

NV/NH disconnectors with fuses

NV/NH horizontal fuse-switch disconnectors KVL

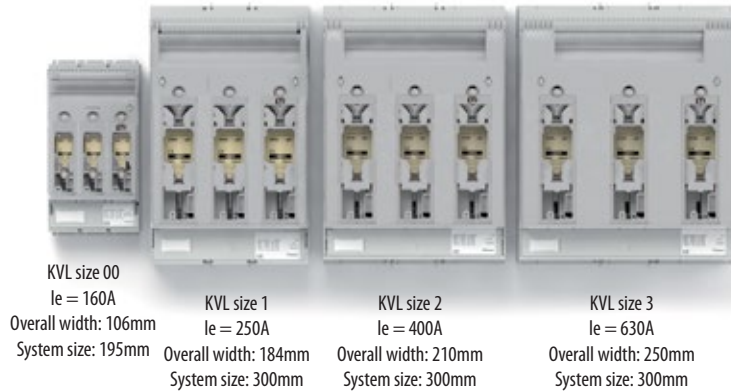
Uniform cover cutout

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 upper 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

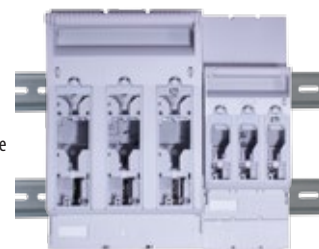


Safety lock
 - Prevents unauthorized operation
 - Can be used for all sizes

Simple and practical parking position
 - Safe parking position of the handle
 - Accidental reclosing not possible

