

# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## IEC FUSE SWITCH DISCONNECTORS

## NH FUSE SWITCH DISCONNECTOR



The production programme of MULTIBLOC® series 2.ST8 comprises NH fuse switch disconnectors for 400A.

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 2 are designed for NH fuse-links in accordance with IEC/EN 60269-2, VDE 0636-2, size 2, 400A.

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)	400 A
Size per Standard	2
SCCR	Ue = AC 400 V; Ie = 400 A 80kA Ue = AC 500 V; Ie = 400 A 80kA Ue = AC 690 V; Ie = 315 A 80kA (3-pole) Ue = AC 690 V; Ie = 315 A 50kA (4-pole)
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
- 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
- Indicating switch for switch door position - 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 2 in accordance with IEC/EN 60 269-2, VDE 0636-2



# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## PRODUCT RANGE



1.000.504



1.002.712



1.000.832

### MULTIBLOC® 2.ST8 size 2 400A, 690VAC bottom fitting, triple pole

Catalog number	Reference number	Poles	Cable termination components	Design	Weight kg <sup>1</sup>	Package
1.000.504	W1002129	3	6 M10 terminal screws	-	3.50	1 piece
1.001.240	F1023068	3	3 clamp straps 120–240 mm <sup>2</sup> 3 M10 terminal screws	-	3.50	1 piece
1.002.563	G1023069	3	6 clamp straps 120–240 mm <sup>2</sup>	-	3.50	1 piece
1.002.712	H1023070	3	6 M10 terminal screws	with electronic fuse monitoring ESÜ installed (rated voltage=525VAC)	3.60	1 piece
1.000.832	E1023067	3	6 M10 terminal screws	with electro-mechanic fuse monitoring MZS installed (galvanic isolation)	4.25	1 piece

<sup>1</sup>weight in kg per piece or set including package



1.001.688



1.002.379

### MULTIBLOC® 2.ST8 size 2 400A, 690VAC bottom fitting, quadruple pole

Catalog number	Reference number	Poles	Cable termination components	Design	Weight kg <sup>1</sup>	Package
1.001.688	J1023071	4	8 M10 terminal screws	-	5.04	1 piece
1.002.379	Y1002131	4	8 M10 terminal screws	with ready fitted special solid link as neutral conductor in pole 4 for leading and lagging switching	5.26	1 piece

<sup>1</sup>weight in kg per piece or set including package

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

# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

	2.ST8 triple pole	2.ST8 quadruple pole
Number of poles/phases	3	4
Size	2	2
Conventional free air thermal current with NH-fuse links $I_{th}$	400 A	400 A
Max. power dissipation of fuse links $P_n$	34 W	34 W
Conventional free air thermal current with solid links $I_{th}$	630 A	630 A
Max. power dissipation of solid links $P_n$	9 W	9 W
Utilization category to IEC/EN 60947-3 $U_e = AC 400 V; I_e = 400 A$ $U_e = AC 500 V; I_e = 400 A$ $U_e = AC 690 V; I_e = 315 A$ $U_e = DC 440 V; I_e = 400 A$	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
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 $U_e = AC 400 V; I_e = 400 A$ $U_e = AC 500 V; I_e = 400 A$ $U_e = AC 690 V; I_e = 315 A$	80 kA 80 kA 80 kA	80 kA 80 kA 50 kA
Rated short circuit making capacity with solid links $I_{cm}$	10.6 kA <sub>sw</sub>	10.6 kA <sub>sw</sub>
Rated short-time withstand current $I_{cw}$	13 kA / 1 s	13 kA / 1 s
Power dissipation by $I_{th}$ without NH-fuse links	27 W	27 W
Power dissipation by $I_{th}$ 630A without solid links	67 W	67 W
Installation mode	bottom fitting	bottom fitting
<b>Cable terminal connection</b>		
Standard cable terminal	M10	M10
for cable lugs Cu max.	2 x 185 mm <sup>2</sup>	2 x 185 mm <sup>2</sup>
for cable lugs Al max.	2 x 240 mm <sup>2</sup>	2 x 240 mm <sup>2</sup>
for copper bars with max. dimensions	35 x 10 mm	35 x 10 mm

