

NH Horizontal fuse switch disconnectors - EBH range



Product description

Eaton's Bussmann® series NH horizontal fuse switch disconnectors are specifically designed to be used with NH fuse links. All energised metal parts are fully protected against accidental contact. These are manually operated switches and the making and breaking is dependent on the speed of the operation. The EBV range is provided complete with the clamps (i.e. screws/V-terminals/2V-terminals) and cable for shrouds for cable termination.

Standard features

- Touch for IP 30 from the front
- Top/bottom cable termination possibility
- Test holes provided on the cover to measure the voltage across the link
- Various options for cable terminations
- Wide range of accessories)

Catalogue symbol:

- EBH (see catalogue numbers table)

Standard/Approvals:

- IEC 60947-1 and 3
- EN 60947-1 and 3

Compatible fuse links:

- NH 400, 500 and 690 V NH gG and aM fuse links

Technical data

- Voltage: 400, 500 and 690 V a.c.
- Current: 160 to 1600 A
- Utilisation category:
 - AC21B Size 4
 - AC22B Sizes 00 (V 120), 1-S, 3, 4
 - AC23B Sizes 00 to 2
 - DC21B Sizes 00, 2 and 3
 - DC21B Sizes 00, 1 and 2

Functionality

- Designed for installation onto mounting platess, 60 mm or 100 mm busbar systems
- Making and breaking operation should be done with determined movement
- Parallel moving, double contact system
- Suitable for top or bottom cable terminal connection

Operating conditions

- Suitable for installation in environments free of any dust, explosive or aggressive gases
- Altitude up to 2000 metre above sea level
- Can be used in outdoor environments if they are installed in IP34 cabinets
- Relative air humidity should not be higher than 50% temperature of +40°C
- Ambient temperature from -25°C to +55°C

Mounting options

- On mounting plates
 - EBH00 O, EBH1 O, EBH2 O, EBH3 O
- On to busbar systems
 - 60 mm busbar systems: EBH00 1, EBH1 1, EBH2 1 installation on to busbar system with hooked clamps
 - 100 mm busbar systems: EBH2 2, EBH1 2 installation on to busbar system with hooked clamps

Packaging

- 1 per carton.

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Table 1. Technical data

		EBH 00			EBH 1			EBH 2		
Rated thermal current with solid links I_{th}	A	160			250			400		
Voltage U_n	V	690			690			690		
Utilisation category		AC-23B	DC-21B	DC-22B	AC-23B	AC-22B	DC-22B	AC-23B	DC-21B	DC-22B
Rated switching current I_e	A	160	160	160	250	250	250	400	400	400
Rated switching Voltage U_e	V	690	440	250	400	690	250	690	440	220
Rated short circuit making current	690 V	80	20	20	80	80	25	80	15	20
	400 V	100	20	20	100	100	25	100	15	20
Rated short-circuit withstand current	690 V	80	20	20	80	80	25	80		
	400 V	100	20	20	100	100	25	100		
Rated insulation voltage U_i	V	1000			1000			1000		
Rated power dissipation	W	12			32			45		
Rated impulse withstand voltage U_{imp}	kV	8			8			12		
Rated frequency	Hz	50-60	N/A	N/A	50-60	50-60	N/A	50-60	N/A	N/A
Mechanical durability	No of cycles	1600			1600			1000		
Electrical durability		200			200			200		
IP Rating	IP	20			30			20		
Weight	kg	0.7, 0.9			2.5			3 / 4.5		
Fuse links size		00			1			2		

		EBH 3		EBH4a	
Rated thermal current with solid links I_{th}	A	630		1250	1600
Voltage U_n	V	690		500	400
Utilisation category		AC-22B	DC-21B	AC-22B	AC-21B
Rated switching current I_e	A	630	630	1250	1600
Rated switching Voltage U_e	V	690	250	500	400
Rated short circuit making current	690 V	100	100		
	400 V	100	100		
Rated short-circuit withstand current	690 V	25			
	400 V	25		50	
Rated insulation voltage U_i	V	1000		800	
Rated power dissipation	W	60			
Rated impulse withstand voltage U_{imp}	kV	12		8	
Rated frequency	Hz	50-60	N/A	50-60	
Mechanical durability	No of cycles	1000			
Electrical durability		200			
IP Rating	IP	20			
Weight	kg	5 / 5.9			
Fuse links size		3		4a	

