# MULTIVERT® 630A 4P (3P+N) 

Size 3, 690VAC

## IEC FUSE SWITCH DISCONNECTORS

## NH VERTICAL FUSE SWITCH DISCONNECTOR



MULTIVERT ${ }^{\circledR}$ NH 4P is the first vertical 4-pole switchable (3P + N) in-line fuse switch disconnector for busbar systems 185 mm with an overall width of 100 mm .

It is the most inovative and cost-efficient market solution to realize grid disconnection on all poles.

MULTIVERT ${ }^{\oplus}$ 630A 4P is designed for NH fuse-links in accordance with IEC/EN 60269-2, VDE 0636-2, size 3: 630A.

The system is easy to install via bus bar mounting and is short-circuit proof.

TECHNICAL DATA OVERVIEW

| Voltage AC | 690 VAC |
| :--- | :--- |
| Amper (A) | 630 A |
| Size per Standard | 3 |
| SCCR | $\mathrm{Ue}=\mathrm{AC} 400 \mathrm{~V} ; \mathrm{Ie}=630 \mathrm{~A} \quad 80 \mathrm{kA}$ <br> $\mathrm{Ue}=\mathrm{AC} 500 \mathrm{~V} ; \mathrm{Ie}=630 \mathrm{~A} \quad 80 \mathrm{kA}$ <br> Ue $=\mathrm{AC} 690 \mathrm{~V} ; \mathrm{Ie}=500 \mathrm{~A} \quad 50 \mathrm{kA}$ |
| Mounting | bus bar system 185 mm |
| Switchability | 4 poles switching |
| Number of Poles | $4 \mathrm{P}(3 \mathrm{P}+\mathrm{N})$ |

## FEATURES \& BENEFITS

- Safe on load connection/disconnection in accordance with IEC 60947-3
- 4-poles switching (3P+N) according to DIN VDE 0100-444
- N-pole closing earlier and opening later than the outer conductors
- Compact design : 100mm overall width
- Easy installation on 185 mm bus bar system
Standard design with M 12 screws
- Varieties of cable termination: bolt, V-terminal, insert nut
- Touch protection IP 30 with central cover
- Lockable and sealable in normal service position
- Voltage measurement from the front


## APPLICATIONS

- Cable distribution cabinets
- Renewable energy
- Low voltage distribution boards
- Network systems : TT, TN-S, TN-C-S


## STANDARDS

- IEC/EN 60 947-3
- DIN VDE 0100-444
- For NH-fuse links size 3 in accordance with IEC/EN 60 269-2, VDE 0636-2


## PRODUCT RANGE

MULTIVERT ${ }^{\text {® }} 630$ A size 3185 mm 4P (3P+N)

| Catalog <br> number | Item <br> number | Cable termination <br> components | Design | Package | Weight |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 4.350 .000 | G1056005 | M12 bolts | $4 \mathrm{P}(3 \mathrm{P}+\mathrm{N})$ | 1 piece | 8.9 kg |
| 4.370 .000 | W1058272 | V-terminal for V-clamps | $4 \mathrm{P}(3 \mathrm{P}+\mathrm{N})$ | 1 piece | 8.9 kg |
| 4.380 .000 | X1058273 | M12 bus bar terminal <br> V-terminal for N pole | 4P (3P+N) <br> MULTIVERT with lateral busbar <br> terminals, busbar coupler switch | 1 piece | 6.5 kg |

