

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## IEC FUSE SWITCH DISCONNECTORS

## NH FUSE SWITCH DISCONNECTOR



The production programme of MULTIBLOC® series 3.ST8 comprises NH fuse switch disconnectors for 630A.

They are designed for bottom fitting/panel installation and are available in 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 3 are designed for NH fuse-links in accordance with IEC/EN 60269-2, VDE 0636-2, size 3, 630A.

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)	630 A
Size per Standard	3
SCCR	Ue = AC 400 V; Ie = 630 A 80kA Ue = AC 500 V; Ie = 630 A 80kA Ue = AC 690 V; Ie = 500 A 50kA
Mounting	bottom fitting/panel
Switchability	3-,4-pole switching

## FEATURES & BENEFITS

- Touch protection IP 20 - when fuse link is in test mode IP rating is maintained
- Padlocking of switch door cover - optional
- Parking position of switch operating cover even with fuse-links inserted
- Indicating switch for switch door position - optional
- 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
- Installation on to 60 mm and 100 mm 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 3 in accordance with IEC/EN 60 269-2, VDE 0636-2



# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## PRODUCT RANGE



1.001.125



1.002.713



1.001.150

### MULTIBLOC® 3.ST8 size 3 630A, 690VAC bottom fitting, triple pole

Catalog number	Item number	Poles	Cable termination components	Design	Package	Weight
1.001.125	C1002135	3	6 M12 terminal screws	-	1 piece	4.94 kg
1.001.241	L1023073	3	3 clamp straps 150–300 mm <sup>2</sup> 3 M12 terminal screws	-	1 piece	5.13 kg
1.002.713	M1023074	3	6 M12 terminal screws	with electronic fuse monitoring ESÜ installed (rated voltage=525VAC)	1 piece	5.5 kg
1.001.150	K1023072	3	6 M12 terminal screws	with electro-mechanic fuse monitoring MZS installed (galvanic isolation)	1 piece	5.74 kg



1.001.904



1.002.661

### MULTIBLOC® 3.ST8 size 3 630A, 690VAC bottom fitting, quadruple pole

Catalog number	Item number	Poles	Cable termination components	Design	Package	Weight
1.001.904	N1023075	4	8 M12 terminal screws	-	1 piece	7.44 kg
1.002.661	P1023076	4	8 M12 terminal screws	with ready fitted special solid link as neutral conductor in pole 4 for leading and lagging switching	1 piece	7.71 kg

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

	<b>3.ST8 triple pole</b>	<b>3.ST8 quadruple pole</b>
Number of poles/phases	3	4
Size	3	3
Conventional free air thermal current with NH-fuse links $I_{th}$	630 A	630 A
Max. power dissipation of fuse links $P_n$	48 W	48 W
Conventional free air thermal current with solid links $I_{th}$	780 A	780 A
Max. power dissipation of solid links $P_n$	17,5 W	17,5 W
Utilization category to IEC/EN 60947-3 $U_e = AC 400 V; I_e = 630 A$ $U_e = AC 500 V; I_e = 630 A$ $U_e = AC 690 V; I_e = 500 A$	AC 23 B AC 22 B AC 21 B	AC 23 B AC 22 B AC 21 B
Rated operational voltage $U_e$	690 V	690 V
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 $U_e = AC 400 V; I_e = 630 A$ $U_e = AC 500 V; I_e = 630 A$ $U_e = AC 690 V; I_e = 500 A$	80 kA 80 kA 50 kA	80 kA 80 kA 50 kA
Rated short circuit making capacity with solid links $I_{cm}$	18.6 kAsw	18.6 kAsw
Rated short-time withstand current $I_{cw}$	18 kA / 1 s	18 kA / 1 s
Power dissipation by $I_{th}$ without NH-fuse links	53 W	53 W
Power dissipation by $I_{th}$ 780A without solid links	81 W	81 W
Installation mode	bottom fitting	bottom fitting
<b>Cable terminal connection</b>		
Standard cable terminal	M12	M12
for cable lugs Cu max.	2 x 240 mm <sup>2</sup>	2 x 240 mm <sup>2</sup>
for cable lugs Al max.	2 x 300 mm <sup>2</sup>	2 x 300 mm <sup>2</sup>
for copper bars with max. dimensions	45 x 10 mm	45 x 10 mm