Table 2. Catalogue numbers sizes 00 to 2

Size	Current (Amps)	Busbar System	Catalogue Numbers	Cable Terminals	Pack Quantity	Compatible Fuse Links Size
Horizontal fuse switch disconnecter for NH size 00 for installation on mounting plates						
00	160	N/A	EBH0003TS5	For connection of round conductors	1	00
			EBH0003TM8	For connection of conductors with lug terminals		
			EBH0003TV1	For connection of sector-shaped conductors		
			EBH0003TS5L	For connection of round conductors, lengthened terminal shrouds		
			EBH0003TM8L	For connection of conductors with lug terminals, lengthened terminal shrouds		
			EBH0003TV1L	For connection of sector-shaped conductors, lengthened terminal shrouds		
Horizontal fuse switch disconnecter for NH size 00 for installation on 60 mm busbar						
00	160	60 mm	EBH0013TBM8	Cable terminal - bottom, for connection of conductors with lug terminals	1	00
			EBH0013TTM8	Cable terminal - top, for connection of conductors with lug terminals		
			EBH0013TBF	Cable terminal - top, for connection of conductors with bare ends		
			EBH0013TTF	Cable terminal - bottom, for connection of conductors with bare ends frame clamps		
Horizontal fuse switch disconnecter for NH size 1 for installation on mounting plates						
1	250	N/A	EBH103TS8	For connection of round conductors - S-bridge clamps	1	1
			EBH103TM1	For connection of conductors with lug terminals - screws		
			EBH103TV1	For connection of sector-shaped conductors V-clamps		
			EBH103TVS	For connection of round conductors, top terminals, V-terminals, bottom terminals, S-bridge terminals		
			EBH103TVM	For connection of round conductors, top terminals, V-terminals, bottom terminals, screw terminals		
			EBH103TSV	For connection of round conductors, top terminals, S-bridge terminals, bottom terminals, V-terminals		
			EBH103TMV	For connection of round conductors, top terminal, screw terminals, bottom terminals, V-terminals		
Horizontal fuse switch disconnecter for NH size 1 for installation on 60 mm busbar						
1	250	60 mm	EBH113TTS8	Top cable terminals, for connection of round conductors, S-bridge clamps	1	1
			EBH113TBS8	Bottom cable terminals, for connection of round conductors, S-bridge clamps		
			EBH113TTM1	Top cable terminals, for connection of conductors with lug terminals screws		
			EBH113TBM1	Bottom cable terminals, for connection of conductors with lug terminals - screws		
			EBH113TTV1	Top cable terminals, for connection of sector-shaped conductors - V-clamps		
			EBH113TBV1	Bottom cable terminals for connection of sector-shaped conductors - V-clamps		
Horizontal fuse switch disconnecter for NH size 1 for installation on 100 mm busbar						
1	250	100 mm	EBH123TTS8	Top cable terminals, for connection of round conductors	1	1
			EBH123TBS8	Bottom cable terminals, for connection of round conductors - S-bridge clamps		
			EBH123TTM1	Top cable terminals, for connection of conductors, with lug terminals - screws		
			EBH123TBM1	Bottom cable terminals, for connection of conductors, with lug terminals - screws		
			EBH123TTV1	Top cable terminals, for connection of sector shaped conductors - V-clamps		
			EBH123TBV1	Bottom cable terminals for connection		
Horizontal fuse switch disconnecter for NH size 2 for installation on mounting plates						
2	400	N/A	EBH203TS8	For connection of round conductors - S-bridge clamps	1	2
			EBH203TM1	For connection of conductors with lug terminals - M10 screws		
			EBH203TV1	For connection of sector-shaped conductors - V-clamps		
			EBH203TW1	For connection of sector-shaped conductors - double V-clamps		
Horizontal fuse switch disconnect for NH size 2 for installation on 60 mm busbar						
2	400	60	EBH213TBM1	Bottom cable terminals, for connection of conductors with lug terminals, M10 screws	1	2
			EBH213TTM1	Top cable terminals, for connection of conductors with lug terminals, M10 screws		
			EBH213TBV1	Bottom cable terminals, for connection of sector-shaped conductors, V-clamps		
			EBH213TTV1	Top cable terminals, for connection of sector shaped conductors, V-clamps		
			EBH213TBW1	Bottom cable terminals, for connection of sector shaped conductors, double V-clamps		
			EBH213TTW1	Top cable terminals, for connection of sector shaped conductors, double V-clamps		

