

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									
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)

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

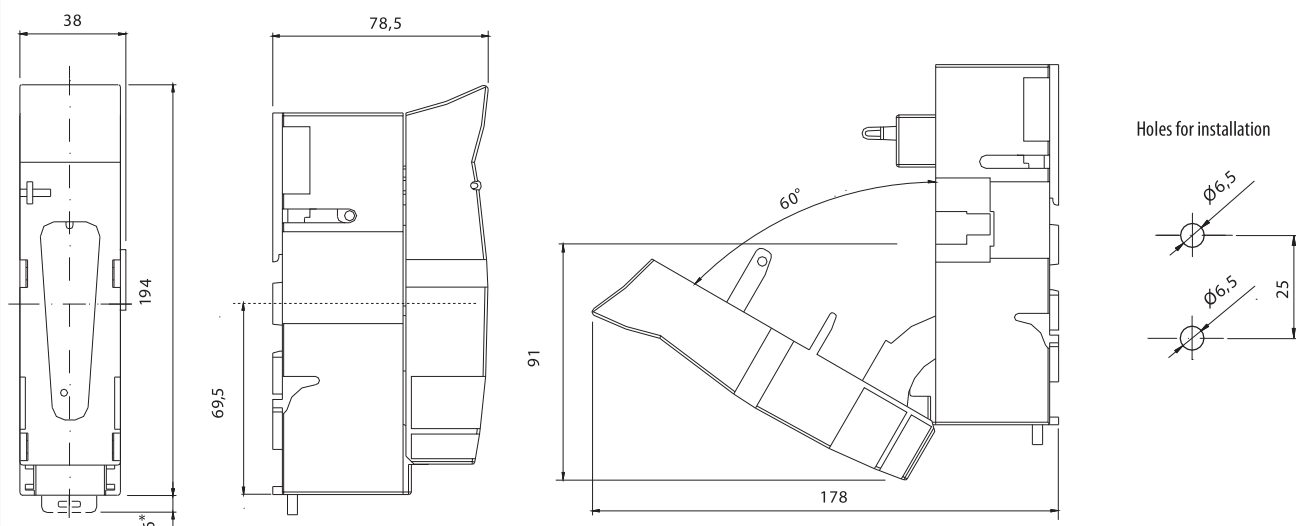
Technical data										
Technical Specifications			HVL EK 000 1p		HVL EK 000 3p		HVL EK 00 1p		HVL EK 00 3p	
Conventional free air thermal current*	I _{th}	A	160							
Rated insulation voltage	U _i	V	AC 690							
Rated withstand voltage	U _{imp}	kV	6							
Rated frequency		Hz	50 (40-60)							
Utilisation category			AC-21B	AC-22B	AC-21B	AC-22B	AC-21B	AC-22B	AC-21B	AC-22B
Rated operational current	I _e	A	160	125	160	100	160	125	160	125
Rated operational voltage	U _e	V	230 AC	690 AC	400 AC	500 AC	230 AC	690 AC	400 AC	500 AC
Rated conditional short-circuit current		kA _{eff}	63							
Mechanical durability (operating cycles)			1600							
Electrical durability (operating cycles)			200							
Power dissipation (without fuse)	W		3,74	10,2	3,74	10,2				
Degree of protection (cover closed)			IP20							
Degree of protection (cover open)			IP10							
Pollution degree			3							
Permissible ambient temperature**	°C		-25 ÷ +55							
Storage temperature	°C		-30 ÷ +70							

* In case of mounting of the fuse-switch disconnecter in cabinet, the thermal current should be corrected (I_{th} x derating factor), depending on the number of built apparatuses (see table 1)

