2 x 50)						
		green-yellow 742-178						
		200 (4 x 50)						

Pin spacing 5.08 mm / 0.2 in	Pin spacing 5.08 mm / 0.2 in	Pin spacing 5.08 mm / 0.2 in
------------------------------	------------------------------	------------------------------



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Modular 1-conductor disconnect/test term. block, 2 solder pins/pole, disconnect link white	Modular 1-conductor fuse terminal block, 2 solder pins/pole	Modular 1-conductor terminal block with jumpering possibility, 2 solder pins/pole						
orange 742-106	orange 742-116	orange 742-126						
384	384	384						
Modular 2-conductor disconnect/test term. block	Modular 2-conductor fuse terminal block	Modular 2-conductor terminal blocks						
orange 742-156	orange 742-166	orange 742-176						
200 (4 x 50)	200 (4 x 50)	200 (4 x 50)						
Modular 3-conductor disconnect/test term. block	Modular 3-conductor fuse terminal block							
orange 742-158	orange 742-168							
100 (2 x 50)	100 (2 x 50)							

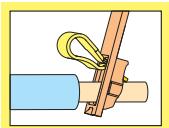
Accessories, Series 742 appropriate marking system **Mini-WSB/marker strips** (see section 9)

End plate, snap-on type, for 1-conductor term. blocks, 1.5 mm/0.059 in thick grey 742-100 300 (3 x 100) blue 742-400 300 (3 x 100) orange 742-600 300 (3 x 100) green-yel. 742-800 300 (3 x 100)	End plate, snap-on type, for 2-conductor term. blocks, 1.5 mm/0.059 in thick grey 742-150 300 (3 x 100) blue 742-450 300 (3 x 100) orange 742-650 300 (3 x 100) green-yel. 742-850 300 (3 x 100)	End plate, snap-on type, for 3-conductor term. blocks, 1.5 mm/0.059 in thick grey 742-152 300 (3 x 100) orange 742-651 300 (3 x 100)
Test plug, w. cable 500 mm/17.7" 2 mm/0.079 in Ø, red 210-136 2.3 mm/0.091 in Ø, yel. 210-137	Blade-type fuse cartridges, acc. to DIN 72581-3f not offered by WAGO	Adjacent jumper, insulated, I _N 24 A grey 280-402 200 (8 x 25)

Please find the entire product range in our General Catalogue W4, Volume 2. More information at www.wago.com.

② in individual arrangement 15 A, in group arrangement 10 A, from 42 V up protection against direct contact must be observed.

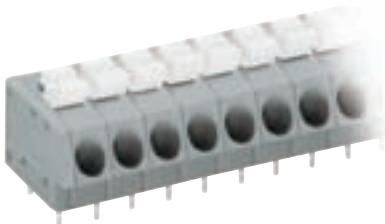
PCB Terminal Strips with CAGE CLAMP® S Connection 2.5 mm² Pin Spacings 5 mm/0.197 in and 7.5 mm/0.295 in; Series 804



Pin spacing 5 mm / 0.197 in	Pin spacing 7.5 mm / 0.295 in
0.5–2.5 mm ² s+f-st" AWG 20 – 12 "sol.+str."	0.5–2.5 mm ² s+f-st" AWG 20 – 12 "sol.+str"
250 V/4 kV/3; 16 A	300 V, 10 A
500 V/4 kV/2; 16 A	800 V/6 kV/2; 16 A
10 – 11 mm / 0.41 in	10 – 11 mm / 0.41 in

* ENEC

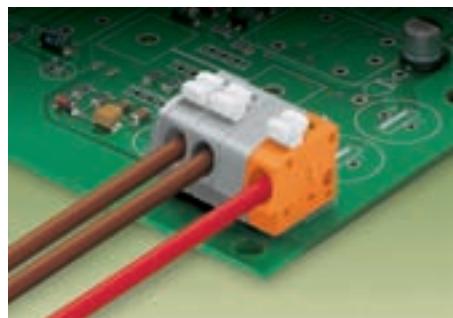
Pin spacing 5 mm / 0.197 in	Pin spacing 7.5 mm / 0.295 in
0.5–2.5 mm ² s+f-st" AWG 20 – 12 "sol.+str."	0.5–2.5 mm ² s+f-st" AWG 20 – 12 "sol.+str"
400 V/6 kV/3; 16 A	300 V, 10 A
800 V/6 kV/2; 16 A	
*	

Application notes**Accessories**

Connection of solid wires:
Fully insert stripped wire into the terminal block



Connection/removal of fine-stranded wires:
Open the clamping unit using push button and fully insert stripped wire into the terminal block



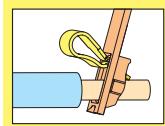
Terminal blocks of different colours with/without spacers are available upon request

No. of poles	Item No.	Pack.-unit pcs	No. of poles	Item No.	Pack.-unit pcs			
1-conductor terminal strips with push button,								
2	804-102	420 (4x105)	2	804-302	320 (4x85)			
3	804-103	280 (4x 70)	3	804-303	220 (4x55)			
4	804-104	220 (4x 55)	4	804-304	160 (4x40)			
5	804-105	180 (4x 45)	5	804-305	120 (4x30)			
6	804-106	140 (4x 35)	6	804-306	100 (4x25)			
7	804-107	120 (4x 30)	7	804-307	80 (4x20)			
8	804-108	100 (4x 25)	8	804-308	80 (4x20)			
9	804-109	100 (4x 25)	9	804-309	60 (4x15)			
10	804-110	80 (4x 20)	10	804-310	60 (4x15)			
11	804-111	80 (4x 20)	11	804-311	60 (4x15)			
12	804-112	60 (4x 15)	12	804-312	40 (4x10)			
13	804-113	60 (4x 15)						
14	804-114	60 (4x 15)						
15	804-115	60 (4x 15)						
16	804-116	40 (4x 10)						
Pin spacing 10 mm (with spacer) on request								
Additional item numbers for coloured terminal strips								
red	.../000-005		Ordering example					
blue	.../000-006		Terminal strip, pin spacing 5 mm, 8 poles, orange					
orange	.../000-012		2 solder pins staggered 804-108/000-012					
light green	.../000-017							

2-Conductor Female Socket Strips with CAGE CLAMP®S Connection 1.5 mm² Pin Spacing 5 mm/0.197 in, Series 806

7

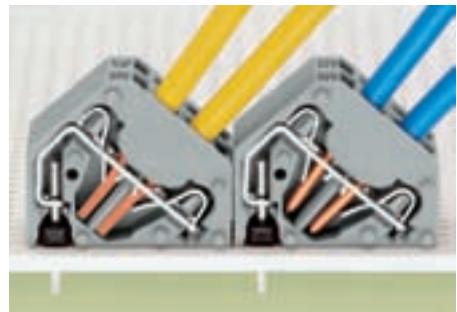
15



Pin spacing 5 mm / 0.197 in	Pin spacing 5 mm / 0.197 in
2 x 0.2 – 1.5 mm ²	2 x AWG 24 – 16
250 V/2.5 kV/3	300 V, 10 A
10 A	
9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in
* @CCA	* @CCA

Pin spacing 5 mm / 0.197 in	Pin spacing 5 mm / 0.197 in
2 x 0.2 – 1.5 mm ²	2 x AWG 24 – 16
250 V/2.5 kV/3	300 V, 10 A
10 A	
9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in
* @CCA	* @CCA

Application notes



Connection of solid wires:
Fully insert stripped wire into the terminal block

Connection/removal of fine-stranded wires:
Open the clamping unit using a screwdriver (210-620) and fully insert stripped wire into the terminal block

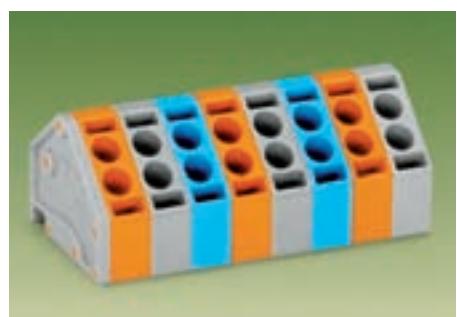


Easy exchange of the PCB through socket strip removal

No. of poles	Item No.	No. of poles	Item No.
Female socket strips, grey		Female socket strips with removal aid, grey	
for solder pin strip		for solder pin strip	
2	806-102	2	806-202
3	806-103	3	806-203
4	806-104	4	806-204
5	806-105	5	806-205
6	806-106	6	806-206
7	806-107	7	806-207
8	806-108	8	806-208
9	806-109	9	806-209
10	806-110	10	806-210
11	806-111	11	806-211
12	806-112	12	806-212
For other lengths, please contact factory		For other lengths, please contact factory	
Additional item numbers for coloured terminal strips		Additional item numbers for coloured terminal strips	
blue	.../000-006	blue	.../000-006
orange	.../000-012	orange	.../000-012

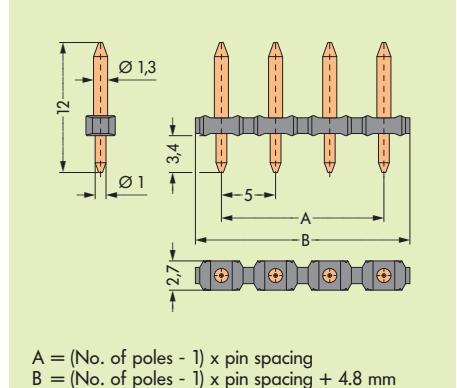
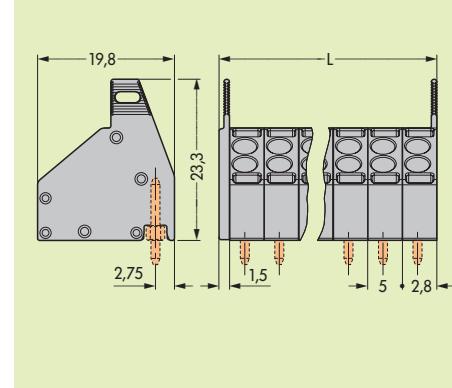
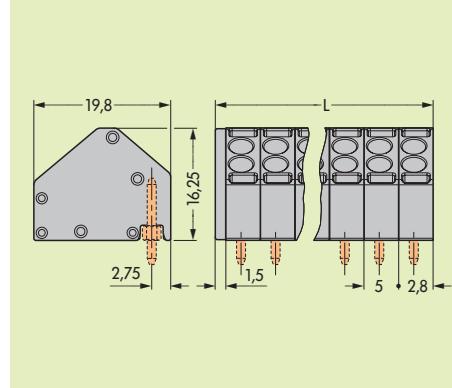
Accessories, Series 806

Solder pin strip, pin 1.3 mm/0.051 in Ø solder pin 1 mm/0.039 in Ø 2 to 12 poles 806-902 to 806-912	Solder pin strip, pin 1.3 mm/0.051 in Ø solder pin 1 mm/0.039 in Ø 2 to 12 poles 806-902 to 806-912
Marker cards, 80 self-adhesive strips per card 1 – 16 (160 x) 210-332/0500-0202 1 card Direct printing upon request	Marker cards, 80 self-adhesive strips per card 1 – 16 (160 x) 210-332/0500-0202 1 card Direct printing upon request



Coloured terminal strips on request

Dimensions (in mm) Diameter of drilled hole: 1.3 mm L = No. of poles x pin spacing + 1.5 mm



$$A = (\text{No. of poles} - 1) \times \text{pin spacing}$$

$$B = (\text{No. of poles} - 1) \times \text{pin spacing} + 4.8 \text{ mm}$$

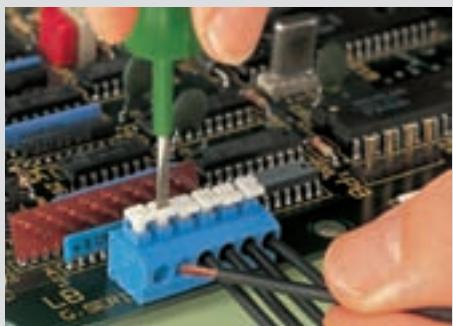
WAGO®

Description and Handling PCB Terminal Strips with Push-Wire Connection Series 235, 250 and 253

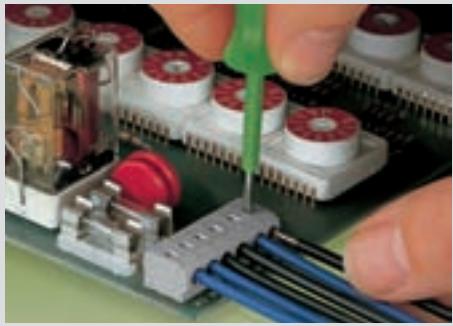
Series 235



Connection of conductors – insertion
Terminal blocks without push button



Fine-stranded wire, tip bonded
Connection/removal using push button



Removal of conductors without push button



Example of application – terminal strip for
field connections

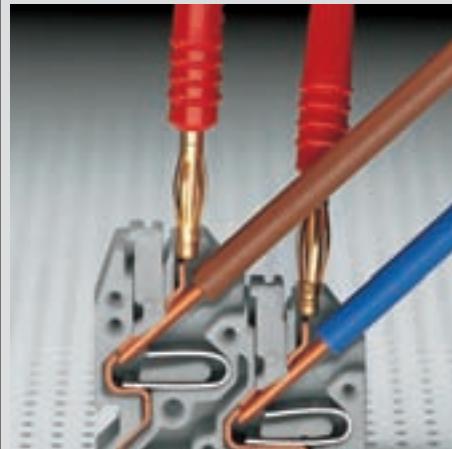
Series 250



Marking with self-adhesive marker strips
or direct printing.
Terminal strips mixed in different colours
with/without spacer – contact factory



Space saving wiring.
Connection of conductors – insertion

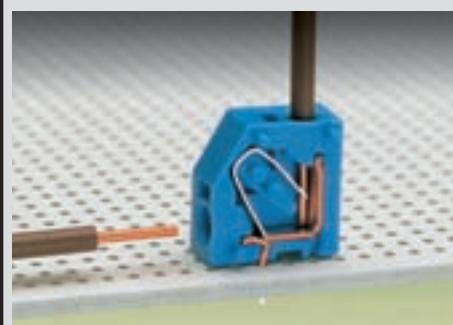


Testing with test plug 2 mm/0.079 in Ø

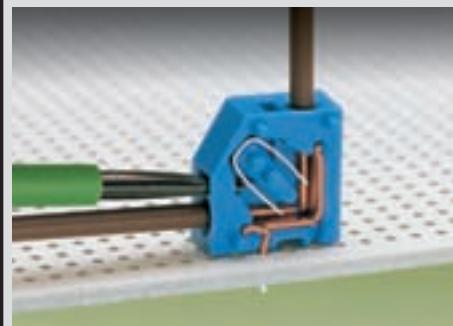


solid

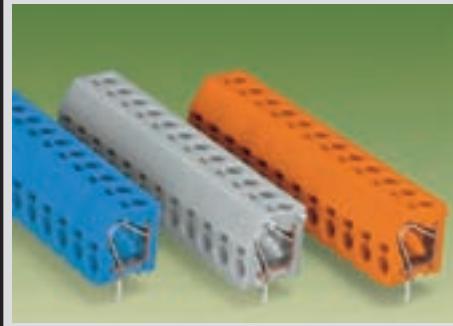
Series 253



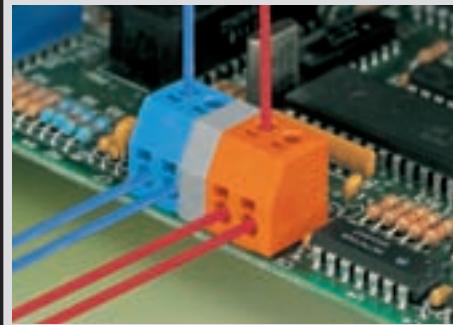
Connection of conductors – insertion
Front-entry / side-entry wiring



Disconnecting a conductor using a screwdriver
2.5 mm/0.098 in



Terminal strips available in different colours

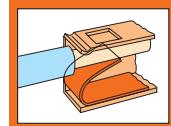


Terminal strips mixed in different colours
with/without spacer – contact factory

The push-wire contact clamps the
following copper wires:

① fine-stranded,
see following pages

Modular PCB Terminal Blocks and Terminal Strips 1.5 mm² Pin Spacing 3.81 mm/0.15 in; Series 235



Pin spacing 3.81 mm / 0.15 in	Pin spacing 3.81 mm / 0.15 in	Pin spacing 3.81 mm / 0.15 in
0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."	0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."	0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."
200 V/4 kV/3, 10 A	300 V, 10 A	200 V/4 kV/3, 10 A
400 V/4 kV/2, 10 A	400 V/4 kV/2, 10 A	400 V/4 kV/2, 10 A
9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in

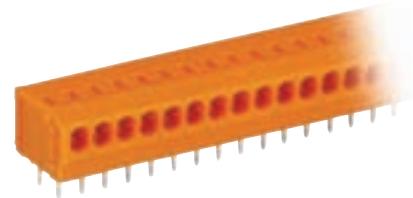
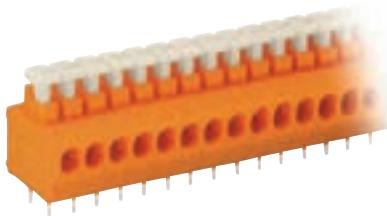
* CCA D GL BV ABS

Pin spacing 3.81 mm / 0.15 in	Pin spacing 3.81 mm / 0.15 in	Pin spacing 3.81 mm / 0.15 in
0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."	0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."	0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."
200 V/4 kV/3, 10 A	300 V, 10 A	200 V/4 kV/3, 10 A
400 V/4 kV/2, 10 A	400 V/4 kV/2, 10 A	400 V/4 kV/2, 10 A
9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in

* CCA D GL BV ABS

Pin spacing 3.81 mm / 0.15 in	Pin spacing 3.81 mm / 0.15 in	Pin spacing 3.81 mm / 0.15 in
0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."	0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."	0.5 – 1.5 mm ² /s ¹ AWG 20–16 "sol."
200 V/4 kV/3, 10 A	300 V, 10 A	200 V/4 kV/3, 10 A
400 V/4 kV/2, 10 A	400 V/4 kV/2, 10 A	400 V/4 kV/2, 10 A
9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in	9 – 10 mm / 0.37 in

* CCA D GL BV ABS

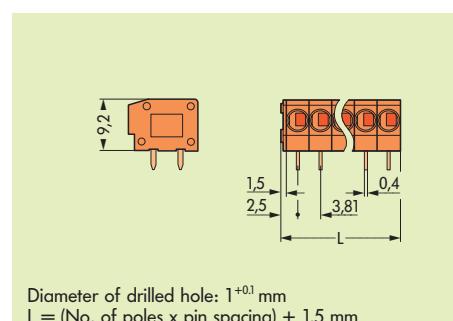
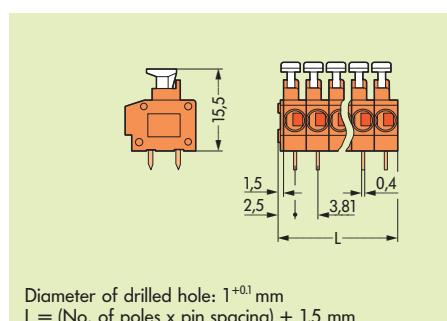
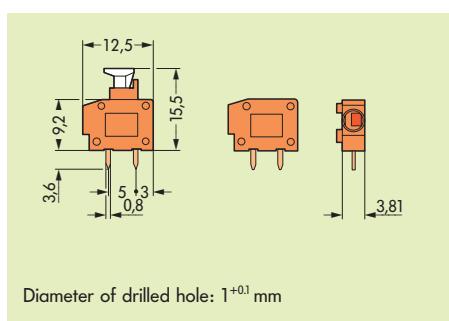


Colour	Item No.	Pack.-unit pcs	No. of poles	Item No.	Pack.-unit pcs	No. of poles	Item No.	Pack.-unit pcs
Single-conductor modular terminal block								
with push button ①, 2 solder pins/pole								
orange	235-101	800 (8 x 100)	2	235-102	520 (4 x 130)	2	235-102/330-000	520 (4 x 130)
red	235-770	800 (8 x 100)	3	235-103	360 (4 x 90)	3	235-103/330-000	360 (4 x 90)
grey	235-771	800 (8 x 100)	4	235-104	280 (4 x 70)	4	235-104/330-000	280 (4 x 70)
dark grey	235-772	800 (8 x 100)	5	235-105	220 (4 x 55)	5	235-105/330-000	220 (4 x 55)
blue	235-774	800 (8 x 100)	6	235-106	180 (4 x 45)	6	235-106/330-000	180 (4 x 45)
white	235-775	800 (8 x 100)	7	235-107	160 (4 x 40)	7	235-107/330-000	160 (4 x 40)
yellow	235-776	800 (8 x 100)	8	235-108	140 (4 x 35)	8	235-108/330-000	140 (4 x 35)
light green	235-777	800 (8 x 100)	9	235-109	120 (4 x 30)	9	235-109/330-000	120 (4 x 30)
black	235-778	800 (8 x 100)	10	235-110	120 (4 x 30)	10	235-110/330-000	120 (4 x 30)
			12	235-112	100 (4 x 25)	12	235-112/330-000	100 (4 x 25)
Single-conductor modular terminal block								
without push button,								
2 solder pins/pole								
orange	235-101/330-000	800 (8 x 100)	16	235-116	60 (4 x 15)	16	235-116/330-000	60 (4 x 15)
			24	235-124	40 (4 x 10)	24	235-124/330-000	40 (4 x 10)
			36	235-136	20 (4 x 5)	36	235-136/330-000	20 (4 x 5)
			48	235-148	20 (4 x 5)	48	235-148/330-000	20 (4 x 5)
Additional item numbers for coloured terminal strips								
yellow	.../000-002	...						
black	.../000-004	...						
red	.../000-005	...						
blue	.../000-006	...						
grey	.../000-007	...						
dark grey	.../000-008	...						
light green	.../000-017	...						
white	.../000-050	...						
For other lengths, please contact factory								
For other lengths, please contact factory								

Accessories, Series 235 (Marker strips see chapter 9)

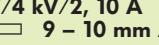
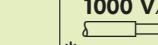
	End plate , snap-on type, 1 mm/0.039 in thick orange 235-600 100	more coloured end plates see page 718	① Connectable conductor cross section (fine-stranded): 0.75 mm ² – 1.5 mm ² 4 A
	Spacer , for doubling the pin spacing orange 235-316 100	 Screwdriver , with partially insulated shaft (2.5 x 0.4) mm 210-619	

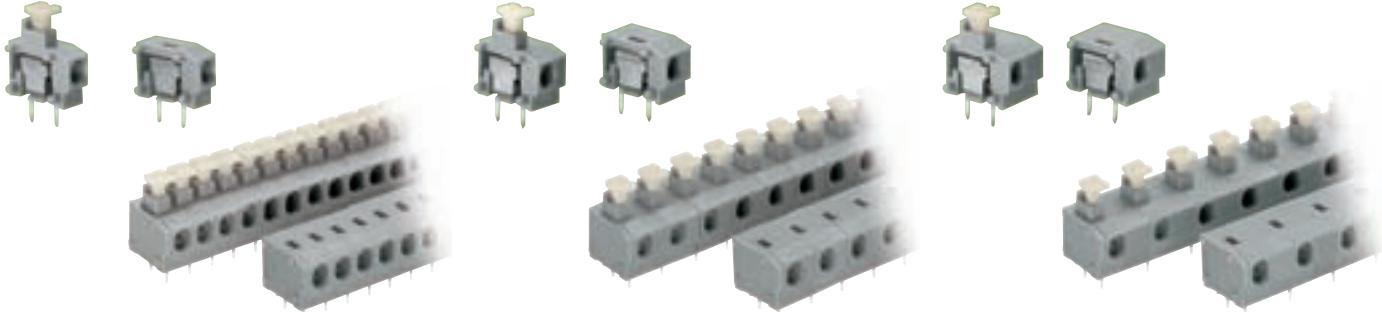
Dimensions (in mm)



Single-Conductor Modular PCB Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacings 5/5.08 mm/0.2 in, 7.5/7.62 mm/0.3 in and 10/10.16 mm/0.4 in

Series 235

Pin spacing 5/5.08 mm / 0.2 in 0.5 – 2.5 mm²"s" ① <small>(1.5 mm²"s" w. push bu.)</small> 250 V/4 kV/3, 10 A 500 V/4 kV/2, 10 A  9 – 10 mm / 0.37 in <small>* ① CCA N ② P ③ GL BV ④ ABS</small>	Pin spacing 7.5/7.62 mm / 0.3 in 0.5 – 2.5 mm²"s" ① <small>(1.5 mm²"s" w. push bu.)</small> 400 V/6 kV/3, 10 A 800 V/6 kV/2, 10 A  9 – 10 mm / 0.37 in <small>* ① CCA N ② P ③ GL BV ④ ABS</small>	Pin spacing 10/10.16 mm / 0.4 in 0.5 – 2.5 mm²"s" ① <small>(1.5 mm²"s" w. push bu.)</small> 500 V/6 kV/3, 10 A 1000 V/6 kV/2, 10 A  9 – 10 mm / 0.37 in <small>* ① CCA N ② P ③ GL BV ④ ABS</small>
--	--	--

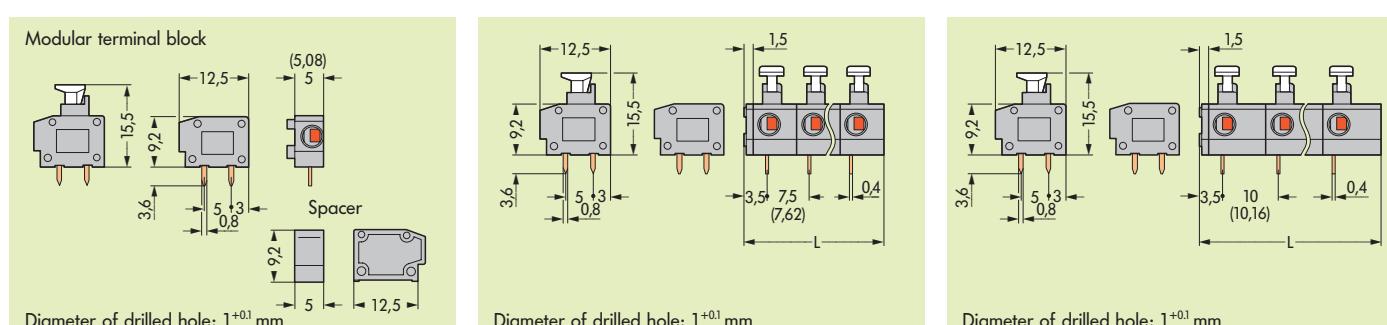


Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.
Single-cond. modular term. bl., 2 solder pins/pole, with push buttons ①	without	235-401	Single-cond. modular term. bl., 2 solder pins/pole, with push buttons ①	without	235-501	Single-cond. modular term. bl., 2 solder pins/pole, with push buttons ①	without	235-801
grey	235-401/331-000	235-401	grey	235-501/331-000	235-501	grey	235-801/331-000	235-801
red	235-740/331-000	235-740	dark grey	235-752/331-000	235-752	dark grey	235-762/331-000	235-762
yellow	235-741/331-000	235-741	light grey	235-753/331-000	235-753	light grey	235-763/331-000	235-763
dark grey	235-742/331-000	235-742	blue	235-754/331-000	235-754	blue	235-764/331-000	235-764
light grey	235-743/331-000	235-743	white	235-755/331-000	235-755	white	235-765/331-000	235-765
blue	235-744/331-000	235-744	orange	235-756/331-000	235-756	orange	235-766/331-000	235-766
white	235-745/331-000	235-745	light green	235-757/331-000	235-757	light green	235-767/331-000	235-767
orange	235-746/331-000	235-746	black	235-758/331-000	235-758	black	235-768/331-000	235-768
light green	235-747/331-000	235-747						
black	235-748/331-000	235-748						
violet	235-749/331-000	235-749						
Single-conductor terminal strips without push buttons, 2 solder pins/pole, grey, standard lengths			Single-conductor terminal strips without push buttons, 2 solder pins/pole, grey, standard lengths			Single-conductor terminal strips without push buttons, 2 solder pins/pole, grey, standard lengths		
2	235-402	12	2	235-502	8	2	235-802	8
3	235-403	16	3	235-503	9	3	235-803	9
:	:	24	4	235-504	10	4	235-804	10
9	235-409	36	5	235-505	12	5	235-805	12
10	235-410	48	6	235-506	16	6	235-806	16
			7	235-507	24	7	235-807	24
			For special assemblies please contact factory			For special assemblies please contact factory		

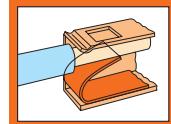
Accessories for modular terminal blocks and terminal strips, Series 235 (Marker strips see chapter 9)

