



Breakers and Switches

# Switches

## Change-over and transfer switches

Power and productivity  
for a better world™





# Change-over and transfer switches

## 16...2500 A

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# Change-over and transfer switches

## 16...2500A

### Manual operation

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |    |    |       |    |    |  |        |     |  |     |        |     |  |     |          |     |  |     |        |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|-------|----|----|--|--------|-----|--|-----|--------|-----|--|-----|----------|-----|--|-----|--------|--|--|--|
| <div></div> |    |    |    |       |    |    |  |        |     |  |     |        |     |  |     |          |     |  |     |        |  |  |  |
| OT16F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    | OT63F |    |    |  | OT100F |     |  |     | OT160E |     |  |     | OT160E_W |     |  |     | OT315E |  |  |  |
| OT25F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    | OT80F |    |    |  | OT125F |     |  |     | OT200E |     |  |     | OT200E_W |     |  |     | OT400E |  |  |  |
| OT40F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    |       |    |    |  |        |     |  |     | OT250E |     |  |     | OT250E_W |     |  |     |        |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |    |    |       |    |    |  |        |     |  |     |        |     |  |     |          |     |  |     |        |  |  |  |
| $I_{th}$ /A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 25 | 32 | 40 |       | 63 | 80 |  | 115    | 125 |  | 160 | 200    | 250 |  | 160 | 200      | 250 |  | 315 | 400    |  |  |  |
| $I_e$ /AC-22A, < 415V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16 | 25 | 40 |       | 63 | 80 |  | 100    | 125 |  | 160 | 200    | 250 |  | 160 | 200      | 250 |  | 315 | 400    |  |  |  |
| $I_e$ /AC-23A, < 415V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16 | 20 | 23 |       | 45 | 75 |  | 80     | 90  |  | 160 | 200    | 250 |  | 160 | 200      | 250 |  | 315 | 400    |  |  |  |
| $I_e$ /AC-21B, < 415V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |    |    |       |    |    |  |        |     |  |     |        |     |  |     |          |     |  |     |        |  |  |  |

### Motor operation

|                                                                                                                                                                                                                                                                                                                                                             |  |  |  |           |    |    |     |     |           |     |     |            |     |     |           |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----------|----|----|-----|-----|-----------|-----|-----|------------|-----|-----|-----------|-----|
| <div></div> |  |  |  |           |    |    |     |     |           |     |     |            |     |     |           |     |
|                                                                                                                                                                                                                                                                                                                                                             |  |  |  | OTM40F_C  |    |    |     |     | OTM160E_C |     |     | OTM160E_WC |     |     | OTM315E_C |     |
|                                                                                                                                                                                                                                                                                                                                                             |  |  |  | OTM63F_C  |    |    |     |     | OTM200E_C |     |     | OTM200E_WC |     |     | OTM400E_C |     |
|                                                                                                                                                                                                                                                                                                                                                             |  |  |  | OTM80F_C  |    |    |     |     | OTM250E_C |     |     | OTM250E_WC |     |     |           |     |
|                                                                                                                                                                                                                                                                                                                                                             |  |  |  | OTM100F_C |    |    |     |     |           |     |     |            |     |     |           |     |
|                                                                                                                                                                                                                                                                                                                                                             |  |  |  | OTM125F_C |    |    |     |     |           |     |     |            |     |     |           |     |
|                                                                                                                                                                                                                                                                                                                                                             |  |  |  |           |    |    |     |     |           |     |     |            |     |     |           |     |
| $I_{th}$ /A                                                                                                                                                                                                                                                                                                                                                 |  |  |  | 40        | 63 | 80 | 115 | 125 | 160       | 200 | 250 | 160        | 200 | 250 | 315       | 400 |
| $I_e$ /AC-22A, < 415V                                                                                                                                                                                                                                                                                                                                       |  |  |  | 40        | 63 | 80 | 100 | 125 | 160       | 200 | 250 | 160        | 200 | 250 | 315       | 400 |
| $I_e$ /AC-23A, < 415V                                                                                                                                                                                                                                                                                                                                       |  |  |  | 40        | 63 | 80 | 80  | 90  | 160       | 200 | 250 | 160        | 200 | 250 | 315       | 400 |
| $I_e$ /AC-21B, < 415V                                                                                                                                                                                                                                                                                                                                       |  |  |  |           |    |    |     |     |           |     |     |            |     |     |           |     |

### Automatic operation

Automatic operation



|                       |             |     |     |              |     |     |
|-----------------------|-------------|-----|-----|--------------|-----|-----|
|                       | OTM160E_C_D |     |     | OTM160E_WC_D |     |     |
|                       | OTM200E_C_D |     |     | OTM200E_WC_D |     |     |
|                       | OTM250E_C_D |     |     | OTM250E_WC_D |     |     |
| $I_{th}$ /A           | 160         | 200 | 250 | 160          | 200 | 250 |
| $I_e$ /AC-22A, < 415V | 160         | 200 | 250 | 160          | 200 | 250 |
| $I_e$ /AC-23A, < 415V | 160         | 200 | 250 | 160          | 200 | 250 |

## Accessories

Optional handles

Terminal shrouds

Extended shafts

Connecting accessories

Auxiliary contacts

Locking accessories



OT630E

OT800E



OT1000E

OT1250E



OT1600E



OT2000E

OT2500E

630 800

630 800

630 800

1000 1250

1000 1250

1000 1250

1600

1600

1250

2000 2500

2000 2500

2000 2500

2000 2500



OTM630E\_C

OTM800E\_C



OTM1000E\_C

OTM1250E\_C



OTM1600E\_C



OTM2000E\_C

OTM2500E\_C

630 800

630 800

630 800

1000 1250

1000 1250

1000 1250

1600

1600

1600

2000 2500

2000 2500

2000 2500

2000 2500



OTM315E\_C\_D

OTM400E\_C\_D



OTM630E\_C\_D

OTM800E\_C\_D



OTM1000E\_C\_D

OTM1250E\_C\_D



OTM1600E\_C\_D

315 400

315 400

315 400

630 800

630 800

630 800

1000 1250

1000 1250

1000 1250

1600

1600

1250

# Growing importance of a secure power supply



## High performance level

In change-over applications where the loaded switch may need to be operated remotely, adequate durability has been ensured by testing against the IEC 60947-6-1 standard in the specification of endurance requirements.

## Utilization categories:

- AC-31 for non-inductive or slightly inductive load
  - AC-33 for motor loads or mixed loads including motors
- ABB change-over switches are rated according to IEC 60947-6-1 standard

## Easy installation for local or remote control

ABB change-over switches are very easy to install: the manually operated switch is operated via a handle fixed directly on the switch or on the panel door. The 16 to 125 Ampere sizes can be snapped on to a DIN rail and the front fits in the 45 mm consumer unit cut-out.

The motorized change-over switches have snap-on control wire connections. Auxiliary contacts can be snapped on to the sides of the switches and the power terminals can be connected in parallel with bridging bars.

The automatic transfer switches feature the automatic control unit, which can be adjusted according to the mounting depth of the panel. The voltage sensing kit is installed at the factory thus reducing the expensive and time consuming installation work.

- Quick and easy installation
  - savings in time and expenses

As industrial processes and IT applications diversify, a secure power supply is increasingly important to cut production and maintenance costs. In emergency situations, the system logic of power distribution can become complex with mechanical devices looking after making, breaking, conducting and isolating power. Loads need to be transferred from one supply to another — this will be the case when energy use is restricted or when the supply source is overloaded.

#### **Safe and reliable**

ABB automatic transfer switches ensure service continuity with a number of built-in, integrated safety features. The change-over mechanism, for example, offers three stable positions which ensure isolation of the two asynchronous power supplies. This eliminates any risk of short-circuit between them, even in the presence of transient voltages. The automatic transfer switches are equipped with a handle for manual operation in case of emergency.

- ▶ Inbuilt safety

#### **Compact design**

The design of ABB change-over switches is advanced and compact, allowing installation in confined spaces at considerable savings. Compact double layer construction.

- ▶ Minimizing the need for space

# Technical data

## Manual change-over switches

### OT16...125\_C\_

#### Manual change-over switches

##### Data according to IEC 60947-3

|                                                                                                                                                                                                                                                                    |                                           | Switch size              |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------|-----------------|
| Rated insulation voltage and rated operational voltage AC20/DC20                                                                                                                                                                                                   |                                           | Pollution degree 3       | V               |
| Dielectric strength                                                                                                                                                                                                                                                |                                           | 50 Hz 1 min.             | kV              |
| Rated impulse withstand voltage                                                                                                                                                                                                                                    |                                           |                          | kV              |
| Rated thermal current and rated operational current AC20/DC20                                                                                                                                                                                                      | / ambient 40°C                            | In open air              | A               |
|                                                                                                                                                                                                                                                                    | / ambient 40°C                            | In enclosure             | A               |
|                                                                                                                                                                                                                                                                    | / ambient 60°C                            | In enclosure             | A               |
| ..with minimum conductor cross section                                                                                                                                                                                                                             |                                           | Cu                       | mm <sup>2</sup> |
| Rated operational current, AC-21A                                                                                                                                                                                                                                  |                                           | up to 500 V              | A               |
|                                                                                                                                                                                                                                                                    |                                           | 690 V                    | A               |
| Rated operational current, AC-22A                                                                                                                                                                                                                                  |                                           | up to 500 V              | A               |
|                                                                                                                                                                                                                                                                    |                                           | 690 V                    | A               |
| Rated operational current, AC-23A                                                                                                                                                                                                                                  |                                           | up to 415 V              | A               |
|                                                                                                                                                                                                                                                                    |                                           | 440 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 500 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 690 V                    | A               |
| Rated operational current / poles in series, DC-21A                                                                                                                                                                                                                |                                           | up to 48 V <sup>1)</sup> | A               |
|                                                                                                                                                                                                                                                                    |                                           | 110 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 220 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 440 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 500 V                    | A               |
| Rated operational current / poles in series, DC-22A                                                                                                                                                                                                                |                                           | up to 48 V <sup>1)</sup> | A               |
|                                                                                                                                                                                                                                                                    |                                           | 110 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 220 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 440 V                    | A               |
| Rated operational current / poles in series, DC-23A                                                                                                                                                                                                                |                                           | up to 48 V <sup>1)</sup> | A               |
|                                                                                                                                                                                                                                                                    |                                           | 110 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 220 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 440 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 500 V                    | A               |
| Rated operational power, AC-23A <sup>2)</sup><br>The kW-ratings are accurate for 3-phase 1500 R.P.M. standard asynchronous motors                                                                                                                                  |                                           | 230 V                    | kW              |
|                                                                                                                                                                                                                                                                    |                                           | 400 V                    | kW              |
|                                                                                                                                                                                                                                                                    |                                           | 415 V                    | kW              |
|                                                                                                                                                                                                                                                                    |                                           | 500 V                    | kW              |
|                                                                                                                                                                                                                                                                    |                                           | 690 V                    | kW              |
| Rated breaking capacity in category AC-23                                                                                                                                                                                                                          |                                           | up to 415 V              | A               |
|                                                                                                                                                                                                                                                                    |                                           | 500 V                    | A               |
|                                                                                                                                                                                                                                                                    |                                           | 690 V                    | A               |
| Rated conditional short-circuit current I <sub>p</sub> (r.m.s.) and corresponding max. allowed cut-off current I <sub>c</sub> (peak) value. The cut-off current I <sub>c</sub> refers to values listed by fuse manufacturers (single phase test acc. to IEC60269). | I <sub>p</sub> (r.m.s.) 50 kA, 415 V      | I <sub>c</sub> (peak)    | kA              |
|                                                                                                                                                                                                                                                                    | Max. OFA_ fuse size                       | gG/aM                    | A/A             |
|                                                                                                                                                                                                                                                                    | I <sub>p</sub> (r.m.s.) 100 kA, 500 V     | I <sub>c</sub> (peak)    | kA              |
|                                                                                                                                                                                                                                                                    | Max. OFA_ fuse size                       | gG/aM                    | A               |
| Rated short-time withstand current                                                                                                                                                                                                                                 | I <sub>sc</sub> (r.m.s.)                  | 690 V 1s                 | kA              |
| Rated short-time making capacity <sup>3)</sup>                                                                                                                                                                                                                     | I <sub>cm</sub> (peak)                    | 690 V                    | kA              |
| Power loss / pole                                                                                                                                                                                                                                                  | With rated current                        |                          | W               |
| Mechanical endurance                                                                                                                                                                                                                                               | Number of oper. cycles <sup>4)</sup>      |                          | Cycles          |
| Mechanical endurance / switch                                                                                                                                                                                                                                      | Number of operations                      |                          | Oper.           |
| Cable size                                                                                                                                                                                                                                                         | Cu-wire size suitable for terminal clamps |                          | mm <sup>2</sup> |
|                                                                                                                                                                                                                                                                    | Counter torque required                   |                          | AWG             |
| Terminal tightening torque                                                                                                                                                                                                                                         | Counter torque required                   |                          | Nm              |
| Operating torque                                                                                                                                                                                                                                                   | Typical for 3-pole switches               |                          | Nm              |
| Weight without accessories                                                                                                                                                                                                                                         | 3-pole switch                             |                          | kg              |
|                                                                                                                                                                                                                                                                    | 4-pole switch                             |                          | kg              |

##### Data according to UL508 (Listed)

|                     |       |    |
|---------------------|-------|----|
| Current             |       | A  |
| Horsepower, 3-phase | 200 V | HP |
|                     | 208 V | HP |
|                     | 240 V | HP |
|                     | 480 V | HP |
|                     | 600 V | HP |

<sup>1)</sup> Below 48 V, two poles in parallel up to OT80 are recommended particularly in polluted atmosphere

<sup>2)</sup> These values are given for guidance and may vary acc. to the motor manufacturer

<sup>3)</sup> Short circuit duration >50ms, without fuse protection

<sup>4)</sup> Operating cycle: O - I - O - II - O



| OT16_   | OT25_   | OT40_   | OT63_  | OT80_  | OT100_  | OT125_  |
|---------|---------|---------|--------|--------|---------|---------|
| 750     | 750     | 750     | 750    | 750    | 750     | 750     |
| 6       | 6       | 6       | 6      | 6      | 6       | 6       |
| 8       | 8       | 8       | 8      | 8      | 8       | 8       |
| 25      | 32      | 40      | 63     | 80     | 115     | 125     |
| 25      | 32      | 40      | 63     | 80     | 115     | 125     |
| 20      | 25      | 32      | 50     | 63     | 80      | 100     |
| 4       | 6       | 10      | 16     | 25     | 35      | 50      |
| 16      | 25      | 40      | 63     | 80     | 100     | 125     |
| 16      | 25      | 40      | 63     | 80     | 100     | 125     |
| 16      | 25      | 40      | 63     | 80     | 100     | 125     |
| 16      | 25      | 40      | 63     | 80     | 100     | 125     |
| 16      | 20      | 23      | 45     | 75     | 80      | 90      |
| 16      | 20      | 23      | 45     | 65     | 65      | 78      |
| 16      | 20      | 23      | 45     | 58     | 60      | 70      |
| 10      | 11      | 12      | 20     | 20     | 40      | 50      |
| 16/1    | 25/1    | 32/1    | 63/1   | 80/1   | 100/1   | 125/1   |
| 16/2    | 25/2    | 32/2    | 63/2   | 80/2   | 100/2   | 125/2   |
| 16/3    | 25/3    | 32/3    | 63/4   | 63/4   | 100/4   | 100/4   |
| 16/4    | 16/4    | 16/4    | 16/4   | 16/4   |         |         |
| 16/4    | 16/4    | 16/4    | 16/4   | 16/4   |         |         |
| 16/1    | 25/1    | 32/1    | 63/1   | 80/1   | 100/1   | 125/1   |
| 16/2    | 25/2    | 32/2    | 63/2   | 80/2   | 100/2   | 125/2   |
| 16/3    | 25/3    | 32/4    | 45/4   | 45/4   | 63/4    | 80/4    |
| 10/4    | 10/4    | 10/4    | 10/4   | 10/4   |         |         |
| 16/1    | 25/1    | 32/1    | 63/1   | 80/1   | 100/1   | 125/1   |
| 16/2    | 25/2    | 32/2    | 63/2   | 80/2   | 100/2   | 125/2   |
| 16/4    | 25/4    | 32/4    | 45/4   | 45/4   | 63/4    | 63/4    |
| 10/4    | 10/4    | 10/4    | 10/4   | 10/4   |         |         |
| 3       | 4       | 5,5     | 11     | 22     | 22      | 22      |
| 7.5     | 9       | 11      | 22     | 37     | 37      | 45      |
| 7.5     | 9       | 11      | 22     | 37     | 37      | 45      |
| 7.5     | 9       | 11      | 22     | 37     | 37      | 45      |
| 7.5     | 9       | 11      | 15     | 18.5   | 37      | 45      |
| 128     | 160     | 184     | 360    | 640    | 640     | 720     |
| 128     | 160     | 184     | 360    | 464    | 480     | 560     |
| 80      | 88      | 96      | 160    | 160    | 320     | 400     |
| 6.5     | 6.5     | 6.5     | 13     | 13     | 16.5    | 16.5    |
| 40/32   | 40/32   | 40/32   | 100/80 | 100/80 | 125/125 | 125/125 |
|         |         |         | 17     | 17     |         |         |
|         |         |         | 100/80 | 100/80 |         |         |
| 0.5     | 0.5     | 0.5     | 1      | 1.5    | 2.5     | 2.5     |
| 0.7     | 0.7     | 0.7     | 1.4    | 2.1    | 3.6     | 3.6     |
| 0.3     | 0.6     | 1.6     | 2.8    | 4.5    | 4.0     | 6.3     |
| 10 000  | 10 000  | 10 000  | 10 000 | 10 000 | 10 000  | 10 000  |
| 20 000  | 20 000  | 20 000  | 20 000 | 20 000 | 20 000  | 20 000  |
| 0.75-10 | 0.75-10 | 0.75-10 | 1.5-35 | 1.5-35 | 10-70   | 10-70   |
| 18-8    | 18-8    | 18-8    | 14-4   | 14-4   | 8-00    | 8-00    |
| 0.8     | 0.8     | 0.8     | 2      | 2      | 6       | 6       |
| 1       | 1       | 1       | 1.2    | 1.2    | 2       | 2       |
| 0.25    | 0.25    | 0.25    | 0.64   | 0.64   | 0.90    | 0.90    |
| 0.31    | 0.31    | 0.31    | 0.70   | 0.70   | 1.18    | 1.18    |
| 16      | 25      | 40      | 60     | 80     |         |         |
| 3       | 7.5     | 10      | 15     | 20     |         |         |
| 3       | 7.5     | 10      | 15     | 20     |         |         |
| 5       | 7.5     | 10      | 15     | 20     |         |         |
| 10      | 15      | 20      | 30     | 40     |         |         |
| 10      | 20      | 25      | 30     | 40     |         |         |