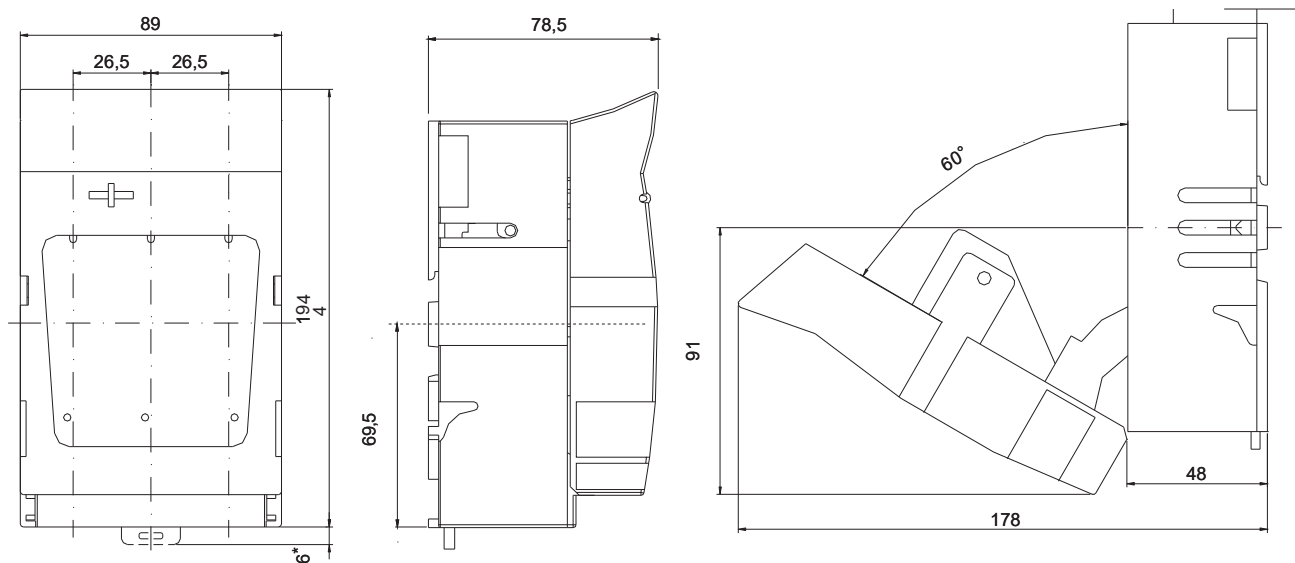
** In case of using the fuse-switch disconnecter at temperatures +45°C to +55°C, the thermal current I_{th} should be reduced for 5%-10%

Table 1				
Number of built apparatuses	2 - 3	4 - 5	6 - 9	>9
Derating factor	0,9	0,8	0,7	0,6