 End plates, snap-on type, 1 mm/0.039 in thick <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>grey</td><td>235-100</td><td>100</td> <td>orange</td><td>235-600</td><td>100</td> </tr> <tr> <td>dark grey</td><td>235-200</td><td>100</td> <td>violet</td><td>235-650</td><td>100</td> </tr> <tr> <td>light grey</td><td>235-300</td><td>100</td> <td>light green</td><td>235-700</td><td>100</td> </tr> <tr> <td>blue</td><td>235-400</td><td>100</td> <td>red</td><td>235-800</td><td>100</td> </tr> <tr> <td>black</td><td>235-500</td><td>100</td> <td>white</td><td>235-850</td><td>100</td> </tr> <tr> <td>yellow</td><td>235-550</td><td>100</td> <td></td><td></td><td></td> </tr> </table>  Spacer, for doubling the pin spacing <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>grey</td><td>235-701</td><td>100</td> </tr> </table>	grey	235-100	100	orange	235-600	100	dark grey	235-200	100	violet	235-650	100	light grey	235-300	100	light green	235-700	100	blue	235-400	100	red	235-800	100	black	235-500	100	white	235-850	100	yellow	235-550	100				grey	235-701	100	 End plates, snap-on type, 1 mm/0.039 in thick <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>grey</td><td>235-100</td><td>100</td> <td>orange</td><td>235-600</td><td>100</td> </tr> <tr> <td>dark grey</td><td>235-200</td><td>100</td> <td>violet</td><td>235-650</td><td>100</td> </tr> <tr> <td>light grey</td><td>235-300</td><td>100</td> <td>light green</td><td>235-700</td><td>100</td> </tr> <tr> <td>blue</td><td>235-400</td><td>100</td> <td>red</td><td>235-800</td><td>100</td> </tr> <tr> <td>black</td><td>235-500</td><td>100</td> <td>white</td><td>235-850</td><td>100</td> </tr> <tr> <td>yellow</td><td>235-550</td><td>100</td> <td></td><td></td><td></td> </tr> </table>  Screwdriver, with partially insulated shaft <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>(3.5 x 0.5) mm</td><td>210-620</td><td>1</td> </tr> </table>	grey	235-100	100	orange	235-600	100	dark grey	235-200	100	violet	235-650	100	light grey	235-300	100	light green	235-700	100	blue	235-400	100	red	235-800	100	black	235-500	100	white	235-850	100	yellow	235-550	100				(3.5 x 0.5) mm	210-620	1	Additional item numbers for coloured terminal strips with push buttons ① <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>blue</td><td>....-006</td><td>2</td> </tr> <tr> <td>dark grey</td><td>....-008</td><td>3</td> </tr> <tr> <td>light grey</td><td>....-009</td><td>4</td> </tr> <tr> <td>orange</td><td>....-012</td><td>5</td> </tr> <tr> <td>light green</td><td>....-017</td><td>6</td> </tr> </table> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> ● Connectable conductor cross section (fine-stranded): 0.25 mm² – 0.5 mm² 2 A 0.75 mm² – 1.5 mm² 6 A </div>	blue-006	2	dark grey-008	3	light grey-009	4	orange-012	5	light green-017	6
grey	235-100	100	orange	235-600	100																																																																																										
dark grey	235-200	100	violet	235-650	100																																																																																										
light grey	235-300	100	light green	235-700	100																																																																																										
blue	235-400	100	red	235-800	100																																																																																										
black	235-500	100	white	235-850	100																																																																																										
yellow	235-550	100																																																																																													
grey	235-701	100																																																																																													
grey	235-100	100	orange	235-600	100																																																																																										
dark grey	235-200	100	violet	235-650	100																																																																																										
light grey	235-300	100	light green	235-700	100																																																																																										
blue	235-400	100	red	235-800	100																																																																																										
black	235-500	100	white	235-850	100																																																																																										
yellow	235-550	100																																																																																													
(3.5 x 0.5) mm	210-620	1																																																																																													
blue-006	2																																																																																													
dark grey-008	3																																																																																													
light grey-009	4																																																																																													
orange-012	5																																																																																													
light green-017	6																																																																																													

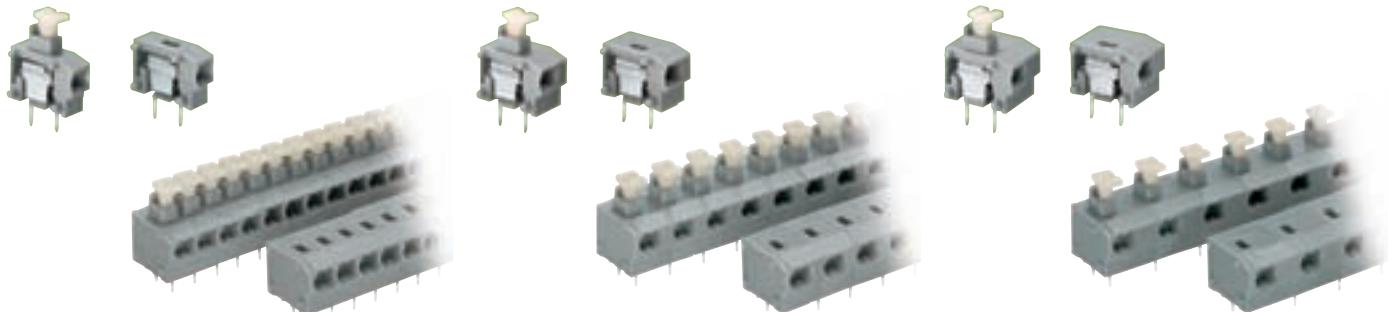
Dimensions (Adjustment of pin spacing is made by pulling on the end blocks so that they expand to satisfy the hole centers required.) **L = (No. of poles x pin spacing) + 1.5 mm**



2-Conductor Modular PCB Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacings 5/5.08 mm/0.2 in, 7.5/7.62 mm/0.3 in and 10/10.16 mm/0.4 in; Series 235



Pin spacing 5/5.08 mm / 0.2 in 2 x 0.25 – 0.75 mm ² s" 2 x AWG 24–18 "sol." 250 V/4 kV/3, 10 A 300 V, 10 A 500 V/4 kV/2, 10 A 9 – 10 mm / 0.37 in * CCA N D P GL BV S ABS	Pin spacing 7.5/7.62 mm / 0.3 in 2 x 0.25 – 0.75 mm ² s" 2 x AWG 24–18 "sol." 400 V/6 kV/3, 10 A 300 V, 10 A 800 V/6 kV/2, 10 A 9 – 10 mm / 0.37 in * CCA N D P GL BV S ABS	Pin spacing 10/10.16 mm / 0.4 in 2 x 0.25 – 0.75 mm ² s" 2 x AWG 24–18 "sol." 500 V/4 kV/3, 10 A 300 V, 10 A 1000 V/4 kV/2, 10 A 9 – 10 mm / 0.37 in * CCA N D P GL BV S ABS
---	---	--

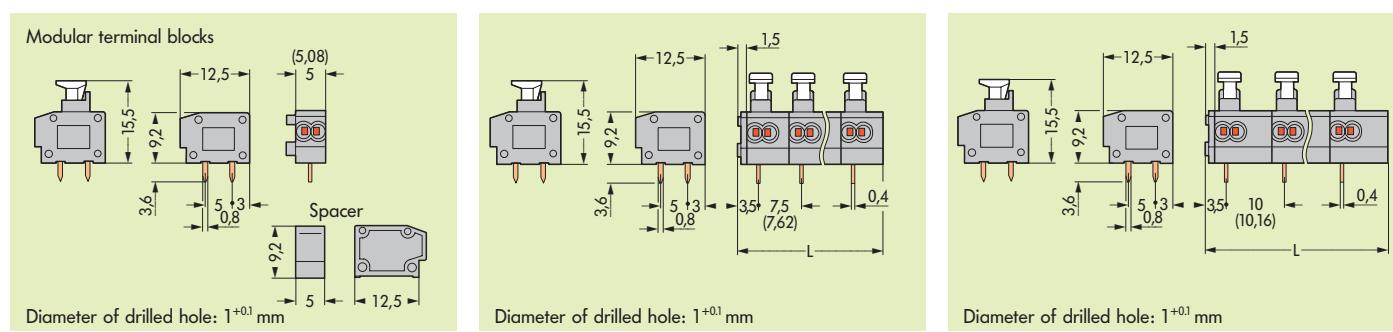


Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.	Colour No. of poles	Item No.	Item No.	
2-conductor modular term. bl., 2 solder pins/pole, with push buttons without	grey 235-711/331-000	235-711	2-conductor modular term. bl., 2 solder pins/pole, with push buttons without	grey 235-551/331-000	235-551	2-conductor modular term. bl., 2 solder pins/pole, with push buttons without	grey 235-851/331-000	235-851	
dark grey 235-712/331-000	235-712	235-722	dark grey 235-722/331-000	235-722	235-732	dark grey 235-732/331-000	235-732	235-732	
light grey 235-713/331-000	235-713	235-723	light grey 235-723/331-000	235-723	235-733	light grey 235-733/331-000	235-733	235-733	
blue 235-714/331-000	235-714	235-724	blue 235-724/331-000	235-724	235-734	blue 235-734/331-000	235-734	235-734	
orange 235-716/331-000	235-716	235-726	orange 235-726/331-000	235-726	235-736	orange 235-736/331-000	235-736	235-736	
light green 235-717/331-000	235-717	235-727	light green 235-727/331-000	235-727	235-737	light green 235-737/331-000	235-737	235-737	
2-conductor terminal strips without push buttons, 2 solder pins/pole, grey, standard lengths	2 235-452	9 235-459	2-conductor terminal strips without push buttons, 2 solder pins/pole, grey, standard lengths	2 235-552	8 235-558	2-conductor terminal strips without push buttons, 2 solder pins/pole, grey, standard lengths	2 235-852	8 235-858	
3 235-453	10 235-460	3 235-553	3 235-559	3 235-853	9 235-859	4 235-454	12 235-462	4 235-854	10 235-860
5 235-455	16 235-466	5 235-555	12 235-562	5 235-855	12 235-862	6 235-456	24 235-474	6 235-856	16 235-866
7 235-457	36 235-486	7 235-557	24 235-574	7 235-857	24 235-874	8 235-458	48 235-498		

Accessories for modular terminal blocks and terminal strips, Series 235 (Marker strips see chapter 9)

End plates, snap-on type, 1 mm/0.039 in thick	grey 235-100 100	dark grey 235-200 100	light grey 235-300 100	blue 235-400 100	orange 235-600 100	light green 235-700 100	Additional item numbers for coloured terminal strips blue .../...-006 2 dark grey .../...-008 2 light grey .../...-009 2 orange .../...-012 2 light green .../...-017 2
Spacer, for doubling the pin spacing	grey 235-701 100	Additional item numbers for 2 conductor terminal blocks with push buttons .../331-000					Suitable for Ex i applications (only for pin spacings 7.5/7.62 mm and 10/10.16 mm)

Dimensions (Adjustment of pin spacing is made by pulling on the end blocks so that they expand to satisfy the hole centers required.) **L = (No. of poles x pin spacing) + 1.5 mm**



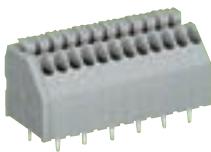
* You can find approvals on the Internet at www.wago.com.

PCB Terminal Strips 0.8 mm Ø and 1.5 mm² Pin Spacings 2.5 mm/0.098 in; 2.54 mm/0.1 in and 3.5 mm/0.138 in; Series 250

Pin spacing 2.5 mm / 0.098 in	Pin spacing 3.5 mm / 0.138 in	Pin spacing 3.5 mm / 0.138 in
Pin spacing 2.54 mm / 0.1 in	Pin spacing 3.5 mm / 0.138 in	Pin spacing 3.5 mm / 0.138 in
0.4 – 0.8 mm Ø "s" ①	0.5 – 1.5 mm ² "s+f-st"	0.5 – 1.5 mm ² "s+f-st"
250 V/2.5 kV/2	AWG 26 – 20 "sol."	AWG 20 – 16 "sol."
2 A	300 V, 2 A ②	300 V, 2 A ②
8.5 – 9.5 mm / 0.35 in	8.5 – 9.5 mm / 0.35 in	8.5 – 9.5 mm / 0.35 in
* ① KEMA CCA P GL BV ② ABS	* ① KEMA CCA P GL BV ② ABS	* ① KEMA CCA P GL BV ② ABS

Pin spacing 2.5 mm / 0.098 in	Pin spacing 3.5 mm / 0.138 in	Pin spacing 3.5 mm / 0.138 in
Pin spacing 2.54 mm / 0.1 in	Pin spacing 3.5 mm / 0.138 in	Pin spacing 3.5 mm / 0.138 in
0.4 – 0.8 mm Ø "s" ①	0.5 – 1.5 mm ² "s+f-st"	0.5 – 1.5 mm ² "s+f-st"
250 V/2.5 kV/2	AWG 26 – 20 "sol."	AWG 20 – 16 "sol."
2 A	300 V, 2 A ②	300 V, 2 A ②
8.5 – 9.5 mm / 0.35 in	8.5 – 9.5 mm / 0.35 in	8.5 – 9.5 mm / 0.35 in
* ① KEMA CCA P GL BV ② ABS	* ① KEMA CCA P GL BV ② ABS	* ① KEMA CCA P GL BV ② ABS

Pin spacing 2.5 mm / 0.098 in	Pin spacing 3.5 mm / 0.138 in	Pin spacing 3.5 mm / 0.138 in
Pin spacing 2.54 mm / 0.1 in	Pin spacing 3.5 mm / 0.138 in	Pin spacing 3.5 mm / 0.138 in
0.4 – 0.8 mm Ø "s" ①	0.5 – 1.5 mm ² "s+f-st"	0.5 – 1.5 mm ² "s+f-st"
250 V/2.5 kV/2	AWG 26 – 20 "sol."	AWG 20 – 16 "sol."
2 A	300 V, 2 A ②	300 V, 2 A ②
8.5 – 9.5 mm / 0.35 in	8.5 – 9.5 mm / 0.35 in	8.5 – 9.5 mm / 0.35 in
* ① KEMA CCA P GL BV ② ABS	* ① KEMA CCA P GL BV ② ABS	* ① KEMA CCA P GL BV ② ABS



No. of poles Colour	Item No.	Item No.	No. of poles Colour	Item No.	Pack.-unit pcs	No. of poles Colour	Item No.	Pack.-unit pcs
1-conductor terminal strips with push button, 1 solder pin/pole staggered, grey with test slot for test pin up to 1.3 mm/0.051 in Ø			1-conductor terminal strips with push button, 1 solder pins/pole front, grey, with test slot for test pin up to 1.3 mm/0.051 in Ø			1-conductor terminal strips with push button, 1 solder pin/pole staggered, grey with test slot for test pin up to 1.3 mm/0.051 in Ø		
Pin spacing 5 mm 5.08 mm	2	250-102	560 (4x140)	2	250-202	560 (4x140)		
2 250-402	250-1402	3	250-103	400 (4x100)	3	250-203	400 (4x100)	
3 250-403	250-1403	4	250-104	300 (4x 75)	4	250-204	300 (4x 75)	
4 250-404	250-1404	5	250-105	240 (4x 60)	5	250-205	240 (4x 60)	
:	:	:	:	:	:	:	:	:
11 250-411	250-1411	11	250-111	120 (4x 30)	11	250-211	120 (4x 30)	
12 250-412	250-1412	12	250-112	100 (4x 25)	12	250-212	100 (4x 25)	
:	:	:	:	:	:	:	:	:
19 250-419	250-1419	17	250-117	80 (4x 20)	17	250-217	80 (4x 20)	
20 250-420	250-1420	18	250-118	60 (4x 15)	18	250-218	60 (4x 15)	
21 250-421	250-1421	19	250-119	60 (4x 15)	19	250-219	60 (4x 15)	
22 250-422	250-1422	20	250-120	60 (4x 15)	20	250-220	60 (4x 15)	
23 250-423	250-1423	21	250-121	60 (4x 15)	21	250-221	60 (4x 15)	
24 250-424	250-1424	22	250-122	60 (4x 15)	22	250-222	60 (4x 15)	
For pin spacing 2.5 mm and 2.54 mm	23	250-123	60 (4x 15)	23	250-223	60 (4x 15)		
Additional item numbers for coloured terminal strips	24	250-124	40 (4x 10)	24	250-224	40 (4x 10)		
black .../000-004 ●		For pin spacing 3.5 mm						
red .../000-005 ○		Additional item numbers for coloured terminal strips						
blue .../000-006 ▲		yellow .../000-002 ■				brown .../000-014 ■		
light grey .../000-009 ▽		black .../000-004 ●				light green .../000-017 ▽		
orange .../000-012 △		red .../000-005 ○				violet .../000-024 ▽		
violet .../000-024 ▽		blue .../000-006 ▲				white .../000-050 ▽		
white .../000-050 ▽		light grey .../000-009 ▽				orange .../000-012 △		
For other colours, please contact factory		For other colours, please contact factory				For other colours, please contact factory		

Accessories, Series 250 (Marker strips see chapter 9)

① Connectable conductor cross section (fine-stranded): 0.2 mm² – 0.5 mm²



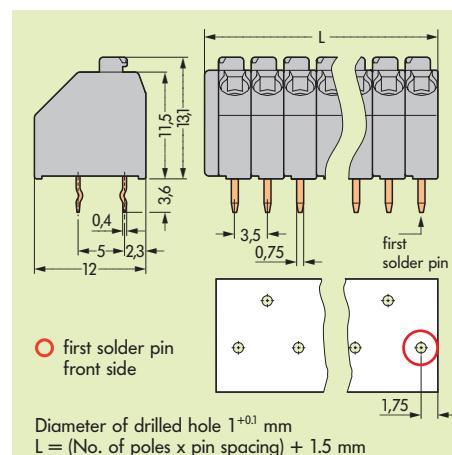
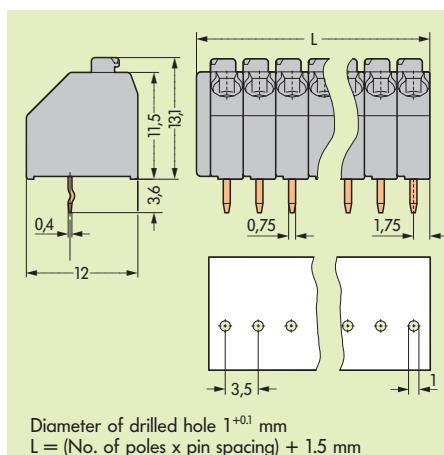
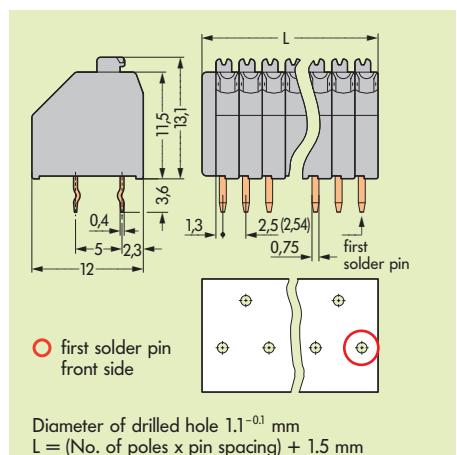
Test pin, 1 mm/0.039 in Ø
735-500

Test wire for sold. onto test plug



Screwdriver, with partially
insulated shaft (3.5 x 0.5) mm
210-619

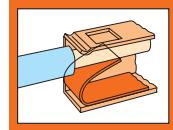
1



PCB Terminal Strips 1.5 mm²; Pin Spacings 5 mm/0.197 in and

7.5 mm/0.295 in; Series 250

PCB Terminal Strips 1.5 mm²; Pin Spacing 5 mm/0.197 in; Series 253



Pin spacing 5 mm / 0.197 in

400 V/4 kV/2

Pin spacing 7.5 mm / 0.295 in

0.5 – 1.5 mm²"s" ① AWG 22 – 14 "sol."

800 V/4 kV/2

10 A

9 – 10 mm / 0.37 in

Pin spacing 5 mm / 0.197 in

0.5 – 1.5 mm²"s" ① AWG 22 – 14 "sol."

400 V/4 kV/2

300 V, 10 A ④

10 A

300 V, 10 A ④

9 mm / 0.35 in

* ④ CCA GL BV ABS

Pin spacing 5 mm / 0.197 in

2 x 0.5 – 1.5 mm²"s" AWG 20 – 16 "sol."

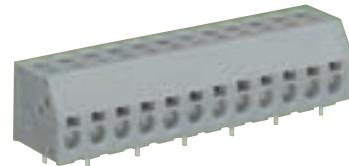
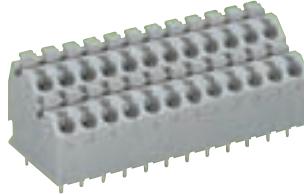
500 V/4 kV/2; 10 A 300 V, 2 A ④

8.5 – 9.5 mm / 0.35 in,

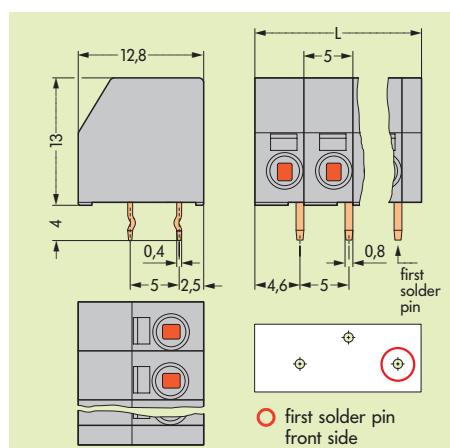
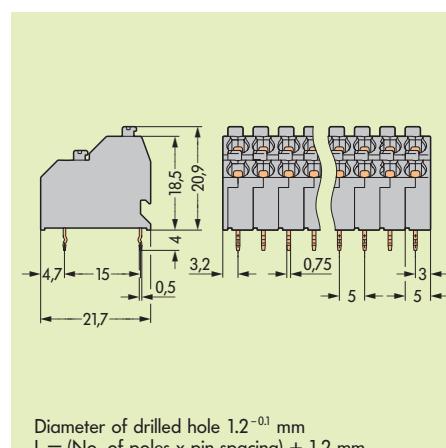
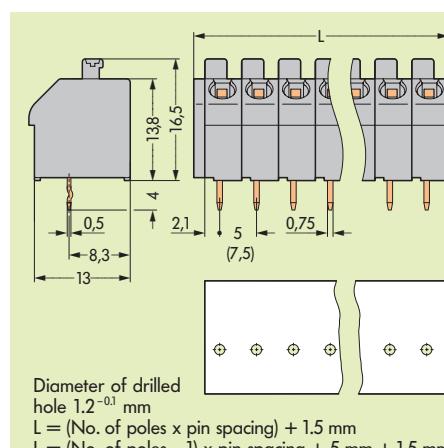
for front- and side-entry

7 – 8 mm / 0.30 in * ④ CCA

* ④ CCA GL BV ABS



No. of poles Colour	Item No.	Item No.	No. of poles Colour	Item No.	Pack.-unit pcs	No. of poles Colour	Item No.	Pack.-unit pcs
1-conductor terminal strips with push button, 1 solder pin/pole in line, grey, with test slot for test pin up to 2 mm/0.079 in Ø			Double deck terminal strips with push buttons, 2 solder pin/pole in line, with test slot for test pin up to 2 mm/0.079 in Ø, grey			2-conductor terminal strips without push buttons, 1 solder pin/pole staggered, grey		
Pin spacing 5 mm 7.5 mm			2 x 2	250-702	264 (4 x 66)	2	253-102	400 (4 x 100)
2	250-502	250-602	3 x 2	250-703	180 (4 x 45)	3	253-103	280 (4 x 70)
3	250-503	250-603	: : :	250-704	132 (4 x 33)	4	253-104	200 (4 x 50)
:	:	:	4 x 2	250-706	84 (4 x 21)	5	253-105	160 (4 x 40)
8	250-508	250-608	6 x 2	250-708	72 (4 x 18)	6	253-106	140 (4 x 35)
9	250-509	250-609	8 x 2	250-710	48 (4 x 12)	7	253-107	120 (4 x 30)
10	250-510	250-610	10 x 2	250-712	36 (4 x 9)	8	253-108	100 (4 x 25)
11	250-511	250-611	12 x 2	250-716	24 (4 x 6)	9	253-109	100 (4 x 25)
12	250-512	250-612	16 x 2	250-724	12 (4 x 3)	10	253-110	80 (4 x 20)
13	250-513		24 x 2			11	253-111	80 (4 x 20)
14	250-514					12	253-112	60 (4 x 15)
15	250-515					13	253-113	60 (4 x 15)
16	250-516					14	253-114	60 (4 x 15)
For pin spacings 5 mm and 7.5 mm						15	253-115	60 (4 x 15)
Additional item numbers for coloured terminal strips						16	253-116	40 (4 x 10)
yellow ... /000-002	yellow	... /000-002	blue ... /000-006	blue	... /000-006			
red ... /000-005	red	... /000-005	orange ... /000-012	orange	... /000-012			
blue ... /000-006	blue							
light grey ... /000-009	light grey	... /000-009						
orange ... /000-012	orange	... /000-012						
brown ... /000-014	brown	... /000-014						
light green ... /000-017	light green	... /000-017						
white ... /000-050	white	... /000-050						
For other colours, please contact factory								
① Connectable conductor cross section (fine-stranded): 0.5 mm² 2 A 0.75 mm² – 1.5 mm² 4 A								
Accessories, Series 250 (Marker strips see chapter 9)								
	Test plug, w. cable 500 mm/17.7", 2 mm Ø red 210-136 50 (5 x 10)		Test plug, w. cable 500 mm/17.7" 2 mm Ø, red 210-136 50 2.3 mm Ø, yel. 210-137 50	Dimensions series 253 (in mm) Diameter of drilled hole: 1.1 ^{+0.1} mm L = (No. of poles x pin spacing) + 2 mm				

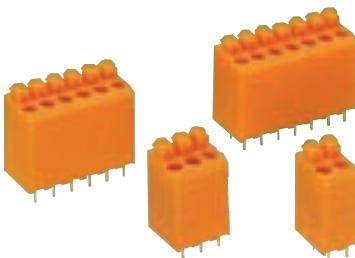
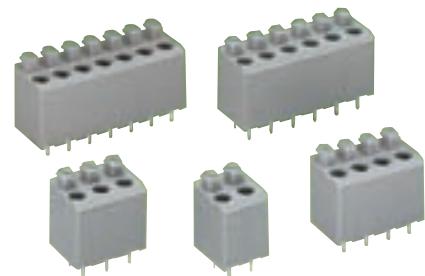


PCB Terminal Blocks 1.5 mm² Pin Spacings 5 mm/0.197 in and 3.81 mm/0.15 in Series 735

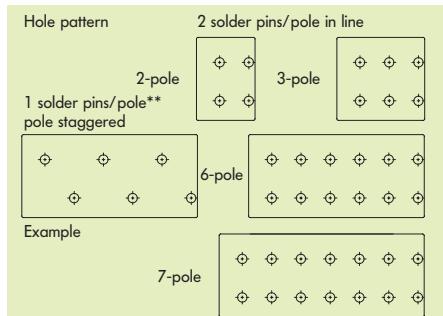
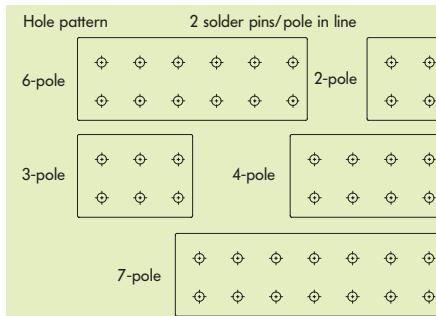
Pin spacing 5 mm / 0.197 in 0.5 – 1.5 mm ² "s" 400 V/4 kV/2 10 A	AWG 20 – 16 "sol." 300 V, 10 A
300 V, 10 A	300 V, 10 A
8 – 9 mm / 0.33 in	8 – 9 mm / 0.33 in

*

Pin spacing 3.81 mm / 0.15 in 0.5 – 1.5 mm ² "s" 400 V/4 kV/2** 10 A	AWG 20 – 16 "sol." 300 V, 10 A
300 V, 10 A	300 V, 10 A
8 – 9 mm / 0.33 in	8 – 9 mm / 0.33 in

Description and handlingTerminal block for 0.5 mm² – 1.5 mm² / AWG 20-16 solid wires

No. of poles	Item No.	Pack.-unit pcs	No. of poles	Item No.	Pack.-unit pcs
Terminal blocks with push buttons,					
2 solder pins/pole in line, grey, with test slot for test pin 1 mm/0.039 in Ø			2 solder pins/pole in line, orange, with test slot for test pin 1 mm/0.039 in Ø		
without spacer			without spacer		
– low version –			– high version –		
2	735-302	500	2	735-122	660
3	735-303	320	3	735-123	440
4	735-304	240			
6	735-306	160	6	735-126	220
7	735-307	140	7	735-127	180
Direct printing on request					

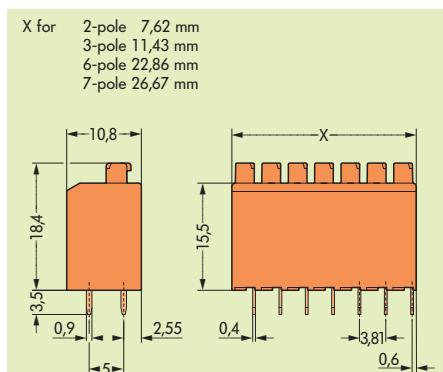
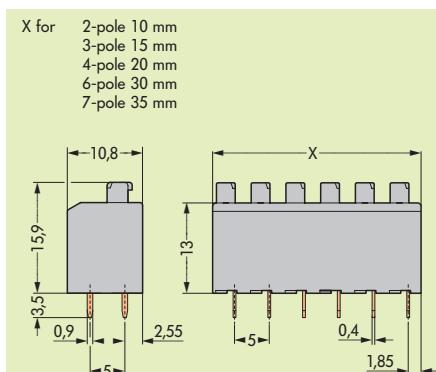


Testing with test pin 1 mm/0.039 in Ø



Use of spacer(s) allows increased air and creepage distances see General Catalogue W4, Volume 2

Accessories, Series 735 (Marker strips see chapter 9)	
	Test pin, 1 mm/0.039 in Ø 735-500 1
	Screwdriver, with partially insulated shaft (2.5 x 0.4) mm 210-619 1

Dimensions (in mm) Diameter of drilled hole 1^{+0.1} mm

Pin center spacing may be maintained in an assembly

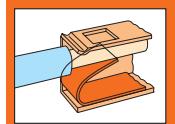
* You can find approvals on the Internet at www.wago.com.

