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INSTALLATION INSTRUCTION

DC switch disconnectors

OTDC800...1000F_/OTDC800...1000UF_

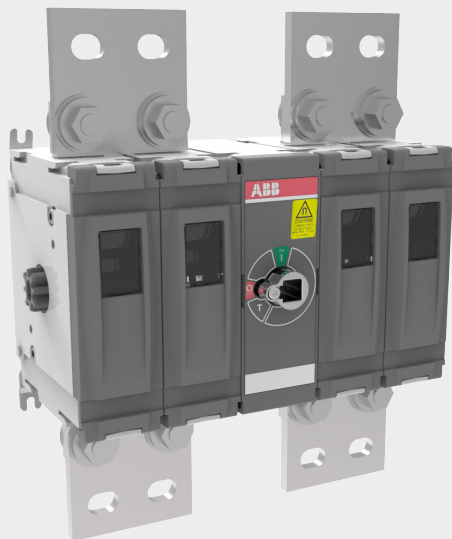


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Use of symbols



Hazardous voltage

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



General warning

Warns about a situation where something other than electrical equipment 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.



Information

Provides important information about the equipment.

Receiving, handling and storage



Warning

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.

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.

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!



Danger

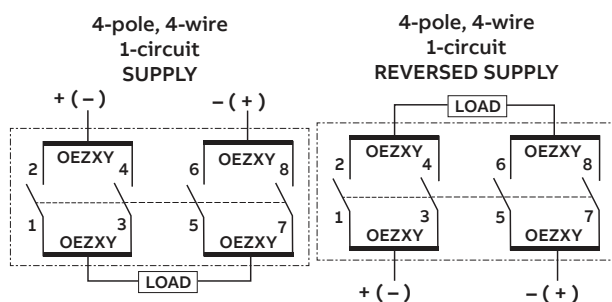
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- 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.

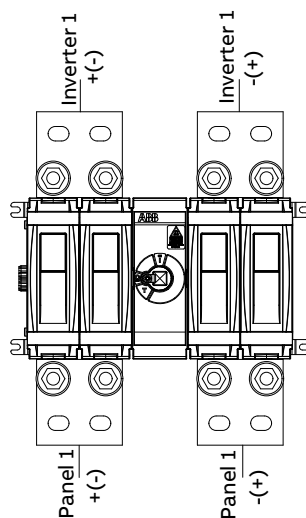
Failure to follow these instructions could result in death or serious injury.

Circuits

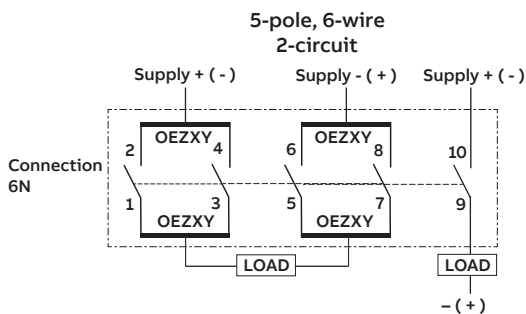
Circuit 6c, 6g



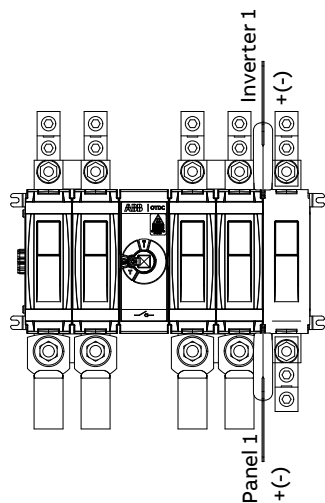
OTDC800...1000F22, _FV22 + OTDCKIT800FS11
OTDC800...1000UF22, _UFV22 + OTDCKIT800FS11



