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

Description

Horizontal fuse-switch disconnector 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.

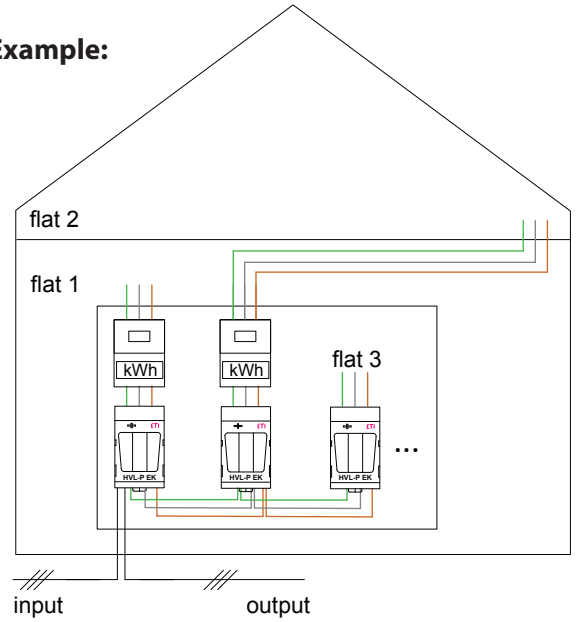
Fields of use and features

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

Example:



Technical data

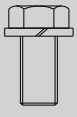
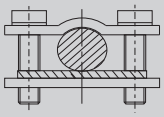
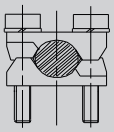
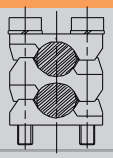
Technical Specifications			HVL EK 000 1p		HVL EK 000 3p			HVL EK 00 1p		HVL EK 00 3p		
Conventional free air thermal current*	I_{th}	A	160									
Rated insulation voltage	U_i	V	AC 690									
Rated withstand voltage	U_{imp}	kV	6									
Rated frequency		Hz	50 (40-60)									
Utilisation category			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 disconnector 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 disconnector at temperatures +45°C to +55°C, the thermal current I_{th} should be reduced for 5%-10%

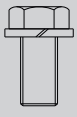
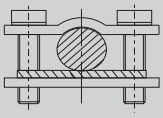
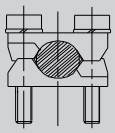
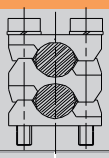
Table 1				
Number of built apparatuses	2 - 3	4 - 5	6 - 9	>9
Derating factor	0,9	0,8	0,7	0,6

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

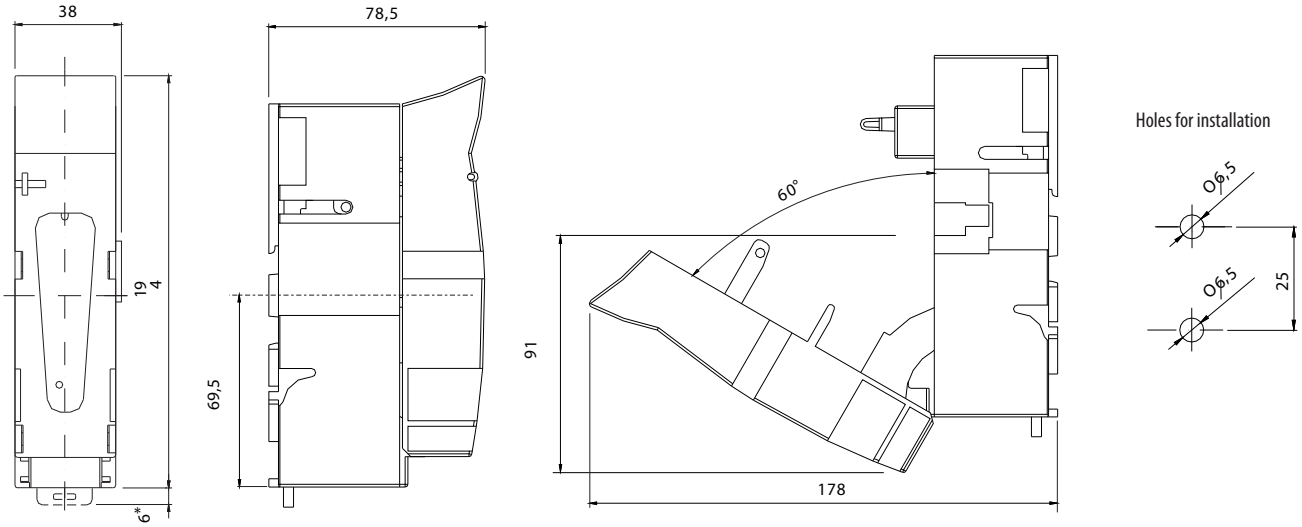
* basic type of HVL EK 000 is screw connection M8
** connector BT00 10-70 at disposal only in combination with HVL-B EK for busbar (HVL-B EK 000 3p BT00 10-70)
*** HVL EK 00 allows an easy change of mutual connections (except BT00 10-70)

