

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, triple 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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MULTIBLOC® 1.ST8

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

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

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 mm ² 3 M10 terminal screws	-	1 piece	2.42 kg
1.002.562	W1023059	3	6 clamp straps 70-150 mm ²	-	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



1.002.711



1.000.831

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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 special 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 kA _{sw}	8.2 kA _{sw}	8.2 kA _{sw}	8.2 kA _{sw}
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 mm ²	2 x 150 mm ²	2 x 150 mm ²	2 x 150 mm ²
for cable lugs Al max.	2 x 185 mm ²	2 x 185 mm ²	2 x 185 mm ²	2 x 185 mm ²
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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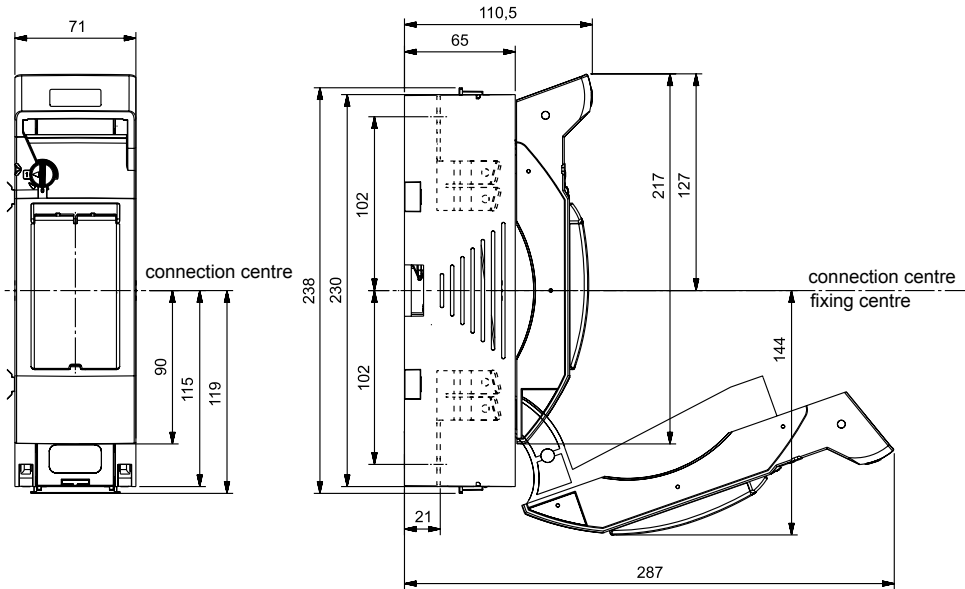
MULTIBLOC® 1.ST8

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

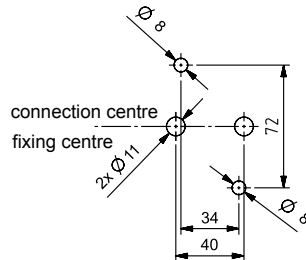
DIMENSIONS

MULTIBLOC® 1.ST8 NH-fuse switch disconnecter
single pole

(M01126)