Circuit 6N



OTDC800UF23
OTDC800UFV23



Enclosure dimensioning

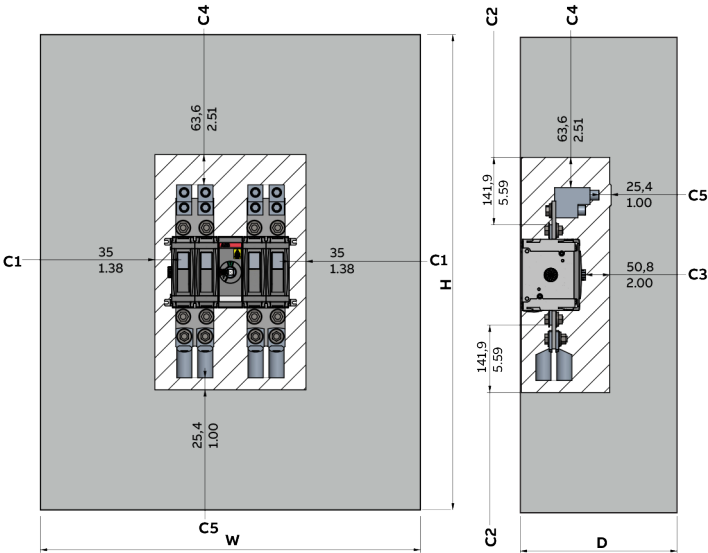
Clearances per UL98 / IEC 60947

mm / in



Warning

A minimum distance of 25,4 mm (1 in) from current carried parts to any conductive part.



Dimensions apply to all switch types.

Minimum clearance to any conductive part

From pole	From terminal blade	From mechanism shaft
C1	C2	C3
35 / 1.38	141,9 / 5.59	50,8 / 2.00

Minimum enclosure size or equivalent volume UL98

Switch size	No. of poles	H	W	D
OTDC800F, OTDC1000	4	1000 / 39	800 / 32	330 / 13

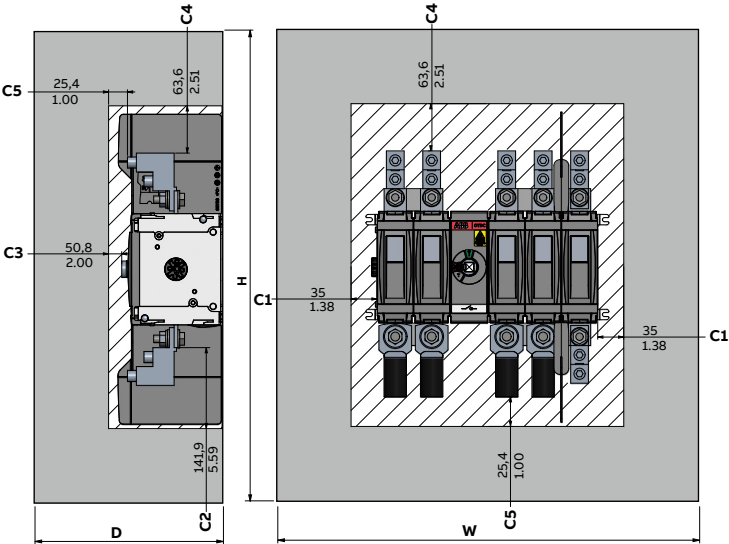
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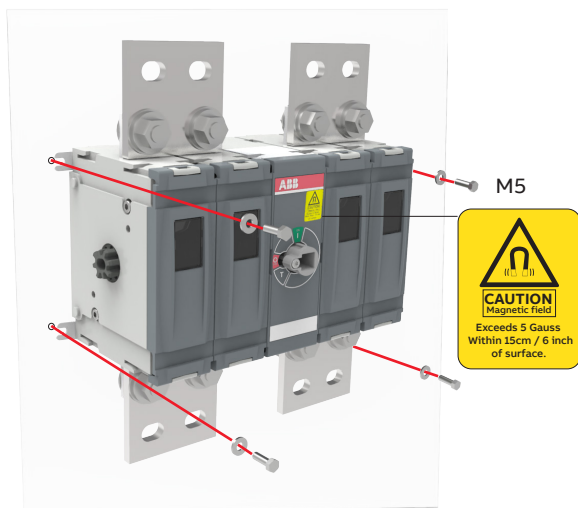
From pole	From terminal blade	From mechanism shaft
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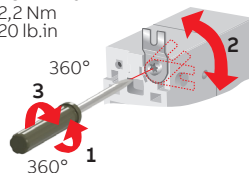
Switch size	No. of poles	H	W	D
OTDC800UF_23	5	500 / 23.64	700 / 27.58	200 / 7.88