Table of connections for HVL EK 00

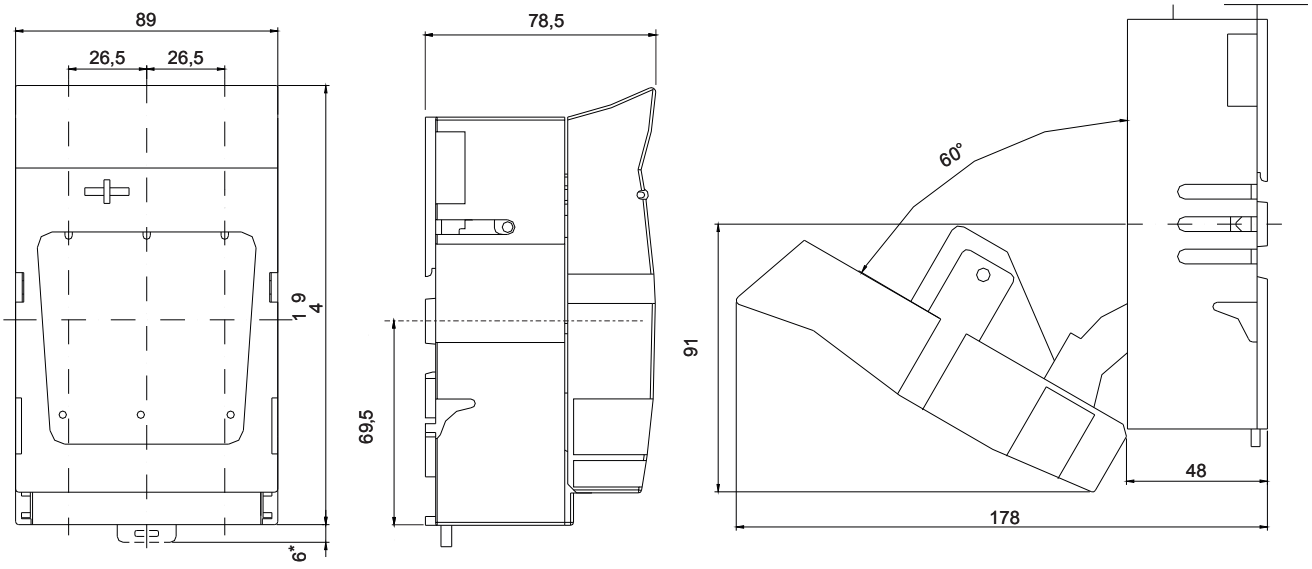
Cable terminal drawing							
Cable terminal type	M8	BT00 10-70*	OS00 6-50	P00 10-70	P00 35-95*	P002 10-35	P002 50
Clamping cross-section	70 mm^2	10-70 mm^2 Al/Cu	(6-50) mm^2 Cu	(10-70) mm^2 Al/Cu	(35-95) mm^2 Al/Cu	2x(10-35) mm^2 Al/Cu	2x50 mm^2 Al/Cu
Screw type	M8x12	M6	2x(M5x14)	2x(M5x25)	2x(M5x30)	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 orderd 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)