# Technical data

## Motorized change-over switches

### OTM40...125\_C\_

#### Motorized change-over switches

##### Data according to IEC 60947-3

|                                                                                                                                                                                                                                                     |                                           | Switch size        |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------|-----------------|
| Rated insulation voltage and rated operational voltage AC20/DC20                                                                                                                                                                                    |                                           | Pollution degree 3 | V               |
| Dielectric strength                                                                                                                                                                                                                                 |                                           | 50 Hz 1 min.       | kV              |
| Rated impulse withstand voltage                                                                                                                                                                                                                     |                                           |                    | kV              |
| Rated thermal current and rated operational current AC20/DC20                                                                                                                                                                                       | / ambient 40°C                            | In open air        | A               |
|                                                                                                                                                                                                                                                     | / ambient 40°C                            | In enclosure       | A               |
|                                                                                                                                                                                                                                                     | / ambient 60°C                            | In enclosure       | A               |
| ..with minimum conductor cross section                                                                                                                                                                                                              |                                           | Cu                 | mm <sup>2</sup> |
| Rated operational current, AC-21A                                                                                                                                                                                                                   |                                           | up to 500 V        | A               |
|                                                                                                                                                                                                                                                     |                                           | 690 V              | A               |
| Rated operational current, AC-22A                                                                                                                                                                                                                   |                                           | up to 500 V        | A               |
|                                                                                                                                                                                                                                                     |                                           | 690 V              | A               |
| Rated operational current, AC-23A                                                                                                                                                                                                                   |                                           | up to 415 V        | A               |
|                                                                                                                                                                                                                                                     |                                           | 500 V              | A               |
|                                                                                                                                                                                                                                                     |                                           | 690 V              | A               |
| Rated operational current / poles in series, DC-21A                                                                                                                                                                                                 |                                           | up to 48 V         | A               |
|                                                                                                                                                                                                                                                     |                                           | 110 V              | A               |
|                                                                                                                                                                                                                                                     |                                           | 220 V              | A               |
| Rated operational current / poles in series, DC-22A                                                                                                                                                                                                 |                                           | up to 48 V         | A               |
|                                                                                                                                                                                                                                                     |                                           | 110 V              | A               |
|                                                                                                                                                                                                                                                     |                                           | 220 V              | A               |
| Rated operational current / poles in series, DC-23A                                                                                                                                                                                                 |                                           | up to 48 V         | A               |
|                                                                                                                                                                                                                                                     |                                           | 110 V              | A               |
|                                                                                                                                                                                                                                                     |                                           | 220 V              | A               |
| Rated operational power, AC-23A <sup>1)</sup>                                                                                                                                                                                                       |                                           | 230 V              | kW              |
| The kW-ratings are accurate for 3-phase 1500 R.P.M. standard asynchronous motors                                                                                                                                                                    |                                           | 400 V              | kW              |
|                                                                                                                                                                                                                                                     |                                           | 415 V              | kW              |
|                                                                                                                                                                                                                                                     |                                           | 500 V              | kW              |
|                                                                                                                                                                                                                                                     |                                           | 690 V              | kW              |
| Rated breaking capacity in category AC-23                                                                                                                                                                                                           |                                           | up to 415 V        | A               |
|                                                                                                                                                                                                                                                     |                                           | 500 V              | A               |
|                                                                                                                                                                                                                                                     |                                           | 690 V              | A               |
| Rated conditional short-circuit current $I_p$ (r.m.s.) and corresponding max. allowed cut-off current $\hat{I}_c$ (peak) value. The cut-off current $\hat{I}_c$ refers to values listed by fuse manufacturers (single phase test acc. to IEC60269). | $I_p$ (r.m.s.) 50 kA, 415 V               | $\hat{I}_c$ (peak) | kA              |
|                                                                                                                                                                                                                                                     | Max. OFA_fuse size                        | gG/aM              | A/A             |
|                                                                                                                                                                                                                                                     | $I_p$ (r.m.s.) 18 kA, 690 V               | $\hat{I}_c$ (peak) | kA              |
|                                                                                                                                                                                                                                                     | Max. OFA_fuse size                        | gG                 | A               |
|                                                                                                                                                                                                                                                     | $I_p$ (r.m.s.) 50 kA, 690 V               | $\hat{I}_c$ (peak) | kA              |
|                                                                                                                                                                                                                                                     | Max. OFA_fuse size                        | gG/aM              | A/A             |
| Rated short-time withstand current                                                                                                                                                                                                                  | $I_{cw}$ (r.m.s.)                         | 690 V 1s           | kA              |
| Rated short-time making capacity <sup>2)</sup>                                                                                                                                                                                                      | $I_{cm}$ (peak)                           | 690 V              | kA              |
| Power loss / pole                                                                                                                                                                                                                                   | With rated current                        |                    | W               |
| Mechanical endurance                                                                                                                                                                                                                                | Number of oper. cycles <sup>3)</sup>      |                    | Cycles          |
| Mechanical endurance / switch                                                                                                                                                                                                                       | Number of operations                      |                    | Oper.           |
| Cable size                                                                                                                                                                                                                                          | Cu-wire size suitable for terminal clamps |                    | mm <sup>2</sup> |
|                                                                                                                                                                                                                                                     |                                           |                    | AWG             |
| Terminal tightening torque                                                                                                                                                                                                                          | Counter torque required                   |                    | Nm              |
| Operating torque                                                                                                                                                                                                                                    | Typical for 3-pole switches               |                    | Nm              |
| Weight without accessories                                                                                                                                                                                                                          | 3-pole switch                             |                    | kg              |
|                                                                                                                                                                                                                                                     | 4-pole switch                             |                    | kg              |

##### Data according to IEC 60947-6-1

|                                    |                   |             |    |
|------------------------------------|-------------------|-------------|----|
| Class of equipment                 |                   |             |    |
| Rated short-time withstand current | $I_{cw}$ (r.m.s.) | 690 V 0.1s  | kA |
| Conditional short-circuit current  | $I_{cc}$ (r.m.s.) | 415 V       | kA |
| Corresponding fuse rating          | gG/aM fuse        | 415 V       | A  |
| Rated operational current, AC-31B  |                   | up to 415 V | A  |
| Rated operational current, AC-32B  |                   | up to 415 V | A  |
| Rated operational current, AC-33B  |                   | up to 415 V | A  |

<sup>1)</sup> These values are given for guidance and may vary acc. to the motor manufacturer

<sup>2)</sup> Short circuit duration > 50ms, without fuse protection

<sup>3)</sup> Operating cycle: O - I - O - II - O

| OTM40_          | OTM63_  | OTM80_  | OTM100_ | OTM125_ |
|-----------------|---------|---------|---------|---------|
| 800             | 800     | 800     | 800     | 800     |
| 6               | 6       | 6       | 6       | 6       |
| 8               | 8       | 8       | 8       | 8       |
| 40              | 63      | 80      | 115     | 125     |
| 40              | 63      | 80      | 115     | 125     |
| 32              | 50      | 63      | 80      | 100     |
| 10              | 16      | 25      | 35      | 50      |
| 40              | 63      | 80      | 100     | 125     |
| 40              | 63      | 80      | 100     | 125     |
| 40              | 63      | 80      | 100     | 125     |
| 40              | 63      | 80      | 100     | 125     |
| 40              | 63      | 80      | 80      | 90      |
| 40              | 60      | 60      | 60      | 70      |
| 40              | 40      | 40      | 40      | 50      |
| 40/1            | 63/1    | 80/1    | 100/1   | 125/1   |
| 40/2            | 63/2    | 80/2    | 100/2   | 125/2   |
| 40/4            | 63/4    | 80/4    | 100/4   | 100/4   |
| 40/1            | 63/1    | 80/1    | 100/1   | 125/1   |
| 40/2            | 63/2    | 80/2    | 100/2   | 125/2   |
| 40/4            | 63/4    | 80/4    | 80/4    | 80/4    |
| 40/1            | 63/1    | 80/1    | 100/1   | 125/1   |
| 40/2            | 63/2    | 80/2    | 100/2   | 125/2   |
| 40/4            | 63/4    | 63/4    | 63/4    | 63/4    |
| 7.5             | 15      | 22      | 22      | 22      |
| 18.5            | 30      | 37      | 37      | 45      |
| 18.5            | 30      | 37      | 37      | 45      |
| 22              | 37      | 37      | 37      | 45      |
| 37              | 37      | 37      | 37      | 45      |
| 320             | 504     | 640     | 640     | 720     |
| 320             | 480     | 480     | 480     | 560     |
| 320             | 320     | 320     | 320     | 400     |
| 16.5            | 16.5    | 16.5    | 16.5    | 16.5    |
| 125/125         | 125/125 | 125/125 | 125/125 | 125/125 |
| 11              | 11      | 11      | 11      | 11      |
| 125             | 125     | 125     | 125     | 125     |
| 10              | 10      | 10      | 10      | 10      |
| 63/63           | 63/63   | 63/63   | 63/63   | 63/63   |
| 2.5             | 2.5     | 2.5     | 2.5     | 2.5     |
| 3.6             | 3.6     | 3.6     | 3.6     | 3.6     |
| 1.6             | 2.8     | 3.5     | 4.0     | 6.3     |
| 10 000          | 10 000  | 10 000  | 10 000  | 10 000  |
| 20 000          | 20 000  | 20 000  | 20 000  | 20 000  |
| 2.5-25/2x2.5-16 | 10-70   | 10-70   | 10-70   | 10-70   |
| 14-4/2x14-6     | 8-00    | 8-00    | 8-00    | 8-00    |
| 6               | 6       | 6       | 6       | 6       |
| 5               | 5       | 5       | 5       | 5       |
| 1.37            | 1.37    | 1.37    | 1.37    | 1.37    |
| 1.60            | 1.60    | 1.60    | 1.60    | 1.60    |
| PC              | PC      | PC      | PC      | PC      |
| 5               | 5       | 5       | 5       | 5       |
| 50              | 50      | 50      | 50      | 50      |
| 125             | 125     | 125     | 125     | 125     |
| 40              | 63      | 80      | 100     | 125     |
| 40              | 63      | 80      | 100     | 125     |
| 40              | 63      | 80      | 80      | 80      |

# Technical data

## Manual, motorized and automatic transfer switches OT/OTM160...2500\_C\_

### Manual / motorized change-over switches and automatic transfer switches

| Data according to IEC 60947-3                                                                                          |                                           |                                  | Switch size     | OT_160_ | OT_200_ |
|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------|-----------------|---------|---------|
| Rated insulation voltage and rated operational voltage AC20/DC20 <sup>1)</sup>                                         |                                           | Pollution degree 3 <sup>2)</sup> | V               | 1000    | 1000    |
| Dielectric strength                                                                                                    |                                           | 50 Hz 1min.                      | kV              | 10      | 10      |
| Rated impulse withstand voltage <sup>3)</sup>                                                                          |                                           |                                  | kV              | 12      | 12      |
| Rated thermal current and rated operational current AC20/DC20                                                          | / ambient 40°C                            | In open air                      | A               | 160     | 200     |
| ..with minimum conductor cross section                                                                                 | / ambient 40°C                            | In enclosure                     | A               | 160     | 200     |
| Rated operational current, AC-21A                                                                                      |                                           | Cu                               | mm <sup>2</sup> | 70      | 95      |
|                                                                                                                        |                                           | up to 500 V                      | A               | 160     | 200     |
|                                                                                                                        |                                           | 690 V                            | A               | 160     | 200     |
| Rated operational current, AC-22A                                                                                      |                                           | up to 500 V                      | A               | 160     | 200     |
|                                                                                                                        |                                           | 690 V                            | A               | 160     | 200     |
| Rated operational current, AC-23A                                                                                      |                                           | up to 415 V                      | A               | 160     | 200     |
|                                                                                                                        |                                           | 440 V                            | A               | 160     | 200     |
|                                                                                                                        |                                           | 500 V                            | A               | 160     | 200     |
|                                                                                                                        |                                           | 690 V                            | A               | 160     | 200     |
| Rated operational current / poles in series, DC-21A...23A                                                              |                                           | ≤ 110 V                          | A               | 160/2   | 200/2   |
|                                                                                                                        |                                           | 220 V                            | A               | 160/2   | 200/2   |
|                                                                                                                        |                                           | 440 V                            | A               | 160/3   | 200/3   |
|                                                                                                                        |                                           | 660 V                            | A               | 160/4   | 200/4   |
| Rated operational power, AC-23A <sup>5)</sup>                                                                          |                                           | 230 V                            | kW              | 45      | 60      |
| The kW-ratings are accurate for 3-phase 1500 R.P.M. standard asynchronous motors                                       |                                           | 400 V                            | kW              | 90      | 110     |
|                                                                                                                        |                                           | 415 V                            | kW              | 90      | 110     |
|                                                                                                                        |                                           | 500 V                            | kW              | 110     | 132     |
|                                                                                                                        |                                           | 690 V                            | kW              | 160     | 200     |
| Rated breaking capacity in category AC-23                                                                              |                                           | up to 415 V                      | A               | 1 280   | 1 600   |
|                                                                                                                        |                                           | 500 V                            | A               | 1 280   | 1 600   |
|                                                                                                                        |                                           | 690 V                            | A               | 1 280   | 1 600   |
| Rated conditional short-circuit current I <sub>p</sub> (r.m.s.) and cut-off current Î <sub>c</sub> (peak) value.       | I <sub>p</sub> (r.m.s.) 80 kA, 415 V      | Î <sub>c</sub> (peak)            | kA              | 40.5    | 40.5    |
| The cut-off current Î <sub>c</sub> refers to values listed by fuse manufacturers (single phase test acc. to IEC60269). | Max. OFA_ fuse size                       | gG/aM                            | A/A             | 355/315 | 355/315 |
|                                                                                                                        | I <sub>p</sub> (r.m.s.) 100 kA, 500 V     | Î <sub>c</sub> (peak)            | kA              | 40.5    | 40.5    |
|                                                                                                                        | Max. OFA_ fuse size                       | gG/aM                            | A               | 315/315 | 315/315 |
|                                                                                                                        | I <sub>p</sub> (r.m.s.) 80 kA, 690 V      | Î <sub>c</sub> (peak)            | kA              | 40.5    | 40.5    |
|                                                                                                                        | Max. OFA_ fuse size                       | gG/aM                            | A               | 355/315 | 355/315 |
| Rated short-time withstand current                                                                                     | I <sub>cw</sub> (r.m.s.)                  | 690 V 0.15s                      | kA              | 15      | 15      |
|                                                                                                                        |                                           | 690 V 0.25s                      | kA              | 15      | 15      |
|                                                                                                                        |                                           | 690 V 1s                         | kA              | 8       | 8       |
| Rated short-time making capacity <sup>6)</sup>                                                                         | I <sub>cm</sub> (peak) <sup>7)</sup>      | 690 V                            | kA              | 30      | 30      |
| Power loss / pole                                                                                                      | With rated current                        |                                  | W               | 2.4     | 4       |
| Mechanical endurance                                                                                                   | Number of oper. cycles <sup>8)</sup>      | Cycles                           |                 | 8 000   | 8 000   |
| Mechanical endurance / switch                                                                                          | Number of operations                      | Oper.                            |                 | 16 000  | 16 000  |
| Terminal bolt size                                                                                                     | Metric thread diameter x length           | mm                               |                 | M8x25   | M8x25   |
| Terminal tightening torque                                                                                             | Counter torque required                   | Nm                               |                 | 15-22   | 15-22   |
| Operating torque                                                                                                       | Typical for 3-pole switches               | Nm                               |                 | 7       | 7       |
| Weight without accessories                                                                                             | Manual change-over switches               | 3-pole switch                    | kg              | 2.5     | 2.5     |
|                                                                                                                        |                                           | 4-pole switch                    | kg              | 3.2     | 3.2     |
|                                                                                                                        | Motorized and automatic transfer switches | 3-pole switch                    | kg              | 5.7     | 5.7     |
|                                                                                                                        |                                           | 4-pole switch                    | kg              | 6.4     | 6.4     |

### Data according to IEC 60947-6-1

|                                    |                          |             |    |     |     |
|------------------------------------|--------------------------|-------------|----|-----|-----|
| Class of equipment                 |                          |             |    | PC  | PC  |
| Rated short-time withstand current | I <sub>sw</sub> (r.m.s.) | 690 V 0.1s  | kA | 15  | 15  |
| Rated operational current, AC-31B  |                          | up to 415 V | A  | 160 | 200 |
| Rated operational current, AC-33B  |                          | up to 415 V | A  | 160 | 200 |

<sup>1)</sup> Automatic transfer switches: operational voltage = max. 415 V AC for OTM\_C2D\_, OTM\_C3D\_ and OTM\_C8D\_

<sup>2)</sup> Automatic transfer switches: pollution degree 2 for OTM\_C2D\_, OTM\_C3D\_ and OTM\_C8D\_

<sup>3)</sup> Automatic transfer switches: U<sub>imp</sub> = 6 kV for OTM\_C2D\_, OTM\_C3D\_ and OTM\_C8D\_

<sup>4)</sup> Utilization category B

<sup>5)</sup> These values are given for guidance and may vary acc. to the motor manufacturer

<sup>6)</sup> Short circuit duration > 50ms, without fuse protection

<sup>7)</sup> Max. distance from switch frame to nearest busbar / cable support 150 mm

<sup>8)</sup> Operating cycle: O - I - O - II - O

<sup>9)</sup> Category AC-21B, up to 415V

<sup>10)</sup> For manual change-over switches

<sup>11)</sup> For motorized and automatic transfer switches

| OT_250_ | OT_315_             | OT_400_             | OT_630_                                | OT_800_                                | OT_1000_    | OT_1250_    | OT_1600_    | OT_2000_            | OT_2500_            |
|---------|---------------------|---------------------|----------------------------------------|----------------------------------------|-------------|-------------|-------------|---------------------|---------------------|
| 1000    | 1000                | 1000                | 1000                                   | 1000                                   | 1 000       | 1 000       | 1 000       | 1 000               | 1 000               |
| 10      | 10                  | 10                  | 10                                     | 10                                     | 10          | 10          | 10          | 10                  | 10                  |
| 12      | 12                  | 12                  | 12                                     | 12                                     | 12          | 12          | 12          | 12                  | 12                  |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 600       | 2000                | 2500                |
| 250     | 315                 | 400                 | 630                                    | 800                                    |             |             |             |                     |                     |
| 120     | 185                 | 240                 | 2x185                                  | 2x240                                  | 2x300       | 2x400       | 2x500       | 3x500               | 4x500               |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 600       | 2000 <sup>9)</sup>  | 2500 <sup>9)</sup>  |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 600       |                     |                     |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 600       |                     |                     |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 250       |                     |                     |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 250       |                     |                     |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 250       |                     |                     |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 250       | 1 250       |                     |                     |
| 250/2   | 315/1 <sup>4)</sup> | 400/1 <sup>4)</sup> | 630/1                                  | 800/1                                  |             |             |             |                     |                     |
| 250/2   | 315/2 <sup>4)</sup> | 400/2 <sup>4)</sup> | 630/1                                  | 800/1                                  |             |             |             |                     |                     |
| 230/3   | 315/3               | 360/3               | 630/2                                  | 720/2                                  |             |             |             |                     |                     |
| 200/4   | 315/4               | 315/4               | 630/4 <sup>4)</sup>                    | 630/4 <sup>4)</sup>                    |             |             |             |                     |                     |
| 75      | 100                 | 132                 | 200                                    | 250                                    | 315         | 400         | 400         |                     |                     |
| 140     | 160                 | 220                 | 355                                    | 450                                    | 560         | 710         | 710         |                     |                     |
| 145     | 180                 | 230                 | 355                                    | 450                                    | 560         | 710         | 710         |                     |                     |
| 170     | 220                 | 280                 | 400                                    | 560                                    | 710         | 900         | 900         |                     |                     |
| 250     | 315                 | 400                 | 630                                    | 800                                    | 1 000       | 1 200       | 1 200       |                     |                     |
| 2 000   | 2 520               | 3 200               | 5 040                                  | 6 400                                  | 10 000      | 10 000      | 10 000      |                     |                     |
| 2 000   | 2 520               | 3 200               | 5 040                                  | 6 400                                  | 10 000      | 10 000      | 10 000      |                     |                     |
| 2 000   | 2 520               | 3 200               | 5 040                                  | 6 400                                  | 10 000      | 10 000      | 10 000      |                     |                     |
| 40.5    | 59                  | 59                  | 83.5                                   | 83.5                                   | 100         | 100         | 100         |                     |                     |
| 355/315 | 500/500             | 500/500             | 800/1 000                              | 800/1 000                              | 1 250/1 250 | 1 250/1 250 | 1 250/1 250 |                     |                     |
| 40.5    | 61.5                | 61.5                | 90                                     | 90                                     | 106         | 106         | 106         |                     |                     |
| 315/315 | 500/450             | 500/450             | 800/800                                | 800/800                                | 1 250/1 250 | 1 250/1 250 | 1 250/1 250 |                     |                     |
| 40.5    | 59                  | 59                  | 83.5                                   | 83.5                                   |             |             |             |                     |                     |
| 355/315 | 500/500             | 500/500             | 800/1 000                              | 800/1 000                              |             |             |             |                     |                     |
| 15      | 31                  | 31                  | 38                                     | 38                                     | 50          | 50          | 50          | 50                  | 50                  |
| 15      | 24                  | 24                  | 36                                     | 36                                     | 50          | 50          | 50          | 50                  | 50                  |
| 8       | 15                  | 15                  | 20                                     | 20                                     | 50          | 50          | 50          | 55                  | 55                  |
| 30      | 65                  | 65                  | 80                                     | 80                                     | 92          | 92          | 92          | 110                 | 110                 |
| 6.5     | 6.5                 | 10                  | 25                                     | 40                                     | 19          | 29          | 48          | 55                  | 85                  |
| 8 000   | 8 000               | 8 000               | 5 000                                  | 5 000                                  | 3 000       | 3 000       | 3 000       | 2000                | 2000                |
| 16 000  | 16 000              | 16 000              | 10 000                                 | 10 000                                 | 6 000       | 6 000       | 6 000       | 4000                | 4000                |
| M8x25   | M10x30              | M10x30              | M12x40                                 | M12x40                                 | M12x60      | M12x60      | M12x60      | M12x60              | M12x60              |
| 15-22   | 30-44               | 30-44               | 50-75                                  | 50-75                                  | 50-75       | 50-75       | 50-75       | 50-75               | 50-75               |
| 7       | 16                  | 16                  | 27                                     | 27                                     | 78          | 78          | 78          | 78                  | 78                  |
| 2.5     | 4.7                 | 4.7                 | 12.8                                   | 12.8                                   | 32.3        | 32.3        | 34.8        | 48                  | 48                  |
| 3.2     | 5.8                 | 5.8                 | 15.6                                   | 15.6                                   | 40.2        | 40.2        | 43.3        | 60                  | 60                  |
| 5.7     | 10.2                | 10.2                | 17.5                                   | 17.5                                   | 42          | 42          | 44          | 56                  | 56                  |
| 6.4     | 11.4                | 11.4                | 20.4                                   | 20.4                                   | 50          | 50          | 52          | 70                  | 70                  |
| PC      | PC                  | PC                  | PC                                     | PC                                     | PC          | PC          | PC          | PC                  | PC                  |
| 15      | 25                  | 25                  | 38                                     | 38                                     | 50          | 50          | 50          | 50                  | 50                  |
| 250     | 315                 | 400                 | 630 <sup>10)</sup> /650 <sup>11)</sup> | 800 <sup>10)</sup> /720 <sup>11)</sup> | 1 000       | 1 250       | 1 600       | 2000 <sup>10)</sup> | 2000 <sup>10)</sup> |
| 250     | 315                 | 400                 | 630 <sup>10)</sup> /650 <sup>11)</sup> | 800 <sup>10)</sup> /650 <sup>11)</sup> | 1 000       | 1 000       | 1 000       |                     |                     |

