MULTIBLOC® 1.ST8

Size 1, 250A, 690VAC, Design for Bottom Fitting, 1-,2-,3-,4-pole

IEC FUSE SWITCH DISCONNECTORS

NH FUSE SWITCH DISCONNECTOR



The production programme of MULTIBLOC® series 1.ST8 comprises NH fuse switch disconnectors for 250A.

They are designed for bottom fitting/panel installation and are available in single pole, double pole, tiple pole and quadruple pole units.

For installation of MULTIBLOC® NH fuse switch disconnectors in distribution units with central cover, respective covers are used to obtain a uniform profile in height and length.

MULTIBLOC® size 1 are designed for NH fuse-links in accordance with IEC/EN 60269-2, VDE 0636-2, size 1, 250A.

MULTIBLOC® offers the user the possibility of fast and easy installation as well as a high degree of security during installation and maintenance.

TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Amper (A)	250 A
Size per Standard	1
SCCR	Ue = AC 400 V; Ie = 250 A 80kA Ue = AC 500 V; Ie = 250 A 80kA Ue = AC 690 V; Ie = 200 A 80kA (1-,2-pole) Ue = AC 690 V; Ie = 200 A 50kA (3-,4-pole)
Mounting	bottom fitting/panel
Switchability	1-,2-,3-,4-pole switching

FEATURES & BENEFITS

- Touch protection IP 20 - when fuse link is in test mode IP rating is maintained
- Parking position of switch operating cover even with fuse-links inserted
- Electronic or electro-mechanic fuse monitoring - optional
- Modular system of cover - cover for cable termination area can be extended as required
- Varieties of cable termination: screw, bolt, clamp strap, extendable for V-terminal - optional
- Padlocking and sealing of switch door cover - optional
- Indicating switch for switch door position - optional
- Installation on to DIN rails in accordance with EN 60 715 - optional
- Installation on to 100mm bus bar system with adapter
- Safe on load connection/disconnection in accordance with IEC 60947-3

APPLICATIONS

- Panel boards for industrial use
- Feeder pillars for industrial use
- Meter distribution units
- Measuring transformer cabinets
- Transmitting stations for telecommunications

STANDARDS

- IEC/EN 60 947-3
  For NH-fuse links size 1 in accordance with IEC/EN 60 269-2, VDE 0636-2

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PRODUCT RANGE



1.000.388

MULTIBLOC® 1.ST8 size 1 250A, 690VAC bottom fitting, single pole

Catalog number	Item number	Poles	Cable termination components	Design	Package	Weight
1.000.388	Q229876	1	2 M10 terminal screws	-	1 piece	1 kg
1.001.818	S1023056	1	2 M10 terminal screws	for direct installation on to bus bars with M10 screws	1 piece	0.91 kg



1.001.818



1.000.397

MULTIBLOC® 1.ST8 size 1 250A, 690VAC bottom fitting, double pole

Catalog number	Item number	Poles	Cable termination components	Package	Weight
1.000.397	R229877	2	4 M10 terminal screws	1 piece	2.06 kg



1.000.299



1.002.711



1.000.831

MULTIBLOC® 1.ST8 size 1 250A, 690VAC bottom fitting, triple pole

Catalog number	Item number	Poles	Cable termination components	Design	Package	Weight
1.000.299	S229878	3	6 M10 terminal screws	-	1 piece	2.42 kg
1.001.239	V1023058	3	3 clamp straps 70–150 mm² 3 M10 terminal screws	-	1 piece	2.42 kg
1.002.562	W1023059	3	6 clamp straps 70-150 mm²	-	1 piece	2.42 kg
1.002.711	X1023060	3	6 M10 terminal screws	with electronic fuse monitoring ESÜ installed (rated voltage=525VAC)	1 piece	2.64 kg
1.000.831	T1023057	3	6 M10 terminal screws	with electro-mechanic fuse monitoring MZS installed (galvanic isolation)	1 piece	3.13 kg

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MULTIBLOC® 1.ST8

Size 1, 250A, 690VAC, Design for Bottom Fitting, 1-,2-,3-,4-pole

PRODUCT RANGE



1.000.405



1.002.378

MULTIBLOC® 1.ST8 size 1 250A, 690VAC bottom fitting, quadruple pole

Catalog number	Item number	Poles	Cable termination components	Design	Package	Weight
1.000.405	Y1023061	4	8 M10 terminal screws	-	1 piece	3.4 kg
1.002.378	V1002128	4	8 M10 terminal screws	with ready fitted speacial solid link as neutral conductor in pole 4 for leading and lagging switching	1 piece	3.55 kg

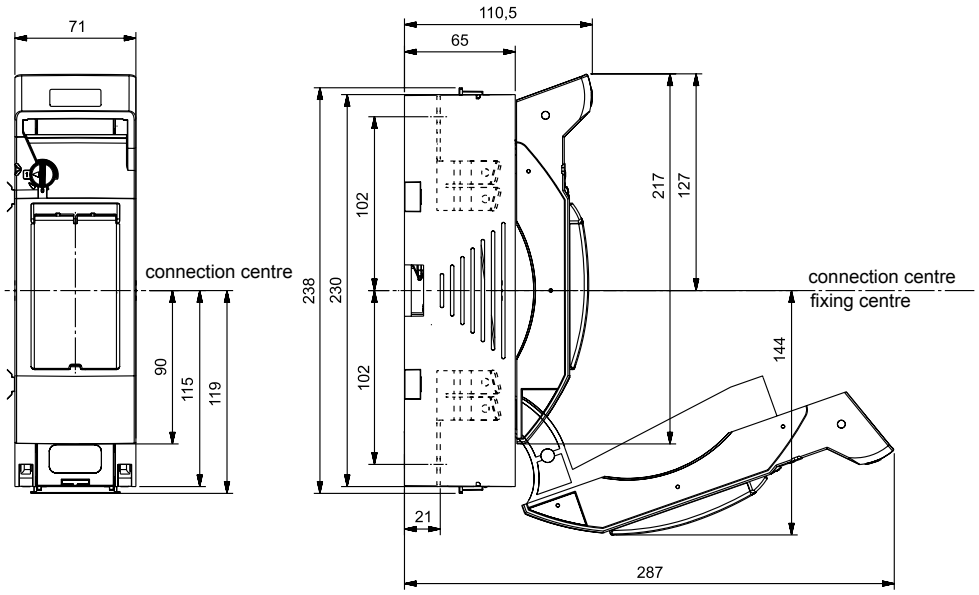
TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