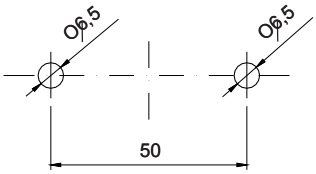
HVL EK 000 1p



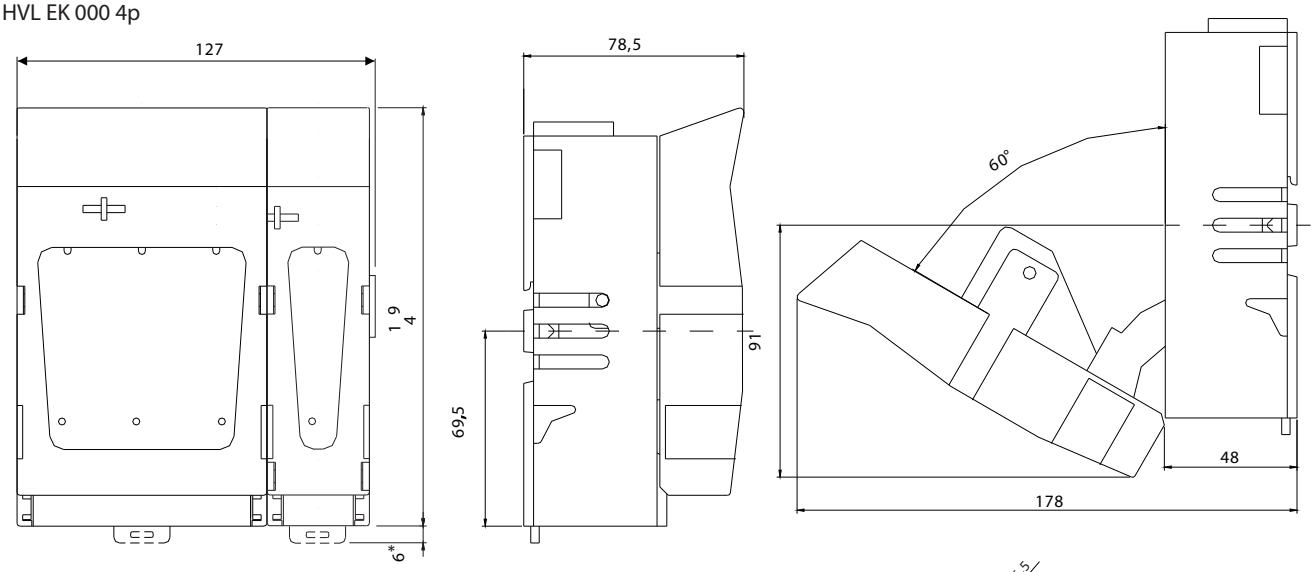
HVL EK 000 3p



