

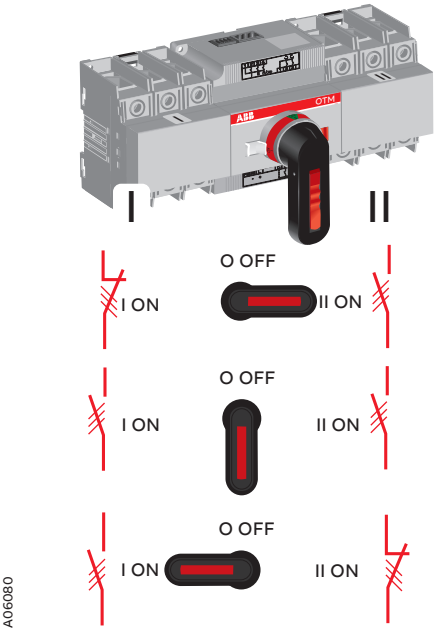


The image shows an ABB OTM 160V 100A AC-23A circuit breaker. It is a grey plastic unit with a red handle in the center. The handle has a red stripe and a green indicator. The unit has a terminal block on top with six terminals, numbered 1 through 6. The terminal block is labeled with '1 2 3 4' and '1 2 3' on the left and right sides respectively. The unit is labeled with 'ABB' and 'OTM' in red. The technical specifications are printed on the right side: 'OTM 160V 100A AC-23A', 'EC 60947-3 Iu 100A SO 40kA', '415V 100A AC-23A', 'Cable PC 415V 100A AC-23A', 'Vmax 51V', '170A rms Fuses 100A', and 'IP 00'. The unit is shown from a front-three-quarter view.

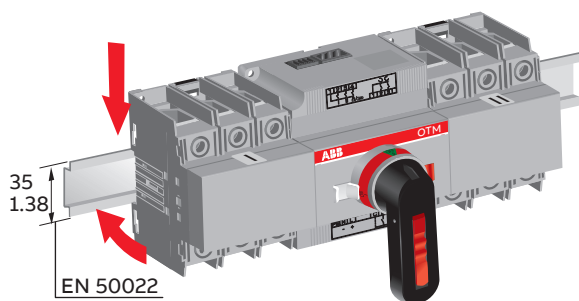
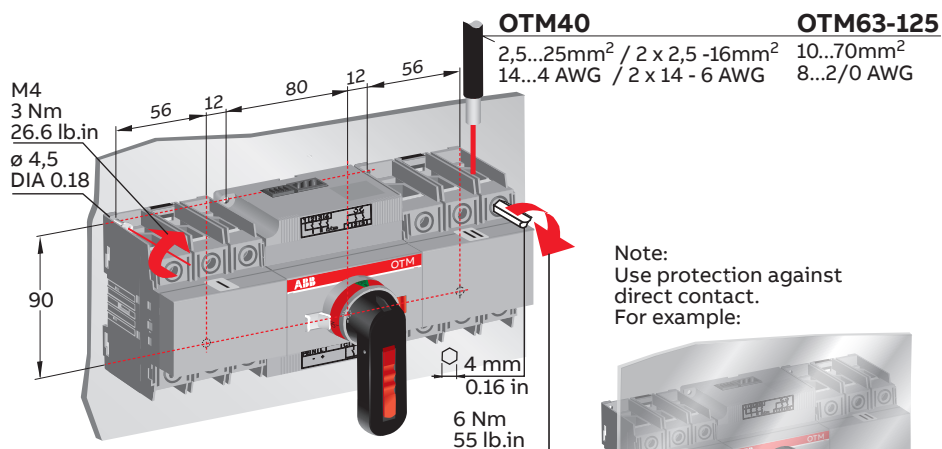
Table of contents

03	Operation
04	Installation
05	Dimension drawing
06	Mounting positions
07	Control circuit
08	Manual operation: Local
09	Electrical operation: Remote
10	Automatic operation
11	Resetting fuse
12	Impulse and continuous control
13	Locking
14	State information
15	Auxiliary contact blocks OA_
16	Terminal clamp sets OZX_
17	Bridging bars OMZC_
18	Terminal shrouds OTS_
19	Auxiliary blocks OA_
20	Handle storage OTVS0
21	Fourth pole OTP_
23	Warning sheet

