

Compact Load Break Switch CLBS

Advantages of compact load break switches CLBS

Description

CLBS are manually operated and modular multipolar load break switches in range 16A-125A. They make and break under load conditions and provide safety isolation for any low voltage circuit, particularly for machine control circuits. Through the use of accessories, CLBS can be transformed into multipolar load break or 3/4 pole changeover switches. CLBS change over switches provide on load changeover switching between two sources or two low voltage power circuits, as well as their safety isolation. CLBS switches have been designed, qualified and tested according to the criteria defined by standard IEC 60947-3.

→ Three-pole version with the ability to connect:

Protective earth module PE



Additional pole, 4th pole



Auxiliary contact



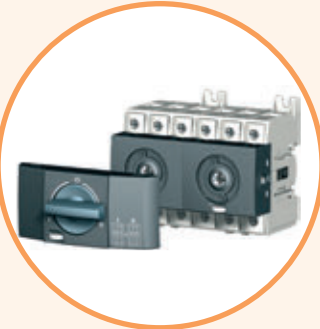
Neutral pole N



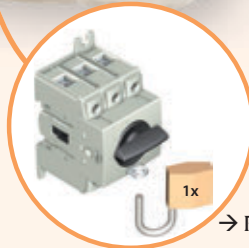
→ Front (direct and external) and right side operation



→ CLBS can be transformed into multipolar load break or 3/4 pole changeover switches



→ Padlocking the handle



General characteristics

- Double break per pole.
- Mounting options: DIN-rail, panel or modular panel with 45 mm front cut-out or directly on door(see door mounting kit).
- IP20 accessories.
- Severe utilisation categories (AC-22 and AC-23).
- Positive break indication.
- Contact point technology.

Applications

- Main incoming load break.
- Distribution load break.
- Machine control.
- Local safety load break.

Advantages

CLBS fully integrates isolation breaking and switching functions. Within a single product CLBS offers front and right side operation. Their highly functional design enables CLBS to be easily transformed from a load break switch to a changeover switch, offering a highly innovative modular solution for numerous applications. Its wide range of accessories means that the CLBS can be upgraded, even after it has been commissioned, enabling future requirements to be met.

The products' colour or shape may be different as on picture

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CLBS body (no handle included) 3 POLES 16 - 125 A

Type	Code No.	I _n [A]	Number of poles	Weight [g]	Packaging [pcs]
CLBS 16 3P	004661400	16	3	230	1/24
CLBS 25 3P	004661401	25	3	228	1/24
CLBS 40 3P	004661402	40	3	228	1/24
CLBS 63 3P	004661403	63	3	320	1/24
CLBS 80 3P	004661404	80	3	322	1/24
CLBS 100 3P	004661405	100	3	600	1/12
CLBS 125 3P	004661406	125	3	624	1/12

Front (direct and external) and right side operation



CLBS 16 3p

CLBS 125 3p

Accessories

Direct handle for direct operation

Type	Description	Code No.	For use with	Weight [g]	Packaging [pcs]
CLBS-DH80/B	Direct handle, black	004661410	CLBS 16-80A 3P	10	1/200
CLBS-DH125/B	Direct handle, black	004661411	CLBS 100-125A 3P	8	1/200
CLBS-DH80/YR	Direct handle, red	004661412	CLBS 16-80A 3P	10	1/200

Type definition: Handle type / color initials



CLBS-DH80/B

CLBS-DH125/B

CLBS-DH80YR

Door interlocked front and right side handle IP65 (shaft not included)

Type	Description	Code No.	For use with	Weight [g]	Packaging [pcs]
CLBS-EH80/G	Door interlocked handle, grey front	004661415	CLBS 16-80A 3P	101	1/45
CLBS-EH125/G	Door interlocked handle, grey front	004661416	CLBS 100-125A 3P	103	1/45
CLBS-EH125/01G	Door interlocked handle, grey front	004661417	CLBS 16-125A 3P	190	1/25

Type definition: Handle type / color initials



CLBS-EH80/G

CLBS-EH125/G

CLBS-EH125/01G

Door interlocked front and right side handle IP65 (shaft not included).

