

# MULTIFIX® 60

MULTIVERT® Vertical NH Fuse Switch Disconnecter

## BUS BAR SYSTEMS

### COMPONENTS FOR 60MM SYSTEMS



MULTIFIX® 60 is a system for energy distribution comprising a variety of modular combinable components. The energy distribution is carried out via copper bus bars in a 60 mm bus bar system up to 630 A, 400 V AC, 500 V AC, 690 V AC, 45-62 Hz. Short circuit withstand tested to VDE 0660 part 500 and IEC 60439-1.

MULTIFIX® 60 is suitable for triple pole, quadruple pole and quintuple pole applications.

The components of the MULTIFIX® 60 system are mounted directly without drilling. This method offers high flexibility for extension and alteration of existing installations -> reduced installation time.

A new, patented solution allows the direct installation of MULTIVERT® NH-vertical fuse switch disconnectors size 00, 160 A, 3 x single pole switching on to 60 mm bus bar system. The MULTIVERT® can be snapped directly on to the bus bar system without drilling and is therefore completely integrated into the MULTIFIX® 60 system.

## TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Amper (A)	160 A
Size per Standard	000
SCCR	Ue = AC 400 V; Ie = 160 A 80kA Ue = AC 500 V; Ie = 160 A 80kA Ue = AC 690 V; Ie = 100 A 50kA
Switchability	triple pole switching
Product Size	NH000
Number of Poles	3

## FEATURES & BENEFITS

- For bus bars with width 12 - 30mm and thickness 10mm
- Symmetrical switch - top/bottom cable terminal connection
- Safe on load connection/disconnection in accordance with IEC 60947-3

## APPLICATIONS

- Panel board builders
- Control system engineering
- Industrial plants
- Heating & air conditioning systems

## STANDARDS

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



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# MULTIFIX® 60

## MULTIVERT® Vertical NH Fuse Switch Disconnecter

### PRODUCT RANGE

#### MULTIVERT® 160 A size 00 60 mm bus bar system 1 x triple pole switching



1.000.909



1.003.307

Catalog number	Reference number	Cable termination components	Design	Weight kg <sup>1</sup>	Package
1.000.909	E1002183	3 M8 terminal screws/3 clamp straps 4-70 mm <sup>2</sup>	bottom terminal with cover shroud MZ00KH	1.45	1 piece
1.002.489	Z1023154	3 frame clamps Cu 2,5-70 mm <sup>2</sup>	bottom terminal with cover shroud MZ00KH	1.30	1 piece
1.003.140	A1023155	3 M8 terminal screws/3 clamp straps 4-70 mm <sup>2</sup>	bottom terminal MULTIVERT® 1.000.909 with cabling of instrument leads	1.50	1 piece
1.003.307	C1023157	3 M8 terminal screws/3 clamp straps 4-70 mm <sup>2</sup>	top terminal with cover shroud MZ00KH	1.50	1 piece
1.003.308	D1023158	3 M8 terminal screws/3 clamp straps 4-70 mm <sup>2</sup>	top terminal MULTIVERT® 1.003.307 with cabling of instrument leads	1.50	1 piece
1.003.309	E1023159	3 frame clamps Cu 2,5-70 mm <sup>2</sup>	top terminal with cover shroud MZ00KH	1.30	1 piece