** Versions with staggered solder pins that allow increased air and creepage distances on request

Technical explanations and abbreviations see page 10.2.

Modular Female PCB Connectors; Pin Spacing 5.75 mm; Series 243

2-Conductor Female PCB Terminal Blocks; Pin Spacing 3.5 mm; Series 252



7

23

Pin spacing 5.75 mm / 0.226 in	Pin spacing 3.5 mm / 0.138 in	Description and handling
4 x 0.5 Ø/4 x 0.6 Ø/4 x 0.8 Ø/4 x 1 Ø mm "s" 4 x AWG 24/4 x AWG 22/4 x AWG 20/ 4 x AWG 18 "sol." 100 V/1.5 kV/2, 6 A	125 V 150 V 2 x 0.4 - 0.8 Ø mm "s" 100 V/1.5 kV/2 300 V, 2 A 2 A 6 - 7 mm / 0.26 in	

*

Pin spacing 5.75 mm / 0.226 in	Pin spacing 3.5 mm / 0.138 in	Description and handling
4 x 0.5 Ø/4 x 0.6 Ø/4 x 0.8 Ø/4 x 1 Ø mm "s" 4 x AWG 24/4 x AWG 22/4 x AWG 20/ 4 x AWG 18 "sol." 100 V/1.5 kV/2, 6 A	125 V 150 V 2 x 0.4 - 0.8 Ø mm "s" 100 V/1.5 kV/2 300 V, 2 A 2 A 6 - 7 mm / 0.26 in	

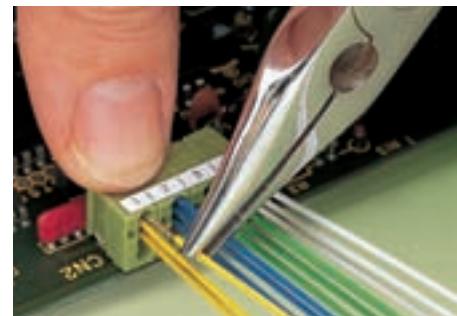
*



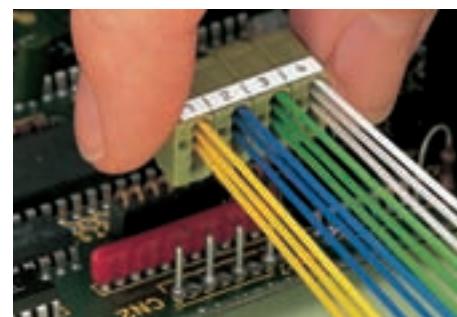
11 mm high

13.1 mm high

Series 243

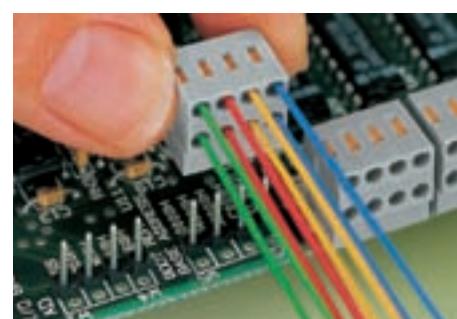


Connection:
Conductor is pushed in until the stop using pliers



Replacement of the board by disconnection
of the female connector strip

Series 252



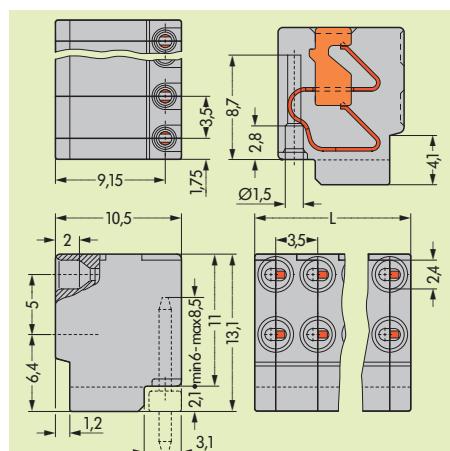
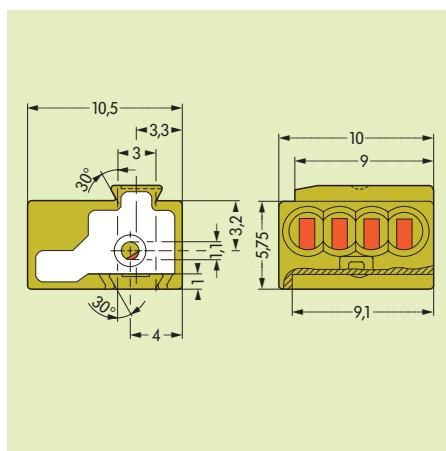
Replacement of the board by disconnection
of the female connector strip

Colour No. of poles	Item No.	Pack.-unit pcs	No. of poles	Item No.	Item No.
Female connectors, can be assembled to female strips					
using dovetail joints, with test slot, for solid wires			for individual solder pins		solder pin strip
grey	243-721	400	2	252-102	252-152
blue	243-722	400	3	252-103	252-153
orange	243-723	400	4	252-104	252-154
light green	243-724	400	5	252-105	252-155
			6	252-106	252-156
			7	252-107	252-157
Female connector strips,					
with test slot, for solid wires, light green			8	252-108	252-158
2	243-742	400	9	252-109	252-159
3	243-743	400	10	252-110	252-160
:	:	:	For other lengths, please contact factory		
6	243-746	200			
7	243-747	200			
8	243-748	200			
Other colours see General Catalogue W4, Volume 2					
Accessories, Series 243					
Solder pin, for PCBs up to 2 mm/0.079 in thick	243-131	1000	Solder pin strip with strain relief,		
			4 poles		
			252-954		
			for 13.1 mm high version		
Marker card,			Marker cards,		
80 self-adhesive strips per card			80 self-adhesive strips per card		
1 - 12 (160 x)			1 - 16 (240 x) 210-332/0350-0202		
210-332/0575-0103 1 card			17 - 32 (240 x) 210-332/0350-0204		

Dimensions (in mm)

Diameter of drilled hole: 1.2 ± 0.05 mm

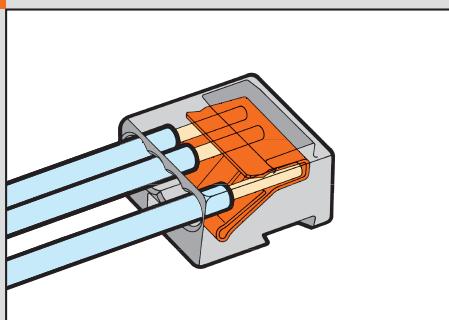
L = No. of poles x pin spacing



Removal of conductors

Description and Handling

MICRO Push-Wire Connectors for Junction Boxes,^① Series 243



Stripped length

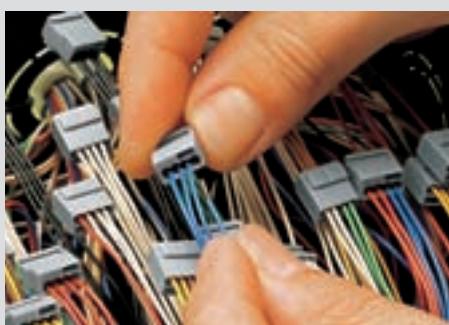


Strip solid conductor to 5 – 6 mm / 0.22 in

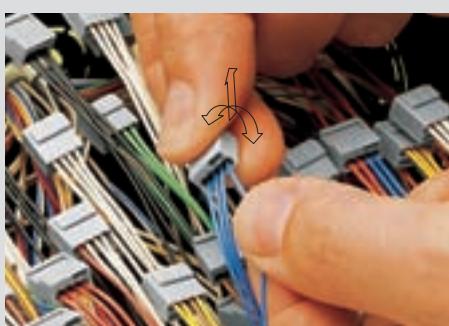
Connector blocks



Assembly of modular connectors to connector strips

Push-wire connection

Connection: Insert stripped conductor FULLY.

**Push-wire connection**

Removal: Hold wire to be removed and twist alternately left and right while pulling the connector

Testing

Testing

Commoning

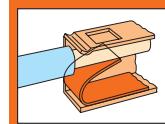
Commoned connector blocks

Packing unitsBox for use on site (example)
Contents series 243: 50 pcs 8-conductor
100 pcs 4-conductor**The push-wire connection clamps the following copper wires:**

solid

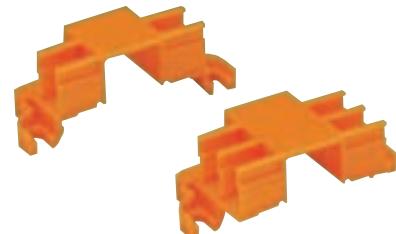
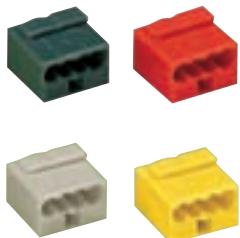
① For distribution connectors for **EIB** (Euro Installation Bus) see General Catalogue W4, Volume 2, page 2.4

MICRO Push-Wire Connectors for Junction Boxes, Fixing Carrier Series 243



4 x 0.6 – 0.8 Ø mm "s"** 100 V/1.5 kV/2 6 A	4 x AWG 22 – 20 "sol."** 125 V, 7 A 150 V, 7 A	8 x 0.6 – 0.8 Ø mm "s"** 100 V/1.5 kV/2 6 A	8 x AWG 22 – 20 "sol."** 125 V, 7 A 150 V, 7 A	Fixing carrier for MICRO push-wire connectors
5 – 6 mm / 0.22 in		5 – 6 mm / 0.22 in		

* VDE KEMA CCA N S D P A



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Description	Item No.	Pack.-unit pcs
MICRO push-wire connectors for junction boxes, 4-conductor connectors			MICRO push-wire connectors for junction boxes, 8-conductor connectors			Fixing carrier		
dark grey	243-204	1000 (10 x 100)	dark grey	243-208	500 (10 x 50)	for 4 push-wire connectors	243-112	50 (5 x 10)
red	243-804	1000 (10 x 100)	red	243-808	500 (10 x 50)	for 6 push-wire connectors	243-113	50 (5 x 10)
light grey	243-304	1000 (10 x 100)	light grey	243-308	500 (10 x 50)	Marker strip, plain	243-110	1
yellow	243-504	1000 (10 x 100)	yellow	243-508	500 (10 x 50)			

4 x 0.4 – 0.5 Ø mm "s" 100 V/1.5 kV/2 6 A	4 x AWG 26 – 24 "sol."	
5 – 6 mm / 0.22 in		

* P A



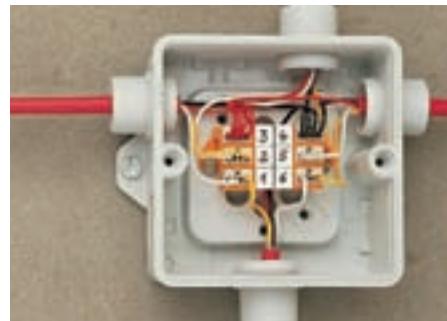
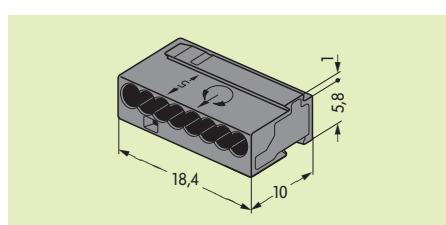
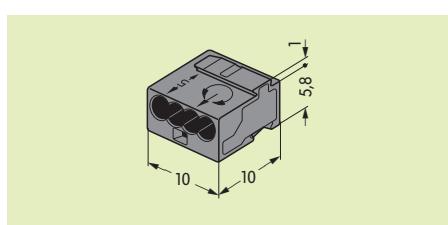
Inserting a MICRO push-wire connector for junction boxes into the carrier

Colour	Item No.	Pack.-unit pcs
MICRO push-wire connector for junction boxes, 4-conductor connector		
transparent	243-144	1000 (10 x 100)



Example of house-bell application
– mounted on DIN 35 rail

Dimensions (in mm)



Typical application in a terminal box for burglar alarm
– screw fixing

* You can find approvals on the Internet at www.wago.com.

**When using wires of the same diameter only, 0.5 Ø mm/AWG 24 or 1.0 Ø mm/AWG 18 are also possible

Technical explanations and abbreviations see page 10.2.

System and Handling Push-Wire Connectors for Junction Boxes, Series 773

2

Stripped length

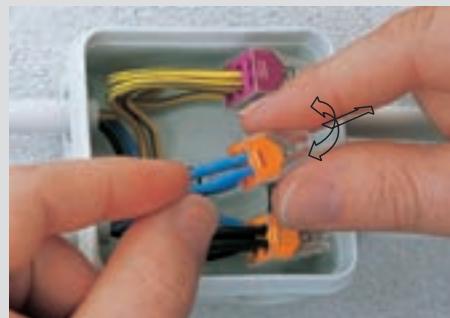


Strip solid conductor to 12 mm / 0.47 in

Push-wire connection

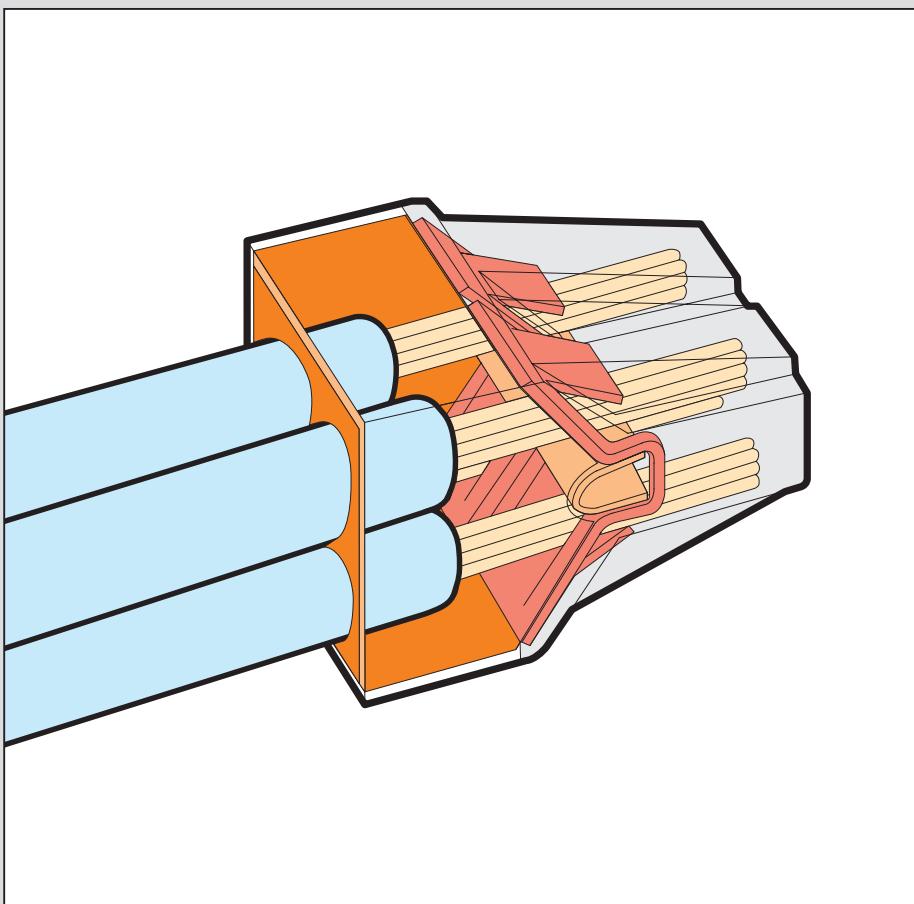


Connection: Insert stripped solid conductor FULLY



Removal: Hold wire to be removed and twist alternately left and right while pulling the connector

Stranded conductors



Connection: Insert stripped stranded conductor FULLY

Testing



Testing

Applications



Push-wire connectors used in a junction box.
(Australia)



Push-wire connectors used in a junction box.
(Japan)



Fixing carrier

The push-wire connection clamps the following copper wires:

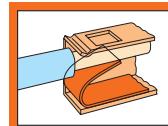


solid



stranded

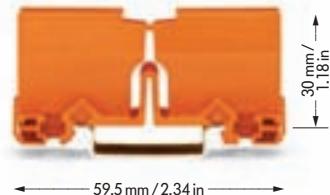
Push-Wire Connectors for Junction Boxes Series 773



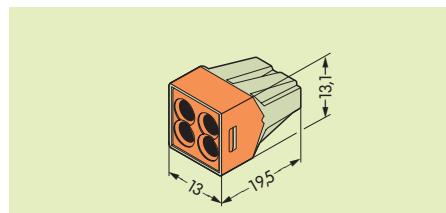
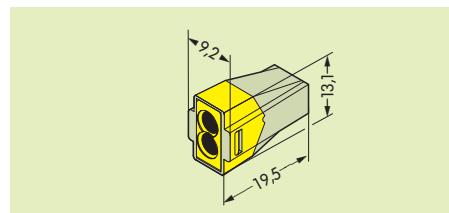
2 x 0.75 – 2.5 mm² "s" 2 x 1.5 – 2.5 mm² "st" 400 V / 4 kV / 2** 24 A	2 x AWG 18 – 12 "sol." 2 x AWG 16 – 12 "str." 600 V, 20 A	4 x 0.75 – 2.5 mm² "s" 4 x 1.5 – 2.5 mm² "st" 400 V / 4 kV / 2** 24 A	4 x AWG 18 – 12 "sol." 4 x AWG 16 – 12 "str." 600 V, 20 A	Carrier for push-wire connectors Carrier width 18 mm / 0.71 in
12 mm / 0.47 in	12 mm / 0.47 in	12 mm / 0.47 in	12 mm / 0.47 in	

* C ENEC KEMA CCA N S D P GL BV

* C ENEC KEMA CCA N S D P GL BV



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack. unit pcs
Push-wire connectors for junction boxes 1, 2-conductor connectors, colour of housing transparent, colour of cover yellow	773-102	1000 (10x100)	Push-wire connectors for junction boxes 1, 4-conductor connectors, colour of housing transparent, colour of cover orange	773-104	1000 (10x100)	Fixing carrier for 4 push-wire connectors	773-332	50 (5 x 10)
						orange		
						plain	243-110	1



6 x 0.75 – 2.5 mm² "s" 6 x 1.5 – 2.5 mm² "st" 400 V / 4 kV / 2** 24 A	6 x AWG 18 – 12 "sol." 6 x AWG 16 – 12 "str." 600 V, 20 A	8 x 0.75 – 2.5 mm² "s" 8 x 1.5 – 2.5 mm² "st" 400 V / 4 kV / 2** 24 A	8 x AWG 18 – 12 "sol." 8 x AWG 16 – 12 "str." 600 V, 20 A	3 x 2.5 – 6 mm² "s + st" 400 V / 4 kV / 2** 41 A	3 x AWG 14 – 10 "sol." + "str." 600 V, 30 A
12 mm / 0.47 in	12 mm / 0.47 in	12 mm / 0.47 in	12 mm / 0.47 in	12 – 13 mm / 0.53 in	12 – 13 mm / 0.53 in

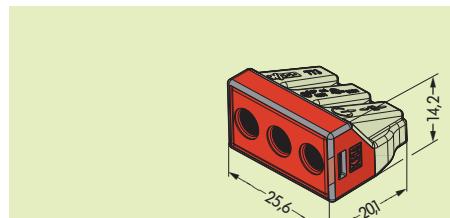
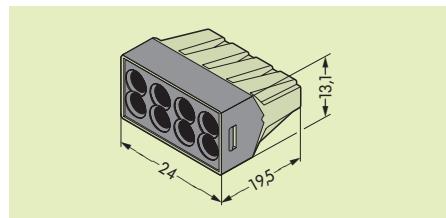
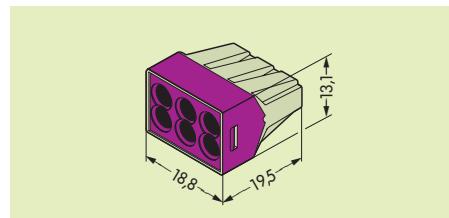
* C ENEC KEMA CCA N S D P GL BV

* C ENEC KEMA CCA N S D P GL BV

* C ENEC



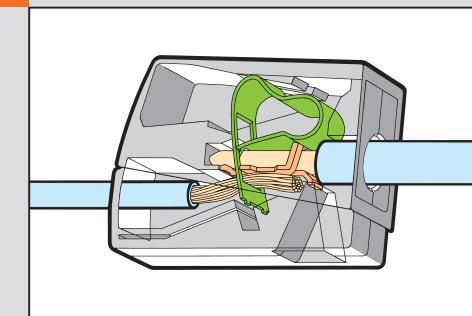
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Push-wire connectors for junction boxes 1, 6-conductor connectors, colour of housing transparent, colour of cover violet	773-106	500 (10 x 50)	Push-wire connectors for junction boxes 1, 8-conductor connectors, colour of housing transparent, colour of cover dark grey	773-108	500 (10 x 50)	Push-wire connectors for junction boxes, 3-conductor connectors, colour of housing transparent, colour of cover red	773-173	500 (10 x 50)

* You can find approvals on the Internet at www.wago.com. ** In grounded (earthing) supply system

① Also available for increased continuous service temperature of 120 °C

Technical explanations and abbreviations see page 10.2.

Description and Handling Lighting Connectors Series 224



Stripped length



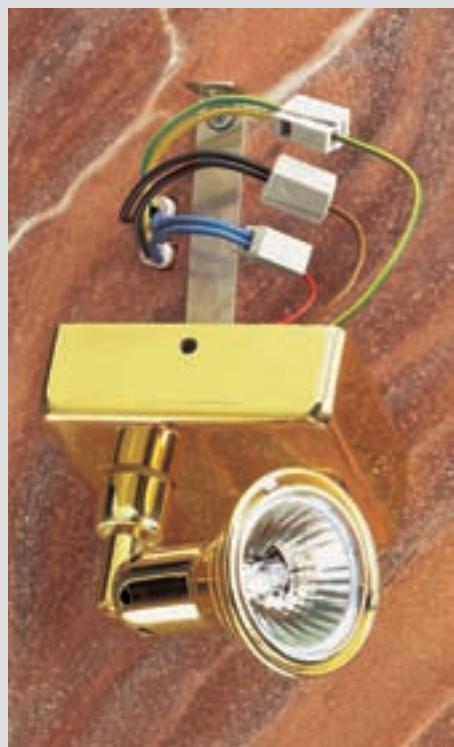
Strip conductor to 9 – 11 mm / 0.39 in

Testing

Testing through separate test slot

Testing

Testing through separate test slot

Applications**CAGE CLAMP®** clamps the following copper wires:

solid



stranded

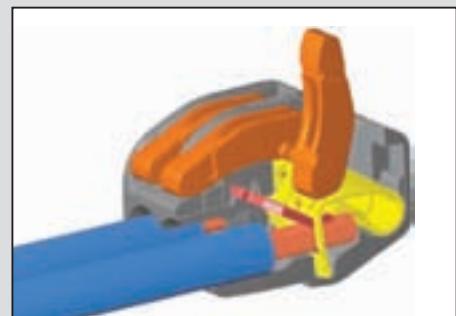


fine-stranded



tip-bonded

Connecting Terminal for Flexible Conductors Series 222

**Stripped length**

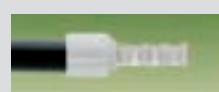
Strip wire to 9 – 10 mm / 0.37 in

CAGE CLAMP® COMPACT Connection

Wire connection: open clamping point using the lever and insert wire ...



... return lever to its rest position



with crimped ferrule



with crimped pin terminal

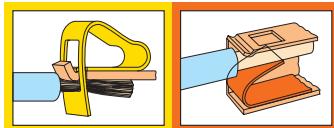
The push-wire connection clamps the following copper wires:

solid

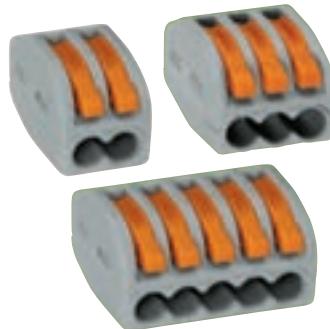
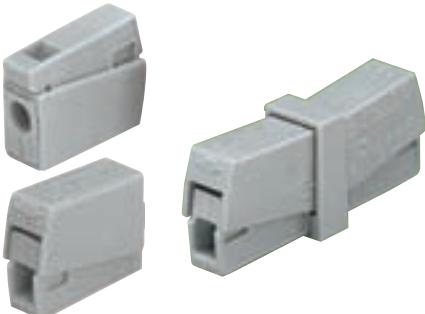
** When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than max. rating of terminal block

Lighting Connectors, "Service" Connector, Series 224

Connecting Terminal for Flexible Conductors, Series 222

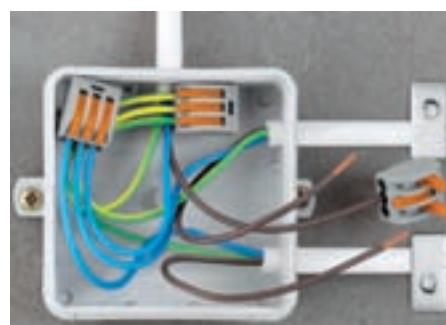
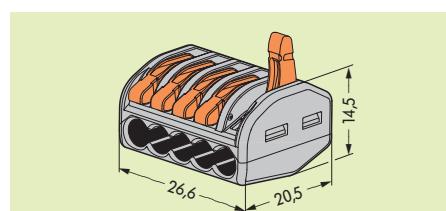
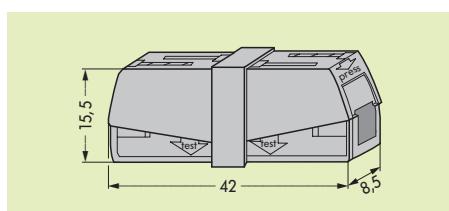
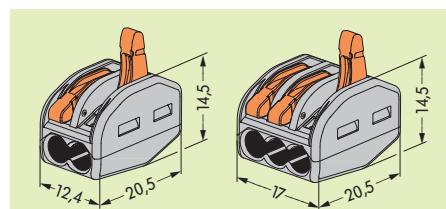
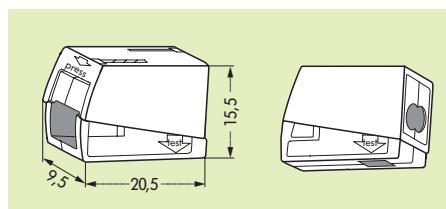
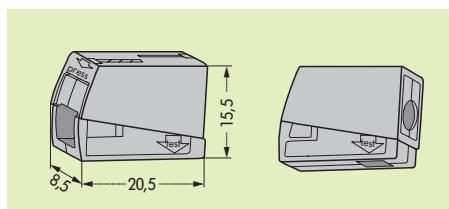


Installation side 1.0 – 2.5 mm ² "s" Lighting side 0.5 – 2.5 mm ² "s+f-st" 400 V/4 kV/2**; 24 A 9 – 11 mm / 0.39 in	AWG 14 – 12	Installation side 2 x 1.0 – 2.5 mm ² "s" Lighting side 0.5 – 2.5 mm ² "s+f-st" 400 V/4 kV/2**; 24 A 9 – 11 mm / 0.39 in	AWG 16 – 14	0.08 – 2.5 mm²s+f-st" 4 mm²f-st" 400 V/4 kV/2** 32 A 9 – 10 mm / 0.37 in	AWG 28 – 12 600 V, 20 A * GL LR ENEC15
* VDE CCA N S D F P GL BV	300 V, 20 A	* VDE CCA N S D F P GL BV	300 V, 4 A		



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Lighting connectors,			2-conductor lighting connectors,			Connecting terminal for flexible conductors, grey	
standard version, continuous service temperature 105 °C, grey	224-101	1000 (10 x 100)	standard version, continuous service temperature 105 °C, white	224-112	1000 (10 x 100)	222-412	500 (10 x 50)
version for increased continuous service temperature 120 °C, black	224-104	100	version for increased continuous service temperature 120 °C, black	224-114	100	222-413	500 (10 x 50)
"Service" connector						5-conductor terminal block	
grey	224-201	50				222-415	400 (10 x 40)

Dimensions (in mm)



Connection of conductors (lighting side):
Press button fully and insert stripped conductor into square entry and release.