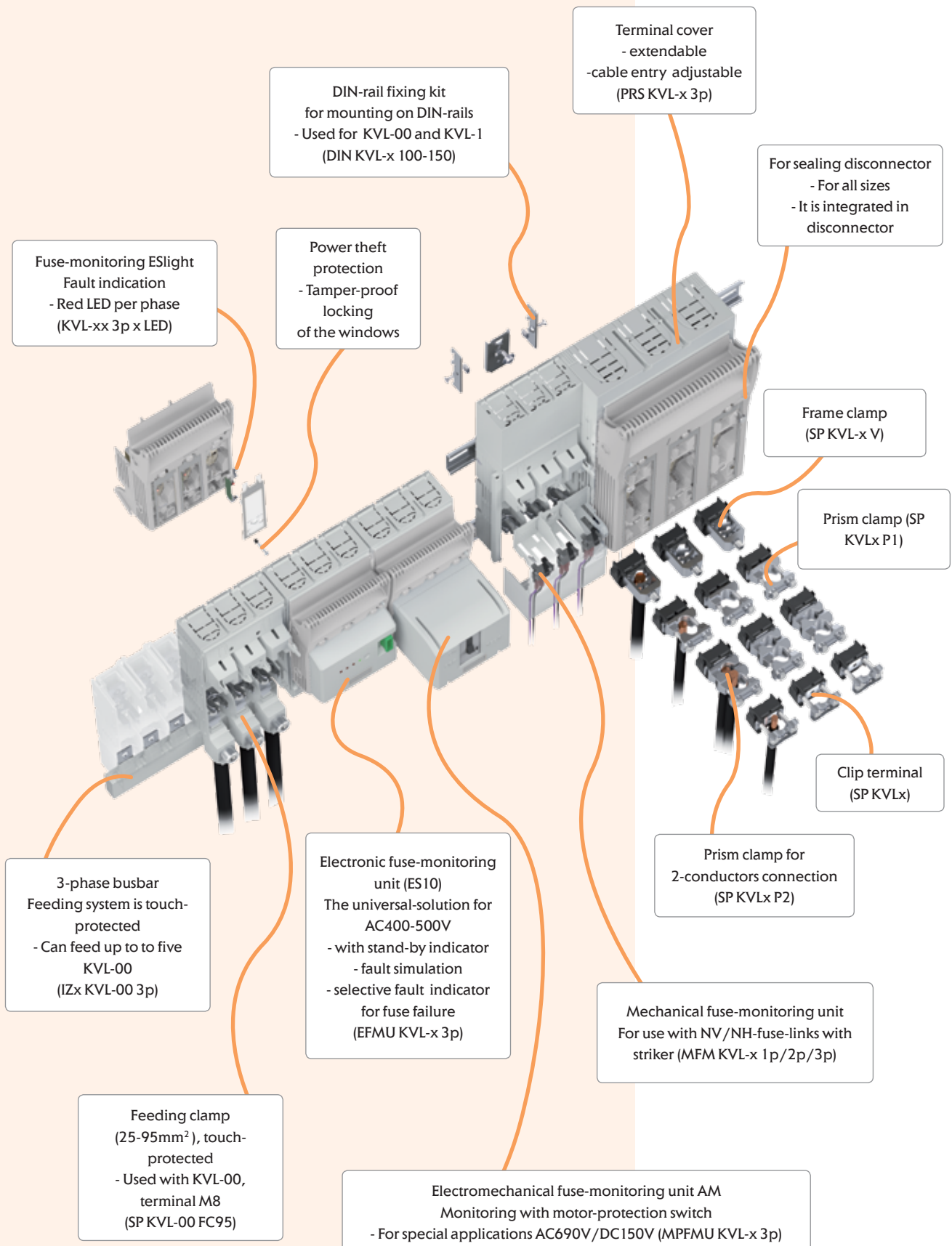


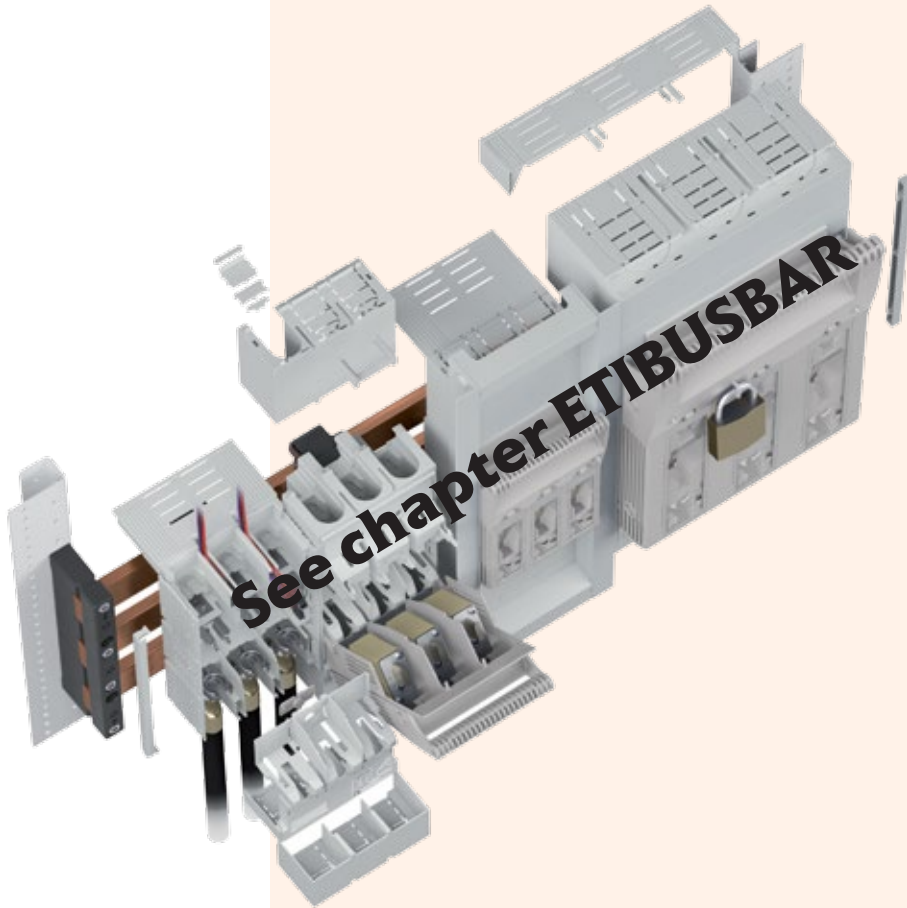
Montage on DIN rails
 - Time saving installation
 - KVL-00 and KVL-1 can fit on the same TH rails