Mounting

OTDC_F_

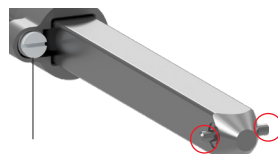
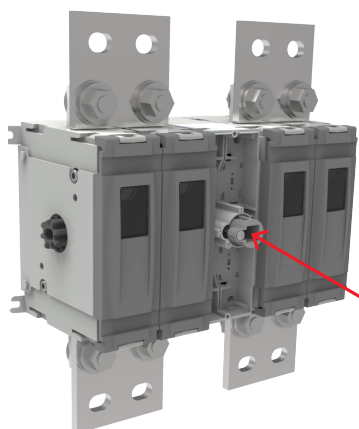


TORX T20
2,2 Nm
20 lb.in



Warning

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

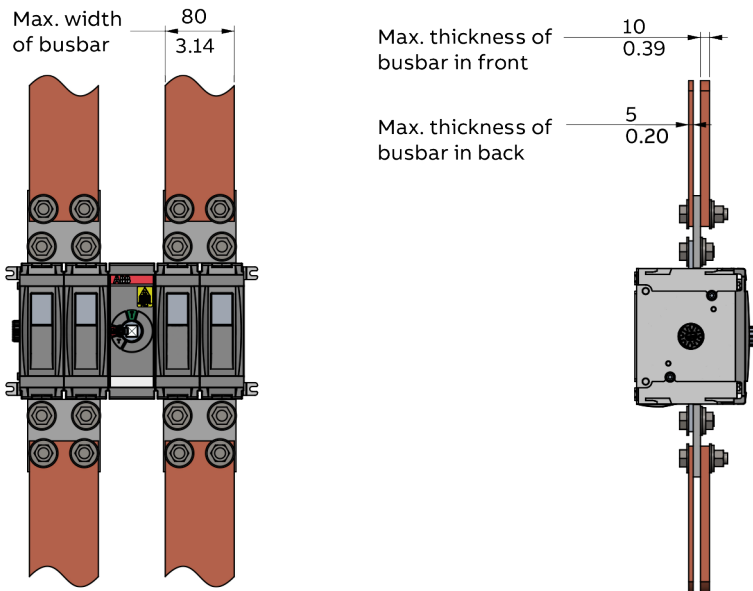
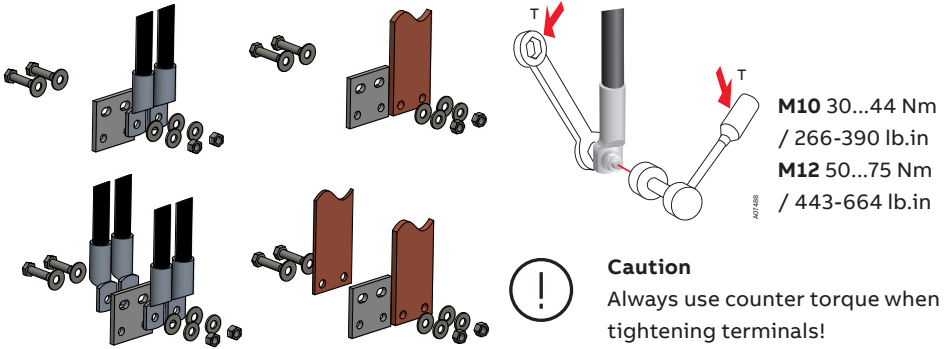


1.2 Nm
11 lb.in

OH_95J/L12_
OH_125
OH_145



Busbars and compression lugs

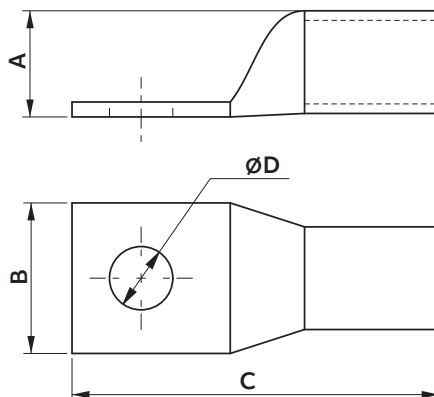


Busbars and compression lugs

Busbar width	[mm / in]
max	80 / 3.14

Minimum Busbar cross-section acc. to UL98B	[mm²]
800 A	520
1000 A	640

Compression Lug dimensions	[mm]
A: Maximum height	34
B: Recommended maximum width	36
C: Maximum length	105
D: Recommended bolt slot	10,5...14,3



