1. DESCRIPTION - USE
Isolating switch ensuring the breaking and the isolation of electrical circuits.
Fully visible breaking indication.

2. RANGE
Polarity and symbols:

1-pole 250V~
- 40A
- 63A
- 100A

2-poles 400V~
- 40A
- 63A
- 100A
- 125A

3-poles 400V~
- 40A
- 63A
- 100A
- 125A

4-poles 400V~
- 40A
- 63A
- 100A
- 125A

3. OVERALL DIMENSIONS
Rated current 40 et 63 A

<table>
<thead>
<tr>
<th>A (mm)</th>
<th>1-pole</th>
<th>2-poles</th>
<th>3-poles</th>
<th>4-poles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17.7</td>
<td>35.4</td>
<td>53.1</td>
<td>70.8</td>
</tr>
</tbody>
</table>

Rated current 100 et 125 A
4. PREPARATION - CONNECTION

Mounting:
- On symmetrical EN 60.715 rail or DIN 35 rail.

Operating positions:
- Vertical, Horizontal, Upside down, On the side

Power supply:
- Either from the top or the bottom.

Module maintenance on devices 40 and 63A:
- Isolating switches may be replaced in the middle of a row supplied with busbars without disconnecting the other products.
- This method is available for the 1-pole, 2-poles, 3-poles and 4-poles.

Preparation - Connection (continued)

Connection:
- Terminals protected against direct contact IP20, wired device.
- Cage terminals, with release and captive screws.
- On devices 40 and 63A, terminals are fitted with shutters, preventing a cable being placed under the terminal, with the terminal partly open or closed.
- Alignment and spacing of the terminals permitting connection with the other products in the range via prong supply busbars.

Conductor type:
- Copper cable or supply busbar.
- Cable cross-section:
  - Rated current 40/63A:
    - Without ferrule
      - Rigid cable: 1 conductor 1.5 to 35 mm²
      - Flexible cable: 1 conductor 1.5 to 25 mm²
    - With ferrule
      - 2 conductors 1.5 to 16 mm²
  - Rated current 100/125A:
    - Without ferrule
      - Rigid cable: 1 conductor 4 to 50 mm²
      - Flexible cable: 1 conductor 4 to 35 mm²
    - With ferrule
      - 2 conductors 4 to 16 mm²

Recommended tools:
- For the terminals:
  - Screwdriver with 5.5 to 6.5 mm blade.
  - Pozidriv no. 2 screwdriver.
- For attaching or removing the DIN rail:
  - Screwdriver with 5.5 to 6 mm blade.
  - Pozidriv no. 2 screwdriver.

Manual actuation of the Isolating switch:
- Ergonomic 2-position handle:
  - "O-OFF": Device open.
  - "I-ON": Device closed.

Contact status display:
- By marking of the handle:
  - "O-OFF" in white on a green background = contacts open.
  - "I-ON" in white on a red background = contacts closed.

Locking:
- Padlocks possible in the open and closed positions with padlock support (Cat. No. 4 063 03) and Ø5 mm padlock (Cat. N°. 4 063 13) or Ø6 mm padlock (Cat. N°. 0 227 97).
Isolating switch DX³-IS
1 module per pole, from 40 to 125A

4. PREPARATION - CONNECTION (continued)
Sealing:
. Possible in the open or closed positions.

Labelling:
. Circuit identification by way of a label inserted in the label holder situated on the front of the product.

5. GENERAL CHARACTERISTICS
Marking on the front side:
. By permanent ink pad printing.

Marking on the upper panel:
. By permanent ink pad printing

Electrical diagram

Rated operational voltage:
1-pole: . Ue = 250 V ~
2-poles, 3-poles and 4-poles: . Ue = 400 V ~

Rated frequency:
. 50/60 Hz with standard tolerances.