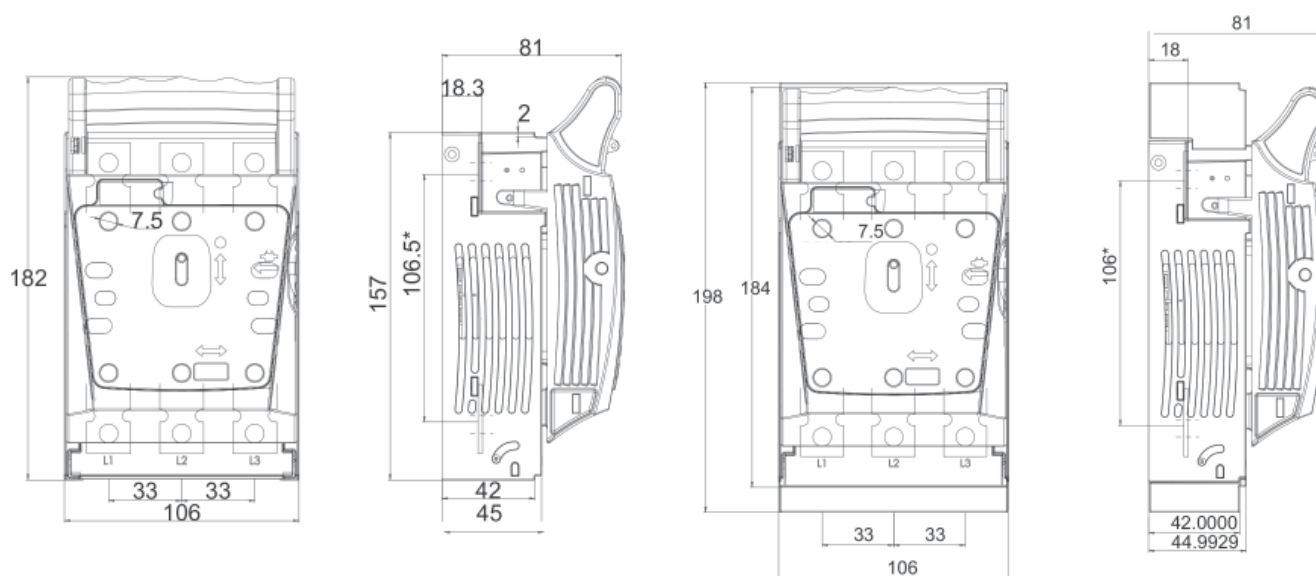
1: Please contact Bussmann to discuss specific requirements

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Table 3. Catalogue numbers size 2 to 4a

Size	Current (Amps)	Busbar System	Catalogue Numbers	Cable Terminals	Pack Quantity	Compatible Fuse Links Size
Horizontal fuse switch disconnector for NH size 2 for installation on 100 mm busbar						
2	400	100 mm	EBH223TBM1	Bottom cable terminals, for connection of conductors with lug terminals, M10 screws	1	2
			EBH223TTM1	Top cable terminals, for connection of conductors with lug terminals, M10 screws		
			EBH223TBV1	Bottom cable terminals, for connection of sector shaped conductors , V-clamps		
			EBH223TTV1	Top cable terminals, for connection of sector shaped conductors, V-clamps		
			EBH223TBW1	Bottom cable terminals, for connection of sector shaped conductors, double V-clamps		
			EBH223TTW1	Top cable terminals, for connection of sector shaped conductors, double V-clamps		
Horizontal fuse switch disconnector for NH size 3 for installation on mounting plates						
3	630	N/A	EBH303TS8	For connection of round conductors, S-bridge clamps	1	3
			EBH303TM2	For connection of conductors with lug terminals, M12 screws		
Horizontal fuse switch disconnector for NH size 3 for installation on 60 mm busbar						
3	630	60 mm	EBH313TM2	For installation on to 60 mm busbar system, top/bottom cable terminals, M12 screws	1	3
Horizontal fuse switch disconnector for NH size 4 for installation on mounting plates						
4a	1250	N/A	EBH403TM2-12	Three phase switching simultaneously	1	4
	1600		EBH403TM2-16	Three phase switching simultaneously		
	1250		EBH403SM2-12	Each phase switching simultaneously		
	1600		EBH403SM2-16	Each phase switching simultaneously		

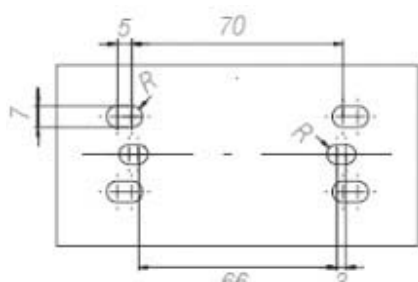
Dimensions (mm) EBH00 suitable for installation on mounting plates



