

# MULTIBLOC® 800V

Size 1, 160A, Design for Bottom Fitting, 3-pole  
Size 2, 250A, Design for Bottom Fitting, 3-pole

IEC FUSE SWITCH DISCONNECTORS

NH FUSE SWITCH DISCONNECTOR



The production programme of MULTIBLOC® 800VAC comprises NH fuse switch disconnectors for 800VAC voltage application. This range includes Size 1 (1.ST8) and Size 2 (2.ST8) Multibloc and answers the specific needs of Photovoltaic application for using String inverters rated at 800Vac.

They are designed for bottom fitting/panel installation and are available in triple 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 and size 2 are designed for NH fuse-links in accordance with IEC/EN 60269, VDE 0636, size 1 and size 2, 160A and 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	800 VAC
Ampere Range (A)	160 ... 250 A
Size per Standard	Size 1 and Size 2
SCCR	Ue=AC 800 V; Ie=160 A 10kA Ue=AC 800 V; Ie=250 A 10kA
Mounting	bottom fitting/panel
Switchability	3-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
- 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
- Safe on load connection/disconnection in accordance with IEC 60947-3

## APPLICATIONS

- Power distribution and Motor protection
- Photovoltaic application: Protection on lines of String inverters rated at 800Vac

## STANDARDS

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



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## PRODUCT RANGE



8.000.299

### MULTIBLOC® 1.ST8 size 1 160A, 800VAC bottom fitting, triple pole

Catalog number	Item number	Poles	Cable termination components	Package	Weight
8.000.299	B1069363	3	6 M10 terminal screws	1 piece	2.42 kg
8.001.239	C1069364	3	3 clamp straps 70–150 mm <sup>2</sup> 3 M10 terminal screws	1 piece	2.42 kg
8.002.562	D1069365	3	6 clamp straps 70-150 mm <sup>2</sup>	1 piece	2.42 kg



8.000.504

### MULTIBLOC® 2.ST8 size 2 250A, 800VAC bottom fitting, triple pole

Catalog number	Item number	Poles	Cable termination components	Package	Weight
8.000.504	E1069366	3	6 M10 terminal screws	1 piece	3.5 kg
8.001.240	F1069367	3	3 clamp straps 120–240 mm <sup>2</sup> 3 M10 terminal screws	1 piece	3.5 kg
8.002.563	G1069368	3	6 clamp straps 120–240 mm <sup>2</sup>	1 piece	3.5 kg

## TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

	1.ST8 triple pole	2.ST8 triple pole
Number of poles/phases	3	3
Size	1	2
Conventional free air thermal current with NH-fuse links $I_{th}$	160 A	250 A
Max. power dissipation of fuse links $P_n$	23 W	34 W
Rated operational voltage $U_e$	800 V	800 V
Utilization category to IEC/EN 60947-3 $U_e = AC 800 V; I_e = 160 A$ $U_e = AC 800 V; I_e = 250 A$	AC 21 B -	- AC 21 B
Rated insulation voltage $U_i$	1000 V	1000 V
Rated impulse withstand voltage $U_{imp}$	12 kV	12 kV
Rated frequency	50 ... 60 Hz	50 ... 60 Hz
Degree of protection	IP 20	IP 20
Degree of pollution	3	3
Rated duty	uninterrupted duty	uninterrupted duty
Rated conditional short-circuit current with fuse links $U_e = AC 800 V; I_e = 160 A$ $U_e = AC 800 V; I_e = 250 A$	10 kA -	- 10 kA
Power dissipation by $I_{th}$ without NH-fuse links	6 W	11 W
<b>Cable terminal connection</b>		
Standard cable terminal	M10	M10
for cable lugs Cu max.	2 x 150 mm <sup>2</sup>	2 x 185 mm <sup>2</sup>
for cable lugs Al max.	2 x 185 mm <sup>2</sup>	2 x 240 mm <sup>2</sup>
for copper bars with max. dimensions	30 x 10 mm	35 x 10 mm
Installation mode	bottom fitting	bottom fitting