dimensions for bottom fitting



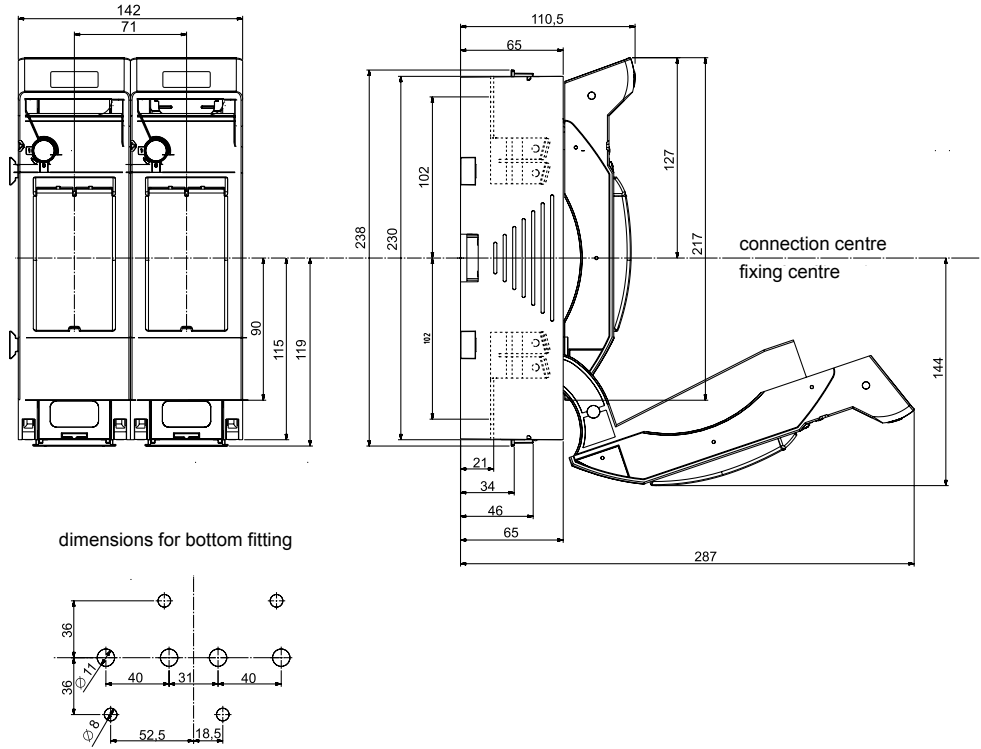
Dimensions in mm

MULTIBLOC® 1.ST8

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

DIMENSIONS

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



Dimensions in mm

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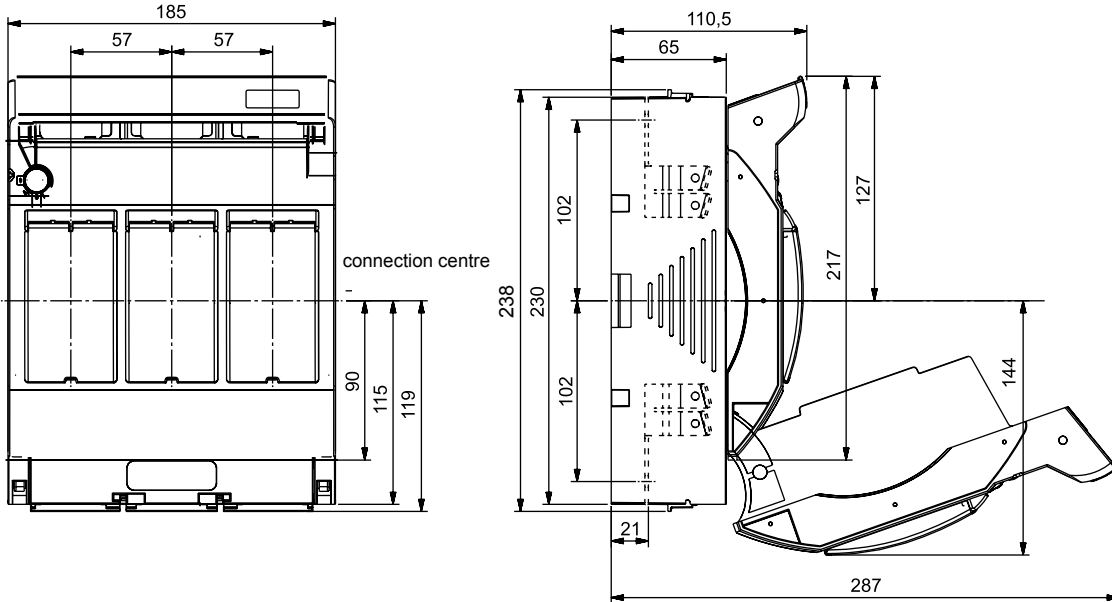
MULTIBLOC® 1.ST8