Type	Description	Code No.	For use with	Weight [g]	Packaging [pcs]
CLBS-EH80/YR	Door interlocked handle, red front	004661418	CLBS 16-80A 3P	102	1/45
CLBS-EH125/YR	Door interlocked handle, red front	004661419	CLBS 100-125A 3P	104	1/45
CLBS-EH125/01YR	Door interlocked handle, red front	004661420	CLBS 16-125A 3P	200	1/25

Type definition: Handle type / color initials



CLBS-EH80/YR

CLBS-EH125/YR

CLBS-EH125/01YR

Shaft for door interlocked front and right side handle

Type	Description	Code No.	For use with	Weight [g]	Packaging [pcs]
CLBS-S200	Shaft, 200 mm	004661422	CLBS-EH80 CLBS-EH125	60	1/110
CLBS-S320	Shaft, 320 mm	004661423	CLBS-EH80 CLBS-EH125	80	1/90
CLBS-S400/01	Shaft, 400 mm	004661424	CLBS-EH125/01	125	1/25

For 3/4 pole switches, shaft extensions are for external front and side operation.
Not for use with Change over kit and handles



CLBS-S

The products' colour or shape may be different as on picture

Technical data on page 424, 428

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Characteristics according to IEC 60947-3									
Type			CLBS 16	CLBS 25	CLBS 40	CLBS 63	CLBS 80	CLBS 100	CLBS 125
Current	(I _n)		16A	25A	40A	63A	80A	100A	125A
Rated insulation voltage	(U)	(V)	800	800	800	800	800	800	800
Rated impulse withstand voltage	(U _{imp})	(kV)	8	8	8	8	8	8	8
Thermal current 40°C	(I _{th})	(A)	16	25	40	63	80	100	125
Rated operational currents (I _e)	AC-20 A/B	415V AC (A)	16	25	40	63	80	100	125
	AC-21 A/B	415V AC (A)							
	AC-22 A/B	415V AC (A)							
	AC-23 A/B	415V AC (A)							
	AC-20 A/B	500V AC (A)							
	AC-21 A/B	500V AC (A)							
	AC-22 A/B	500V AC (A)							
	AC-23 A/B	500V AC (A)			25	63	80	100	
	AC-20 A/B	690V AC (A)			40	80	100	125	
	AC-21 A/B	690V AC (A)							
	AC-22 A/B	690V AC (A)			32/40	40/63	63/80	80/100	100/125
	AC-23 A/B	690V AC (A)			25	40	40	63	63
	DC-20 A/B	110V DC (A)			40	63	80	100	125
	DC-21 A/B ⁽¹⁾	110V DC (A)							
DC-20 A/B	250V DC (A)								
DC-21 A/B ⁽²⁾	250V DC (A)								
DC-20 A/B	400V DC (A)								
DC-21 A/B ⁽³⁾	400V DC (A)	25	40	40	63	63			
Operational power in AC 23 ⁽⁴⁾	400V AC (kW)		7,5	11	18,5	30	37	45	55
	500V AC (kW)		7,5	11	18,5	30	37	45	55
	690V AC (kW)		7,5	15	15	30	37	45	55
Short-circuit capacity I _{cw}	1 s.	(kA)	1,26	1,26	1,26	1,5	1,5	2,75	2,75
	0,25 s.	(kA)	1,8	1,8	1,8	2,1	2,1	3,9	3,9
Fuse protected short-circuit withstand (kA rms prospective) ⁽⁵⁾									
Associated fuse rating		(A)	16	25	40	63	80	100	125
Prospective short-circuit current		(kA)	50	50	50	50	50	25	25
Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s									
Rated short-time withstand current	0,3 s.	(kA)	2,5	2,5	2,5	3	3	5	5
Connection									
Minimum Cu cable cross-section	mm ²		1,5	1,5	1,5	2,5	2,5	10	10
Maximum Cu cable cross-section	mm ²		16	16	16	35	35	70	70
Tightening torque min/max	Nm		2/2,2	2/2,2	2/2,2	3,5/3,85	3,5/3,85	4/4,4	4/4,4
Durability (number of operating cycles)	cycles		100 000	100 000	100 000	100 000	100 000	100 000	100 000
Operating effort - 3 pole device	Nm		1	1	1	1,4	1,4	1,6	1,6
Operating effort - 4 pole device	Nm		1,2	1,2	1,2	1,6	1,6	2	2
Power dissipation	W/pole		0,15	0,4	0,9	1,5	2,4	4,3	7,1

Category with index A = frequent operation

Category with index B = infrequent operation.

⁽¹⁾ - one pole per polarity.

⁽²⁾ - 3-pole device with 2 poles in series for the "+" and 1 pole for the "-".

⁽³⁾ - 4-pole device with 2 poles in series per polarity.

⁽⁴⁾ - The power value is given for information only, the current values vary from one manufacturer to another.

⁽⁵⁾ - For a rated operational voltage U_e = 415 VAC.

