### MULTIBLOC® 00.ST8

Size 00 160A, 690VAC Bottom Fitting, 1-,2-,4-pole

#### **IEC FUSE SWITCH DISCONNECTORS**

### NH FUSE SWITCH DISCONNECTOR



The production programme of MULTIBLOC® series 00.ST8 comprises NH fuse switch disconnectors for 160A.

They are designed for bottom fitting/panel installation and are available in single pole, double 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 $^{\circ}$  size 00 are designed for NH fuse-links in accordance with IEC/EN 60269-2, VDE 0636-2, size 00, 160A.

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  |
|-------------------|--|
| Voltage DC        | 220 VDC  |
| Amper (A)         | 160 A  |
| Size per Standard | 00   |
| SCCR              | Ue = AC 400 V; Ie = 160 A 80kA<br>Ue = AC 500 V; Ie = 160 A 80kA<br>Ue = AC 690 V; Ie = 125 A 50kA |
| Mounting          | bottom fitting/panel   |
| Switchability     | 1-,2-,4-pole switching   |
| Number of poles   | 1,2,4  |

### **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 - optional
- Varieties of cable termination: screw, clamp strap, Al-Cu clamp, extendable for V-terminal - optional
- Padlocking and sealing of switch door cover - optional
- Indicating switch for switch door position optional
- Safe on load connection/disconnection in accordance with IEC 60947-3

### **APPLICATIONS**

- House incoming units
- Meter distribution units
- Measuring transformer cabinets
- Transmitting stations for telecommunications

### **STANDARDS**

IEC/EN 60 947-3
 For NH-fuse links size 000/00 in accordance with IEC/EN 60 269-2, VDE 0636-2





### PRODUCT RANGE

1.000.053



.001.81

### MULTIBLOC® 00.ST8 size 00 160A, 690VAC bottom fitting, single pole

| Catalog<br>number | Item<br>number | Poles | Cable termination components                                   | Design   | Package | Weight  |
|-------------------|----------------|-------|--|--|---------|---------|
| 1.000.053         | F229292        | 1     | 2 M8 terminal screws   | -  | 1 piece | 0.32 kg |
| 1.000.054         | E1022998       | 1     | 2 clamp straps Cu 4–70 mm²                                     | -  | 1 piece | 0.32 kg |
| 1.000.114         | F1022999       | 1     | 2 Al/Cu clamps 1,5–70 mm²round stranded, 95 mm² sectoral solid | -  | 1 piece | 0.35 kg |
| 1.001.817         | G1023000       | 1     | 2 M8 terminal screws   | for direct installation on to bus bars with M8 screw | 1 piece | 0.29 kg |

# Account.

1.000.139

### MULTIBLOC® 00.ST8 size 00 160A, 690VAC bottom fitting, double pole

| Catalog<br>number | Item<br>number | Poles | Cable termination components | Design   | Package | Weight  |
|-------------------|----------------|-------|------------------------------|--|---------|---------|
| 1.000.139         | G229293        | 2     | 4 M8 terminal screws         | 2 poles  | 1 piece | 0.62 kg |
| 1.004.453         | E1062213       | 2     | 4 M8 terminal screws         | with ready fitted special solid link as<br>neutral conductor in pole 2 for leading<br>and lagging switching (right side) | 1 piece | 1.42 kg |
| 1.000.140         | H1023001       | 2     | 4 clamp straps Cu 4 –70 mm²  | 2 poles  | 1 piece | 0.62 kg |



1.000.141



1.002.377

### MULTIBLOC® 00.ST8 size 00 160A, 690VAC bottom fitting, quadruple pole

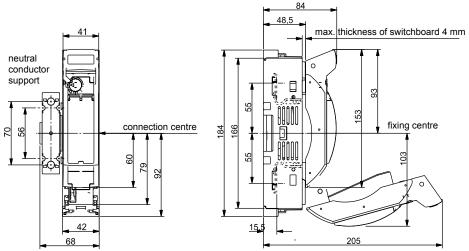
| Catalog<br>number | Item<br>number | Poles | Cable termination components | Design  | Package | Weight  |
|-------------------|----------------|-------|------------------------------|---|---------|---------|
| 1.000.141         | J1023002       | 4     | 8 M8 terminal screws         | pole 4 right side   | 1 piece | 1.04 kg |
| 1.000.142         | K1023003       | 4     | 8 clamp straps Cu 4–70 mm²   | pole 4 right side   | 1 piece | 1.04 kg |
| 1.001.575         | L1023004       | 4     | 8 M8 terminal screws         | pole 4 left side  | 1 piece | 1.04 kg |
| 1.002.377         | T1002127       | 4     | 8 M8 terminal screws         | with ready fitted special solid link<br>as neutral conductor in pole 4 for<br>leading and lagging switching | 1 piece | 1.8 kg  |
| 1.003.141         | N1023006       | 4     | 8 clamp straps Cu 4-70 mm²   | with ready fitted special solid link<br>as neutral conductor in pole 4 for<br>leading and lagging switching | 1 piece | 1.8 kg  |

### TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

|  | 00.ST8 single pole                       | 00.ST8<br>double pole | 00.ST8 quadruple pole |
|--|--|-----------------------|-----------------------|
| Number of poles/phases   | 1  | 2                     | 4                     |
| Size   | 00                                       | 00                    | 00                    |
| Conventional free air thermal current with NH-fuse links Ith   | 160 A                                    | 160 A                 | 160 A                 |
| Max. power dissipation of fuse links P <sub>n</sub>  | 12 W                                     | 12 W                  | 12 W                  |
| Conventional free air thermal current with solid links I <sub>th</sub>   | 200 A                                    | 200 A                 | 200 A                 |
| Max. power dissipation of solid links P <sub>n</sub>   | 1,2 W                                    | 1,2 W                 | 1,2 W                 |
| Rated operational voltage U <sub>e</sub>   | 690 V                                    | 690 V                 | 690 V                 |
| Utilization category to IEC/EN 60947-3 $U_e = AC 400 \text{ V}; I_e = 160 \text{ A}$ $U_e = AC 500 \text{ V}; I_e = 160 \text{ A}$ $U_e = AC 690 \text{ V}; I_e = 125 \text{ A}$ $U_e = DC 220 \text{ V}; I_e = 160 \text{ A}$ | AC 23 B<br>AC 22 B<br>AC 21 B<br>DC 22 B | AC                    | 23 B<br>22 B<br>21 B  |
| Rated insulation voltage U <sub>i</sub>  | 1000 V                                   | 1000 V                | 1000 V                |
| Rated impulse withstand voltage U <sub>imp</sub>   | 8 kV                                     | 8 kV                  | 8 kV                  |
| Rated frequency  | 50 60 Hz                                 | 50 60 Hz              | 50 60 Hz              |
| Degree of protection   | IP 20                                    | IP 20                 | IP 20                 |
| Degree of pollution  | 3  | 3                     | 3                     |
| Rated duty   | uninterrupted duty                       | uninterrupted duty    | uninterrupted duty    |
| Rated short circuit making capacity with solid links I <sub>cm</sub>   | 6.2                                      | 6.2                   | 6.2                   |
| Rated short-time withstand current I <sub>cw</sub>   | 4 kA / 1 s                               | 4 kA / 1 s            | 4 kA / 1 s            |
| Power dissipation by I <sub>th</sub> without NH-fuse links   | 4 W                                      | 8 W                   | 11 W                  |
| Power dissipation by I <sub>th</sub> 200A without solid links  | 6,3 W                                    | 12,5 W                | 17 W                  |
| Cable terminal connection  |  |                       |                       |
| Standard cable terminal  | M8                                       | M8                    | M8                    |
| for cable lugs Cu max.   | 2 x 70 mm²                               | 2 x 70 mm²            | 2 x 70 mm²            |
| for cable lugs Al max.   | 2 x 70 mm²                               | 2 x 70 mm²            | 2 x 70 mm²            |
| for copper bars with max. dimensions   | 20 x 5 mm                                | 20 x 5 mm             | 20 x 5 mm             |
| Installation mode  | bottom fitting                           | bottom fitting        | bottom fitting        |

## MULTIBLOC® 00.ST8 NH-fuse switch disconnector single pole

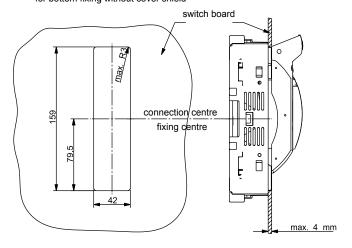
(M 01115)

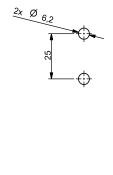


The neutral conductor art. no. 00SZNS (accessory) can be fixed on right side, left side or both sides of switch.