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

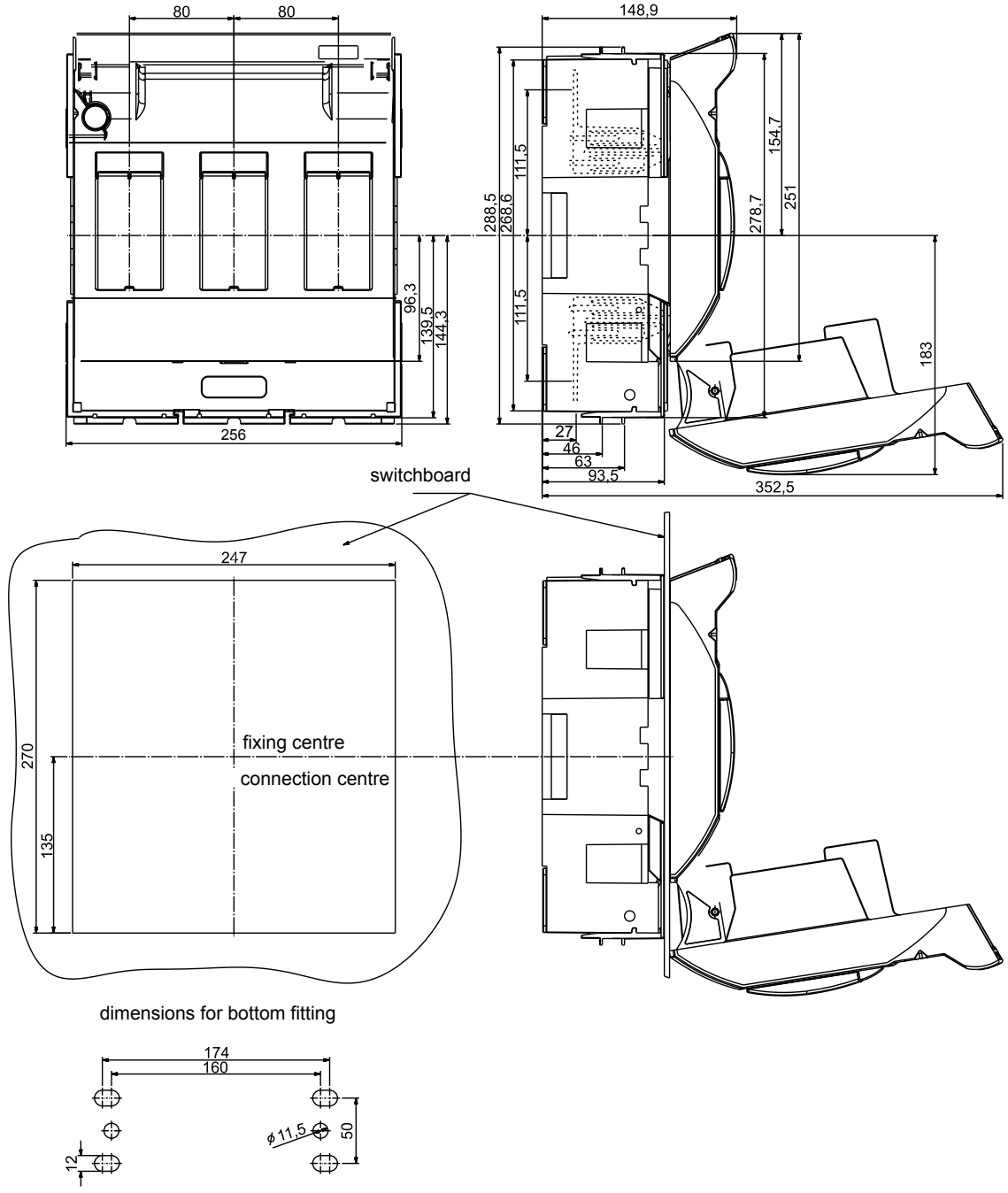
# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