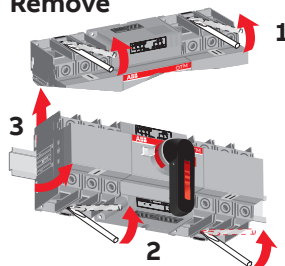
Operation



Installation



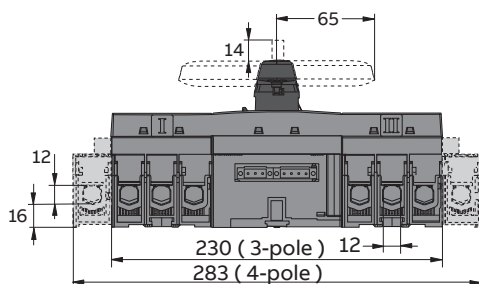
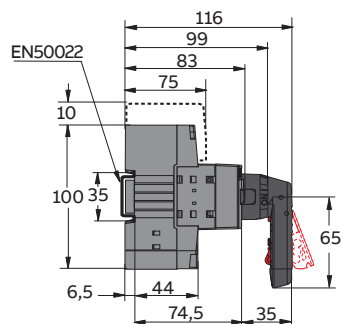
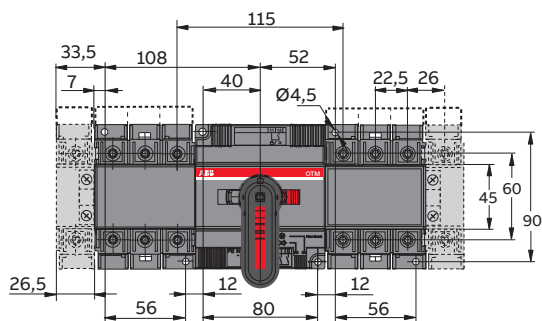
Remove



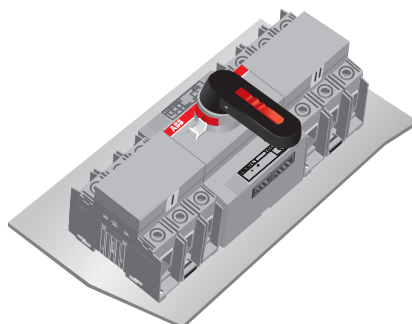
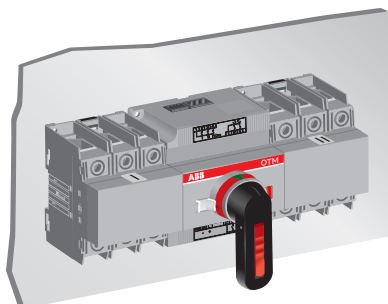
A06077

Dimension drawing

OTM40-125F_C_



Mounting positions

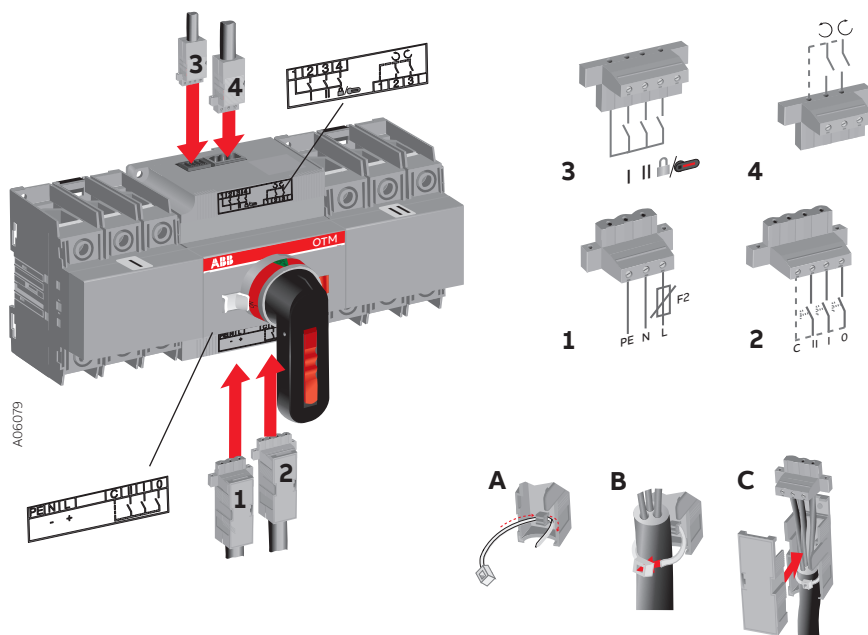


A06078

Control circuit



Only an authorised electrician may perform the electrical installation and maintenance of motorized switch. Do not attempt any installation or maintenance actions when a motorized switch is connected to the electrical mains. Before starting work, make sure that the switch is de-energised.