	1.ST8 single pole	1.ST8 double pole	1.ST8 triple pole	1.ST8 quadruple pole
Number of poles/phases	1	2	3	4
Size	1	1	1	1
Conventional free air thermal current with NH-fuse links I_{th}	250 A	250 A	250 A	250 A
Max. power dissipation of fuse links P_n	23 W	23 W	23 W	23 W
Conventional free air thermal current with solid links I_{th}	400 A	400 A	400 A	400 A
Max. power dissipation of solid links P_n	2,6 W	2,6 W	2,6 W	2,6 W
Utilization category to IEC/EN 60947-3 U_e = AC 400 V; I_e = 250 A U_e = AC 500 V; I_e = 250 A U_e = AC 690 V; I_e = 200 A U_e = DC 220 V; I_e = 250 A U_e = DC 440 V; I_e = 250 A	 AC 23 B AC 22 B AC 21 B DC 22 B -	 AC 23 B AC 22 B AC 21 B DC 22 B -	 AC 23 B AC 22 B AC 21 B - DC 21 B	 AC 23 B AC 22 B AC 21 B - -
Rated operational voltage U_e	690 V	690 V	690 V	690 V
Rated insulation voltage U_i	1000 V	1000 V	1000 V	1000 V
Rated impulse withstand voltage U_{imp}	12 kV	12 kV	12 kV	12 kV
Rated frequency	50 ... 60 Hz	50 ... 60 Hz	50 ... 60 Hz	50 ... 60 Hz
Degree of protection	IP 20	IP 20	IP 20	IP 20
Degree of pollution	3	3	3	3
Rated duty	uninterrupted duty	uninterrupted duty	uninterrupted duty	uninterrupted duty
Rated conditional short-circuit current with fuse links U_e = AC 400 V; I_e = 250 A U_e = AC 500 V; I_e = 250 A U_e = AC 690 V; I_e = 200 A	 80 kA 80 kA 80 kA	 80 kA 80 kA 80 kA	 80 kA 50 kA 50 kA	 80 kA 80 kA 50 kA
Rated short circuit making capacity with solid links I_{cm}	8.2 kAsw	8.2 kAsw	8.2 kAsw	8.2 kAsw
Rated short-time withstand current I_{cw}	8 kA / 1 s	8 kA / 1 s	8 kA / 1 s	8 kA / 1 s
Power dissipation by I_{th} without NH-fuse links	4 W	9 W	13 W	13 W
Power dissipation by I_{th} 400A without solid links	10 W	23 W	33 W	33 W
Installation mode	bottom fitting	bottom fitting	bottom fitting	bottom fitting
Cable terminal connection				
Standard cable terminal	M10	M10	M10	M10
for cable lugs Cu max.	2 x 150 mm²	2 x 150 mm²	2 x 150 mm²	2 x 150 mm²
for cable lugs Al max.	2 x 185 mm²	2 x 185 mm²	2 x 185 mm²	2 x 185 mm²
for copper bars with max. dimensions	30 x 10 mm	30 x 10 mm	30 x 10 mm	30 x 10 mm

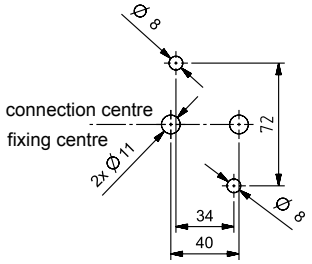
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DIMENSIONS

MULTIBLOC® 1.ST8 NH-fuse switch disconnector single pole (M01126)



dimensions for bottom fitting

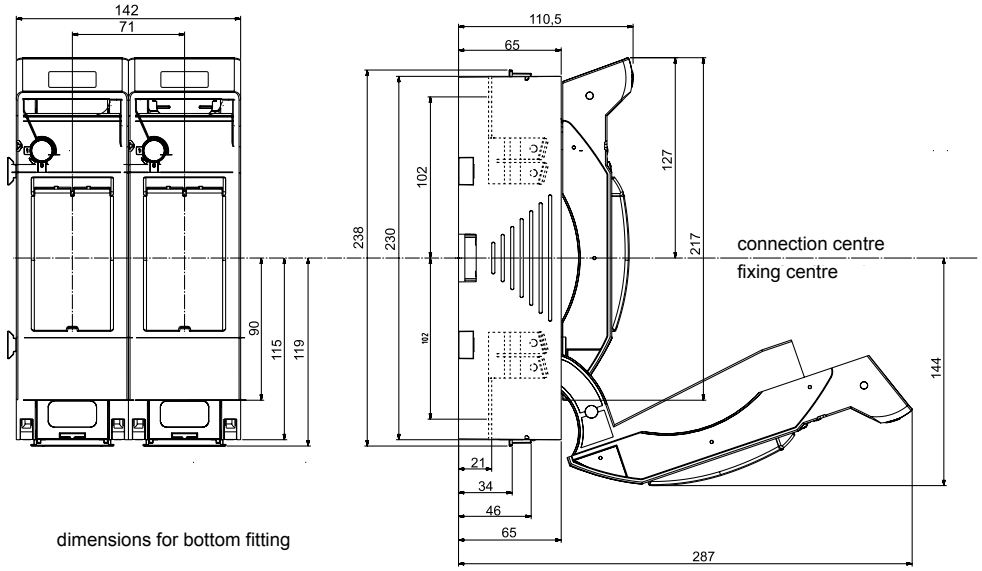


Dimensions in mm

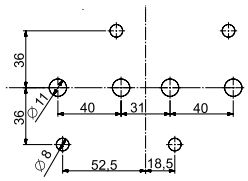
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DIMENSIONS