# Technical data, motor operators

## Motorized change-over switches

### OTM40...125\_C\_

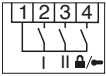
#### Motor operator

| Data according to IEC 60947                         |                                                                    | Switch size              | 40...125                |
|-----------------------------------------------------|--------------------------------------------------------------------|--------------------------|-------------------------|
| Rated operational voltage $U_e$                     | Pollution degree 3<br>50/60 Hz                                     | V AC/DC                  | 110 - 240               |
| Operating voltage range                             |                                                                    |                          | $0.85 - 1.1 \times U_e$ |
| Operating time <sup>1)</sup>                        | 90° I-0, 0-I, 0-II, II-0                                           | s                        | 0.5-1.0                 |
| Operating transfer time <sup>1)</sup>               | 180° I-II, II-I                                                    | s                        | 1.2-1.5                 |
| OFF -time when operating I-II or II-I <sup>1)</sup> | 180° I-II, II-I                                                    | s                        | 0.4-0.8                 |
| Nominal current $I_n$ <sup>1)</sup>                 |                                                                    | A                        | 0.2-0.5                 |
| Current inrush <sup>1)</sup>                        |                                                                    | A                        | 1.5-3.0                 |
| Operating rate                                      | Cycle 0-I-0-II-0<br>Max. continuous<br>Max. short-time ≤ 10 cycles | cycles/min<br>cycles/min | 1<br>10                 |
| Overvoltage category                                |                                                                    |                          | III                     |
| Rated impulse withstand voltage $U_{imp}$           |                                                                    | kV                       | 4                       |
| Dielectric strength                                 | 50 Hz 1 min.                                                       | kV                       | 1.5                     |
| Impulse command                                     | Min. impulse duration                                              | ms                       | 100                     |

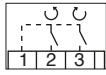
#### Terminals

|                                 |                |                 |                |
|---------------------------------|----------------|-----------------|----------------|
| Voltage supply wiring for $U_e$ |                |                 | PE - N - L     |
| Cross section                   | Solid/stranded | mm <sup>2</sup> | 1.5 - 2.5      |
| Short-circuit protection device | Max. MCB       | A               | C16            |
| Control terminal                |                |                 | C - II - I - O |
| Cross section                   | Solid/stranded | mm <sup>2</sup> | 1.5 - 2.5      |
| Maximum cable length            |                | m               | 100            |

#### Terminal for state information

|                                               |                                                                                     |                |                 |                |
|-----------------------------------------------|-------------------------------------------------------------------------------------|----------------|-----------------|----------------|
| Terminal for state information                |  | Solid/stranded | mm <sup>2</sup> | 1.5            |
| Also used with the OMD automatic control unit |                                                                                     | Rating         | A               | 3<br>AC-1/250V |
| Common, voltage supply                        | 1                                                                                   |                |                 |                |
| Position of switch I                          | 2                                                                                   |                |                 |                |
| Position of switch II                         | 3                                                                                   |                |                 |                |
| Handle attached or motor operator locked      | 4                                                                                   |                |                 |                |
| Short-circuit protection device               |                                                                                     | Max. MCB       | A               | C2             |

#### Control terminal for OMD automatic control unit

|                                                 |                                                                                     |                |                 |           |
|-------------------------------------------------|-------------------------------------------------------------------------------------|----------------|-----------------|-----------|
| Control terminal for OMD automatic control unit |  | Solid/stranded | mm <sup>2</sup> | 1.5 - 2.5 |
| Common, voltage supply from motor operator      |                                                                                     |                |                 |           |
| Close switch I or open switch II                | 2                                                                                   |                | V DC<br>mW      | 24<br>500 |
| Close switch II or open switch I                | 3                                                                                   |                | V DC<br>mW      | 24<br>500 |
| Operating temperature                           |                                                                                     |                | °C              | -25...+55 |
| Transportation and storage temperature          |                                                                                     |                | °C              | -40...+70 |
| Max. altitude                                   |                                                                                     |                | m               | 2000      |
| Protection degree (front panel)                 |                                                                                     |                |                 | IP20      |

<sup>1)</sup> Under nominal conditions

# Technical data, motor operators

## Motorized change-over switches

### OTM160...2500\_C\_

#### Motor operator

| Data according to IEC 60947                            |                                     | Switch size                                   | 160...250                                            | 315...400                                 | 630...800                                | 1000...1600                                | 2000...2500                              |
|--------------------------------------------------------|-------------------------------------|-----------------------------------------------|------------------------------------------------------|-------------------------------------------|------------------------------------------|--------------------------------------------|------------------------------------------|
| Rated operational voltage $U_e$                        | Pollution degree 3<br>50/60 Hz      | V AC<br>V AC/DC<br>V DC<br>V DC               |                                                      |                                           | 220 - 240<br>110 - 125<br>48<br>24       |                                            |                                          |
| Operating voltage range                                |                                     |                                               | 0,85 - 1,1 x $U_e$                                   |                                           |                                          |                                            |                                          |
| Operating time <sup>1)</sup>                           | 90° I-O, 0-I, 0-II, II-O            | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | s<br>s<br>s<br>s                                     | 0.4-1.0<br>0.5-1.5<br>0.5-1.5<br>0.4-1.0  | 0.4-1.0<br>0.5-1.5<br>0.4-1.0<br>0.5-1.5 | 0.4-1.0<br>0.6-1.2<br>0.6-1.6<br>1.0-2.0   | 0.5-1.5<br>0.5-1.5<br>0.5-1.5<br>1.0-2.0 |
| Operating transfer time <sup>1)</sup>                  | 180° I-O-II, II-O-I                 | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | s<br>s<br>s<br>s                                     | 1.0-2.0<br>1.1-2.5<br>1.4-2.5<br>1.0-2.0  | 0.9-2.0<br>1.2-2.6<br>1.0-2.0<br>1.0-2.0 | 0.9-2.0<br>1.2-3.0<br>1.3-3.0<br>1.1-2.5   | 1.5-3.0<br>1.5-3.0<br>1.5-3.0<br>2.0-3.5 |
| OFF -time when operating<br>I-II or II-I <sup>1)</sup> | 180° I-II, II-I                     | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | s<br>s<br>s<br>s                                     | 0.4-1.0<br>0.4-1.1<br>0.5-1.1<br>0.4-1.0  | 0.4-1.0<br>0.5-1.5<br>0.4-1.0<br>0.4-1.0 | 0.4-1.0<br>0.6-1.5<br>0.7-1.6<br>0.5-1.5   | 0.5-1.5<br>0.5-1.5<br>0.5-1.5<br>0.8-1.7 |
| Nominal current $I_n$ <sup>1)</sup>                    |                                     | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | A<br>A<br>A<br>A                                     | 0.2<br>0.5<br>1.1<br>3.3                  | 0.5<br>0.6<br>2.1<br>4.2                 | 0.7<br>0.8<br>2.6<br>4                     | 1.8<br>3.0<br>5.3<br>8.0                 |
| Current inrush <sup>1)</sup>                           |                                     | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | A<br>A<br>A<br>A                                     | 1.3<br>2.1<br>4.4<br>16.8                 | 2.1<br>2.5<br>8.3<br>17.5                | 2.8<br>4.6<br>8.4<br>22.4                  | 7.7<br>13.3<br>22.4<br>26.6              |
| Overload fuse                                          | Type / $I_n$ / Capacity             | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | mA<br>mA<br>A<br>A                                   | T/315/H<br>T/500/H<br>T/1,25/H<br>T/4,0/H | T/500/H<br>T/630/H<br>T/2,5/H<br>T/5,0/H | T/1000/H<br>T/1000/H<br>T/2,5/H<br>T/5,0/H | T/2000/H<br>T/4000/H<br>T/5/H<br>T/10/H  |
|                                                        | Size                                |                                               | mm                                                   | 5x20                                      | 5x20                                     | 5x20                                       | 5x20                                     |
| Operating rate                                         | Cycle 0-I-O-II-O<br>Max. continuous | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | cycles/min<br>cycles/min<br>cycles/min<br>cycles/min | 1<br>1<br>1<br>1                          | 1<br>1<br>1<br>1                         | 1<br>1<br>1<br>1                           | 0.5<br>0.5<br>0.5<br>0.5                 |
|                                                        | Max. short-time ≤ 10 cycles         | 220-240VAC<br>110-125VAC/DC<br>48VDC<br>24VDC | cycles/min<br>cycles/min<br>cycles/min<br>cycles/min | 10<br>10<br>10<br>10                      | 10<br>10<br>10<br>10                     | 10<br>10<br>10<br>10                       | 5<br>5<br>5<br>5                         |
| Overvoltage category                                   |                                     |                                               |                                                      |                                           |                                          | III                                        |                                          |
| Rated impulse withstand voltage $U_{imp}$              |                                     |                                               | kV                                                   |                                           |                                          | 4                                          |                                          |
| Dielectric strength                                    | 50 Hz 1 min.                        |                                               | kV                                                   |                                           |                                          | 1.5                                        |                                          |
| Impulse command                                        | Min. impulse<br>duration            |                                               | ms                                                   |                                           |                                          | 100                                        |                                          |
| <b>Terminals</b>                                       |                                     |                                               |                                                      |                                           |                                          |                                            |                                          |
| Voltage supply wiring for $U_e$                        |                                     |                                               |                                                      |                                           |                                          | PE - N - L                                 |                                          |
| Cross section                                          | solid/stranded                      | mm <sup>2</sup>                               |                                                      |                                           |                                          | 1.5 - 2.5                                  |                                          |
| Short-circuit protection device                        | max. MCB                            | A                                             |                                                      |                                           |                                          | C16                                        |                                          |
| Control terminal (no SELV)                             |                                     |                                               |                                                      |                                           |                                          | C - II - I - O                             |                                          |
| Cross section                                          | solid/stranded                      | mm <sup>2</sup>                               |                                                      |                                           |                                          | 1.5 - 2.5                                  |                                          |
| Maximum cable length                                   |                                     | m                                             |                                                      |                                           |                                          | 100                                        |                                          |
| <b>State information of locking (no SELV)</b>          |                                     |                                               |                                                      |                                           |                                          |                                            |                                          |
| Handle attached or motor operator locked               | 11-12-14 (C/O)                      |                                               |                                                      |                                           |                                          | 5A/250V/cosφ=1                             |                                          |
| Locking motor operator                                 | 23-24 (NO)                          |                                               |                                                      |                                           |                                          | 5A/250V/cosφ=1                             |                                          |
| Short-circuit protection device                        | Max. MCB                            | A                                             |                                                      |                                           |                                          | C2                                         |                                          |
| Protection degree                                      |                                     |                                               |                                                      |                                           |                                          | IP20                                       |                                          |
| Operating temperature                                  |                                     | °C                                            |                                                      |                                           |                                          | -25...+55                                  |                                          |
| Transportation and storage temperature                 |                                     | °C                                            |                                                      |                                           |                                          | -40...+70                                  |                                          |
| Max. altitude                                          |                                     | m                                             |                                                      |                                           |                                          | 2000                                       |                                          |

<sup>1)</sup> Under nominal conditions

# Technical data, power circuit

## Automatic transfer switches

### Technical data for automatic transfer switches, power circuit

|                                                                          |                                  |
|--------------------------------------------------------------------------|----------------------------------|
| <b>OTM_C2D_ (OMD200)</b>                                                 |                                  |
| Rated operational voltage U <sub>e</sub>                                 | 208 - 415 V AC +/- 20 % + N      |
| Phase - Neutral                                                          | 120 - 240 V AC +/- 20 %          |
| Rated frequency                                                          | 50 / 60 Hz +/- 10 %              |
| Rated impulse withstand voltage U <sub>imp</sub>                         | 6 kV                             |
| <b>OTM_C3D_ (OMD300)</b>                                                 |                                  |
| Rated operational voltage U <sub>e</sub>                                 | 208 - 415 V AC +/- 20 % + N      |
| Phase - Neutral                                                          | 120 - 240 V AC +/- 20 %          |
| Rated frequency                                                          | 50 / 60 Hz +/- 10 %              |
| Rated impulse withstand voltage U <sub>imp</sub>                         | 6 kV                             |
| <b>OTM_C8D_ (OMD800)</b>                                                 |                                  |
| Rated operational voltage U <sub>e</sub> on 3 phase system               | 100 - 415 V AC +/- 20 %          |
| Phase - Neutral                                                          | 57,7 - 240 V AC +/- 20 %         |
| Rated operational voltage U <sub>e</sub> on 1 phase system <sup>1)</sup> | 57,7 - 240 V AC +/- 20 %         |
| Rated frequency                                                          | 50 / 60 Hz +/- 10 %              |
| Rated impulse withstand voltage U <sub>imp</sub>                         | 6 kV                             |
| AUX voltage <sup>1)</sup>                                                | 24 V DC - 110 V DC (-10 to 15 %) |
| Operating temperature                                                    | -5...+40°C                       |
| Transportation and storage temperature                                   | -25...+70°C                      |
| Altitude                                                                 | Max.2000m                        |

<sup>1)</sup> If on 1 phase system the voltage level is between 57,7 – 109 V AC, AUX voltage supply must be used



# Technical data, motor operator Automatic transfer switches

## Technical data for motor operator, control circuit

| Motor operator, control circuit                  |                                  |                 | OTM160...250               | OTM315...400 | OTM630...800 | OTM1000...1600 |
|--------------------------------------------------|----------------------------------|-----------------|----------------------------|--------------|--------------|----------------|
| Rated operational voltage U [V]                  | Pollution degree 3               | 50/60 Hz        | 220 - 240 V AC             |              |              |                |
| Operating voltage range                          |                                  |                 | 0,8...1,2 x U <sub>n</sub> |              |              |                |
| Operating times                                  |                                  |                 | See the table below        |              |              |                |
| Nominal current I <sub>n</sub> <sup>a)</sup>     |                                  | A               | 0.2                        | 0.5          | 0.7          | 1.8            |
| Current Inrush <sup>a)</sup>                     |                                  | A               | 1.3                        | 2.1          | 2.8          | 7.7            |
| Overload fuse                                    | Type / I <sub>n</sub> / Capacity | mA              | T/315/H                    | T/500/H      | T/1000/H     | T/2000/H       |
|                                                  | Size                             | mm              | 5x20                       | 5x20         | 5x20         | 5x20           |
| Operating rate                                   | Cycle 0 - I - 0 - II - 0         |                 |                            |              |              |                |
|                                                  | Max. continuous                  | cycles / min    | 1                          | 1            | 1            | 0.5            |
| Max. short-time ≤ 10 cycles                      |                                  | cycles / min    | 10                         | 10           | 10           | 5              |
| Overvoltage category                             |                                  |                 | III                        |              |              |                |
| Rated impulse withstand voltage U <sub>imp</sub> |                                  | kV              | 4                          |              |              |                |
| Dielectric strength                              | 50 Hz 1 min.                     | kV              | 1.5                        |              |              |                |
| Terminals                                        |                                  |                 |                            |              |              |                |
| Voltage supply wiring for U                      |                                  |                 | PE - N - L                 |              |              |                |
| Cross section                                    | solid/stranded                   | mm <sup>2</sup> | 1.5 - 2.5                  |              |              |                |
| Short-circuit protection device                  | max. MCB                         | A               | C16                        |              |              |                |
| State information of locking (no SELV)           |                                  |                 |                            |              |              |                |
| Cross section                                    | solid/stranded                   | mm <sup>2</sup> | 1.5 - 2.5                  |              |              |                |
| Locking motor operator                           | 23-24 (NO)                       |                 | 5A/250V/cosφ=1             |              |              |                |
| Short-circuit protection device                  | Max. MCB                         | A               | C2                         |              |              |                |
| Protection degree                                |                                  |                 | IP20                       |              |              |                |
| Operating temperature                            |                                  | °C              | -25...+55                  |              |              |                |
| Transportation and storage temperature           |                                  | °C              | -40...+70                  |              |              |                |
| Max. altitude                                    |                                  | m               | 2000                       |              |              |                |

## Operating times

| Type                | Operating transfer time <sup>a)</sup> | OFF-time when operating <sup>a)</sup> |
|---------------------|---------------------------------------|---------------------------------------|
|                     | I - II, II - I [s]                    | I - II, II - I [s]                    |
| OTM160...250_C2D_   | 2.0 - 4.0                             | 0.4 - 1.0                             |
| OTM160...250_C3D_   | 2.0 - 4.0                             | 0.4 - 1.0                             |
| OTM160...250_C8D_   | 1.5 - 3.0                             | 0.4 - 1.0                             |
| OTM315...400_C2D_   | 2.0 - 5.0                             | 0.4 - 1.0                             |
| OTM315...400_C3D_   | 2.0 - 5.0                             | 0.4 - 1.0                             |
| OTM315...400_C8D_   | 1.5 - 3.0                             | 0.4 - 1.0                             |
| OTM630...800_C2D_   | 2.0 - 5.0                             | 0.4 - 1.0                             |
| OTM630...800_C3D_   | 2.0 - 5.0                             | 0.4 - 1.0                             |
| OTM630...800_C8D_   | 1.5 - 3.0                             | 0.4 - 1.0                             |
| OTM1000...1600_C2D_ | 3.0 - 6.0                             | 0.6 - 1.5                             |
| OTM1000...1600_C3D_ | 3.0 - 6.0                             | 0.6 - 1.5                             |
| OTM1000...1600_C8D_ | 2.5 - 4.0                             | 0.6 - 1.5                             |