Connection of conductors (installation side):
Introduce stripped solid conductor into circular entry and push to stop.

Wiring of flexible conductors in a junction box

* You can find approvals on the Internet at www.wago.com.

** In grounded (earthed) supply systems

Technical explanations and abbreviations see page 10.2.

WINSTA® – new products

WINSTA® MINI

For use in applications where space is limited

- Sensors (switches, push buttons, window contacts, pressure switches, temperature sensors ...)
- Actuators (control valves, magnetic valves, servo motors, blinds/sun protection ...)
- Halogen lamps and lighting fixtures of protection class II
- Control signals
- 1.5 mm^2 , 250 V, 16 A



WINSTA® MIDI

For the majority of applications

- General building installations, especially for modern functional buildings
- General lighting and safety lamps
- Exhibition construction and shop building
- Caravan manufacture
- Laboratory workstations
- Rail vehicles
- Marine applications
- 4 mm^2 , 250/400 V, 25 A



WINSTA® MAXI

For high performance

- Power supply via 6 mm^2 cable due to long cable lengths
- Power supply via 32 A distribution boxes for high energy demands
- 6 mm^2 , 250/400 V, 32 A



WINSTA® – The perfect connection!

Floor distribution boxes



make the system perfect

WINSTA® EIB

For the standardized bus

- EIB
- Control signals
- Ø 0.8 mm, 50 V, 3 A



Cable ducts



WINSTA® IDC

For a high degree of flexibility

- Supply and tap off is possible anytime and anywhere in the flat cable. No cutting, no need to remove outer or inner insulation → thus very user-friendly
- Very fast connection to flat cable by simple 120° rotation per pole
- Space saving using longitudinal tap off
- 2.5/4 mm², 400 V, 25 A
10 mm², 690 V, 57 A
16 mm², 690 V, 76 A



Lighting



WINSTA® RD

For round conduits and ducts

- Outside diameter of 17.5 mm for applications in electrical conduits with an inner diameter > 18 mm
- Prefabricated houses
- Furniture lights
- Wall or ceiling openings



Opening the cable entry

Remove one cover plate

Inserting cable

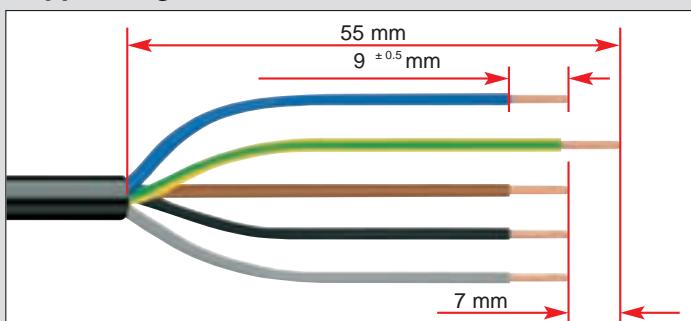
Before connecting the conductor, put the cable through the strain relief housing (prelocking position)

Connection

Open clamping unit using a screwdriver (2.5 x 0.4) mm and insert stripped wire as far as possible

Assembly

Put strain relief housing and plug/socket in position. Note the "TOP" marking

Stripped lengths**Solid conductors**

Insert wire as far as possible

Flexible conductors

Open clamping unit using a screwdriver (2.5 x 0.4) mm and insert stripped wire as far as possible

Connecting enclosures and lighting fixtures using T-joints

Insert the snap-in type connector into the panel cutout



Plug the T-joint into the snap-in type connector until the locking device snaps into position



Mate the pre-assembled plug and socket cables to the T-joint

Removing the snap-in type connector from the panel cutout

Remove the snap-in type connector by hand from inside the enclosure



Remove the snap-in type connector from outside the enclosure inserting a screwdriver from the front

Direct ground (earth) contact

Snap-in type connector with direct ground (earth) contact

Sealing the socket

Sockets can be sealed using lockout caps

The CAGE CLAMP®S connection clamps the following copper wires:

solid



stranded

Snapping into final position

Snap the strain relief housing into final position

Tightening screw

Tighten strain relief screw

Marking

Moulded marking on a plug and socket connection



Marking strain relief housings using WSB quick marking system

Connected conductor**Removing the conductor**

Open clamping unit using a screwdriver (2.5×0.4) mm and remove the conductor

Variable coding

Cut or break the coding pin off on the socket



Insert coding pin with the broken edge first into the plug and fasten it

Distribution connector with mounting carrier

The distribution connector snaps directly onto the mounting carrier



The cables are safely locked by snapping the plugs or sockets

Distributor with phase selection

Lift lever out of delivery position (L2) using a screwdriver (2.5×0.4) mm



Move the lever into its new position (in this case L3)

Distribution box and accessories

- enclosure top panel/bottom panel
- 2 side panels
- 16 fixing pins



Plugs and sockets as well as locking devices are available according to the function of the distribution box

Fixing the connectors

Push the fixing pins into the connectors

Mounting the side panels

The spacing between the connectors are closed when mounting the side panels

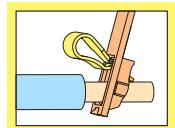


fine-stranded,
also with tinned single
strands

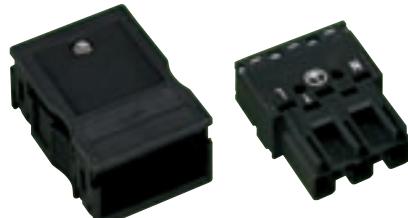


fine-stranded,
tip bonded

Connectors with Strain Relief Housing, Distributor with Phase Selection, Distribution Box Series 770



2 x 0.5 – 4 mm² 250 V/4 kV/3, 3-pole 400 V/6 kV/3, 4- and 5-pole 25 A	2 x AWG 20 - 12 600 V, 20 A	2 x 0.5 – 4 mm² 250 V/4 kV/3, 3-pole 400 V/6 kV/3, 4- and 5-pole 25 A	2 x AWG 20 - 12 600 V, 20 A	2 x 0.5 – 4 mm² 250 V/4 kV/3, 3-pole 400 V/6 kV/3, 5-pole 25 A	2 x AWG 20 - 12 600 V, 20 A
9 mm / 0.35 in * VDE CCA GL LR NV	9 mm / 0.35 in * VDE CCA GL LR NV	9 mm / 0.35 in * VDE CCA GL LR NV	9 mm / 0.35 in * CCA		



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Socket, with strain relief housing			Plug, with strain relief housing					
3-pole, cable diameter 8 – 12 mm			3-pole, cable diameter 8 – 12 mm			3-pole, with strain relief housing,		
black 770-103	25		black 770-113	25		cable diameter 9 – 13 mm		
white 770-123	25		white 770-133	25		black 770-611	10	
4-pole, cable diameter 9 – 13 mm						white 770-661	10	
black 770-104	25		black 770-114	25		socket 3-pole N ⊕ L = wire branch		
white 770-124	25		white 770-134	25		socket 5-pole N ⊕ L1 L2 L3 = through connection		
5-pole, cable diameter 9 – 13 mm			5-pole, cable diameter 9 – 13 mm					
black 770-105	25		black 770-115	25				
white 770-125	25		white 770-135	25				
5-pole, 1-conductor connection*, cable diameter 9 – 13 mm			5-pole, 1-conductor connection*, cable diameter 9 – 13 mm					
black 770-305	25		black 770-315	25				
white 770-325	25		white 770-335	25				
Socket, without strain relief housing			Plug, without strain relief housing					
3-pole,			3-pole,					
black 770-203	100		black 770-213	100				
white 770-223	100		white 770-233	100				
4-pole,			4-pole,					
black 770-204	50		black 770-214	50				
white 770-224	50		white 770-234	50				
5-pole,			5-pole,					
black 770-205	50		black 770-215	50				
white 770-225	50		white 770-235	50				
5-pole, 1-conductor connection*, cable diameter 9 – 13 mm			5-pole, 1-conductor connection*, cable diameter 9 – 13 mm					
black 770-405	50		black 770-415	50				
white 770-425	50		white 770-435	50				
*The large funnel-shaped conductor entry hole makes the connection of rigid wires (e.g. NYM) easier			*The large funnel-shaped conductor entry hole makes the connection of rigid wires (e.g. NYM) easier					



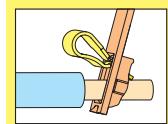
Wiring example



Wiring example

Colour	Item No.	Pack.-unit pcs
Distribution box, version 1,		
ready for mating 3-, 4- and 5-pole plugs and sockets		
black 770-631	1	
white 770-681	1	
Colour	Item No.	Pack.-unit pcs
Distribution box, version 1,		
ready for mating 3-, 4- and 5-pole plugs and sockets as well as DIN 35 mounted electronic modules		
black 770-632	1	
white 770-682	1	

Distribution Connectors, 3- and 5-Pole Series 770



250 V/4 kV/3, 3-pole | 600 V, 20 A
400 V/6 kV/3, 5-pole | 25 A

* cULus CCA

250 V/4 kV/3, 3-pole | 600 V, 20 A
400 V/6 kV/3, 5-pole | 25 A

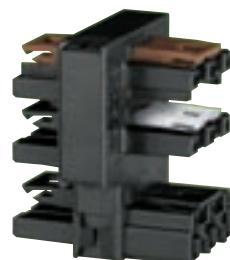
* cULus CCA

250 V/4 kV/3, 3-pole | 600 V, 20 A
400 V/6 kV/3, 5-pole | 25 A

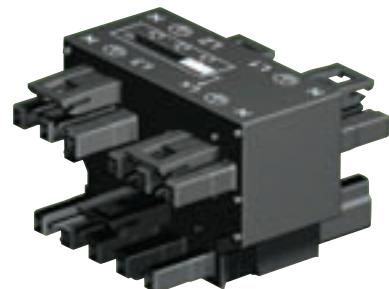
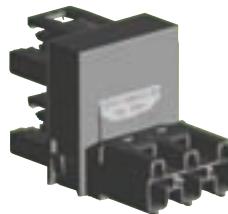
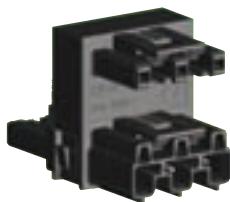
* CCA



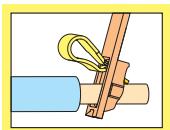
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
T-joint,			Distribution connector, 5-way			Distribution connector for single-pole switch or series circuits, 3-pole,		
1 x plug/2 x socket, 3-pole black	770-606	50	1 x plug/5 x socket, 3-pole black	770-608	25	black	770-637	10
white	770-656	50	white	770-658	25	white	770-687	10
1 x plug/2 x socket, 5-pole								
black	770-621	50	white	770-671	50			

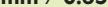
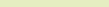


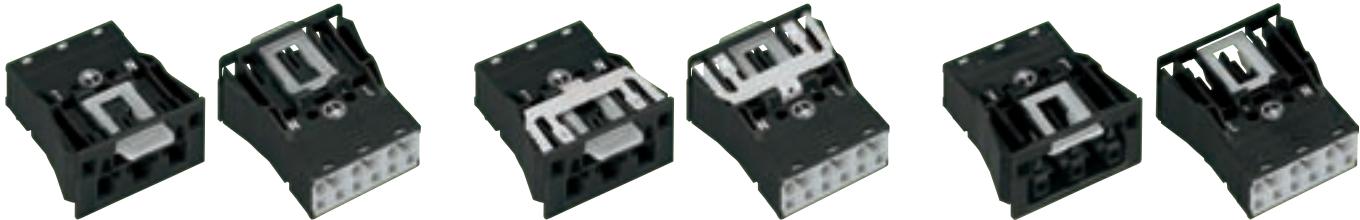
Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
Distribution connector, 3-way,			Distribution connector, 3-way,			Distribution connector for single-pole switch or two-way circuits, 3-pole,		
1 x plug/3 x socket, 3-pole black	770-607	50	1 x plug/3 x socket, 5-pole black	770-609	25	black	770-638	1
white	770-657	50	white	770-659	25	white	770-688	1



Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs	Colour	Item No.	Pack.-unit pcs
H-joint, 3-pole, bidirectional,			H-joint, 3-pole, unidirectional,			Three-phase to single-phase distributor		
black	770-633	50	black	770-634	50	black	770-639	10
white	770-683	50	white	770-684	50	white	770-689	10



2 x 0.5 – 4 mm² 250 V/4 kV/3, 3-pole 400 V/6 kV/3, 4- and 5-pole 25 A	2 x AWG 20 - 12 600 V, 20 A	2 x 0.5 – 4 mm² 250 V/4 kV/3, 3-pole 400 V/6 kV/3, 4- and 5-pole 25 A	2 x AWG 20 - 12 600 V, 20 A	2 x 0.5 – 4 mm² 250 V/4 kV/3, 3-pole 400 V/6 kV/3, 4- and 5-pole 25 A	2 x AWG 20 - 12 600 V, 20 A
 9 mm / 0.35 in		 9 mm / 0.35 in		 9 mm / 0.35 in	

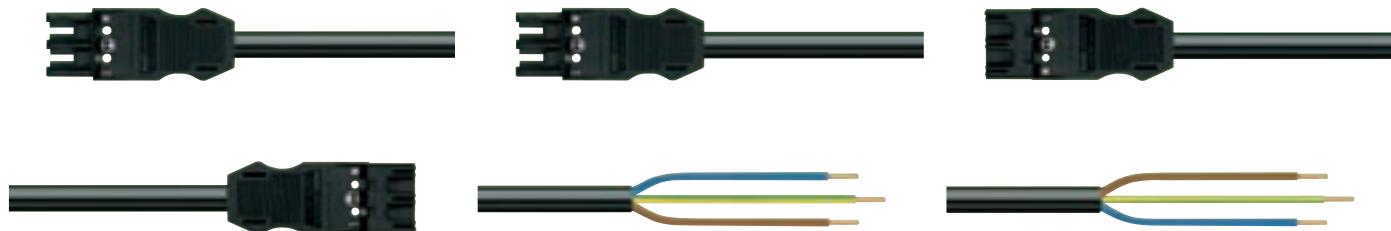


Snap-in versions with integrated locking device allow an easy connection through cutouts in enclosures

Colour	Item No.	Pack.-unit pcs	Item No.
Coupling device, 1 x plug/1 x socket, 3-pole		Self-adhesive marker strips on A4 cards, strip length 182 mm	
black	770-603	100	
white	770-653	100	Height of marker strip 5 mm (48x) 210-334 for series 771
1 x plug/1 x socket, 5-pole			
black	770-605	100	
white	770-655	100	Height of marker strip 6 mm (40x) 210-333 for series 770
			Note:
			For thermal transfer printers the markers are also available. Please ask for delivery time and prices!

Pre-Assembled Cables, 3-/4- and 5-Pole Series 771

Interconnection cables socket - plug	Connection cables socket - stripped cable end	Connection cables plug - stripped cable end
*  CCA GL LR NV	*  CCA GL LR NV	*  CCA GL LR NV

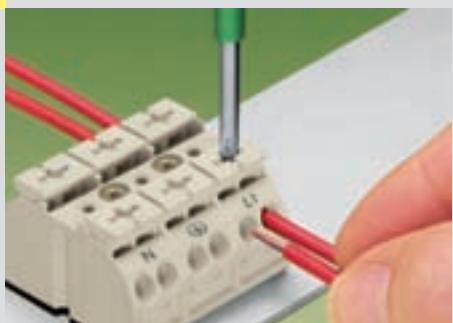


Length	Item No. black	Item No. white	Length	Item No. black	Item No. white	Length	Item No. black	Item No. white
3 x 1.5 mm²			3 x 1.5 mm²			3 x 1.5 mm²		
250 V/4 kV/3 16 A			250 V/4 kV/3 16 A			250 V/4 kV/3 16 A		
1 m	771-9993/006-101	.../-102	1 m	771-9993/106-101	.../-102	1 m	771-9993/206-101	.../-102
2 m	771-9993/006-201	.../-202	2 m	771-9993/106-201	.../-202	2 m	771-9993/206-201	.../-202
:	:	:	:	:	:	:	:	:
8 m	771-9993/006-801	.../-802	8 m	771-9993/106-801	.../-802	8 m	771-9993/206-801	.../-802
3 x 2.5 mm²			3 x 2.5 mm²			3 x 2.5 mm²		
250 V/4 kV/3 20 A			250 V/4 kV/3 20 A			250 V/4 kV/3 20 A		
1 m	771-9993/007-101	.../-102	1 m	771-9993/107-101	.../-102	1 m	771-9993/207-101	.../-102
2 m	771-9993/007-201	.../-202	2 m	771-9993/107-201	.../-202	2 m	771-9993/207-201	.../-202
:	:	:	:	:	:	:	:	:
8 m	771-9993/007-801	.../-802	8 m	771-9993/107-801	.../-802	8 m	771-9993/207-801	.../-802
4 x 1.5 mm²			4 x 1.5 mm²			4 x 1.5 mm²		
400 V/6 kV/3 16 A			400 V/6 kV/3 16 A			400 V/6 kV/3 16 A		
1 m	771-9994/006-101	.../-102	1 m	771-9994/106-101	.../-102	1 m	771-9994/206-101	.../-102
2 m	771-9994/006-201	.../-202	2 m	771-9994/106-201	.../-202	2 m	771-9994/206-201	.../-202
:	:	:	:	:	:	:	:	:
8 m	771-9994/006-801	.../-802	8 m	771-9994/106-801	.../-802	8 m	771-9994/206-801	.../-802
5 x 1.5 mm²			5 x 1.5 mm²			5 x 1.5 mm²		
400 V/6 kV/3 16 A			400 V/6 kV/3 16 A			400 V/6 kV/3 16 A		
1 m	771-9995/006-101	.../-102	1 m	771-9995/106-101	.../-102	1 m	771-9995/206-101	.../-102
2 m	771-9995/006-201	.../-202	2 m	771-9995/106-201	.../-202	2 m	771-9995/206-201	.../-202
:	:	:	:	:	:	:	:	:
8 m	771-9995/006-801	.../-802	8 m	771-9995/106-801	.../-802	8 m	771-9995/206-801	.../-802
5 x 2.5 mm²			5 x 2.5 mm²			5 x 2.5 mm²		
400 V/6 kV/3 20 A			400 V/6 kV/3 20 A			400 V/6 kV/3 20 A		
1 m	771-9995/007-101	.../-102	1 m	771-9995/107-101	.../-102	1 m	771-9995/207-101	.../-102
2 m	771-9995/007-201	.../-202	2 m	771-9995/107-201	.../-202	2 m	771-9995/207-201	.../-202
:	:	:	:	:	:	:	:	:
8 m	771-9995/007-801	.../-802	8 m	771-9995/107-801	.../-802	8 m	771-9995/207-801	.../-802

More variations	Accessories, Series 771 appropriate marking system WSB/marker strips (see left page)		
	Locking device, hand-operated, for "flying leads" black 770-101 100 (4 x 25) white 770-121 100 (4 x 25)		for plug grey 770-401 100
	Locking device, tool-operated, for "flying leads" black 770-111 100 (4 x 25) white 770-131 100 (4 x 25)		
Country-specific connecting cables on request			

4-Conductor Device Connectors with CAGE CLAMP®S Connection Series 862

Wire connection



4 conductors per pole
- for solid and flexible conductors
- mixed wiring with solid and flexible conductors of different cross sections

Marking



Marking by direct printing and/or marker strips

Testing

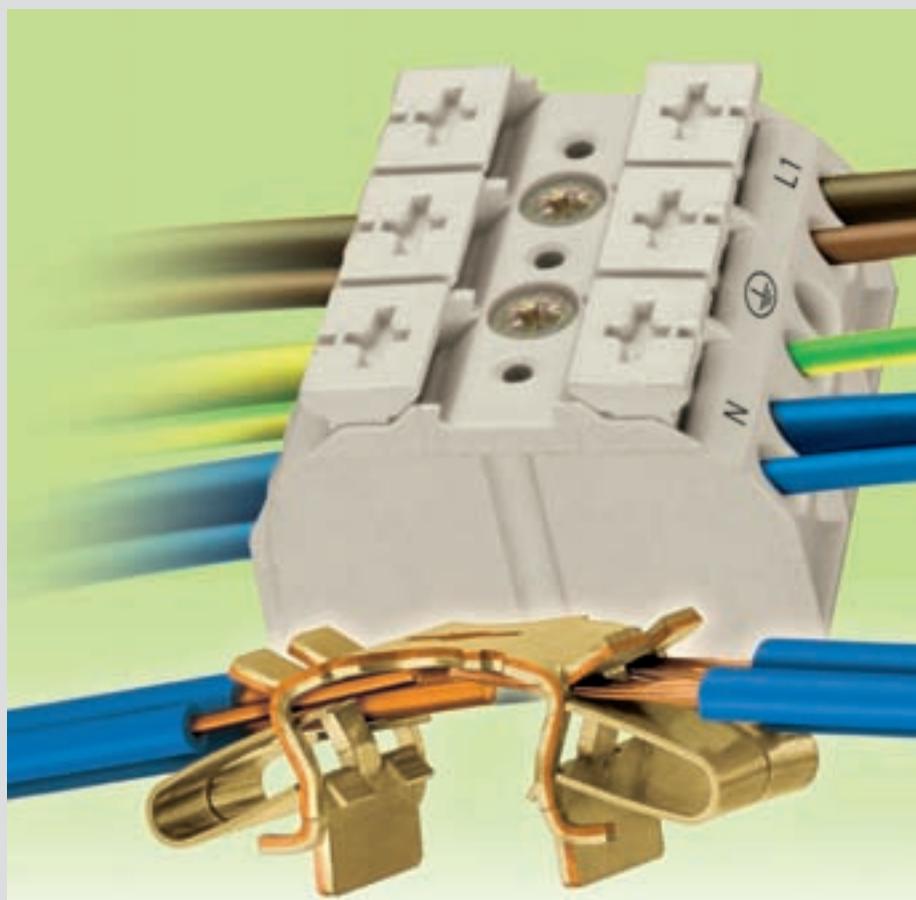


Testing with test plug 2 mm/0.079 in Ø

Ground (earth) contact



Make an automatic contact to the mounting plate.
A varnish coating is penetrated automatically



Commoning



Commoning with comb type jumper bar

Features and advantages

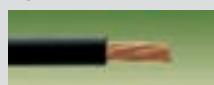
This new terminal block series has been developed specifically to minimise the connection costs of electrical devices. At the same time, the requirement for flexible assembly, for numerous electrical connection options and for easy handling were part of the development:

- The new CAGE CLAMP®S allows the connection of up to four conductors with cross sections from 0.5 mm^2 to 4 mm^2 . Different cross sections can be used within one terminal block.
- For factory wiring, CAGE CLAMP®S allows the direct insertion of solid conductors or flexible conductors with crimped ferrules or with ultrasonically bonded wire ends from 0.5 mm^2 up to 4 mm^2 (length of bonded wire end min. 7 mm).
- Automatic grounding contact available as an option.
- Snap-in mounting feet for fast assembly.
- Push buttons for easy handling with a commercially available screwdriver or by hand.
- Direct testing with test plug 2 mm/0.079 in Ø.
- Standard marking per pole or, for large quantities, in accordance with customer's specification.

CAGE CLAMP® clamps the following copper wires:



solid



stranded



fine-stranded

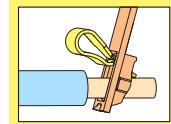


tip-bonded

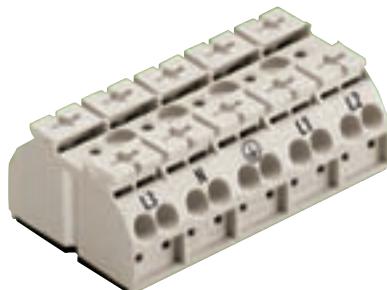


with crimped ferrule

4-Conductor Device Connectors, 2- and 3-Pole 4 mm² with Unique Cost-Cutting Features Series 862



	4 x 0.5 – 4 mm ² 500 V/6 kV/3 32 A	4 x AWG 20 – 12 300/600 V, 20/5 A ENEC®	4 x 0.5 – 4 mm ² 500 V/6 kV/3 32 A	4 x AWG 20 – 12 300/600 V, 20/5 A ENEC®
	10 – 11 mm / 0.41 in	10 – 11 mm / 0.41 in	10 – 11 mm / 0.41 in	10 – 11 mm / 0.41 in



Available in black and white colour



2-pole



3-pole

without ground (earth) contact	Item No. black	Item No. white	Pack.-unit pcs	Item No. black	Item No. white	Pack.-unit pcs
for fixing screw 3 mm Ø or						
for self tapping screw 2.9mm Ø from top						
without marking	862-0552	862-0652	500			
L1-N	862-1552	862-1652	500			
N-L1	862-2552	862-2652	500			
for self tapping screw 2.9mm Ø from below						
without marking	862-0562	862-0662	500			
L1-N	862-1562	862-1662	500			
N-L1	862-2562	862-2662	500			
1 snap-in foot per pole						
without marking	862-0532	862-0632	500			
L1-N	862-1532	862-1632	500			
N-L1	862-2532	862-2632	500			
for fixing screw 3 mm Ø or						
for self tapping screw 2.9mm Ø from top						
without marking				862-0503	862-0603	250
⊕-N-L1				862-1503	862-1603	250
N-⊕-L1				862-2503	862-2603	250
N-⊕-L1				862-8503	862-8603	250
⊕-N-L1				862-9503	862-9603	250
1 snap-in foot per pole						
without marking				862-0533	862-0633	250
⊕-N-L1				862-1533	862-1633	250
N-⊕-L1				862-2533	862-2633	250
N-⊕-L1				862-8533	862-8633	250
⊕-N-L1				862-9533	862-9633	250
snap-in feet at pos. 1+3						
without marking				862-0593	862-0693	250
⊕-N-L1				862-1593	862-1693	250
N-⊕-L1				862-2593	862-2693	250
N-⊕-L1				862-8593	862-8693	250
⊕-N-L1				862-9593	862-9693	250

Accessories, Series 862

Comb type jumper bar , can easily be inserted into the wire entry 32 A 862-482 5	Test plug , with cable 500 mm/17.7" 2 mm/0.079 in Ø red 210-136 50 (5x10)	Test plug , with cable 500 mm/17.7" 2.3 mm/0.091 in Ø yellow 210-137 50 (5x10)
Screwdriver , with partially insulated shaft (3.5 x 0.5) mm 210-620 1	Marker strip , white, plain, for central marking; 7.5 mm wide, on roll 50 m long 709-178 1	Marker strip , white, plain, for central marking; 7.5 mm wide, on roll 300 m long 709-188 1

* You can find approvals on the Internet at www.wago.com.

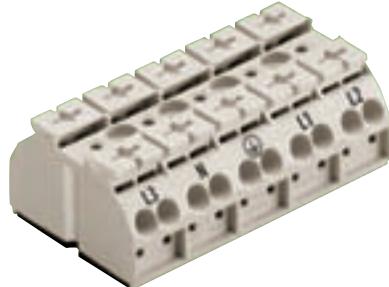
Technical explanations and abbreviations see page 10.2.