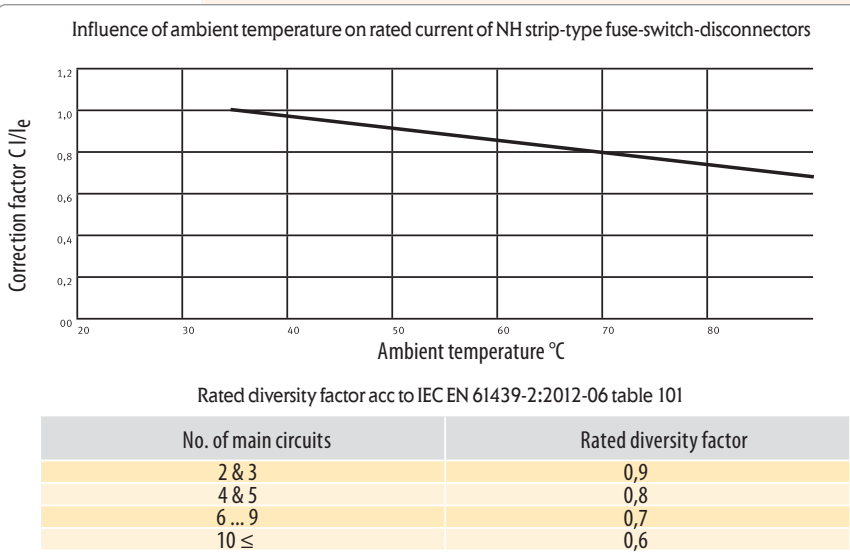
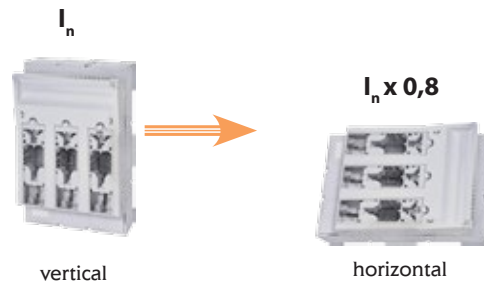
New generation!

Advantages





Derating factor: to operate the fuse switch disconnecter in horizontal mounted position
 The fuse switch disconnecters 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.



NV/NH disconnectors with fuses

3-pole, Baseplate mounting

Size	Code No.	Type	Weight [kg]	Packaging [pcs]
00	001690870	KVL-00 3p M8-M8	0,63	1
	001690871	KVL-00 3p BC95-BC95	0,67	1
1	001690872	KVL-1 3p M10-M10	2,03	1
2	001690873	KVL-2 3p M10-M10	3,42	1
3	001690874	KVL-3 3p M10-M10	3,95	1
4a	001692620	HVL4a 3P M16 1250	15,7	1
4a	001692630	HVL4a 3P 2xM12 1600	15,7	1

3-pole, Baseplate mounting, LED indication

Size	Code No.	Type	Weight [kg]	Packaging [pcs]
00	001690880	KVL-00 3p M8-M8 LED	0,66	1
	001690881	KVL-00 3p BC95-BC95 LED	0,7	1
1	001690882	KVL-1 3p M10-M10 LED	2,06	1
2	001690883	KVL-2 3p M10-M10 LED	3,45	1
3	001690884	KVL-3 3p M10-M10 LED	3,92	1

! Only used for 400 V AC
! Not used for DC

1-pole, Baseplate mounting

Size	Code No.	Type	Weight [kg]	Packaging [pcs]
00	001690890	KVL-00 1p M8-M8	0,31	2
1	001690891	KVL-1 1p M10-M10	0,93	1
2-3	001690892	KVL-3 1p M10-M10	1,57	1
4a	001692498	HVL4a 1P M16 1250A	5,3	1
4a	001692499	HVL4a 1P 2xM12 1600A	5,3	1

2-pole, Baseplate mounting

Size	Code No.	Type	Weight [kg]	Packaging [pcs]
00	001690895	KVL-00 2p M8-M8	0,72	1
1	001690896	KVL-1 2p M10-M10	1,88	1
2-3	001690897	KVL-3 2p M10-M10	3,19	1

4-pole, Baseplate mounting

Size	Code No.	Type	Weight [kg]	Packaging [pcs]
00	001690900	KVL-00 4p M8-M8	1,19	1
1	001690901	KVL-1 4p M10-M10	2,91	1
2-3	001690902	KVL-3 4p M10-M10	5,76	1



BC95-BC95





PRS KVL-00 1p



SP KVL



PRS KVL-00 1p S



DIN KVL-00 100-150



SP KVL...P1



SP KVL-23 V



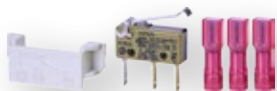
SP KVL-1 V



SP KVL-00 FC95



IZ2 KVL-00 3p



MST KVL- ...