**MULTIBLOC® 3.ST8 NH-fuse switch disconnecter**  
**triple pole design for bottom fitting**

(M01141)



Dimensions in mm

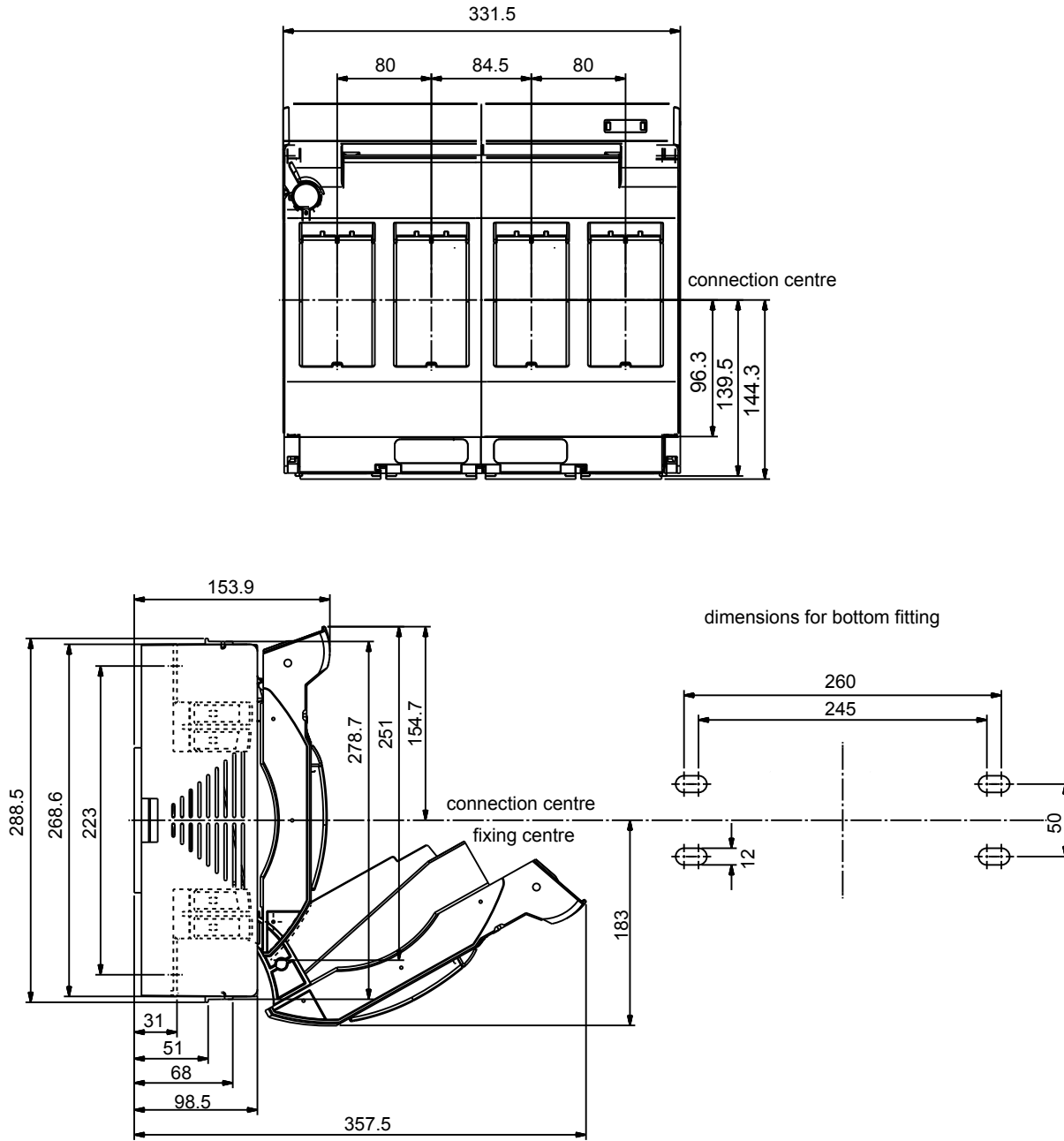
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