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

DIMENSIONS

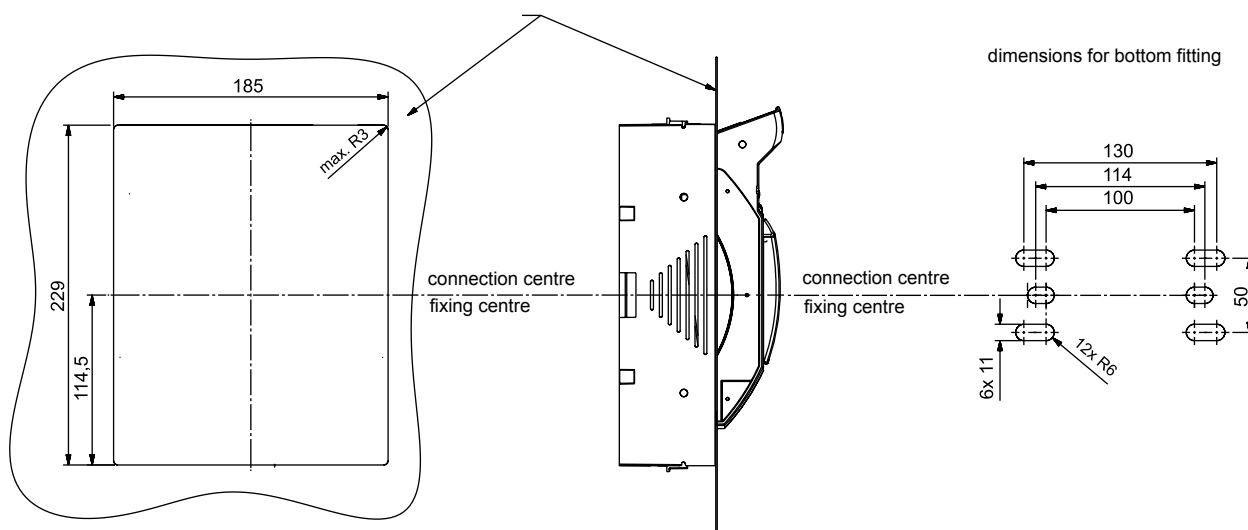
MULTIBLOC® 1.ST8 NH-fuse switch disconnecter
triple pole design for bottom fitting

(M01121a)



dimensions of switch board cut out
 for bottom fixing without cover shield

max. thickness
 of switch board 2mm



Dimensions in mm

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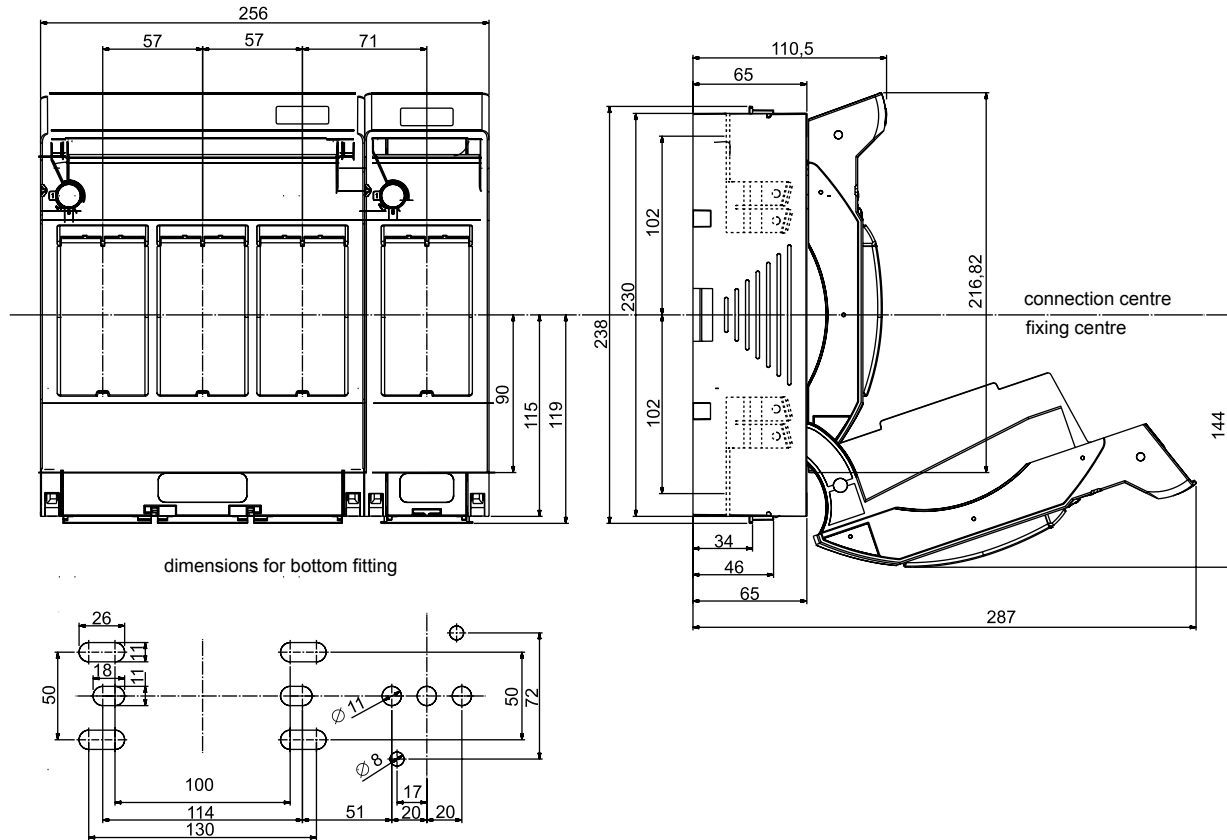
MULTIBLOC® 1.ST8