Caution

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

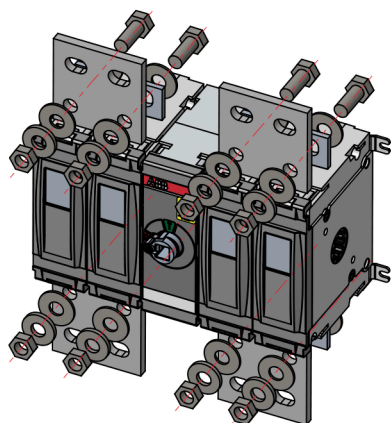


Warning

A minimum distance of 25,4 mm (1 in) from current carried parts to any conductive part.

Connection bar kit

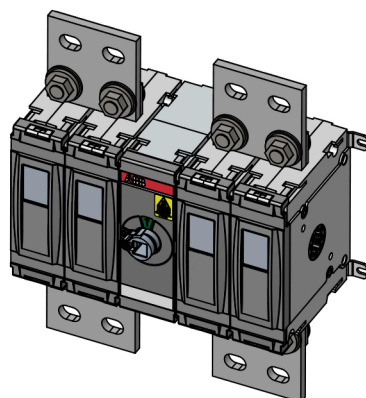
OTDCKIT800FS11



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



OTDCKIT800FS11



Circuit 6c, 6g
OTDC800F22
OTDC800FV22
OTDC800UF22
OTDC800UFV22
OTDC1000F22
OTDC1000FV22
OTDC1000UF22
OTDC1000UFV22

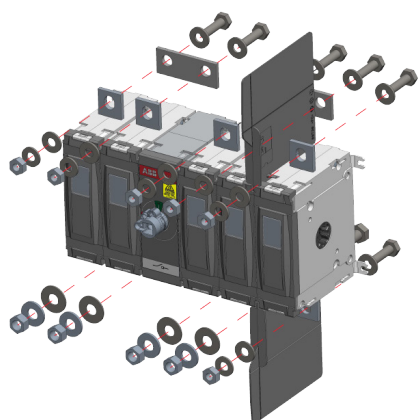


Caution

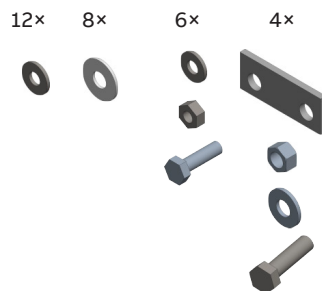
Installation only as shown in drawings.

Connection bar kit

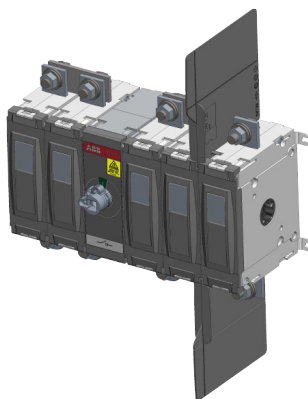
OTDCKIT800FS12



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



OTDCKIT800FS12



Circuit 6N
OTDC800UF23
OTDC800UFV23

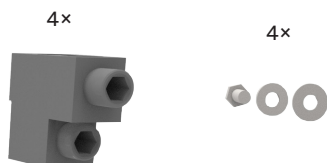


Caution

Installation only as shown in drawings.

Mechanical lug kit

OZXA804

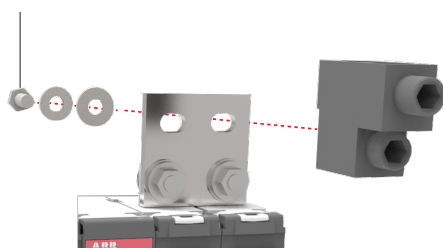


Caution

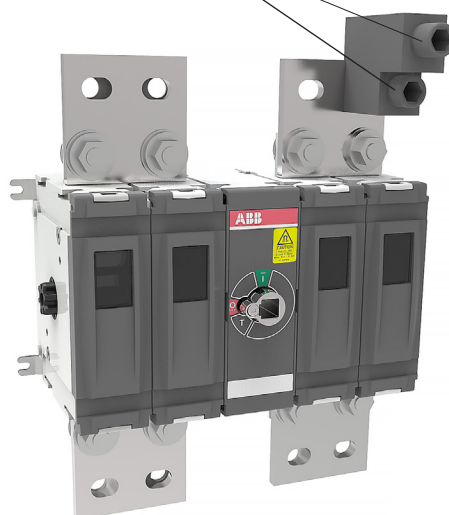
Always use counter torque when tightening terminals!