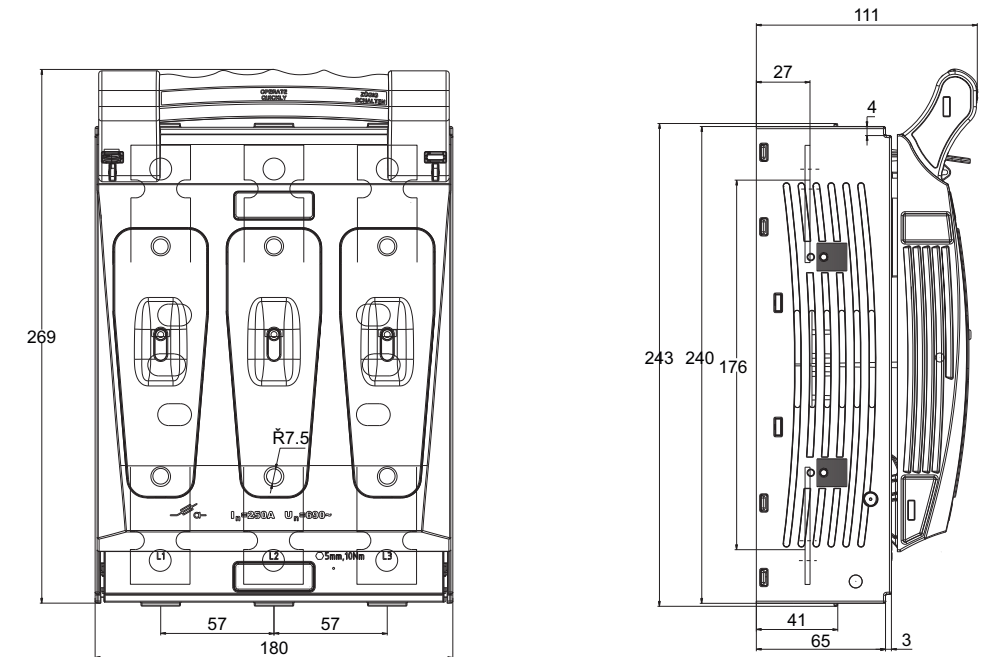
Without extended terminals

With extended terminals

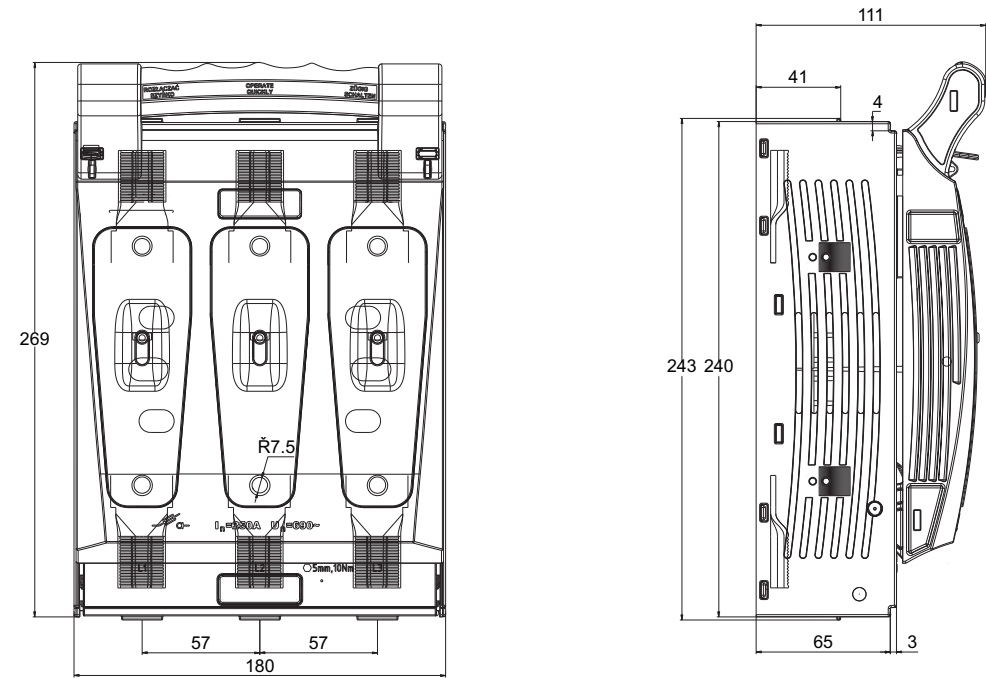
Dimensions and spacing holes for installation on mounting plates



