# MULTIBLOC® 1.RST8

Size 1, 250A, 690VAC, Design for bus bar installation, Triple Pole

#### IEC FUSE SWITCH DISCONNECTORS

### NH FUSE SWITCH DISCONNECTOR



The production programme of MULTIBLOC<sup>®</sup> 1.RST8 comprises NH fuse switch disconnectors for 250A.

Products are designed in triple pole units for direct installation on to 40 mm and 60mm bus bar systems.

For installation of MULTIBLOC<sup>®</sup> NH fuse switch disconnectors of different sizes in distribution units with central cover, respective covers are used to obtain a uniform profile in height and length.

MULTIBLOC<sup>®</sup> size 1 are designed for NH fuse-links in accordance with IEC/EN 60269-2, VDE 0636-2, size 1: 250A.

The system is a modular system, which allows the installation and combination of individual components. 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	440 VDC
Amper (A)	250 A
Size per Standard	1
SCCR	Ue = AC 400 V; le = 250 A 80kA Ue = AC 500 V; le = 250 A 80kA Ue = AC 690 V; le = 200 A 50kA (3-,4-pole)
Mounting	bus bar installation
Switchability	triple pole switching

### FEATURES & BENEFITS

- Touch protection IP 20 (IP rating maintained if fuse-link in test mode)
- Padlocking and sealing of switch door cover optional
- Parking position of switch operating cover even with fuse-links Inserted
- Suitable for bottom/top cable terminal connections
- Cable termination: screw, bolt, clamp strap, extendable for V-terminal – optional
- Direct installation on 40 and 60mm bus bar systems (snap on)
- Universally useable for bus bars with thickness of 5 and 10mm and widths of 12–30mm
- For PV application, we recommend to mount the device on busbar systems with 10mm thickness
- Fuse monitoring optional
- Indicating switch for switch door position optional
- Safe on load connection/disconnection: 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 60269-2, VDE 0636-2





### PRODUCT RANGE



1.000.323



1.000.855

#### MULTIBLOC® 1.RST8 size 1 250A, 690VAC bus bar installation, triple pole

Catalog number	ltem number	Poles	Cable termination components	Design	Package	Weight
1.000.323	T229879	3	3 M10 terminal screws	-	1 piece	3.09 kg
1.001.294	Q1023054	3	3 clamp straps 70–150 mm <sup>2</sup>	-	1 piece	3.06 kg
1.003.134	R1023055	3	3 M10 terminal screws	with electronic fuse monitoring ESÜ installed (rated voltage = 525VAC)	1 piece	3.14 kg
1.000.855	M1023051	3	3 M10 terminal screws	with electro-mechanic fuse monitoring MZS installed (galvanic isolation)	1 piece	3.8 kg
1.000.936	P1023053	3	6 M10 terminal screws	main incomer	1 piece	4.68 kg



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# TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

	1.RST8 triple pole
Number of poles/phases	3
Size	1
Conventional free air thermal current with NH-fuse links Ith	250 A
Max. power dissipation of fuse links Pn	23 W
Conventional free air thermal current with solid links Ith	400 A
Max. power dissipation of solid links Pn	2,6 W
Rated operational voltage U <sub>e</sub>	690 V
Utilization category to IEC/EN 60947-3 $U_e = AC 400 V; I_e = 250 A$ $U_e = AC 500 V; I_e = 250 A$ $U_e = AC 690 V; I_e = 200 A$ $U_e = DC 440 V; I_e = 250 A$	AC 23 B AC 22 B AC 21 B DC 21 B
Rated insulation voltage U	1000 V
Rated impulse withstand voltage U <sub>imp</sub>	12 kV
Rated frequency	50 60 Hz
Degree of protection	IP 20
Degree of pollution	3
Rated duty	uninterrupted duty
Rated short circuit making capacity with solid links I <sub>cm</sub>	8.2 kAsw
Rated short-time withstand current Icw	8 kA / 1 s
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 50 kA 50 kA
Power dissipation by I <sub>th</sub> without NH-fuse links	20 W
Cable terminal connection	
Standard cable terminal	M10
for cable lugs Cu max.	2 x 150 mm <sup>2</sup>
for cable lugs AI max.	2 x 185 mm <sup>2</sup>
for copper bars with max. dimensions	30 x 10 mm
Bus bar terminal connection	· · · · · · · · · · · · · · · · · · ·
Bus bar width (bus bar system = 40 mm)	12 mm
Bus bar thickness (bus bar system = 40 mm)	5 10 mm
Bus bar width (bus bar system = 60 mm)	12 30 mm
Bus bar thickness (bus bar system = 60 mm)	5 10 mm *
Bus bar system	40 mm 60 mm

\*For PV application, we recommend to mount the device on Busbar systems with 10mm thickness



MULTIBLOC<sup>®</sup> 1.RST8 NH-fuse switch disconnector triple pole design for bus bar installation







switch board cut out



Dimensions in mm

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#### MULTIBLOC® main incomer size 1 (M01167-1)





### MULTIBLOC<sup>®</sup> 1.ST8 and 1.RST8

triple pole with electronic fuse monitoring ESÜ (MO1174-1)







Dimensions in mm



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### MULTIBLOC<sup>®</sup> 1.ST8 and 1.RST8

triple pole with electro-mechanic fuse monitoring MZS (M01135-1)









### $\textbf{MULTIBLOC}^{\texttt{$\circ$}} \text{ bus bar adapter}$

with clamp terminal for 1.ST8 (M01151a-1)





m = max. 60 x 10

tightening torque: M10: 25 Nm M8: 15 Nm



#### Cable termination size 1 (MA 98e-1)

screw treminal: (standard) bolt terminal: (standard)





#### 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:

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size 1: for round stranded conductors 70-150mm<sup>2</sup> for bars or laminated copper 18 x 7-18



# EXPLODED SKETCH



n	10.	articlenumber	short Description
1		1.000.382	Cover for cable termination triple pole
2	2	1.003.329	bus bar touch protection
3	3	1.000.353	Cover shield, 210 x 260 mm
4	ŀ	1.000.852	indicator for switch door position
5	5	1.000.150	Locking device f. windows,1 Set=3 pieces
6	6	1.000.155	Cover sealing device, installation set

IEC Fuse Switch Disconnectors / DS-LABCMB1RST8-08-1020\_EN



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# ACCESSORIES



1.000.353

1.002.351



1.000.382



1.000.852



1.000.155



1.000.150

#### **Cover shields**

Catalog number	Item number	Design	Package	Weight		
Covers/co	Covers/cover shields					
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		

#### Cover/shrouds for cable termination

Catalog number	Item number	Design	Package	Weight		
Covers/sh	Covers/shrouds for cable termination					
1.000.382	V229880	cover for cable terminal connection for 1.ST8 triple pole, 1 set = 2 pieces	1 set	0.29 kg		
1.003.329	G1023115	bus bar touch protection for 1.RST8	1 piece	82 g		

#### Indication facilities

Catalog number	Item number	Design	Package	Weigh
Indication	n facilities			
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	ltem number	Design	Package	Weight		
Locking a	Locking and sealing devices/cover sealing device					
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 number	Item number	Design	Package	Weight			
Locking a	Locking and sealing devices/locking device for window						
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			



# ACCESSORIES





1.001.830

#### Varieties of cable termination

Catalog number	Item number	Design	Package	Weight
Varieties	of cable teri	mination		
1.000.420	E229889	clamp strap 70–150 mm² pour 1.ST8 1- 4-pôle + 1.RST8, 1 set = 3 pièces	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



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