

## solutions

# High-quality protection of installations and devices in industry is ensured by wide selection of fuse-links and circuit breakers. Particularly important is the wide range of NV/NH fuse-links and

wide range of NV/NH fuse-links and switchgear combinations, i.e. fuse blocks and switch disconnectors. We also offer MCB's and power circuit breakers ETIBREAK. And not to forget ETICON contactors, plug-in outfit and line-up terminals SPOJ and overvoltage protection devices ETITEC. As well we can not provide solutions without switch disconnectors ETISWITCH and actuators and indicators ETISIG. The products are internationally certified and carry several quality marks.

INDUSTRY

#### NV/NH disconnectors with fuses

#### NV/NH horizontal fuse-switch disconnectors KVL

#### Uniform cover cutout

 $KVL\ - horizontal\ fuse-switch\ disconnectors\ with\ different\ sizes\ can\ be\ combined\ together\ and\ form\ uniform\ cover\ cutout.$ The new assortment contains four cover support levels at 32, 60, 70 and 90 mm above the uper of busbar. KVL fuse-switch disconnectors can be mounted on baseplates and DIN rails (for busbars see chapter ETIBUSBAR).

- Available with 1-, 2-, 3-, 4- pole versions
- Four sizes: size 00, size 1, size 2, size 3
- Use with NV/NH Fuse-links 000, 00, 1, 2, 3

#### Baseplate and DIN-rail mounting

KVL disconnectors have multiple mounting holes for variability of installations.

KVL-00 and KVL-1 can also be mounted on two parallel DIN-rails.



#### **Practical advantages**



#### Easy voltage measurements

- Easy access with standard voltage Testers.

Window in the handle is movable. - Protection degree IP2XC in normal operating condition



#### Safety lock

- Prevents unauthorized operation - Can be used for all sizes

### Simple and practical parking

- Safe parking position of the handle - Accidental reclosing not possible



#### Montage on DIN rails

- Time saving installation KVL-00 and KVL-1 can fit on the same TH rails



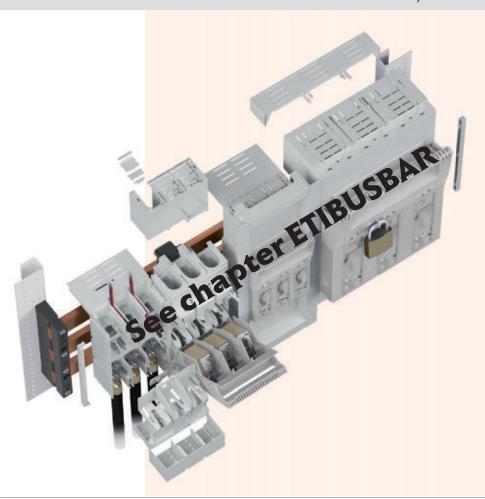
New Generation,

#### Advantages Terminal cover - extendable -cable entry adjustable DIN-rail fixing kit (PRS KVL-x 3p) for mounting on DIN-rails - Used for KVL-00 and KVL-1 (DIN KVL-x 100-150) For sealing disconnector - For all sizes - It is integrated in disconnector Power theft Fuse-monitoring ESlight protection Fault indication - Tamper-proof - Red LED per phase locking (KVL-xx3pxLED) of the windows Frame clamp (SP KVL-x V) Prism clamp (SP KVLx P1) Clip terminal (SP KVLx) Prism clamp for Electronic fuse-monitoring 2-conductors connection 3-phase busbar unit (ES10) (SP KVLx P2) Feeding system is touch-The universal-solution for AC400-500V protected - Can feed up to to five - with stand-by indicator KVL-00 - fault simulation (IZx KVL-00 3p) - selective fault indicator for fuse failure Mechanical fuse-monitoring unit (EFMU KVL-x 3p) For use with NV/NH-fuse-links with striker (MFM KVL-x 1p/2p/3p) Feeding clamp (25-95mm<sup>2</sup>), touchprotected - Used with KVL-00, Electromechanical fuse-monitoring unit AM terminal M8 Monitoring with motor-protection switch

- For special applications AC690V/DC150V (MPFMU KVL-x 3p)