Dimensions (mm) for EBH1 suitable for installation on mounting platess

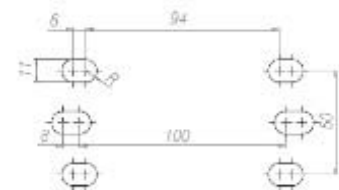


Screw terminals

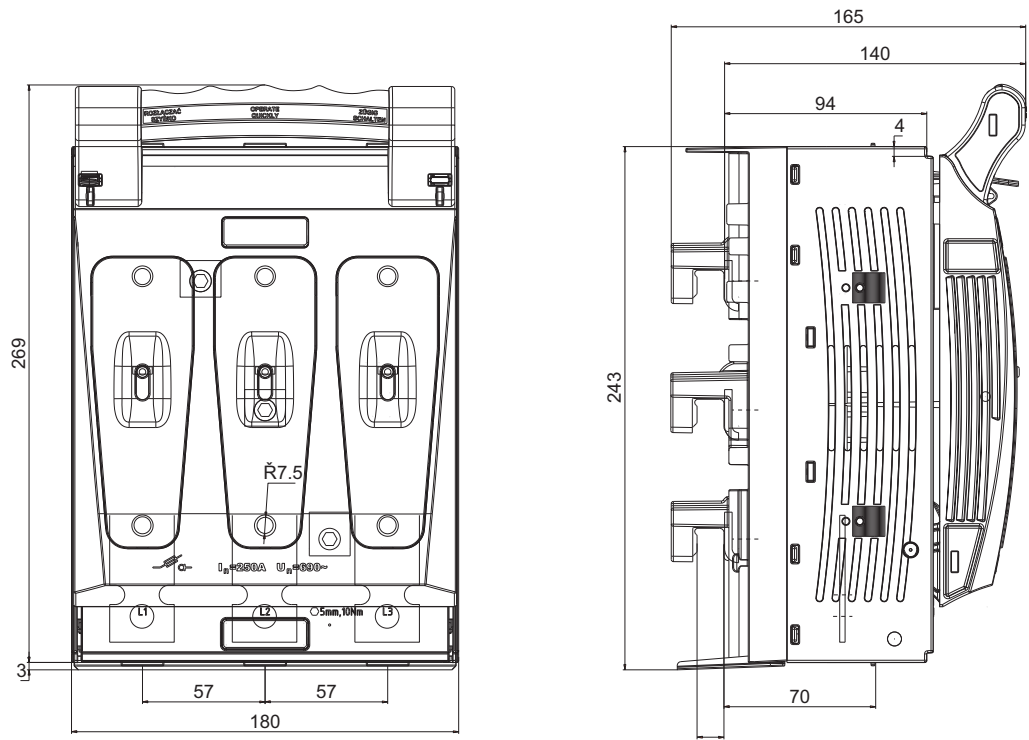


V Clamps

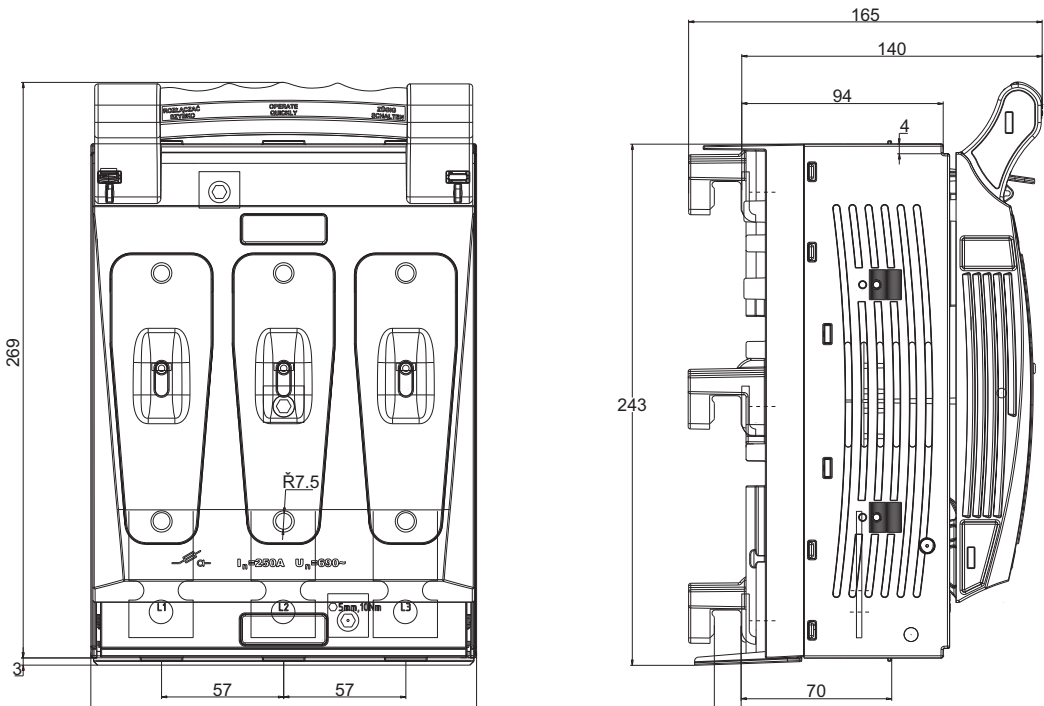
Dimensions and spacing holes for installation on mounting platess