4-Conductor Device Connectors, 4- and 5-Pole 4 mm² with Unique Cost-Cutting Features

Series 862

	4 x 0.5 – 4 mm ² 500 V/6 kV/3 32 A	4 x AWG 20 – 12 300/600 V, 20/5 A	4 x 0.5 – 4 mm ² 500 V/6 kV/3 32 A	4 x AWG 20 – 12 300/600 V, 20/5 A
	10 – 11 mm / 0.41 in		10 – 11 mm / 0.41 in	

*



Available in black and white colour



4-pole



5-pole

without ground (earth) contact	Item No. black	Item No. white	Pack.-unit pcs	Item No. black	Item No. white	Pack.-unit pcs
for fixing screw 3 mm Ø or						
for self tapping screw 2.9mm Ø from top						
without marking	862-0504	862-0604	200			
⊕-N-L1-L2	862-1504	862-1604	200			
N-⊕-L1-L2	862-2504	862-2604	200			
N-⊕-L1-L2	862-8504	862-8604	200			
⊕-N-L1-L2	862-9504	862-9604	200			
1 snap-in foot per pole						
without marking	862-0534	862-0634	200			
⊕-N-L1-L2	862-1534	862-1634	200			
N-⊕-L1-L2	862-2534	862-2634	200			
N-⊕-L1-L2	862-8534	862-8634	200			
⊕-N-L1-L2	862-9534	862-9634	200			
snap-in feet at pos. 1+4						
without marking	862-0594	862-0694	200			
⊕-N-L1-L2	862-1594	862-1694	200			
N-⊕-L1-L2	862-2594	862-2694	200			
N-⊕-L1-L2	862-8594	862-8694	200			
⊕-N-L1-L2	862-9594	862-9694	200			
for fixing screw 3 mm Ø or						
for self tapping screw 2.9mm Ø from top						
without marking				862-0505	862-0605	200
⊕-N-L1-L2-L3				862-1505	862-1605	200
L3-N-⊕-L1-L2				862-2505	862-2605	200
L3-N-⊕-L1-L2				862-8505	862-8605	200
⊕-N-L1-L2-L3				862-9505	862-9605	200
1 snap-in foot per pole						
without marking				862-0525	862-0625	200
⊕-N-L1-L2-L3				862-1525	862-1625	200
L3-N-⊕-L1-L2				862-2525	862-2625	200
L3-N-⊕-L1-L2				862-8525	862-8625	200
⊕-N-L1-L2-L3				862-9525	862-9625	200
snap-in feet at pos. 1+3+5						
without marking				862-0515	862-0615	200
⊕-N-L1-L2-L3				862-1515	862-1615	200
L3-N-⊕-L1-L2				862-2515	862-2615	200
L3-N-⊕-L1-L2				862-8515	862-8615	200
⊕-N-L1-L2-L3				862-9515	862-9615	200

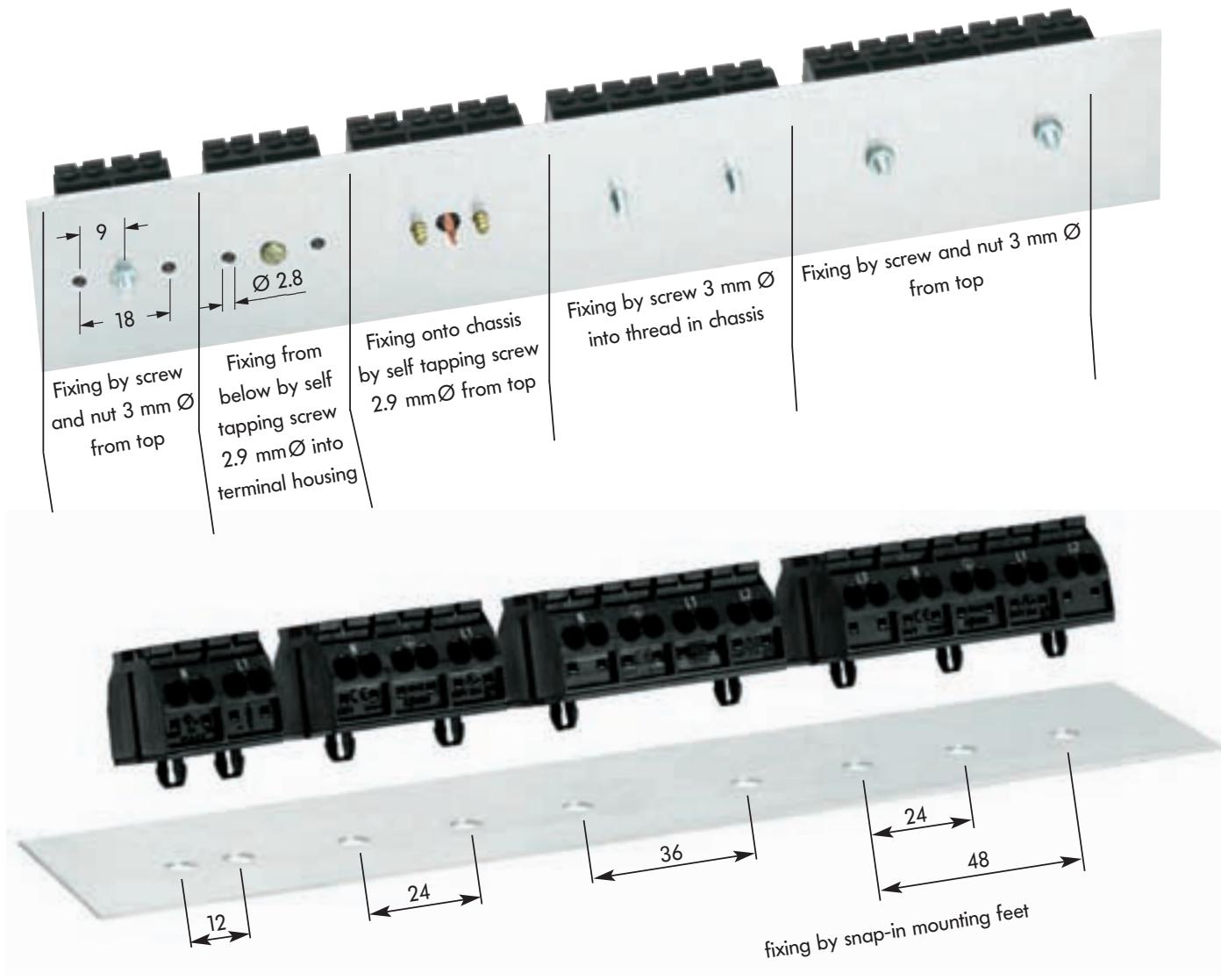
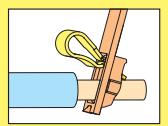
Accessories, Serie 862

Comb type jumper bar, can easily be inserted into the wire entry 32 A 862-482 5	Test plug, with cable 500 mm/1'77" 2 mm/0.079 in Ø red 210-136 50 (5x10)	Test plug, with cable 500 mm/1'77" 2.3 mm/0.091 in Ø yellow 210-137 50 (5x10)
Screwdriver, with partially insulated shaft (3.5 x 0.5) mm 210-620 1	Marker strip, white, plain, for central marking; 7.5 mm wide, on roll 50 m long 709-178 1	Marker strip, white, plain, for central marking; 7.5 mm wide, on roll 300 m long 709-188 1

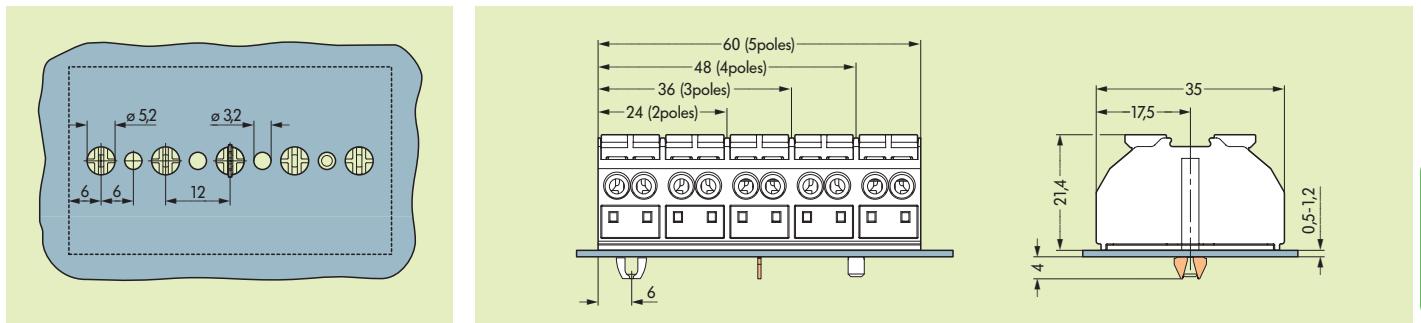
* You can find approvals on the Internet at www.wago.com.

Technical explanations and abbreviations see page 10.2.

Fixing Options for 4-Conductor Device Connectors Series 862



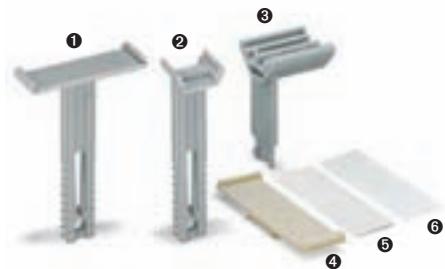
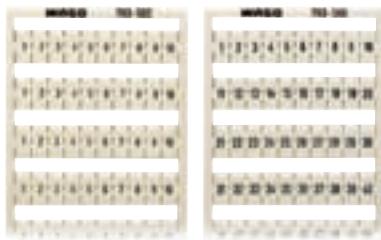
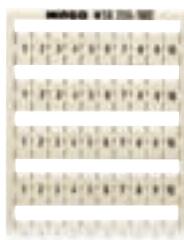
Dimensions (in mm)



Ferrules	Sleeve for mm ²	AWG	Colour	Stripped length mm	L	L1	D mm	D1	D2	Item No.	Pack.-unit pcs
Insulated ferrules electrolytic copper, electro-tin plated	0.5	22	white	12.0	16.0	10.0	3.1	2.6	1.0	216-241	1000
	0.75	20	grey	12.0	16.0	10.0	3.3	2.8	1.2	216-242	1000
	1.0	18	red	12.0	16.0	10.0	3.5	3.0	1.4	216-243	1000
	1.5	16	black	12.0	16.0	10.0	4.0	3.5	1.7	216-244	1000
Uninsulated ferrules electrolytic copper, electro-tin plated	0.5	22		10	10		2.1	1.0	216-141	1000	
	0.75	20		10	10		2.3	1.2	216-142	1000	
	1.0	18		10	10		2.5	1.4	216-143	1000	
	1.5	16		10	10		2.8	1.7	216-144	1000	

0 Marking Accessories

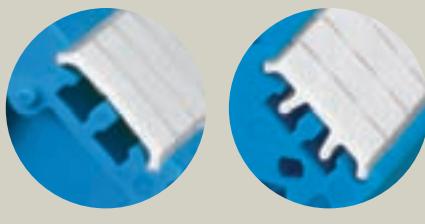
WAGO quick marking systems Miniature WSB and WSB	WAGO multi marking system WMB for use in miniature WSB and WSB marker receptacle profile of the terminal block	WAGO group marker carriers
10 strips with 10 markers for each card 5 cards per packing unit	10 strips with 10 markers for each card 5 cards per packing unit	



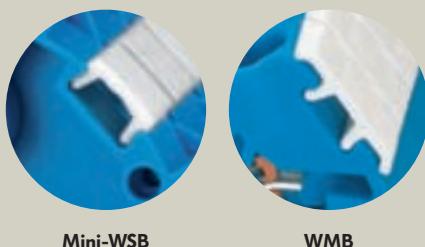
Marking per card	Item No.	Item No.	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
	Mini-WSB	WMB			Adjustable height group marker carrier,	
	for series 264, 869, 870	for terminal block width 4 / 4.2 mm 5 / 5.2 mm			for end stops 249-116 and 249-117 (see page 9.2)	
plain	248-501	793-4501	793-5501	5 cards	for 1 marker card or self-adhesive label and transparent cover protection	
1 ... 10 (10x)	248-502	793-4502	793-5502	5 cards	249-119 ①	50 (2 x 25)
11 ... 20 (10x)	248-503	793-4503	793-5503	5 cards	for 2 WSB Quick markers each or 1 x continuous marking strip	
21 ... 30 (10x)	248-504	793-4504	793-5504	5 cards	249-118 ②	100 (4 x 25)
31 ... 40 (10x)	248-505	793-4505	793-5505	5 cards	Group marker carrier, for up to 3 WMB markers, 15 mm/0.591 in wide	
41 ... 50 (10x)	248-506	793-4506	793-5506	5 cards	209-140 ③	50
1 ... 9 (10x)	248-565	793-4565	793-5565	5 cards	Group marker carrier, for snapping into screwless end stops, 10 mm/0.394 in wide	
10, 20 ... 50 (20x)	248-553	793-4553	793-5553	5 cards	209-112 ④	50
1 ... 50 (2x)	248-566	793-4566	793-5566	5 cards	Marker card, from white cardboard, for self-marking, 100 markers per sheet	
51 ... 100 (2x)	248-507	793-4507	793-5507	5 cards	209-113 ⑤	1 sheet
101 ... 150 (2x)	248-508	793-4508	793-5508	5 cards	Protection cover, transparent	
151 ... 200 (2x)	248-509	793-4509	793-5509	5 cards	209-114 ⑥	50
R, S, T, U, V, W, X, Y, Z, MP	248-544	793-4544	793-5544	5 cards		
A, B, P, N, PE, PEN, L1, L2, L3, ⊕	248-545	793-4545	793-5545	5 cards		
(10 strips each with same numbers)						



WSB marker receptacle



Mini-WSB marker receptacle



All markings stated above are also available with black printing on coloured marker cards.

Additional item numbers for coloured marker cards

yellow .../000-002

red .../000-005

blue .../000-006

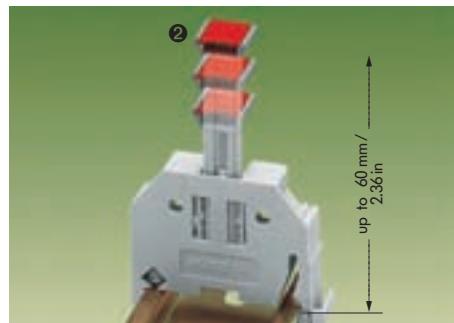
grey .../000-007

orange .../000-012

light green .../000-017

green .../000-023

violet .../000-024



Marker Cards - Self-Adhesive Marker Strips

Marking Computer System

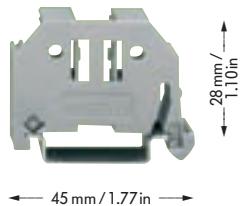
WAGO marker cards for series 260/261/262, computer marked, 40 self-adhesive strips per card	WAGO marker cards, computer marked, for pin spacings 2.5 mm; 2.54 mm; 3.5 mm; 3.81 mm; 5 mm; 5.08 mm; 7.5 mm; 7.62 mm; 10 mm and 10.16 mm 100/80 self-adhesive strips per card	Thermal transfer printers Plotter Accessories
Height of marker strips 6 mm/0.236 in		



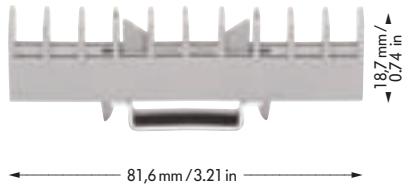
Marking	Item No.	Pack.-unit pcs	Marking	Item No.	Pack.-unit pcs	Description	Item No.
for 2-conductor terminal strips series 260			suitable for terminal strips with			Thermal transfer printer TP 298	258-298
1 - 10 (120x)	210-333/0500-0002	1 card	Pin spacing 2.5 mm , strip height 2.3 mm/100 strips			Resolution 300 dpi, incl. ProServe Software	
11 - 20 (120x)	210-333/0500-0003	1 card	1 - 16 (400x)	210-331/0250-0202	1 card	Thermal transfer printer TP 297	258-297
21 - 30 (120x)	210-333/0500-0004	1 card	17 - 32 (400x)	210-331/0250-0204	1 card	Resolution 200 dpi, incl. ProServe Software	
31 - 40 (120x)	210-333/0500-0005	1 card	33 - 48 (400x)	210-331/0250-0206	1 card		
41 - 50 (120x)	210-333/0500-0006	1 card				Plotter IP 350	258-350
			Pin spacing 2.54 mm , strip height 2.3 mm/100 strips			incl. power supply, centronics and USB cable	
			1 - 16 (400x)	210-331/0254-0202	1 card		
			17 - 32 (400x)	210-331/0254-0204	1 card		
			33 - 48 (400x)	210-331/0254-0206	1 card		
for 4-conductor terminal strips series 260			Pin spacing 3.5 mm , strip height 3 mm/80 strips				
1 - 10 (80x)	210-333/0800-0002	1 card	1 - 16 (240x)	210-332/0350-0202	1 card		
11 - 20 (80x)	210-333/0800-0003	1 card	17 - 32 (240x)	210-332/0350-0204	1 card		
21 - 30 (80x)	210-333/0800-0004	1 card	33 - 48 (240x)	210-332/0350-0206	1 card		
31 - 40 (80x)	210-333/0800-0005	1 card					
41 - 50 (80x)	210-333/0800-0006	1 card					
			Pin spacing 3.81 mm , strip height 3 mm/80 strips				
			1 - 16 (160x)	210-332/0381-0202	1 card		
			17 - 32 (160x)	210-332/0381-0204	1 card		
			33 - 48 (160x)	210-332/0381-0206	1 card		
for 2-conductor terminal strips series 261							
1 - 12 (80x)	210-333/0600-0103	1 card					
13 - 24 (80x)	210-333/0600-0104	1 card					
25 - 36 (80x)	210-333/0600-0105	1 card					
37 - 48 (80x)	210-333/0600-0106	1 card					
			Pin spacing 5 mm , strip height 3 mm/80 strips				
			1 - 16 (160x)	210-332/0500-0202	1 card		
			17 - 32 (160x)	210-332/0500-0203	1 card		
			33 - 48 (160x)	210-332/0500-0204	1 card		
for 4-conductor terminal strips series 261							
1 - 16 (40x)	210-333/1000-0202	1 card					
17 - 32 (40x)	210-333/1000-0204	1 card					
33 - 48 (40x)	210-333/1000-0206	1 card					
			Pin spacing 5.08 mm , strip height 3 mm/80 strips				
			1 - 16 (160x)	210-332/0508-0202	1 card		
			17 - 32 (160x)	210-332/0508-0204	1 card		
			33 - 48 (160x)	210-332/0508-0204	1 card		
for 2-conductor terminal strips series 262							
1 - 20 (40x)	210-333/0700-0202	1 card	Pin spacing 5.08 mm , strip height 3 mm/80 strips			Ink pen	
21 - 40 (40x)	210-333/0700-0108	1 card	1 - 16 (160x)	210-332/0508-0202	1 card	Thickness of pen stroke 0.18 mm	258-226
41 - 60 (40x)	210-333/0700-0109	1 card	17 - 32 (160x)	210-332/0508-0204	1 card	Thickness of pen stroke 0.25 mm	258-227
			33 - 48 (160x)	210-332/0508-0204	1 card	Thickness of pen stroke 0.35 mm	258-228
						Thickness of pen stroke 0.5 mm	258-229
for 4-conductor terminal strips series 262							
1 - 12 (40x)	210-333/1200-0103	1 card	Pin spacing 7.5 mm , strip height 3 mm/80 strips			Cleaning Set	258-139
13 - 24 (40x)	210-333/1200-0104	1 card	1 - 20 (80x)	210-332/0750-0020	1 card	EK Pen Cleaner	258-140
25 - 36 (40x)	210-333/1200-0105	1 card					
37 - 48 (40x)	210-333/1200-0106	1 card	Pin spacing 7.62 mm , strip height 3 mm/80 strips			EK ink cartridges	258-141
			1 - 20 (80x)	210-332/0762-0020	1 card	black, for permanent marking, cannot be refilled (5x1 ml)	
			Pin spacing 10 mm , strip height 3 mm/80 strips			ProServe Software	0888-0402
			1 - 16 (80x)	210-332/1000-0202	1 card	WAGO smartDESIGNER, WAGO smartMARKING,	
			17 - 32 (80x)	210-332/1000-0204	1 card	WAGO productLOCATOR, WAGO wireLINK	
Self-adhesive marker strips on carrier cards			33 - 48 (80x)	210-332/1000-0206	1 card		
DIN A 4, plain, strip length 182 mm, pin spacings can be chosen						Carrier plates for	
Strip height 2.3 mm/100 strips	210-331		1 - 16 (80x)	210-332/1016-0202	1 card	WSB 5 mm	258-361
Strip height 3 mm/ 80 strips	210-332		17 - 32 (80x)	210-332/1016-0204	1 card	WSB 4 mm	258-362
Strip height 5 mm/ 48 strips	210-334		33 - 48 (80x)	210-332/1016-0206	1 card	Miniature WSB	258-363
Strip height 6 mm/ 40 strips	210-333					Group marking carrier (209-112)	258-364
Strip height 9 mm/ 40 strips	210-335					WMB (5 mm)	258-368

Transparent Covers for Rail-Mounted Terminal Blocks, Usable with Lead Seals Screwless End Stops, Collective Carrier for Jumpers

Covers and cover carrier type 1, suitable for Rail-mounted terminal blocks series 279 to 282 Miniature rail-mounted terminal blocks series 264	Covers and cover carrier type 2, suitable for Rail-mounted terminal blocks series 283 to 285 Double and triple deck term. bl. series 280/281 Sensor/actuator terminal blocks series 280 Disconnect and measuring terminal blocks for transformer circuits series 282	Screwless end stop Collective carrier for jumpers
---	---	--



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Cover, type 1, 1 m/3'3" long, suitable for cover carrier, type 1 transparent	709-153	Cover, type 2, 1 m/3'3" long, suitable for cover carrier, type 2 transparent	709-154	Screwless end stop, for DIN 35 rail	



81,6 mm / 3.21 in

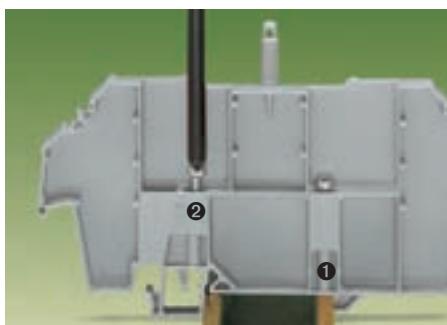
Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Cover carrier, type 1, incl. fixing/retaining screws and knurled nut grey	709-167	Cover carrier, type 2, incl. fixing/retaining screws and knurled nut grey	709-168	Collective carrier for jumpers	

Accessories, Series 709

Spare fixing/retaining screws 209-196	200 (8 x 25)	Marker card with 6 marking strips plain 709-183	1
Spare knurled nut 210-549	100 (4 x 25)	Diskette with WinWORD marking system 709-184	1



Example:
A cover, type 1, with safety warning and lead seals

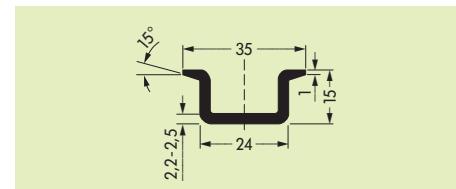
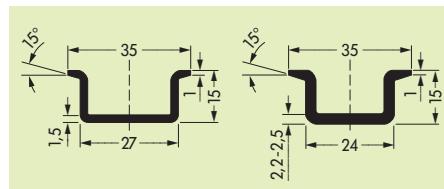
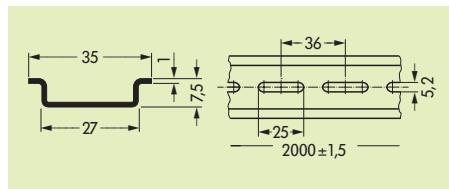
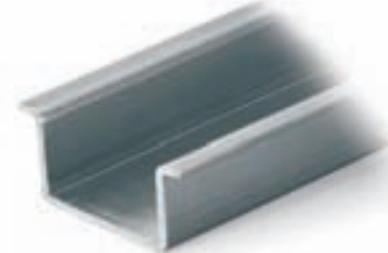


Item No.	Pack.-unit pcs
Collective carrier for adjacent jumpers 209-100	50 (2 x 25)

Suitable for adjacent jumpers series
279, 280, 281, 282 and 284
and banana plugs series 215

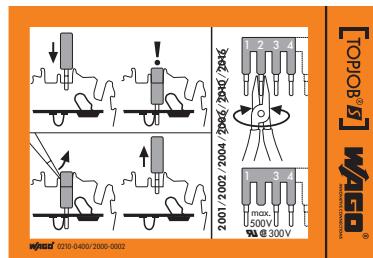
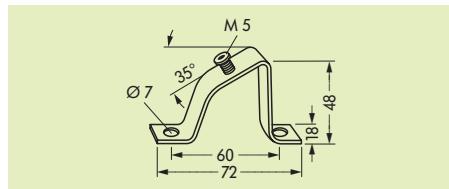
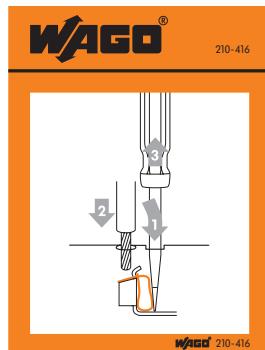
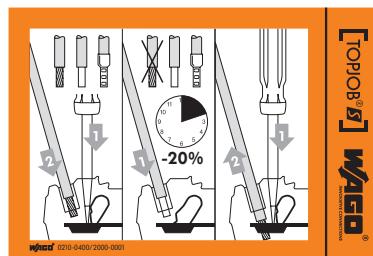
Mounting Accessories Carrier Rails and Sticker for Operating Instruction

Carrier rail 35 x 7.5 mm, 1 mm/0.039 in thick, acc. to EN 60715, Steel, zinc-plated and yellow chromated I _N 76 A (referred to a length of 1 m)	Carrier rail 35 x 15 mm, 1.5 mm/0.059 in and 2.3 mm/0.091 in thick, acc. to EN 60715, Steel, zinc-plated and yellow chromated I _N 125 A (referred to a length of 1 m)	Carrier rail 35 x 15 mm, 2.3 mm/0.091 in thick, acc. to EN 60715, Copper, unplated I _N 309 A (referred to a length of 1 m)
--	--	---



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Steel rail 35 x 7.5 mm, 1 mm/0.039 in th., unslootted 2 m/6'6" long	210-113	10	Steel rail 35 x 15 mm, 2 m/6'6" long 1.5 mm thick	210-114	10
Steel rail 35 x 7.5 mm, 1 mm/0.039 in th., slotted 2 m/6'6" long	210-112	10	1.5 mm thick	210-197	10
			2.3 mm thick	210-118	10

Angled support bracket Steel, zinc-plated and yellow chromated	Operating sticker, for rail-mounted terminal blocks with TOPJOB® S connection Size 80 mm x 101 mm	Operating sticker, for CAGE CLAMP®, universal Size 60 mm x 63 mm
---	--	--



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Angled support bracket, without screw 210-148	10	Operating sticker, for rail-mounted terminal blocks with TOPJOB® S Series 2001/2002/2004/2006/2010/2016		Operating sticker, for CAGE CLAMP®, universal	
Screw M 5 x 8 210-149	100 (5 x 20)			210-400/2000-0001	100
				210-400/2000-0002	100

**Screwdrivers
with partially insulated shaft
for optimum handling
of CAGE CLAMP® connection
in terminal blocks and connectors**

Multipole operating tools for front-entry terminal blocks (insulated)

**Screwdrivers (DIN 5264)
for optimum handling
of CAGE CLAMP® connection
in terminal blocks and connectors**



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Screwdriver , with partially insulated shaft, blade 2.5 x 0.4 mm/0.098 x 0.016 in suitable for series 218, 233, 234, 235, 250, 253, 279, 733, 734, 735, 770, 2001		Operating tool , solid non-conducting material suitable for series 279		Screwdriver, short, blade 3.5 x 0.5 mm/0.138 x 0.020 in suitable for series 231, 232, 236, 255, 256, 257, 264, 280, 281, 721, 722, 736, 737, 738, 742, 745, 804, 869, 2002, 2004	
210-619	1	suitable for series 279		210-657	1
		2-way 279-432	1		
		3-way 279-433	1		
		10-way 279-440	1	Screwdriver, short angled, blade 3.5 x 0.5 mm/0.138 x 0.020 in specially suitable for sensor and actuator terminal blocks of series 280 or for	
		suitable for series 264*, 280, 281**		series 231, 232, 236, 255, 256, 257, 264, 280, 281, 721, 722, 736, 737, 738, 742, 745, 804, 869, 2002,	
		1-way 209-130	1	2004	
210-620	1	2-way 280-432	1	210-658	1
		3-way 280-433	1		
Screwdriver , with partially insulated shaft, blade 5.5 x 0.8 mm/0.217 x 0.031 in suitable for series 282, 283, 284, 285, 745, 2006, 2010, 2016		4-way 280-434	1		
		5-way 280-435	1		
		6-way 280-436	1		
		7-way 280-437	1		
210-621	1	8-way 280-438	1		
		9-way 280-439	1		
		10-way 280-440	1		
Screwdriver , with partially insulated shaft, – set –, consists of 210-619, 210-620 und 210-621		suitable for series 281			
210-622	1	5-way 281-440	1		
		* only 1- and 2-way			
		** only up to 3-way			

Application notes



Set of screwdrivers in a box



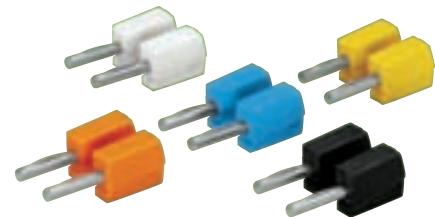
Commoning of front-entry through terminal blocks with comb type jumper bars with the aid of a 10-way operating tool



The blade dimensions of the a. m. screwdrivers (DIN 5264) are particularly appropriate for easy front-entry sensor and actuator terminal blocks of series 280

Voltage Tester and Testboy, Series 206 Banana Plugs, Series 215

Voltage tester Profipol 12 V to 400 V AC 12 V to 500 V DC Weight 138 g / 0.304 lbs	Testboy	Banana plugs for sockets Ø 4 mm 0.08 – 2.5 mm ² AWG 28 – 14 42 V 20 A  9 – 11 mm / 0.39 in
---	----------------	---



Voltage testing at push-wire connectors



A device that will reliably detect AC voltages in cables, sockets, fuses, switches, connector boxes, etc.