MFM KVL-123 1p 2p 3p



PRS KVL-... 3p



CK KVL-00 2p/4p

Accessories for KVL

Type	Code No.	Description	Packaging min order [pcs]
SP KVL00	001692701	Clip terminal, 1,5 – 50 mm ² Cu	3
SP KVL1	001692702	Clip terminal, 25– 150 mm ² Cu	3
SP KVL2	001692703	Clip terminal, 25– 240 mm ² Cu	3
SP KVL3	001692704	Clip terminal, 11x21 mm ² Cu	3
SP KVL00 P1	001692760	Prism clamp, 10 – 70 mm ² Al/Cu	3
SP KVL1 P1	001692761	Prism clamp, 70 – 150 mm ² Al/Cu	3
SP KVL2 P1	001692762	Prism clamp, 120 – 240 mm ² Al/Cu	3
SP KVL3 P1	001692763	Prism clamp, 120 – 300 mm ² Al/Cu	3
SP KVL1 P2	001692764	Prism clamp for 2-conductors connection, 2x70 – 95 mm ² Al/Cu	3
SP KVL2 P2	001692765	Prism clamp for 2-conductors connection, 2x120 – 150 mm ² Al/Cu	3
SP KVL3 P2	001692766	Prism clamp for 2-conductors connection, 2x120 – 240 mm ² Al/Cu	3
SP HVL 4a D2	001692767	Direct terminal clamp for 2-conductors connection, 2x120 – 300mm ² Al/Cu	1
SP HVL 4a D3	001692768	Direct terminal clamp for 3-conductors connection, 3x95 – 150 mm ² Al/Cu	1
SP HVL 4a D4	001692769	Direct terminal clamp for 4-conductors connection, 4x95 – 150 mm ² Al/Cu	1
SP KVL-1 V	001690940	Frame clamp, 35-150mm ² Al/Cu	3
SP KVL-23 V	001690941	Frame clamp, 95-300mm ² Al/Cu	3
SP KVL-00 FC95	001690942	Feeding clamp, 25-95mm ² Cu/Al, isolated, terminal M8,*	3
IZ2 KVL-00 3p	001690943	Phase busbars, 2 x 3pole KVL-00 50mm ²	5
IZ3 KVL-00 3p	001690944	Phase busbars, 3 x 3pole KVL-00 50mm ²	5
IZ4 KVL-00 3p	001690945	Phase busbars, 4 x 3pole KVL-00 50mm ²	3
IZ5 KVL-00 3p	001690946	Phase busbars, 5 x 3pole KVL-00 50mm ²	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	Switch position indicator + mechanical fuse monitor, size 4a, 1p/3p	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
EFMU KVL-00 3p	001690966	Electronic fuse monitoring unit, 3-pole, size 00, ****	1
EFMU KVL-1 3p	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
MPFEMU KVL-00 3p	001690974	Elektromechanical fuse monitoring unit (AM), 3-pole, size 00, ****	1
MPFEMU KVL-1 3p	001690975	Elektromechanical fuse monitoring unit (AM), 3-pole, size 1, ****	1
MPFEMU KVL-2 3p	001690976	Elektromechanical fuse monitoring unit (AM), 3-pole, size 2, ****	1
MPFEMU 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
CK KVL-123 2p/4p	001690971	Connecting kit 2- and 4-pole, For making of 2- and 4-pole disconnectors, size 1, 2, 3	1
LP KVL-00123	001690972	Interlock device, locking with padlock, diameter 6mm max., size 00, 1, 2, 3	10
IC KVL-00123	001690973	Contact cover interlock, only be operated by tool, size 00-3	10

* Feeding clamp, AC690V/DC1000V-250A

** 1 Changeover, AC250V, 10/3A (ohmic/ind.)

*** 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

! For other pictures of Accessories, see chapter ETIBUSBAR

Horizontal fuse-switch disconnecter type HVL EK size 000 and 00

Description

Horizontal fuse-switch disconnecter type HVL EK is a low voltage device that provides switching of the circuits, depending on the voltage and use categories. The main purpose of HVL EK is installation of the NH fuses size 000 and 00, and protection of equipment from the harmful effects of short circuit and overload. If instead of NH fuses NH separators are installed, HVL EK provides disconnection function and meets all regulatory requirements in the open position.