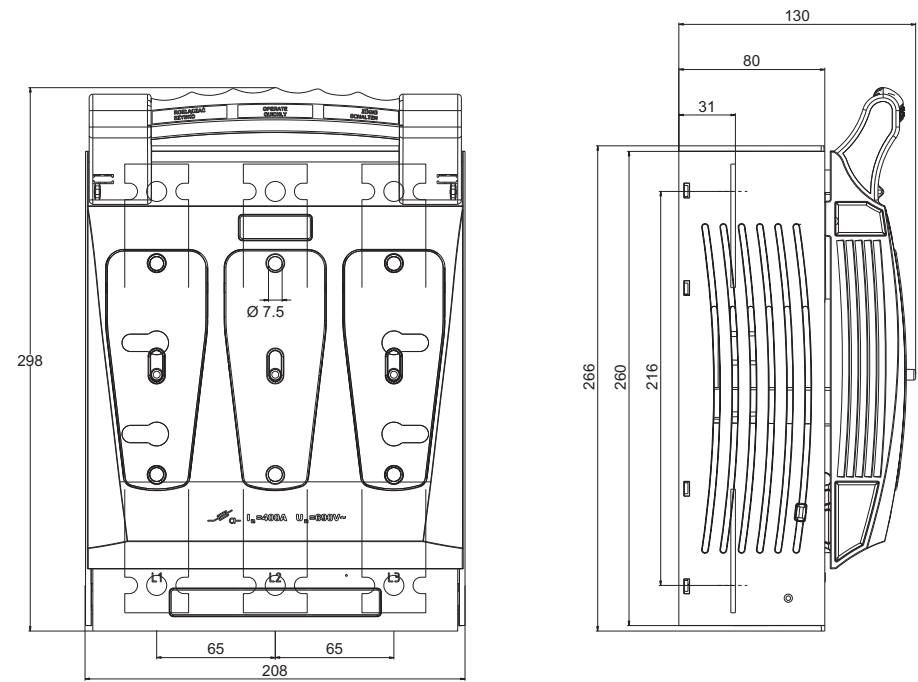
Dimensions (mm) for EBH1 suitable for installation on 60 mm busbar



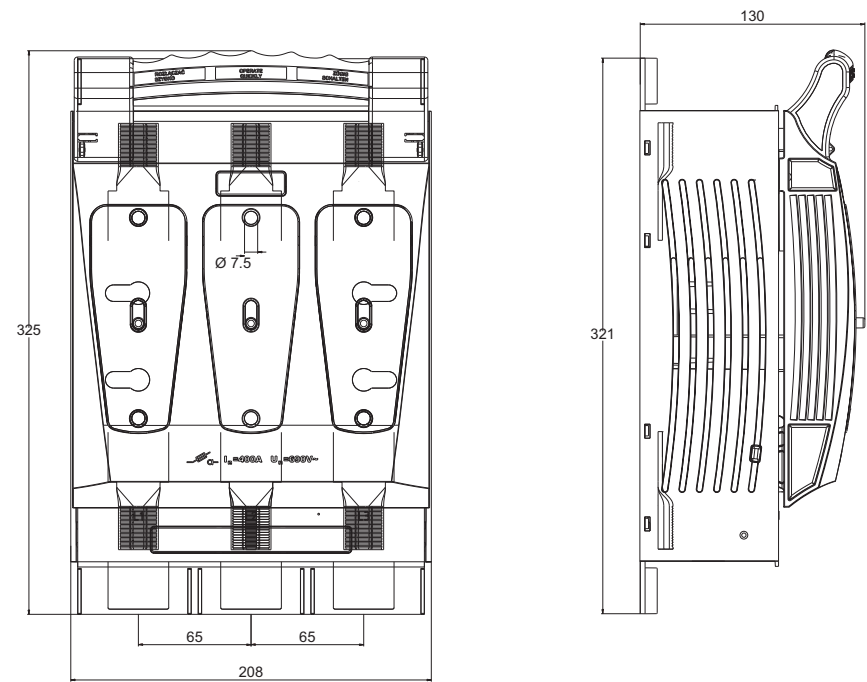
Dimensions (mm) for EBH1 suitable for installation on 100 mm busbar