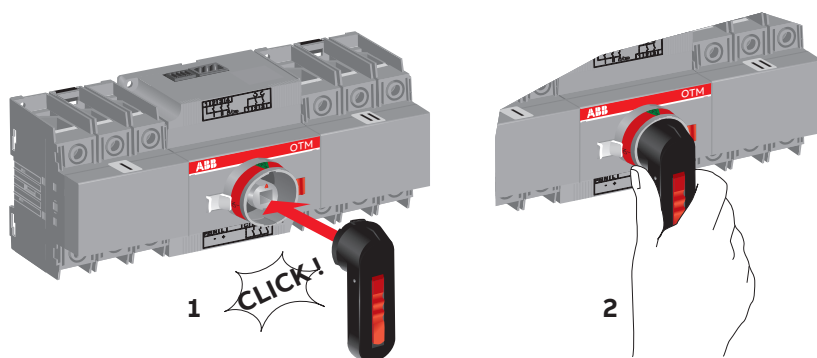


1. Terminal for motor operator voltage supply
2. Control terminal for push buttons
3. Terminal for state information (also used with the automatic control unit)
4. Control terminal for automatic control unit (If used OMD controller)



Do not couple power for the control terminal. See the correct terminal for the power supply.

Manual operation: Local



A06081



Electrical operation is prevented when the handle is attached to the switch panel.

Electrical operation: Remote



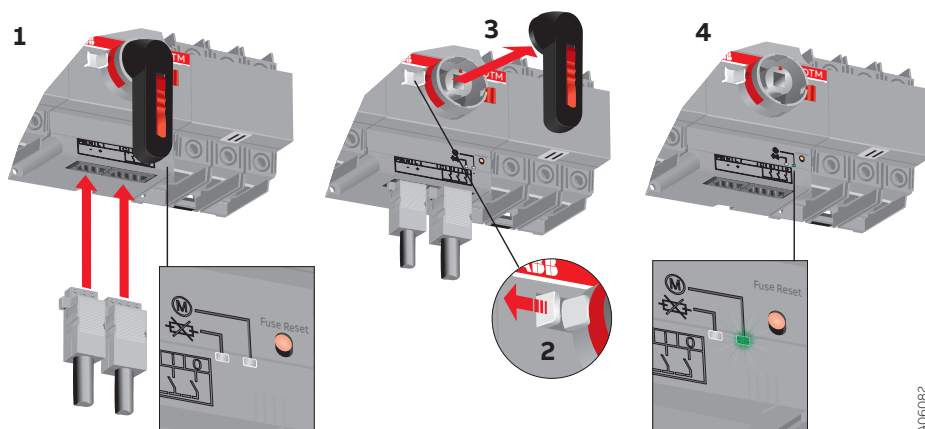
Never open any covers on the product. There may be dangerous external control voltages inside the motorized switch even if the voltage is turned off.



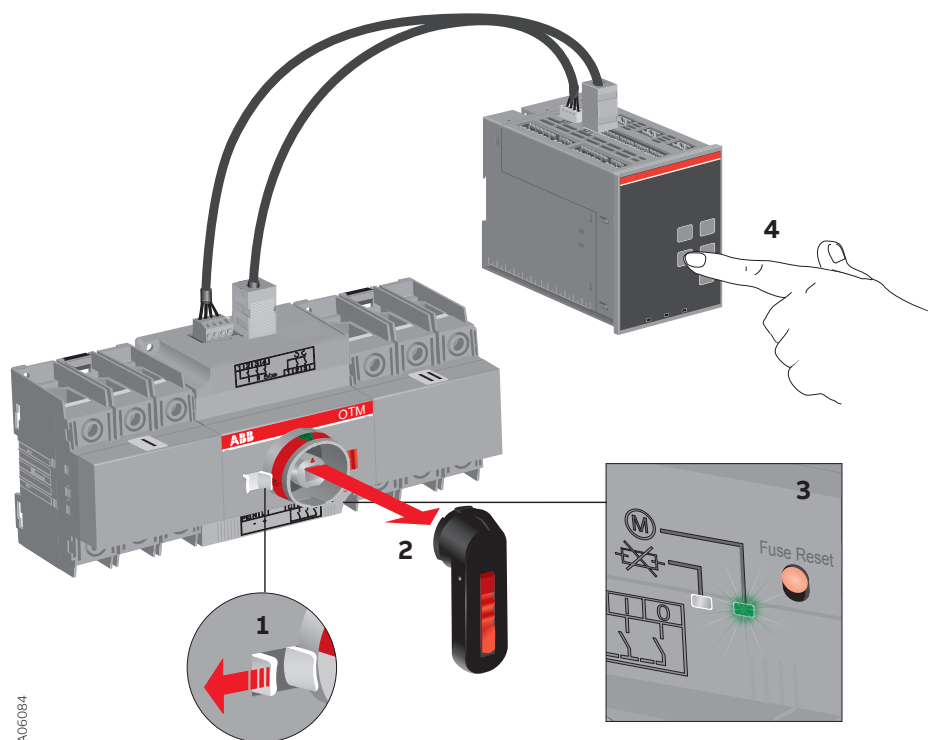
Never handle control cables when the voltage of the motorized switch or external control circuits are connected.