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

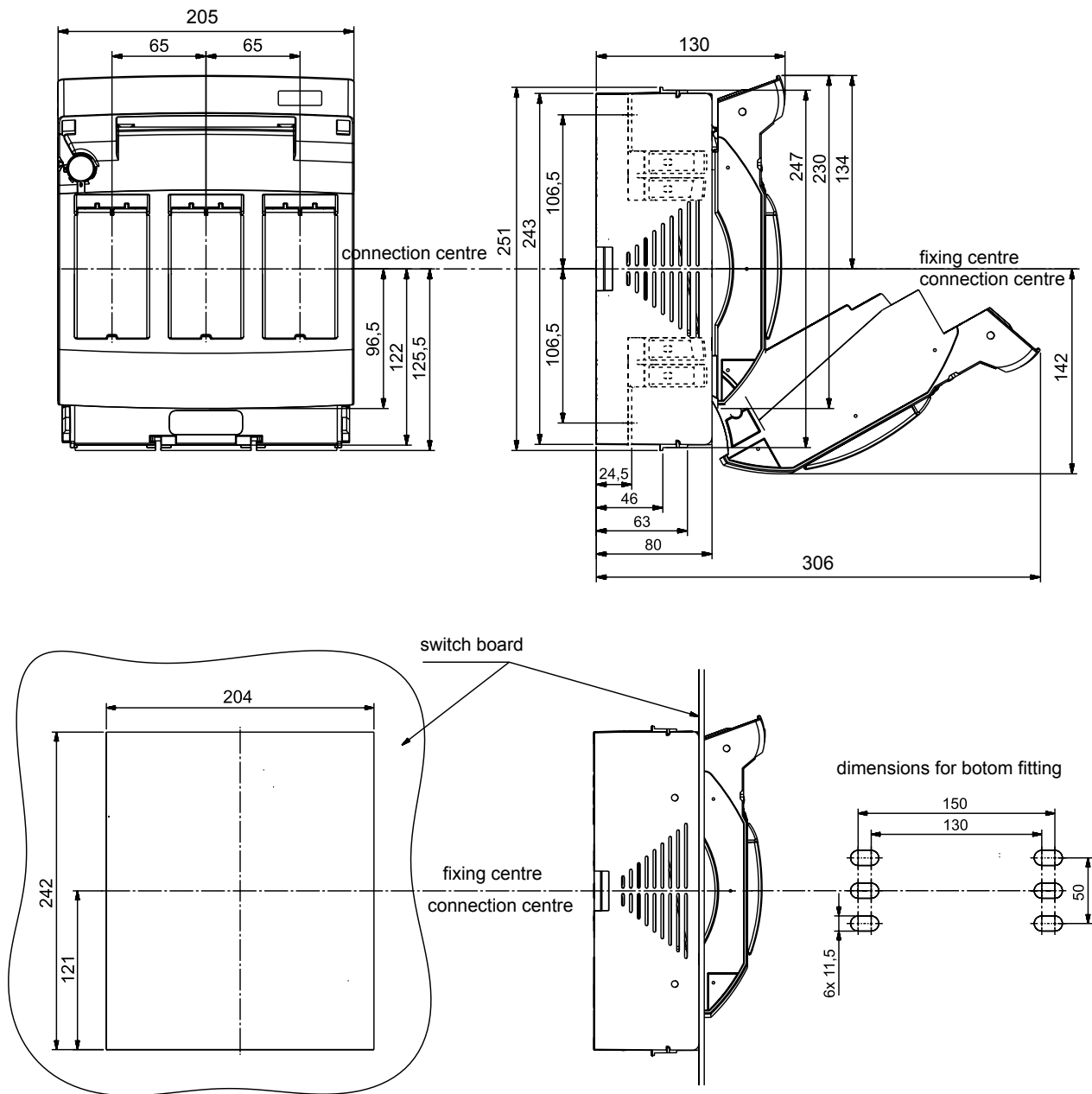
# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

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

(M01131)