<sup>a)</sup> Under nominal conditions

# Technical data

## Automatic control units and dual power source

### Technical data for automatic control units OMD200/300/800

#### OMD200 and OMD300

|                                                   |                                    |
|---------------------------------------------------|------------------------------------|
| Rated operational voltage U <sub>e</sub>          | 208 V AC - 480 V AC +/- 20% + N    |
| Phase - Neutral                                   | 120 V AC - 277 V AC +/- 20%        |
| Rated frequency                                   | 50 / 60 Hz +/- 10%                 |
| Voltage sensing precision                         | 5%                                 |
| Frequency sensing precision                       | 1%                                 |
| Relay ratings:                                    |                                    |
| X21, X22                                          | 12 A, AC1, 250 V / 12 A, DC1, 24 V |
| X23, X24                                          | 8 A, AC1, 250 V / 8 A, DC1, 24 V   |
| X26, X27, X28                                     | 10 A, AC1, 250 V / 5 A, DC1, 24 V  |
| Rated impulse withstand voltage, U <sub>imp</sub> | 6 kV                               |
| Overvoltage category                              | III                                |
| Pollution degree                                  | 2                                  |

#### OMD800

|                                                                          |                                    |
|--------------------------------------------------------------------------|------------------------------------|
| Rated operational voltage U <sub>e</sub> on 3 phase system               | 100 V AC - 480 V AC +/- 20%        |
| Phase - Neutral                                                          | 57,7 V AC - 277 V AC +/- 20%       |
| Rated operational voltage U <sub>e</sub> on 1 phase system <sup>1)</sup> | 57,7 V AC - 277 V AC +/- 20%       |
| Rated frequency                                                          | 50 / 60 Hz +/- 10%                 |
| Voltage sensing precision                                                | 1%                                 |
| Frequency sensing precision                                              | 1%                                 |
| Relay ratings:                                                           |                                    |
| X21, X22, X24                                                            | 12 A, AC1, 250 V / 12 A, DC1, 24 V |
| X23                                                                      | 8 A, AC1, 250 V / 8 A, DC1, 24 V   |
| X29                                                                      | 5 A, AC1, 250 V / 6 A, DC1, 24 V   |
| Rated impulse withstand voltage, U <sub>imp</sub>                        | 6 kV                               |
| Overvoltage category                                                     | III                                |
| Pollution degree                                                         | 2                                  |
| AUX voltage <sup>1)</sup>                                                | 24 V DC - 110 V DC (-10% to +15%)  |
| Protection rating for the front panel                                    | IP40                               |
| Operating temperature                                                    | - 20...+ 60 °C                     |
| Transportation and storage temperature                                   | - 25...+ 80 °C                     |
| Altitude                                                                 | Max. 2000m                         |
| Humidity                                                                 |                                    |
| With condensation                                                        | 5 %...98 %                         |
| Without condensation                                                     | 5 %...90 %                         |

<sup>1)</sup> If on 1 phase system the voltage level is between 57,7 – 109 V AC, AUX voltage supply must be used

### Technical data for dual power source ODPSE230C

#### Dual power source ODPSE230C

|                                                   |                            |
|---------------------------------------------------|----------------------------|
| Rated operational voltage U [V]                   | 220...240 V AC +/- 20%     |
| Rated frequency                                   | 50 / 60 Hz +/- 10%         |
| Short-circuit protection device                   | Max. MCB 4 A               |
| Nominal output current I <sub>n</sub> [A]         | 4 A                        |
| Startup time                                      | Max. 1.0 s (with 230 V AC) |
| Operating transfer time LN1 - LN2 or LN2 - LN1    | Max. 0.5 s (with 230 V AC) |
| Cable size                                        | 0,2...2,5 mm <sup>2</sup>  |
| Rated impulse withstand voltage, U <sub>imp</sub> | 4 kV                       |
| Overvoltage category                              | III                        |
| Pollution degree                                  | 3                          |
| Protection rating for the front panel             | IP20                       |
| Operating temperature                             | - 25...+ 60 °C             |
| Transportation and storage temperature            | - 40...+ 70 °C             |
| Altitude                                          | Max. 2000m                 |

# Technical data

## UL/CSA manual change-over switches

### OT200...800U\_C\_ and auxiliary contacts

#### Manual change-over switches

| Data according to UL and CSA                |  |  | Switch size         | OT200U_    | OT400U_    | OT600U_    | OT800U_    |     |
|---------------------------------------------|--|--|---------------------|------------|------------|------------|------------|-----|
| Standards                                   |  |  |                     | UL98       | UL98       | UL98       | UL98       |     |
|                                             |  |  |                     | CSA 22.2#4 | CSA 22.2#4 | CSA 22.2#4 | CSA 22.2#4 |     |
| General use ratings - 1- or 3-phase ratings |  |  | V                   | 600        | 600        | 600        | 600        |     |
|                                             |  |  | A                   | 200        | 400        | 600        | 800        |     |
| Horsepower, 3-phase ratings                 |  |  | 240V HP             | 75         | 125        | 200        | 250        |     |
|                                             |  |  | 480V HP             | 150        | 250        | 450        | 500        |     |
|                                             |  |  | 600V HP             | 200        | 350        | 500        | 500        |     |
| Short-circuit ratings                       |  |  | Required protection |            |            |            |            |     |
|                                             |  |  | Circuit breaker     | kA         | 14         | 25         | 35         | 42  |
|                                             |  |  | Class J/L fuse      | kA         | 65/100     | 100        | 100        | 100 |
|                                             |  |  | ...fuse size        | A          | 400/200    | 600        | 800        | 800 |
|                                             |  |  | Class RK5 fuse      | kA         |            |            | 100        |     |
|                                             |  |  | ...fuse size        | A          |            |            | 600        |     |

#### Data according to IEC 60947-3

|                                                                                                                                                     |                                                                |                             |         |                 |                 |                  |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------|---------|-----------------|-----------------|------------------|------------------|
| Data according to IEC 60371-1                                                                                                                       |                                                                |                             |         |                 |                 |                  |                  |
| Rated insulation voltage and rated operational voltage AC20/DC20                                                                                    | Pollution degree 3                                             | V                           | 1000    | 1000            | 1000            | 1000             |                  |
| Dielectric strength                                                                                                                                 | 50 Hz 1min.                                                    | kV                          | 10      | 10              | 10              | 10               |                  |
| Rated impulse withstand voltage                                                                                                                     |                                                                | kV                          | 12      | 12              | 12              | 12               |                  |
| Rated thermal current and rated operational current AC20/DC20                                                                                       | / ambient 40°C In open air                                     | A                           | 250     | 400             | 800             | 1600             |                  |
| ..with minimum conductor cross section                                                                                                              | Cu                                                             | mm²                         | 120     | 240             | 2x240           | 2x500            |                  |
| Rated operational current, AC-21A                                                                                                                   | up to 690 V                                                    | A                           | 250     | 400             | 800             | 1600             |                  |
| Rated operational current, AC-22A                                                                                                                   | up to 500 V                                                    | A                           | 250     | 400             | 800             | 1600             |                  |
|                                                                                                                                                     | 690 V                                                          | A                           | 250     | 400             | 800             | 1600             |                  |
| Rated operational current, AC-23A                                                                                                                   | up to 500 V                                                    | A                           | 250     | 400             | 800             | 1250             |                  |
|                                                                                                                                                     | 690 V                                                          | A                           | 250     | 400             | 800             | 1250             |                  |
| Rated conditional short-circuit current I <sub>p</sub> (r.m.s.) and corresponding max. allowed cut-off current $\hat{I}_c$ peak value <sup>1)</sup> | I <sub>p</sub> (r.m.s.) : 100 kA, 500 V<br>Max. OFA_ fuse size | $\hat{I}_c$ (peak)<br>gG/aM | kA<br>A | 40.5<br>315/315 | 61.5<br>500/450 | 90<br>800/800    | 106<br>1250/1250 |
|                                                                                                                                                     | I <sub>p</sub> (r.m.s.) : 80 kA, 690 V<br>Max. OFA_ fuse size  | $\hat{I}_c$ (peak)<br>gG/aM | kA<br>A | 40.5<br>355/315 | 59<br>500/500   | 83.5<br>800/1000 |                  |
| Rated short-time withstand current                                                                                                                  | I <sub>cw</sub> (r.m.s.)                                       | 690V, 1s                    | kA      | 8               | 15              | 20               | 50               |
| Rated short-circuit making capacity                                                                                                                 | I <sub>cm</sub> (peak)                                         | 690V                        | kA      | 30              | 65              | 80               | 92               |
| Mechanical endurance                                                                                                                                | Number of operating cycles <sup>2)</sup>                       | Cycles                      | 8000    | 8000            | 5000            | 3000             |                  |
| Mechanical endurance / switch                                                                                                                       | Number of operations                                           | Oper.                       | 16000   | 16000           | 10000           | 6000             |                  |
| Terminal bolt size                                                                                                                                  | Metric thread diameter x length                                | mm                          | M8x25   | M10x30          | M12x40          | M12x60           |                  |
| Terminal tightening torque                                                                                                                          | Counter torque required                                        | Nm                          | 15...22 | 30...44         | 50...75         | 50...75          |                  |
| Operating torque                                                                                                                                    | 3-pole switches                                                | Nm                          | 7       | 16              | 27              | 78               |                  |
| Weight without accessories                                                                                                                          | 3-pole switch                                                  | kg                          | 2.8     | 5.0             | 13.1            | 34.8             |                  |
|                                                                                                                                                     | 4-pole switch                                                  | kg                          | 3.5     | 6.1             | 15.9            | 43.3             |                  |

#### Data according to IEC 60947-6-1

|                                    |  |                                     |   |     |     |     |      |
|------------------------------------|--|-------------------------------------|---|-----|-----|-----|------|
| Class of equipment                 |  |                                     |   | PC  | PC  | PC  | PC   |
| Rated short-time withstand current |  | I <sub>cw</sub> (r.m.s.) 690 V 0.1s |   | 15  | 25  | 38  | 50   |
| Rated operational current, AC-31B  |  | up to 415 V                         | A | 250 | 400 | 800 | 1600 |
| Rated operational current, AC-33B  |  | up to 415 V                         | A | 250 | 400 | 800 | 1000 |

<sup>1)</sup> The fuse in single-phase test according to IEC 60269

<sup>2)</sup> Operating cycle: O - I - O - II - O

#### Auxiliary contacts

##### Technical data for auxiliary contacts according to IEC 60947-5-1

For OA1G\_, OA2G\_, OA3G\_, OA7G\_, OA8G\_

| AC15                |                     | DC12                |                     |       | DC13                |       |
|---------------------|---------------------|---------------------|---------------------|-------|---------------------|-------|
| U <sub>e</sub> /[V] | I <sub>e</sub> /[A] | U <sub>e</sub> /[V] | I <sub>e</sub> /[A] | P/[W] | I <sub>e</sub> /[A] | P/[W] |
| 230                 | 6                   | 24                  | 10                  | 240   | 2                   | 50    |
| 400                 | 4                   | 72                  | 4                   | 290   | 0.8                 | 60    |
| 415                 | 4                   | 125                 | 2                   | 250   | 0.55                | 70    |
| 690                 | 2                   | 250                 | 0.55                | 140   | 0.27                | 70    |
|                     |                     | 440                 | 0.1                 | 44    |                     |       |

# Ordering information

## Manual change-over switches, IEC-types

OT16...40F3C



OT63...80F3C



OT100...125F3C



### Manual change-over switches, I-O-II -operation, open transition

Including terminal clamps, IP20. Handle and shaft has to be ordered separately. OT 16...80 are UL Listed.

| No.<br>of<br>poles | Rated current and power |                |                      | Type     | Order number    | Units/ Weight/ |              |
|--------------------|-------------------------|----------------|----------------------|----------|-----------------|----------------|--------------|
|                    | AC-21A/AC-22A           |                | AC-23A<br>400...415V |          |                 | type<br>[pcs]  | unit<br>[kg] |
|                    | ≤ 415V<br>I[A]          | 400V<br>S[kVA] |                      |          |                 |                |              |
| 3                  | 16                      | 11             | 16/7.5               | OT16F3C  | 1SCA104816R1001 | 1              | 0.25         |
| 4                  | 16                      | 11             | 16/7.5               | OT16F4C  | 1SCA104831R1001 | 1              | 0.31         |
| 3                  | 25                      | 17             | 20/9                 | OT25F3C  | 1SCA104863R1001 | 1              | 0.25         |
| 4                  | 25                      | 17             | 20/9                 | OT25F4C  | 1SCA104877R1001 | 1              | 0.31         |
| 3                  | 40                      | 27             | 23/11                | OT40F3C  | 1SCA104913R1001 | 1              | 0.25         |
| 4                  | 40                      | 27             | 23/11                | OT40F4C  | 1SCA104934R1001 | 1              | 0.31         |
| 3                  | 63                      | 43             | 45/22                | OT63F3C  | 1SCA105338R1001 | 1              | 0.64         |
| 4                  | 63                      | 43             | 45/22                | OT63F4C  | 1SCA105369R1001 | 1              | 0.70         |
| 3                  | 80                      | 55             | 75/37                | OT80F3C  | 1SCA105402R1001 | 1              | 0.64         |
| 4                  | 80                      | 55             | 75/37                | OT80F4C  | 1SCA105418R1001 | 1              | 0.70         |
| 3                  | 100                     | 70             | 80/37                | OT100F3C | 1SCA105008R1001 | 1              | 0.90         |
| 4                  | 100                     | 70             | 80/37                | OT100F4C | 1SCA105019R1001 | 1              | 1.18         |
| 3                  | 125                     | 86             | 90/45                | OT125F3C | 1SCA105037R1001 | 1              | 0.90         |
| 4                  | 125                     | 86             | 90/45                | OT125F4C | 1SCA105054R1001 | 1              | 1.18         |

### Cable cross section of the change-over switches

| Suitable for switches | Cable cross section [mm²] |
|-----------------------|---------------------------|
| OT16...40F_C          | 0.75 ... 10               |
| OT63...80F_C          | 1.5 ... 35                |
| OT100...125F_C        | 10 ... 70                 |

# Ordering information

## Manual change-over switches, IEC-types

OT160...250E03CP



OT160...250E03WCP



OT160...250E04CP



OT160...250E04WCP



OT160...250E33CP



OT160...250E33WCP



### Manual change-over switches, I-O-II -operation, open transition

Including a black plastic IP65 I-O-II pistol type handle (see the table below), shaft and bolt set for the cable connection. Handle padlockable in the 0-position, door interlock in the I- and II-positions and when padlocked.

| No.<br>of<br>poles                  | Rated current and power |                |                          | Type        | Order number    | Units/ Weight/ |      |
|-------------------------------------|-------------------------|----------------|--------------------------|-------------|-----------------|----------------|------|
|                                     | AC-21A/AC-22A           |                | AC-23A                   |             |                 | type           | unit |
|                                     | ≤415V<br>I[A]           | 400V<br>S[kVA] | 400...415V<br>I[A]/P[kW] |             |                 |                |      |
| Types -W: with wide phase distance. |                         |                |                          |             |                 |                |      |
| 3                                   | 160                     | 110            | 160/90                   | OT160E03CP  | 1SCA022772R6510 | 1              | 3.3  |
| 3                                   | 160                     | 110            | 160/90                   | OT160E12CP  | 1SCA022776R9080 | 1              | 3.3  |
| 3                                   | 160                     | 110            | 160/90                   | OT160E03WCP | 1SCA022772R8210 | 1              | 3.6  |
| 4                                   | 160                     | 110            | 160/90                   | OT160E04CP  | 1SCA022775R9440 | 1              | 4.1  |
| 4                                   | 160                     | 110            | 160/90                   | OT160E13CP  | 1SCA022777R0170 | 1              | 4.1  |
| 4                                   | 160                     | 110            | 160/90                   | OT160E04WCP | 1SCA022775R0220 | 1              | 4.4  |
| 6                                   | 160                     | 110            | 160/90                   | OT160E33CP  | 1SCA118537R1001 | 1              | 5.7  |
| 6                                   | 160                     | 110            | 160/90                   | OT160E33WCP | 1SCA118603R1001 | 1              | 6.0  |
| 3                                   | 200                     | 135            | 200/110                  | OT200E03CP  | 1SCA022771R7520 | 1              | 3.3  |
| 3                                   | 200                     | 135            | 200/110                  | OT200E12CP  | 1SCA022776R8510 | 1              | 3.3  |
| 3                                   | 200                     | 135            | 200/110                  | OT200E03WCP | 1SCA022772R8720 | 1              | 3.6  |
| 4                                   | 200                     | 135            | 200/110                  | OT200E04CP  | 1SCA022771R7280 | 1              | 4.1  |
| 4                                   | 200                     | 135            | 200/110                  | OT200E13CP  | 1SCA022777R0250 | 1              | 4.1  |
| 4                                   | 200                     | 135            | 200/110                  | OT200E04WCP | 1SCA022775R0650 | 1              | 4.4  |
| 6                                   | 200                     | 135            | 200/110                  | OT200E33CP  | 1SCA118541R1001 | 1              | 5.7  |
| 6                                   | 200                     | 135            | 200/110                  | OT200E33WCP | 1SCA118607R1001 | 1              | 6.0  |
| 3                                   | 250                     | 170            | 250/140                  | OT250E03CP  | 1SCA022771R3450 | 1              | 3.3  |
| 3                                   | 250                     | 170            | 250/140                  | OT250E12CP  | 1SCA022776R9320 | 1              | 3.3  |
| 3                                   | 250                     | 170            | 250/140                  | OT250E03WCP | 1SCA022772R8300 | 1              | 3.6  |
| 4                                   | 250                     | 170            | 250/140                  | OT250E04CP  | 1SCA022775R4640 | 1              | 4.1  |
| 4                                   | 250                     | 170            | 250/140                  | OT250E13CP  | 1SCA022777R0330 | 1              | 4.1  |
| 4                                   | 250                     | 170            | 250/140                  | OT250E04WCP | 1SCA022775R0810 | 1              | 4.4  |
| 6                                   | 250                     | 170            | 250/140                  | OT250E33CP  | 1SCA118551R1001 | 1              | 5.7  |
| 6                                   | 250                     | 170            | 250/140                  | OT250E33WCP | 1SCA118608R1001 | 1              | 6.0  |

### Shafts, handle and bolt kits included as standard

| Suitable for switches | Shaft    | Handle      | Bolt kit |
|-----------------------|----------|-------------|----------|
| OT160...250_C         | OXp6x161 | OHB65J6E011 | M8x25    |

# Ordering information

## Manual change-over switches, IEC-types

OT315...400E03CP



OT315...400E13CP



OT315...400E33CP



OT630...800E03CP



OT630...800E04CP



OT630...800E33CP



### Manual change-over switches, I-O-II -operation, open transition

Including a black plastic IP65 I-O-II pistol type handle (see the table below), shaft and bolt set for the cable connection. Handle padlockable in the 0-position, door interlock in the I- and II-positions and when padlocked.