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

DIMENSIONS

MULTIBLOC® 1.ST8 NH-fuse switch disconnecter
quadruple pole design for bottom fitting

(M01128)



Dimensions in mm

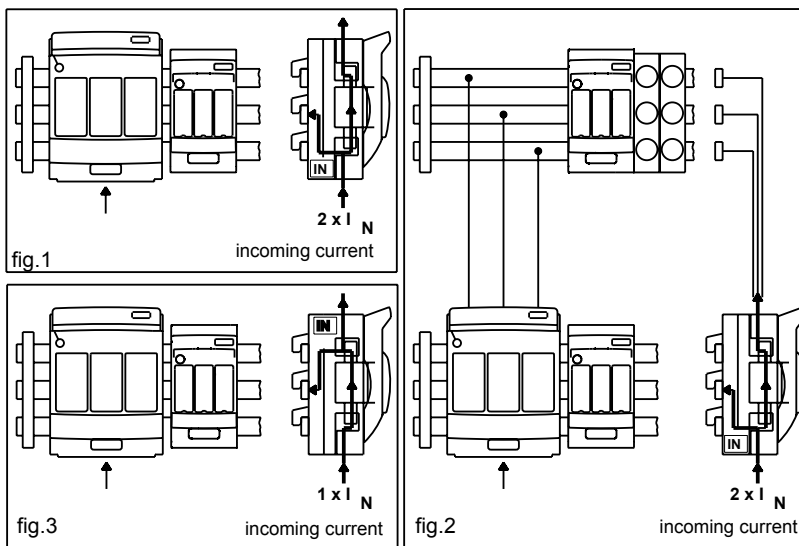
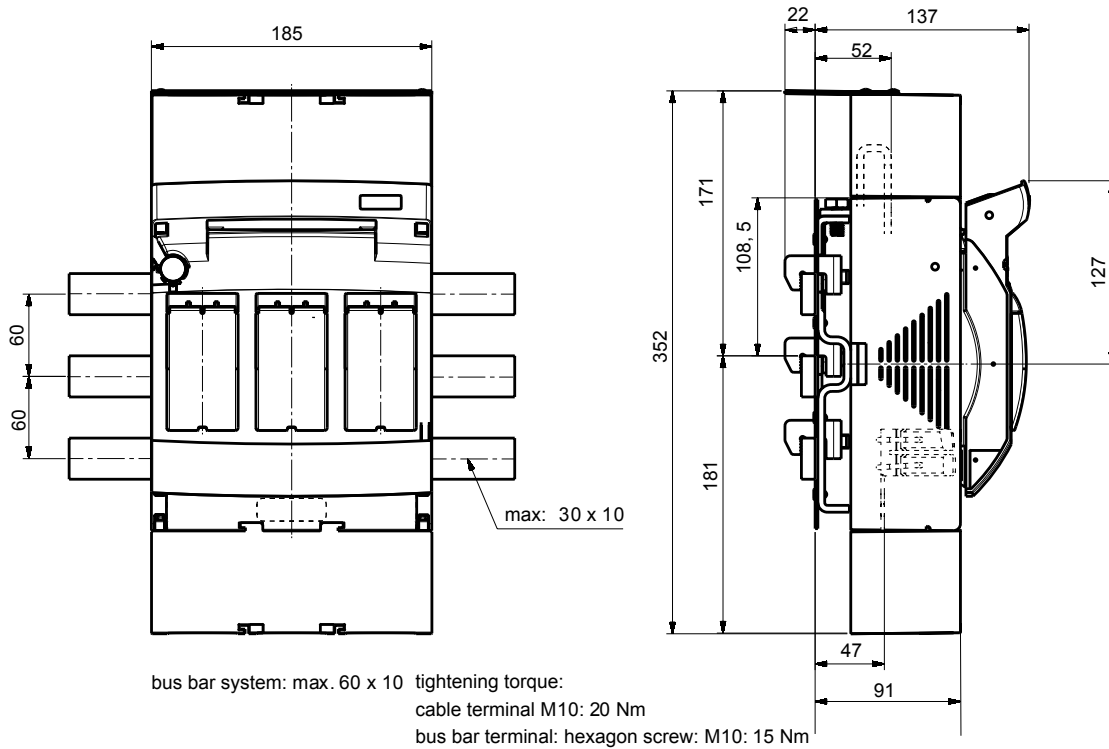
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MULTIBLOC® 1.ST8