Dimensions (mm) for EBH2 suitable for installation on mounting platess

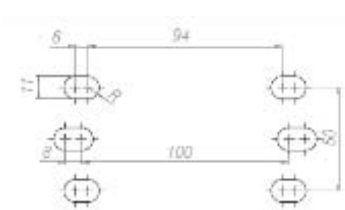


Screw Terminals

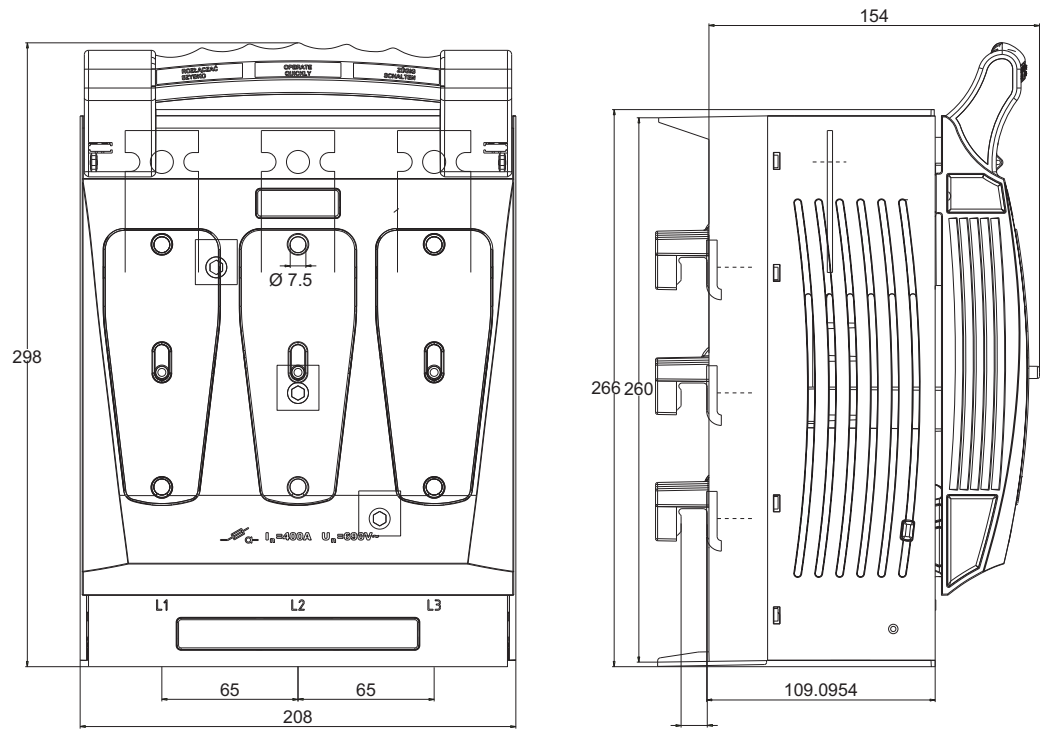


V Terminals

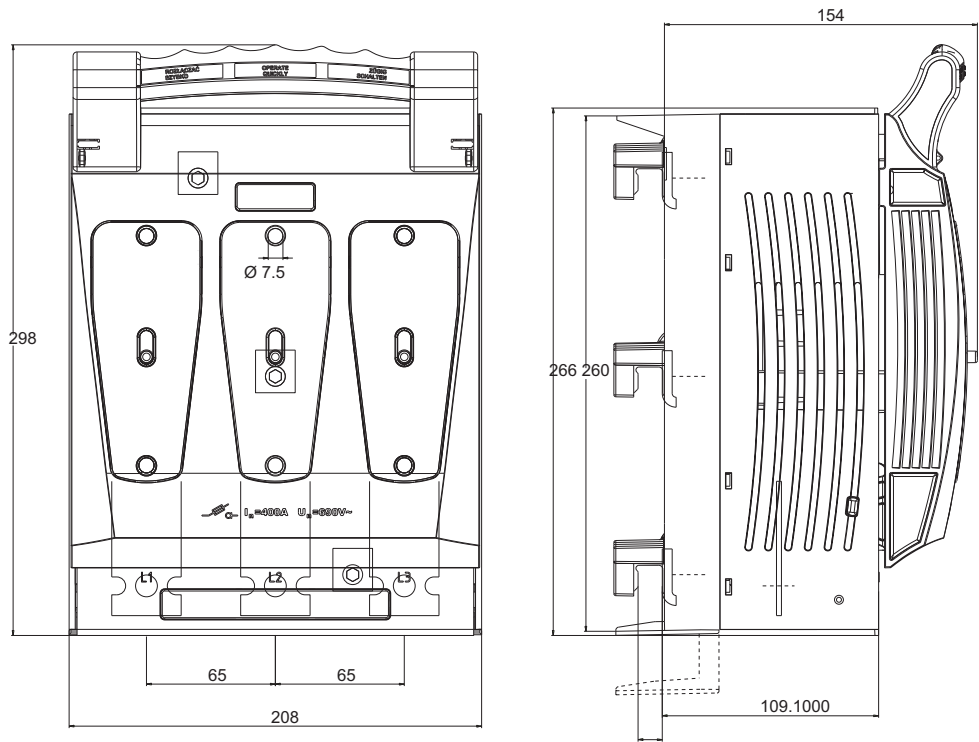
Dimensions and spacing holes for installation on mounting platess