M12x25

54,2 Nm
480 lb.in



56,5 Nm
500 lb.in



Warning

A minimum distance of 25,4 mm (1 in) from current carried parts to any conductive part.



Caution

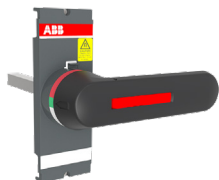
Installation only as shown in drawings.

Single lug cable cross section 2 x AWG
2-600 MCM.

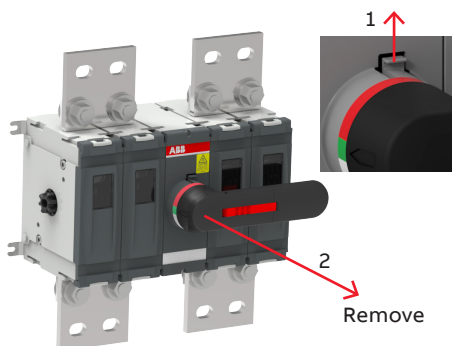
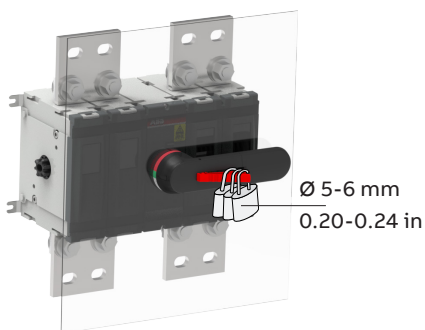
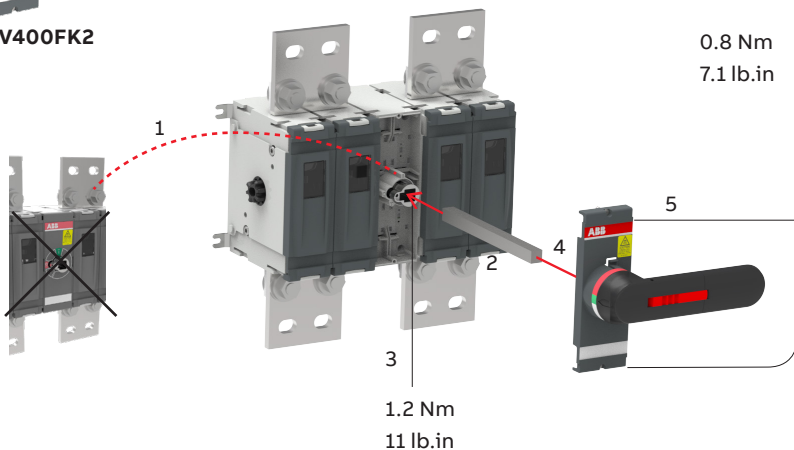
Direct handle kit