Exercise sufficient caution when handling the unit.



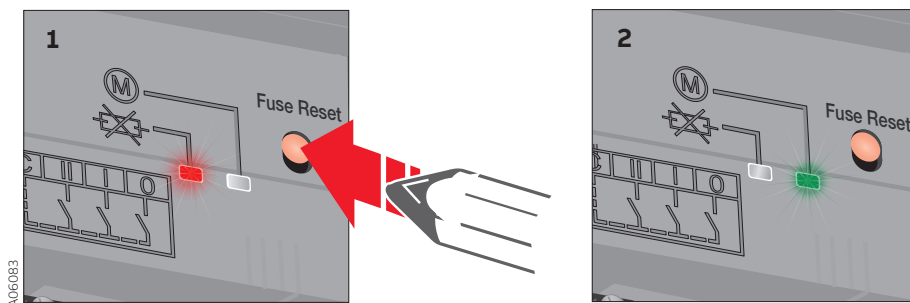
Automatic operation



A06084

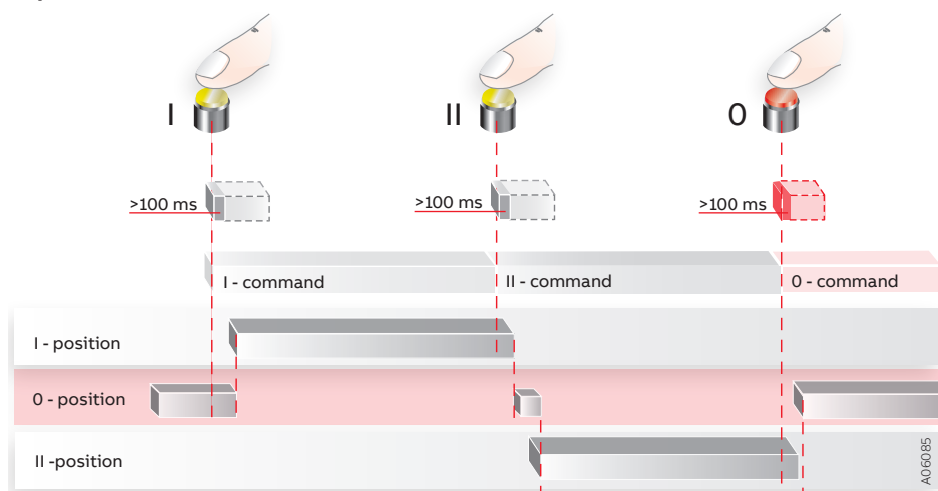
See detailed installation instructions for OMD controllers from OMD user manuals.