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

DIMENSIONS

MULTIBLOC® main incomer size 1 (M01167-1)



Dimensions in mm

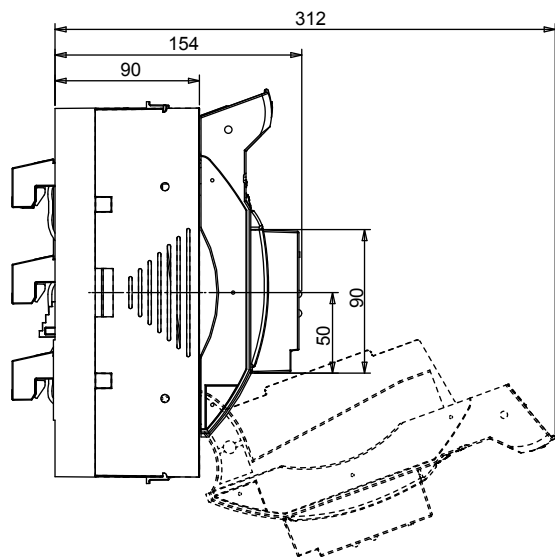
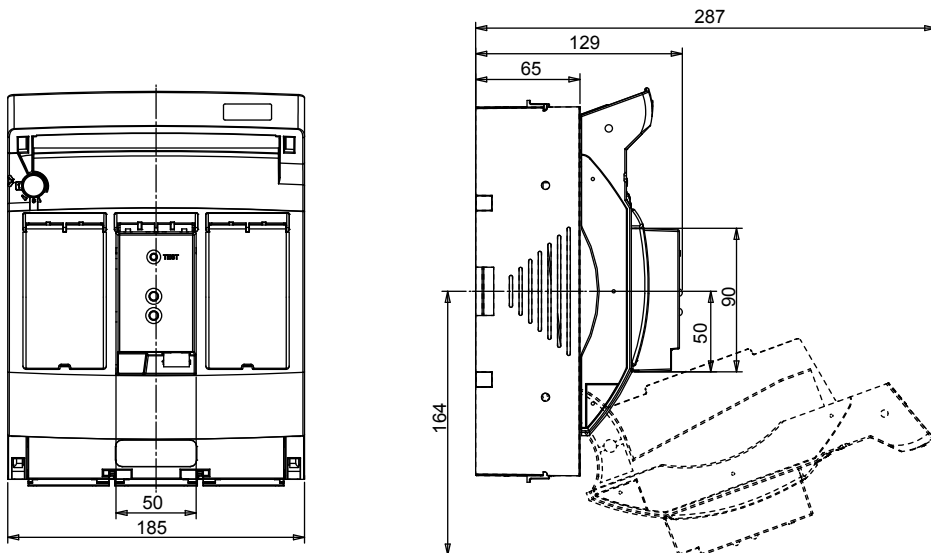
MULTIBLOC® 1.ST8

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

DIMENSIONS

MULTIBLOC® 1.ST8 and 1.RST8

triple pole with electronic fuse monitoring ESÜ (M01174-1)