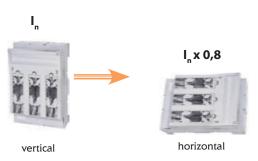
NV/NH disconnectors with fuses

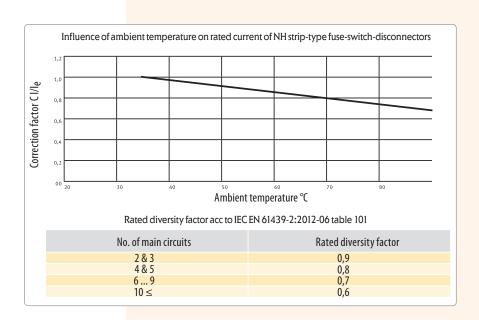
(SP KVL-00 FC95)



Derating factor: to operate the fuse switch disconnector in horizontal mounted position

The fuse switch disconnectors are designed to operate in both horizontal as well as vertical mounted positions. However the main field of application is for vertical mounting because the heat dissipation on this type of mounting is considerably low. To operate them on horizontal mounted position a derating factor has to be taken in to consideration.









SP KVL-1 V



SP KVL-23 V









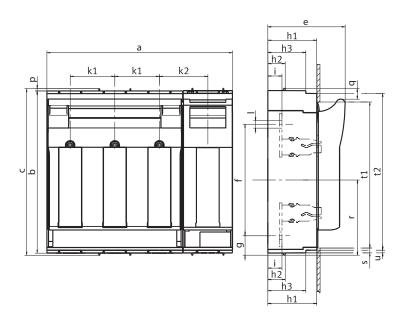
Accessories for KV	Code No.	Description	Packagino				
Туре	Code No.	Description					
SP KVL00	001692701	Clip terminal, 1,5 – 50 mm <sup>2</sup> Cu	[ <b>pcs</b> ]				
SP KVL1	001692702	Clip terminal, 25— 150 mm² Cu	3				
5P KVL2	001692703		3				
5P KVL3	001692704		3				
SP KVL00 P1	001692760		3				
SP KVL1 P1	001692761	12	3				
SP KVL2 P1	001692762		3				
5P KVL3 P1	001692763		3				
SP KVL1 P2	001692764	· ·	3				
SP KVL2 P2	001692765	Prism clamp for 2-conductors connection, 2x120 – 150 mm² Al/Cu	3				
5P KVL3 P2	001692766	Prism clamp for 2-conductors connection, 2x120 – 240 mm² Al/Cu	3				
5P HVL 4a D2	001692767	Direct terminal clamp for 2-conductors connection, 2x120 – 300mm <sup>2</sup> Al/Cu	1				
SP HVL 4a D2	001692767	Direct terminal clamp for 3-conductors connection, 3x95 – 150 mm² Al/Cu	1				
SP HVL 4a D3	001692768	Direct terminal clamp for 4-conductors connection, 4x95 — 150 mm² Al/Cu	1				
SP KVL-1 V	001692769	Frame clamp, 35-150mm <sup>2</sup> Al/Cu	3				
SP KVL-23 V	001690940	Frame clamp, 95-300mm² Al/Cu	3				
SP KVL-23 V	001690941	Feeding clamp, 25-95mm² Cu/Al, isolated, terminal M8,*	3				
		Phase busbars, 2 x 3pole KVL-00 50mm <sup>2</sup>	5				
Z2 KVL-00 3p	001690943						
Z3 KVL-00 3p	001690944	Phase busbars, 3 x 3pole KVI00 50mm <sup>2</sup>	5				
Z4 KVL-00 3p	001690945	Phase busbars, 4 x 3pole KVL-00 50mm <sup>2</sup>	3				
Z5 KVL-00 3p	001690946	Phase busbars, 5 x 3pole KVL-00 50mm <sup>2</sup>	3				
MST KVL-00 1p	001690947	Switch position indicator, 1-pole, size 00, **	1				
MST KVL-00 3p	001690948	Switch position indicator, 3-pole, size 00, **	1				
MST KVL-123 1p/2p/3p	001690949	Switch position indicator, 1/2/3 -pole, size 1, 2, 3, **	1				
MST 4a 1p+3p	001692714		1				
MFM KVL-00 1p/2p/3p	001690950	Mechanical fuse monitor, size 00, **	3				
MFM KVL-123 1p/2p/3p	001690951	Mechanical fuse monitor, size 1, 2, 3, **, ***	3				
PRS KVL-00 3p L	001690952	Terminal cover, 3-pole, variable to open, Length 66mm, size 00	2				
PRS KVL-00 3p S	001690953	Terminal cover, 3-pole, variable to open, Length 36mm, size 00	2				
PRS KVL-1 3p	001690954	Terminal cover, 3-pole, variable to open, Length 42mm, size 1	2				
PRS KVL-2 3p	001690955	Terminal cover, 3-pole, variable to open, Length 42mm, size 2	2				
PRS KVL-3 3p	001690956	Terminal cover, 3-pole, variable to open, Length 42mm, size 3	2				
PRS KVL-00 1p L	001690957	Terminal cover, 1-pole, variable to open, Length 66mm, size 00	2				
PRS KVL-00 1p S	001690958	Terminal cover, 1-pole, variable to open, Length 36mm, size 00	2				
PRS KVL-1 1p	001690959	Terminal cover, 1-pole, variable to open, Length 42mm, size 1	2				
PRS KVL-3 1p	001690960	Terminal cover, 1-pole, variable to open, Length 42mm, size 3	2				
DIN KVL-00 100-150	001690964	DIN rail fixing parts, For mounting on DIN rails, size 00	3				
DIN KVL-1 100-150	001690965	DIN rail fixing parts, For mounting on DIN rails, size 1	3				
FMU KVL-00 3p	001690966	Electronic fuse monitoring unit, 3-pole, size 00, ****	1				
EFMU KVL-13p	001690967	Electronic fuse monitoring unit, 3-pole, size 1, ****	1				
EFMU KVL-2 3p	001690968	Electronic fuse monitoring unit, 3-pole, size 2, ****	1				
EFMU KVL-3 3p	001690969	Electronic fuse monitoring unit, 3-pole, size 3, ****	1				
MPFMU KVL-00 3p	001690974	Elektromechanical fuse monitoring unit (AM), 3-pole, size 00, ****	1				
MPFMU KVL-13p	001690975	Elektromechanical fuse monitoring unit (AM), 3-pole, size 1, ****	1				
MPFMU KVL-2 3p	001690976	Elektromechanical fuse monitoring unit (AM), 3-pole, size 2, ****	1				
MPFMU KVL-3 3p	001690977	Elektromechanical fuse monitoring unit (AM), 3-pole, size 3, ****	1				
CK KVL-00 2p/4p	001690970	Connecting kit 2- and 4-pole, For making of 2- and 4-pole disconnectors, size 00	1				
K KVL-123 2p/4p	001690971	Connecting kit 2- and 4-pole, For making of 2- and 4-pole disconnectors, size 1, 2, 3	1				
P KVL-00123	001690972	Interlock device, locking with padlock, diameter 6mm max., size 00, 1, 2, 3	10				
C KVL-00123	001690973	Contact cover interlock, only be operated by tool, size 00-3	10				