**MULTIBLOC® 3.ST8 NH-fuse switch disconnecter**  
**quadruple pole design for bottom fitting** (M01157-3)



Dimensions in mm

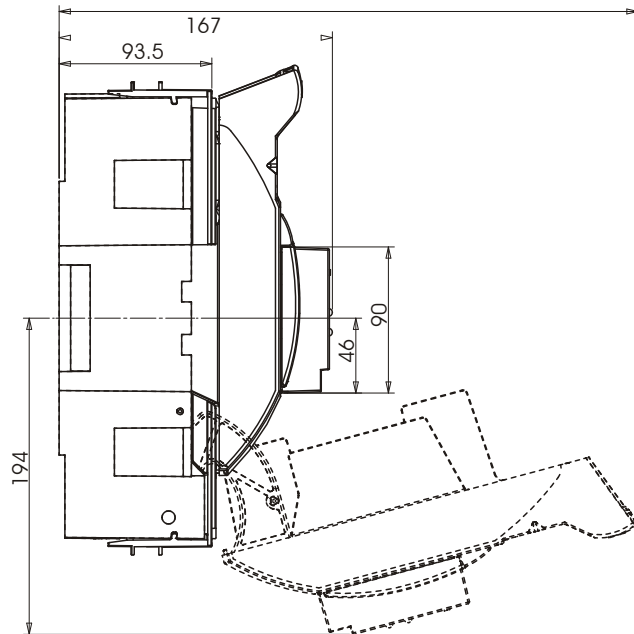
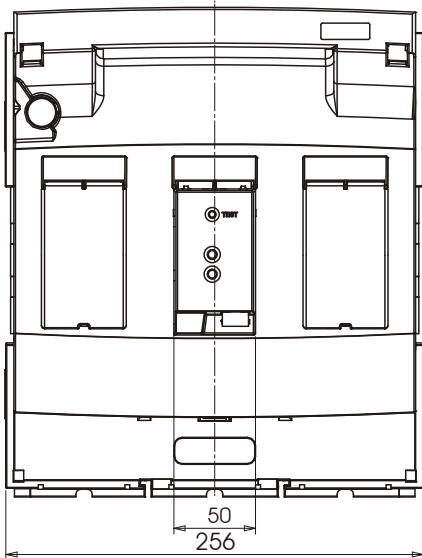
# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

### MULTIBLOC® 3.ST8

triple pole with electronic fuse monitoring ESÜ (M01174-3)