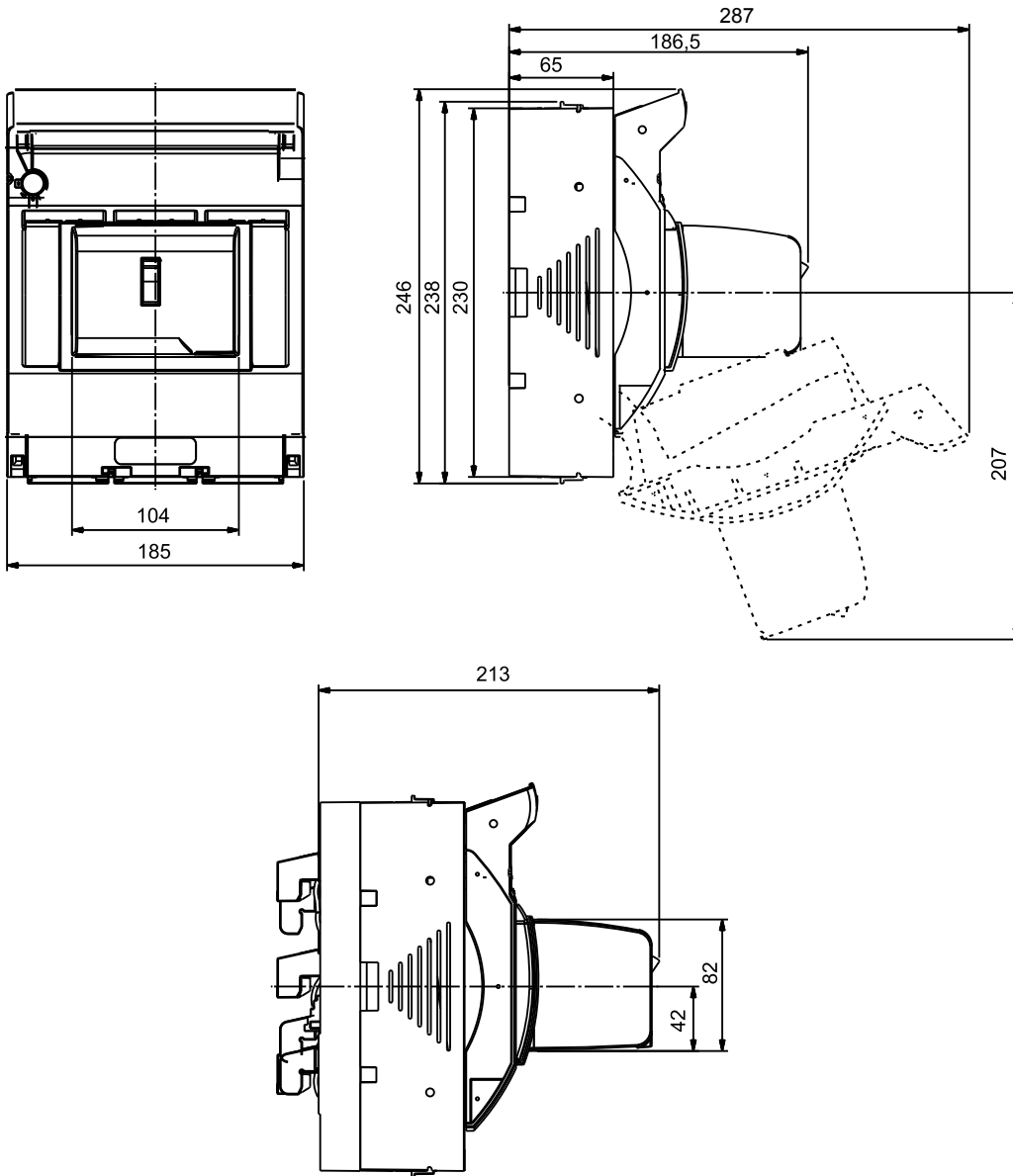
Dimensions in mm

MULTIBLOC® 1.ST8

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

DIMENSIONS

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



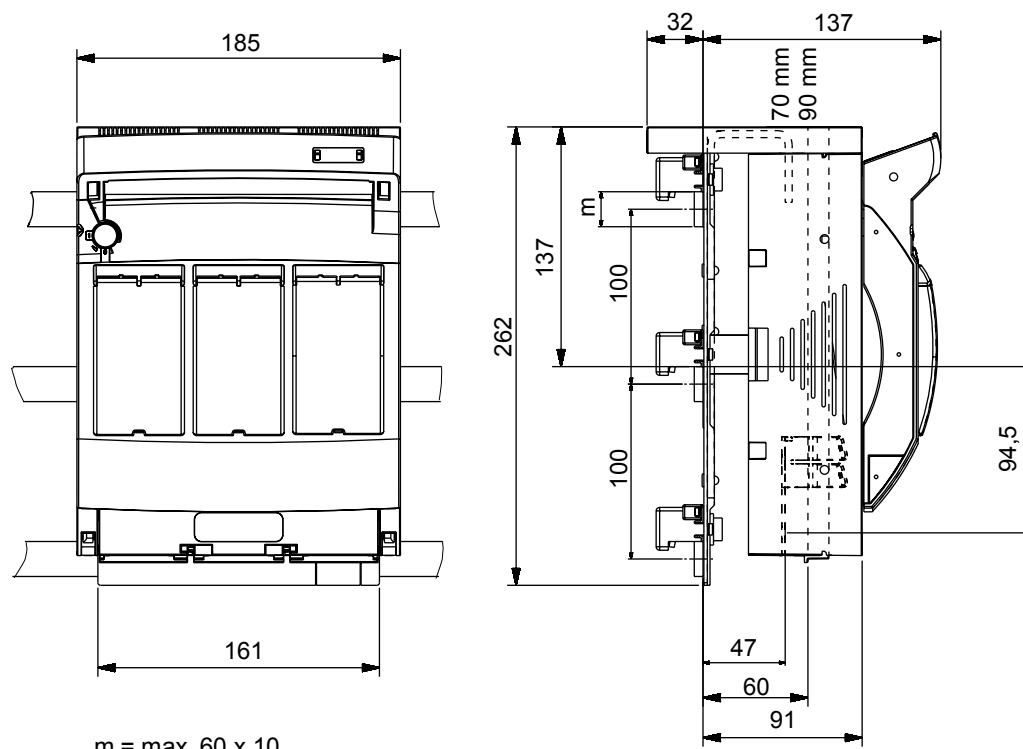
Dimensions in mm

MULTIBLOC® 1.ST8

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

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

MULTIBLOC® 1.ST8

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

DIMENSIONS

Cable termination size 1 (MA 98e-1)

screw terminal:
(standard)

M10x20 screw
tightening torque 20Nm

spring washer M10

cable lug
or
copper bar

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

bolt terminal:
(standard)

