

# MULTIFIX® 60

MULTIVERT® Vertical NH Fuse Switch Disconnecter

## 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.

### Features Benefits

- For bus bars with width 12 - 30 mm and thickness 10 mm
- Symmetrical switch - top/bottom cable terminal connection

### Applications

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

### Technical data overview

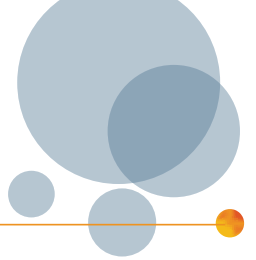
Volt (VAC)	690 VAC
Amper (A)	160 A
Size per Standard	000
Product Size	NH000
SCCR	Ue = AC 400 V; Ie = 160 A 80kA Ue = AC 500 V; Ie = 160 A 80kA Ue = AC 690 V; Ie = 100 A 50kA
Number of Poles	3
Switchability	triple pole switching



### 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

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



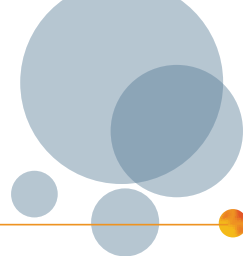
1.000.909



1.003.307

Catalog number	Reference number	Cable termination components	Design	Weight kg <sup>1)</sup>	Package
1.000.909	E1022183	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
1.003.309	E1023159	3 frame clamps Cu 2,5-70 mm <sup>2</sup>	top terminal with cover shroud MZ00KH	1.30	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) weight in kg per piece or set including package



### Technical data in accordance with EN / IEC 60947

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

Installation mode	bus bar installation
Size	00
Number of poles/phases	3
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 0
Degree of pollution	3
Rated duty	uninterrupted duty
Rated short circuit making capacity with solid links $I_{cm}$	4.5 kAsw
Rated short circuit making capacity 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 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

#### Cable terminal connection

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>

#### Bus bar terminal connection

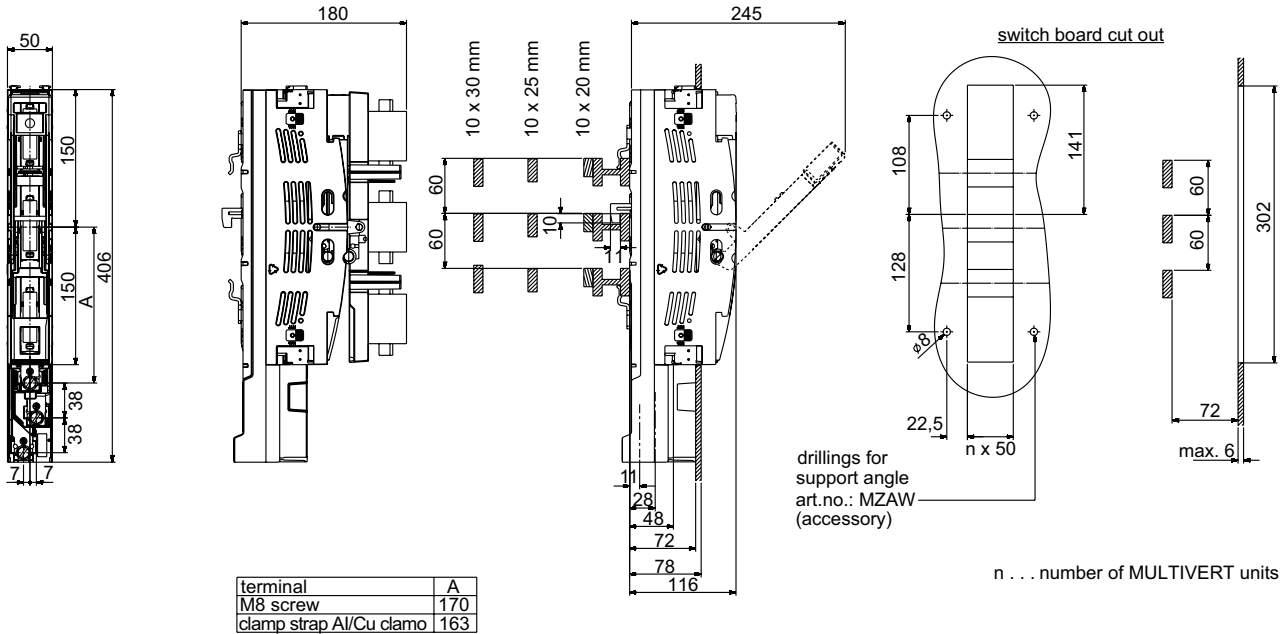
Standard bus bar terminal	ready fitted hooked clamps
Hooked clamp for bus bar with thickness	10 mm
Bus bar system	60 mm
Bus bar thickness (bus bar system = 60 mm)	20 ... 30 mm