MULTIBLOC® 1.ST8 NH-fuse switch disconnector
double pole design for bottom fitting (M01127)



dimensions for bottom fitting

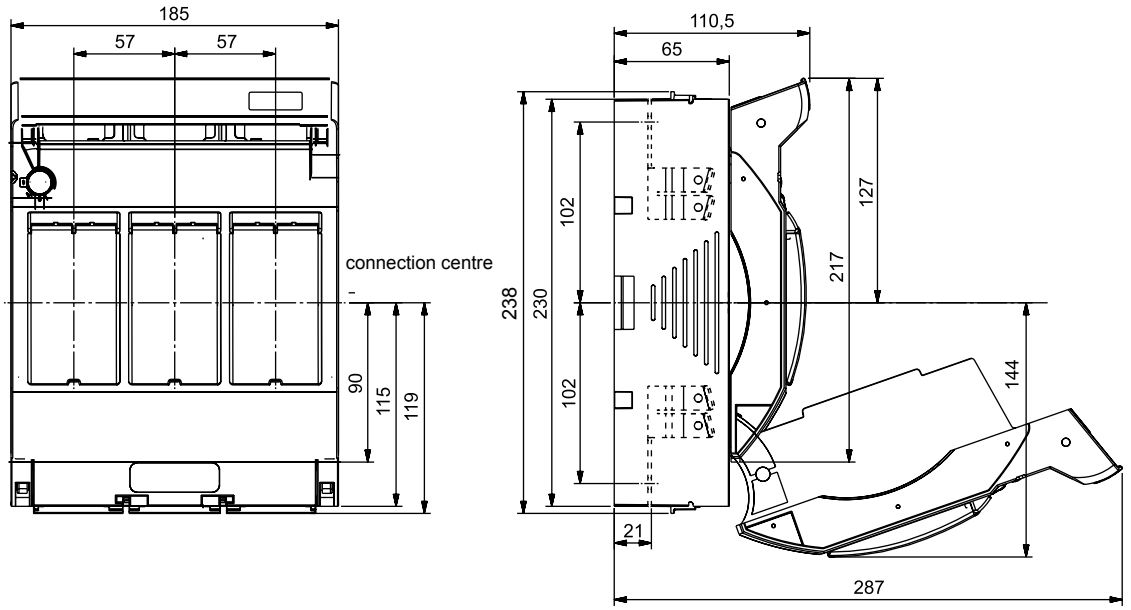


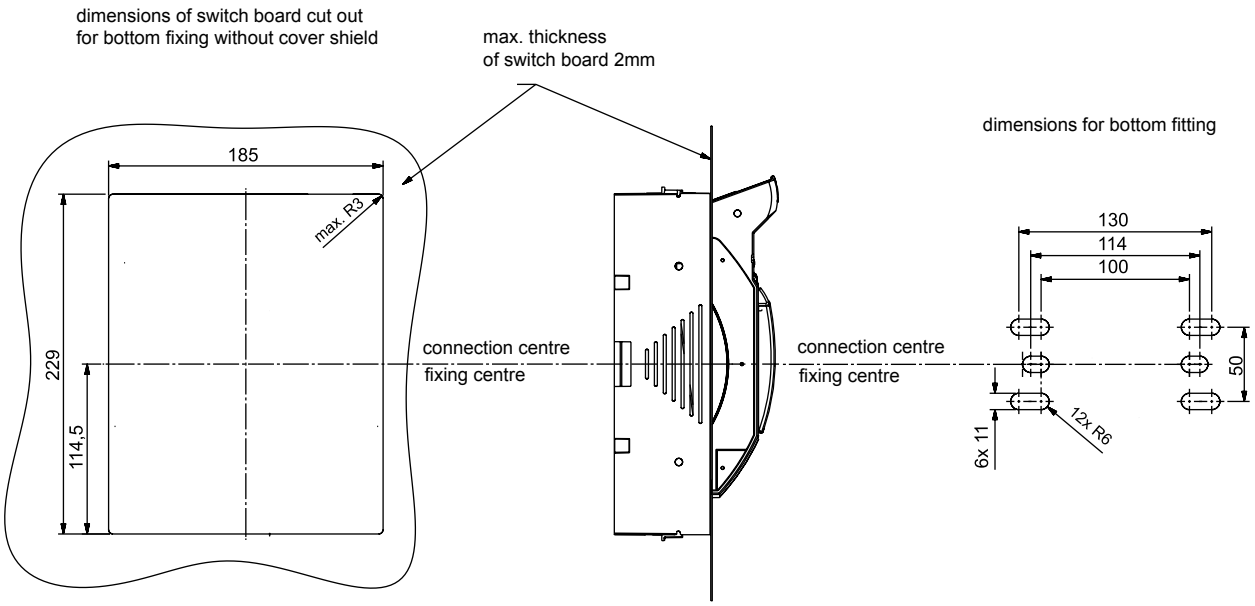
Dimensions in mm

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DIMENSIONS

MULTIBLOC® 1.ST8 NH-fuse switch disconnector
triple pole design for bottom fitting (M01121a)