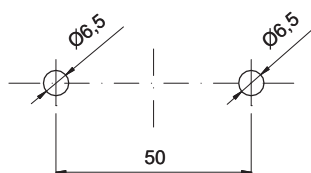
HVL EK 000 1p



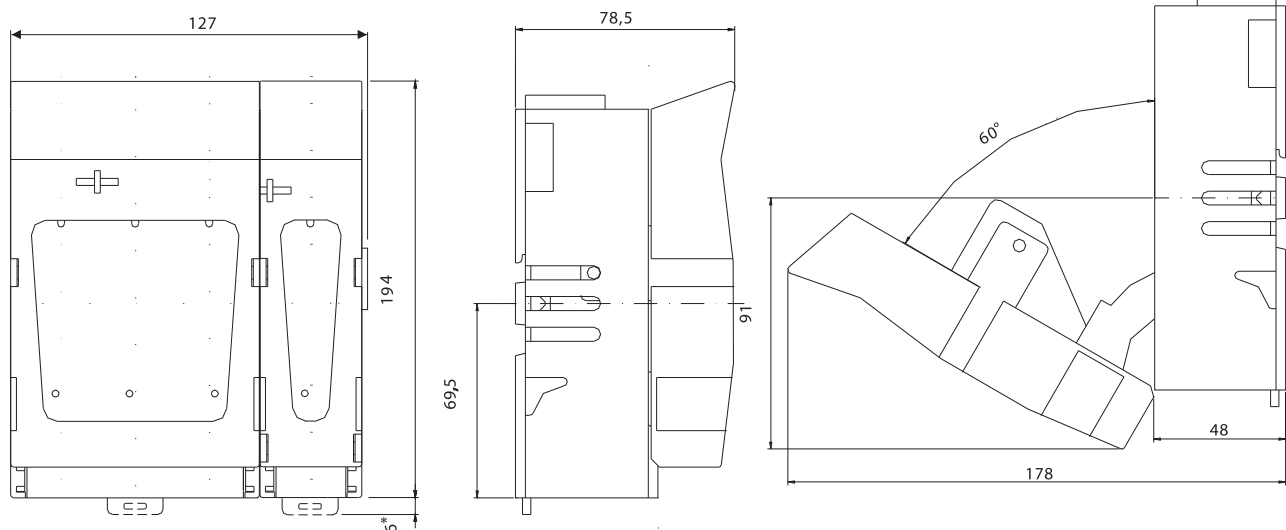
HVL EK 000 3p



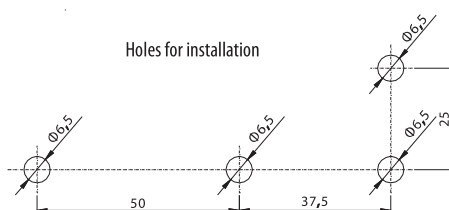
Holes for installation



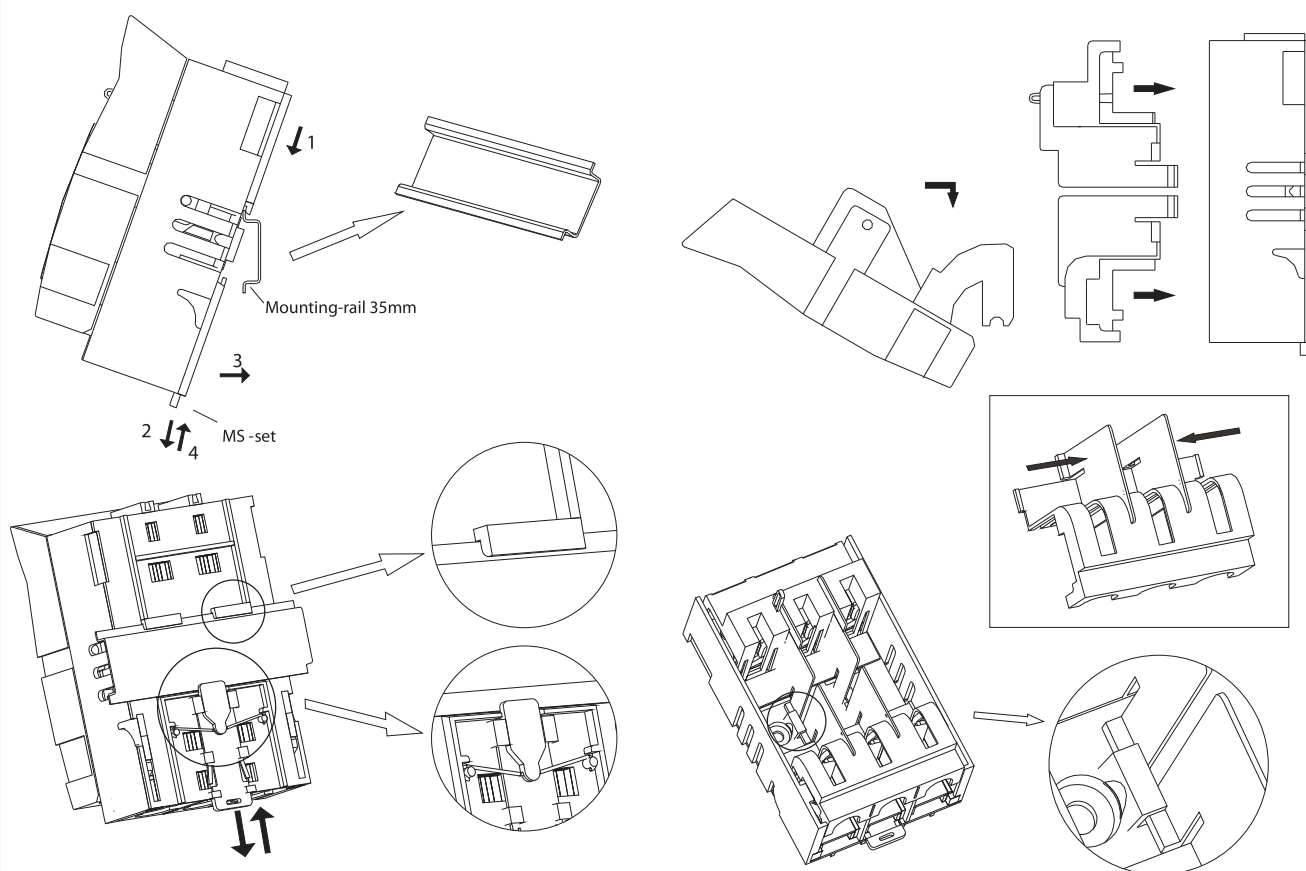
HVL EK 000 4p



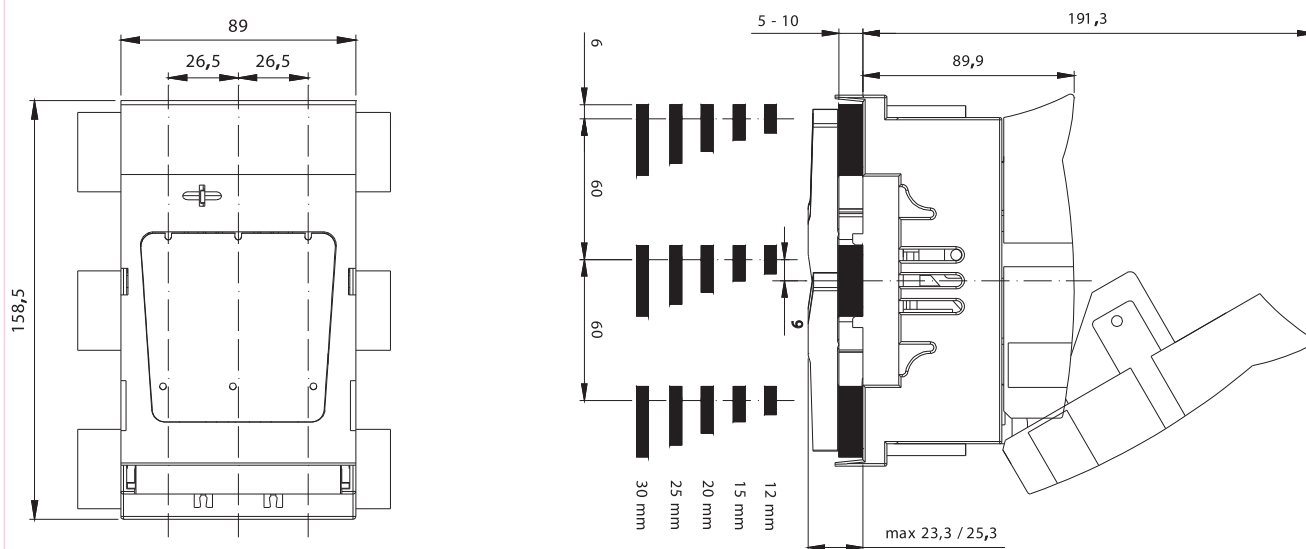
