Low-voltage Distributions

- Series 88 - Vamocon
- tested for resistance to accidental arcing
- Acc. to EN 61439-2 tested
Technical data

General, protection against internal arcs

Special features of series 88

Detailed view on series 88

Possible system components and field quantity

Checklist for the planning

Representatives close to you

### Technical Data

- International protection acc. to DIN EN 60529: up to IP 5X
- Safety precaution: with protective conductor (Protection class I)
- Category of over-voltage: III
- Degree of pollution: 3
- Interior division acc. to IEC 61439-2: part 1 - 4b
- Protection class: 1 earthed
- Rated current $I_n$: up to 5000 A
- Rated voltage $U_e$: 230 / 690 V AC
- Rated insulation voltage $U_i$: 1000 V
- Rated peak withstand current resistance $I_{pk}$: 330 kA
- Rated short-time current resistance $I_{cw}$: 150 kA / 1s
- Biggest dimensions allowed:
  - Width: 1200 mm
  - Height: 2200 mm (plus socket 100/200 mm, plus canopy 60 mm)
- Biggest transportation unit allowed:
  - Width: 1250 mm
  - Height: 2460 mm
  - Depth: 1075 mm
- Ambient temperature: -5 up to +40° C
- Ambient temperature (average value 24h): +35° C
- Relative humidity: 50% at 40° C

### Electrical varieties of components:

- Feeding with circuit breaker from Eaton, ABB, Schneider, Siemens, GE
- Outgoing feeder downwards / upwards; with low-voltage fuse switch disconnector from DRIESCHER, SASIL-J. Müller, SLIMLINE-ABB, EFEN, Jung, Pronutec
Protection against internal arcs
The series 88 offers the highest possible safety from the effects of an arc.

The protection from the effects of an arc is the highest requirement a power distribution has to meet. Doors and covers may not either open or remove nor may burn holes occur in parts of the casing.

Indicators may not inflame and the circuit of the protective conductor has to stay functional. The series 88 offers this protection. Test of IPH acc. to IEC 61641 respectively VDE 0660 Part 500/2 that have been successfully passed, confirm that the protection and health of the personnel is given any time.

For an additional increase of safety we can optionally offer you arc barriers in the panel frame as well as insulated main bus bar systems.

The ingenious ventilation makes high currents in compact installations possible. Without further accessory the ventilating apertures combine a high airflow with a high protection class.

The screwing of the bus bars is and remains accessible from the front. Sockets are available in different heights, but also without a socket, the doors can be opened and closed without problems in case of uneven underground.
Special features:

DRIESCHER – low-voltage distributions type 88 correspond to the valid instructions of VDE.

• tested acc. to DIN EN 61439-2.
• approved DRIESCHER long-life cycle through galvanized section steel frames.
• best quality and highest personnel and operating safety.
• highest safety from the effects of an arc.
• protection class up to IP 5x.
• short delivery times because of the flexibility of the modular system.
• above the outgoing circuits with additional place for the installation of measuring devices, control devices, etc.
• all panels are mounted and wired in the factory and delivered ready for connection.
• on requirement empty panels with mounting plates matching to the closed construction are available.
• sheet steel covers are available in all RAL-colours (standard colour RAL 7035 powder coated).
  All sheets are aluminium zinc galvanized.
• highest possible operating safety and reliability with the proven DRIESCHER low-voltage fuse switch disconnector type 403 (see booklet of the trade association: “Safety during working on electrical installations”).
double edged doors with ventilation, earthing and mounting bolts as standard

front cover for labelling, ventilation on the top

hinge 180° with locking for the mounting of the door (electric arc safe)

25 mm and 12.5 mm perforation in all frame profiles

doors with turning lever and lock or quarter-turn lock

socket with 100 or 200 mm on desire

lower shelf, support for circuit breaker, support for bus bar support and door stop in one

expanded metal cover (0.9 mm), protection class IP 4x
Supply feeders

<table>
<thead>
<tr>
<th>Pos</th>
<th>Equipment (3-pole)</th>
<th>panel width</th>
<th>( a )</th>
<th>possible panel depth</th>
<th>possible panel height</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>on request</td>
<td>400</td>
<td>335</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>2</td>
<td>ABB E1, 3WL BG1, Schneider NT16, further on request</td>
<td>500</td>
<td>435</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>3</td>
<td>ABB E3, 3WL BG2, Schneider NW40, further on request</td>
<td>600</td>
<td>535</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>4</td>
<td>ABB E4, 3WL BG3, Schneider NW40, further on request</td>
<td>800</td>
<td>765</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>5</td>
<td>ABB E6, 3WL BG5, Schneider NW40, further on request</td>
<td>1000</td>
<td>935</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>6</td>
<td>on request</td>
<td>1200</td>
<td>1135</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
</tbody>
</table>