Resetting Fuse

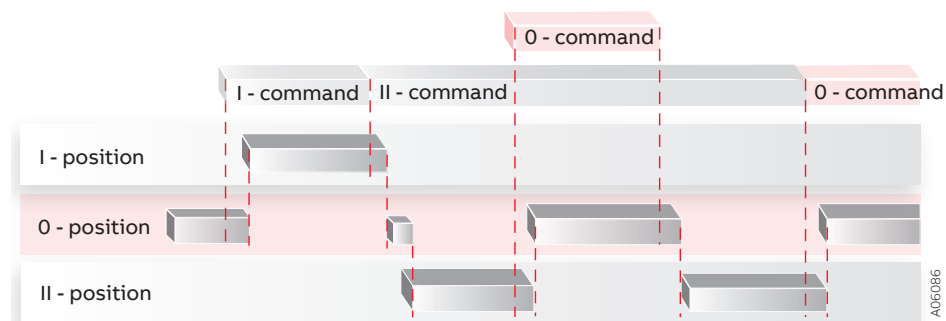


Impulse and continuous control

Impulse control



Continuous control



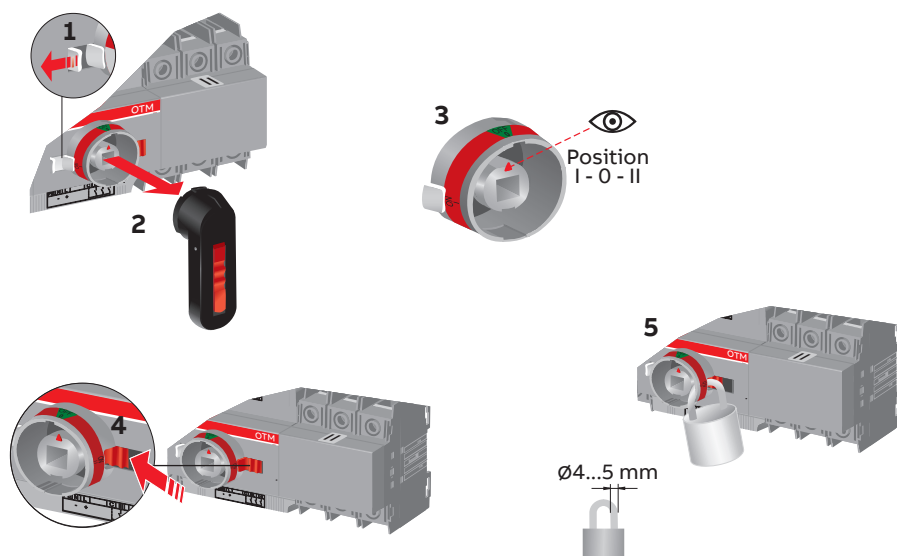
If a new command is given before the switch has reached the position of the previous command, the internal protection may operate.

Locking

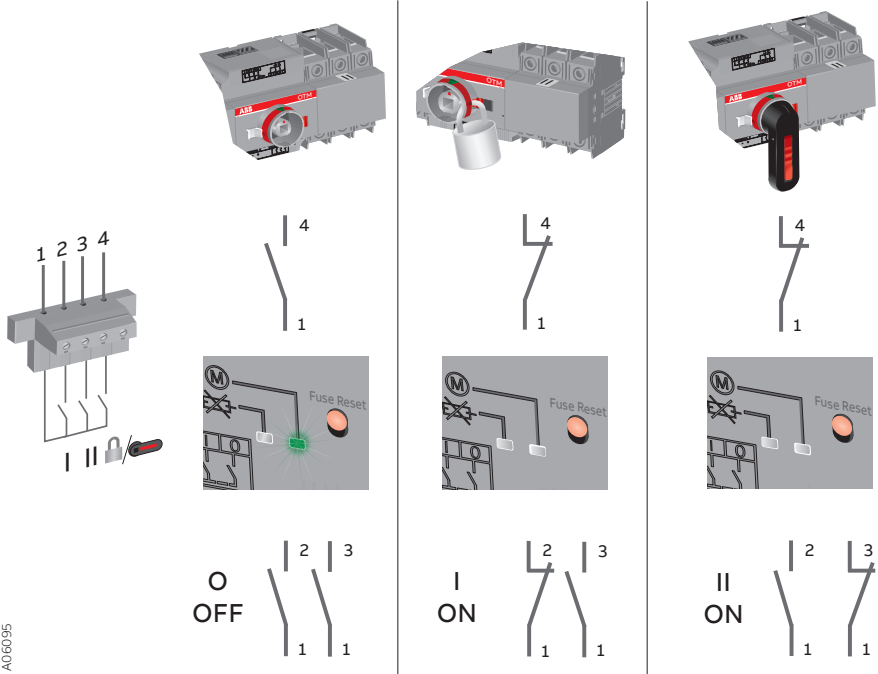
Prevent manual and electrical operation.



Locking possible at any position. Check position before locking.



State information



A06095

Technical data

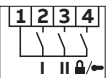
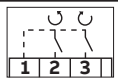
Motor operator, control circuit	Value	Cabling/Rating
Rated operational voltage U [V]	110-240 Vac/dc 50-60 Hz	
	24 Vdc	
Operating voltage range	0.85... 1.1 x U	
Operating angle	90° 0-I, I-O, 0-II, II-O; 180° I-O-II	
Operating time	See Table 2	
Protection degree	IP 20, front panel	
Rated impulse withstand voltage U _{imp}	4 kV	
Voltage supply	PEN L	1,5 -2,5 mm ²
F2	Max. MCB 16 A	
Control terminal for the push-buttons	C II I O	1,5 -2,5 mm ²
Maximum cable length	100 m	
Terminal for state information Also used with the automatic control unit		1,5 mm ² 3A AC-1/250 V
Common, voltage supply	1	
Position of change-over switch I	2	
Position of change-over switch II	3	
Handle attached or motor operator locked	4	
SCPD	Max. MCB C2A	
Control terminal for automatic control unit If used OMD_ controller		1,5-2,5 mm ²
Common, voltage supply from motor operator	1	24VDC
Close switch I or open switch II	2	24VDC 500 mW
Close switch II or open switch I	3	24VDC 500 mW
Operating temperature	-25... +55 °C	
Transportation and storage temperature	-40... +70 °C	
Altitude	Max. 2000 m	