OTDV400FK_

OTDV400FK_



OTDV400FK2

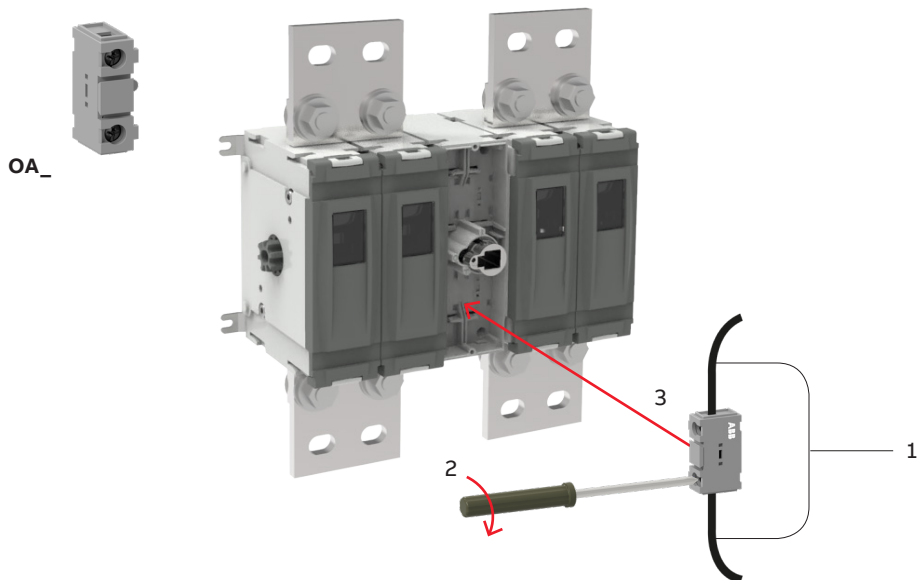


Information

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

Auxiliary contacts

OA_



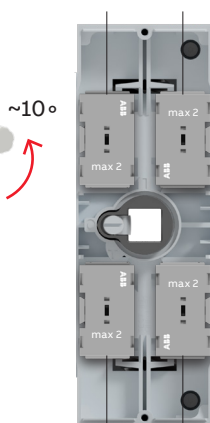
Remove

Test contact max. 4 pcs

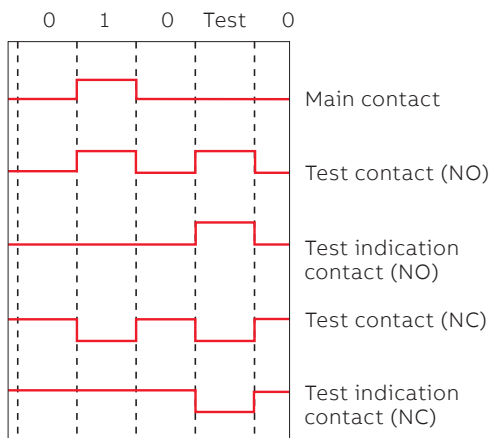


NO: OA1G10

NC: OA3G01

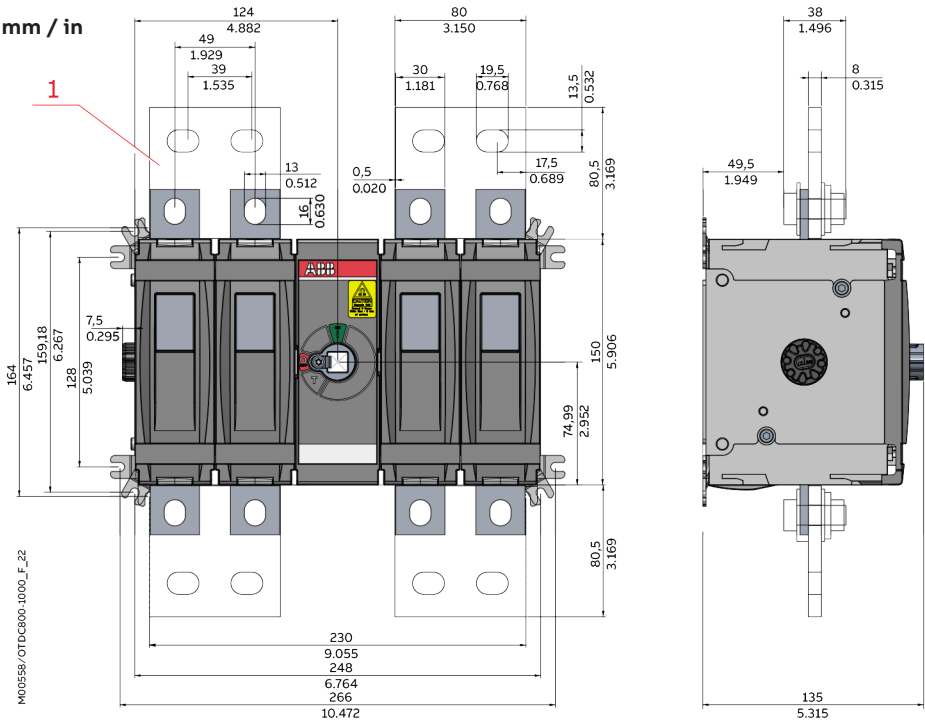


Test indication contact
max. 4 pcs



Dimension drawings

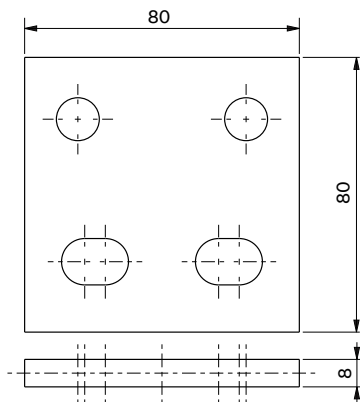
OTDC800-1000_F_22



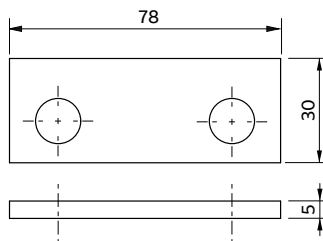
Pos.	Accessory	Description
1	Connection bar	OTDCKIT800FS11

Dimension drawings

Connection bar kit



OTDCKIT800FS11



OTDCKIT800FS12



BG Внимание! Опасно напряжение! Да се монтира само от лице с електротехническа квалификация.

CN 警告！电压危险！只能由专业电工进行安装。

CZ Varování! Nebezpečné napětí! Montáž smí provádět výhradně elektrotechnik!

DA Advarsel! Farlig elektrisk spænding! Installation må kun foretages af personer med elektroteknisk ekspertise.

DE Warnung! Gefährliche Spannung! Installation nur durch elektrotechnische Fachkraft.

EL Προειδοποίηση! Υψηλή τάση! Η εγκατάσταση πρέπει να γίνεται μόνο από εξειδικευμένους ηλεκτροτεχνικούς.

EN Warning! Hazardous voltage! Installation by person with electrotechnical expertise only.

ES ¡Advertencia! ¡Tensión peligrosa! La instalación deberá ser realizada únicamente por electricistas especializados.

ET Hoiatus! Ohtlik pinge. Paigaldada võib ainult elektrotehnika-alane ekspert.

FI Varoitus! Vaarallinen jännite! Asennuksen voi tehdä vain sähköalan ammattihenkilö.

FR Avertissement! Tension électrique dangereuse! Installation uniquement par des personnes qualifiées en électricité.

HR Upozorenje! Opasan napon! Postavljati smije samo elektrotehnički stručnjak.