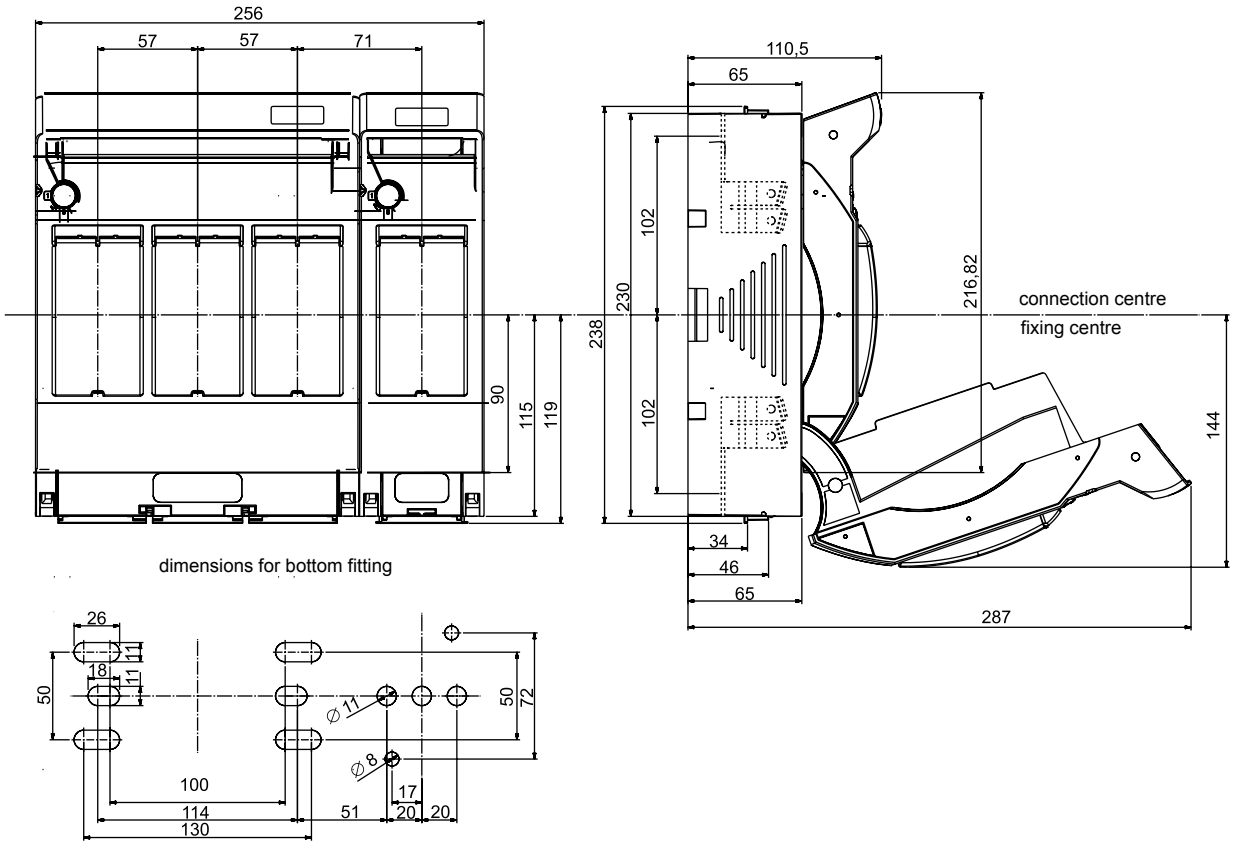


Dimensions in mm

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DIMENSIONS

MULTIBLOC® 1.ST8 NH-fuse switch disconnector quadruple pole design for bottom fitting (M01128)

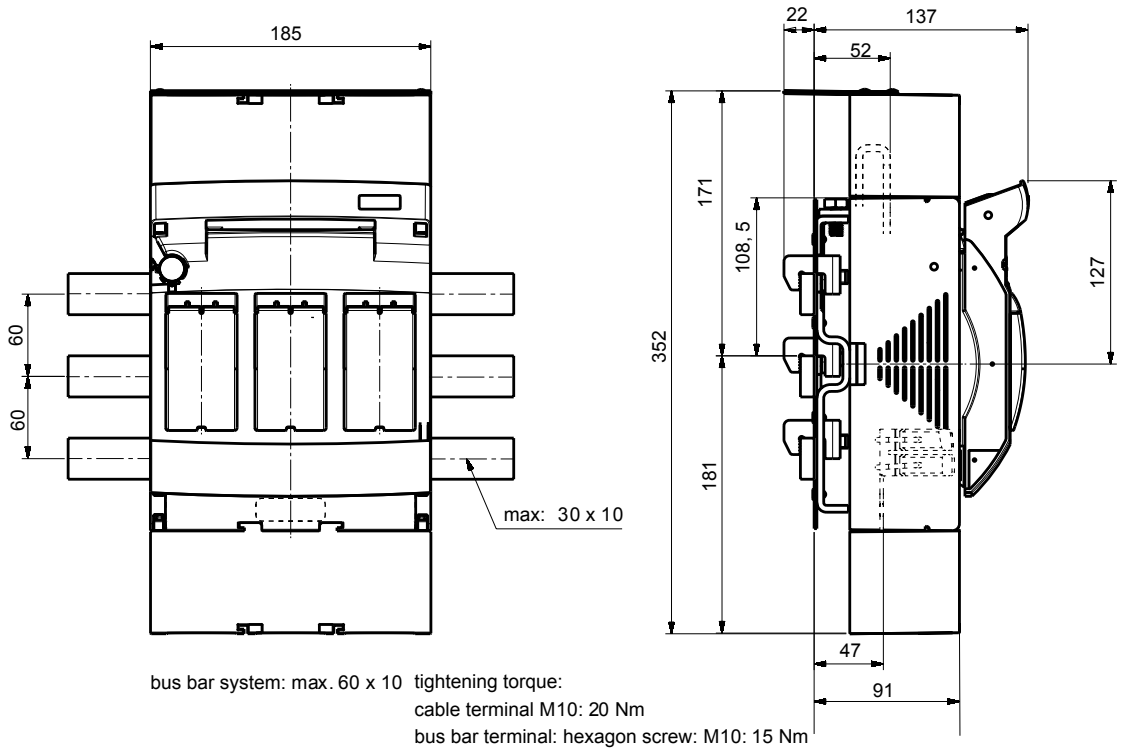


Dimensions in mm

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DIMENSIONS

MULTIBLOC® main incomer size 1 (M01167-1)



bus bar system: max. 60 x 10 tightening torque:
cable terminal M10: 20 Nm
bus bar terminal: hexagon screw: M10: 15 Nm