Fields of use and features

Horizontal fuse-switch disconnectors are designed for use in a number of applications that require disconnection function. They are suitable for challenging the scope of the external electrical junction boxes, and public lighting, security cable branches in industrial applications and for the separation of distribution metering cabinets.

The program of horizontal fuse-switch disconnectors type HVL EK includes sizes 000 and 00 and is intended for mounting on a mounting plate, DIN rails and 60 mm busbar system. The standard offer includes 1-pole, 3-pole and 4-pole versions. Available is a wide range of different connections allowing great flexibility in use. Horizontal fuse-switch disconnectors HVL EK meet the requirements of the following standards:

IEC 60947-1,
IEC 60947-3,
IEC 60269-1,
IEC 60269-2-1

In horizontal fuse-switch disconnecter type HVL EK 000 only NH knife-blade fuse links size 000 (00C) could be used while in horizontal fuse-switch disconnecter type HVL EK 00 sizes 00 and 000 (00C) could be used. About additional warnings on products see technical part of the catalogue.

3-pole horizontal fuse-switch disconnecter HVL EK 000

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL EK 000 3p M8	001701000	0,58	1
HVL EK 000 3p OS00 6-16	001701001	0,52	1
HVL EK 000 3p OS00 25-50	001701002	0,58	1
HVL EK 000 3p P00 10-35	001701003	0,62	1
HVL EK 000 3p P00 50-70	001701004	0,63	1
HVL EK 000 3p P002 10-16	001701005	0,66	1
HVL EK 000 3p P002 25-35	001701006	0,67	1

* HVL EK 000 are ready for mounting on mounting plate or mounting on 35mm mounting rail without accessories

** connections are described in table of connections for HVL EK 000

*** given Type connector for the HVL EK means same connectors on both sides of HVL EK

**** different combinations of connections on both sides of the separator can be made with terminals that are available as accessories

***** highest clamp that can be placed on top side is P002 25-35, and on bottom side P002 50

1-pole horizontal fuse-switch disconnecter HVL EK 000

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL EK 000 1p M8	001701400	0,23	3
HVL EK 000 1p OS00 6-16	001701401	0,22	3
HVL EK 000 1p OS00 25-50	001701402	0,22	3
HVL EK 000 1p P00 10-35	001701403	0,24	3
HVL EK 000 1p P00 50-70	001701404	0,24	3
HVL EK 000 1p P002 10-16	001701405	0,25	3
HVL EK 000 1p P002 25-35	001701406	0,25	3

* HVL EK 000 are ready for mounting on mounting plate or mounting on 35mm mounting rail without accessories

** connections are described in table of connections for HVL EK 000

*** two-pole design can be done using two single-pole

**** highest clamp that can be placed on top side is P002 25-35, and on bottom side P002 50





4-pole horizontal fuse-switch disconnecter HVL EK 000

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL EK 000 4p M8	001701420	0,82	1

- * HVL EK 000 are ready for mounting on mounting plate or mounting on 35mm mounting rail without accessories
- ** connections are described in table of connections for HVL EK 000
- *** switching off neutral pole (N) same time as switching phase polarity
- **** highest clamp that can be placed on top side is P002 25-35, and on bottom side P002 50



3-pole horizontal fuse-switch disconnecter HVL-B EK 000 (5-10mm Busbar)

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL-B EK 000 3p M8	001701011	0,85	1
HVL-B EK 000 3p BT00 10-70	001701012	0,88	1

- * HVL-B EK 000 are ready for mounting on 60mm busbar system, 5-10 mm thick
- ** connections are described in table of connections for HVL EK 000
- *** connector BT00 10-70 in combination with HVL-B EK have clamping cross-section up to 50mm².
- **** connecting from top/bottom (read installation manual carefully to avoid wrong connection!)
- ***** for additional remarks on product see technical part of the catalogue.
- ***** highest clamp that can be placed on top side is P002 25-35, and on bottom side P002 50



3-pole horizontal fuse-switch disconnecter HVL-P EK 000 (flat bar connection)

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL-P EK 000 3p M8	001701013	0,59	1
HVL-P EK 000 3p OS00 6-50	001701014	0,53	1
HVL-P EK 000 3p P00 10-70	001701015	0,59	1

- * HVL-P EK 000 are ready for mounting on mounting plate or mounting on 35mm mounting rail without accessories
- ** HVL-P EK 00 are supplied with extra protective covering of connectors on the bottom side (PRS EK 000/3)
- *** connections are described in table of connections for HVL EK 000
- **** highest clamp that can be placed on top side is P002 25-35, and on bottom side P002 50