TECHNICAL DATA IN ACCORDANCE WITH EN / IEC 60947

|  | 630 A <br> 1x4 pole switching |
| :---: | :---: |
| Number of poles/phases | 4P (3P+N) |
| Size | 3 |
| Conventional free air thermal current with NH-fuse links $\mathrm{I}_{\text {th }}$ | 630 A |
| Max. power dissipation of fuse links $\mathrm{P}_{\mathrm{n}}$ | 48 W |
| Conventional free air thermal current with solid links $I_{\text {th }}$ | 800 A |
| Max. power dissipation of solid links $\mathrm{P}_{\mathrm{n}}$ | 17 W |
| Utilization category to IEC/EN 60947-3 $\begin{aligned} & \mathrm{U}_{\mathrm{e}}=\mathrm{AC} 400 \mathrm{~V} ; \mathrm{I}_{\mathrm{e}}=630 \mathrm{~A} \\ & \mathrm{U}_{\mathrm{e}}=\mathrm{AC} 500 \mathrm{~V} ; \mathrm{I}_{\mathrm{e}}=630 \mathrm{~A} \\ & \mathrm{U}_{\mathrm{e}}=\mathrm{AC} 690 \mathrm{~V} ; \mathrm{I}_{\mathrm{e}}=630 \mathrm{~A} \end{aligned}$ | AC 23 B <br> AC 22 B <br> AC 21 B |
| Rated operational voltage $\mathrm{U}_{\mathrm{e}}$ | 690 V |
| Rated insulation voltage $\mathrm{U}_{\mathrm{i}}$ | 1000 V |
| Rated impulse withstand voltage $\mathrm{U}_{\text {imp }}$ | 8 kV |
| Rated frequency | $50 \ldots 60 \mathrm{~Hz}$ |
| Degree of protection | IP 30 |
| Degree of pollution | 3 |
| Rated duty | uninterrupted duty |
| Rated conditional short-circuit current with fuse links $\begin{aligned} & \mathrm{U}_{\mathrm{e}}=\mathrm{AC} 400 \mathrm{~V} ; \mathrm{I}_{\mathrm{e}}=630 \mathrm{~A} \\ & \mathrm{U}_{\mathrm{e}}=\mathrm{AC} 500 \mathrm{~V} ; \mathrm{I}_{\mathrm{e}}=630 \mathrm{~A} \\ & \mathrm{U}_{\mathrm{e}}=\mathrm{AC} 690 \mathrm{~V} ; \mathrm{I}_{\mathrm{e}}=500 \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 80 \mathrm{kA} \\ & 80 \mathrm{kA} \\ & 50 \mathrm{kA} \end{aligned}$ |
| Rated short circuit making capacity with solid links $\mathrm{I}_{\mathrm{cm}}$ | 16 kAsw |
| Rated short-time withstand current $\mathrm{I}_{\mathrm{cw}}$ | $12 \mathrm{kA} / 1 \mathrm{~s}$ |
| Power dissipation by $\mathrm{I}_{\text {th }}$ without NH -fuse links | 147 W |
| Power dissipation by $\mathrm{I}_{\text {th }}$ without solid links | 243 W |
| Installation mode | bus bar installation |
| Cable terminal connection |  |
| Standard cable terminal | M12 |
| for cable lugs Cu max. | $240 \mathrm{~mm}^{2}$ |
| for cable lugs AI max. | $300 \mathrm{~mm}^{2}$ |
| for copper bars with max. dimensions | $40 \times 10 \mathrm{~mm}$ |
| V-shaped lugs for V-terminal clamps | 35-240 mm ${ }^{2}$ |
| Bus bar terminal connection |  |
| Standard bus bar terminal | M12 |
| Bus bar system | 185 mm |

MULTIVERT ${ }^{\circledR}$ 630A 4P (3P+N)
Size 3, 690VAC

## DIMENSIONS

MULTIVERT ${ }^{\circledR}$ 630A ${ }^{\text {NH-vertical fuse switch disconnector, 4P (3P+N) }}$
direct installation with screws on to 185 mm bus bar system


MULTIVERT ${ }^{\circledR}$ 630A 4P (3P+N)
Size 3, 690VAC

## DIMENSIONS

MULTIVERT ${ }^{\circledR}$ 630A NH-vertical fuse switch disconnector, 4P (3P+N)
direct installation with screws on to 185 mm bus bar system