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# MULTIBLOC® 800V

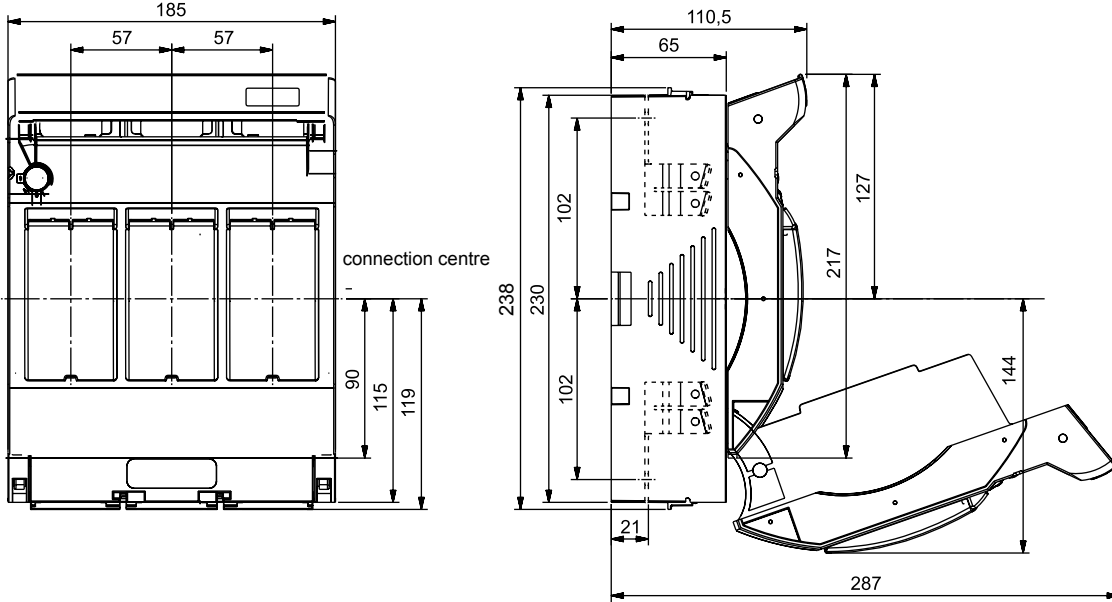
Size 1, 160A, Design for Bottom Fitting, 3-pole

Size 2, 250A, Design for Bottom Fitting, 3-pole

## DIMENSIONS

**MULTIBLOC® 800 V AC NH-fuse switch disconnecter**  
**Size 1, triple pole design for bottom fitting**

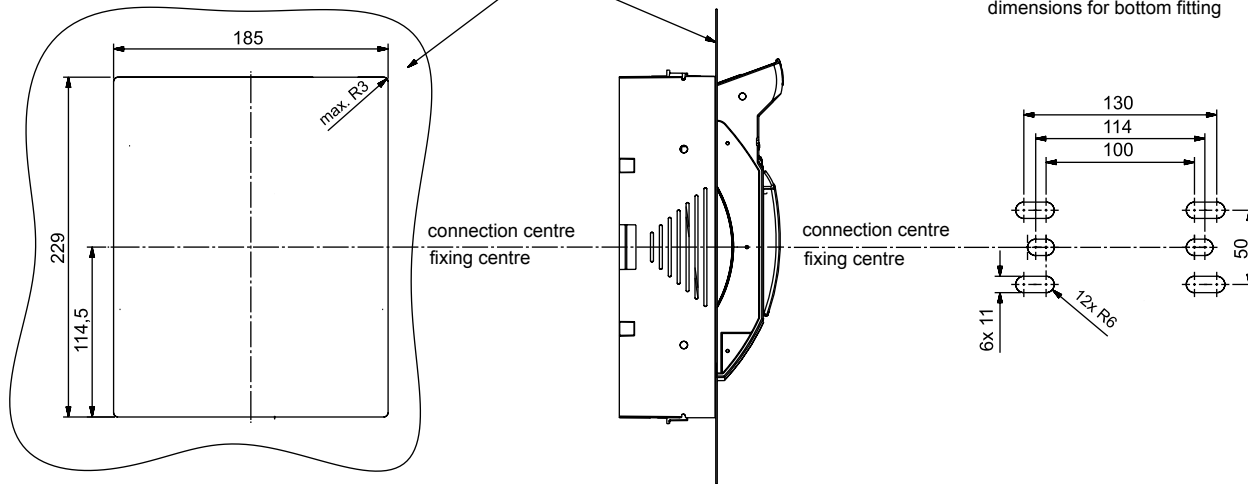
(M01121a)