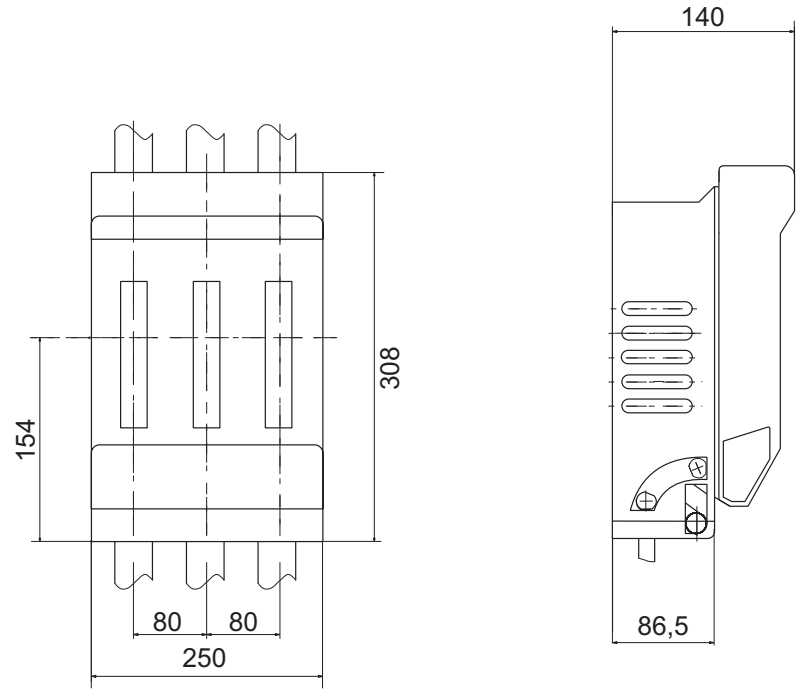
Dimensions (mm) for EBH2 suitable for installation on 60 mm busbar



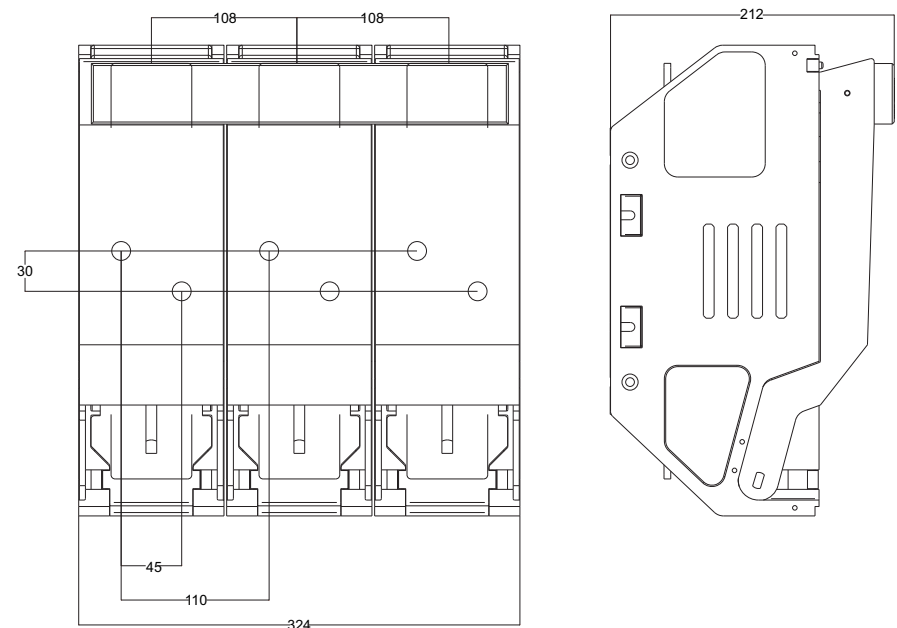
Dimensions (mm) for EBH2 suitable for installation on 100 mm busbar



Dimensions (mm) for EBH3



Dimensions (mm) for EBH4



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