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

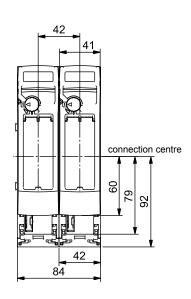
dimensions for bottom fitting

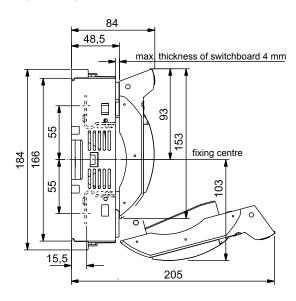




## MULTIBLOC® 00.ST8 NH-fuse switch disconnector double pole

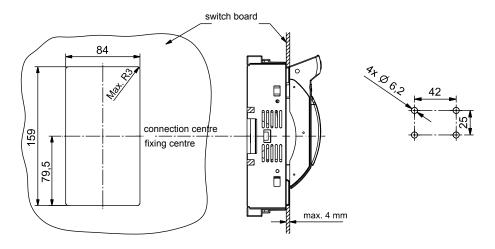
(M 01124)





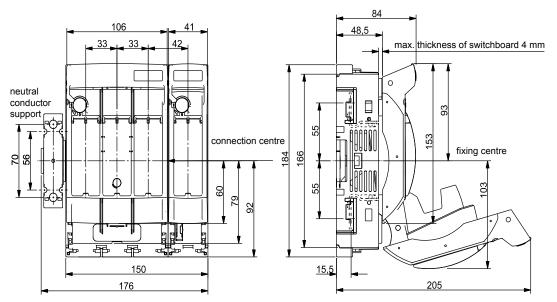
dimensions of switch board cut out for bottom fixing without cover shield

dimensions for bottom fitting

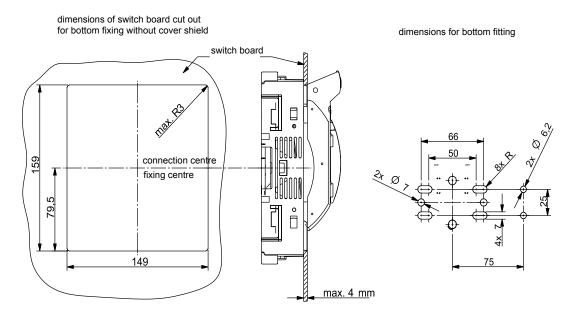


## MULTIBLOC® 00.ST8 NH-fuse switch disconnector quadruple pole

(M 01120)



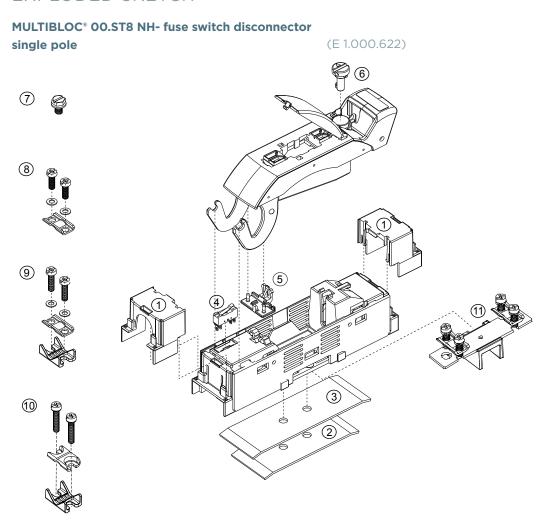
The neutral conductor art. no. 00SZNS (accessory) can be fixed on right side, left side or both sides of switch.



### **Cable termination size 00** (MA 120c)

| type                          | N        | S  | A  | R                             |
|-------------------------------|----------|--|--|-------------------------------|
| terminal                      | screw    | clamp srap                               | Al/Cu clamp  | frame clamp                   |
|                               | Cu 16-70 | Cu 4-70                                  | Cu 1,5-70  | Cu 2,5-70                     |
| cross section mm <sup>2</sup> | Al 16-95 | Al                                       | Al 1,5-70 sectoral stranded<br>Al 1,5-95 sectoral solid    | Al                            |
| M(an) (Nm)                    | 10       | 3-4                                      | 3-4  | 6                             |
| M8                            | max. 20  | M5 D D D D D D D D D D D D D D D D D D D | 4-70/95mm² se  4-70/95mm² se  4-70mm²  4-70mm²  1;5-2,5mm² | assembled by the manufacturer |