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

max. thickness  
 of switch board 2mm

dimensions for bottom fitting



Dimensions in mm

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# MULTIBLOC® 800V

Size 1, 160A, Design for Bottom Fitting, 3-pole

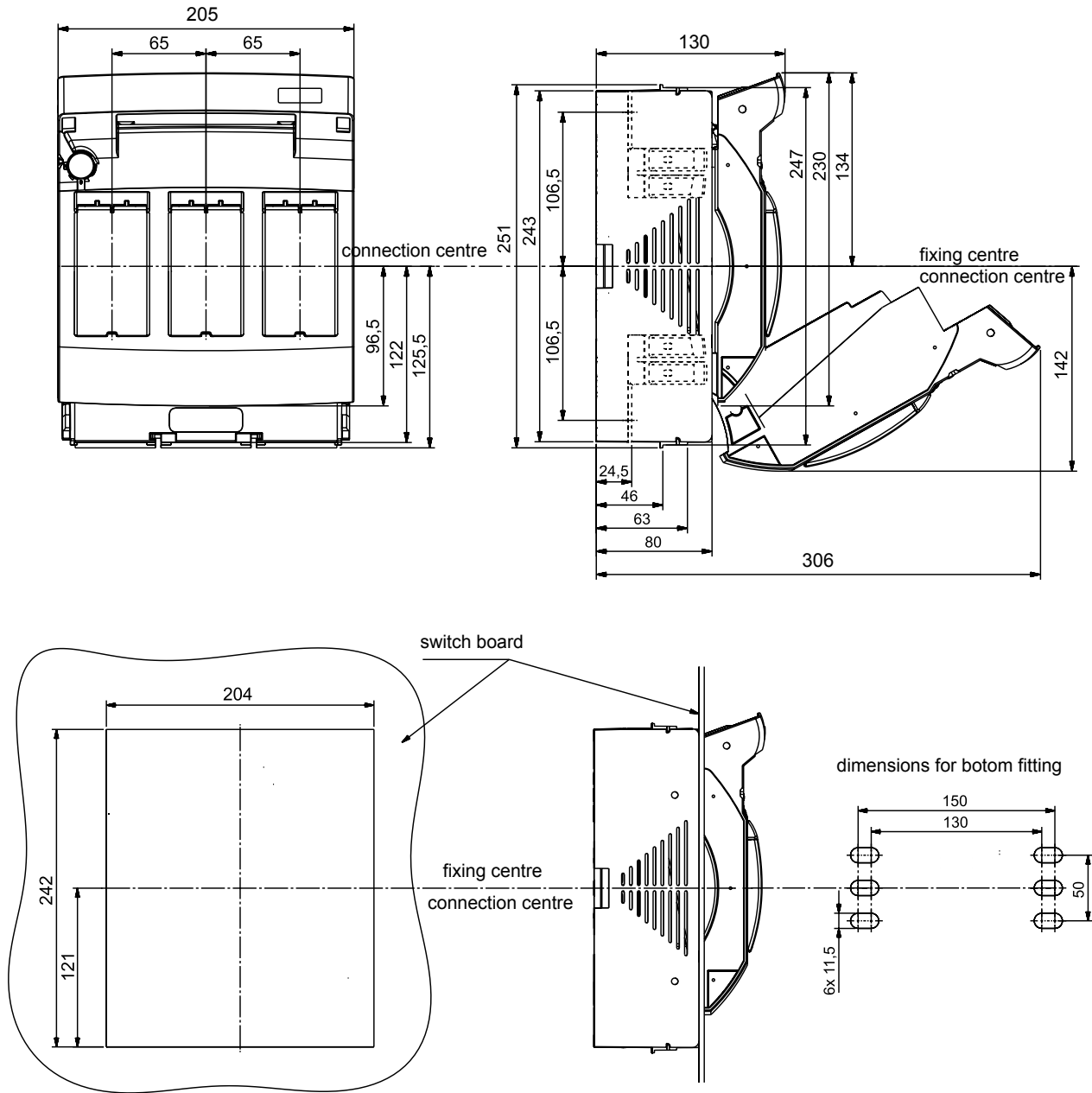
Size 2, 250A, Design for Bottom Fitting, 3-pole