Connection of conductors:
Press button fully and insert stripped conductor into square entry and release

- LED band provides clear voltage range readings
(white scale = AC voltage
red scale = DC voltage)
 - LED indication of polarity
 - double-pole voltage testing
 - type of protection IP 65
 - switching is not necessary
 - 85 cm long highly flexible and nonskid test cable

The following can be detected by the WAGO Testboy:

- Live conductors
 - Line breaks
 - Blown fuses
 - Defective switches
 - Defective lamps

Wire Cutter and Stripping Tools Series 206

Wire cutter acc. to VDE for copper and aluminium wires up to 35 mm²/AWG 2 Weight 200 g / 0.441 lbs	Quickstrip 10 wire stripper 0.02 mm² – 10 mm² "f-st" (6 mm² "s") wire cutter up to 10 mm² "f-st" (1.5 mm² "s") Weight 136 g / 0.297 lbs	Quickstrip 16 wire stripper 4 mm² – 16 mm² wire cutter up to 10 mm² "f-st" (1.5 mm² "s") Weight 136 g / 0.297 lbs
---	--	---



Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs	Item No.	Pack.-unit pcs
Wire cutter 206-118	1	Stripping tool Quickstrip 10 206-124	1	Stripping tool Quickstrip 16 206-125	1
Accessories, Series 206					
		Standard blade cassette 0.02 mm ² up to 10 mm ² 206-126	1	Standard blade cassette 4 mm ² up to 16 mm ² 206-128	1
		"V" blade cassette 0.02 mm ² up to 4 mm ² for PTFE 206-127	1		

Application notes



Cutting of wire



Quickstrip 16. Stripping of wire.



Quickstrip 16. Cutting of wire.

- Automatic adjustment to wire size.
- No damage to wire strands.
- Gripping pressure of jaws adjusts automatically to wire insulation diameter
- Full cycle strip – jaws open after stripping, ensures no nicked strands.
- Exact strip length may be set by sliding of black setting stop.
- Replaceable stripping jaw assembly.
- Self-sharpening, fully protected wire cutter.
- Glass fibre reinforced polyamide tool body.

Crimping Tool Variocrimp 4, Variocrimp 16 Ferrules

Crimping tools for ferrules insulated or uninsulated	Insulated ferrules
Variocrimp 4 from 0.25 mm² – 4 mm² Weight 400 g / 0.882 lbs Variocrimp 16 from 6 mm² – 16 mm² Weight 580 g / 1.28 lbs	

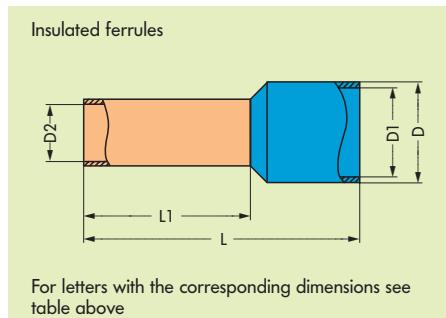


Item No.	Pack.-unit pcs	Sleeve for mm ²	Colour	Stripped length mm	L mm	L1	D mm	D1	D2	Item No.	Pack.-unit pcs	
Variocrimp 4 206-204	1	0.25	24	yellow	7.5	10.5	6.0	2.5	2.0	0.8	216-321	1000
0.25 mm ² - 4 mm ² / AWG 24 - 12		0.25	24	yellow	9.5	12.5	8.0	2.5	2.0	0.8	216-301	1000
		0.35	24	green	7.5	10.5	6.0	2.5	2.0	0.8	216-322	1000
		0.34	24	green	9.5	12.5	8.0	2.5	2.0	0.8	216-302	1000
Variocrimp 16 206-216	1	0.5	22	white	7.5	11.5	6.0	3.0	2.5	1.1	216-221	1000
6 mm ² - 16 mm ² / AWG 10 - 6		0.5	22	white	9.5	13.5	8.0	3.0	2.5	1.1	216-201	1000
		0.75	20	grey	8.0	12.0	6.0	3.3	2.8	1.3	216-222	1000
		0.75	20	grey	10.0	14.0	8.0	3.3	2.8	1.3	216-202	1000
		1.0	18	red	8.0	12.0	6.0	3.6	3.0	1.5	216-223	1000
		1.0	18	red	10.0	14.0	8.0	3.6	3.0	1.5	216-203	1000
		1.5	16	black	8.0	12.0	6.0	4.0	3.4	1.8	216-224	1000
		1.5	16	black	10.0	14.0	8.0	4.0	3.4	1.8	216-204	1000
		2.08	14	yellow	10.0	14.5	8.0	4.2	3.6	2.05	216-205	1000
		2.5	14	blue	10.0	15.0	8.0	4.8	4.2	2.3	216-206	1000
Application notes		4.0	12	grey	12.0	16.8	9.5	5.4	4.8	2.9	216-207	1000
		6.0	10	yellow	14.0	20.0	12.0	6.8	6.2	3.5	216-208	100
		10.0	8	red	16.0	21.0	12.0	8.1	7.5	4.6	216-209	100
		16.0	6	blue	23.0	28.0	18.0	9.6	8.8	5.8	216-210	100
Insulated ferrules, extra long, for TOBJOB®S terminal blocks												
0.5	22	white	12.0	16.0	10.0	3.1	2.6	1.0	216-241	1000		
0.75	20	grey	12.0	16.0	10.0	3.3	2.8	1.2	216-242	1000		
0.75	20	grey	14.0	18.0	12.0	3.3	2.8	1.2	216-262	1000		
1.0	18	red	12.0	16.0	10.0	3.5	3.0	1.4	216-243	1000		
1.0	18	red	14.0	18.0	12.0	3.5	3.0	1.4	216-263	1000		
1.5	16	black	12.0	16.0	10.0	4.0	3.5	1.7	216-244	1000		
1.5	16	black	14.0	18.0	12.0	4.0	3.5	1.7	216-264	1000		
1.5	16	black	20.0	24.0	18.0	4.0	3.5	1.7	216-284	1000		
2.5	14	blue	12.0	17.0	10.0	4.7	4.2	2.2	216-246	1000		
2.5	14	blue	14.0	19.0	12.0	4.7	4.2	2.2	216-266	1000		
2.5	14	blue	20.0	25.0	18.0	4.7	4.2	2.2	216-286	1000		
4.0	12	grey	14.0	20.0	12.0	5.4	4.8	2.8	216-267	500		
4.0	12	grey	20.0	26.0	18.0	5.4	4.8	2.8	216-287	500		
6.0	10	yellow	14.0	20.0	12.0	6.9	6.3	3.5	216-208	500		
6.0	10	yellow	20.0	26.0	18.0	6.9	6.3	3.5	216-288	500		
10.0	8	red	20.0	28.0	18.0	8.4	7.6	4.5	216-289	500		
16.0	6	blue	23.0	28.0	18.0	9.6	8.8	5.8	216-210	500		



Introduce conductor with ferrule into crimping station.
Squeeze handles until ratchet mechanism is released.

- With the Variocrimp 4, the built-in crimping pressure control automatically adjusts the crimping force to the conductor cross section used. With the Variocrimp 16 it is necessary to select the wire gauge on the tool before crimping.
- Each tool has only one crimping station for all wire sizes handled.
- Uniform compact crimping from all four sides for high conductor retention.
- No necessity to centralize the conductor into the terminal ferrule.
- Conductor and ferrule insertion possible from both sides (for left- and right handers).
- Built-in ratchet to guarantee complete crimping every time.
- Tools open automatically after crimping operation is complete.
- Comfortable handles for operator.



Uninsulated ferrules
see General Catalogue W4, volume 1



A

	Page
Actuator and actuator LED term. blocks	4.35
Adjacent jumpers	4.10 – 4.15
Alternate jumpers	4.10 – 4.15
Analogue input modules	5.4
Analogue output modules	5.4
Angled female connectors see <i>MULTI CONNECTION SYSTEM</i> – 100% protected against mismatching – standard version	Sec. 6
Angled support bracket	9.3

B

Bridge rectifiers	5.15
-------------------	------

C

CAGE CLAMP®S connection	4.1
CAL® fieldbus coupler	5.2
CANopen® fieldbus coupler	5.2
CC-Link fieldbus coupler	5.2
Carrier rails	9.3
Carrier terminal blocks, front-entry – X-COM®-SYSTEM	4.28
Changeover modules, pluggable	5.15
Collective carrier for jumpers	9.2
Comb type jumper bars – for rail-mounted term. blocks	4.10 – 4.12
– for Topjob S term. blocks	4.2 – 4.9
Combi PCB terminal blocks	W 4, vol. 2
Combi strip, 2-conductor	6.5
Compact block terminal strips	4.45
Compact I/O system	5.6
Companies and representations WAGO worldwide	10.4
Computer marking	9.1
Connectors – for junction boxes	Section 8
– for PCBs	Section 7
– <i>MULTI CONNECTION SYSTEM</i>	Section 6
– WINSTA®	Section 8
– X-COM®-SYSTEM	Section 4
Cover for rail-mounted terminal blocks	9.2
Crimping tools	9.7
Current supplies	5.16

D

Data exchange coupler	5.2
DeviceNet® fieldbus coupler	5.2
Differential inputs und differential measurement inputs see “Analogue input modules”	5.4
Digital input modules	5.3
Digital output modules	5.3
Disconnect terminal blocks, f.-e. angled type – with knife disconnect	4.29
– with pivotable disconnect link	4.29
Disconnect/Test terminal blocks	4.30 – 4.31

Page

	Page
Double deck headers <i>MULTI CONNECTON SYSTEM</i>	6.3/6.4
Double deck terminal blocks, f.-e.	4.8, 4.18 – 4.19
Double deck terminal strips for PCBs	7.8
Double pin headers see <i>MULTI CONNECTION SYSTEM MIDI</i>	W 4, Vol. 2

E

EEx i fieldbus modules	5.5
Ex e II PCB terminal blocks	W 4, Vol. 2
Ex e II Through terminal blocks, f.-e. – angled type	4.17
– horizontal type	4.10 – 4.15
Electronic modules	Section 5
Empty component plug housings for building custom circuits	5.17
End stops – for DIN 35 rail	9.2
ETHERNET® fieldbus coupler	5.2

F

Female connectors see <i>MULTI CONNECTION SYSTEM</i>	Sec. 6
see X-COM®-SYSTEM	Sec. 4
Female PCB connectors	7.23
Female PCB terminal blocks	7.23
Ferrules	9.7
Field side connection module	5.5
Fieldbus couplers/controllers	5.2
Fieldbus connectors	5.2
Firewire fieldbus coupler	5.2
Fixing adapter for push-wire connectors – Series 243	8.1
– Series 273	8.3
Fuse modules, pluggable – for carrier terminal blocks	4.28
Fuse terminal blocks, angled type, f.-e. – for mini-automotive fuses	4.28
– with pivotable fuseholder	4.28
Fuse terminal blocks, s.-e.	4.39

G

Ground (earth) conductor terminal blocks, miniature type – for DIN 35 rail	4.43
Ground (earth) conductor disconnect terminal blocks – front-entry	4.29
– side-entry	4.39
Ground (earth) conductor terminal blocks, angled type, f.-e. horizontal type, f.-e.	4.17
– double deck terminal blocks	4.18
– triple deck terminal blocks	4.20
Ground (earth) conductor terminal blocks, side-entry	4.37 – 4.38
– high current terminal blocks	4.16
Group marker carrier	9.0

H

Headers <i>MULTI CONNECTION SYSTEM</i>	Section 6
X-COM-SYSTEM	Section 4
Headers w. solder pins f. double deck assembly see <i>MULTI CONNECTION SYSTEM</i>	Sec. 6
High current PCB terminal blocks	7.10 – 7.12
High current terminal blocks	4.16

J

Jumpers for rail-mounted terminal blocks – push-in type wire jumpers	4.10 – 4.12, 4.17
– staggered jumpers	4.11, 4.12, 4.17
– step-down jumpers	4.13, 4.15

L

Lighting connectors	8.5
Lockout caps	W 4, Vol. 2

M

Marker cards – Miniature WSB/WMB/WSB cards	9.0
Marker cards for WAGO group marker carriers	9.0
Marker strips, self-adhesive	9.1
Marking	Section 9
MICRO Push-wire connectors for junction boxes	8.1
Miniature ground (earth) conductor terminal blocks, f.-e., for DIN 35 rail	4.43
Miniature through terminal blocks, f.-e. for DIN 35 rail	4.43
Miniature WSB Quick marking system (marker cards)	9.0
MODBUS® fieldbus coupler	5.2
Modular I/O system <i>WAGO-I/O-SYSTEM 750</i>	Section 5
Modular terminal blocks or terminal strips with fixing flanges or snap-in mounting feet – front-entry	4.43, 4.45
– side-entry	4.41
Modular terminal blocks and terminal strips – rail-mounted	4.40 – 4.45
– for PCBs	7.0 – 7.23

	Page		Page		Page
MULTI CONNECTION SYSTEM		R		Terminal strips for PCBs	
MICRO 100% protected against mismatching		Rail-mounted terminal blocks with		– front-entry	Section 7
– pin spacing 2.5 mm	6.1	– CAGE CLAMP® connection	4.10 – 4.15	– front-entry and side-entry	7.4 – 7.5
MIDI 100% protected against mismatching		– CAGE CLAMP®S connection	4.2 – 4.7	– high current terminal strips	7.10 – 7.12
– pin spacings 5 mm / 7.5 mm	6.7	– coupler function	5.10	– with finger operated levers	W4, Vol. 2
MIDI standard		Relay modules		– side-entry	7.5/7.14/7.18
pin spacings		– terminal blocks	4.2	– single conductor	Section 7
– 5 mm	6.11	– DIN-rail-mountable	4.4, 4.5	– double conductor	7.19
– 5.08 mm	6.11	Relay sockets		Test plug adapters for	
– 7.5 mm	6.11	– DIN-rail-mountable	4.4	– PCB terminal blocks	
– 7.62 mm	6.11			series 255, 256, 257	W4, Vol. 2
MINI 100% protected against mismatching		S		– miniature terminal blocks	4.41
pin spacings		Safety I/O modules	5.5	– rail-mounted terminal blocks	
– 3.5 mm	6.3	Screwdriver	9.4	4.2 – 4.7, 4.10 – 4.15	
– 3.81 mm	6.3	Sensor terminal blocks and		Test plugs for	
– accessories	6.3	sensor LED terminal blocks		– rail-mounted terminal blocks	
Multi mounting adapter		Service and programming software	4.34	4.13	
MULTI CONNECTION SYSTEM	6.16	Service on CD-ROM	5.6	Testboy	9.5
Multideck PCB terminal strips		WAGO service	9.1	Through terminal blocks, f.-e.	
– double deck terminal strips	7.8	Service connectors	8.5	angled type	4.17
– quadruple deck terminal strips	7.9	Shield (screen) connection system		– distribution terminal blocks	4.14
– triple deck terminal strips	7.8	shield (screen) clamping saddle	5.7	– for transformer circuits	4.31
Multilevel terminal blocks		Shield (screen) terminal blocks,		– suitable for fuse terminal blocks for	
– double deck terminal blocks	4.8, 4.18 – 4.19	horizontal type		automotive blade-type fuses	4.24
– quadruple deck terminal blocks	4.21	horizontal type	4.10 – 4.12	horizontal type	4.2 – 4.7, 4.10 – 4.15
– triple deck terminal blocks	4.9, 4.20	Small terminal blocks		– double deck terminal blocks	4.8, 4.18 – 4.19
O		see "Miniature rail-mounted terminal blocks"		– triple deck terminal blocks	4.9, 4.20
Operating lever	6.4/6.8	Software for building automation		Through terminal blocks, s.-e.	4.37 – 4.39
Operating stickers	9.3	WAGO-I/O-SYSTEM 759	5.6	– high current through term. blocks	4.16
Operating tools	9.4	Software "WAGO SCRIPT"	9.1	Tools	Section 9
Optocoupler modules		Specialty I/O modules	5.4	TopJob®S disconnect terminal blocks	4.24 – 4.27
– pluggable		Staggered jumpers		TopJob®S rail-mounted terminal blocks	4.2 – 4.9
– rail-mounted terminal blocks	5.10	for rail-mounted terminal blocks	4.11, 4.12	Triple deck terminal blocks, f.-e.	4.9, 4.20
Overvoltage protection		Step-down jumpers	4.13, 4.15	Triple deck terminal strips for PCBs	7.8
– pluggable		Strain relief housings for		2-conductor female connectors	
– rail-mounted terminal blocks	5.11	– MULTI CONNECTION SYSTEM MIDI	6.17	MULTI CONNECTION SYSTEM	
P		– MULTI CONNECTION SYSTEM MINI	6.17	– 100% protected against mismatching	
PCB terminal blocks and terminal strips		– WINSTA®	8.8	– standard type	
– with CAGE CLAMP® connection		Strain relief plates for		Up/down counters	5.4
– with push-wire connection		– MULTI CONNECTION SYSTEM MIDI	6.17	U	
PCB terminal blocks		– MULTI CONNECTION SYSTEM MICRO	6.1		
– fuse terminal blocks, terminal blocks,		– MULTI CONNECTION SYSTEM MINI	6.17		
term. blocks for test and measurement		Stripping tools	9.6	Up/down counters	5.4
– front-entry		Supply modules	5.5		
– front-entry and side-entry		Surge suppression devices			
– high current		– pluggable	5.15		
– single conductor		Switching modules, changeover			
– double conductor		– pluggable	5.15		
Power supply units in housings	5.16	Switching relay modules			
PressIn technique	7.6	– terminal blocks	5.10		
PROFIBUS® fieldbus coupler	5.2	– DIN-rail-mountable	5.12, 5.13		
Programmable fieldbus controller	5.2	– pluggable	5.14		
ProServe CD-ROM		System I/O modules	5.5		
WAGO service	9.1				
Push-in type wire jumpers for rail-mounted		T		V	
terminal blocks		Temperature transducers for thermocouples	5.15	Voltage testers	9.5
Push-wire connection	8.0 – 8.5	Terminal blocks			
Push-wire connectors for junction boxes	Sec. 8	for PCBs	7.22		
Q		Terminal blocks for			
Quadruple deck PCB terminal strips	7.8	pluggable modules, f.-e.	5.14 – 5.15		
Quadruple deck rail-mounted terminal blocks		Terminal strips for PCBs			
for fast electric motor wiring	4.21	– with locking slide	7.1		
		– double deck terminal strips	7.8		
		– triple deck terminal strips	7.8		
		– quadruple deck terminal strips	7.9		
				X	
				X-COM-SYSTEM	4.46 – 4.49

Technical Explanations and Abbreviations

0.25 – 2.5 (4) mm² ①	AWG 22 – 12	Pin spacing 5 mm / 0.197 in	Pictographs
800 V/8 kV/3	600 V, 20 A	0.5 – 2.5 mm²"s+f-st"	
24 A	600 V, 20 A	250 V/4 kV/3; 16 A	
Terminal block width 5.2 mm / 0.205 in		500 V/4 kV/2; 16 A	

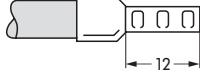
*

* ENEC

① can be connected: 0.25 mm² – 4 mm² "s+f-st"; can be pushed in directly:

0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

(The length of the ferrule ONLY refers to its metal part)



Pin spacing 5mm/0.197 in: pin spacing of the terminal block
(e.g. for PCB terminal blocks and MULTI CONNECTION SYSTEM)

0.25 - 2.5 (4) mm² / AWG 22 - 12 : connectable conductor cross section min. - max.,
when using insulated ferrules the conductor cross section is reduced to 2.5 mm² (see ①)

800 V/250 V/500 V: rated voltage (see General Catalogue W4, Volume 1 section 15)

8 kV/4 kV: rated surge voltage (see General Catalogue W4, Volume 1 section 15)

3/2: pollution degree (see General Catalogue W4, Volume 1 section 15)

24 A/16 A: maximum current

600 V, 20 A

: Voltage and current ratings acc. to UL approval

600 V, 20 A

: Voltage and current ratings acc. to CSA approval

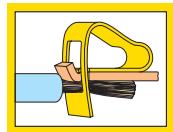
300 V, 10 A: Voltage and current ratings acc. to requested UL and CSA approvals

Terminal block width 5.2 mm/0.205 in: width (e.g. rail-mounted terminal blocks)

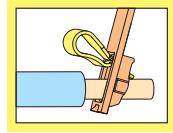
10 – 12 mm / 0.43 in: stripped length (flexible conductor)

10 – 11 mm / 0.41 in: stripped length (solid conductor)

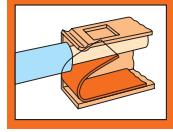
*



CAGE CLAMP® connection



CAGE CLAMP®S connection



Push-wire connection

Abbreviations

"s": solid conductor

AWG: American Wire Gauge

"f-st": fine-stranded conductor

I_N 32 A: Rated current 32 A (e.g. for jumpers)

"s+f-st": solid and fine-stranded conductors

WCB: WAGO Combi marking system

"sol.": solid conductor

WMB: WAGO Multi marking system

"str": stranded conductor

WSB: WAGO Quick marking system

Material specification

Insulation materials

For 40 years Nylon (PA 6.6 and PA 4.6) and Polycarbonate (PC) have been the preferred insulation materials for housings of current carrying parts and accessories of terminal blocks and connectors. They have been approved by almost all international test houses.

Contact materials

Electrolytic copper E_{Cu} hard and extrahard as well as extra-hard copper alloys are the standard materials for the current carrying parts of all WAGO products. This material combines excellent conductivity and good chemical resistance without risk of stress cracking.

Contact surface

The special tin alloy layer, the standard surface for all current-carrying parts in WAGO products, is the guarantee for the excellent long-term protection against corrosive substances. Furthermore, these layers make a gastight contact which provides a durable transition resistance.

Material of clamping springs

All WAGO clamping springs are produced from high quality carefully selected austenitic chrome nickel spring steel (CrNi) with high tensile strength which has proven its resistance to corrosion in many years of practical use.

It is resistant to salt sea air, town gas and the industrial gases sulphur dioxide and hydrogen sulfide.

Index of Item-Nos

10

3

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
Series 206		210-332/1016-0206	9.1	Series 218		231-732/001-000	6.11
206-118	9.6	210-333	9.1	218-102	7.1		
206-124	9.6	210-333/0500-0002	9.1	218-124	7.1	231-742/001-000	6.11
						231-832/001-000	6.11
206-128	9.6	210-333/0500-0006	9.1	218-502	7.1		
206-204	9.7	210-333/0600-0103	9.1	218-523	7.1	231-843/001-000	6.11
206-216	9.7	210-333/0600-0106	9.1	Series 222		231-846/001-000	6.11
206-802	9.5	210-333/0700-0020	9.1	222-412	8.5	231-932/001-000	6.11
206-804	9.5	210-333/0700-0108	9.1	222-413	8.5		
		210-333/0700-0109	9.1	222-415	8.5	231-942/001-000	6.11
Series 209		210-333/0800-0002	9.1	Series 224		Series 232	
209-129	9.4			224-101	8.5	232-132	6.13
209-130	9.4	210-333/0800-0006	9.1	224-104	8.5		
209-147	6.12	210-333/1000-0202	9.1	224-112	8.5	232-154	6.13
209-172	6.17	210-333/1000-0204	9.1	224-114	8.5	232-162	6.13
209-173	6.17	210-333/1000-0206	9.1	224-201	8.5		
209-174	6.17	210-333/1200-0103	9.1	Series 231		232-183	6.13
209-177	6.17	210-333/1200-0104	9.1	231-1 .. /008-000	6.15	232-232	6.13
209-501	9.0	210-333/1200-0105	9.1	231-1 .. /026-000	6.14		
209-502	9.0	210-333/1200-0106	9.1	231-1 .. /031-000	6.15	232-254	6.13
		210-334	9.1	231-1 .. /037-000	6.14	232-262	6.13
209-509	9.0	210-619	9.4	231-129	6.12	232-283	6.13
209-544	9.0			231-130	6.12	232-602	6.17
209-545	9.0	210-622	9.4	231-132/001-000	6.11		
209-553	9.0			231-154/001-000	6.11	232-610	6.17
209-565	9.0	Series 215		231-195	6.4	232-612	6.17
209-566	9.0	215-111	9.5	231-2 .. /008-000	6.15	232-632	6.17
209-701	9.0			231-2 .. /026-000	6.14	232-636	6.17
		215-211	9.5	231-2 .. /037-000	6.14	232-638	6.17
209-709	9.0	215-212	9.5	231-232/001-000	6.11	232-639	6.17
209-744	9.0	215-311	9.5	231-243/001-000	6.11	232-640	6.17
209-745	9.0			231-246/001-000	6.11	232-642	6.17
209-753	9.0	215-411	9.5	231-232 .. /008-000	6.11	232-732	6.13
209-765	9.0			231-243 .. /026-000	6.11		
209-766	9.0	215-511	9.5	231-246 .. /037-000	6.11	232-743	6.13
		215-711	9.5	231-246 .. /008-000	6.15	232-746	6.13
Series 210				231-246 .. /232/001-000	6.11	232-762	6.13
210-136	6.13	215-811	9.5	231-243 .. /232/001-000	6.11	232-772	6.13
210-136	7.10			231-246 .. /232/001-000	6.11		
210-137	6.13	215-911	9.5	231-246 .. /232/001-000	6.11	232-772	6.13
210-257	9.4	Series 216		231-3 .. /008-000	6.15	232-832	6.13
210-258	9.4	216-141	8.15	231-3 .. /026-000	6.14		
210-331	9.1	216-142	8.15	231-3 .. /031-000	6.15	232-832	6.13
210-331/0250-0202	9.1	216-143	8.15	231-3 .. /037-000	6.14		
210-331/0250-0204	9.1	216-144	8.15	231-332/001-000	6.11	232-843	6.13
210-331/0250-0206	9.1	216-201	9.7			231-354/001-000	6.11
210-331/0254-0202	9.1			231-354/001-000	6.11	232-846	6.13
210-331/0254-0204	9.1	216-210	9.7	231-432/001-000	6.11	232-862	6.13
210-331/0254-0206	9.1			231-432/001-000	6.11		
210-331/0350-0202	9.1	216-221	9.7	231-454/001-000	6.11	232-872	6.13
210-331/0350-0204	9.1			231-454/001-000	6.11		
210-331/0350-0206	9.1	216-224	9.7	Series 233			
210-331/0500-0103	6.12	216-241	8.15	231-500	6.12		
210-331/0500-0104	6.12			231-532/001-000	6.11	233-102	7.2
210-331/0508-0103	6.12			231-532/001-000	6.11		
210-331/0508-0104	6.12	216-244	8.15	231-554/001-000	6.11	233-110	7.2
210-331/0750-0202	6.12			231-554/001-000	6.11	233-112	7.2
210-331/0762-0202	6.12	216-246	9.7	231-602	6.12	233-116	7.2
210-332	9.1	216-262	9.7			233-124	7.2
210-332/0381-0202	9.1	216-263	9.7	231-654	6.12		
210-332/0381-0204	9.1	216-264	9.7			233-202	7.2
210-332/0381-0206	9.1	216-266	9.7	231-602/019-000	6.12		
210-332/0500-0202	9.1	216-267	9.7	231-654/019-000	6.12	233-210	7.2
210-332/0500-0204	9.1	216-284	9.7			233-212	7.2
210-332/0500-0206	9.1	216-286	9.7	231-670	6.12	233-216	7.2
210-332/0508-0202	9.1					233-224	7.2
210-332/0508-0204	9.1	216-289	9.7	231-675	6.12	233-332	7.2
210-332/0508-0206	9.1					233-335	7.2
210-332/0750-0020	9.1	216-301	9.7	231-7 .. /008-000	6.15	233-402	7.2
210-332/1000-0202	9.1	216-302	9.7	231-7 .. /026-000	6.14		
210-332/1000-0204	9.1	216-321	9.7	231-7 .. /031-000	6.15	233-410	7.2
210-332/1000-0206	9.1	216-322	9.7	231-7 .. /037-000	6.14		
210-332/1016-0202	9.1						
210-332/1016-0204	9.1						
210-332/1016-0206	9.1						
210-332/1016-0208	9.1						
210-332/1016-0209	9.1						
210-332/1016-0210	9.1						
210-332/1016-0211	9.1						
210-332/1016-0212	9.1						
210-332/1016-0213	9.1						
210-332/1016-0214	9.1						
210-332/1016-0215	9.1						
210-332/1016-0216	9.1						
210-332/1016-0217	9.1						
210-332/1016-0218	9.1						
210-332/1016-0219	9.1						
210-332/1016-0220	9.1						
210-332/1016-0221	9.1						
210-332/1016-0222	9.1						
210-332/1016-0223	9.1						
210-332/1016-0224	9.1						
210-332/1016-0225	9.1						
210-332/1016-0226	9.1						
210-332/1016-0227	9.1						
210-332/1016-0228	9.1						
210-332/1016-0229	9.1						
210-332/1016-0230	9.1						
210-332/1016-0231	9.1						
210-332/1016-0232	9.1						
210-332/1016-0233	9.1						
210-332/1016-0234	9.1						
210-332/1016-0235	9.1						
210-332/1016-0236	9.1						
210-332/1016-0237	9.1						
210-332/1016-0238	9.1						
210-332/1016-0239	9.1						
210-332/1016-0240	9.1						
210-332/1016-0241	9.1						
210-332/1016-0242	9.1						
210-332/1016-0243	9.1						
210-332/1016-0244	9.1						
210-332/1016-0245	9.1						
210-332/1016-0246	9.1						
210-332/1016-0247	9.1						
210-332/1016-0248	9.1						
210-332/1016-0249	9.1						
210-332/1016-0250	9.1						
210-332/1016-0251	9.1						
210-332/1016-0252	9.1						
210-332/1016-0253	9.1						
210-332/1016-0254	9.1						
210-332/1016-0255	9.1						
210-332/1016-0256	9.1						
210-332/1016-0257	9.1						
210-332/1016-0258	9.1						
210-332/1016-0259	9.1						
210-332/1016-0260	9.1						
210-332/1016-0261	9.1						
210-332/1016-0262	9.1						
210-332/1016-0263	9.1						
210-332/1016-0264	9.1						
210-332/1016-0265	9.1						
210-332/1016-0266	9.1						
210-332/1016-0267	9.1						
210-332/1016-0268	9.1						
210-332/1016-0269	9.1						
210-332/1016-0270	9.1						
210-332/1016-0271	9.1						
210-332/1016-0272	9.1						
210-332/1016-0273	9.1						
210-332/1016-0274	9.1						
210-332/1016-0275	9.1						
210-332/1016-0276	9.1						
210-332/1016-0277	9.1						
210-332/1016-0278	9.1						
210-332/1016-0279	9.1		</				