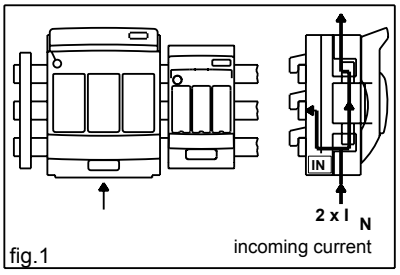


fig.1

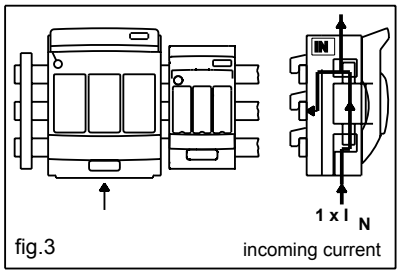


fig.3

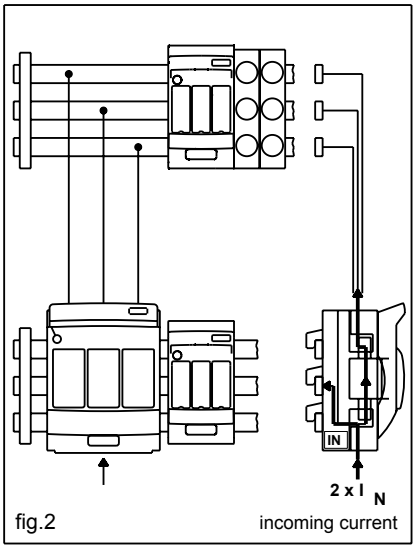


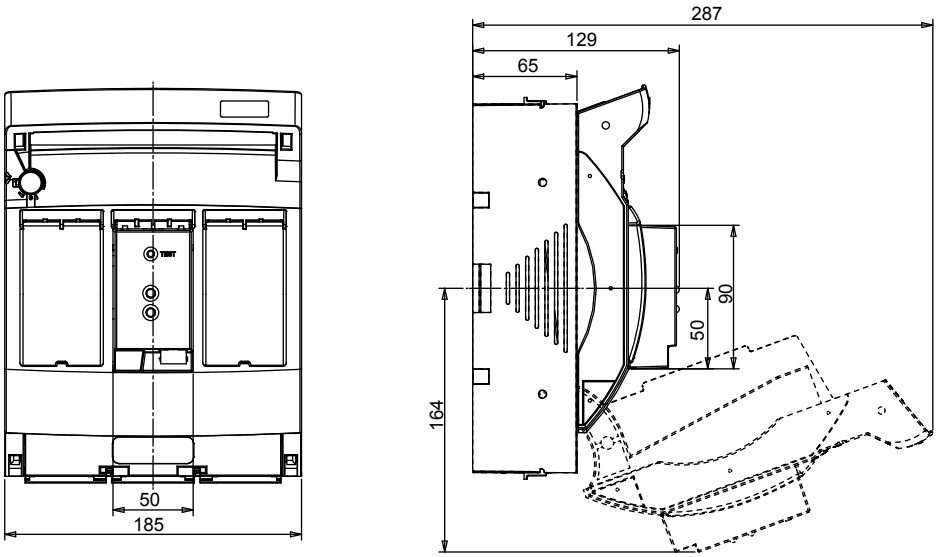
fig.2

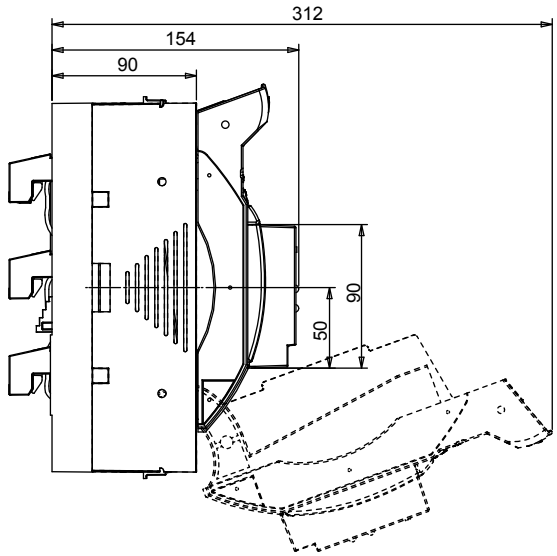
Dimensions in mm

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DIMENSIONS

MULTIBLOC® 1.ST8 and 1.RST8
triple pole with electronic fuse monitoring ESÜ (M01174-1)