M10 nut
tightening torque 20Nm

spring washer M10

washer

M10x30 screw
tightening torque 20Nm

terminal: clamp strap:
(option/accessory)

Gr.1: M6x30 screw
tightening torque 6Nm

spring ring

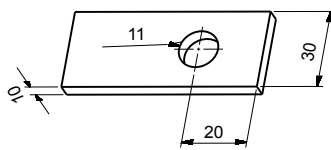
clamp strap

screw and bolt terminal for

cable lugs:

size. 1:	DIN 46234 max. 150mm ²	2
	DIN 46235 max. 150mm ²	2
	DIN 46329 max. 185mm ²	2

copper bars:



size 1:

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

Dimensions in mm

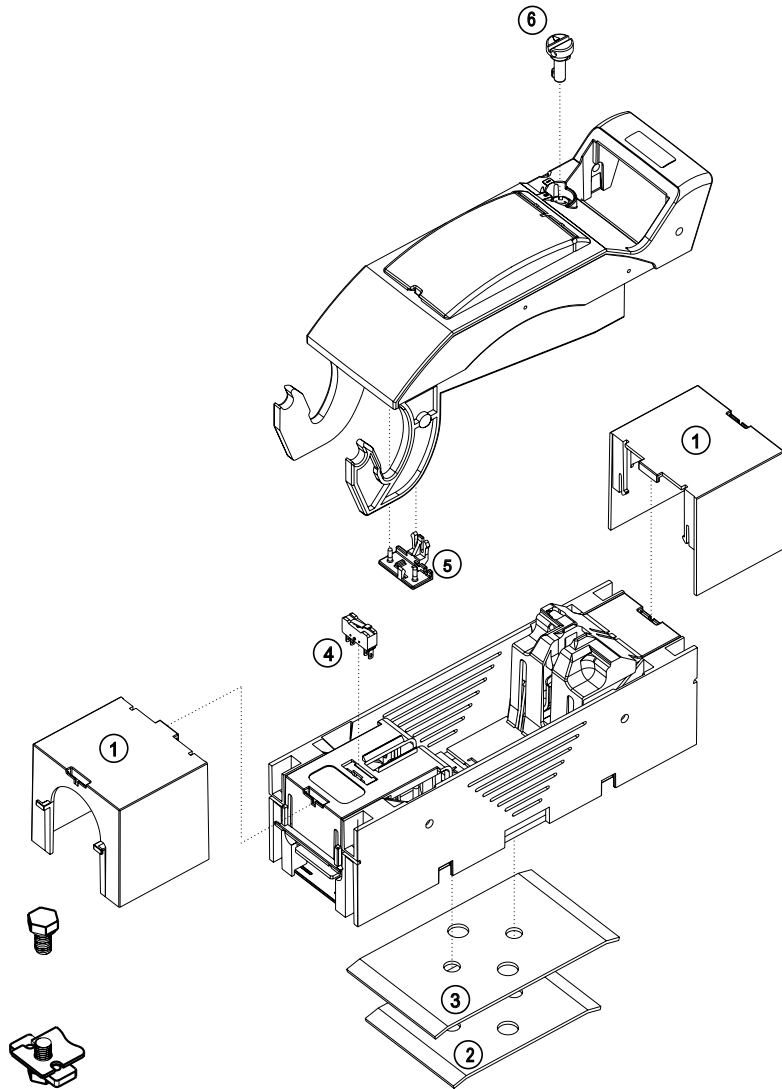
MULTIBLOC® 1.ST8

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

EXPLODED SKETCH

MULTIBLOC® 1.ST8 NH-fuse switch disconnecter
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