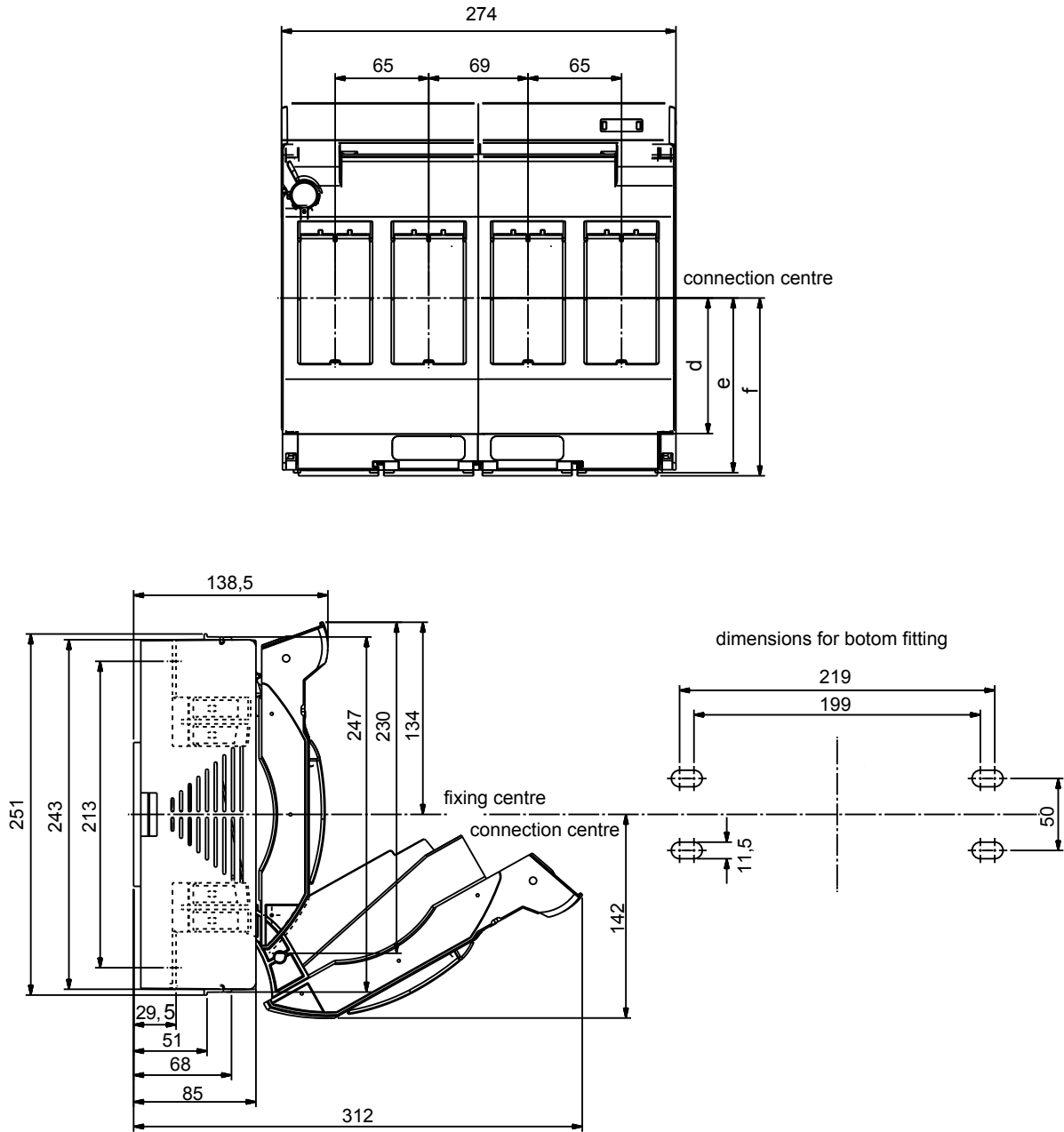
Dimensions in mm

# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

**MULTIBLOC® 2.ST8 NH-fuse switch disconnecter**  
**quadruple pole design for bottom fitting** (M01157-2)



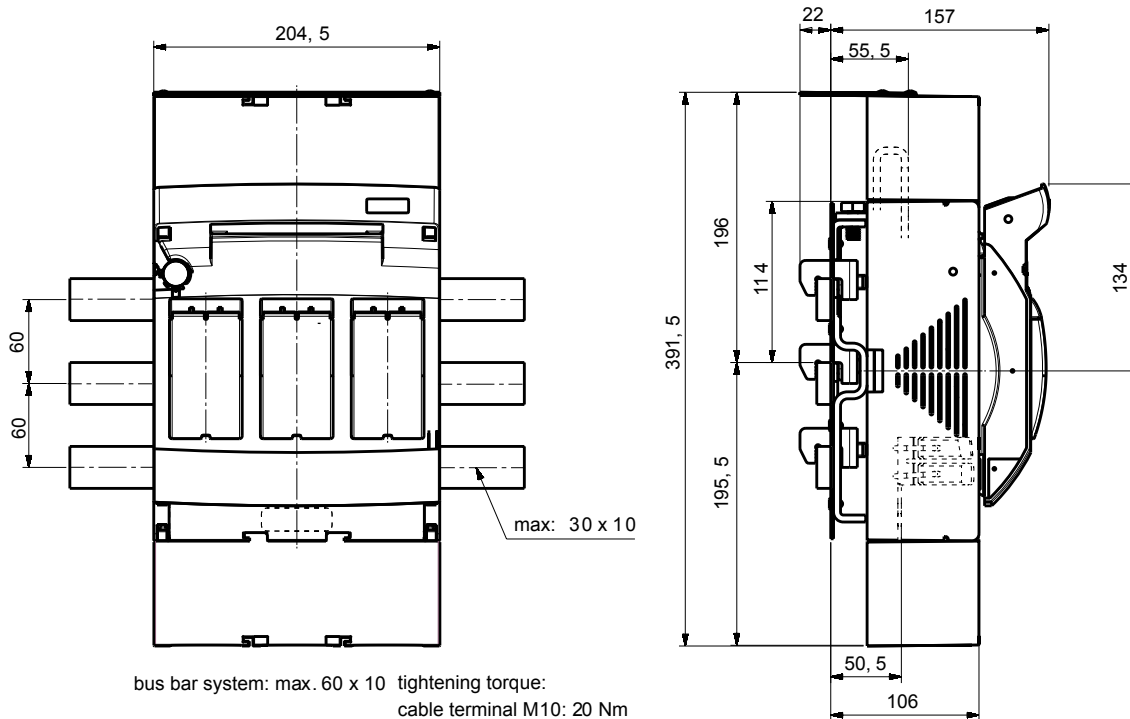
Dimensions in mm

# MULTIBLOC® 2.ST8

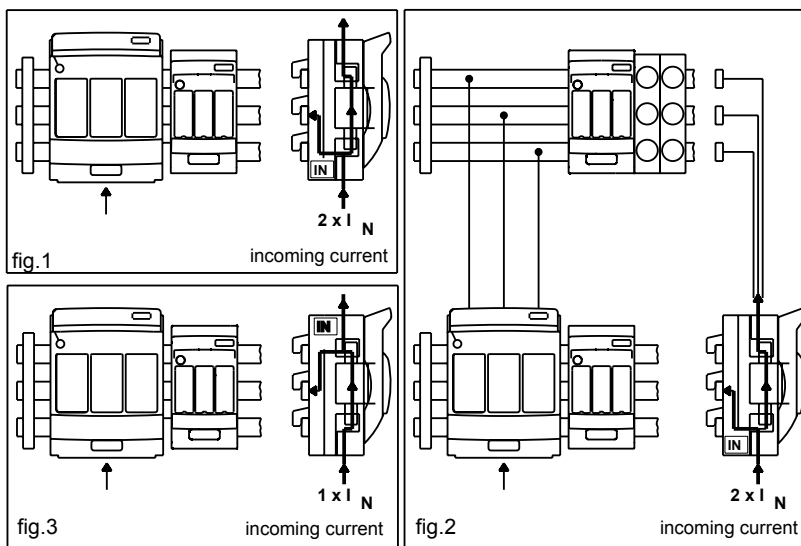
Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

MULTIBLOC® main incomer size 2 (M01167-2)



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



Dimensions in mm

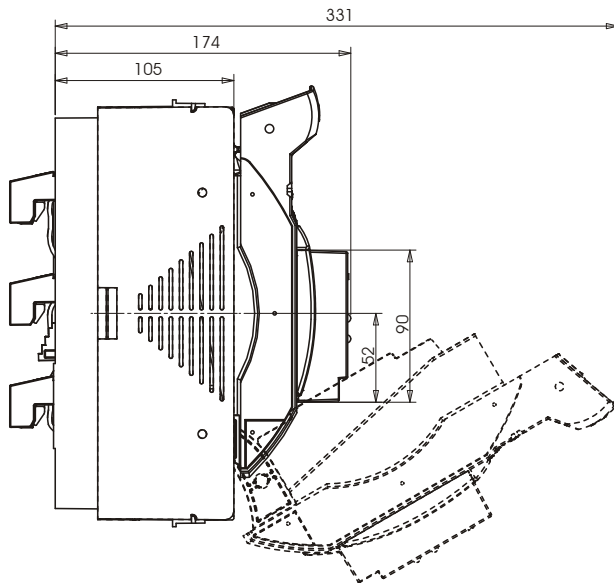
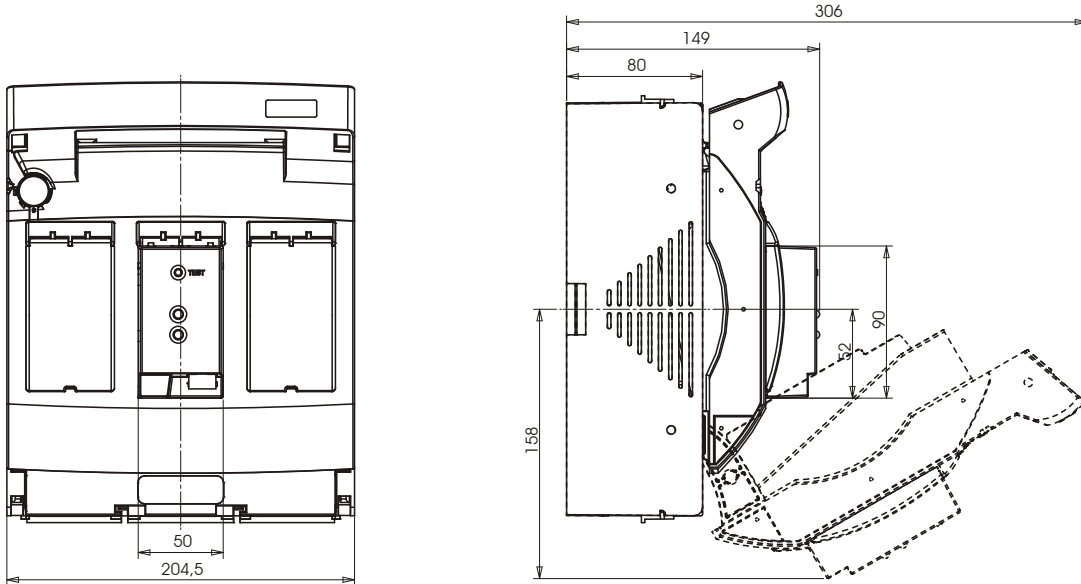
# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