## DIMENSIONS

**MULTIBLOC® 800 V AC NH-fuse switch disconnecter**

**Size 2, triple pole design for bottom fitting**

(M01131)



Dimensions in mm

# MULTIBLOC® 800V

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Size 2, 250A, Design for Bottom Fitting, 3-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

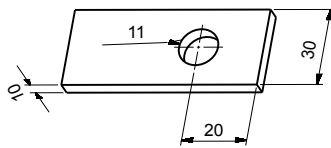
clamp strap

screw and bolt terminal for

cable lugs:

size. 1:	DIN 46234 max. 150mm <sup>2</sup>	2
	DIN 46235 max. 150mm <sup>2</sup>	2
	DIN 46329 max. 185mm <sup>2</sup>	2

copper bars:



size 1:

for round stranded conductors 70-150mm<sup>2</sup>  
for bars or laminated copper 18 x 7-18

Dimensions in mm

# MULTIBLOC® 800V

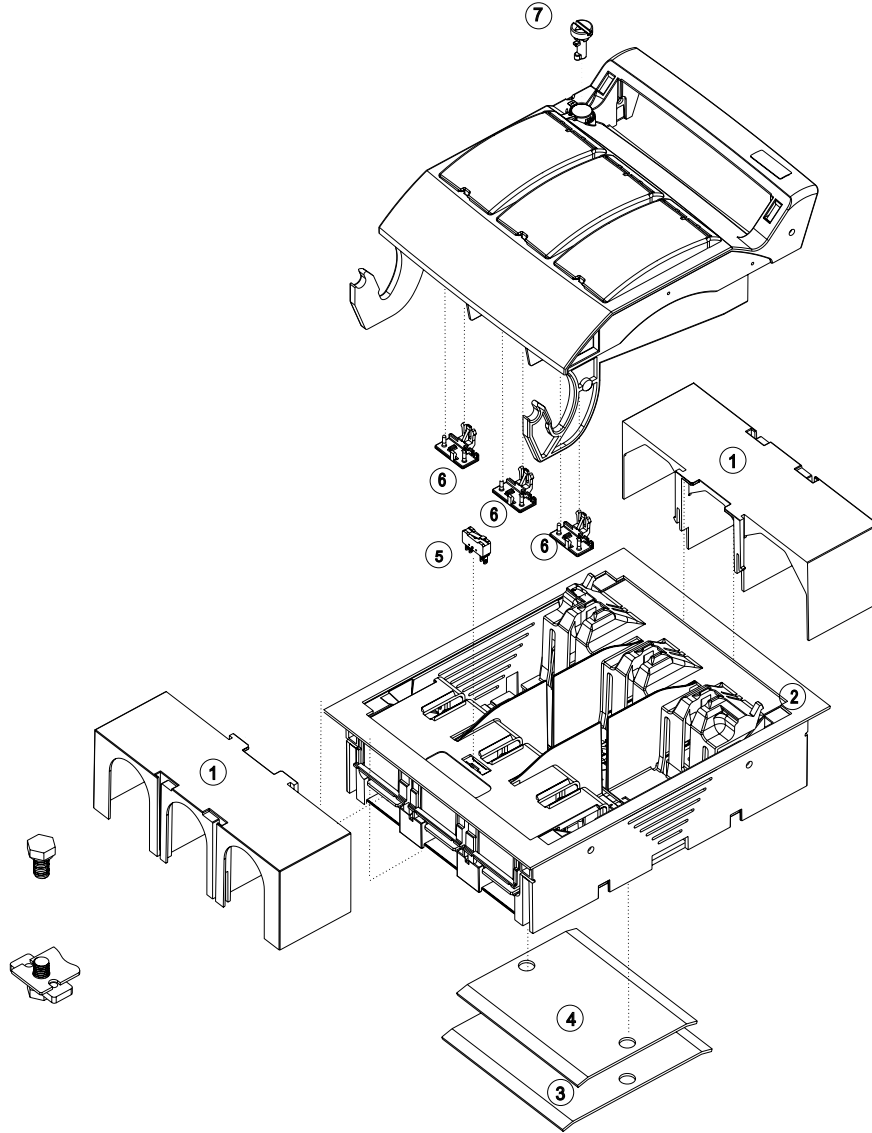
Size 1, 160A, Design for Bottom Fitting, 3-pole