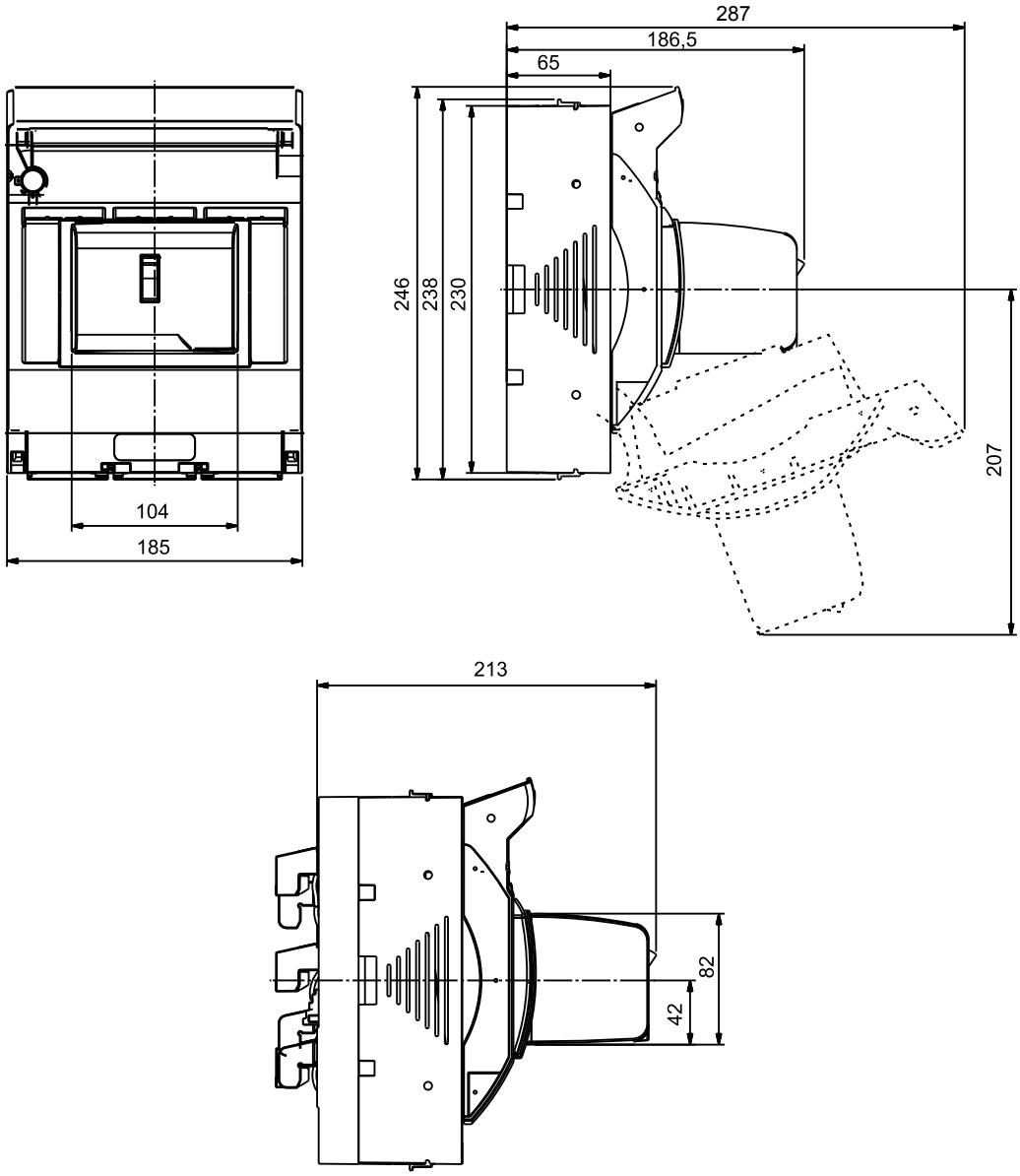


Dimensions in mm

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DIMENSIONS

MULTIBLOC® 1.ST8 and 1.RST8
triple pole with electro-mechanic fuse monitoring MZS (M01135-1)

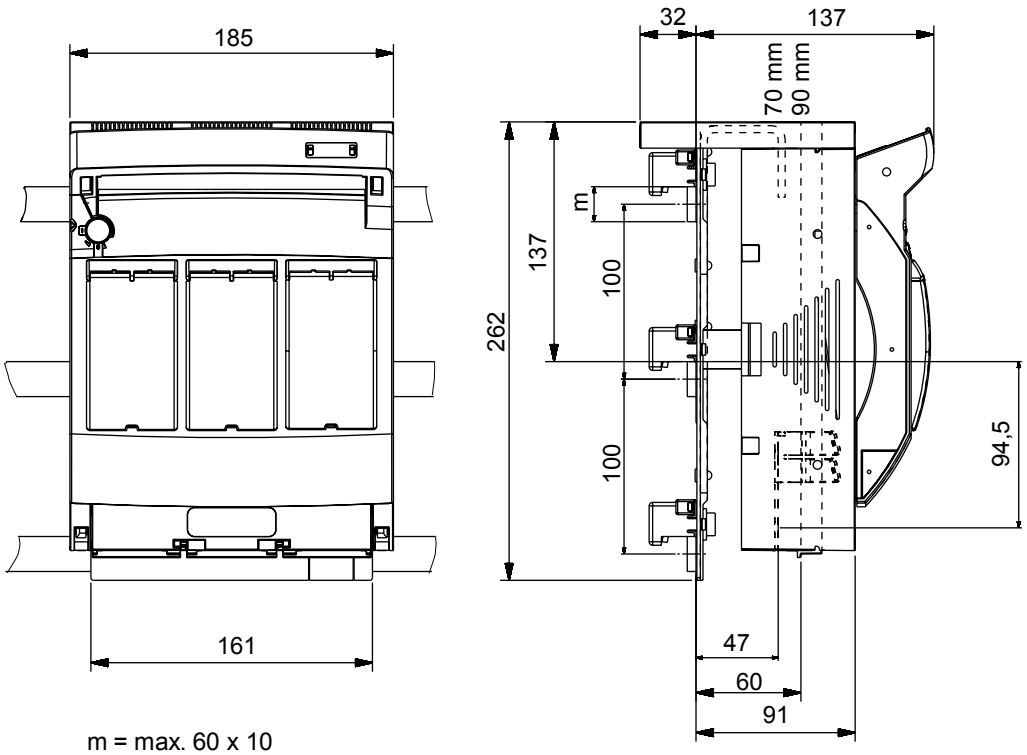


Dimensions in mm

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DIMENSIONS

MULTIBLOC® bus bar adapter with clamp terminal for 1.ST8 (M01151a-1)



m = max. 60 x 10

tightening torque: M10: 25 Nm
M8: 15 Nm

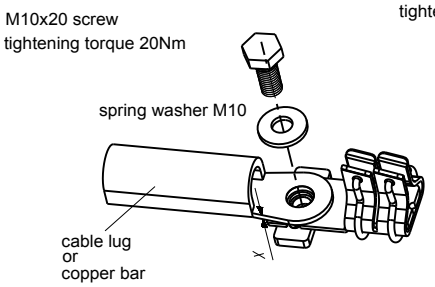
Dimensions in mm

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DIMENSIONS

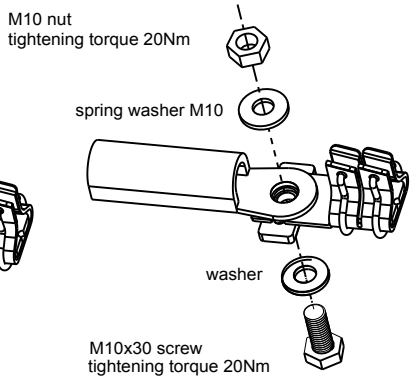
Cable termination size 1 (MA 98e-1)

screw treminal:
(standard)