## DIMENSIONS

Cable termination MULTIVERT ${ }^{\circledR}$ 630A
Terminal connection

| Type of terminal | Bolt | Insert nut | V-terminal |
| :---: | :---: | :---: | :---: |
| to use with | Cable lug width max. 44mm | Cable lug width max. 44mm | V-clamp |
| Cross section AI - DIN 46329 | max. $300 \mathrm{~mm}^{2}$ | max. $300 \mathrm{~mm}^{2}$ | max. $300 \mathrm{~mm}^{2}$ se |
| Cross section Cu - DIN 46235 | max. $240 \mathrm{~mm}^{2}$ | max. $240 \mathrm{~mm}^{2}$ |  |
| Tightening torque | $35 \pm 3 \mathrm{Nm}$ | $35 \pm 3 \mathrm{Nm}$ | According printing on clamp |
|  |  |  |  |

Dimensions in mm

## EXPLODED SKETCH

## MULTIVERT ${ }^{\text {® }}$ 630A 4 pole switching (3P+N)



| no. |  | Reference |
| :---: | :--- | :--- |
| 1 |  | Short description |
| 2 |  | Main base |
| 3 |  | Protection cover |
| 4 |  | Handle |
| 5 |  | Integrated cover shroud |
| 6 | D218687 | Support angle |
| 7 | Q1002285 | Indicator for switch door position |
| 8 | B222181 | Labelling facilities MZBT |
| 9 | G1058305 | V-clamps, 1 set = 4 pieces |
| 10 | J1002279 | Cover shroud, length 70mm |

## MULTIVERT® 630A 4P (3P+N)

## ACCESSORIES


1.002 .095


MZAW

1.000 .852

## Cover/shrouds for cable termination

| Catalog <br> number | Item number | Design | Application | Package | Weight |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.002 .095 | $J 1002279$ | cover shroud for extended cover <br> length 70 mm | bottom terminal | 1 piece | 0.12 kg |

## Covers/level \& system adjustment covers

| Catalog <br> number | Item number | Design | Package | Weight |
| :--- | :--- | :--- | :--- | :--- |
| MZAW | D218687 | support angle for support of cover plate <br> 1 set $=4$ pieces | 1 set | 27 g |

Indication facilities

| Catalog <br> number | Item number | Design | Package | Weight |
| :--- | :--- | :--- | :--- | :--- |
| 1.000 .852 | Q1002285 | indicator for switch door position <br> micro switch, 1 change-over contact $5 \mathrm{~A}, 250 \mathrm{~V}$ | 1 piece | 90 g |

## Labelling facilities

| Catalog <br> number | Item number | Design | Package | Weight |
| :--- | :--- | :--- | :--- | :--- |
| MZBT | B222181 | label holder size 1, 2,3 | 1 piece | 30 g |

## Varieties of cable termination

| Catalog <br> number | Item number | Design | Package | Weight |
| :--- | :--- | :--- | :--- | :--- |
| 1.004 .402 | G1058305 | V-terminal clamp size 1,2,3, <br> $95-240 \mathrm{~mm}^{2}$ single solid, $70-240 \mathrm{~mm}^{2}$ single stranded, <br> $50-185 \mathrm{~mm}^{2}$ round stranded, $70-240 \mathrm{~mm}^{2}$ round solid, <br> $\mathrm{M}=23-27 \mathrm{Nm}$ <br> 1 set $=4$ pieces | 1 set | 0.3 kg |
|  |  | V-terminal clamp size 1,2,3, <br> $95-300 \mathrm{~mm}^{2}$ single solid, $70-240 \mathrm{~mm}^{2}$ single stranded, <br> 1.004 .403 | H1058306$50-185 \mathrm{~mm}^{2}$ round stranded, $70-240 \mathrm{~mm}^{2}$ round solid, <br> $\mathrm{M}=23-27 \mathrm{Nm}$ <br> 1 set $=4$ pieces | 1 set |