Holes for installation



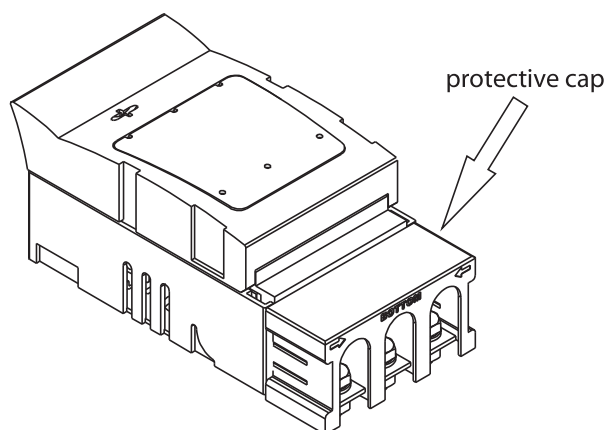
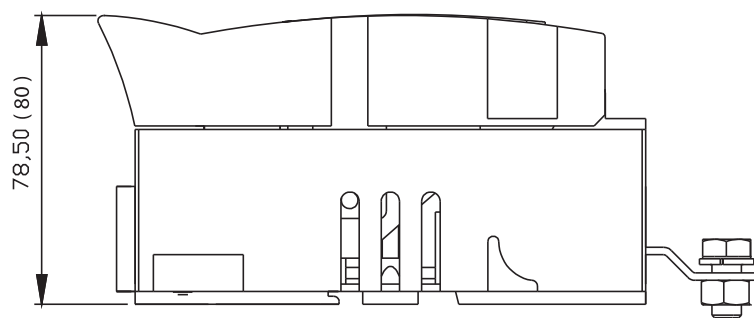
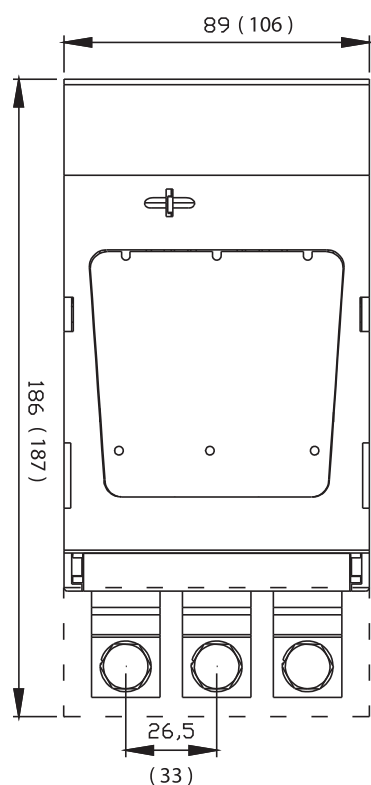
HVL EK 000 – options and Installation guide



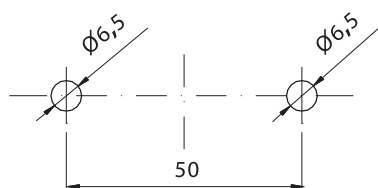
HVL-B EK 000 3p



HVL-P EK 000 3P