Short circuit withstand:
. Maximum capacity switching on short-circuit:
  - Rated current 40/63A: 4500 A
  - Rated current 100/125A: 5000 A

Insulation voltage:
. Ui = 500 V

Technical data sheet: F01480EN/01
Updated on: 07/11/2013 Created on: 15/11/2012

5. GENERAL CHARACTERISTICS (continued)
Rated impulse withstand voltage:
. Uimp = 6 kV

Direct current utilization:
. 48V (110V with 2 poles serial cabling).

Utilization category:
. AC22: Mixed load.
. A: Frequent operations.

Degree of pollution:
. 3 in accordance with standard CEI 60664-1.

Power dissipated per pole:

<table>
<thead>
<tr>
<th></th>
<th>40 A</th>
<th>63A</th>
<th>100A</th>
<th>125A</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>0.67W</td>
<td>1.67W</td>
<td>3.70W</td>
<td>5.78W</td>
</tr>
</tbody>
</table>

Degree or class of protection:
. Terminals protected against direct contact. Class of protection against solid objects and liquids (wired device): IP20 in accordance with standards IEC 529 – EN 60529 and NF 20-010.
. Class II in relation to metallic conductive parts.
. Class of protection against mechanical impacts IK04 in accordance with standard EN 62262.

Plastic materials:
. Polyamide, PBT and PC

Enclosure heat and fire resistance:
. Resistance to glow wire tests at 960°C, in accordance with standard CEI 60695-2-10 & 60695-2-11.
. Classification V2, in accordance with standard UL94.

Higher heating potential:
. The heat potential is assessed at:

<table>
<thead>
<tr>
<th></th>
<th>1-pole</th>
<th>2-poles</th>
<th>3-poles</th>
<th>4-poles</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJ</td>
<td>1.27MJ</td>
<td>2.52MJ</td>
<td>3.79MJ</td>
<td>5.03MJ</td>
</tr>
</tbody>
</table>

Closing and opening effort via the handle:

<table>
<thead>
<tr>
<th>Handle force</th>
<th>1-pole</th>
<th>2-poles</th>
<th>3-poles</th>
<th>4-poles</th>
</tr>
</thead>
<tbody>
<tr>
<td>To switch Off</td>
<td>6N</td>
<td>13N</td>
<td>18N</td>
<td>25N</td>
</tr>
<tr>
<td>To switch On</td>
<td>17N</td>
<td>34N</td>
<td>50N</td>
<td>66N</td>
</tr>
</tbody>
</table>

Mechanical endurance:
. Compliant with standard IEC/EN 60947-3 & IEC/EN 60669-2-4

<table>
<thead>
<tr>
<th>Rated current</th>
<th>40 / 63 A</th>
<th>100 / 125 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nb operations with no load</td>
<td>200 000</td>
<td>100 000</td>
</tr>
</tbody>
</table>
Isolating switch DX³-IS
1 module per pole, from 40 to 125A

5. GENERAL CHARACTERISTICS (continued)

Electrical endurance:
- Compliant with standard IEC/EN 60947-3 & IEC/EN 60669-2-4

<table>
<thead>
<tr>
<th>operations with load</th>
<th>40 / 63 A</th>
<th>100 / 125 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC22A (in accordance with IEC/EN 60947-3)</td>
<td>20 000</td>
<td>5 000</td>
</tr>
</tbody>
</table>

Vibrations and tremors resistance:
- Compliant with appendix Q catégorie F of standard IEC/EN 60947-1.

Ambient temperatures:
- Operation: from -25 °C to +70 °C.
- Storage: from -40 °C to +70 °C.

Short-circuit behavior in coordination with upstream protection:
- Tests performed according to the protocol of IEC/EN 60669-2-4:
  - The device remains fully functional and meets the switch tests after suffering two short circuit established in coordination with the DPCC of the following table.
  - The first short circuit being set at an angle of 45 °.
  - The second being provided by the switching on of the isolator switch on the short-circuit.

