INSTALLATION INSTRUCTION

DC switch disconnectors
OTDC800...1000F_/OTDC800...1000UF_
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Use of symbols

Hazardous voltage
Warns about a situation where a hazardous voltage may cause physical injury to a person or damage to equipment.

Caution
Provides important information or warns about a situation that may have a detrimental effect on equipment.

General warning
Warns about a situation where something other than electrical equipment may cause physical injury to a person or damage to equipment.

Information
Provides important information about the equipment.
Receiving, handling and storage

Receiving and handling
Upon receipt, carefully inspect the switch for damage that may have occurred during transit. If damage is evident, or there is visible indication of rough handling, immediately file a damage claim with the transportation company, and notify your local ABB sales office.

Do not remove the shipping package until ready to install the switch.

HAZARD OF EQUIPMENT OVERTURNING
When moving with a forklift, do not remove the shipping package until the device is in its final location.

Failure to follow this instruction will result in personal injury or equipment damage.

Storage
If the unit will not be placed into service immediately, store the switch on its original package in a clean, dry location. To prevent condensation, maintain a uniform temperature. Store the unit in a heated building, allowing adequate air circulation and protection from dirt and moisture. Storing the unit outdoors could cause harmful condensation inside the switch enclosure.
Read these safety instructions carefully before using this product!

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

• Apply appropriate personal protective equipment and follow safe electrical work practices.
• This equipment must only be installed and serviced by qualified electrical personnel.
• Before performing visual inspections, tests, or maintenance on the equipment, disconnect all sources of electric power. Assume that all circuits are live unless they are completely deenergized, tested, grounded, and tagged. Pay particular attention to the design of the power system. Consider all sources of power, including the possibility of backfeeding.
• Turn off switch before removing or making load side connections.
• Always use a properly rated voltage sensing device at all line and load to confirm switch is off.
• Turn off power supplying switch before doing any other work on or inside switch.

Failure to follow these instructions could result in death or serious injury.
Circuits

Circuit 6g, 6c

4-pole, 4-wire
1-circuit
SUPPLY

<table>
<thead>
<tr>
<th>2</th>
<th>OEZXY 4</th>
<th>6</th>
<th>OEZXY 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OEZXY 3</td>
<td>5</td>
<td>OEZXY 7</td>
</tr>
</tbody>
</table>

LOAD

4-pole, 4-wire
1-circuit
REVERSED SUPPLY

<table>
<thead>
<tr>
<th>2</th>
<th>OEZXY 4</th>
<th>6</th>
<th>OEZXY 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OEZXY 3</td>
<td>5</td>
<td>OEZXY 7</td>
</tr>
</tbody>
</table>

LOAD

Warning
Installation and use of OTDCKIT800FS11 is mandatory.
### Enclosure dimensioning
Clearances per UL98 / IEC 60947

**mm / in**

⚠️ **Warning**
A minimum distance of 25.4 mm (1 in) from current carried parts to any conductive part.

![Diagram showing clearance dimensions](image)

Dimensions apply to all switch types.

#### Minimum clearance to any conductive part

<table>
<thead>
<tr>
<th>From pole</th>
<th>From terminal blade</th>
<th>From mechanism shaft</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>C2</td>
<td>C3</td>
</tr>
<tr>
<td>35 / 1.38</td>
<td>141.9 / 5.59</td>
<td>50.8 / 2.00</td>
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</tbody>
</table>

#### Minimum enclosure size or equivalent volume UL98

<table>
<thead>
<tr>
<th>Switch size</th>
<th>No. of poles</th>
<th>H</th>
<th>W</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTDC800F, OTDC1000</td>
<td>4</td>
<td>1000 / 39</td>
<td>800 / 32</td>
<td>330 / 13</td>
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</tbody>
</table>
Mounting

**OTDC_F**

**Warning**
Magnetic field exceeds 5 Gauss within 15 cm / 6 inch of surface. Can erase credit cards. Avoid medical Implant Device proximity.

1.2 Nm
11 lb.in

OH_95J/L12_
OH_125
OH_145
Busbars and compression lugs

- Caution
  Always use counter torque when tightening terminals!

Max. width of busbar: 76.2 mm
Max. thickness of busbar in front: 3.00 mm
Max. thickness of busbar in back:
  - 5 mm (0.20"
  - 10 mm (0.39"

Tightening torques:
- M10: 30...44 Nm / 266-390 lb.in
- M12: 50...75 Nm / 443-664 lb.in
Busbars and compression lugs

**Caution**
Ensure cable suitability for compression lugs and application requirements. Use max. 2 pcs of compression lugs per switch terminal.

**Warning**
A minimum distance of 25.4 mm (1 in) from current carried parts to any conductive part.
Connection bar kit

OTDCKIT800FS11

<table>
<thead>
<tr>
<th>Connection bar kit</th>
<th>OTDCKIT800FS11</th>
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<tbody>
<tr>
<td>Circuit 6c, 6g</td>
<td>OTDCKIT800FS11</td>
</tr>
<tr>
<td>OTDC800F22</td>
<td>OTDC800F22</td>
</tr>
<tr>
<td>OTDC800FV22</td>
<td>OTDC800FV22</td>
</tr>
<tr>
<td>OTDC800UF22</td>
<td>OTDC800UF22</td>
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<td>OTDC800UFV22</td>
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<tr>
<td>OTDC1000UF22</td>
<td>OTDC1000UF22</td>
</tr>
</tbody>
</table>

Caution
Installation only as shown in drawings.

Warning
Installation and use of OTDCKIT800FS11 is mandatory.

M12 50...75 Nm 443-664 lb.in

4× OTDCKIT800FS11

4× 8×
Mechanical lug kit
OZX A804

Caution
Always use counter torque when tightening terminals!

M12x25
54.2 Nm
480 lb.in

Warning
A minimum distance of 25.4 mm (1 in) from current carried parts to any conductive part.

Caution
Installation only as shown in drawings.

Single lug cable cross section 2 x AWG 2-600 MCM.
Direct handle kit
OTDV400FK

Information
Use protection against direct contact. For example, see picture above.
Auxiliary contacts

OA_

Remove

Test contact max. 4 pcs

NO: OA1G10
NC: OA3G01

~10°

Test indication contact max. 4 pcs
**Dimension drawings**

**OTDC800-1000_F_22**

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Accessory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connection bar</td>
<td>OTDCKIT800FS11</td>
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</tbody>
</table>
Connection bar kit
OTDCKIT800FS11
DC SWITCH DISCONNECTORS
Contact us

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Finland

abb.com/lowvoltage