Dimensions in mm

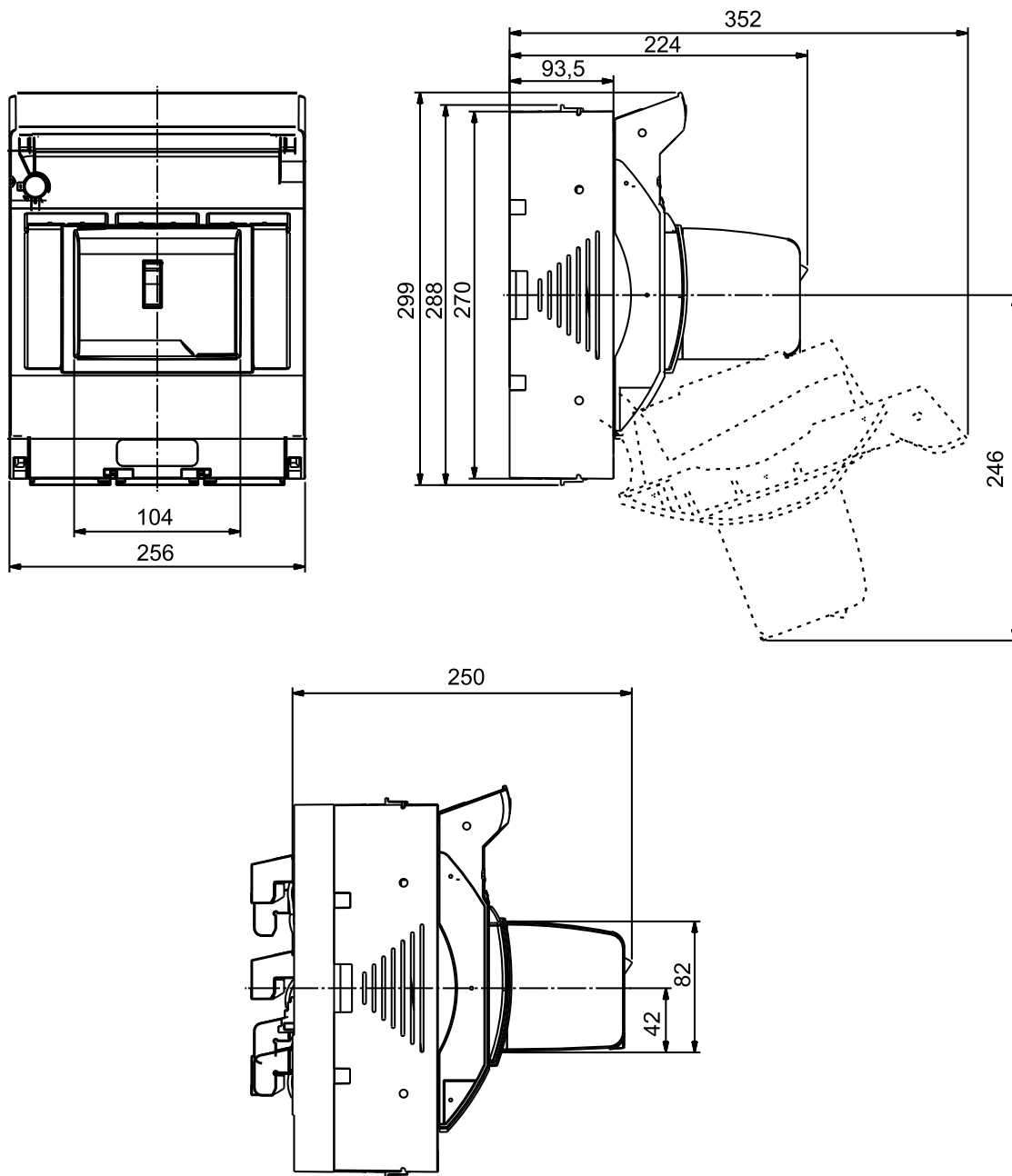
# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

### MULTIBLOC® 3.ST8

triple pole with electro-mechanic fuse monitoring MZS (M01135-3)