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
233-412	7.2	235-516	7.18	236-...	7.7	250-704	7.21
233-416	7.2	235-524	7.18			250-706	7.21
233-424	7.2	235-550	7.18			250-708	7.21
233-502	7.2	235-551	7.19			250-710	7.21
		235-551/331-000	7.19			250-712	7.21
233-510	7.2	235-552	7.19			250-716	7.21
233-512	7.2			243-110	8.1	250-724	7.21
233-516	7.2	235-560	7.19	243-112	8.1		
233-524	7.2	235-562	7.19	243-113	8.1	250-1402	7.20
		235-566	7.19	243-131	7.23		
		235-574	7.19	243-144	8.1	250-1424	7.20
Series 234				243-204	8.1		
234-202	7.2	235-600	7.18	243-208	8.1	Series 252	
				243-304	8.1	252-102	7.23
234-210	7.2	235-700	7.18	243-308	8.1		
234-212	7.2	235-701	7.18			252-110	7.23
234-216	7.2	235-711	7.19	243-504	8.1	252-152	7.23
234-224	7.2	235-711/331-000	7.19	243-508	8.1		
		235-712	7.19			252-160	7.23
234-502	7.2	235-712/331-000	7.19	243-721	7.23		
		235-713	7.19				
234-510	7.2	235-713/331-000	7.19	243-724	7.23	252-902	7.23
234-512	7.2	235-714/331-000	7.19	243-742	7.23	252-910	7.23
234-516	7.2	235-716	7.19			252-954	7.23
234-524	7.2	235-716/331-000	7.19	243-748	7.23		
		235-717	7.19				
		235-717/331-000	7.19	243-804	8.1	Series 253	
		235-722	7.19	243-808	8.1	253-102	7.21
Series 235							
235-100	7.18	235-722/331-000	7.19			253-116	7.21
		235-723	7.19	Series 248			
235-102	7.17	235-723/331-000	7.19	248-450	5.11	Series 255	
		235-724	7.19			255-...	7.4
235-110	7.17	235-724/331-000	7.19	248-455	5.11		
235-102/330-000	7.17	235-726	7.19				
		235-726/331-000	7.19	248-501	5.11/9.0	Series 256	
235-110/330-000	7.17	235-727	7.19			256-...	7.4
235-112	7.17	235-727/331-000	7.19	248-506	5.11/9.0		
235-112/330-000	7.17	235-732	7.19				
235-116	7.17	235-732/331-000	7.19	248-507	9.0	Series 257	
235-116/330-000	7.17	235-733	7.19	248-508	9.0	257-...	7.5
235-124	7.17	235-733/331-000	7.19	248-509	9.0		
235-124/330-000	7.17	235-734	7.19	248-544	9.0		
235-136	7.17	235-734/331-000	7.19	248-545	9.0		
235-136/330-000	7.17	235-736	7.19	248-553	9.0		
235-148	7.17	235-736/331-000	7.19	248-565	9.0		
235-148/330-000	7.17	235-737	7.19	248-566	5.11	Series 258	
		235-737/331-000	7.19	248-566	9.0	258-139	9.1
235-200	7.18	235-74.	7.18			258-140	9.1
		235-74./331-000	7.18			258-141	9.1
235-300	7.18	235-75.	7.18	Series 249			
		235-75./331-000	7.18	249-112	9.0	258-226	9.1
235-400	7.18	235-76.	7.18	249-113	9.0		
235-401	7.18	235-76./331-000	7.18	249-114	9.0	258-229	9.1
235-401/331-000	7.18	235-770	7.17	249-118	9.0	258-268	9.1
235-402	7.18	235-771	7.17	249-119	9.0	258-297	9.1
		235-772	7.17	249-140	9.0	258-298	9.1
235-410	7.18	235-774	7.17			258-300	9.1
235-412	7.18					258-350	9.1
235-416	7.18	235-778	7.17	Series 250			
235-424	7.18	235-800	7.18	250-102	7.20	258-361	9.1
235-436	7.18	235-801	7.18			258-364	9.1
235-448	7.18	235-801/331-000	7.18	250-124	7.20		
235-452	7.19	235-802	7.18	250-202	7.20	Series 260	
				250-224	7.20	260-...	4.41
235-460	7.19	235-810	7.18				
235-462	7.19	235-812	7.18	250-402	7.20		
235-466	7.19	235-816	7.18				
235-474	7.19	235-824	7.18	250-424	7.20	Series 261	
235-486	7.19	235-850	7.18	250-502	7.21	261-...	4.41
235-498	7.19	235-851	7.19				
		235-851/331-000	7.19	250-516	7.21	Series 236	
235-500	7.18					262-...	
235-501	7.18	235-852	7.19	250-602	7.21		
235-501/331-000	7.18						
235-502	7.18	235-860	7.19	250-612	7.21	Series 264	
		235-862	7.19			264-...	4.43
235-510	7.18	235-866	7.19	250-702	7.21		
235-512	7.18	235-874	7.19	250-703	7.21		

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
Series 279		280-315	4.11	280-580	4.34	281-309	4.28
279-101	4.37	280-317	4.29	280-580/281-434	4.34	281-311	4.28
279-104	4.37	280-319	4.34	280-581/281-413	4.34	281-312	4.17
		280-320	4.34	280-584	4.34	281-313	4.17
279-308	4.10	280-321	4.34	280-584/281-483	4.34	281-318	4.17
279-309	4.10	280-323	4.34	280-586/281-496	4.34	281-322	4.37
279-325	4.10	280-324	4.11	280-592	4.35	281-324	4.28
279-326	4.10	280-326	4.11	280-593	4.35	281-326	4.28
279-328	4.10	280-334	4.11	280-597	4.20	281-328	4.28
		280-335	4.11			281-329	4.28
279-331	4.10	280-336	4.20	280-610	4.11	281-332	4.37
		280-339	4.20	280-637	4.17	281-334	4.28
279-339	4.10	280-340	4.18	280-637/999-950	4.17	281-335	4.28
		280-341	4.18	280-640	4.17	281-340	4.19
279-342	4.10	280-342	4.18	280-641	4.17	281-341	4.19
279-344	4.10	280-343	4.18	280-646	4.17	281-342	4.19
		280-344	4.11	280-650	4.11	281-343	4.19
279-349	4.10	280-346	4.11	280-651	4.17	281-348	4.17
		280-348	4.17	280-653	4.11	281-357	4.17
279-402	4.10	280-352	4.11	280-654	4.17	281-358	4.17
279-405	4.37	280-353	4.11	280-656	4.17	281-365	4.21
279-409	4.10	280-354	4.17	280-671	4.11	281-366	4.21
279-415	4.10	280-355	4.17	280-672	4.11		
279-422	4.10	280-356	4.11	280-681	4.11	281-402	4.12
279-432	9.4			280-683	4.11	281-405	4.37
279-433	9.4	280-359	4.11	280-684	4.11	281-407	4.12
279-440	9.4	280-373	4.29	280-686	5.16	281-409	4.12
279-470	4.10	280-374	4.29	280-687	4.11	281-415	4.12
279-471	4.10	280-376	4.29	280-687/999-950	4.11	281-421	4.12
279-492	4.10			280-801	5.16	281-422	4.12
279-501	4.18	280-402	4.11			281-432	4.12
279-504	4.18	280-404	4.11	280-804	5.16	281-433	4.12
279-508	4.18	280-409	4.11			281-440	4.12
279-509	4.18	280-415	4.11	280-805	4.29	281-470	4.12
279-512	4.18	280-422	4.11	280-816	4.11	281-471	4.12
279-513	4.18	280-432	9.4	280-826	4.11	281-472	4.12
279-517	4.18			280-830	4.11	281-482	4.12
279-518	4.18	280-440	9.4			281-483	4.12
279-519	4.18	280-470	4.11	280-833	4.11	281-485	4.12
279-527	4.18	280-471	4.11	280-834	4.11	281-490	4.28
279-529	4.18	280-472	4.11	280-835	4.11	281-492	4.28
279-681	4.10	280-482	4.11	280-836	4.29	281-503	4.28
279-682	4.10	280-483	4.11	280-837	4.11	281-511	4.28
		280-490	4.11	280-837/999-950	4.11	281-512/281-417	4.28
279-687	4.10	280-517	4.18	280-838	4.11	281-512/281-418	4.28
279-687/999-950	4.10	280-519	4.18	280-839	4.29	281-512/281-501	4.28
				280-868	4.29	281-530	4.21
279-826	4.10	280-524	4.18	280-870	4.29	281-531	4.21
279-831	4.10	280-527	4.18	280-874	4.29	281-532	4.21
		280-529	4.18	280-876	4.29	281-610	4.12
279-837	4.10	280-530	4.18	280-879	4.29	281-611	4.28
279-837/999-950	4.10	280-533	4.18	280-881	4.29	281-611/281-417	4.28
279-838	4.10	280-534	4.18	280-883	4.29	281-611/281-541	4.28
		280-537	4.18	280-885	4.29	281-612	4.28
279-901	4.10	280-547	4.20	280-901	4.11	281-612/281-541	4.28
		280-549	4.20	280-902	4.11	281-613	4.28
279-907	4.10	280-550	4.20			281-613/281-541	4.28
		280-551	4.20	280-907	4.11	281-618/281-417	4.28
279-907/999-950	4.10	280-552	4.20	280-907/999-950	4.11	281-619	4.19
279-992	4.10	280-557	4.20	280-912	4.11	281-620	4.19
279-993	4.10	280-560	4.34	280-913	4.29	281-622	4.28
279-994	4.10	280-560/281-434	4.34	280-914	4.29	281-622/281-541	4.28
		280-561/281-413	4.34	280-915	4.11	281-629	4.19
		280-562	4.35	280-916	4.11	281-630	4.19
		280-562/281-411	4.35	280-946	4.17	281-631	4.17
		280-562/281-434	4.35	280-992	4.11	281-637	4.17
		280-562/281-420	4.35	280-993	4.11	281-637/999-950	4.17
280-101	5.16	280-564	4.34	280-994	4.11	281-651	4.17
280-303	4.20	280-564/281-483	4.34	280-996	4.17	281-652	4.12
		280-566/281-496	4.34	280-998	4.17	281-653	4.12
280-306	4.20	280-570	4.34			281-654	4.12
280-308	4.11	280-570/281-434	4.34			281-656	4.12
280-309	4.11	280-571/281-413	4.34			281-657	4.12
280-310	4.11	280-572	4.35	Series 281		281-657/999-950	4.12
280-311	4.11	280-572/281-411	4.35	281-101	4.37	281-658	4.12
280-312	4.17	280-572/281-420	4.35	281-104	4.37	281-659	4.12
280-313	4.17	280-572/281-434	4.35			281-663	4.12
280-314	4.11	280-574/281-483	4.34	281-301	4.37	281-664	4.12
		280-576/281-496	4.34	281-302	4.37	281-668	4.12

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
281-681	4.12	282-424	4.31	Series 284		286-570	5.15
		282-432	4.30	284-101	4.39	286-571	5.15
281-687	4.12	282-433	4.30	284-104	4.39	286-578	5.14
281-687/999-950	4.12	282-440	4.30	284-107	4.39	286-579	5.14
		282-442	4.30				
281-901	4.12	282-443	4.30	284-301	4.39	286-661	5.15
		282-444	4.30	284-302	4.39		
281-907	4.12	282-451	4.39	284-308	4.14	286-700	5.14
281-907/999-950	4.12	282-457	4.39	284-309	4.14	286-701	5.14
281-912	4.12	282-458	4.39	284-322	4.39	286-702	5.14
281-916	4.12	282-638	4.29	284-325	4.14	286-704	5.14
281-992	4.12			284-326	4.14	286-706	5.14
281-993	4.12	282-641	4.29	284-328	4.14	286-708	5.14
281-994	4.12	282-681	4.13			286-720	5.14
281-998	4.17	282-682	4.13	284-331	4.14	286-721	5.14
		282-684	4.13	284-332	4.39	286-723	5.15
		282-687	4.13	284-339	4.14	286-726	5.15
Series 282		282-687/999-950	4.13			286-728	5.15
282-101	4.38					286-730	5.15
282-104	4.38	282-694	4.29	284-342	4.14	286-732	5.15
282-107	4.38			284-357	4.14	286-733	5.15
282-120	4.39	282-697	4.29	284-358	4.14	286-734	5.15
282-122	4.39	282-698/281-413	4.29			286-750	5.14
282-124	4.39	282-698/281-429	4.29	284-400	4.14	286-751	5.14
282-128	4.39	282-698/281-434	4.29	284-402	4.14	286-752	5.14
282-128/281-413	4.39	282-698/281-449	4.29	284-405	4.39	286-754	5.14
282-128/281-417	4.39	282-699	4.29	284-409	4.14	286-756	5.14
282-128/281-418	4.39			284-412	4.14	286-758	5.14
282-131	4.39	282-811	4.30	284-413	4.39	286-790	5.15
282-133	4.39	282-821	4.30	284-415	4.14	286-792	5.15
282-135	4.39	282-860	4.31	284-422	4.14		
282-137	4.39	282-865	4.31	284-422	4.39	286-830	5.15
		282-866	4.31			286-835	5.15
282-141	4.39	282-870	4.31	284-621	4.14	286-836	5.15
282-301	4.38	282-881	4.31	284-624	4.14	286-840	5.15
282-302	4.38	282-884	4.31	284-681	4.14		
282-308	4.13	282-901	4.13	284-682	4.14	286-843	5.15
282-309	4.13	282-902	4.13	284-684	4.14		
282-311	4.39	282-904	4.13	284-687	4.14	286-860	5.15
282-312	4.39	282-907	4.13	284-687/999-950	4.14	286-863	5.15
282-314	4.39	282-907/999-950	4.13	284-901	4.14	286-865	5.15
282-315	4.39	282-992	4.13	284-902	4.14	286-868	5.15
282-322	4.38	282-993	4.13	284-904	4.14		
282-325	4.13			284-907	4.14	286-870	5.15
282-326	4.13			284-907/999-950	4.14	286-871	5.15
282-328	4.13	Series 283		284-992	4.14	286-872	5.15
		283-325	4.15	284-993	4.14	286-895	5.15
282-331	4.13	283-326	4.15			286-896	5.15
282-332	4.38	283-328	4.15	Series 285		Series 287	
282-333	4.29			285-...	4.16	287-474	5.13
282-334	4.29	283-331	4.15				
282-339	4.13	283-350	4.15	Series 286		287-774	5.13
				286-110	5.16	287-824	5.13
282-342	4.13	283-355	4.15	286-113	5.16	287-834	5.13
282-357	4.13	283-357	4.15	286-302	5.14	287-853	5.13
282-358	4.13			286-304	5.14	287-854	5.13
282-360	4.30	283-400	4.15	286-308	5.14		
282-361	4.30	283-402	4.15	286-310	5.14	Series 288	
282-365	4.30	283-404	4.15	286-312	5.14	288-304	5.12
282-366	4.30	283-409	4.15	286-316	5.14	288-364	5.12
282-369	4.30	283-415	4.15	286-364	5.14	288-368	5.12
282-370	4.30	283-422	4.15	286-365	5.14		
282-372	4.30	283-671	4.15	286-366	5.14	Series 289	
282-373	4.30	283-672	4.15	286-368	5.14	288-504	5.12
282-374	4.30	283-674	4.15	286-369	5.14	288-508	5.12
282-384	4.31	283-677	4.15	286-370	5.14	288-512	5.13
282-385	4.31	283-677/999-950	4.15	286-375	5.14	288-564	5.12
282-387	4.31					288-565	5.12
282-390	4.31	283-901	4.15			288-567	5.12
282-392	4.31	283-902	4.15	286-502	5.14		
		283-904	4.15	286-504	5.14		
282-402	4.13	283-907	4.15	286-508	5.14	Series 289	
282-405	4.38	283-907/999-950	4.15	286-510	5.14	288-758	5.13
282-407	4.39	283-992	4.15	286-512	5.14	288-761	5.13
282-409	4.13	283-993	4.15	286-516	5.14		
282-413	4.13			286-564	5.14		
282-414	4.13			286-567	5.14		
282-415	4.13			286-568	5.14		
282-422	4.13					289-509	5.13

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
289-540	5.13	726-224	7.8	734-216	6.5	734-632	6.17
		726-324	7.8	734-220	6.5		
289-559	5.13	726-424	7.8	734-230	6.4	734-636	6.17
289-597	5.13			734-232	6.3	734-638	6.17
						734-639	6.17
289-611	5.13			734-236	6.3	734-640	6.17
		Series 731		734-238	6.3	734-642	6.17
289-619	5.13	731-5.. /008-000	6.16	734-239	6.3		
289-707	5.13	731-5.. /031-000	6.16	734-240	6.3	Series 735	
289-708	5.13			734-242	6.3	735-...	7.22
289-710	5.13	731-6..	6.12	734-244	6.3		
289-720	5.13	731-6.. /019-000	6.12	734-246	6.3		
289-721	5.13			734-250	6.3	Series 736	
289-722	5.13			734-262	6.3	736-...	7.8
289-723	5.13	Series 733					
289-725	5.13	733-102	6.1	734-266	6.3	Series 737	
289-726	5.13						
289-727	5.13	733-108	6.1	734-268	6.3	737-102	7.8
				734-269	6.3	737-103	7.8
Series 721		733-110	6.1	734-270	6.3	737-104	7.8
721-1.. /008-000	6.9	733-202	6.1	734-272	6.3	737-106	7.8
721-1.. /026-000	6.8			734-274	6.3	737-108	7.8
721-1.. /031-000	6.9	733-208	6.1	734-276	6.3	737-112	7.8
721-1.. /037-000	6.8	733-210	6.1	734-280	6.3	737-116	7.8
				734-2.. /037-000	6.5	737-124	7.8
721-132/001-000	6.7	733-212	6.1	734-302	6.4	737-202	7.9
				734-303	6.4	737-203	7.9
721-140/001-000	6.7	733-330	6.1	734-304	6.4	737-204	7.9
721-142/001-000	6.7	733-332	6.1	734-305	6.4	737-206	7.9
721-144/001-000	6.7			734-306	6.4	737-208	7.9
721-146/001-000	6.7	733-338	6.1	734-307	6.4	737-212	7.9
721-150/001-000	6.7	733-340	6.1	734-308	6.4	737-216	7.9
		733-342	6.1	734-309	6.4	737-224	7.9
721-2.. /008-000	6.9	733-362	6.1	734-310	6.4		
721-2.. /026-000	6.8			734-312	6.4	737-302	7.8
721-2.. /031-000	6.9	733-368	6.1	734-313	6.4	737-303	7.8
721-2.. /037-000	6.8			734-316	6.4	737-304	7.8
721-232/001-000	6.7	733-370	6.1	734-318	6.4	737-306	7.8
		733-372	6.1	734-320	6.4	737-308	7.8
721-242/001-000	6.7			734-324	6.4	737-312	7.8
				734-332	6.4	737-316	7.8
721-302/031-000	6.9	Series 734		734-333	6.4	737-324	7.8
		734-102	6.5	734-334	6.4		
721-310/031-000	6.9			734-335	6.4	737-402	7.9
721-312/031-000	6.9	734-110	6.5	734-336	6.4	737-403	7.9
721-314/031-000	6.9			734-339	6.4	737-404	7.9
721-316/031-000	6.9	734-112	6.5	734-340	6.4	737-406	7.9
721-320/031-000	6.9	734-113	6.5	734-342	6.4	737-408	7.9
721-332/031-000	6.9	734-116	6.5	734-344	6.4	737-412	7.9
		734-118	6.5	734-346	6.4	737-416	7.9
721-439/001-000	6.7	734-120	6.5	734-350	6.4	737-424	7.9
				734-362	6.5		
721-440/001-000	6.7	734-124	6.5			Series 738	
721-442/001-000	6.7	734-130	6.3	734-370	6.5	738-...	7.9
721-444/001-000	6.7			734-372	6.5		
721-446/001-000	6.7	734-142	6.3	734-3.. /019-000	6.4	Series 742	
721-450/001-000	6.7	734-143	6.3	734-400	6.3	742-...	7.13
721-6..	6.7	734-146	6.3	734-402	6.3		
721-6.. /019-000	6.7	734-148	6.3			Series 745	
		734-150	6.3	734-410	6.3	745-100	7.10
721-832/001-000	6.7	734-154	6.3			745-102	7.10
721-840/001-000	6.7	734-162	6.3	734-412	6.3	745-110	7.10
721-841/001-000	6.7			734-432	6.3	745-112	7.10
721-842/001-000	6.7	734-170	6.3	734-433	6.3	745-140	7.10
				734-434	6.3	745-145	7.10
		734-172	6.3	734-435	6.3	745-152	7.10
Series 722		734-173	6.3	734-436	6.3	745-160	7.10
722-...	6.8	734-176	6.3	734-438	6.3	745-162	7.10
		734-178	6.3	734-439	6.3	745-180	7.10
		734-180	6.3	734-440	6.3	745-185	7.10
Series 723		734-184	6.3	734-442	6.3		
723-6..	6.7	734-1.. /037-000	6.5	734-4.. /001-000	6.4		
723-6.. /019-000	6.7	734-202	6.5	734-602	6.17		
Series 726		734-210	6.5	734-610	6.17		
726-124	7.8	734-212	6.5	734-612	6.17		
		734-214	6.5				

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
745-202	7.10	750-310	5.2	750-552	5.4	Series 769	
		750-312	5.2	750-554	5.4	769-101	4.48
745-210	7.10	750-314	5.2	750-556	5.4		
745-212	7.10	750-315	5.2	750-557	5.4	769-115	4.48
745-300	7.11	750-316	5.2	750-559	5.4	769-101/022-000	4.48
745-302	7.11	750-319/004-000	5.2	750-560	5.4		
		750-320	5.2	750-585	5.5	769-115/022-000	4.48
745-310	7.11	750-331	5.2	750-600	5.5	769-121	4.48
745-312	7.11	750-333	5.2	750-601	5.5		
745-340	7.11	750-334	5.2			769-135	4.48
745-345	7.11	750-339	5.2	750-604	5.5	769-151	4.48
745-352	7.11	750-341	5.2	750-609	5.5	769-156	4.48
				750-610	5.5	769-161	4.49
745-360	7.11	750-348	5.2			769-162/769-313	4.49
745-362	7.11	750-400	5.3	750-614	5.5		
745-380	7.11	750-402	5.3	750-616	5.5	769-165/769-313	4.49
				750-621	5.5	769-171	4.48
745-385	7.11	750-405	5.3	750-622	5.5	769-176	4.48
745-390	7.11	750-408	5.3	750-624	5.5	769-182/769-314	4.49
745-395	7.11	750-412	5.3	750-627	5.5	769-185/769-314	4.49
745-500	7.12	750-414	5.3	750-630	5.4	769-191	4.49
745-540	7.12	750-415	5.3	750-631	5.4	Series 753	
745-545	7.12	750-418	5.3	750-635	5.4	769-201	4.48
745-582	7.12	750-419	5.3	750-637	5.4	769-202	4.49
745-583	7.12	750-422	5.3	750-638	5.4	769-203	4.49
745-584	7.12	750-422	5.3	750-641	5.4	769-207	4.48
745-585	7.12			750-642	5.4	769-208/281-410	4.49
745-5.. /006-000	7.12	750-425	5.3	750-650	5.4	769-208/281-411	4.49
745-631	7.12	750-427	5.3	750-651	5.4	769-209/281-413	4.49
745-632	7.12	750-428	5.3	750-653	5.4	769-209/281-434	4.49
745-633	7.12	750-430	5.3	750-654	5.4	769-211	4.48
745-634	7.12			750-655	5.4		
745-635	7.12	750-433	5.3	750-660	5.5	769-214	4.48
745-681	7.12	750-435	5.5	750-665	5.5	769-217	4.48
745-682	7.12	750-438	5.5	750-666	5.5	769-218/281-410	4.48
745-683	7.12	750-452	5.4	750-804	5.2	769-218/281-411	4.48
745-684	7.12			750-806	5.2	769-219/281-413	4.48
745-685	7.12	750-452	5.4	750-812	5.2	769-219/281-434	4.48
745-6.. /006-000	7.12	750-457	5.4	750-814	5.2	769-221	4.48
745-801	7.10	750-459	5.4	750-815	5.2	769-222	4.48
745-803	7.10	750-460	5.4	750-816	5.2	769-223	4.48
745-804	7.10	750-461	5.4	750-819	5.2	769-227	4.48
745-807	7.10	750-465	5.4	750-833	5.2	769-228/281-410	4.48
745-808	7.10			750-837	5.2	769-229/281-413	4.48
745-811	7.10	750-469	5.4	750-841	5.2	769-229/281-434	4.48
745-813	7.10	750-472	5.4	750-842	5.2	769-231	4.48
745-814	7.10	750-474	5.4	750-960	5.2	769-232	4.48
745-817	7.10					769-233	4.48
745-818	7.10	750-474	5.4	750-963	5.2	769-237	4.48
745-821	7.10	750-480	5.4	750-965	5.2	769-238/281-410	4.48
745-823	7.10	750-481/ 003-000	5.5	750-970	5.2	769-238/281-411	4.48
745-824	7.10	750-483	5.4	750-970	5.2	769-238/281-413	4.48
745-827	7.10	750-485	5.5	750-970	5.2	769-238/281-434	4.48
745-828	7.10	750-485	5.5	750-970	5.2	769-251	4.48
745-831	7.11	750-491	5.4	753-...	5.6	769-257	4.48
745-833	7.11	750-492	5.4			769-288/281-411	4.48
745-834	7.11	750-511	5.4				
745-837	7.11					769-302	4.48
745-838	7.11	750-501	5.3			769-305	4.48
745-841	7.11	750-502	5.3			769-306	4.48
745-843	7.11	750-504	5.3	Series 755		769-307	4.48
745-844	7.11	750-506	5.3	755-814	5.6	769-308	4.48
745-847	7.11	750-507	5.3			769-309	4.49
745-848	7.11	750-509	5.3			769-310	4.49
745-8.. /006-000	7.12	750-511	5.4	Series 757		769-311	4.48
				757-...	5.6	769-311	4.49
		750-514	5.3			769-312	4.48
Series 750		750-516	5.3			769-312	4.49
750-300	5.2	750-517	5.3			769-313	4.49
750-301	5.2	750-519	5.3	Series 758		769-314	4.48
750-303	5.2	750-522	5.3	758-...	5.3	769-314	4.49
750-304	5.2	750-523	5.3			769-315	4.48
750-305	5.2	750-530	5.3			769-316	4.48
750-306	5.2	750-531	5.3			769-317	4.49
750-307	5.2	750-535	5.5	Series 759		769-318	4.49
		750-550	5.4	759-...	5.6	769-319	4.49