| No.<br>of<br>poles                    | Rated current and power |                |                          | Type       | Order number    | Units/ Weight/<br>type unit |      |
|---------------------------------------|-------------------------|----------------|--------------------------|------------|-----------------|-----------------------------|------|
|                                       | AC-21A/AC-22A           |                | AC-23A                   |            |                 | [pcs]                       | [kg] |
|                                       | ≤ 415V<br>I[A]          | 400V<br>S[kVA] |                          |            |                 |                             |      |
|                                       |                         |                | 400...415V<br>I[A]/P[kW] |            |                 |                             |      |
| Place of mechanism, see the pictures. |                         |                |                          |            |                 |                             |      |
| 3                                     | 315                     | 215            | 315/160                  | OT315E03CP | 1SCA022772R6780 | 1                           | 5.9  |
| 3                                     | 315                     | 215            | 315/160                  | OT315E12CP | 1SCA022776R9910 | 1                           | 5.9  |
| 4                                     | 315                     | 215            | 315/160                  | OT315E04CP | 1SCA022775R7150 | 1                           | 7.1  |
| 4                                     | 315                     | 215            | 315/160                  | OT315E13CP | 1SCA022777R0410 | 1                           | 7.1  |
| 6                                     | 315                     | 215            | 315/160                  | OT315E33CP | 1SCA118635R1001 | 1                           | 9.5  |
| 3                                     | 400                     | 275            | 400/220                  | OT400E03CP | 1SCA022771R8500 | 1                           | 5.9  |
| 3                                     | 400                     | 275            | 400/220                  | OT400E12CP | 1SCA022776R9590 | 1                           | 5.9  |
| 4                                     | 400                     | 275            | 400/220                  | OT400E04CP | 1SCA022771R8680 | 1                           | 7.1  |
| 4                                     | 400                     | 275            | 400/220                  | OT400E13CP | 1SCA022777R0500 | 1                           | 7.1  |
| 6                                     | 400                     | 275            | 400/220                  | OT400E33CP | 1SCA118629R1001 | 1                           | 9.5  |
| 3                                     | 630                     | 435            | 630/355                  | OT630E03CP | 1SCA022785R6050 | 1                           | 17.7 |
| 3                                     | 630                     | 435            | 630/355                  | OT630E12CP | 1SCA022785R8690 | 1                           | 17.7 |
| 4                                     | 630                     | 435            | 630/355                  | OT630E04CP | 1SCA022785R6130 | 1                           | 21   |
| 4                                     | 630                     | 435            | 630/355                  | OT630E13CP | 1SCA022785R9070 | 1                           | 21   |
| 6                                     | 630                     | 435            | 630/355                  | OT630E33CP | 1SCA118652R1001 | 1                           | 27.6 |
| 3                                     | 800                     | 550            | 800/450                  | OT800E03CP | 1SCA022785R6300 | 1                           | 17.7 |
| 3                                     | 800                     | 550            | 800/450                  | OT800E12CP | 1SCA022785R8850 | 1                           | 17.7 |
| 4                                     | 800                     | 550            | 800/450                  | OT800E04CP | 1SCA022785R6210 | 1                           | 21   |
| 4                                     | 800                     | 550            | 800/450                  | OT800E13CP | 1SCA022785R9230 | 1                           | 21   |
| 6                                     | 800                     | 550            | 800/450                  | OT800E33CP | 1SCA118649R1001 | 1                           | 27.6 |

### Shafts, handle and bolt kits included as standard

| Suitable for switches | Shaft     | Handle        | Bolt kit |
|-----------------------|-----------|---------------|----------|
| OT315...400_C         | OXF12x166 | OHB95J12E011  | M10x30   |
| OT630...800_C         | OXF12x185 | OHB125J12E011 | M12x40   |



# Ordering information

## Manual change-over switches, IEC-types

OT1250E03CP



OT1000...1250E22CP



OT1600E03CP



OT2000...2500E03CP



### Manual change-over switches, I-O-II -operation, open transition

Including a black plastic IP65 I-O-II pistol type handle (see the table below), shaft and bolt set for the cable connection. Handle padlockable in the 0-position, door interlock in the I- and II-positions and when padlocked.

| No.<br>of<br>poles                    | Rated current <sup>1)</sup> and power |                |                          | Type        | Order number    | Units/ Weight/<br>type unit |      |
|---------------------------------------|---------------------------------------|----------------|--------------------------|-------------|-----------------|-----------------------------|------|
|                                       | AC-21A/AC-22A                         |                | AC-23A                   |             |                 | [pcs]                       | [kg] |
|                                       | ≤ 415V<br>I[A]                        | 400V<br>S[kVA] | 400...415V<br>I[A]/P[kW] |             |                 |                             |      |
| Place of mechanism, see the pictures. |                                       |                |                          |             |                 |                             |      |
| 3                                     | 1000                                  | 680            | 1000/560                 | OT1000E03CP | 1SCA022872R1680 | 1                           | 48   |
| 3                                     | 1000                                  | 680            | 1000/560                 | OT1000E12CP | 1SCA103287R1001 | 1                           | 48   |
| 4                                     | 1000                                  | 680            | 1000/560                 | OT1000E04CP | 1SCA022872R1500 | 1                           | 60   |
| 4                                     | 1000                                  | 680            | 1000/560                 | OT1000E13CP | 1SCA103291R1001 | 1                           | 60   |
| 4                                     | 1000                                  | 680            | 1000/560                 | OT1000E22CP | 1SCA103289R1001 | 1                           | 60   |
| 3                                     | 1250                                  | 850            | 1250/710                 | OT1250E03CP | 1SCA022872R0790 | 1                           | 48   |
| 3                                     | 1250                                  | 850            | 1250/710                 | OT1250E12CP | 1SCA103308R1001 | 1                           | 48   |
| 4                                     | 1250                                  | 850            | 1250/710                 | OT1250E04CP | 1SCA022872R1250 | 1                           | 60   |
| 4                                     | 1250                                  | 850            | 1250/710                 | OT1250E13CP | 1SCA103313R1001 | 1                           | 60   |
| 4                                     | 1250                                  | 850            | 1250/710                 | OT1250E22CP | 1SCA103311R1001 | 1                           | 60   |
| 3                                     | 1600                                  | 1000           | 1250/710                 | OT1600E03CP | 1SCA022872R1840 | 1                           | 51   |
| 3                                     | 1600                                  | 1000           | 1250/710                 | OT1600E12CP | 1SCA103293R1001 | 1                           | 51   |
| 4                                     | 1600                                  | 1000           | 1250/710                 | OT1600E04CP | 1SCA022872R2310 | 1                           | 63   |
| 4                                     | 1600                                  | 1000           | 1250/710                 | OT1600E13CP | 1SCA103306R1001 | 1                           | 63   |
| 4                                     | 1600                                  | 1000           | 1250/710                 | OT1600E22CP | 1SCA103303R1001 | 1                           | 63   |
| 3                                     | 2000                                  | 1350           |                          | OT2000E03CP | 1SCA103908R1001 | 1                           | 70   |
| 3                                     | 2000                                  | 1350           |                          | OT2000E12CP | 1SCA103915R1001 | 1                           | 70   |
| 4                                     | 2000                                  | 1350           |                          | OT2000E04CP | 1SCA103912R1001 | 1                           | 86   |
| 4                                     | 2000                                  | 1350           |                          | OT2000E13CP | 1SCA103918R1001 | 1                           | 86   |
| 4                                     | 2000                                  | 1350           |                          | OT2000E22CP | 1SCA103953R1001 | 1                           | 86   |
| 3                                     | 2500                                  | 1700           |                          | OT2500E03CP | 1SCA105615R1001 | 1                           | 70   |
| 3                                     | 2500                                  | 1700           |                          | OT2500E12CP | 1SCA103891R1001 | 1                           | 70   |
| 4                                     | 2500                                  | 1700           |                          | OT2500E04CP | 1SCA103906R1001 | 1                           | 86   |
| 4                                     | 2500                                  | 1700           |                          | OT2500E13CP | 1SCA103895R1001 | 1                           | 86   |
| 4                                     | 2500                                  | 1700           |                          | OT2500E22CP | 1SCA103902R1001 | 1                           | 86   |

<sup>1)</sup> OT2000...2500: Category AC-21B

### Shafts, handle and bolt kits included as standard

| Suitable for switches | Shaft     | Handle        | Bolt kit |
|-----------------------|-----------|---------------|----------|
| OT1000...2500_C       | EXP12x185 | OH200J12PE011 | M12x60   |

# Ordering information

## Manual change-over switches, IEC-types

OT160...250E03CFP



OT160...250E03WCFP



OT315...400E13CFP



OT630...800E03CFP



### Manual change-over switches, I-O-II -operation, fast transition

Including a black plastic IP65 I-O-II pistol type handle (see the table below), shaft and bolt set for the cable connection. Handle not padlockable and no door interlocking. Operating angle 90° to achieve fast switching. Minimum OFF-time between transfer from I-II or II-I is 20 ms.

| No.<br>of<br>poles                                                        | Rated current and power |                |                          | Type         | Order number    | Units/ Weight/<br>type unit |      |
|---------------------------------------------------------------------------|-------------------------|----------------|--------------------------|--------------|-----------------|-----------------------------|------|
|                                                                           | AC-21A/AC-22A           |                | AC-23A                   |              |                 | [pcs]                       | [kg] |
|                                                                           | ≤ 415V<br>I[A]          | 400V<br>S[kVA] | 400...415V<br>I[A]/P[kW] |              |                 |                             |      |
| Place of mechanism, see the pictures. Types -W: with wide phase distance. |                         |                |                          |              |                 |                             |      |
| 3                                                                         | 160                     | 110            | 160/90                   | OT160E03CFP  | 1SCA106086R1001 | 1                           | 3.3  |
| 3                                                                         | 160                     | 110            | 160/90                   | OT160E12CFP  | 1SCA108496R1001 | 1                           | 3.3  |
| 3                                                                         | 160                     | 110            | 160/90                   | OT160E03WCFP | 1SCA108484R1001 | 1                           | 3.6  |
| 4                                                                         | 160                     | 110            | 160/90                   | OT160E04CFP  | 1SCA108489R1001 | 1                           | 4.1  |
| 4                                                                         | 160                     | 110            | 160/90                   | OT160E13CFP  | 1SCA108502R1001 | 1                           | 4.1  |
| 4                                                                         | 160                     | 110            | 160/90                   | OT160E04WCFP | 1SCA108492R1001 | 1                           | 4.4  |
| 3                                                                         | 200                     | 135            | 200/110                  | OT200E03CFP  | 1SCA108520R1001 | 1                           | 3.3  |
| 3                                                                         | 200                     | 135            | 200/110                  | OT200E12CFP  | 1SCA108535R1001 | 1                           | 3.3  |
| 3                                                                         | 200                     | 135            | 200/110                  | OT200E03WCFP | 1SCA107578R1001 | 1                           | 3.6  |
| 4                                                                         | 200                     | 135            | 200/110                  | OT200E04CFP  | 1SCA108528R1001 | 1                           | 4.1  |
| 4                                                                         | 200                     | 135            | 200/110                  | OT200E13CFP  | 1SCA108543R1001 | 1                           | 4.1  |
| 4                                                                         | 200                     | 135            | 200/110                  | OT200E04WCFP | 1SCA108531R1001 | 1                           | 4.4  |
| 3                                                                         | 250                     | 170            | 250/140                  | OT250E03CFP  | 1SCA108591R1001 | 1                           | 3.3  |
| 3                                                                         | 250                     | 170            | 250/140                  | OT250E12CFP  | 1SCA108609R1001 | 1                           | 3.3  |
| 3                                                                         | 250                     | 170            | 250/140                  | OT250E03WCFP | 1SCA107577R1001 | 1                           | 3.6  |
| 4                                                                         | 250                     | 170            | 250/140                  | OT250E04CFP  | 1SCA108600R1001 | 1                           | 4.1  |
| 4                                                                         | 250                     | 170            | 250/140                  | OT250E13CFP  | 1SCA108615R1001 | 1                           | 4.1  |
| 4                                                                         | 250                     | 170            | 250/140                  | OT250E04WCFP | 1SCA108606R1001 | 1                           | 4.4  |
| 3                                                                         | 315                     | 215            | 315/160                  | OT315E03CFP  | 1SCA108629R1001 | 1                           | 5.9  |
| 3                                                                         | 315                     | 215            | 315/160                  | OT315E12CFP  | 1SCA108633R1001 | 1                           | 5.9  |
| 4                                                                         | 315                     | 215            | 315/160                  | OT315E04CFP  | 1SCA114535R1001 | 1                           | 7.1  |
| 4                                                                         | 315                     | 215            | 315/160                  | OT315E13CFP  | 1SCA106436R1001 | 1                           | 7.1  |
| 3                                                                         | 400                     | 275            | 400/220                  | OT400E03CFP  | 1SCA106360R1001 | 1                           | 5.9  |
| 3                                                                         | 400                     | 275            | 400/220                  | OT400E12CFP  | 1SCA108652R1001 | 1                           | 5.9  |
| 4                                                                         | 400                     | 275            | 400/220                  | OT400E04CFP  | 1SCA108650R1001 | 1                           | 7.1  |
| 4                                                                         | 400                     | 275            | 400/220                  | OT400E13CFP  | 1SCA106441R1001 | 1                           | 7.1  |
| 3                                                                         | 630                     | 435            | 630/355                  | OT630E03CFP  | 1SCA106915R1001 | 1                           | 17.7 |
| 3                                                                         | 630                     | 435            | 630/355                  | OT630E12CFP  | 1SCA106963R1001 | 1                           | 17.7 |
| 4                                                                         | 630                     | 435            | 630/355                  | OT630E04CFP  | 1SCA108753R1001 | 1                           | 21   |
| 4                                                                         | 630                     | 435            | 630/355                  | OT630E13CFP  | 1SCA106988R1001 | 1                           | 21   |
| 3                                                                         | 800                     | 550            | 800/450                  | OT800E03CFP  | 1SCA106916R1001 | 1                           | 17.7 |
| 3                                                                         | 800                     | 550            | 800/450                  | OT800E12CFP  | 1SCA106966R1001 | 1                           | 17.7 |
| 4                                                                         | 800                     | 550            | 800/450                  | OT800E04CFP  | 1SCA106945R1001 | 1                           | 21   |
| 4                                                                         | 800                     | 550            | 800/450                  | OT800E13CFP  | 1SCA106983R1001 | 1                           | 21   |

### Shafts, handle and bolt kits included as standard

| Suitable for switches | Shaft     | Handle       | Bolt kit |
|-----------------------|-----------|--------------|----------|
| OT160...250_CF        | EXP6x161  | OHB65J6E69   | M8x25    |
| OT315...400_CF        | EXP12x166 | OHB95J12E69  | M10x30   |
| OT630...800_CF        | EXP12x185 | OHB145J12E69 | M12x40   |



# Ordering information

## Motorized change-over switches, IEC-types

OTM40...125F3C\_



OTM40...125F4C\_



Change-over switches, motor operation, I-O-II -operation, open transition

Including a handle for manual operation, a storage clip for the handle and male connectors for control circuits.

| No. of poles                                            | Rated current<br>AC-21A,<br>AC-22A<br>≤ 415V, I[A] | Rated power<br>400V<br>S[kVA] | Rated current<br>AC-31B/<br>AC-33B<br>415V, I[A] | Type            | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|---------------------------------------------------------|----------------------------------------------------|-------------------------------|--------------------------------------------------|-----------------|-----------------|-------------------------|-------------------------|
| <b>Motor voltage <math>U_e</math> 110...240 V AC/DC</b> |                                                    |                               |                                                  |                 |                 |                         |                         |
| 3                                                       | 40                                                 | 27                            | 40/40                                            | OTM40F3CMA230V  | 1SCA120096R1001 | 1                       | 1.64                    |
| 4                                                       | 40                                                 | 27                            | 40/40                                            | OTM40F4CMA230V  | 1SCA120102R1001 | 1                       | 1.86                    |
| 3                                                       | 63                                                 | 43                            | 63/63                                            | OTM63F3CMA230V  | 1SCA120095R1001 | 1                       | 1.64                    |
| 4                                                       | 63                                                 | 43                            | 63/63                                            | OTM63F4CMA230V  | 1SCA120101R1001 | 1                       | 1.86                    |
| 3                                                       | 80                                                 | 55                            | 80/80                                            | OTM80F3CMA230V  | 1SCA120093R1001 | 1                       | 1.64                    |
| 4                                                       | 80                                                 | 55                            | 80/80                                            | OTM80F4CMA230V  | 1SCA120100R1001 | 1                       | 1.86                    |
| 3                                                       | 100                                                | 70                            | 100/80                                           | OTM100F3CMA230V | 1SCA120071R1001 | 1                       | 1.64                    |
| 4                                                       | 100                                                | 70                            | 100/80                                           | OTM100F4CMA230V | 1SCA120098R1001 | 1                       | 1.86                    |
| 3                                                       | 125                                                | 86                            | 125/80                                           | OTM125F3CMA230V | 1SCA120070R1001 | 1                       | 1.64                    |
| 4                                                       | 125                                                | 86                            | 125/80                                           | OTM125F4CMA230V | 1SCA120097R1001 | 1                       | 1.86                    |

### Handles included as standard, cable cross section

| Suitable for switches | Cable cross section [mm <sup>2</sup> ] | Handle    |
|-----------------------|----------------------------------------|-----------|
| OTM40F_               | 2.5...25 or 2 x 2.5...16               | OHB65D6CM |
| OTM63...125F_         | 10 ... 70                              | OHB65D6CM |

# Ordering information

## Motorized change-over switches, IEC-types

OTM160...250E2C\_



OTM160...250E2WC\_



OTM160...250E3C\_



OTM160...250E3WC\_



OTM315...400E2C\_



OTM315...400E3C\_



OTM315...400E4C\_



### Change-over switches, motor operation, I-O-II -operation, open transition

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM160...400E\_ include a storage clip for the handle and spare fuses. Types OTM160...250E\_W are equipped with extended phase distance.

| No. of poles                                     | Rated current<br>AC-21A,<br>AC-22A<br>≤ 415V, I[A] | Rated power<br>400V<br>S[kVA] | Rated current<br>AC-31B/<br>AC-33B<br>415V, I[A] | Type            | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|--------------------------------------------------|----------------------------------------------------|-------------------------------|--------------------------------------------------|-----------------|-----------------|-------------------------|-------------------------|
| Motor voltage $U_n$ 220...240 V AC <sup>1)</sup> |                                                    |                               |                                                  |                 |                 |                         |                         |
| 2                                                | 160                                                | 110                           | 160/160                                          | OTM160E2CM230V  | 1SCA121216R1001 | 1                       | 5.7                     |
| 2                                                | 160                                                | 110                           | 160/160                                          | OTM160E2WCM230V | 1SCA121218R1001 | 1                       | 5.9                     |
| 3                                                | 160                                                | 110                           | 160/160                                          | OTM160E3CM230C  | 1SCA022845R8610 | 1                       | 6.6                     |
| 3                                                | 160                                                | 110                           | 160/160                                          | OTM160E3WCM230C | 1SCA022846R4000 | 1                       | 6.9                     |
| 4                                                | 160                                                | 110                           | 160/160                                          | OTM160E4CM230C  | 1SCA022848R1510 | 1                       | 7.5                     |
| 4                                                | 160                                                | 110                           | 160/160                                          | OTM160E4WCM230C | 1SCA022846R7440 | 1                       | 7.9                     |
| 2                                                | 200                                                | 135                           | 200/200                                          | OTM200E2CM230V  | 1SCA121209R1001 | 1                       | 5.7                     |
| 2                                                | 200                                                | 135                           | 200/200                                          | OTM200E2WCM230V | 1SCA121294R1001 | 1                       | 5.9                     |
| 3                                                | 200                                                | 135                           | 200/200                                          | OTM200E3CM230C  | 1SCA022845R8960 | 1                       | 6.6                     |
| 3                                                | 200                                                | 135                           | 200/200                                          | OTM200E3WCM230C | 1SCA022846R3960 | 1                       | 6.9                     |
| 4                                                | 200                                                | 135                           | 200/200                                          | OTM200E4CM230C  | 1SCA022846R1590 | 1                       | 7.5                     |
| 4                                                | 200                                                | 135                           | 200/200                                          | OTM200E4WCM230C | 1SCA022846R7870 | 1                       | 7.9                     |
| 2                                                | 250                                                | 170                           | 250/250                                          | OTM250E2CM230V  | 1SCA121211R1001 | 1                       | 5.7                     |
| 2                                                | 250                                                | 170                           | 250/250                                          | OTM250E2WCM230V | 1SCA121220R1001 | 1                       | 5.9                     |
| 3                                                | 250                                                | 170                           | 250/250                                          | OTM250E3CM230C  | 1SCA022845R9260 | 1                       | 6.6                     |
| 3                                                | 250                                                | 170                           | 250/250                                          | OTM250E3WCM230C | 1SCA022846R4770 | 1                       | 6.9                     |
| 4                                                | 250                                                | 170                           | 250/250                                          | OTM250E4CM230C  | 1SCA022846R1910 | 1                       | 7.5                     |
| 4                                                | 250                                                | 170                           | 250/250                                          | OTM250E4WCM230C | 1SCA022846R8250 | 1                       | 7.9                     |
| 2                                                | 315                                                | 215                           | 315/315                                          | OTM315E2CM230V  | 1SCA121221R1001 | 1                       | 9.7                     |
| 3                                                | 315                                                | 215                           | 315/315                                          | OTM315E3CM230C  | 1SCA022847R1210 | 1                       | 11.1                    |
| 4                                                | 315                                                | 215                           | 315/315                                          | OTM315E4CM230C  | 1SCA022847R2870 | 1                       | 12.5                    |
| 2                                                | 400                                                | 275                           | 400/400                                          | OTM400E2CM230V  | 1SCA121226R1001 | 1                       | 9.7                     |
| 3                                                | 400                                                | 275                           | 400/400                                          | OTM400E3CM230C  | 1SCA022847R1630 | 1                       | 11.1                    |
| 4                                                | 400                                                | 275                           | 400/400                                          | OTM400E4CM230C  | 1SCA022847R3250 | 1                       | 12.5                    |