# MULTIFIX® 60

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

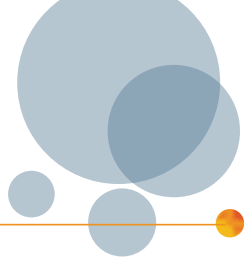


1.000.914

### Cover/shrouds for cable termination

Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
MZ00KH	F1023298	cover shroud length 106 mm for MULTIVERT®/BSL 160 A	0.02	1 piece
MZ00KA	L1023464	extended cover shroud for cover shroud MZ00KH	0.04	1 piece
1.000.915	H1023300	cover shroud for MULTIVERT®/BSL 160 A with V-terminal	0.05	1 piece
1.000.914	E1023274	rear cover for MULTIVERT®/BSL 160 A with V-terminal	0.004	1 piece

1) weight in kg per piece or set including package



### Accessories



MZA W

#### Covers/level & system adjustment covers

Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
MZ00AAD	X214081	2 piece adjustment, with integrated area for labeling to adapt to MULTIVERT® for 185 mm bus bar system	0.10	1 set
MZA W	D218687	support angle for support of cover plate 1 set = 4 pieces	0.03	1 set



MZ00AAD



1.002.939

MZ00ESM

#### Indication facilities

Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
1.002.939	Y1023452	electronic fuse monitoring ESÜ size 00 for MULTIVERT® 160 A with cabling of instrument leads	0.06	1 piece
MZ00ESM	D228761	Electronic System Monitor ESM size 00 for MULTIVERT® 160 A with cabling of instrument leads	0.35	1 piece
1.000.852	Q1002285	indicator for switch door position micro switch, 1 change-over contact 5 A, 250 V	0.00	1 piece



1.000.852

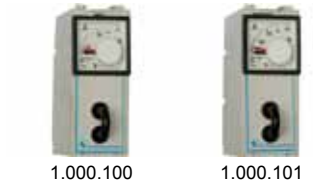


1.000.106

1.000.107

#### Amperemeter units

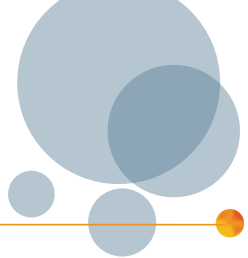
Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
1.000.106	R1023285	size 00, 100 A, with drag indicator, triple pole measurement (optional L1, L2, L3)	0.34	1 piece
1.000.107	S1023286	size 00, 150 A, with drag indicator, triple pole measurement (optional L1, L2, L3)	0.34	1 piece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



1.000.100

1.000.101

1) weight in kg per piece or set including package



### Accessories



MZ00EM



MZEGK

#### Earthing unit

Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
MZ00EM	X1024578	earthing link size 00	0.30	1 piece
MZEGK	V1024576	complete earthing unit including 3 pieces earthing links	5.40	1 piece



MZ00BT2

#### Labelling facilities

Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
MZ00BT2	K215611	label holder size 00	0.01	1 piece



00SZS

00SZESK



00SA70

1.003.571



1.003.433

00SZVK1



1.000.098

#### Varieties of cable termination

Catalog number	Reference number	Design	Weight kg <sup>1)</sup>	Package
00SZS	M229298	M8 terminal screw for switch gear size 00 1 set = 3 pieces	0.03	1 set
00SZESK	E214594	clamp strap Cu 4–70 mm <sup>2</sup> for switch gear size 00 1 set = 3 pieces	0.04	1 set
00SA70	R211523	Al/Cu clamp 1,5–70 mm <sup>2</sup> for switch gear size 00 1 set = 3 pieces	0.08	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	0.10	1 set
1.003.433	L1022958	triple clamp per pole 1.5 up to 16 mm <sup>2</sup> 1 set = 3 pieces	-	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	0.04	1 piece
1.000.098	E1023435	insulation cap for V-terminal clamp size 00	0.002	1 piece

1) weight in kg per piece or set including package