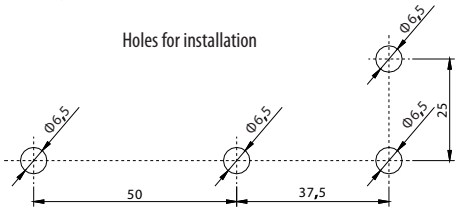
Holes for installation



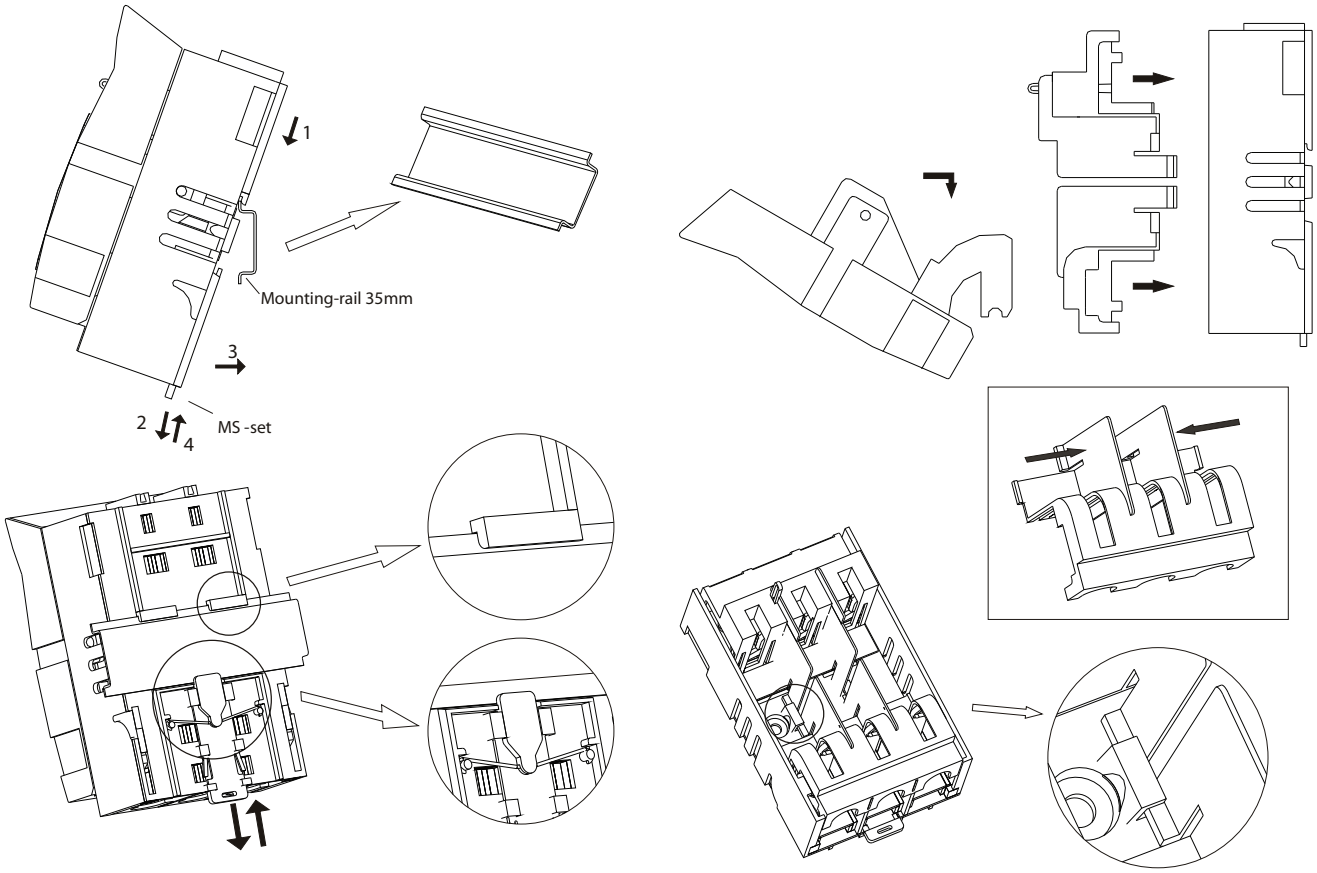
HVL EK 000 4p



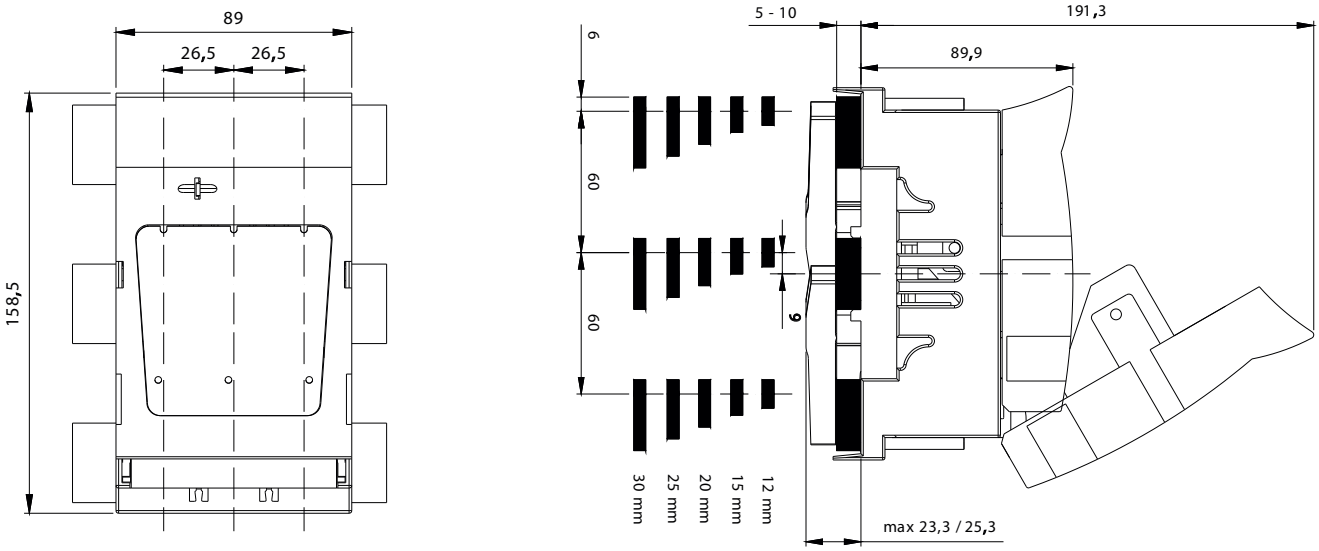