<sup>1)</sup> 2-pole versions, motor voltage  $U_n$  220...240V AC/DC

### Handles and bolt kits included as standard

| Suitable for switches | Handle     | Bolt kit |
|-----------------------|------------|----------|
| OTM160...250          | OTV250ECMK | M8x25    |
| OTM315...400          | OTV400ECMK | M10x30   |

# Ordering information

## Motorized change-over switches, IEC-types

OTM630...800E2C\_



OTM630...800E3C\_



OTM1000...1250E2C\_



OTM1000...1250E3C\_



OTM1600E2C\_



OTM1600E3C\_



OTM2000...2500E2C\_



OTM2000...2500E3C\_



### Change-over switches, motor operation, I-O-II -operation, open transition

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM630...2500E\_ include a storage clip for the handle and spare fuses.

| No. of poles                                              | Rated current <sup>1)</sup><br>AC-21A,<br>AC-22A<br>≤ 415V, I[A] | Rated power<br>400V<br>S[kVA] | Rated current<br>AC-31B/<br>AC-33B<br>415V, I[A] | Type            | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|-----------------------------------------------------------|------------------------------------------------------------------|-------------------------------|--------------------------------------------------|-----------------|-----------------|-------------------------|-------------------------|
| Motor voltage U <sub>e</sub> 220...240 V AC <sup>2)</sup> |                                                                  |                               |                                                  |                 |                 |                         |                         |
| 2                                                         | 630                                                              | 435                           | 650/650                                          | OTM630E2CM230V  | 1SCA121268R1001 | 1                       | 19                      |
| 3                                                         | 630                                                              | 435                           | 650/650                                          | OTM630E3CM230C  | 1SCA103567R1001 | 1                       | 22                      |
| 4                                                         | 630                                                              | 435                           | 650/650                                          | OTM630E4CM230C  | 1SCA022873R1990 | 1                       | 25                      |
| 2                                                         | 800                                                              | 550                           | 720/650                                          | OTM800E2CM230V  | 1SCA121270R1001 | 1                       | 19                      |
| 3                                                         | 800                                                              | 550                           | 720/650                                          | OTM800E3CM230C  | 1SCA103570R1001 | 1                       | 22                      |
| 4                                                         | 800                                                              | 550                           | 720/650                                          | OTM800E4CM230C  | 1SCA022872R8340 | 1                       | 25                      |
| 2                                                         | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E2CM230V | 1SCA121279R1001 | 1                       | 45                      |
| 3                                                         | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E3CM230C | 1SCA112677R1001 | 1                       | 55                      |
| 4                                                         | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E4CM230C | 1SCA112703R1001 | 1                       | 65                      |
| 2                                                         | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E2CM230V | 1SCA121293R1001 | 1                       | 45                      |
| 3                                                         | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E3CM230C | 1SCA112676R1001 | 1                       | 55                      |
| 4                                                         | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E4CM230C | 1SCA112702R1001 | 1                       | 65                      |
| 2                                                         | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E2CM230V | 1SCA121280R1001 | 1                       | 49                      |
| 3                                                         | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E3CM230C | 1SCA112678R1001 | 1                       | 59                      |
| 4                                                         | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E4CM230C | 1SCA112704R1001 | 1                       | 69                      |
| 2                                                         | 2000                                                             | 1350                          |                                                  | OTM2000E2CM230V | 1SCA121289R1001 | 1                       | 61                      |
| 3                                                         | 2000                                                             | 1350                          |                                                  | OTM2000E3CM230C | 1SCA112709R1001 | 1                       | 78                      |
| 4                                                         | 2000                                                             | 1350                          |                                                  | OTM2000E4CM230C | 1SCA112712R1001 | 1                       | 95                      |
| 2                                                         | 2500                                                             | 1700                          |                                                  | OTM2500E2CM230V | 1SCA121291R1001 | 1                       | 61                      |
| 3                                                         | 2500                                                             | 1700                          |                                                  | OTM2500E3CM230C | 1SCA112710R1001 | 1                       | 78                      |
| 4                                                         | 2500                                                             | 1700                          |                                                  | OTM2500E4CM230C | 1SCA112713R1001 | 1                       | 95                      |

<sup>1)</sup> OTM2000...2500: Category AC-21B

<sup>2)</sup> 2-pole versions, motor voltage U<sub>e</sub> 220...240V AC/DC

### Handles and bolt kits included as standard

| Suitable for switches | Handle      | Bolt kit |
|-----------------------|-------------|----------|
| OTM630...800          | OTV800ECMK  | M12x40   |
| OTM1000...2500        | OTV1000ECMK | M12x60   |

# Ordering information

## Motorized change-over switches, IEC-types

OTM160...250E3C\_



OTM160...250E3WC\_



OTM315...400E3C\_



OTM630...800E3C\_



OTM1000...1250E3C\_



OTM1600E3C\_



OTM2000...2500E3C\_



### Change-over switches, motor operation, I-O-II -operation, open transition

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM160...2500E\_ include a storage clip for the handle and spare fuses. Types OTM160...250E\_W are equipped with extended phase distance.

| No.<br>of<br>poles                                   | Rated<br>current <sup>1)</sup><br>AC-21A,<br>AC-22A<br>≤ 415V, I[A] | Rated<br>power<br>400V<br>S[kVA] | Rated<br>current<br>AC-31B/<br>AC-33B<br>415V, I[A] | Type            | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|------------------------------------------------------|---------------------------------------------------------------------|----------------------------------|-----------------------------------------------------|-----------------|-----------------|-------------------------|-------------------------|
| <b>Motor voltage U<sub>n</sub> 110...125 V AC/DC</b> |                                                                     |                                  |                                                     |                 |                 |                         |                         |
| 3                                                    | 160                                                                 | 110                              | 160/160                                             | OTM160E3CM110V  | 1SCA022845R8530 | 1                       | 6.6                     |
| 3                                                    | 160                                                                 | 110                              | 160/160                                             | OTM160E3WCM110V | 1SCA022846R3450 | 1                       | 6.9                     |
| 4                                                    | 160                                                                 | 110                              | 160/160                                             | OTM160E4CM110V  | 1SCA022846R1080 | 1                       | 7.5                     |
| 4                                                    | 160                                                                 | 110                              | 160/160                                             | OTM160E4WCM110V | 1SCA022846R7360 | 1                       | 7.9                     |
| 3                                                    | 200                                                                 | 135                              | 200/200                                             | OTM200E3CM110V  | 1SCA022845R8880 | 1                       | 6.6                     |
| 3                                                    | 200                                                                 | 135                              | 200/200                                             | OTM200E3WCM110V | 1SCA022846R3880 | 1                       | 6.9                     |
| 4                                                    | 200                                                                 | 135                              | 200/200                                             | OTM200E4CM110V  | 1SCA022846R1410 | 1                       | 7.5                     |
| 4                                                    | 200                                                                 | 135                              | 200/200                                             | OTM200E4WCM110V | 1SCA022846R7790 | 1                       | 7.9                     |
| 3                                                    | 250                                                                 | 170                              | 250/250                                             | OTM250E3CM110V  | 1SCA022845R9180 | 1                       | 6.6                     |
| 3                                                    | 250                                                                 | 170                              | 250/250                                             | OTM250E3WCM110V | 1SCA022846R4690 | 1                       | 6.9                     |
| 4                                                    | 250                                                                 | 170                              | 250/250                                             | OTM250E4CM110V  | 1SCA022846R1830 | 1                       | 7.5                     |
| 4                                                    | 250                                                                 | 170                              | 250/250                                             | OTM250E4WCM110V | 1SCA022846R8170 | 1                       | 7.9                     |
| 3                                                    | 315                                                                 | 215                              | 315/315                                             | OTM315E3CM110V  | 1SCA022847R1120 | 1                       | 11.1                    |
| 4                                                    | 315                                                                 | 215                              | 315/315                                             | OTM315E4CM110V  | 1SCA022847R2790 | 1                       | 12.5                    |
| 3                                                    | 400                                                                 | 275                              | 400/400                                             | OTM400E3CM110V  | 1SCA022847R1550 | 1                       | 11.1                    |
| 4                                                    | 400                                                                 | 275                              | 400/400                                             | OTM400E4CM110V  | 1SCA022847R3170 | 1                       | 12.5                    |
| 3                                                    | 630                                                                 | 435                              | 650/650                                             | OTM630E3CM110V  | 1SCA022873R1050 | 1                       | 22                      |
| 4                                                    | 630                                                                 | 435                              | 650/650                                             | OTM630E4CM110V  | 1SCA022873R1810 | 1                       | 25                      |
| 3                                                    | 800                                                                 | 550                              | 720/650                                             | OTM800E3CM110V  | 1SCA022872R5750 | 1                       | 22                      |
| 4                                                    | 800                                                                 | 550                              | 720/650                                             | OTM800E4CM110V  | 1SCA022872R8260 | 1                       | 25                      |
| 3                                                    | 1000                                                                | 680                              | 1000/1000                                           | OTM1000E3CM110V | 1SCA113653R1001 | 1                       | 55                      |
| 4                                                    | 1000                                                                | 680                              | 1000/1000                                           | OTM1000E4CM110V | 1SCA113656R1001 | 1                       | 65                      |
| 3                                                    | 1250                                                                | 850                              | 1250/1000                                           | OTM1250E3CM110V | 1SCA113652R1001 | 1                       | 55                      |
| 4                                                    | 1250                                                                | 850                              | 1250/1000                                           | OTM1250E4CM110V | 1SCA113655R1001 | 1                       | 65                      |
| 3                                                    | 1600                                                                | 1000                             | 1600/1000                                           | OTM1600E3CM110V | 1SCA113654R1001 | 1                       | 59                      |
| 4                                                    | 1600                                                                | 1000                             | 1600/1000                                           | OTM1600E4CM110V | 1SCA113657R1001 | 1                       | 69                      |
| 3                                                    | 2000                                                                | 1350                             |                                                     | OTM2000E3CM110V | 1SCA113683R1001 | 1                       | 78                      |
| 4                                                    | 2000                                                                | 1350                             |                                                     | OTM2000E4CM110V | 1SCA113685R1001 | 1                       | 95                      |
| 3                                                    | 2500                                                                | 1700                             |                                                     | OTM2500E3CM110V | 1SCA113684R1001 | 1                       | 78                      |
| 4                                                    | 2500                                                                | 1700                             |                                                     | OTM2500E4CM110V | 1SCA113686R1001 | 1                       | 95                      |

<sup>1)</sup> OTM2000...2500: Category AC-21B

### Handles and bolt kits included as standard

| Suitable for switches | Handle      | Bolt kit |
|-----------------------|-------------|----------|
| OTM160...250          | OTV250ECMK  | M8x25    |
| OTM315...400          | OTV400ECMK  | M10x30   |
| OTM630...800          | OTV800ECMK  | M12x40   |
| OTM1000...2500        | OTV1000ECMK | M12x60   |



# Ordering information

## Motorized change-over switches, IEC-types

OTM160...250E3C\_



OTM160...250E3WC\_



OTM315...400E3C\_



OTM630...800E3C\_



OTM1000...1250E3C\_



OTM1600E3C\_



OTM2000...2500E3C\_



### Change-over switches, motor operation, I-O-II -operation, open transition

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM160...2500E\_ include a storage clip for the handle and spare fuses. Types OTM160...2500E\_W are equipped with extended phase distance.

| No. of poles                               | Rated current <sup>1)</sup><br>AC-21A,<br>AC-22A<br>≤ 415V, I[A] | Rated power<br>400V<br>S[kVA] | Rated current<br>AC-31B/<br>AC-33B<br>415V, I[A] | Type           | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|--------------------------------------------|------------------------------------------------------------------|-------------------------------|--------------------------------------------------|----------------|-----------------|-------------------------|-------------------------|
| <b>Motor voltage U<sub>e</sub> 48 V DC</b> |                                                                  |                               |                                                  |                |                 |                         |                         |
| 3                                          | 160                                                              | 110                           | 160/160                                          | OTM160E3CM48D  | 1SCA022845R8450 | 1                       | 6.6                     |
| 3                                          | 160                                                              | 110                           | 160/160                                          | OTM160E3WCM48D | 1SCA022846R3370 | 1                       | 6.9                     |
| 4                                          | 160                                                              | 110                           | 160/160                                          | OTM160E4CM48D  | 1SCA022846R0940 | 1                       | 7.5                     |
| 4                                          | 160                                                              | 110                           | 160/160                                          | OTM160E4WCM48D | 1SCA022846R7280 | 1                       | 7.9                     |
| 3                                          | 200                                                              | 135                           | 200/200                                          | OTM200E3CM48D  | 1SCA022845R8700 | 1                       | 6.6                     |
| 3                                          | 200                                                              | 135                           | 200/200                                          | OTM200E3WCM48D | 1SCA022846R3700 | 1                       | 6.9                     |
| 4                                          | 200                                                              | 135                           | 200/200                                          | OTM200E4CM48D  | 1SCA022846R1320 | 1                       | 7.5                     |
| 4                                          | 200                                                              | 135                           | 200/200                                          | OTM200E4WCM48D | 1SCA022846R7610 | 1                       | 7.9                     |
| 3                                          | 250                                                              | 170                           | 250/250                                          | OTM250E3CM48D  | 1SCA022845R9000 | 1                       | 6.6                     |
| 3                                          | 250                                                              | 170                           | 250/250                                          | OTM250E3WCM48D | 1SCA022846R4510 | 1                       | 6.9                     |
| 4                                          | 250                                                              | 170                           | 250/250                                          | OTM250E4CM48D  | 1SCA022846R1750 | 1                       | 7.5                     |
| 4                                          | 250                                                              | 170                           | 250/250                                          | OTM250E4WCM48D | 1SCA022846R8090 | 1                       | 7.9                     |
| 4                                          | 315                                                              | 215                           | 315/315                                          | OTM315E4CM48D  | 1SCA022847R2610 | 1                       | 11.1                    |
| 3                                          | 400                                                              | 275                           | 400/400                                          | OTM400E3CM48D  | 1SCA022847R1470 | 1                       | 12.5                    |
| 4                                          | 400                                                              | 275                           | 400/400                                          | OTM400E4CM48D  | 1SCA022847R3090 | 1                       | 11.1                    |
| 3                                          | 315                                                              | 215                           | 315/315                                          | OTM315E3CM48D  | 1SCA022847R1040 | 1                       | 12.5                    |
| 3                                          | 630                                                              | 435                           | 650/650                                          | OTM630E3CM48D  | 1SCA022873R1300 | 1                       | 22                      |
| 4                                          | 630                                                              | 435                           | 650/650                                          | OTM630E4CM48D  | 1SCA022873R2110 | 1                       | 25                      |
| 3                                          | 800                                                              | 550                           | 720/650                                          | OTM800E3CM48D  | 1SCA022872R6050 | 1                       | 22                      |
| 4                                          | 800                                                              | 550                           | 720/650                                          | OTM800E4CM48D  | 1SCA022872R8510 | 1                       | 25                      |
| 3                                          | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E3CM48D | 1SCA113663R1001 | 1                       | 55                      |
| 4                                          | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E4CM48D | 1SCA113666R1001 | 1                       | 65                      |
| 3                                          | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E3CM48D | 1SCA113662R1001 | 1                       | 55                      |
| 4                                          | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E4CM48D | 1SCA113665R1001 | 1                       | 65                      |
| 3                                          | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E3CM48D | 1SCA113664R1001 | 1                       | 59                      |
| 4                                          | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E4CM48D | 1SCA113667R1001 | 1                       | 69                      |
| 3                                          | 2000                                                             | 1350                          |                                                  | OTM2000E3CM48D | 1SCA113689R1001 | 1                       | 78                      |
| 4                                          | 2000                                                             | 1350                          |                                                  | OTM2000E4CM48D | 1SCA113691R1001 | 1                       | 95                      |
| 3                                          | 2500                                                             | 1700                          |                                                  | OTM2500E3CM48D | 1SCA113690R1001 | 1                       | 78                      |
| 4                                          | 2500                                                             | 1700                          |                                                  | OTM2500E4CM48D | 1SCA113692R1001 | 1                       | 95                      |

<sup>1)</sup> OTM2000...2500: Category AC-21B

### Handles and bolt kits included as standard

| Suitable for switches | Handle      | Bolt kit |
|-----------------------|-------------|----------|
| OTM160...250          | OTV250ECMK  | M8x25    |
| OTM315...400          | OTV400ECMK  | M10x30   |
| OTM630...800          | OTV800ECMK  | M12x40   |
| OTM1000...2500        | OTV1000ECMK | M12x60   |

# Ordering information

## Motorized change-over switches, IEC-types

OTM160...250E3C\_



OTM160...250E3WC\_



OTM315...400E3C\_



OTM630...800E3C\_



OTM1000...1250E3C\_



OTM1600E3C\_



OTM2000...2500E3C\_



### Change-over switches, motor operation, I-O-II -operation, open transition

Including a handle for manual operation, bolt kit with nut and washers for all terminals and male connectors for control circuits. Types OTM160...2500E\_ include a storage clip for the handle and spare fuses. Types OTM160...250E\_W are equipped with extended phase distance.