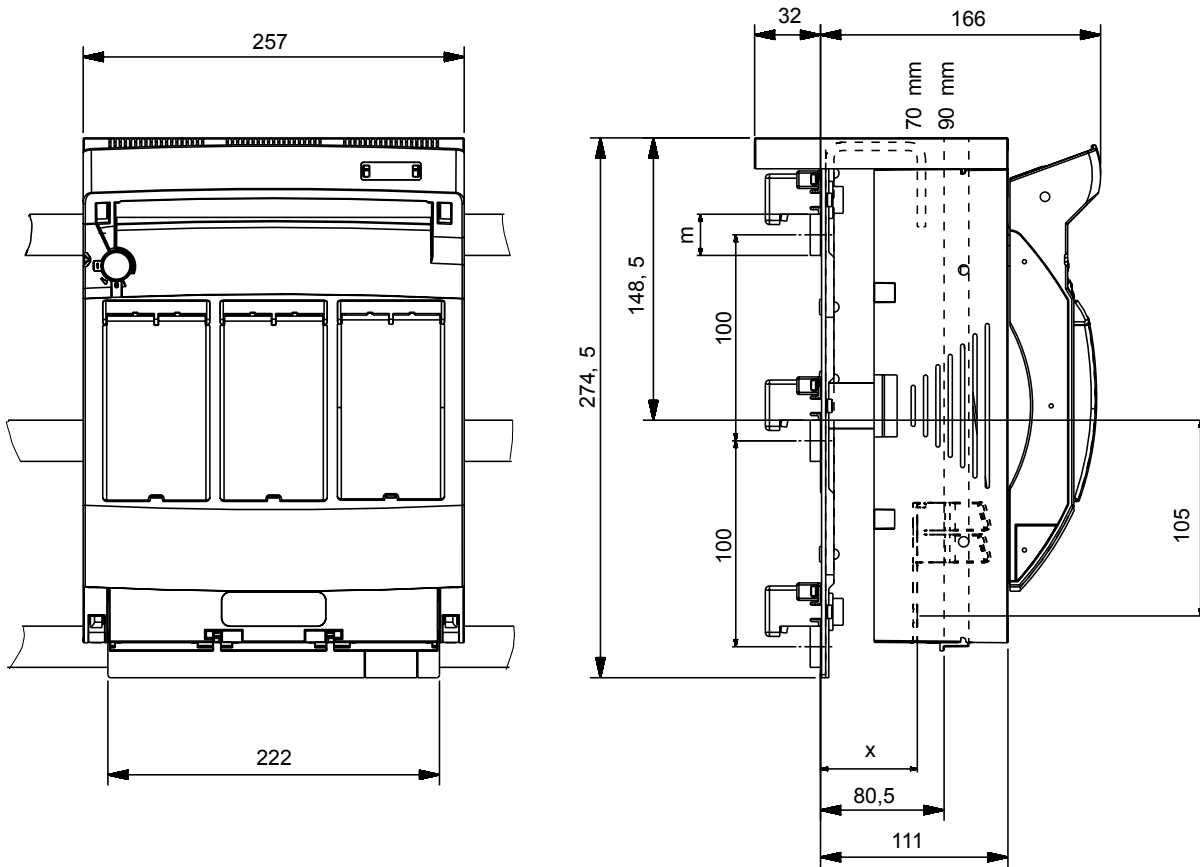
Dimensions in mm

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

**MULTIBLOC® bus bar adapter**  
with clamp terminal for 3.ST8 (M01151a-3)



m = max. 60 x 10

x = L1, L3 44.5

L2 39.5 (with accessory level adjustment art. no. 1.001.409 the same level as L1/L2 is reached)

tightening torque: M10: 25 Nm

M8: 15 Nm

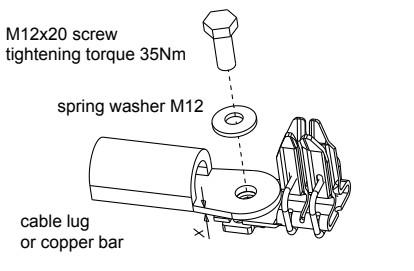
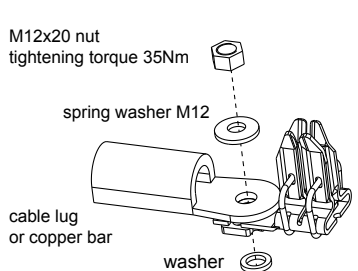
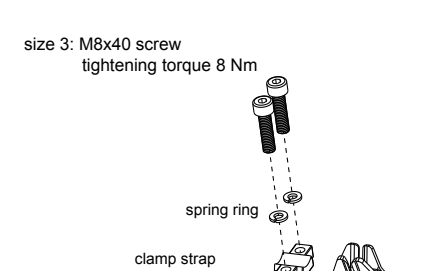
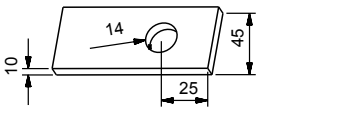
Dimensions in mm