Holes for installation



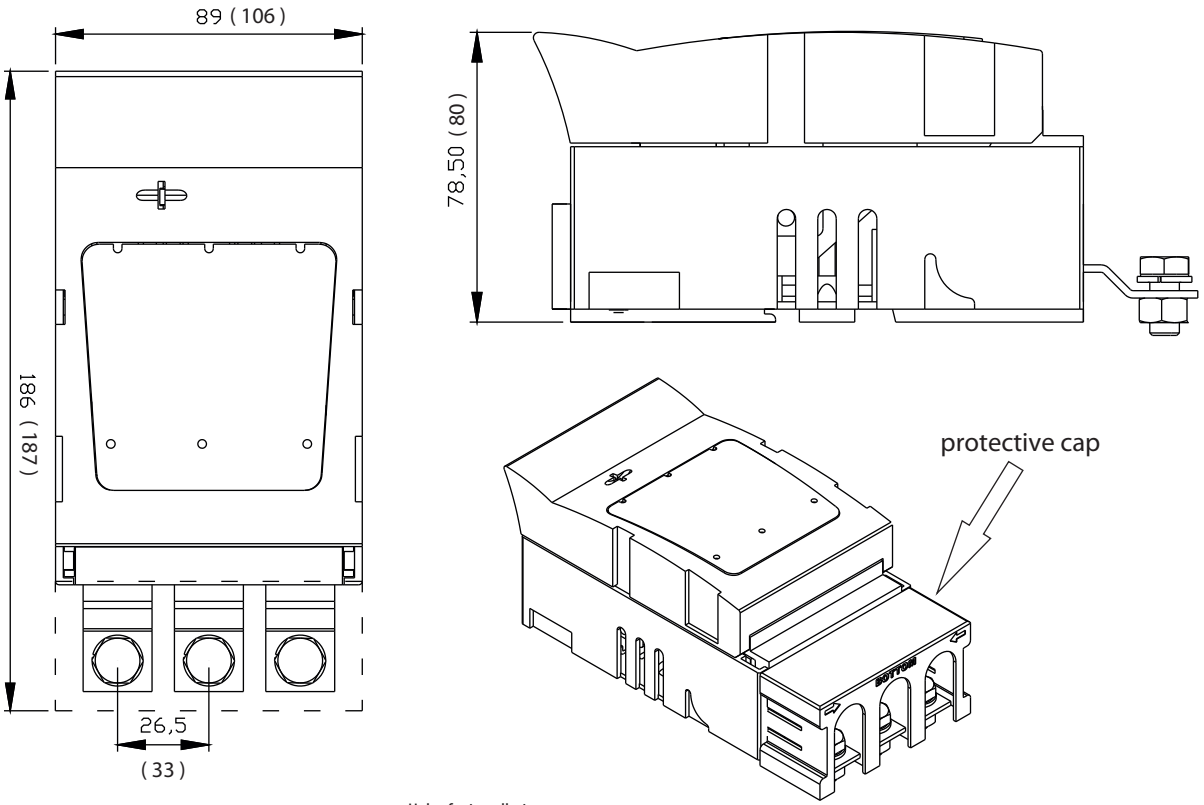
HVL EK 000 – options and Installation guide