| No. of poles                               | Rated current <sup>1)</sup><br>AC-21A,<br>AC-22A<br>≤ 415V, I[A] | Rated power<br>400V<br>S[kVA] | Rated current<br>AC-31B/<br>AC-33B<br>415V, I[A] | Type           | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|--------------------------------------------|------------------------------------------------------------------|-------------------------------|--------------------------------------------------|----------------|-----------------|-------------------------|-------------------------|
| <b>Motor voltage U<sub>e</sub> 24 V DC</b> |                                                                  |                               |                                                  |                |                 |                         |                         |
| 3                                          | 160                                                              | 110                           | 160/160                                          | OTM160E3CM24D  | 1SCA022845R8110 | 1                       | 6.6                     |
| 3                                          | 160                                                              | 110                           | 160/160                                          | OTM160E3WCM24D | 1SCA022846R3290 | 1                       | 6.9                     |
| 4                                          | 160                                                              | 110                           | 160/160                                          | OTM160E4CM24D  | 1SCA022846R0860 | 1                       | 7.5                     |
| 4                                          | 160                                                              | 110                           | 160/160                                          | OTM160E4WCM24D | 1SCA022846R7100 | 1                       | 7.9                     |
| 3                                          | 200                                                              | 135                           | 200/200                                          | OTM200E3CM24D  | 1SCA022845R8290 | 1                       | 6.6                     |
| 3                                          | 200                                                              | 135                           | 200/200                                          | OTM200E3WCM24D | 1SCA022846R3610 | 1                       | 6.9                     |
| 4                                          | 200                                                              | 135                           | 200/200                                          | OTM200E4CM24D  | 1SCA022846R1240 | 1                       | 7.5                     |
| 4                                          | 200                                                              | 135                           | 200/200                                          | OTM200E4WCM24D | 1SCA022846R7520 | 1                       | 7.9                     |
| 3                                          | 250                                                              | 170                           | 250/250                                          | OTM250E3CM24D  | 1SCA022845R8370 | 1                       | 6.6                     |
| 3                                          | 250                                                              | 170                           | 250/250                                          | OTM250E3WCM24D | 1SCA022846R4420 | 1                       | 6.9                     |
| 4                                          | 250                                                              | 170                           | 250/250                                          | OTM250E4CM24D  | 1SCA022846R1670 | 1                       | 7.5                     |
| 4                                          | 250                                                              | 170                           | 250/250                                          | OTM250E4WCM24D | 1SCA022846R7950 | 1                       | 7.9                     |
| 3                                          | 315                                                              | 215                           | 315/315                                          | OTM315E3CM24D  | 1SCA022847R0910 | 1                       | 11.1                    |
| 4                                          | 315                                                              | 215                           | 315/315                                          | OTM315E4CM24D  | 1SCA022847R2520 | 1                       | 12.5                    |
| 3                                          | 400                                                              | 275                           | 400/400                                          | OTM400E3CM24D  | 1SCA022847R1390 | 1                       | 11.1                    |
| 4                                          | 400                                                              | 275                           | 400/400                                          | OTM400E4CM24D  | 1SCA022847R2950 | 1                       | 12.5                    |
| 3                                          | 630                                                              | 435                           | 650/650                                          | OTM630E3CM24D  | 1SCA022873R1210 | 1                       | 22                      |
| 4                                          | 630                                                              | 435                           | 650/650                                          | OTM630E4CM24D  | 1SCA022873R2020 | 1                       | 25                      |
| 3                                          | 800                                                              | 550                           | 720/650                                          | OTM800E3CM24D  | 1SCA022872R5910 | 1                       | 22                      |
| 4                                          | 800                                                              | 550                           | 720/650                                          | OTM800E4CM24D  | 1SCA022872R8420 | 1                       | 25                      |
| 3                                          | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E3CM24D | 1SCA113672R1001 | 1                       | 55                      |
| 4                                          | 1000                                                             | 680                           | 1000/1000                                        | OTM1000E4CM24D | 1SCA113675R1001 | 1                       | 65                      |
| 3                                          | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E3CM24D | 1SCA113671R1001 | 1                       | 55                      |
| 4                                          | 1250                                                             | 850                           | 1250/1000                                        | OTM1250E4CM24D | 1SCA113674R1001 | 1                       | 65                      |
| 3                                          | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E3CM24D | 1SCA113673R1001 | 1                       | 59                      |
| 4                                          | 1600                                                             | 1000                          | 1600/1000                                        | OTM1600E4CM24D | 1SCA113676R1001 | 1                       | 69                      |
| 3                                          | 2000                                                             | 1350                          |                                                  | OTM2000E3CM24D | 1SCA113695R1001 | 1                       | 78                      |
| 4                                          | 2000                                                             | 1350                          |                                                  | OTM2000E4CM24D | 1SCA113697R1001 | 1                       | 95                      |
| 3                                          | 2500                                                             | 1700                          |                                                  | OTM2500E3CM24D | 1SCA113696R1001 | 1                       | 78                      |
| 4                                          | 2500                                                             | 1700                          |                                                  | OTM2500E4CM24D | 1SCA113698R1001 | 1                       | 95                      |

<sup>1)</sup> OTM2000...2500: Category AC-21B

### Handles and bolt kits included as standard

| Suitable for switches | Handle      | Bolt kit |
|-----------------------|-------------|----------|
| OTM160...250          | OTV250ECMK  | M8x25    |
| OTM315...400          | OTV400ECMK  | M10x30   |
| OTM630...800          | OTV800ECMK  | M12x40   |
| OTM1000...2500        | OTV1000ECMK | M12x60   |

# Ordering information

## Automatic transfer switches



### Automatic transfer switches functionality

|                                                        | OTM_C2D_        | OTM_C3D_        | OTM_C8D_ |
|--------------------------------------------------------|-----------------|-----------------|----------|
| <b>OTM_C_D products overview</b>                       |                 |                 |          |
| Includes automatic control unit                        | OMD200_         | OMD300_         | OMD800_  |
| Manual operation with handle                           | x               | x               | x        |
| Local operation with front panel keypad                | x               | x               | x        |
| Automatic transfer switching equipment (ATSE)          | x               | x               | x        |
| Dual power source for the motor operator <sup>1)</sup> | o               | x               | o        |
| <b>Measurements</b>                                    |                 |                 |          |
| Three phase voltage measurement on LINE 1              | x               | x               | x        |
| Single phase voltage measurement on LINE 1             | x               | x               | x        |
| Three phase voltage measurement on LINE 2              | x               | x               | x        |
| Single phase voltage measurement on LINE 2             | x               | x               | x        |
| Frequency on LINE 1                                    | x               | x               | x        |
| Frequency on LINE 2                                    | x               | x               | x        |
| Possibility to check the measurements via LCD          |                 |                 | x        |
| <b>Source failure detections</b>                       |                 |                 |          |
| No voltage                                             | x               | x               | x        |
| Undervoltage                                           | x               | x               | x        |
| Overvoltage                                            | x               | x               | x        |
| Phase missing                                          | x               | x               | x        |
| Voltage unbalance                                      | x               | x               | x        |
| Invalid frequency                                      | x               | x               | x        |
| Incorrect phase sequence                               |                 |                 | x        |
| <b>Configuration</b>                                   |                 |                 |          |
| By DIP switches                                        | x               | x               |          |
| By rotary switches                                     | x               | x               |          |
| By keypad and LCD                                      |                 |                 | x        |
| Voltage threshold setting                              | x               | x               | x        |
| Voltage hysteresis setting                             |                 |                 | x        |
| Frequency threshold setting                            |                 |                 | x        |
| Frequency hysteresis setting                           |                 |                 | x        |
| <b>Time delays</b>                                     |                 |                 |          |
| Switching delay                                        | x <sup>2)</sup> | x <sup>2)</sup> | x        |
| Delay on transfer <sup>3)</sup>                        |                 |                 | x        |
| Dead band time I-II (stop switching to position O)     |                 |                 | x        |
| Back-switching delay                                   | x <sup>4)</sup> | x <sup>4)</sup> | x        |
| Dead band time II-I (stop switching to position O)     |                 |                 | x        |
| Generator stop delay                                   | x <sup>5)</sup> | x <sup>5)</sup> | x        |
| Status of time delays on the LCD                       |                 |                 | x        |

<sup>1)</sup> Dual power source allows the motor operator to be supplied by two separate voltage supplies. This way the motor operator is always energized from the available line.

<sup>2)</sup> Four options: 0, 5, 10 or 30 seconds

<sup>3)</sup> Delaying the switching sequence before transferring to generator, guaranteeing that in cold locations the generator is properly warmed up

<sup>4)</sup> Two options: the duration of back-switching delay is the same as switching delay, i.e. the time delay is same for I - II and II - I, or the back-switching delay is fixed 300 seconds

<sup>5)</sup> Two options: the duration of generator stop delay is the same as Switching delay or fixed 5 min

x = included as standard

o = as an accessory



# Ordering information

## Automatic transfer switches



### Automatic transfer switches functionality

|                                                                             | OTM_C2D_         | OTM_C3D_         | OTM_C8D_         |
|-----------------------------------------------------------------------------|------------------|------------------|------------------|
| <b>Features</b>                                                             |                  |                  |                  |
| Generator start and stop                                                    | x                | x                | x                |
| Off-load test sequence                                                      | x                | x                | x                |
| On-load test sequence                                                       | x                | x                | x                |
| Source status via front panel                                               | x                | x                | x                |
| Source status via digital outputs                                           |                  |                  | x                |
| Switch position via front panel                                             | x                | x                | x                |
| LCD <sup>6)</sup>                                                           |                  |                  | x                |
| Fieldbus interface <sup>7)</sup>                                            |                  |                  | x                |
| Event/alarm log                                                             |                  |                  | x                |
| Counter for number of operations                                            |                  |                  | x                |
| Auxiliary voltage supply <sup>8)</sup>                                      |                  |                  | x                |
| Programmable digital inputs (eight) and digital outputs (six)               |                  |                  | x                |
| Secondary load control (load shedding)                                      |                  |                  | x                |
| Digital input - Allow transfer to secondary <sup>9)</sup>                   |                  |                  | x                |
| Digital input - Generator alarm <sup>10)</sup>                              |                  |                  | x                |
| Digital input - Remote control to positions I, O and II                     |                  |                  | x                |
| <b>Operating mode</b>                                                       |                  |                  |                  |
| Line priority                                                               | x <sup>11)</sup> | x <sup>11)</sup> | x <sup>12)</sup> |
| Manual back-switching <sup>13)</sup>                                        | x                | x                | x                |
| Automatic operation to position O, in case of source failure <sup>14)</sup> |                  |                  | x                |
| <b>Applications</b>                                                         |                  |                  |                  |
| Transfer between two transformers                                           | x                | x                | x                |
| Transfer between a transformer and a generator                              | x                | x                | x                |

<sup>6)</sup> Menus available in eight languages; English, French, German, Italian, Spanish, Russian, Chinese and Finnish

<sup>7)</sup> Two-way communication, bus communication protocol is Modbus

<sup>8)</sup> In case of source failure, the control unit can be supplied with an external auxiliary supply with 24...110 V DC

<sup>9)</sup> Control unit requires an external signal before allowing the transfer to secondary

<sup>10)</sup> Two options for the operating mode after receiving the alarm: control unit either works normally, or initiates generator stop with operation to position O

<sup>11)</sup> Two options: No line priority, or Source 1 is the priority source

<sup>12)</sup> Three options: No line priority, Source 1 or Source 2 is the priority source

<sup>13)</sup> Automatic back-switching to primary source is prevented

<sup>14)</sup> Control unit and motor operator must be energized

x = included as standard

o = as an accessory

# Ordering information

## Automatic transfer switches, IEC-types

OTM160...250E4WC3D\_



OTM630...800E4C2D\_



OTM1000...1250E4C3D\_



### Automatic transfer switches, I-O-II operation, open transition

Including a handle for manual operation, PCB connectors, bolt kit with nuts and washers for all terminals. Types OTM160...1600\_C\_D\_, including a voltage sensing kit on the top of the switch. Voltage sensing kit on the bottom on the switch, available on request, please add letter "B" to the type code. For example, OTM160E4C2D230C ▶ OTM160E4CB2D230C. Types OTM160...1600E\_ include a storage clip for the handle and spare fuses. Types OTM160...250\_WC\_D\_ are equipped with extended phase distance.

| No. of poles | Rated current AC-21A, AC-22A $\leq 415V, I[A]$ | Rated power 400V S[kVA] | Rated current AC-31B/ AC-33B 415V, I[A] | Type | Order number | Units/ type [pcs] | Weight/ unit [kg] |
|--------------|------------------------------------------------|-------------------------|-----------------------------------------|------|--------------|-------------------|-------------------|
|--------------|------------------------------------------------|-------------------------|-----------------------------------------|------|--------------|-------------------|-------------------|

#### Automatic operation, OTM\_C2D\_ types, voltage sensing on the top

Motor operator voltage  $U_m = 220...240 V AC^{1)}$

|   |      |      |           |                  |                 |   |    |
|---|------|------|-----------|------------------|-----------------|---|----|
| 4 | 160  | 110  | 160/160   | OTM160E4C2D230C  | 1SCA106230R1001 | 1 | 11 |
| 4 | 160  | 110  | 160/160   | OTM160E4WC2D230C | 1SCA101033R1001 | 1 | 11 |
| 4 | 200  | 135  | 200/200   | OTM200E4C2D230C  | 1SCA106671R1001 | 1 | 11 |
| 4 | 200  | 135  | 200/200   | OTM200E4WC2D230C | 1SCA101034R1001 | 1 | 11 |
| 4 | 250  | 170  | 250/250   | OTM250E4C2D230C  | 1SCA101016R1001 | 1 | 11 |
| 4 | 250  | 170  | 250/250   | OTM250E4WC2D230C | 1SCA101035R1001 | 1 | 11 |
| 4 | 315  | 215  | 315/315   | OTM315E4C2D230C  | 1SCA101059R1001 | 1 | 15 |
| 4 | 400  | 275  | 400/400   | OTM400E4C2D230C  | 1SCA101060R1001 | 1 | 15 |
| 4 | 630  | 435  | 650/650   | OTM630E4C2D230C  | 1SCA108434R1001 | 1 | 37 |
| 4 | 800  | 550  | 720/650   | OTM800E4C2D230C  | 1SCA108439R1001 | 1 | 37 |
| 4 | 1000 | 680  | 1000/1000 | OTM1000E4C2D230C | 1SCA112858R1001 | 1 | 66 |
| 4 | 1250 | 850  | 1250/1000 | OTM1250E4C2D230C | 1SCA112857R1001 | 1 | 66 |
| 4 | 1600 | 1000 | 1600/1000 | OTM1600E4C2D230C | 1SCA112854R1001 | 1 | 70 |

#### Automatic operation, OTM\_C3D\_ types, voltage sensing on the top

Including in-built dual power source for the motor operator. Motor operator voltage  $U_e = 220...240 V AC^{1)}$

|   |      |      |           |                  |                 |   |    |
|---|------|------|-----------|------------------|-----------------|---|----|
| 4 | 160  | 110  | 160/160   | OTM160E4C3D230C  | 1SCA106305R1001 | 1 | 11 |
| 4 | 160  | 110  | 160/160   | OTM160E4WC3D230C | 1SCA106306R1001 | 1 | 11 |
| 4 | 200  | 135  | 200/200   | OTM200E4C3D230C  | 1SCA106309R1001 | 1 | 11 |
| 4 | 200  | 135  | 200/200   | OTM200E4WC3D230C | 1SCA106310R1001 | 1 | 11 |
| 4 | 250  | 170  | 250/250   | OTM250E4C3D230C  | 1SCA106313R1001 | 1 | 11 |
| 4 | 250  | 170  | 250/250   | OTM250E4WC3D230C | 1SCA106314R1001 | 1 | 11 |
| 4 | 315  | 215  | 315/315   | OTM315E4C3D230C  | 1SCA106317R1001 | 1 | 15 |
| 4 | 400  | 275  | 400/400   | OTM400E4C3D230C  | 1SCA106318R1001 | 1 | 15 |
| 4 | 630  | 435  | 650/650   | OTM630E4C3D230C  | 1SCA108726R1001 | 1 | 37 |
| 4 | 800  | 550  | 720/650   | OTM800E4C3D230C  | 1SCA108728R1001 | 1 | 37 |
| 4 | 1000 | 680  | 1000/1000 | OTM1000E4C3D230C | 1SCA112852R1001 | 1 | 66 |
| 4 | 1250 | 850  | 1250/1000 | OTM1250E4C3D230C | 1SCA112851R1001 | 1 | 66 |
| 4 | 1600 | 1000 | 1600/1000 | OTM1600E4C3D230C | 1SCA112848R1001 | 1 | 70 |

<sup>1)</sup> Under nominal conditions

### Handles and bolt kits included as standard

| Suitable for switches | Handle      | Bolt kit |
|-----------------------|-------------|----------|
| OTM160...250          | OTV250ECMK  | M8x25    |
| OTM315...400          | OTV400ECMK  | M10x30   |
| OTM630...800          | OTV800ECMK  | M12x40   |
| OTM1000...1600        | OTV1000ECMK | M12x60   |

# Ordering information

## Automatic transfer switches, IEC-types

OTM160...250E3C8D\_



OTM315...400E4C8D\_



OTM1600E3C8D\_



### Automatic transfer switches, I-O-II operation, open transition

Including a handle for manual operation, PCB connectors, bolt kit with nuts and washers for all terminals. Types OTM160...1600\_C\_D\_, including a voltage sensing kit on the top of the switch. Voltage sensing kit on the bottom on the switch, available on request, please add letter "B" to the type code. For example, OTM160E4C8D230C ▶ OTM160E4CB8D230C. Types OTM160...1600E\_ include a storage clip for the handle and spare fuses. Types OTM160...250\_WC\_D\_ are equipped with extended phase distance.

| No. of poles                                                           | Rated current AC-21A, AC-22A ≤ 415V, I[A] | Rated power 400V S[kVA] | Rated current AC-31B/ AC-33B 415V, I[A] | Type             | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|------------------------------------------------------------------------|-------------------------------------------|-------------------------|-----------------------------------------|------------------|-----------------|-------------------|-------------------|
| <b>Automatic operation, OTM_C8D_ types, voltage sensing on the top</b> |                                           |                         |                                         |                  |                 |                   |                   |
| Motor operator voltage $U_m = 220...240 \text{ V AC}^{1)}$             |                                           |                         |                                         |                  |                 |                   |                   |
| 3                                                                      | 160                                       | 110                     | 160/160                                 | OTM160E3C8D230C  | 1SCA101017R1001 | 1                 | 10                |
| 3                                                                      | 160                                       | 110                     | 160/160                                 | OTM160E3WC8D230C | 1SCA101036R1001 | 1                 | 10                |
| 4                                                                      | 160                                       | 110                     | 160/160                                 | OTM160E4C8D230C  | 1SCA101020R1001 | 1                 | 11                |
| 4                                                                      | 160                                       | 110                     | 160/160                                 | OTM160E4WC8D230C | 1SCA101039R1001 | 1                 | 11                |
| 3                                                                      | 200                                       | 135                     | 200/200                                 | OTM200E3C8D230C  | 1SCA101018R1001 | 1                 | 10                |
| 3                                                                      | 200                                       | 135                     | 200/200                                 | OTM200E3WC8D230C | 1SCA101037R1001 | 1                 | 10                |
| 4                                                                      | 200                                       | 135                     | 200/200                                 | OTM200E4C8D230C  | 1SCA101021R1001 | 1                 | 11                |
| 4                                                                      | 200                                       | 135                     | 200/200                                 | OTM200E4WC8D230C | 1SCA101040R1001 | 1                 | 11                |
| 3                                                                      | 250                                       | 170                     | 250/250                                 | OTM250E3C8D230C  | 1SCA101019R1001 | 1                 | 10                |
| 3                                                                      | 250                                       | 170                     | 250/250                                 | OTM250E3WC8D230C | 1SCA101038R1001 | 1                 | 10                |
| 4                                                                      | 250                                       | 170                     | 250/250                                 | OTM250E4C8D230C  | 1SCA101022R1001 | 1                 | 11                |
| 4                                                                      | 250                                       | 170                     | 250/250                                 | OTM250E4WC8D230C | 1SCA101041R1001 | 1                 | 11                |
| 3                                                                      | 315                                       | 215                     | 315/315                                 | OTM315E3C8D230C  | 1SCA101062R1001 | 1                 | 14                |
| 4                                                                      | 315                                       | 215                     | 315/315                                 | OTM315E4C8D230C  | 1SCA101063R1001 | 1                 | 15                |
| 3                                                                      | 400                                       | 275                     | 400/400                                 | OTM400E3C8D230C  | 1SCA101061R1001 | 1                 | 14                |
| 4                                                                      | 400                                       | 275                     | 400/400                                 | OTM400E4C8D230C  | 1SCA101064R1001 | 1                 | 15                |
| 3                                                                      | 630                                       | 435                     | 650/650                                 | OTM630E3C8D230C  | 1SCA108452R1001 | 1                 | 34                |
| 4                                                                      | 630                                       | 435                     | 650/650                                 | OTM630E4C8D230C  | 1SCA108453R1001 | 1                 | 37                |
| 3                                                                      | 800                                       | 550                     | 720/650                                 | OTM800E3C8D230C  | 1SCA108454R1001 | 1                 | 34                |
| 4                                                                      | 800                                       | 550                     | 720/650                                 | OTM800E4C8D230C  | 1SCA108455R1001 | 1                 | 37                |
| 3                                                                      | 1000                                      | 680                     | 1000/1000                               | OTM1000E3C8D230C | 1SCA112868R1001 | 1                 | 57                |
| 4                                                                      | 1000                                      | 680                     | 1000/1000                               | OTM1000E4C8D230C | 1SCA112861R1001 | 1                 | 66                |
| 3                                                                      | 1250                                      | 850                     | 1250/1000                               | OTM1250E3C8D230C | 1SCA112862R1001 | 1                 | 57                |
| 4                                                                      | 1250                                      | 850                     | 1250/1000                               | OTM1250E4C8D230C | 1SCA112864R1001 | 1                 | 66                |
| 3                                                                      | 1600                                      | 1000                    | 1600/1000                               | OTM1600E3C8D230C | 1SCA112866R1001 | 1                 | 60                |
| 4                                                                      | 1600                                      | 1000                    | 1600/1000                               | OTM1600E4C8D230C | 1SCA112867R1001 | 1                 | 70                |