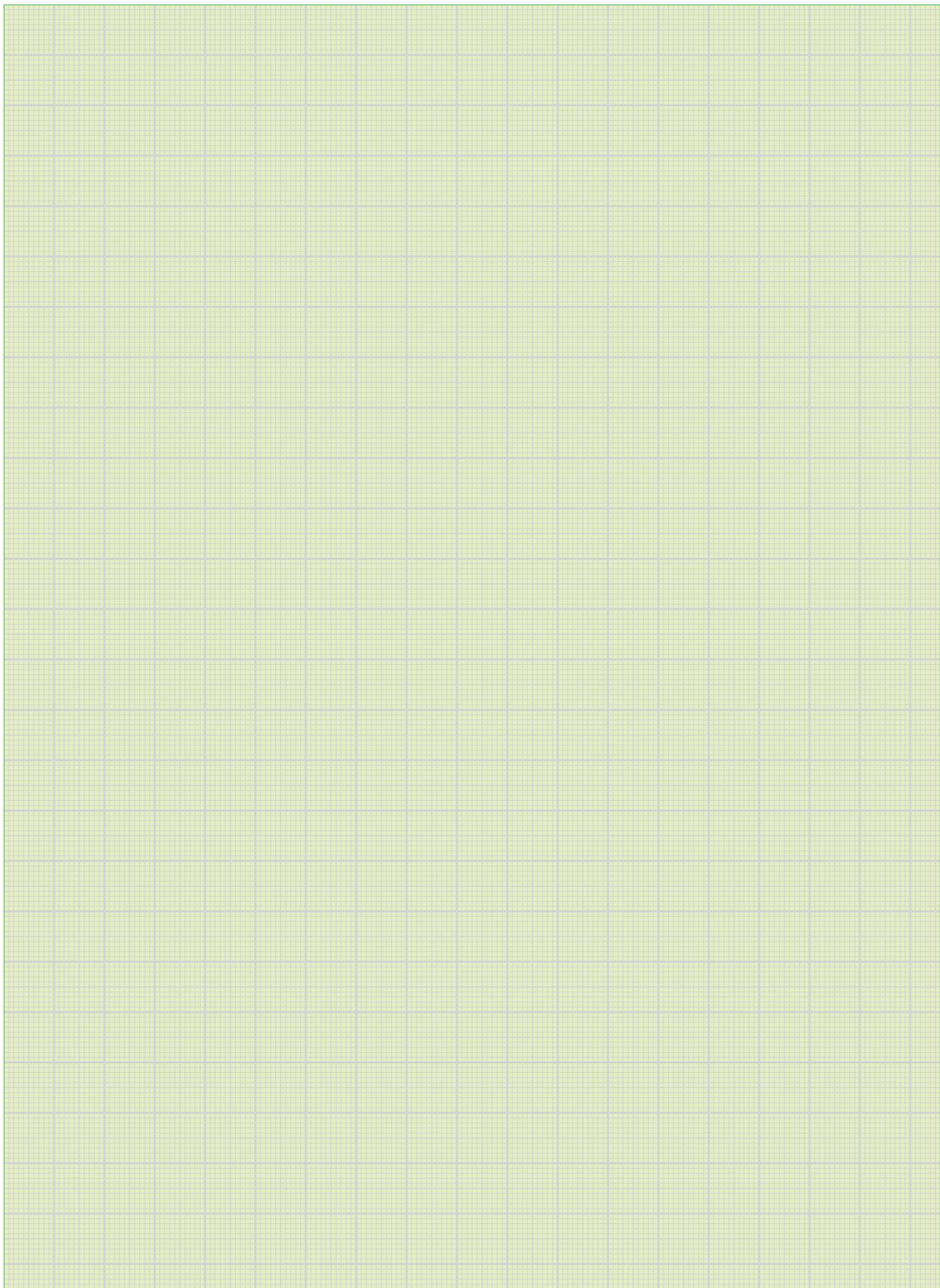
Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
769-320	4.48	770-634	8.11	788-120	5.12	806-202	7.15
769-321	4.48	770-637	8.11				
769-410	4.48	770-638	8.11	788-125	5.12	806-212	7.15
		770-639	8.11	788-303	5.12		
769-414	4.48	770-643	8.12				
769-428	4.49	770-644	8.12	788-307	5.12	Series 859	
		770-645	8.12	788-311	5.12	859-302	5.10
769-431	4.49	770-653	8.12				
769-434	4.49	770-655	8.12	788-315	5.12	859-308	5.10
				788-324	5.12	859-314	5.10
769-602	4.49	770-659	8.11	788-334	5.12	859-317	5.10
		770-661	8.10	788-506	5.12	859-333	5.10
769-615	4.49	770-671	8.11	788-507	5.12	859-334	5.10
769-632	4.49	770-673	8.10	788-508	5.12	Series 790	
		770-675	8.10	788-512	5.12	859-357	5.10
769-645	4.49	770-681	8.10	788-515	5.12	859-360	5.10
769-662	4.49	770-682	8.10	788-516	5.12	859-368	5.10
		770-683	8.11	788-528	5.12		
769-675	4.49	770-684	8.11	788-538	5.12	859-402	5.11
		770-687	8.11				
		770-688	8.11			859-410	5.11
		770-689	8.11				
		770-693	8.12				
		770-694	8.12			Series 792	
Series 770		770-695	8.12			859-410/000-006	5.11
770-100	8.10					859-410/000-029	5.11
770-101	8.10						
770-103	8.10	770-703	8.12	790-100	5.7		
770-104	8.10	770-704	8.12	790-101	5.7		
770-105	8.10	770-705	8.12	790-113	5.7	859-500	5.11
770-111	8.10	770-713	8.12	790-114	5.7	859-525	5.11
770-113	8.10	770-713/007-000	8.12	790-115	5.7		
770-114	8.10	770-714	8.12	790-133	5.7	859-702	5.10
770-115	8.10	770-714/007-000	8.12	790-134	5.7	859-706	5.10
770-121	8.10	770-715/007-000	8.12	790-144	5.7	859-708	5.10
770-123	8.10	770-723	8.12	790-145	5.7	859-712	5.10
770-124	8.10			790-190	5.7	859-720	5.10
770-125	8.10	770-724	8.12	790-191	5.7	859-730	5.10
770-131	8.10	770-725	8.12			859-752	5.10
770-133	8.10	770-733	8.12			859-756	5.10
770-134	8.10	770-733/007-000	8.12			859-758	5.10
770-135	8.10	770-734	8.12			859-772	5.10
770-201	8.10	770-734/007-000	8.12			792-800	5.11
770-203	8.10	770-735	8.12				
770-204	8.10	770-735/007-000	8.12			859-794	5.10
770-205	8.10						
770-213	8.10					859-795	5.10
770-214	8.10					792-805	5.11
770-215	8.10						
770-221	8.10						
770-223	8.10					Series 793	
770-224	8.10					793-4501	9.0
770-225	8.10						
770-233	8.10					793-4509	9.0
770-234	8.10						
770-235	8.10					793-4544	9.0
770-305	8.10					793-4545	9.0
770-315	8.10					793-4553	9.0
770-325	8.10	773-332	8.3			793-4565	9.0
770-335	8.10					793-4566	9.0
770-401	8.10					793-5501	9.0
770-405	8.10						
770-415	8.10	773-102	8.3			793-5509	9.0
770-425	8.10	773-104	8.3				
770-435	8.10	773-106	8.3			793-5544	9.0
770-603	8.12	773-108	8.3			793-5545	9.0
770-605	8.12	773-173	8.3			793-5553	9.0
770-606	8.10					793-5555	9.0
770-607	8.11					793-5565	9.0
770-608	8.11					793-5566	9.0
770-609	8.11						
770-611	8.10						
770-621	8.11					Series 804	
770-623	8.10					804-102	7.14
770-625	8.10						
770-631	8.10	788-100	5.12			804-116	7.14
770-632	8.10						
770-633	8.11					804-302	7.14
						804-312	7.14
						Series 806	
						806-102	7.15
						806-112	7.15

Item-No.	Page	Item-No.	Page	Item-No.	Page	Item-No.	Page
862-1593	8.15	2001-402	4.2	2002-1692	4.25	2006-402	4.5
862-1594	8.16			2002-1801	4.26		
862-1603	8.15	2001-410	4.2	2002-1802	4.26	2006-405	4.5
862-1604	8.16	2001-433	4.2	2002-1804	4.26	2006-433	4.5
862-1605	8.16			2002-1871	4.26	2006-434	4.5
862-1615	8.16	2001-440	4.2	2002-1872	4.26	2006-435	4.5
862-1632	8.15			2002-1874	4.26		
862-1633	8.15	2001-501	4.2	2002-1891	4.26	2006-1201	4.5
862-1634	8.16	2001-549	4.2	2002-1892	4.26	2006-1202	4.5
862-1652	8.15					2006-1204	4.5
862-1662	8.15	2001-1201	4.2	2002-2201	4.8	2006-1207	4.5
862-1693	8.15	2001-1202	4.2			2006-1291	4.5
862-1694	8.16	2001-1204	4.2	2002-2204	4.8	2006-1292	4.5
862-2503	8.15	2001-1207	4.2	2002-2208	4.8	Series 2009	
862-2504	8.16	2001-1301	4.2	2002-2209	4.8	2006-1301	4.5
862-2505	8.16	2001-1302	4.2	2002-2291	4.8	2006-1302	4.5
862-2515	8.16	2001-1304	4.2	2002-2292	4.8	2006-1304	4.5
862-2525	8.16	2001-1307	4.2	2002-2951	4.27	2006-1307	4.5
862-2532	8.15			2002-2952	4.27	2006-1391	4.5
862-2533	8.15	2001-1401	4.2	2002-2954	4.27	2006-1392	4.5
862-2534	8.16	2001-1401	4.4	2002-2958	4.27		
862-2552	8.15	2001-1402	4.2	2002-2959	4.27		
862-2562	8.15	2001-1404	4.2	2002-2971	4.27		
862-2593	8.15	2001-1407	4.2	2002-2972	4.27		
862-2594	8.16			2002-2974	4.27		
862-2603	8.15	Series 2002		2002-2991	4.27		
862-2604	8.16	2002-115	4.3	2002-2992	4.27		
862-2605	8.16	2002-121	4.8			Series 2010	
862-2615	8.16	2002-131	4.9	2002-3201	4.9	2010-115	4.6
862-2632	8.15	2002-171	4.8	2002-3203	4.9		
862-2633	8.15	2002-172	4.8	2002-3207	4.9		
862-2634	8.16			2002-3208	4.9		
862-2652	8.15	2002-402	4.3	2002-3217	4.9	2010-402	4.6
862-2662	8.15	2002-403	4.3	2002-3218	4.9		
862-2693	8.15	2002-404	4.3	2002-3227	4.9	2010-405	4.6
862-2694	8.16	2002-405	4.3	2002-3228	4.9		
862-8503	8.15	2002-406	4.3	2002-3291	4.9	2010-433	4.6
862-8504	8.16	2002-407	4.3	2002-3292	4.9	2010-434	4.6
862-8505	8.16	2002-408	4.3			2010-435	4.6
862-8515	8.16	2002-409	4.3				
862-8525	8.16	2002-410	4.3	Series 2004			
862-8533	8.15	2002-433	4.3	2004-171	4.4	2010-1201	4.6
862-8534	8.15	2002-434	4.3	2004-172	4.4	2010-1202	4.6
862-8534	8.16	2002-435	4.3			2010-1204	4.6
862-8593	8.15	2002-436	4.3	2004-402	4.4	2010-1207	4.6
862-8594	8.16	2002-437	4.3			2010-1291	4.6
862-8603	8.15	2002-438	4.3	2004-410	4.4	2010-1301	4.6
862-8604	8.15	2002-439	4.3			2010-1302	4.6
862-8605	8.16	2002-440	4.3	2004-433	4.4		
862-8615	8.16					2010-1304	4.6
862-8633	8.15	2002-501	4.3	2004-439	4.4	2010-1307	4.6
862-8634	8.15	2002-549	4.3			2010-1391	4.6
862-8693	8.16			2004-440	4.4	2010-1392	4.6
862-8694	8.16	2002-1201	4.3	Series 2016			
862-9503	8.15	2002-1202	4.3	2004-501	4.4	2016-115	4.7
862-9504	8.16	2002-1204	4.3	2004-549	4.4		
862-9505	8.16	2002-1207	4.3				
862-9515	8.16	2002-1291	4.3	2004-1201	4.4	2016-402	4.7
862-9525	8.16	2002-1292	4.3	2004-1202	4.4		
862-9533	8.15	2002-1301	4.3	2004-1204	4.4	2016-405	4.7
862-9534	8.16	2002-1302	4.3	2004-1207	4.4		
862-9593	8.15	2002-1304	4.3	2004-1291	4.4	2016-433	4.7
862-9594	8.16	2002-1307	4.3	2004-1292	4.4	2016-434	4.7
862-9603	8.15	2002-1391	4.3	2004-1301	4.4	2016-435	4.7
862-9604	8.16	2002-1392	4.3	2004-1302	4.4	2016-499	4.7
862-9605	8.16			2004-1304	4.4		
862-9615	8.16	2002-1401	4.3	2004-1307	4.4	2016-1201	4.7
862-9633	8.15	2002-1402	4.3	2004-1391	4.4	2016-1202	4.7
862-9634	8.16	2002-1404	4.3	2004-1392	4.4	2016-1204	4.7
862-9693	8.15	2002-1407	4.3	2004-1402	4.4	2016-1207	4.7
862-9694	8.16	2002-1491	4.3	2004-1404	4.4	2016-1291	4.7
		2002-1492	4.3	2004-1407	4.4	2016-1292	4.7
				2004-1491	4.4	2016-1301	4.7
Series 869		2002-1601	4.25	2004-1492	4.4	2016-1302	4.7
869...	4.44	2002-1602	4.25			2016-1304	4.7
		2002-1604	4.25			2016-1307	4.7
		2002-1671	4.25			2016-1391	4.7
						2016-1392	4.7
Series 2001		2002-1672	4.25	Series 2006			
2001-172	4.2	2002-1674	4.25	2006-115	4.5		
		2002-1691	4.25				

Notes

10

11



10

WAGO Worldwide

- Companies and Representations -

Argentina

Bruno Schillig S.A.
Arenales 4030, B1604CFD
Florida, PBA
Phone +54 11 4730 1100
Fax +54 11 4761 7244
robertor@schillig.com.ar

Australia

NHP ELECTRICAL ENGINEERING
PRODUCTS PTY LTD
43-67 River Street
Richmond, Victoria, 3121
P.O. Box 199
Phone +61 3 9429 2999
Fax +61 3 9429 1075
export@wago.com

Austria

WAGO Kontakttechnik Ges.m.b.H.
Laxenburger Straße 244
1230 Wien
Phone +43 1 6150780
Fax +43 1 6150775
info.at@wago.com

Belgium

WAGO Kontakttechnik
Excelsiorlaan 11
1930 Zaventem
Phone +32 2 7179090
Fax +32 2 7179099
info.be@wago.com

Bosnia and Herzegovina

please contact WAGO Bulgaria

Brasil

WAGO Eletroeletrônicos Ltda
Rua Américo Simões 1470
São Roque da Chave
Itupeva SP Brasil 13295-000
Phone +55 11 4591 0199
Fax +55 11 4591 0190
info.br@wago.com

Bulgaria

WAGO Kontakttechnik GmbH & Co. KG
Representative Office Sofia Bulgaria
Twardischiki Prohod 21, ap.5
Sofia
Phone +359 2 489 46 10
Fax +359 2 859 21 31
info-BG@wago.com

Canada

WAGO CORPORATION
N120 W19129 Freistadt Road
Germantown, WI 53022
Phone +1 262 255 6222
Fax +1 262 255 3232
Toll-Free: 1-800 DIN Rail (346-7245)
info.us@wago.com

Chile

Desimat Chile
Av Puerto Vespucio 9670
Pudahuel Santiago
Phone +56 2 7470152
Fax +56 2 7470153
ventaschile@desimat.cl

China

WAGO ELECTRONIC (TIANJIN) Co. LTD
No.5, Quan Hui Road
Wuqing Development Area
Tianjin 301700
Phone +86 22 59617688
Fax +86 22 59617668
info-cn@wago.com

Columbia

T.H.L. Ltda.
Cra. 35 # 89 - 35
Bogotá
Phone +57 1 621 85 50
Fax +57 1 621 60 28
ventas-thl@thl-ltda.com

Croatia

M.B.A. d.o.o. za trgovinu i zastupanje
Franja Supila 5
51211 Matulji HR
Phone +00385 51 275-736
Fax +00385 51 275-066
mba@ri.htnet.hr

Czech Republic

WAGO Elektro spol. s.r.o.
Nad lesem 21
14700 Praha 4 - Hodkovicke
61400 Brno - Husovice
Phone +420 261 090 143
Fax +420 261 090 144
info.cz@wago.com

Denmark

WAGO Danmark
Filial of WAGO Kontakttechnik GmbH & Co. KG
Lejrejvej 29
3500 Værløse
Phone +45 44 357777
Fax +45 44 357787
salg.dk@wago.com

Ecuador

INSETEC CIA. LTDA.
El Zurriago 177 y El Vengador
P.O. Box 17-16-016
Quito
Phone +593 2 2 26 91 48
Fax +593 2 2 46 18 33
g.castro@insetec.com.ec

Egypt

IBN Engineering Instrumentation & Control
71 a El Shaheed Ahmed Hamdi St.
King Faisal, Giza
Phone +20 2 7214350
Fax +20 2 7221709
sales@ibnengineering.com

Estland

Eltarko OÜ
Laki 14 - 502
10621 Tallinn
Phone +372 651 7731
Fax +372 651 7786
andres@eltarko.ee

Finland

WAGO Kontakttechnik GmbH & Co. KG
Filial i Finland
Pulttitie 2A
00880 Helsinki
Phone +358 9 7744 060
Fax +358 9 7744 0660
export@wago.com

France

WAGO CONTACT S.A.
Paris Nord 2
83 Rue des Chardonnerets
B.P. 50065 - Tremblay en France
95947 - ROISSY CDG CEDEX
Phone +33 1 48172590
Fax +33 1 48632520
info-fr@wago.com

Germany

WAGO Kontakttechnik GmbH & Co. KG
Postfach 28 80 32385 Minden
Hansastraße 27
32423 Minden
Phone +49 571 887-0
Fax +49 571 887-169
info@wago.com

Great Britain

WAGO Limited
Triton Park, Swift Valley Industrial Estate
RUGBY
Warwickshire, CV21 1SG
Phone +44 1788 568008
Fax +44 1788 568050
uksales@wago.com

Greece

PANAGIOTIS SP. DIMOULAS - BIOMAT
Kritis Str. 26
10439 Athen
Phone +30 210 883 3337
Fax +30 210 883 4436
export@wago.com

Hong Kong

National Concord Eng., Ltd.
Unit A-B, 5/F.
Southeast Industrial Building
611-619 Castle Peak Road
Tsuen Wan, N.T.
Phone +852 24292611
Fax +852 24292164
sales@nce.com.hk

Hungary

WAGO Hungária KFT
Ipari Park, Gyár u. 2.
2040 Budapest
Phone +36 23 502-170
Fax +36 23 502-166
info@wago.hu

Iceland

S. Guðjónsson ehf.
Audbrekku 9-11
202 Kopavogur
Phone +354 520-4500
Fax +354 520-4501
export@wago.com

India

WAGO & CONTROLS (INDIA) LTD.
C-27, Sector-58, Phase-III
Noida-201 301
Gautam Budh Nagar (U.P.)
Phone +91 120 2 580409 10
Fax +91 120 2 580081
info@wagoindia.com

Indonesia

PT. Timur Agungmulia Kencana
Graha Mulindo Lt. 2
Jl. Sultan Iskandar Muda No. 88 L
Jakarta Selatan 12240
Phone +62 21 722 8888
Fax +62 21 722 8565
tak_electric@cbn.net.id

Iran

Patsa Industry
No. 2 Bahar St.
South Shiraz Ave
P.O. Box.: 15875-1698
14369 Tehran
Phone +98 21 8726869
Fax +98 21 8719666
export@wago.com

Ireland

Drives & Controls
Unit F4, Riverview Business Park
Nangor Road
Dublin 12
Phone +353 1 4604474
Fax +353 1 4604507
wago@drivesandcontrols.ie

Israel

Comtel Israel Electronic Solutions Ltd.
Bet Hapaamon
20 Hataas Street
P.O.Box 66
44425 Kefar-Saba
Phone +972 9 76 77 240
Fax +972 9 76 77 243
sales@comtel.co.il

Italy

WAGO ELETTRONICA SRL
Via Vittoria, 5/b
40068 San Lazzaro di Savena (BO)
Phone +39 051 6272170
Fax +39 051 6272174
info-ita@wago.com

Japan

WAGO Co. of JAPAN Ltd.
Nittetsu ND-Tower Building 4F
Kameido 1-5-7
Koto-Ku
Tokyo 136-0071
Phone +81 3 5627 2050
Fax +81 3 5627 2055
info-jp@wago.com

Korea

Hankuk Sangsa Co. &
Mahani Electric Co. Ltd.
576-8, Bisan-2-dong, Dongan-Ku
Anyang-City
Kyungki-Do., 431-821
Phone +82 31 4633300
Fax +82 31 4633398/9
export@wago.com

Kosovo

please contact WAGO Bulgaria

Kuwait

Kuwait Controls Company
Al Sour Street, Above Lufthansa Airline
Safat Kuwait 13062
Phone +965 822 522
Fax +965 243 3698

Latvia

INSTABALT LATVIA SIA
Vestienas iela 6
Riga, LV-1035
Phone +371 790 1188
Fax +371 790 1180
info@instabalt.lv

Lithuania

INSTABALT LIT UAB
Savanorių 187
Vilnius, 2053
Phone +370 52 322 295
Fax +370 52 322 247
info@instabalt.lt

Luxembourg

please contact WAGO Belgium

Malaysia

WAGO Representative Office Malaysia
No 806, Block A4, Leisure Commerce Square,
No 9, Jalan PJS 8/9, 46150 Petaling Jaya,
Selangor Darul Ehsan, Malaysia
Phone +60 3 7877 1776
Fax +60 3 7877 2776
kian.guan.tan@wago.com

Macedonia

please contact WAGO Bulgaria

Mexico

WAGO CORPORATION
N120 W19129 Freistadt Road
Germantown, WI 53022
Phone +52 55 26 44 69 16
Fax +52 55 26 44 69 15
Toll-Free: 001-800-309-5975
info.mx@wago.com

Netherlands

WAGO Nederland
van Leeuwenhoekstraat 20-1
3846 CB Harderwijk
Phone +31 341 439039
Fax +31 341 439030
info-nl@wago.com

New Zealand

NHP NZ
7 Lockhart Place
Mt Wellington
New Zealand
Phone +64 9 2761967
Fax +64 9 2761992
export@wago.com

Norway

WAGO Norge NUF
WAGO Kontakttechnik GmbH Co. KG
Jerikoveien 20
1067 Oslo
Phone +47 22 30 94 50
Fax +47 22 30 94 51
info.no@wago.com

Peru

Desimat Peru
Av. E. Salazar Barreto No. 280
Surco - Lima 33
Phone +51 1 2731892
Fax +51 1 2720054
export@wago.com

Philippines

please contact WAGO Singapore

Poland

WAGO ELWAG sp. z o. o.
ul. Pięknego 58 a
50-506 Wrocław
Phone +48 71 3604670 78
Fax +48 71 3604699
wago.elwag@wago.com

Portugal

MORGADO & CA. LDA - SEDE
Estrada Exterior da
Circunvalação 3558/3560
Apartado 1057
4435 Rio Tinto
Phone +351 22 9770600
Fax +351 22 9770699
export@wago.com

Romania

please contact WAGO Bulgaria

Russia

WAGO Kontakttechnik
Repräsentanz Moskau
ul. Lesnaya, 43, off. 329
127055 Moskau
Phone +7 499 9786670
Fax +7 499 9786690
info@wago.ru

Saudi Arabia

Al Quraishi Electrical Services of S. A.
P.O. Box 73462
Dammam-31462
Phone +966 3 85 725 37
Fax +966 3 85 725 41
export@wago.com

Serbia

please contact WAGO Bulgaria

Singapore

WAGO Electronic Pte Ltd
10 Upper Aljunied Link, # 04-04
York International, Industrial Building
Singapore 367904
Phone +65 62866776
Fax +65 62842425
info.sing@wago.com

Slovakia

WAGO Elektrik spol.s r. o
Odborárska 52
83102 Bratislava
Phone +421 2 44458301
Fax +421 2 44458301
export@wago.com

South Africa

Shorrock Automation (Pty) Ltd
Postnet Suite # 219
Private Bag X 8, Elardus Park
0047 PRETORIA
Phone +27 2 3454449
Fax +27 2 3455145
sales@shorrock.co.za

Spain

DICOMAT S.L.
Avda. de la Industria, 36
Apartado Correos, 1.178
28108-Alcobendas (Madrid)
Phone +34 91 6621362 (6 lineas)
Fax +34 91 6610089
madrid@dicomat-asetyc.com

Sweden

WAGO Sverige
WAGO Kontakttechnik GmbH
Tyskland Filial
Box 639, 17527 Järfälla
Datavägen 9 A, 17543 Järfälla
Phone +46 858410680
Fax +46 858410699
info.se@wago.com

Switzerland

WAGO CONTACT SA
Rte. de l'Industrie 19
Case Postale 168
1564 Domdidier
Phone +41/26 676 75 86 (Tel. deutsch)
Fax +41/26 676 75 88 (Tel. italiano)
info.switzerland@wago.com

Syria

Zahabi Co.
8/5 Shouhadaa St., P.O. Box 8262
Aleppo
Phone +963 21 21 22 235/6
Fax +963 21 21 24 768
export@wago.com

Taiwan R.O.C.

WAGO Taiwan
8/F, No. 48, Jing-An Road
Chung-Ho City, 23556
Taipei Hsien, Taiwan
Phone +886 2 2244 2569
Fax +886 2 2244 2658

Thailand

WAGO Representative Office Thailand
4th Floor, KS Building
213/6-8 Rachada-Phisek Road
Dingdaeng Bangkok 10320
Phone +66 2 6935611
Fax +66 2 6935612
pote.c@wago.com

Turkey

WAGO Elektronik Sanayi ve Ticaret Ltd. Şti.
Barbaros Mahallesi Mimar Sinan Caddesi No 169
34746 Yenihisra - Kadıköy İstanbul
Turkey
Phone +90 216 472 1133
Fax +90 216 472 9910

SAROZ DIS TIC. VE MÜŞ. LTD. STI.
BOSTANCIYOLU CAD. SAV. SOK.
NO.: 20 KAT: 2 YUKARIDUDULLU
81230 ÜMRANIYE-İSTANBUL
Phone +90 216 4994777
Fax +90 216 4994776
saroz@saroz.com.tr

Dacel Mühendislik Elektrik, Elektronik, San. ve. Tic. Ltd. Sti.
Perpa Elektrotken Is. Merk.
A. Blok Kat 2 No 38
Okmeydani - İSTANBUL
Phone +90 212 210 7646
Fax +90 212 / 220 5045
dacel@dacel.com.tr

United Arab Emirates (UAE)

Binghalib Engineering Ent.
Trading Division
Al Khabeshi Area
P.O. Box 14743
Dubai
Phone +971 4 2674555
Fax +971 4 2674117
export@wago.com

USA

WAGO Corporation
N120 W19129 Freistadt Road
Germantown, WI 53022
Phone +1 262 255 6222
Fax +1 262 255 3232
Toll-Free: 1-800 DIN Rail (346-7245)
info.us@wago.com

Venezuela

PETROBORNAS, C.A.
Av. Principal UD 304-Zona Ind. Los Pinos
C.C. Los Pinos-Local E
8015-Puerto Ordaz-Edo, Bolívar
Phone +58 286 994 3406
Fax +58 286 994 5249
info@petrobornas.net

Vietnam

please contact WAGO Singapore



51183396 · 0888-0070/0503-3601 · PSF 3.3 (773) ED - 02/07 · JA 61509 · Printed in Germany · Subject to design changes

4