### Table: Rated voltage 400V–

<table>
<thead>
<tr>
<th>Upstream protection</th>
<th>40A</th>
<th>63A</th>
<th>100A</th>
<th>125A</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX³ 4500A/6kA</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX³ 6000A/10kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DX³ 10000A/16kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DX³ 25kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DX³ 36kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DX³ 50kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 160A 16kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 160A 25kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 160A 36kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 160A 50kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 250A 25kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 250A 36kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>DPX³ 250A 70kA</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

### Table: Rated voltage 250V–

<table>
<thead>
<tr>
<th>Upstream protection</th>
<th>40A</th>
<th>63A</th>
<th>100A</th>
<th>125A</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX³ 4500A/4,5kA</td>
<td>4,5</td>
<td>4,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX³ 6000A/6kA</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DX³ 10000A/16kA</td>
<td>10</td>
<td>10</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DX³ 25kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DX³ 36kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DX³ 50kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 160A 16kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 160A 25kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 160A 36kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 160A 50kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 250A 25kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 250A 36kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>DPX³ 250A 70kA</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

### Table: Packaged volume:

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Volume (dm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-pole</td>
<td>Per 10</td>
</tr>
<tr>
<td>2-poles</td>
<td>Per 5</td>
</tr>
<tr>
<td>3-poles</td>
<td>Per 1</td>
</tr>
<tr>
<td>4-poles</td>
<td>Per 1</td>
</tr>
</tbody>
</table>

Technical data sheet: F01480EN/01
Updated on: 07/11/2013
Created on: 15/11/2012
5. GENERAL CHARACTERISTICS (continued)

### Average unit weight:

<table>
<thead>
<tr>
<th></th>
<th>40 / 63 A</th>
<th>100 / 125 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-pole</td>
<td>86 g</td>
<td>91 g</td>
</tr>
<tr>
<td>2-poles</td>
<td>170 g</td>
<td>181 g</td>
</tr>
<tr>
<td>3-poles</td>
<td>255 g</td>
<td>272 g</td>
</tr>
<tr>
<td>4-poles</td>
<td>340 g</td>
<td>361 g</td>
</tr>
</tbody>
</table>

6. COMPLIANCE AND APPROVALS

In accordance with standards:


Usage in special conditions:

- Compliant with appendix Q category F of standard IEC/EN 60947-1.

Respect for the environment – Compliance with European Union Directives:

- Compliance with Directive 2002/95/EC of 27/01/03 known as "RoHS" which provides for a restriction on the use of dangerous substances such as lead, mercury, cadmium, hexavalent chromium and polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) brominated flame retardants from 1st July 2006.

Plastic materials:

- Halogen free plastic materials.
- Labelling of parts compliant with ISO 11469 and ISO 1043.

Packaging:

- Design and manufacture of packaging compliant with decree 98-638 of 20/07/98 and Directive 94/62/EC.

Approvals obtained:

- See list of approvals available.

7. AUXILIARIES AND ACCESSORIES

### Wiring accessories:

- Supply busbar and connection module with busbar up to 63A:
  - HX³ 1-pole universal supply busbar (Cat N°: 4 049 26, 4 049 37).
  - HX³ 4-poles supply busbar « head of group » (Cat N°: 4 052 00, 4 052 01, 4 052 02) with DX-auto terminal connection module -2P or 4P (Cat N°: 4 063 00, 4 063 01).
  - HX³ busbar for screw terminal (Cat N°: 4 049 38, 4 049 39, 4 049 40, 4 049 41, 4 049 42, 4 049 43, 4 049 44, 4 049 45).

- HX³ connection module plug-in system set (Cat N° 4 052 22) for devices 40A and 63A.
- Connection terminals (Cat N°: 4 049 05, 4 049 06, 4 052 08).
- Sealeable screwcover (Cat N°: 4 063 04).
- Terminal for aluminium conductor 50 mm² max for DX³-IS ≤ 63A (Cat N°: 4 063 10).
- Insulating shield (Cat N°: 4 063 05).

### Signalling auxiliaries:

- Auxiliary contact (0.5 module, Cat N°: 4 062 58).
- Double Auxiliary contact (1 module, Cat N°: 4 062 66).

### Installation software:

- XL PRO³.