Outgoing feeders with 403 systems

<table>
<thead>
<tr>
<th>Pos</th>
<th>Equipment</th>
<th>Equipment alternative</th>
<th>panel width</th>
<th>( a )</th>
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<td>2000, 2200</td>
</tr>
<tr>
<td>2</td>
<td>4 x 400 A</td>
<td>2 x 630 A + 2 x 400 A</td>
<td>600</td>
<td>535</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>3</td>
<td>7 x 400 A</td>
<td>2 x 630 A + 5 x 400 A</td>
<td>850</td>
<td>785</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>4</td>
<td>8 x 400 A</td>
<td>2 x 630 A + 6 x 400 A</td>
<td>1000</td>
<td>935</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>5</td>
<td>10 x 400 A</td>
<td>2 x 630 A + 8 x 400 A</td>
<td>1200</td>
<td>1135</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
</tbody>
</table>

Outgoing feeders with 203 systems

<table>
<thead>
<tr>
<th>Pos</th>
<th>Equipment</th>
<th>Equipment alternative</th>
<th>panel width</th>
<th>( a )</th>
<th>possible panel depth</th>
<th>possible panel height</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>on request</td>
<td></td>
<td>400</td>
<td>335</td>
<td>425, 625, 825, 1025</td>
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<tr>
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<td>5 x 400 A</td>
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<td></td>
<td>850</td>
<td>785</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>4</td>
<td>7 x 400 A</td>
<td>9 x 400 A</td>
<td>1000</td>
<td>935</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
<tr>
<td>5</td>
<td>9 x 400 A</td>
<td>11 x 400 A</td>
<td>1200</td>
<td>1135</td>
<td>425, 625, 825, 1025</td>
<td>2000, 2200</td>
</tr>
</tbody>
</table>

Multipart sockets 100 mm and 200 mm high are optionally available in all panel dimensions.
Checklist for the planning of low-voltage switchgears

- please remove or copy and send back to Elektrotechnische Werke Fritz Driescher & Söhne GmbH
  85366 Moosburg • Phone +49 87 61 6 81-0 • Fax +49 87 61 6 81-1 37 • vertrieb.nsp@driescher.de

Sender

| Company | ____________________________ |
| First name | ______ Surname | ____________________________ |
| Department | ____________________________ |
| Street | ____________________________ |
| Post code | ______ Place | ____________________________ |
| Phone | ____________________________ | Fax | ____________________________ |
| email | ____________________________ | http | ____________________________ |

Rated transformer power _________ kVA
Rated current - bus bar _________ A
Network ____________________________

Series | 88 | Colour _________

Supply feeder

- fuse disconnector LTL 4a • _________ A
- circuit breaker including adjustable short-circuit trip and overload trip
- rated current _________ A
- fixed mounting plug-in device
- manual actuator motor actuator
- with operating current release _________ V
- with undervoltage release _________ V undelayed
- with undervoltage release _________ V delayed 0,5 up to 4s.
- with normal auxiliary switch Nhi (2C+2O)
- with relative auxiliary switch Rhi (2C+1O)
- with leading auxiliary switch Vhi (2C+1O)
- with current/voltage measurement (including fuse protection of the station lighting)
- with analog indicating devices
- with multifunction device type _________ Fabr. _________

Outgoing feeder

| low-voltage fuse switch disconnector | 403 | 203 / 400 A (NH 2) |
| low-voltage fuse switch disconnector | 403 | 203 / 630 A (NH 3) |
| low-voltage fuse switch disconnector | 403 | 203 / _________ A |
| reserve positions | 403 | 203 / _________ A |
| low-voltage fuse switch disconnector | 301 / 160 A (NH 00) |
| reserve positions | 301 / 160 A |

- outgoing circuit 1-pole or 3-pole
- outgoing circuit with connecting screws M12 x 35 mm
- outgoing circuit with V-connecting terminal 50 up to 300 mm² se
- outgoing circuit with direct connecting terminal 50 up to 185 mm² se
- with outgoing measurement 1-pole (L3)
- with outgoing measurement 3-pole
- with inspection window in the instrument board

Further options

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