### MULTIBLOC® 2.ST8 and 2.RST8

triple pole with electronic fuse monitoring ESÜ (M01174-2)



Dimensions in mm

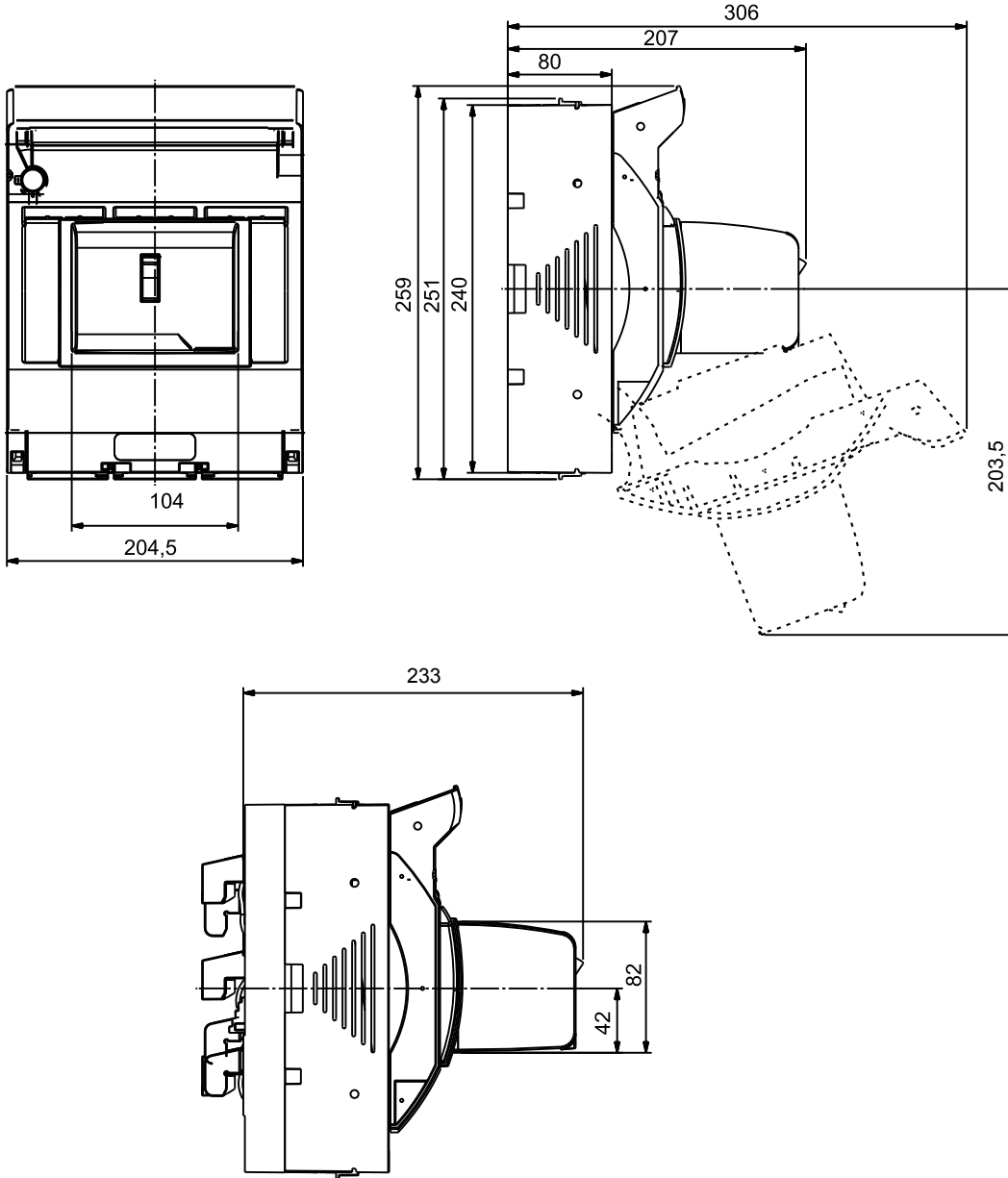
# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