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

### Cable termination size 3 (MA 108e)

screw terminal: (standard)	bolt terminal: (standard)	terminal: clamp strap (option / accessory)
 <p>M12x20 screw tightening torque 35Nm</p> <p>spring washer M12</p> <p>cable lug or copper bar</p> <p>for values x larger than 10 mm use M 12x35 screw plus washer in addition</p>	 <p>M12x20 nut tightening torque 35Nm</p> <p>spring washer M12</p> <p>cable lug or copper bar</p> <p>washer</p> <p>M12x35 nut tightening torque 35Nm</p>	 <p>size 3: M8x40 screw tightening torque 8 Nm</p> <p>spring ring</p> <p>clamp strap</p>
<p>size: for cable lug in accordance with DIN 46234 max. 240 mm<sup>2</sup> DIN 46235 max. 240 mm<sup>2</sup> DIN 46329 max. 300 mm<sup>2</sup></p>	 <p>14</p> <p>45</p> <p>25</p> <p>10</p>	<p>size 3: for round stranded conductors 150-300 mm<sup>2</sup> for bars or laminated copper 25 x 3 -14</p>

Dimensions in mm

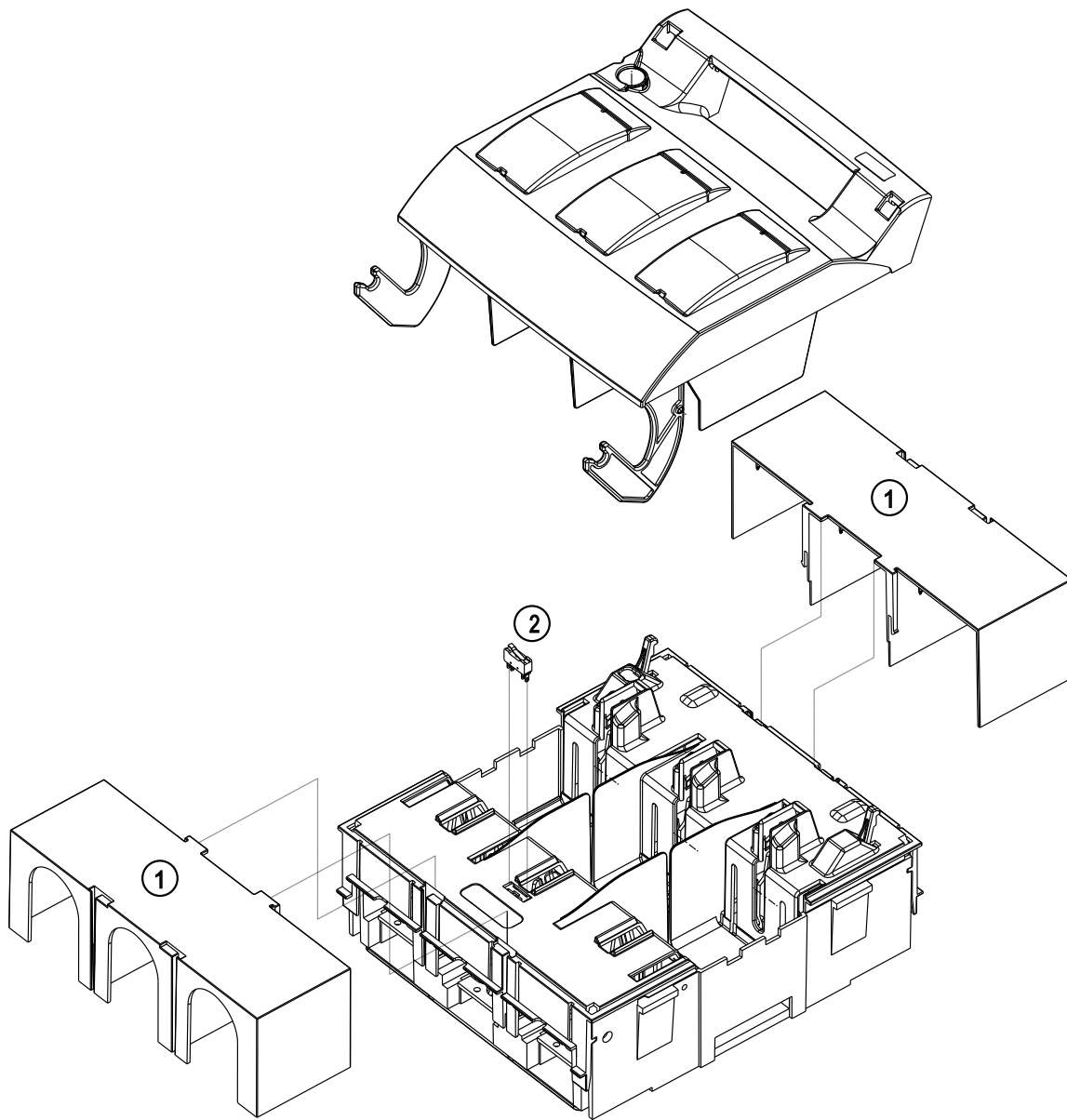
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## EXPLODED SKETCH