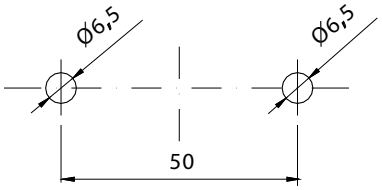
HVL-B EK 000 3p



HVL-P EK 000 3P

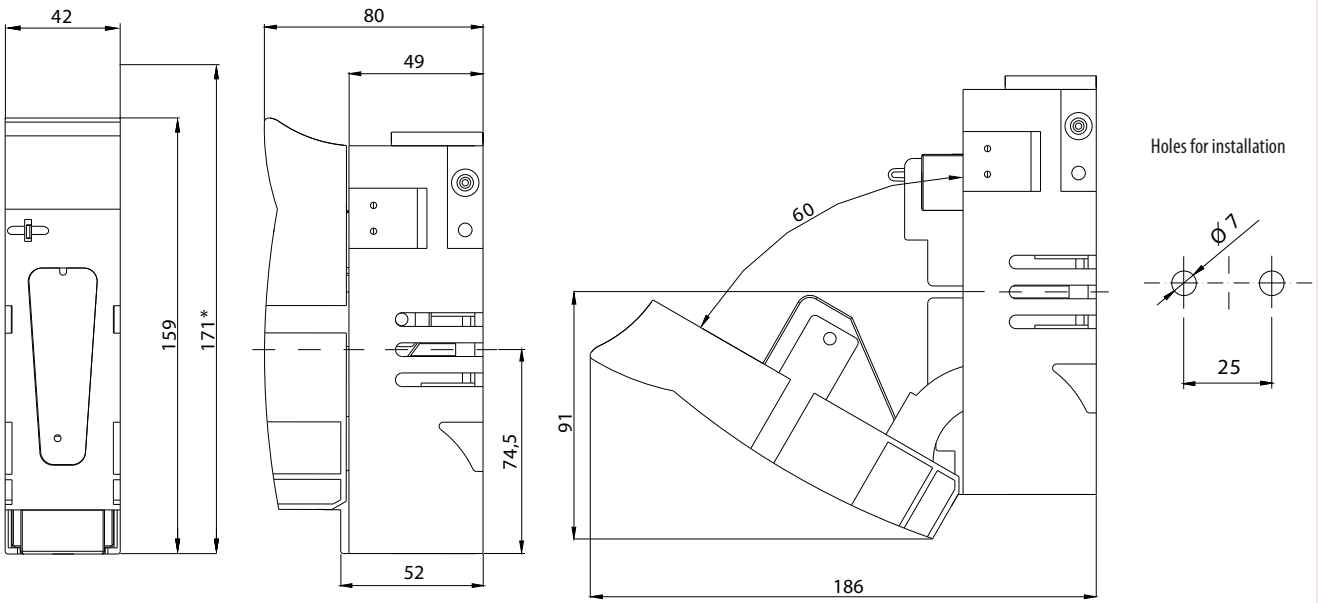


Holes for installation

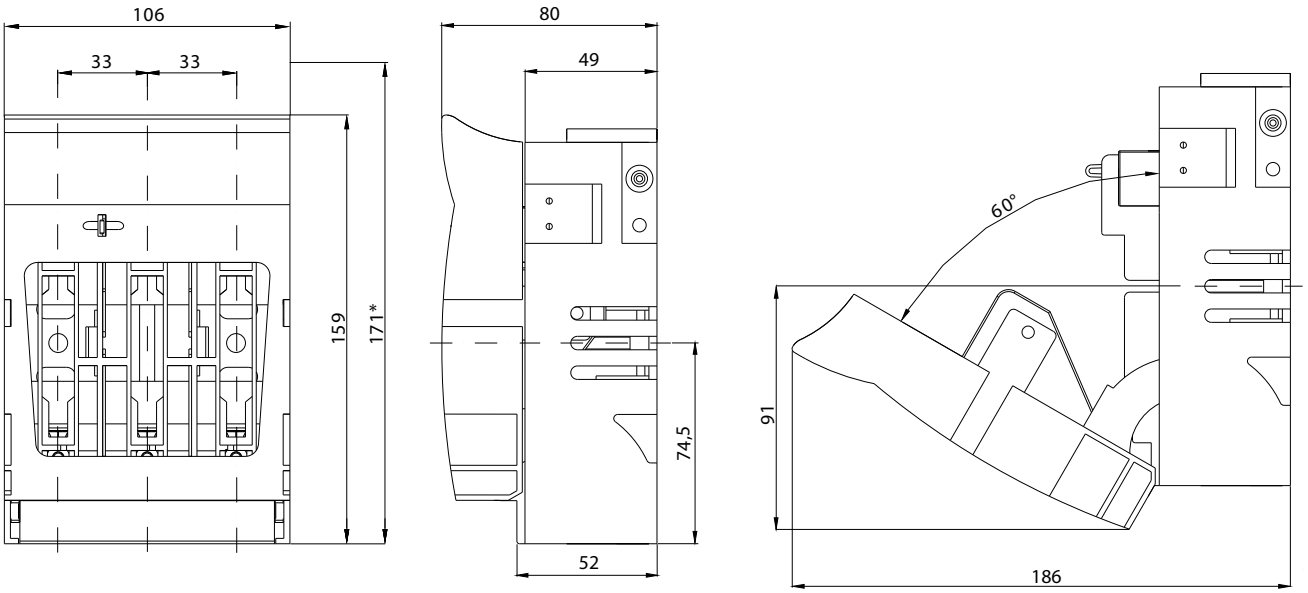


HVL-P EK 000 3p is supplied complete with a bottom covering protection. HVL-P EK 00 3p is supplied without protective coatings.