<sup>\*</sup> Feeding clamp, AC690V/DC1000V-250A

<sup>\*\* 1</sup> Changeover, AC250V, 10/3A (ohmic/ind.)

<sup>\*\*\*</sup> Only in combination with ETI fuse-links with striker-pin; not in combination with frame-clamp or 2-wire-prism clamp.

\*\*\*\* For monitoring of fuse-links with live gripping lugs



	a	b	С	е	f	g	h1	h2	h3	k1	k2	i	l	р	q	r	s	t1	t2	u
KVL-14p	254	298	306	117	185	46	70	32	-	58	69	25	Ø10,5	4	19	138	5	272	-	-
KVL-3 4p	341,5	298	306	143	205	36	90	32	70	82	89	26	Ø14	4	19	138	10	268	288	5

Technical data - Feeding clamps								
Technical Characteristics								
Max. electrical load			AC690V/DC1000V-250A					
Heat deflection temp.			125°C UL94: V0					
Comparative tracking index			600					
Cross sections								
Conductor - Max. Diameter Ø14 mm								
single wire		mm <sup>2</sup>	25 - 95					
multi wire		mm <sup>2</sup>	25 - 95					
fine wire (with end sleeve)		mm <sup>2</sup>	25 - 70					
Torque	Ma	Nm	13					
Degree of protection			IP20					
Regulations			EN 60998-1:2004; EN 60998-2:2004; EN 60999-1:2000; EN 60999-2:2003					



#### Important

This Terminal is suitable for Al and Cu conductors. Please pay attention to the common handling guidelines when connecting the Aluminium conductors. Clean and brush the contact surfaces and lubricate them with an appropriate grease.