MULTIBLOC® 3.ST8 NH- fuse switch disconnecter triple pole design for bottom fitting (E 1.001.523)

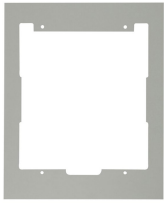


no.	articlenumber	short Description
1	1.000.893	cover for cable termination, 1 set=2 pcs.
2	1.000.852	indicator for switch door position

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## ACCESSORIES



1.002.353

### Cover shields

Catalog number	Item number	Design	Package	Weight
1.002.353	W1002175	cover shield for installation in distribution units size (width x height): 287 x 330 mm for one 3.ST8 triple pole	1 piece	0.13 kg



1.000.893

### Cover/shrouds for cable termination

Catalog number	Item number	Design	Package	Weight
1.000.893	P1002169	cover for cable terminal connection for 3.ST8 triple pole, 1 set = 2 pieces	1 set	0.50 kg
1.003.319	L1022981	cover for cable terminal connection for 3.ST8 quadruple pole	1 piece	0.25 kg



1.003.319



1.002.490

### Adapter für installation on to bus bars with clamp terminal

Catalog number	Item number	Design	Package	Weight
1.002.490	D1023112	bus bar adapter size 3 with clamp terminal for MULTIBLOC® 3.ST8 triple pole for bus bar system 60 mm	1 piece	1.17 kg
1.002.503	E1023113	bus bar adapter size 3 with clamp terminal for MULTIBLOC® 3.ST8 triple pole for bus bar system 100 mm	1 piece	1.28 kg



1.002.503



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

# MULTIBLOC® 3.ST8

Size 3, 630A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## ACCESSORIES



1.001.238

### Varieties of cable termination

Catalog number	Item number	Design	Package	Weight
1.001.238	C1002181	clamp strap size 3 150–300 mm <sup>2</sup> , 1 set = 3 pieces	1 set	0.32 kg
13SZAD6	A1022971	M12 terminal lugs for M12 double terminal for MULTIBLOC® size 2 and 3 1 set = 3 pieces	1 set	0.26 kg