Table 1 General technical data of motor operators

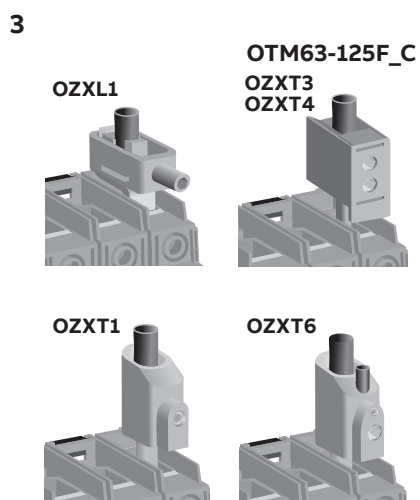
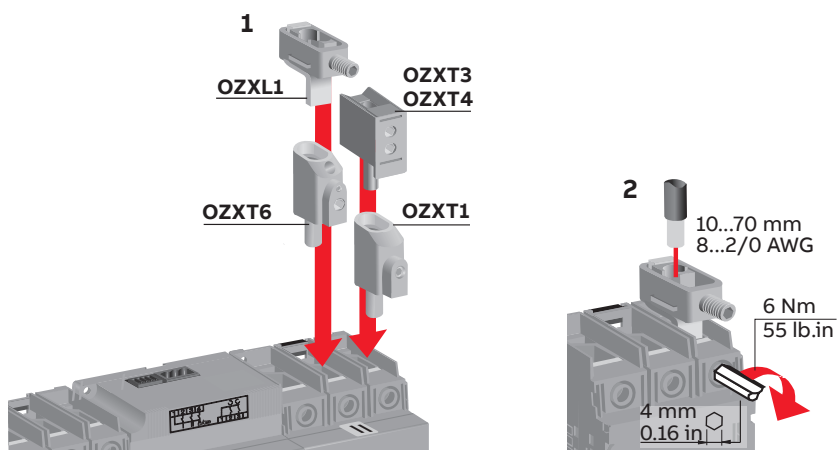
Type	Voltage U _e [V]	Nominal current ^{a)} I _n [A]	Current Inrush ^{a)} [A]	Operating time ^{a)} I-O, 0-I, 0-II, II-O [s]	Operating transfer time ^{a)} I-II or II-I [s]	OFF-time when operating ^{a)} I-II or II-I [s]
OTM40...125_C	110-240 Vac/dc	0,2 - 0,5	1,5 - 3,0	0,5 - 1,0	1,2 - 1,5	0,4 - 0,8
	48 Vdc	0,4	2,5	0,6 - 1,0	1,3 - 1,6	0,6 - 1,0
	24 Vdc	0,6	3,6	0,6 - 1,3	1,4 - 2,1	0,6 - 1,0