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



# MULTIFIX<sup>®</sup> 60

## MULTIVERT<sup>®</sup> Vertical NH Fuse Switch Disconnecter

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

**160 A, 60 mm**  
**1 x triple pole switching**

Number of poles/phases	3
Size	00
Conventional free air thermal current with NH-fuse links $I_{th}$	160 A
Max. power dissipation of fuse links $P_n$	12 W
Conventional free air thermal current with solid links $I_{th}$	250 A
Max. power dissipation of solid links $P_n$	1,2 W
Utilization category to IEC/EN 60947-3 $U_e = AC 400 V; I_e = 160 A$ $U_e = AC 500 V; I_e = 160 A$ $U_e = AC 690 V; I_e = 100 A$	AC 23 B AC 22 B AC 21 B
Rated operational voltage $U_e$	690 V
Rated insulation voltage $U_i$	1000 V
Rated impulse withstand voltage $U_{imp}$	8 kV
Rated frequency	50 ... 60 Hz
Degree of protection	IP 30
Degree of pollution	3
Rated duty	uninterrupted duty
Rated conditional short-circuit current with fuse links $U_e = AC 400 V; I_e = 160 A$ $U_e = AC 500 V; I_e = 160 A$ $U_e = AC 690 V; I_e = 100 A$	80 kA 80 kA 50 kA
Rated short circuit making capacity with solid links $I_{cm}$	4.5 kAsw
Rated short-time withstand current $I_{cw}$	4.5 kA / 1 s
Power dissipation by $I_{th}$ without NH-fuse links	20 W
Power dissipation by $I_{th}$ without solid links	49 W
Installation mode	bus bar installation
<b>Cable terminal connection</b>	
Standard cable terminal	M8
for cable lugs Cu max.	70 mm <sup>2</sup>
for cable lugs Al max.	70 mm <sup>2</sup>
for copper bars with max. dimensions	20 x 5 mm
V-shaped lugs for V-terminal clamps	10 - 95 mm <sup>2</sup>
<b>Bus bar terminal connection</b>	
Standard bus bar terminal	ready fitted hooked clamps
Hooked clamp for bus bar with thickness	10 mm
Bus bar thickness (bus bar system = 60 mm)	20 ... 30 mm
Bus bar system	60 mm

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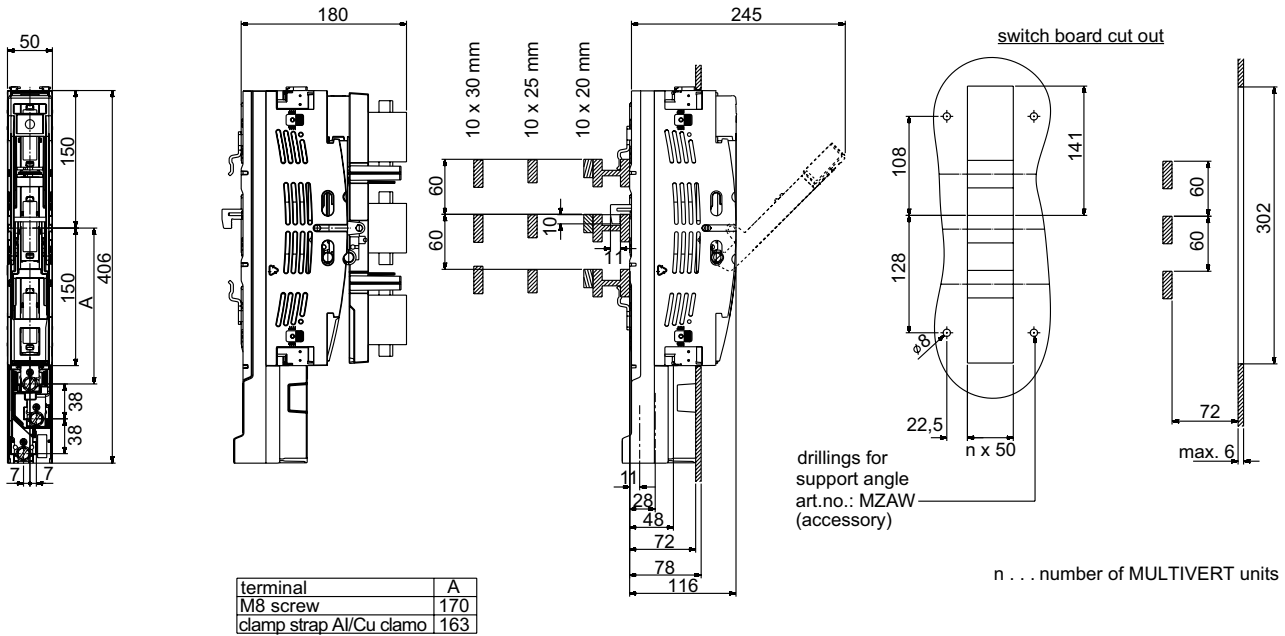
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MULTIVERT® Vertical NH Fuse Switch Disconnecter

## DIMENSIONS

**MULTIVERT® NH-vertical fuse switch disconnecter 160A/60mm**  
**for direct installation without drilling on to 60mm bus bar system (M01147a)**