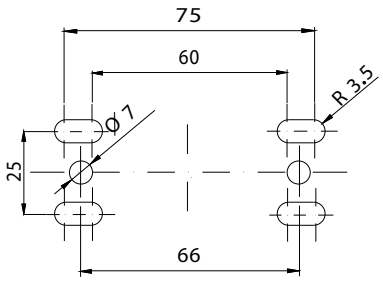
HVL EK 00 1p



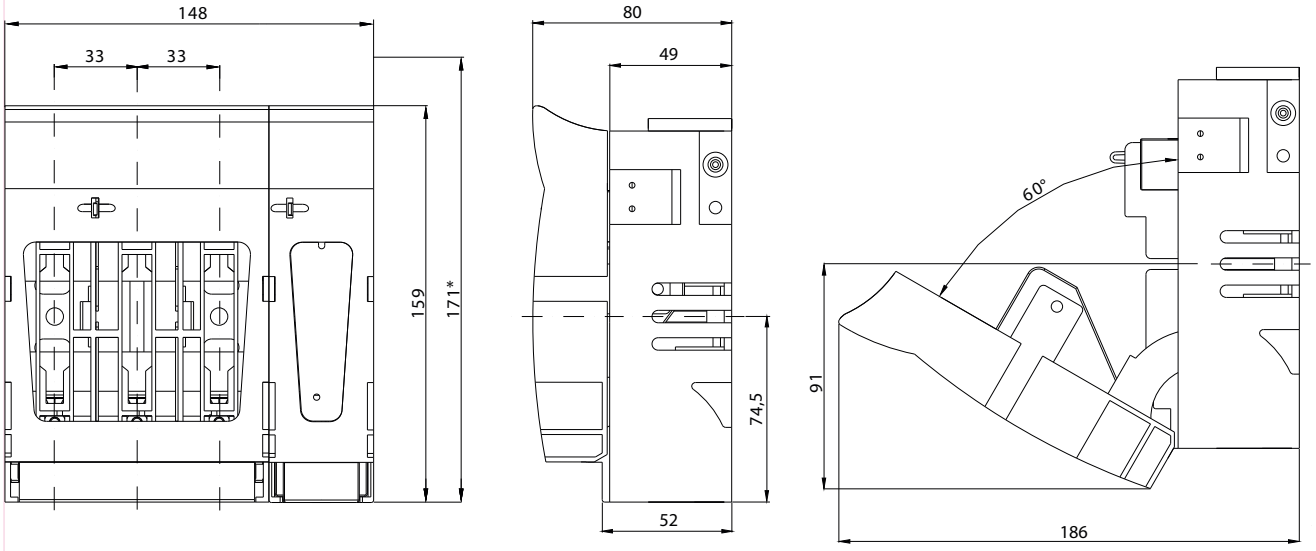
HVL EK 00 3p



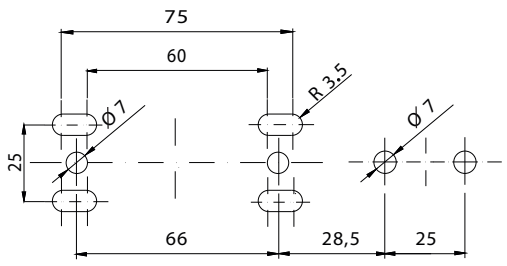
Holes for installation



HVL EK 00 4p



Holes for installation



* with set for mounting on two mounting rails in distance (125mm, 150mm)