a) Under nominal conditions

Table 2 Specified technical data of motor operators

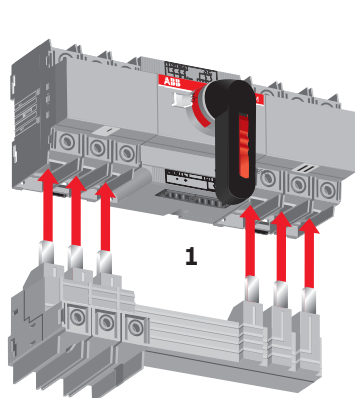
Terminal clamp sets

OZX_



Bridging bars

OMZC_

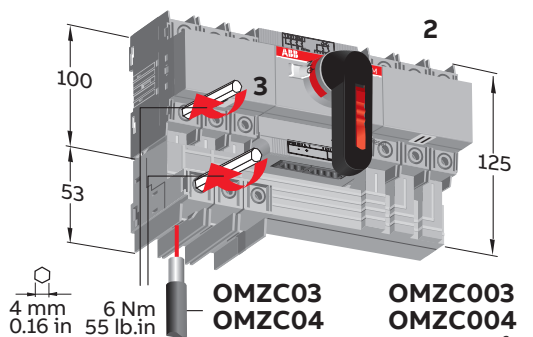


OTM40-125F_C
OTM40F_C

OMZC03
OMZC003

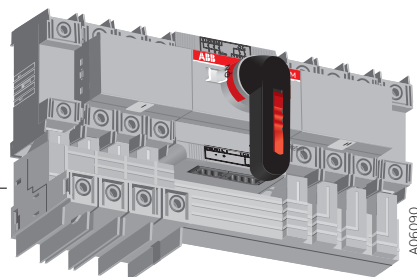
OTM40-125F_C
OTM40F_C

OMZC04
OMZC004



OMZC03
OMZC04
10...70 mm²
8...2/0 AWG

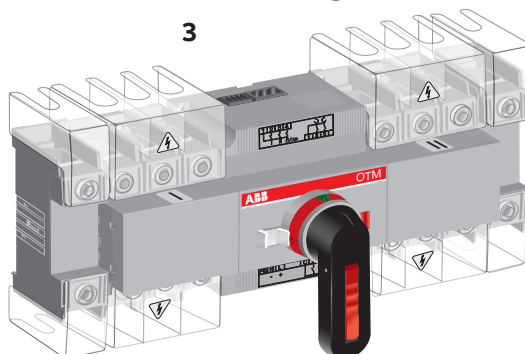
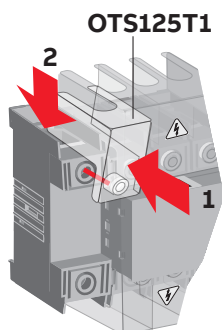
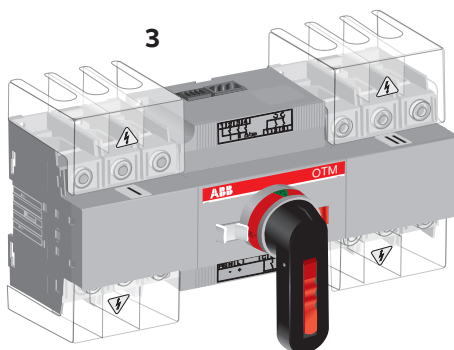
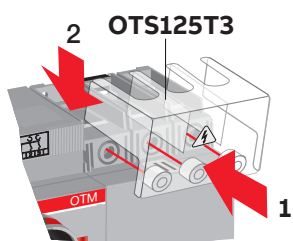
OMZC003
OMZC004
2,5...25 mm²
14...4 AWG
2x2,5...16 mm²
2x14... 6 AWG