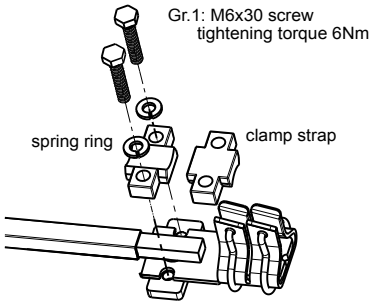


size. 1: for values x smaller than 2.5 mm
use washer in addition

bolt terminal:
(standard)



terminal: clamp strap:
(option/accessory)

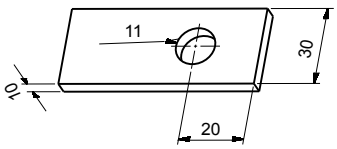


screw and bolt terminal for

cable lugs:

size. 1:	DIN 46234 max. 150mm²
	DIN 46235 max. 150mm²
	DIN 46329 max. 185mm²

copper bars:



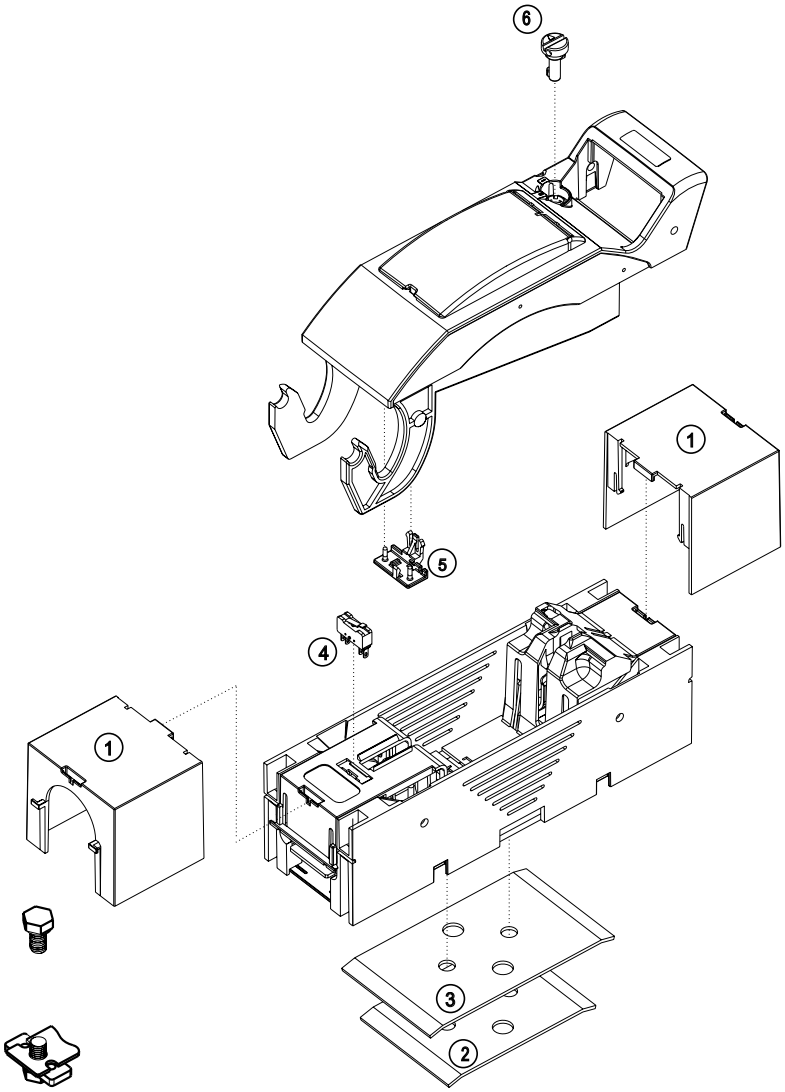
size 1:
for round stranded conductors 70-150mm²
for bars or laminated copper 18 x 7-18

Dimensions in mm

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EXPLODED SKETCH

MULTIBLOC® 1.ST8 NH-fuse switch disconnector single pole (E 1.000.411)