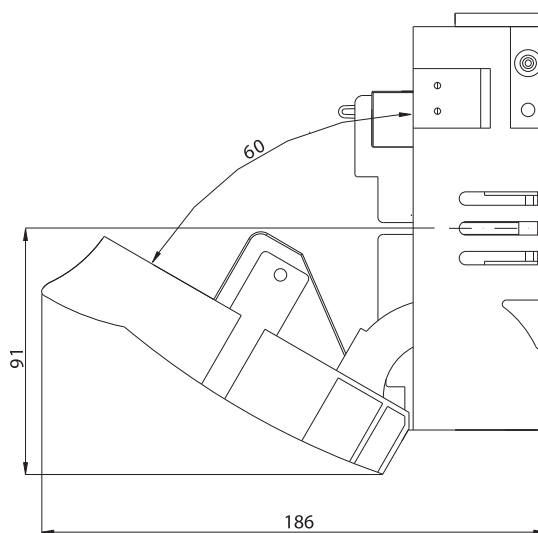
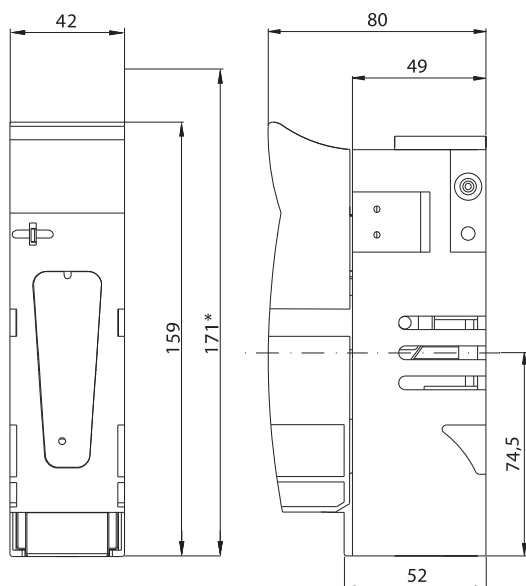


Holes for installation



HVL-P EK 000 3p is supplied complete with a bottom covering protection. HVL-P EK 00 3p is supplied without protective coatings.

HVL EK 00 1p



Holes for installation