### MULTIBLOC® 2.ST8 and 2.RST8

triple pole with electro-mechanic fuse monitoring MZS (M01135-2)



Dimensions in mm

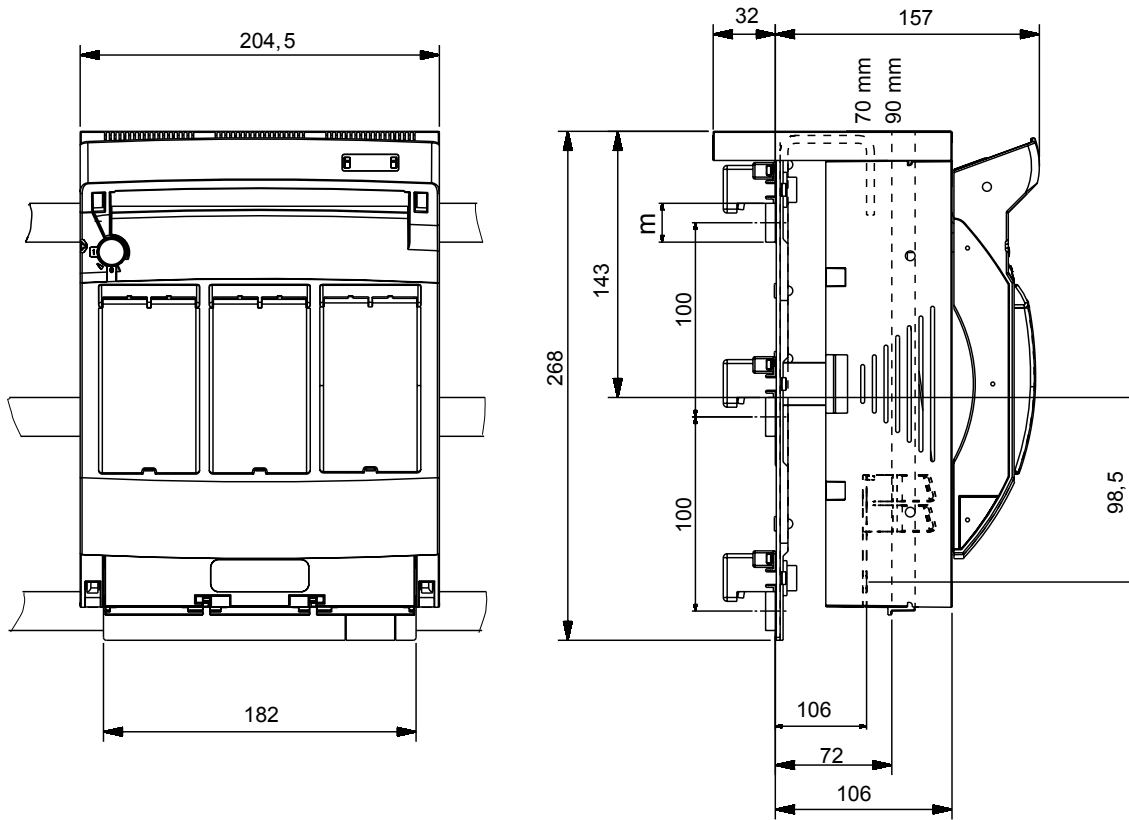


# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

**MULTIBLOC® bus bar adapter**  
with clamp terminal for 2.ST8 (M01151a-2)



m = max. 60 x 10

tightening torque: M10: 25 Nm  
M8: 15 Nm

Dimensions in mm

# MULTIBLOC® 2.ST8

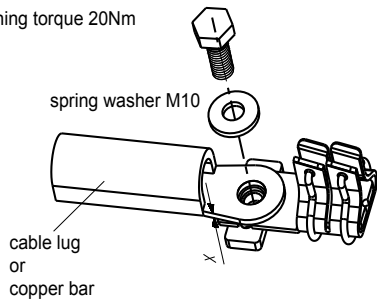
Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## DIMENSIONS