Accessories for HVL EK 000

Type	Code No.	Description	Weight [kg/pc]	Packaging [pcs]	Min order [pcs]
PRS EK 000/1	001701450	Protecting cover, 1p	0,02	set = 2	1 set
PRS EK 000/3	001701451	Protecting cover, 3p	0,03	set = 2	1 set
PRS-B EK 000/3	001701452	Protecting cover, 3p	0,03	set = 2	1 set

- * PRS EK 000... to be used for HVL EK 000, supplied in pairs covering the TOP and BOTTOM side
- ** PRS-B EK 000 to be used for HVL-B EK 000, supplied in pairs covering the TOP and BOTTOM side

Table of connections for HVL EK 000

Cable terminal drawing										
	M8	BT00 10-70	OS00 6-16	OS00 25-50	P00 10-35	P00 50-70	P002 10-16	P002 25-35	P002 50	
Cable terminal type	M8	BT00 10-70	OS00 6-16	OS00 25-50	P00 10-35	P00 50-70	P002 10-16	P002 25-35	P002 50	
Clamping cross-section	70 mm ²	10-50 mm ² Al/Cu	(6-16) mm ² Cu	(25-50) mm ² Cu	(10-35) mm ² Al/Cu	(50-70) mm ² Al/Cu	2x(10-16) mm ² Al/Cu	2x(25-35) mm ² Al/Cu	2x50 mm ² Al/Cu	
Screw type	M8x12	M6	2x(M5x12)	2x(M5x14)	2x(M5x20)	2x(M5x25)	2x(M5x25)	2x(M5x30)	2x(M5x35)	
Tightening torque	12-15 Nm	4,5 Nm	2,6 Nm	2,6 Nm	4,5 Nm	4,5 Nm	4,5 Nm	4,5 Nm	4,5 Nm	
Package	3	3	3	3	3	3	3	3	3	

- * basic type of HVL EK 000 is screw connection M8
- ** connector BT00 10-70 at disposal only in combination with HVL-B EK for busbar (HVL-B EK 000 3p BT00 10-70)
- *** HVL EK 00 allows an easy change of mutual connections (except BT00 10-70)

NV/NH disconnectors with fuses

3-pole horizontal fuse-switch disconnecter HVL EK 00

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL EK 00 3p M8	001701250	0,65	1
HVL EK 00 3p OS00 6-50	001701251	0,63	1
HVL EK 00 3p P00 10-70	001701252	0,69	1
HVL EK 00 3p P00 35-95	001701255	0,72	1
HVL EK 00 3p BT00 10-70	001701256	0,66	1

- * HVL EK 00 are ready for mounting on mounting plate
- ** basic Type of HVL EK 000 is screw connection M8
- *** connections are described in table of connections for HVL EK 00
- **** clamps that can be placed on top side are OS00 and P00, while on bottom side there is no limitation (see table range of connections for HVL EK 000/00)
- ***** For clamp limitation, see table of accessories

1-pole horizontal fuse-switch disconnecter HVL EK 00

Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL EK 00 1p M8	001701410	0,28	3
HVL EK 00 1p OS00 6-50	001701411	0,26	3
HVL EK 00 1p P00 10-70	001701412	0,28	3
HVL EK 00 1p P00 35-95	001701415	0,30	3
HVL EK 00 1p BT00 10-70	001701416	0,28	3

- * HVL EK 00 are ready for mounting on mounting plate
- ** basic Type of HVL EK 000 is screw connection M8
- *** connections are described in table of connections for HVL EK 00
- **** two-pole design can be made using two single-pole
- ***** For clamp limitation, see table of accessories

4-pole horizontal fuse-switch disconnecter HVL EK 00

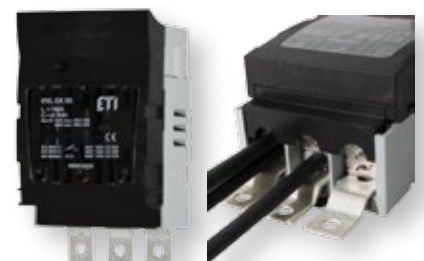
Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL EK 00 4p M8	001701430	0,92	1
HVL EK 00 4p BT00 10-70	001701431	0,92	1