Dimensions in mm

## ACCESSORIES



MZ00KH



MZ00KA



1.000.915



1.000.914

### Cover/shrouds for cable termination

Catalog number	Reference number	Design	Weight	Package
MZ00KH	F1023298	cover shroud length 106 mm for MULTIVERT®/BSL 160 A	20 g	1 piece
MZ00KA	L1023464	extended cover shroud for cover shroud MZ00KH	40 g	1 piece
1.000.915	H1023300	cover shroud for MULTIVERT®/BSL 160 A with V-terminal	50 g	1 piece
1.000.914	E1023274	rear cover for MULTIVERT®/BSL 160 A with V-terminal	4 g	1 piece

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## MULTIVERT® Vertical NH Fuse Switch Disconnecter

### ACCESSORIES



MZAW

#### Covers/level & system adjustment covers

Catalog number	Reference number	Design	Weight	Package
MZ00AAD	X214081	2 piece adjustment, with integrated area for labeling to adapt to MULTIVERT® for 185 mm bus bar system	0.1 kg	1 set
MZAW	D218687	support angle for support of cover plate 1 set = 4 pieces	27 g	1 set



MZ00AAD



1.002.939

MZO0ESM

#### Indication facilities

Catalog number	Reference number	Design	Weight	Package
1.002.939	Y1023452	electronic fuse monitoring ESÚ size 00 for MULTIVERT® 160 A with cabling of instrument leads	66 g	1 piece
MZO0ESM	D228761	Electronic System Monitor ESM size 00 for MULTIVERT® 160 A with cabling of instrument leads	0.35 kg	1 piece
1.000.852	Q1002285	indicator for switch door position micro switch, 1 change-over contact 5 A, 250 V	9 g	1 piece



1.000.852



1.000.106

1.000.107

#### Amperemeter units

Catalog number	Reference number	Design	Weight	Package
1.000.106	R1023285	size 00, 100 A, with drag indicator, triple pole measurement (optional L1, L2, L3)	0.34 kg	1 piece
1.000.107	S1023286	size 00, 150 A, with drag indicator, triple pole measurement (optional L1, L2, L3)	0.34 kg	1 piece
1.000.100	K1023279	size 00, 100 A, with drag indicator, single pole measurement	0.34 kg	1 piece
1.000.101	L1023280	size 00, 150 A, with drag indicator, single pole measurement	0.34 kg	1 piece



1.000.100



1.000.101



# MULTIFIX<sup>®</sup> 60

MULTIVERT<sup>®</sup> Vertical NH Fuse Switch Disconnecter

## ACCESSORIES



MZ00EM

### Earthing unit

Catalog number	Reference number	Design	Weight	Package
MZ00EM	X1024578	earthing link size 00	0.3 kg	1 piece
MZEGK	V1024576	complete earthing unit including 3 pieces earthing links	5.4 kg	1 piece



MZEGK



MZ00BT2

### Labelling facilities

Catalog number	Reference number	Design	Weight	Package
MZ00BT2	K215611	label holder size 00	0.01 kg	1 piece



### ACCESSORIES



00SZS



00SZESK



00SA70



1.003.571



1.003.433



00SZVK1



1.000.098

#### Varieties of cable termination

Catalog number	Reference number	Design	Weight	Package
00SZS	M229298	M8 terminal screw for switch gear size 00 1 set = 3 pieces	35 g	1 set
00SZESK	E214594	clamp strap Cu 4–70 mm <sup>2</sup> for switch gear size 00 1 set = 3 pieces	35 g	1 set
00SA70	R211523	Al/Cu clamp 1,5–70 mm <sup>2</sup> for switch gear size 00 1 set = 3 pieces	75 g	1 set
1.003.571	V1033684	Al/Cu clamp 50–95 mm <sup>2</sup> round stranded for switch gear size 00 1 set = 3 pieces	88 g	1 set
1.003.433	L1022958	triple clamp per pole 1.5 up to 16 mm <sup>2</sup> 1 set = 3 pieces	0.135 kg	1 piece
00SZVK1	D1023434	V-terminal clamp size 00, 10–70 mm <sup>2</sup> round stranded, 10–95 mm <sup>2</sup> round solid, 35–95 mm <sup>2</sup> single stranded, 50–95 mm <sup>2</sup> single solid, M = 12 Nm	43.3 g	1 piece
1.000.098	E1023435	insulation cap for V-terminal clamp size 00	0.002 kg	1 piece