Size 2, 250A, Design for Bottom Fitting, 3-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® 800V

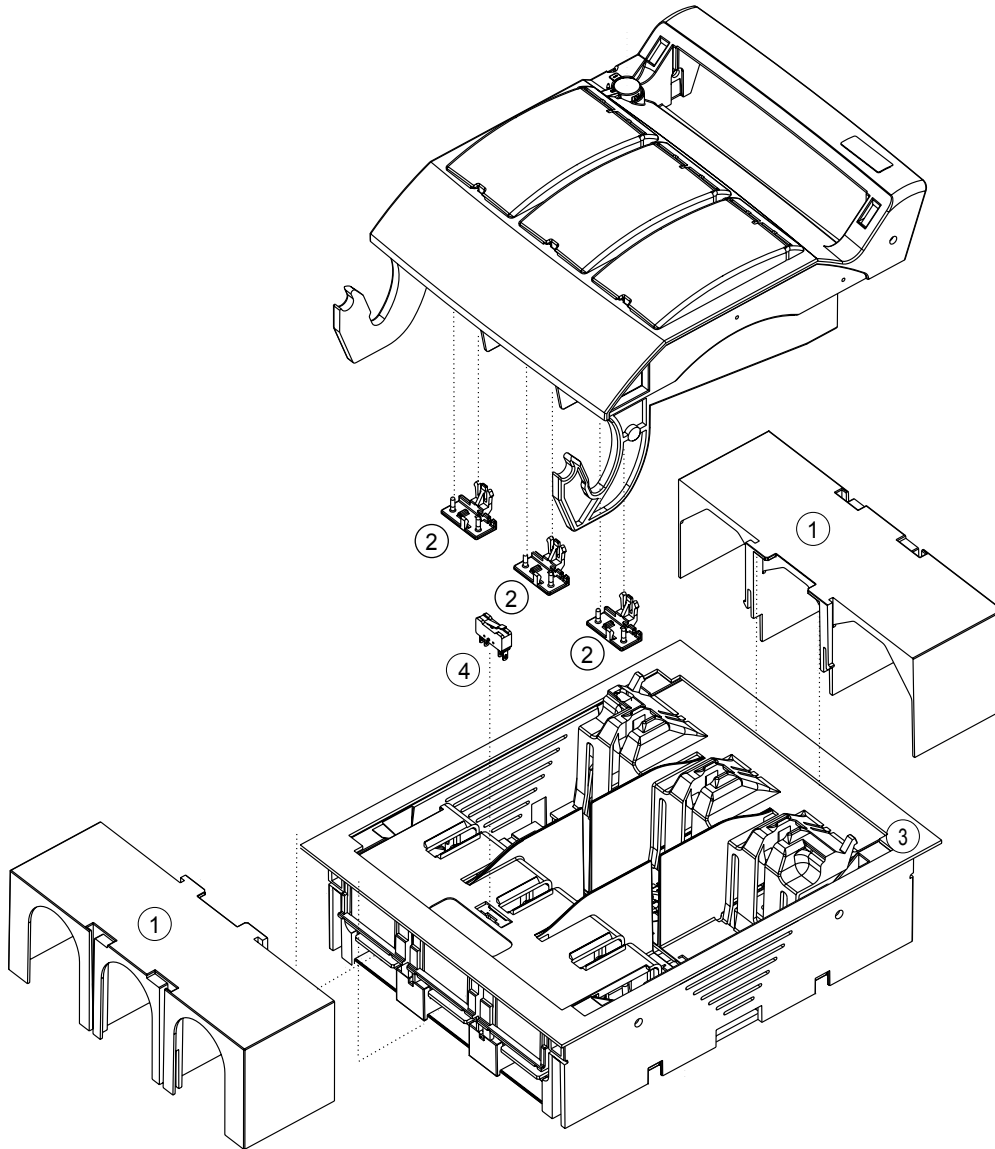
Size 1, 160A, Design for Bottom Fitting, 3-pole