### Cable termination size 2 (MA 98e-2)

screw terminal:  
(standard)

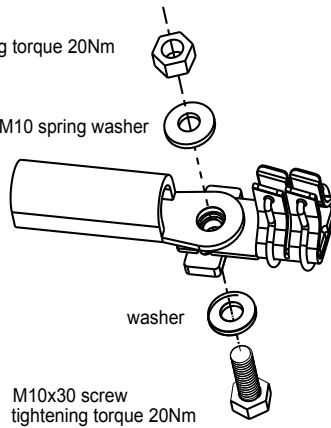
M10x20 screw  
tightening torque 20Nm



bolt terminal:  
(standard)

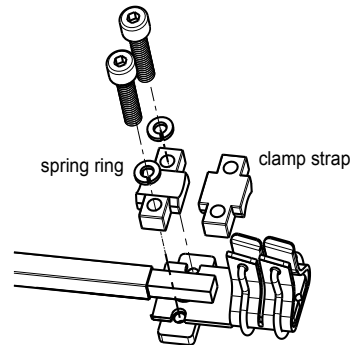
M10 nut  
tightening torque 20Nm

M10 spring washer



terminal: clamp strap  
(option/accessory)

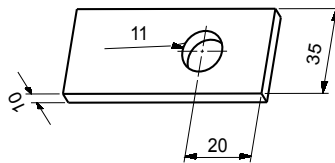
size.2: M8x35 screw  
tightening torque 8Nm



screw and bolt terminal for

size. 2:	DIN 46234 max. 240mm <sup>2</sup>
	DIN 46235 max. 185mm <sup>2</sup>
	DIN 46329 max. 240mm <sup>2</sup>

copper bars:



size. 2: for round stranded conductors 120 x 24C  
for bars or laminated copper 21 x 3-14

Dimensions in mm

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

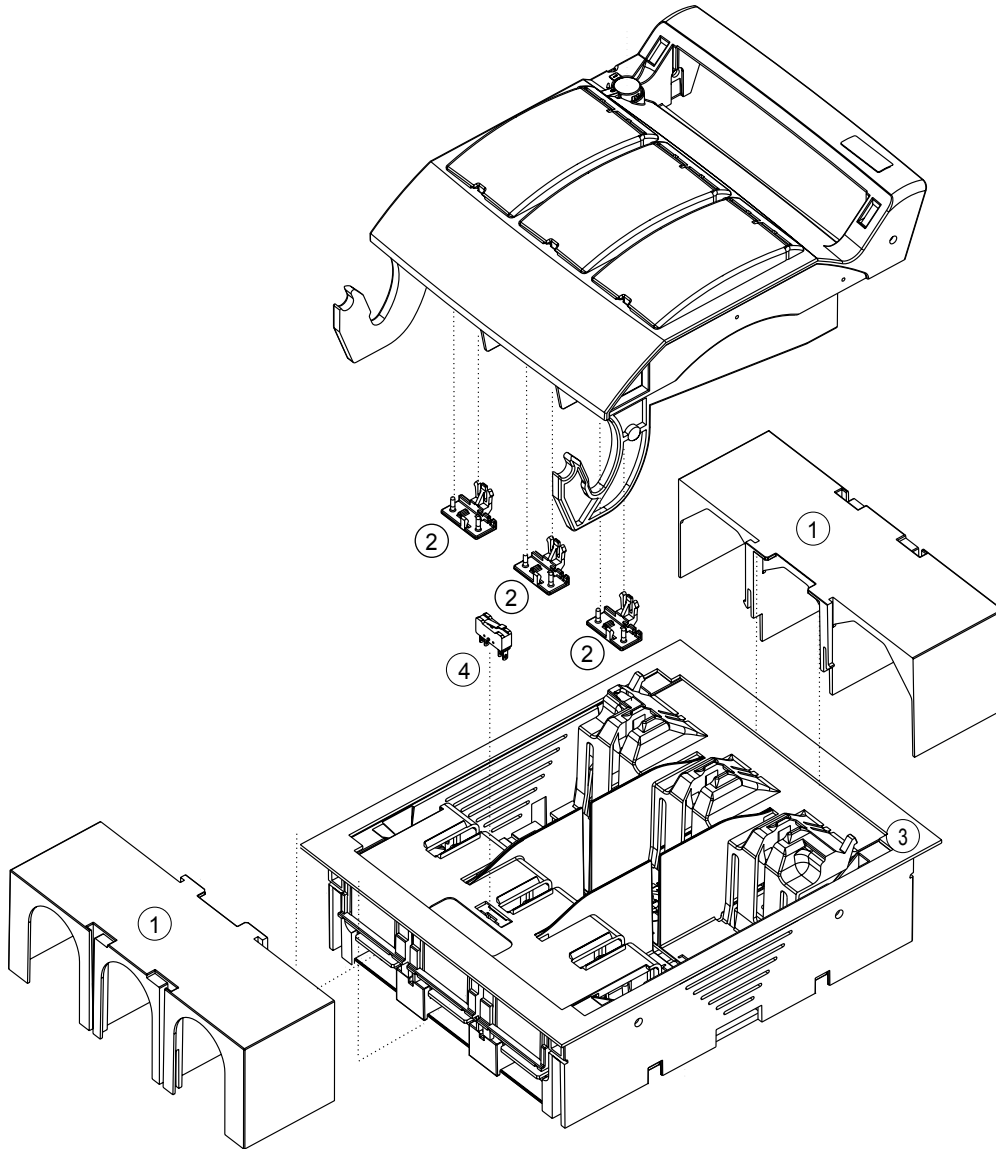
# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## EXPLODED SKETCH