### **EXPLODED SKETCH**



| no. | articlenumber | short Description                        |
|-----|---------------|--|
| 1   | 1.000.149     | Cover for cable termination, single pole |
| 2   | 1.000.151     | Set for mounting on DIN rails 125mm      |
| 3   | 1.000.152     | Set for mounting on DIN rails 150mm      |
| 4   | MZ00HD        | Indicating switch f.switch door position |
| 5   | 1.000.150     | Locking device f. windows,1 Set=3 pieces |
| 6   | 1.000.155     | Cover sealing device, installation set   |
| 7   | 00SZS         | M8 terminal screw screw,1 Set = 3 pieces |
| 8   | 00SZESK       | Clamp strap 4 - 70mm², set = 3 pieces    |
| 9   | 00SZA70       | Al/Cu clamp 1·5 - 70mm², set = 3 pieces  |
| 10  | 1.003.571     | Al/Cu clamp 50 - 95 mm², set = 3 pieces  |
| 11  | 00SZNS        | Neutral cond. support with clamp strap   |

### **ACCESSORIES**



1.002.764

### **Cover shields**

| Catalog<br>number | Item number | Design  | Package | Weight |
|-------------------|-------------|---|---------|--------|
| 1.002.764         | T1022965    | cover shield for installation in distribution units size (width x height): 220 x 240 mm for one 00.ST8 quadruple pole | 1 piece | 93 g   |

# 1



1000149

### **Covers/shrouds for cable termination**

| Catalog<br>number | Item number | Design  | Package | Weight |
|-------------------|-------------|---|---------|--------|
| 1.000.148         | W229283     | cover for cable terminal connection for 00 triple pole,<br>1 set = 2 pieces     | 1 set   | 43 g   |
| 1.000.149         | V229282     | cover for cable terminal connection for 00.ST8 single pole,<br>1 set = 2 pieces | 1 set   | 21 g   |





000.151 1.000.152

#### **Installation devices**

| Catalog<br>number | Item number | Design   | Package | Weight  |
|-------------------|-------------|--|---------|---------|
| 1.000.151         | B229288     | adapter for installation between DIN-rails in accordance with EN 60715, DIN-rail distance 125mm for 00.ST8 single pole | 1 piece | 80 g    |
| 1.000.152         | C229289     | adapter for installation between DIN-rails in accordance with EN 60715, DIN-rail distance 150mm for 00.ST8 single pole | 1 piece | 0.14 kg |



MZOOHD

### **Indication facilities**

| Catalog<br>number | Item number | Design   | Package | Weight |
|-------------------|-------------|--|---------|--------|
| MZ00HD            | V1022989    | indicator for switch door position<br>micro switch 1 "a" contact/ 1 "b" contact, 5 A, 250 V<br>for MULTIBLOC® 00.ST8 1-, 2- , 4-pole | 1 piece | 90 g   |

1.000.155

### Locking and sealing devices/cover sealing device

| Catalog<br>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   |

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

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



1.000.150

### **ACCESSORIES**







### Varieties of cable termination

| Catalog<br>number | Item number | Design  | Package | Weight  |
|-------------------|-------------|---|---------|---------|
| 00SZA70           | R211523     | Al/Cu clamp 1,5–70 mm²<br>for switch gear size 00<br>1 set = 3 pieces   | 1 set   | 75 g    |
| 00SZESK           | E214594     | clamp strap Cu 4–70 mm²<br>for switch gear size 00<br>1 set = 3 pieces  | 1 set   | 35 g    |
| 00SZS             | M229298     | M8 terminal screw<br>for switch gear size 00<br>1 set = 3 pieces  | 1 set   | 35 g    |
| 00SZSV6           | K1022957    | V-shaped lug size 00, M8, for V-terminal clamp size 00 for switch gear size 00 with screw terminal supplementary set for V-terminal with V-terminal clamps 1 set = 3 pieces | 1 set   | 0.13 kg |
| 1.003.433         | L1022958    | triple clamp per pole 1.5 up to 16 mm <sup>2</sup><br>1 set = 3 pieces  | 1 set   | 0.14 kg |
| 1.003.571         | V1033684    | Al/Cu clamp 50 -95 mm² round stranded for switch gear size 00 1 set = 3 pieces  | 1 set   | 88 g    |



00SZNS

### **Neutral conductor**

| Catalog<br>number | Item number | Design  | Package | Weight |
|-------------------|-------------|---|---------|--------|
| 00SZNS            | A1023086    | neutral conductor support<br>for lateral installation<br>either left or right side of MULTIBLOC® size 00<br>cable termination clamp strap Cu 4-70 mm² round stranded/round<br>solid | 1 piece | 83 g   |