- * HVL EK 00 are ready for mounting on mounting plate
- ** basic Type of HVL EK 000 is screw connection M8
- *** connections are described in table of connections for HVL EK 00
- **** switching off neutral pole (N) same time as switching phase polarity
- ***** For clamp limitation, see table of accessories

3-pole horizontal fuse-switch disconnecter HVL-P EK 00 (additional flat bar connection)

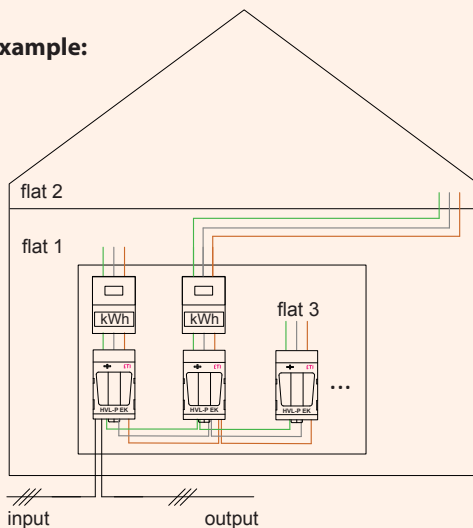
Type	Code No.	Weight [kg/pc]	Packaging [pcs]
HVL-P EK 00 3p M8	001701260	0,67	1
HVL-P EK 00 3p OS00 6-50	001701261	0,65	1
HVL-P EK 00 3p P00 10-70	001701262	0,71	1

- * HVL-P EK 00 are ready for mounting on mounting plate
- ** HVL-P EK 00 are supplied without any extra protective covering of connectors
- *** connections are described in table of connections for HVL EK 00
- ***** For clamp limitation, see table of accessories





Example:



Accessories for HVL EK 00			
Type	Code No.	Description	Packaging [pcs]
DIN EK 00 125-150	001701453	Mounting brackets for mounting on two rails 35mm	1 set

* DIN EK 00 125-150 set allows to mount HVL EK 00 on two mounting rails in distance of 125mm or 150mm.

Table of connections for HVL EK 00

Cable terminal drawing							
Cable terminal type	M8	BT00 10-70*	OS00 6-50	P00 10-70	P00 35-95*	P002 10-35	P002 50
Clamping cross-section	70 mm ²	10-70 mm ² Al/Cu	(6-50) mm ² Cu	(10-70) mm ² Al/Cu	(35-95) mm ² Al/Cu	2x(10-35) mm ² Al/Cu	2x50 mm ² Al/Cu
Screw type	M8x12	M6	2x(M5x14)	2x(M5x25)	2x(M5x30)	2x(M5x30)	2x(M5x40)
Tightening torque	12-15 Nm	4,5 Nm	2,6 Nm	4,5 Nm	4,5 Nm	4,5 Nm	4,5 Nm
Package	3	3	3	3	3	3	3

* connections P00 35-95 and BT00 10-70 should be ordered with fuse-switch disconnector while latter exchange is not possible

** basic type of HVL EK 00 is screw connection M8

*** HVL EK 00 allows an easy change of mutual connections (except BT00 10-70 and P00 35-95)

Accessories for HVL EK 000/00 (connectors)

Type	Code No.	Connector drawing	Suitability	Packaging [pcs]
OS00 6-16	001701460		HVL EK 000	set = 3
OS00 25-50	001701461		HVL EK 000	set = 3
OS00 6-50	001701480		HVL EK 00	set = 3
P00 10-35	001701462		HVL EK 000	set = 3
P00 50-70	001701463		HVL EK 000	set = 3
P00 10-70	001701481		HVL EK 00	set = 3
P00 35-95*	001701464		HVL EK 00	set = 3
P002 10-16	001701465		HVL EK 000	set = 3
P002 25-35	001701466		HVL EK 000	set = 3
P002 10-35	001701482		HVL EK 00***	set = 3
P002 50	001701467		HVL EK 000, 00***	set = 3
P002 35-70*	001701468		HVL EK 00***	set = 3

* because of wider screw distance change is only possible between these two Types of connections (however always possible to change connections OS with P00 and P002 and vice versa only the exceptions are marked with '*')

** Type of cable for direct connection is given on connector drawing

*** Double prism clamp (P002) can be used only on bottom side of HVL EK 00, while on top side clamps (OS00 and P00) remain