A06090

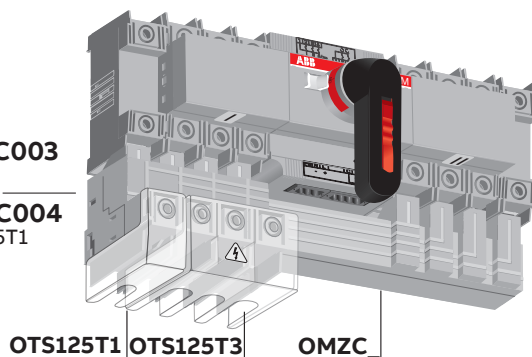
Terminal shrouds

OTS_



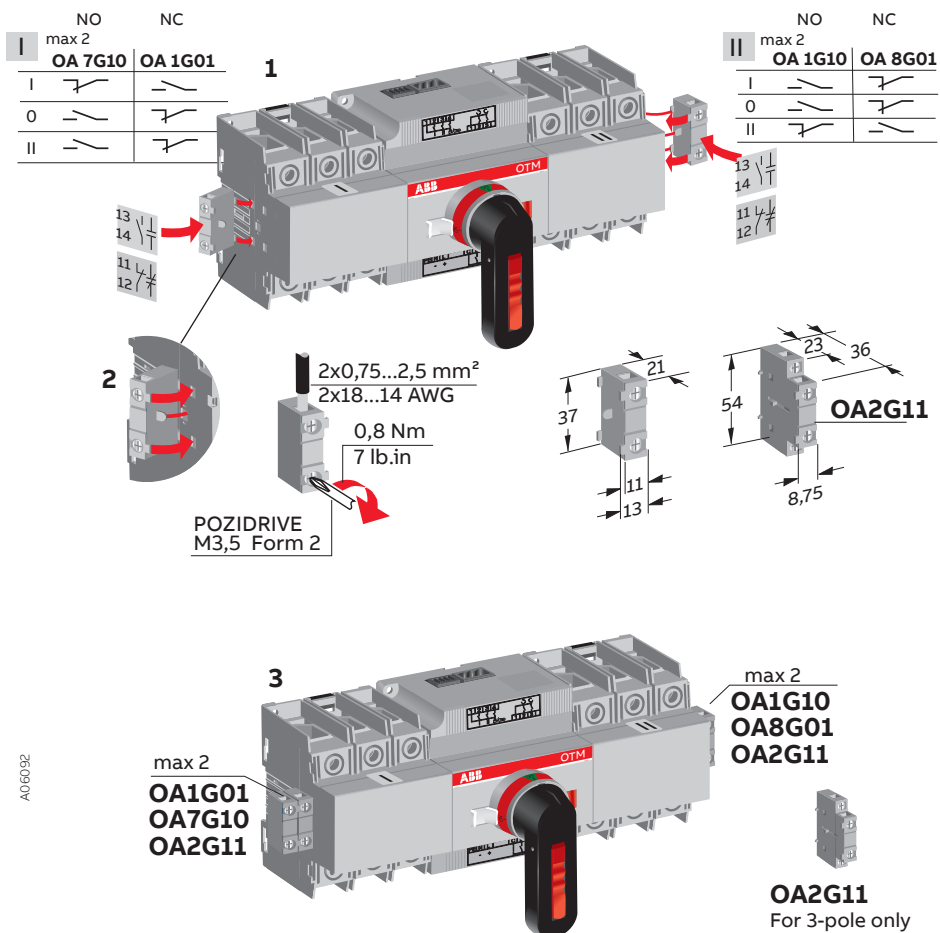
OMZC03, OMZC003
OTS125T3

OMZC04, OMZC004
OTS125T3 + OTS125T1



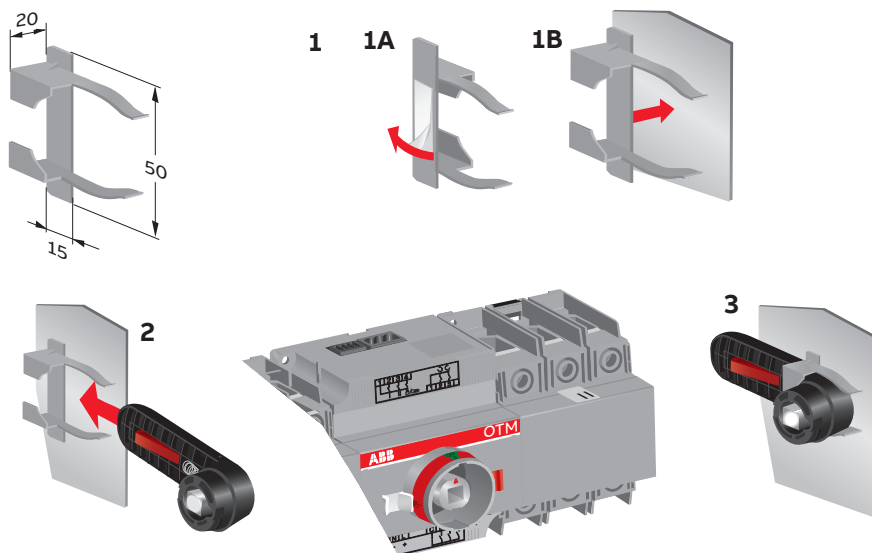
Auxiliary contact blocks

OA_



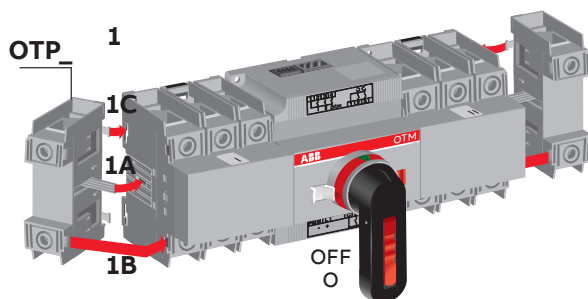
Handle storage

OTVS0



Fourth pole

OTP_



OTPD60FP
OTPD125FP



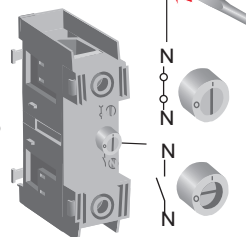
OTM40
OTM63-125

OTPS60FP
OTPS125FP
(N) 7 L4
(N) 8 T4

OTPL60FP
OTPL125FP
N
N

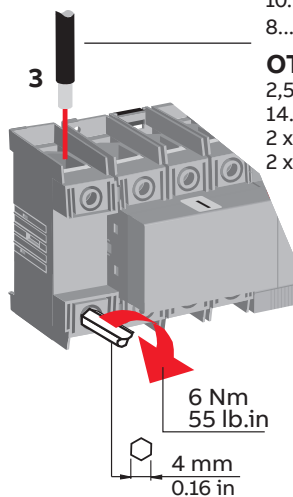
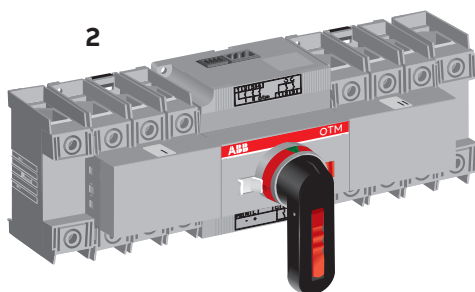
OTPN60FP
OTPN125FP
N
N

OTPE60FP
OTPE125FP
PE
PE



OTM63-125
10...70mm²
8...2/0 AWG

OTM40
2,5...25mm²
14...4 AWG
2 x 2,5 -16mm²
2 x 14...6 AWG





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 Varoitusta! Vaarallinen jännite! Asennuksen voi tehdä vain sähköalan ammattihenkilö.

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

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 Twissija! 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

P.O. Box 622
FI-65101 Vaasa
Finland

abb.com/lowvoltage