HU Figyelmeztetés! Veszélyes feszültség! Csak elektrotechnikai tapasztalattal rendelkező szakember helyezheti üzembe.

IE Rabhadh! Voltas guaiseach! Ba chóir do dhuine ag a bhfuil saineolas leictreicniúil, agus an té sin amháin, é seo a shuiteáil.

IT Avvertenza! Tensione pericolosa! Fare installare solo da un elettricista qualificato.

LT Dėmesio! Pavojinga įtampa! Dirbti leidžiama tik elektrotechnikui patirties turintiems asmenims.

LV Uzmanību! Bīstami - elektrība! Montāžas darbus drīkst veikt tikai personas, kurām ir atbilstošas elektrotehniskās zināšanas.

MT Twissja! Vultaġġ perikoluż! Għandu jiġi installat biss minn persuna b'kompetenza elettroteknika.

NL Waarschuwing! Gevaarlijke spanning! Mag alleen geïnstalleerd worden door een deskundige elektrotechnicus.

NO Advarsel! Farlig spenning! Montering skal kun utføres av kvalifiserte personer med elektrokompetanse.

PL Ostrzeżenie! Niebezpieczne napięcie! Instalacji może dokonać wyłącznie osoba z fachową wiedzą w dziedzinie elektrotechniki.

PT Aviso! Tensão perigosa! A instalação só deve ser realizada por um electricista especializado.

RO Avertizare! Tensiune periculoasă! Instalarea trebuie efectuată numai de către o persoană cu experiență în electrotehnică.

RU Осторожно! Опасное напряжение! Монтаж должен выполняться только специалистом-электриком.

SE Varning! Farlig spänning! Installation får endast utföras av en elektriker.

SK Varovanie! Nebezpečné napätie! Montáž môže vykonávať iba skúsený elektrotechnik.

SL Opozorilo! Nevarna napetost! Vgradnjo lahko opravi le oseba z elektrotehničnim strokovnim znanjem.



Contact us

ABB Oy

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