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

(E 1.000.595)

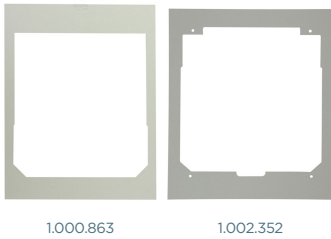


no.	articlenumber	short Description
1	1.000.861	Cover for cable termination, set = 2 pcs.
2	1.000.150	Locking device f. windows, 1 Set=3 pieces
3	1.000.863	Cover shield 230 x 300 mm
4	1.000.852	indicator for switch door position

# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## ACCESSORIES



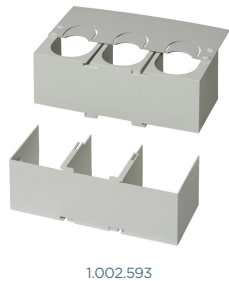
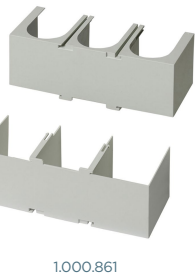
### Cover shields

Catalog number	Reference number	Design	Weight	Package
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	0.102 kg	1 piece
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	0.11 kg	1 piece



### Cover/shrouds for cable termination

Catalog number	Reference number	Design	Weight	Package
1.003.255	K1022980	cover for cable terminal connection for 2.ST8 quadruple pole	0.16 kg	1 piece
1.000.861	N1002168	cover for cable terminal connection for 2.ST8 triple pole, 1 set = 2 pieces	0.308 kg	1 set
1.002.593	J1023439	bus bar touch protection for bus bar adapter size 2, 1 set = 2 pieces	0.255 kg	1 set



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

Catalog number	Reference number	Design	Weight	Package
1.002.502	C1023111	bus bar adapter size 2 with clamp terminal for MULTIBLOC® 2.ST8 triple pole for bus bar system 100 mm	1.251 kg	1 piece



### Indication facilities

Catalog number	Reference number	Design	Weight	Package
1.000.852	Q1002285	indicator for switch door position micro switch, 1 change-over contact 5 A, 250 V	0.09 kg	1 piece

# MULTIBLOC® 2.ST8

Size 2, 400A, 690VAC, Design for Bottom Fitting, 3-,4-pole

## ACCESSORIES



1.000.150

### Locking and sealing devices/locking device for window

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



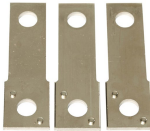
1.001.237

### Varieties of cable termination

Catalog number	Reference number	Design	Weight	Package
1.001.237	B1002180	clamp strap size 2 120–240 mm², 1 set = 3 pieces	0.261 kg	1 set
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	0.27 kg	1 set
13SZAD6	A1022971	M12 terminal lugs for M12 double terminal for MULTIBLOC® size 2 and 3 1 set = 3 pieces	0.259 kg	1 set



13SZAV6



13SZAD6

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