Size 2, 250A, Design for Bottom Fitting, 3-pole

## EXPLODED SKETCH

**MULTIBLOC® 2.ST8 NH- fuse switch disconnecter**  
triple pole design for bottom fitting

(E 1.000.595)



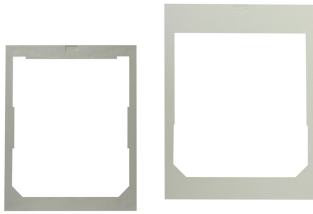
no.	articlenumber	short Description
1	1.000.861	Cover for cable termination,set = 2 pcs.
2	1.000.150	Locking device f. windows,1 Set=3 pieces
3	1.000.863	Cover shield 230 x 300 mm
4	1.000.852	indicator for switch door position

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Size 1, 160A, Design for Bottom Fitting, 3-pole

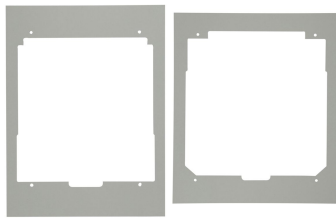
Size 2, 250A, Design for Bottom Fitting, 3-pole

## ACCESSORIES



1.000.353

1.000.863

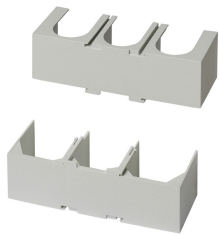


1.002.351

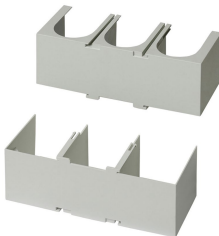
1.002.352

### 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
1.000.863	V1002174	cover shield for installation in distribution units size (width x height): 230 x 300 mm for one 2.ST8/2.RST8 triple pole	1 piece	0.10 kg
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
1.002.352	Y1022969	cover shield for installation in distribution units size (width x height): 234 x 310 mm for one 2.ST8/2.RST8 triple pole	1 piece	0.11 kg



1.000.382



1.000.861

### Cover/shrouds for cable termination

Catalog number	Item number	Design	Package	Weight
1.000.382	V229880	cover for cable terminal connection for 1.ST8 triple pole, 1 set = 2 pieces	1 set	0.29 kg
1.000.861	N1002168	cover for cable terminal connection for 2.ST8 triple pole, 1 set = 2 pieces	1 set	0.31 kg



1.000.383

1.000.384

### 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



1.000.852

### 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



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## ACCESSORIES



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



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 <sup>2</sup> pour 1.ST8 1- 4-pôle + 1.RST8, 1 set = 3 pièces	1 set	0.14 kg
1.001.237	B1002180	clamp strap size 2 120–240 mm <sup>2</sup> , 1 set = 3 pieces	1 set	0.26 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
13SZAD6	A1022971	M12 terminal lugs for M12 double terminal for MULTIBLOC® size 2 and 3 1 set = 3 pieces	1 set	0.26 kg
13SZAV6	K1023118	V-terminal size 1,2,3; M12, for V-terminal clamps size 1,2,3 for MULTIBLOC® size 2 supplementary set for V-terminal with use of V-clamps 1 set = 3 pieces	1 set	0.27 kg

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