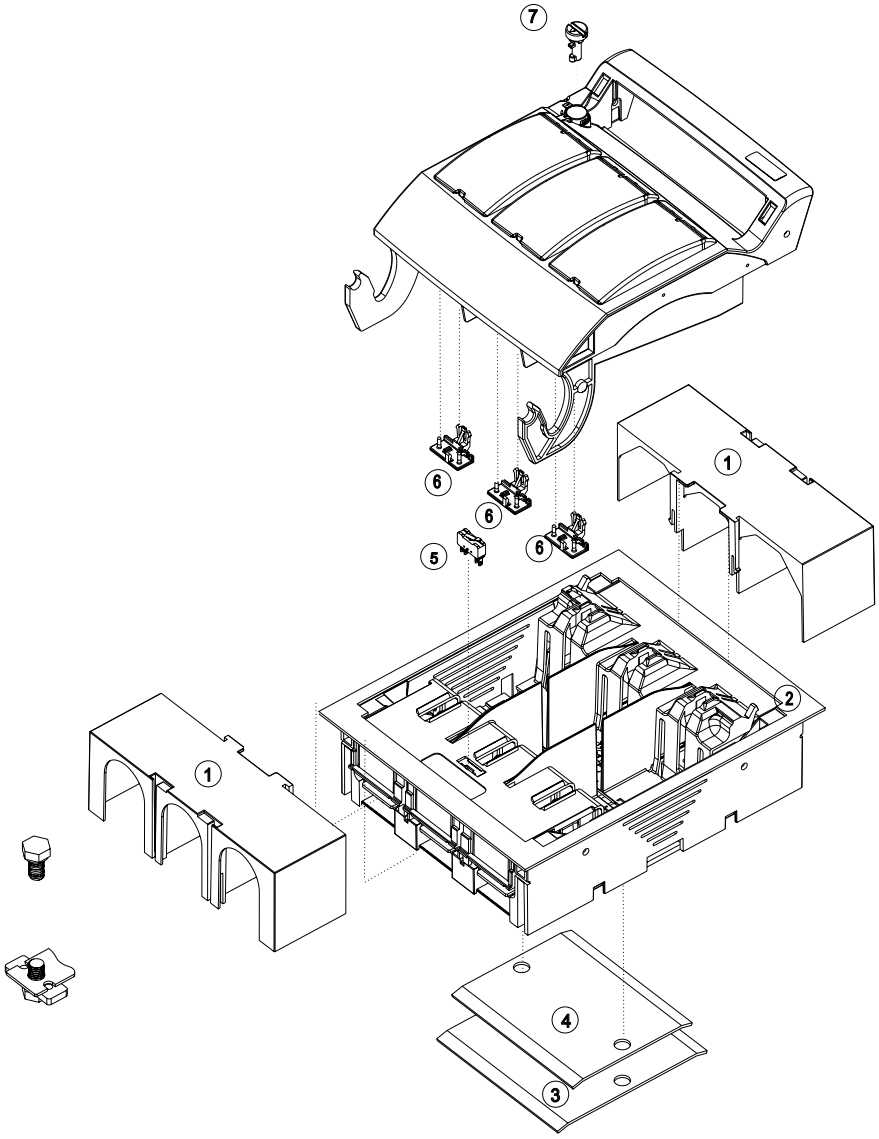


no.	articlenumber	short Description
1	1.000.354	Cover for cable termination single pole
2	1.000.402	Set for mounting on DIN rails 125mm
3	1.000.403	Set for mounting on DIN rails 150mm
4	1.000.852	indicator for switch door position
5	1.000.150	Locking device f. windows,1 Set=3 pieces
6	1.000.155	Cover sealing device, installation set

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EXPLODED SKETCH

MULTIBLOC® 1.ST8 NH- fuse switch disconnector triple pole design for bottom fitting (E 1.000.347)



no.	articlenumber	short Description
1	1.000.382	Cover for cable termination triple pole
2	1.000.353	Cover shield, 210 x 260 mm
3	1.000.384	Set for mounting on DIN rails 125mm,
4	1.000.383	Set for mounting on DIN rails 150mm
5	1.000.852	indicator for switch door position
6	1.000.150	Locking device f. windows,1 Set=3 pieces
7	1.000.155	Cover sealing device, installation set

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ACCESSORIES

Cover shields

Catalog number	Item number	Design	Package	Weight
1.000.353	Z229884	cover shield for installation in distribution units size (width x height): 210 x 260 mm for one 1.ST8/1.RST8 triple pole	1 piece	68 g
1.002.351	X1022968	cover shield for installation in distribution units size (width x height): 230 x 283 mm for one 1.ST8/1.RST8 triple pole	1 piece	90 g



1.000.354

Cover/shrouds for cable termination

Catalog number	Item number	Design	Package	Weight
1.000.354	W229881	cover for cable terminal connection for 1.ST8 single pole, 1 set = 2 pieces	1 set	0.19 kg
1.000.382	V229880	cover for cable terminal connection for 1.ST8 triple pole, 1 set = 2 pieces	1 set	0.29 kg
1.003.402	M1022982	cover for cable terminal connection for 1.ST8 quadruple pole	1 piece	0.13 kg
1.002.592	G1023437	bus bar touch protection for bus bar adapter size 1, 1 set = 2 pieces	1 set	0.20 kg



1.003.402



1.002.592

Adapter für installation on to bus bars with clamp terminal

Catalog number	Item number	Design	Package	Weight
1.002.501	C1023088	bus bar adapter size 1 with clamp terminal for MULTIBLOC® 1.ST8 triple pole for bus bar system 100 mm	1 piece	1.23 kg



1.002.501

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ACCESSORIES



1.000.383



1.000.384



1.000.402



1.000.403

Installation devices

Catalog number	Item number	Design	Package	Weight
1.000.383	E229291	adapter for installation on to DIN-rails in accordance with EN 60 715-150 mm for 1.ST8 triple pole	1 piece	3.1 kg
1.000.384	D229290	adapter for installation on to DIN-rails in accordance with EN 60 715-125 mm for 1.ST8 triple pole	1 piece	3.1 kg
1.000.402	A229885	adapter for installation on to DIN-rails in accordance with EN 60 715-125 mm for 1.ST8 single pole	1 piece	0.16 kg
1.000.403	B229886	adapter for installation on to DIN-rails in accordance with EN 60 715-150 mm for 1.ST8 single pole	1 piece	0.19 kg



1.000.852

Indication facilities

Catalog number	Item number	Design	Package	Weight
1.000.852	Q1002285	indicator for switch door position micro switch, 1 change-over contact 5 A, 250 V	1 piece	90 g



1.000.155

Locking and sealing devices/cover sealing device

Catalog number	Item number	Design	Package	Weight
1.000.155	L229297	cover sealing device-installation set for 00.ST8 1-, 2-, 4-pole and 1.ST8/RST8	1 piece	10 g



1.000.150

Locking and sealing devices/locking device for window

Catalog number	Item number	Design	Package	Weight
1.000.150	K229296	locking device for window for 00.ST8 1-, 2-, 4-pole and 1./2.ST8/RST8 1 set = 3 pieces	1 set	20 g

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ACCESSORIES



1.000.420



1.001.830

Varieties of cable termination

Catalog number	Item number	Design	Package	Weight
1.000.420	E229889	clamp strap 70–150 mm² for 1.ST8 1- 4-pole + 1.RST8, 1 set = 3 pieces	1 set	0.14 kg
1.001.830	J1023117	V-shaped lug size 1, M8, for V-terminal clamp size 1 for 1.ST8 1- to 4-pole + 1.RST8, supplementary set for V-terminal with use of V-clamps 1 set = 3 pieces	1 set	90 g

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