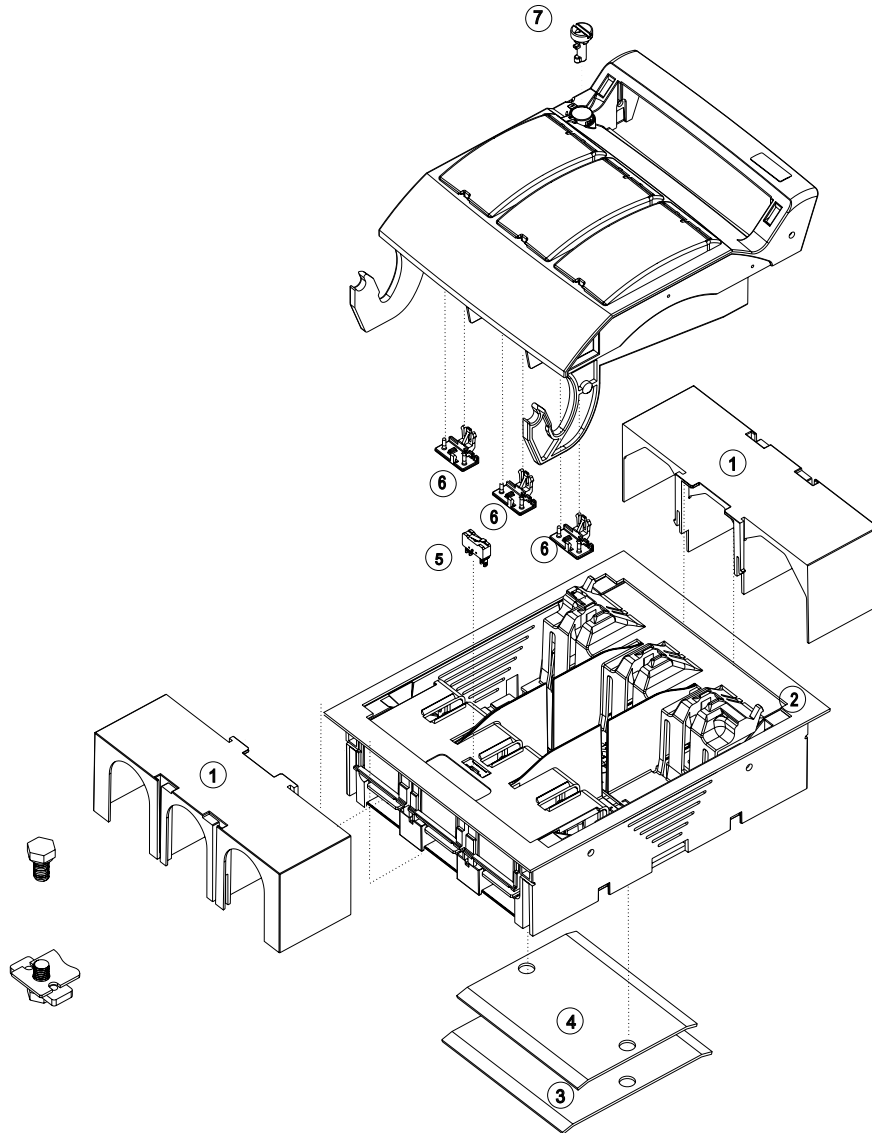
MULTIBLOC® 1.ST8

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

EXPLODED SKETCH

MULTIBLOC® 1.ST8 NH- fuse switch disconnecter
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

MULTIBLOC® 1.ST8

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

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



1.003.402



1.002.592



1.002.501

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

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

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MULTIBLOC® 1.ST8

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

ACCESSORIES



1.000.383



1.000.384



1.000.402



1.000.403



1.000.852

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

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

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

1.000.155

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

1.000.150

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MULTIBLOC® 1.ST8

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

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 mm ² 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