<sup>1)</sup> Under nominal conditions

### Handles and bolt kits included as standard

| Suitable for switches | Handle      | Bolt kit |
|-----------------------|-------------|----------|
| OTM160...250          | OTV250ECMK  | M8x25    |
| OTM315...400          | OTV400ECMK  | M10x30   |
| OTM630...800          | OTV800ECMK  | M12x40   |
| OTM1000...1600        | OTV1000ECMK | M12x60   |

# Ordering information

## Manual change-over switches, IEC-types

OT160...250E03CLP



OT160...250E03WCLP



OT315...400E03CLP



### Manual change-over switches, I - I+II - II -operation, closed transition

The OT160...250E\_CL change-over switches operate on a closed transition principle, i.e. make-before-break operation without OFF-position. Between positions I and II, there is a position I+II where both switches are closed simultaneously. The overlapping time when both contacts are closed is minimum 20 ms. Operating angle of the handle is 90°. Including a black plastic IP65 I - I+II - II pistol type handle (see the table below), shaft and bolt set for the cable connection. Handle not padlockable and no door interlocking.

| No.<br>of<br>poles                                                       | Rated current and power |                |                                    | Type         | Order number    | Units/ Weight/<br>type unit |      |
|--------------------------------------------------------------------------|-------------------------|----------------|------------------------------------|--------------|-----------------|-----------------------------|------|
|                                                                          | AC-21A/AC-22A           |                | AC-23A<br>400...415V<br>I[A]/P[kW] |              |                 | [pcs]                       | [kg] |
|                                                                          | ≤ 415V<br>I[A]          | 400V<br>S[kVA] |                                    |              |                 |                             |      |
| Place of mechanism, see the picture. Types -W: with wide phase distance. |                         |                |                                    |              |                 |                             |      |
| 3                                                                        | 160                     | 110            | 160/90                             | OT160E03CLP  | 1SCA108468R1001 | 1                           | 3.3  |
| 3                                                                        | 160                     | 110            | 160/90                             | OT160E12CLP  | 1SCA108498R1001 | 1                           | 3.3  |
| 3                                                                        | 160                     | 110            | 160/90                             | OT160E03WCLP | 1SCA108486R1001 | 1                           | 3.6  |
| 4                                                                        | 160                     | 110            | 160/90                             | OT160E04CLP  | 1SCA108491R1001 | 1                           | 4.1  |
| 4                                                                        | 160                     | 110            | 160/90                             | OT160E13CLP  | 1SCA108504R1001 | 1                           | 4.1  |
| 4                                                                        | 160                     | 110            | 160/90                             | OT160E04WCLP | 1SCA108494R1001 | 1                           | 4.4  |
| 3                                                                        | 200                     | 135            | 200/110                            | OT200E03CLP  | 1SCA108522R1001 | 1                           | 3.3  |
| 3                                                                        | 200                     | 135            | 200/110                            | OT200E12CLP  | 1SCA108537R1001 | 1                           | 3.3  |
| 3                                                                        | 200                     | 135            | 200/110                            | OT200E03WCLP | 1SCA108525R1001 | 1                           | 3.6  |
| 4                                                                        | 200                     | 135            | 200/110                            | OT200E04CLP  | 1SCA108530R1001 | 1                           | 4.1  |
| 4                                                                        | 200                     | 135            | 200/110                            | OT200E13CLP  | 1SCA108548R1001 | 1                           | 4.1  |
| 4                                                                        | 200                     | 135            | 200/110                            | OT200E04WCLP | 1SCA108532R1001 | 1                           | 4.4  |
| 3                                                                        | 250                     | 170            | 250/140                            | OT250E03CLP  | 1SCA108593R1001 | 1                           | 3.3  |
| 3                                                                        | 250                     | 170            | 250/140                            | OT250E12CLP  | 1SCA108611R1001 | 1                           | 3.3  |
| 3                                                                        | 250                     | 170            | 250/140                            | OT250E03WCLP | 1SCA107576R1001 | 1                           | 3.6  |
| 4                                                                        | 250                     | 170            | 250/140                            | OT250E04CLP  | 1SCA108605R1001 | 1                           | 4.1  |
| 4                                                                        | 250                     | 170            | 250/140                            | OT250E13CLP  | 1SCA108618R1001 | 1                           | 4.1  |
| 4                                                                        | 250                     | 170            | 250/140                            | OT250E04WCLP | 1SCA108607R1001 | 1                           | 4.4  |
| 3                                                                        | 315                     | 215            | 315/160                            | OT315E03CLP  | 1SCA108630R1001 | 1                           | 5.9  |
| 3                                                                        | 315                     | 215            | 315/160                            | OT315E12CLP  | 1SCA106419R1001 | 1                           | 5.9  |
| 4                                                                        | 315                     | 215            | 315/160                            | OT315E04CLP  | 1SCA106404R1001 | 1                           | 7.1  |
| 4                                                                        | 315                     | 215            | 315/160                            | OT315E13CLP  | 1SCA106443R1001 | 1                           | 7.1  |
| 3                                                                        | 400                     | 275            | 400/220                            | OT400E03CLP  | 1SCA108641R1001 | 1                           | 5.9  |
| 3                                                                        | 400                     | 275            | 400/220                            | OT400E12CLP  | 1SCA106423R1001 | 1                           | 5.9  |
| 4                                                                        | 400                     | 275            | 400/220                            | OT400E04CLP  | 1SCA106405R1001 | 1                           | 7.1  |
| 4                                                                        | 400                     | 275            | 400/220                            | OT400E13CLP  | 1SCA106447R1001 | 1                           | 7.1  |

### Shafts, handles and bolt kits included as standard

| Suitable for switches | Shaft     | Handle      | Bolt kit |
|-----------------------|-----------|-------------|----------|
| OT160...250_CL        | EXP6x161  | OHB65J6E65  | M8x25    |
| OT315...400_CL        | EXP12x166 | OHB95J12E65 | M10x30   |

# Ordering information

## Manual change-over switches, IEC-types

OT630...800E03CLP



### Manual change-over switches, I - I+II - II -operation, closed transition

The OT160...2500E\_CL change-over switches operate on a closed transition principle, i.e. make-before-break operation without OFF-position. Between positions I and II, there is a position I+II where both switches are closed simultaneously. The overlapping time when both contacts are closed is minimum 20 ms. Operating angle of the handle is 90°. Including a black plastic IP65 I - I+II - II pistol type handle (see the table below), shaft and bolt set for the cable connection. Handle not padlockable and no door interlocking.

| No.<br>of<br>poles | Rated current <sup>1)</sup> and power |                |                                    | Type         | Order number    | Units/ Weight/<br>type unit |      |
|--------------------|---------------------------------------|----------------|------------------------------------|--------------|-----------------|-----------------------------|------|
|                    | AC-21A/AC-22A                         |                | AC-23A<br>400...415V<br>I[A]/P[kW] |              |                 | [pcs]                       | [kg] |
|                    | ≤ 415V<br>I[A]                        | 400V<br>S[kVA] |                                    |              |                 |                             |      |
| 3                  | 630                                   | 435            | 630/355                            | OT630E03CLP  | 1SCA106917R1001 | 1                           | 17.7 |
| 3                  | 630                                   | 435            | 630/355                            | OT630E12CLP  | 1SCA106968R1001 | 1                           | 17.7 |
| 4                  | 630                                   | 435            | 630/355                            | OT630E04CLP  | 1SCA106947R1001 | 1                           | 21   |
| 4                  | 630                                   | 435            | 630/355                            | OT630E13CLP  | 1SCA106981R1001 | 1                           | 21   |
| 3                  | 800                                   | 550            | 800/450                            | OT800E03CLP  | 1SCA106928R1001 | 1                           | 17.7 |
| 3                  | 800                                   | 550            | 800/450                            | OT800E12CLP  | 1SCA106973R1001 | 1                           | 17.7 |
| 4                  | 800                                   | 550            | 800/450                            | OT800E04CLP  | 1SCA106952R1001 | 1                           | 21   |
| 4                  | 800                                   | 550            | 800/450                            | OT800E13CLP  | 1SCA106976R1001 | 1                           | 21   |
| 3                  | 1000                                  | 680            | 1000/560                           | OT1000E03CLP | 1SCA117221R1001 | 1                           | 48   |
| 3                  | 1000                                  | 680            | 1000/560                           | OT1000E12CLP | 1SCA117608R1001 | 1                           | 48   |
| 4                  | 1000                                  | 680            | 1000/560                           | OT1000E04CLP | 1SCA117224R1001 | 1                           | 60   |
| 4                  | 1000                                  | 680            | 1000/560                           | OT1000E13CLP | 1SCA117677R1001 | 1                           | 60   |
| 3                  | 1250                                  | 850            | 1250/710                           | OT1250E03CLP | 1SCA117222R1001 | 1                           | 48   |
| 3                  | 1250                                  | 850            | 1250/710                           | OT1250E12CLP | 1SCA117610R1001 | 1                           | 48   |
| 4                  | 1250                                  | 850            | 1250/710                           | OT1250E04CLP | 1SCA117225R1001 | 1                           | 60   |
| 4                  | 1250                                  | 850            | 1250/710                           | OT1250E13CLP | 1SCA117678R1001 | 1                           | 60   |
| 3                  | 1600                                  | 1000           | 1250/710                           | OT1600E03CLP | 1SCA117223R1001 | 1                           | 51   |
| 3                  | 1600                                  | 1000           | 1250/710                           | OT1600E12CLP | 1SCA117611R1001 | 1                           | 51   |
| 4                  | 1600                                  | 1000           | 1250/710                           | OT1600E04CLP | 1SCA117226R1001 | 1                           | 63   |
| 4                  | 1600                                  | 1000           | 1250/710                           | OT1600E13CLP | 1SCA117615R1001 | 1                           | 63   |
| 3                  | 2000                                  | 1350           |                                    | OT2000E03CLP | 1SCA117250R1001 | 1                           | 70   |
| 3                  | 2000                                  | 1350           |                                    | OT2000E12CLP | 1SCA117617R1001 | 1                           | 70   |
| 4                  | 2000                                  | 1350           |                                    | OT2000E04CLP | 1SCA117251R1001 | 1                           | 86   |
| 4                  | 2000                                  | 1350           |                                    | OT2000E13CLP | 1SCA117620R1001 | 1                           | 86   |
| 3                  | 2500                                  | 1700           |                                    | OT2500E03CLP | 1SCA117249R1001 | 1                           | 70   |
| 3                  | 2500                                  | 1700           |                                    | OT2500E12CLP | 1SCA117619R1001 | 1                           | 70   |
| 4                  | 2500                                  | 1700           |                                    | OT2500E04CLP | 1SCA117252R1001 | 1                           | 86   |
| 4                  | 2500                                  | 1700           |                                    | OT2500E13CLP | 1SCA117622R1001 | 1                           | 86   |

<sup>1)</sup> OT2000...2500: Category AC-21B

### Shafts, handles and bolt kits included as standard

| Suitable for switches | Shaft     | Handle        | Bolt kit |
|-----------------------|-----------|---------------|----------|
| OT630...800_CL        | OXF12x185 | OHB145J12E65  | M12x40   |
| OT1000...2500_CL      | OXF12x185 | OHB200J12PE65 | M12x60   |



# Ordering information

## Manual change-over switches, UL/CSA -types

OT200U03CP



OT400U04CP



OT600U03CP



### Change-over switches, I-O-II -operation, open transition

The change-over switches include a black handle IP65; see the table below, Nema type 1, 3R, 12, a shaft and a bolt set for the cable connection and a set of phase separators.

| No. of poles | UL98<br>600V<br>general use<br>[A] | Rated current<br>IEC60947-3<br>≤ 690 V<br>AC-21-23A<br>[A] | Rated current<br>IEC60947-6-1<br>≤ 415V<br>AC-31B/<br>AC-33B<br>[A] | Type       | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|--------------|------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|------------|-----------------|-------------------------|-------------------------|
|              |                                    |                                                            |                                                                     |            |                 |                         |                         |
| 3            | 200                                | 250                                                        | 250/250                                                             | OT200U03CP | 1SCA022771R5910 | 1                       | 3.6                     |
| 4            | 200                                | 250                                                        | 250/250                                                             | OT200U04CP | 1SCA022771R6210 | 1                       | 4.4                     |
| 3            | 400                                | 400                                                        | 400/400                                                             | OT400U03CP | 1SCA022771R2810 | 1                       | 6.2                     |
| 4            | 400                                | 400                                                        | 400/400                                                             | OT400U04CP | 1SCA022771R2300 | 1                       | 8.1                     |
| 3            | 600                                | 800                                                        | 800/800                                                             | OT600U03CP | 1SCA022785R5320 | 1                       | 17.9                    |
| 4            | 600                                | 800                                                        | 800/800                                                             | OT600U04CP | 1SCA022785R5410 | 1                       | 21                      |
| 3            | 800                                | 800                                                        | 1600/1000                                                           | OT800U03CP | 1SCA104031R1001 | 1                       | 51                      |
| 4            | 800                                | 800                                                        | 1600/1000                                                           | OT800U04CP | 1SCA104036R1001 | 1                       | 63                      |

### Shafts, handles and bolt kits included as standard

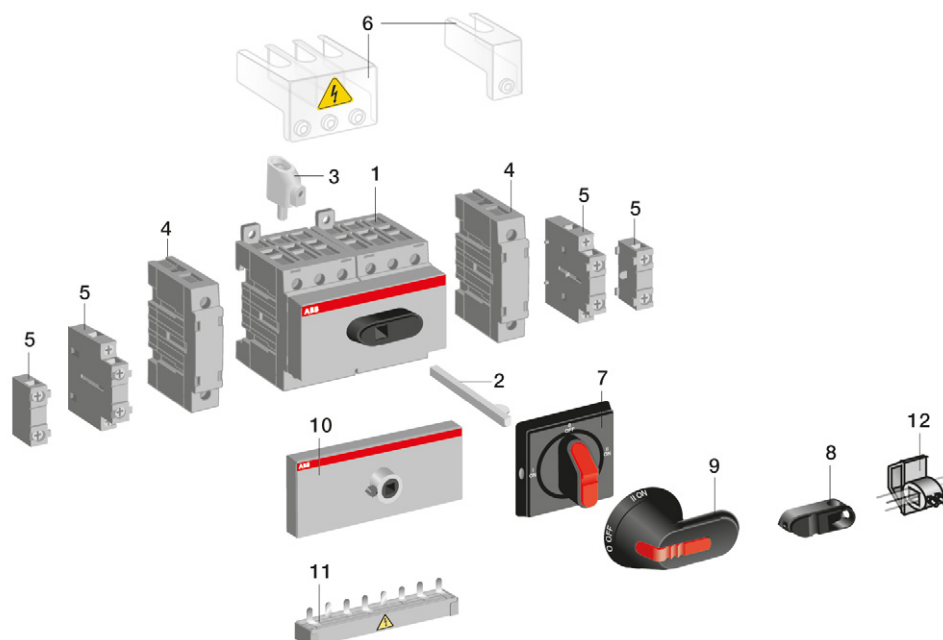
The handles are equipped with door interlock function in both I- and II-position and when padlocked. Padlocking possibility in O-position with 3 padlocks, bail dia Ø 5...10 mm. Indication I-O-II. Nema type 1, 3R, 12.

| Suitable for switches | Shaft     | Handle         | Bolt kit |
|-----------------------|-----------|----------------|----------|
| OT200U_               | EXP6x161  | OHB65J6E011    | M8x25    |
| OT400U_               | EXP12x166 | OHB95J12E011   | M10x30   |
| OT600U_               | EXP12x185 | OHB125J12E011  | M12x40   |
| OT800U_               | EXP12x185 | OHB200J12PE011 | M12x60   |

# Selection overview

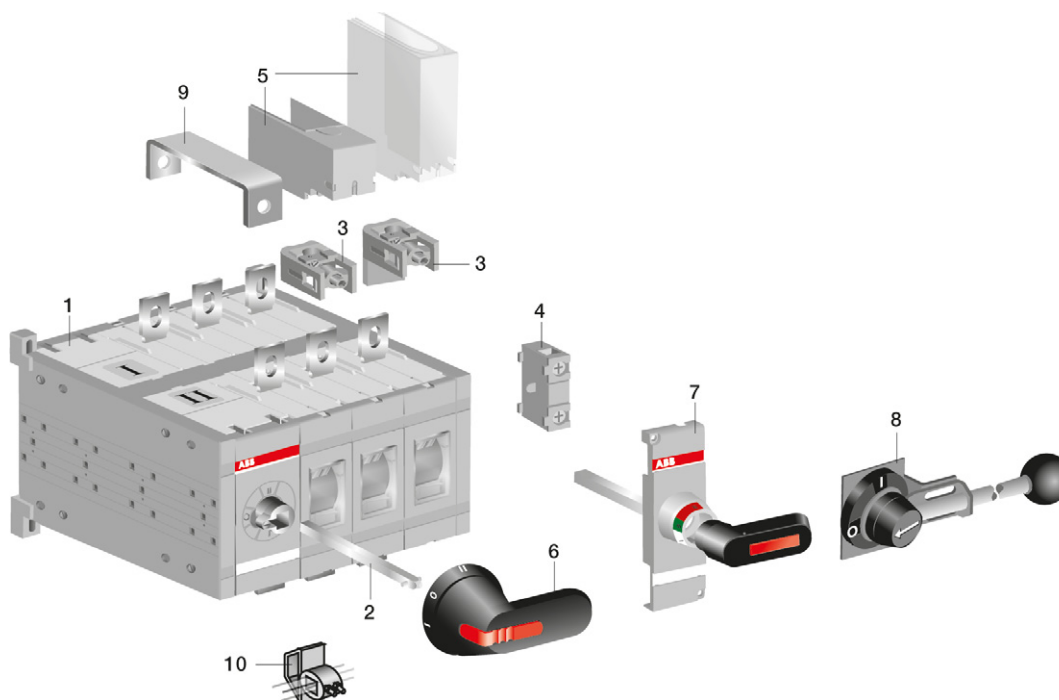
## Accessories

### OT16F...OT125F\_C



1 Manual change-over switch | 2 Extended shaft | 3 Terminal clamp | 4 Fourth pole | 5 Auxiliary contact | 6 Terminal shroud | 7 Selector type handle | 8 Handle knob | 9 Pistol type handle | 10 Conversion kit | 11 Parallel connection kit | 12 Cam attachment for interlocking

### OT160...OT2500\_C



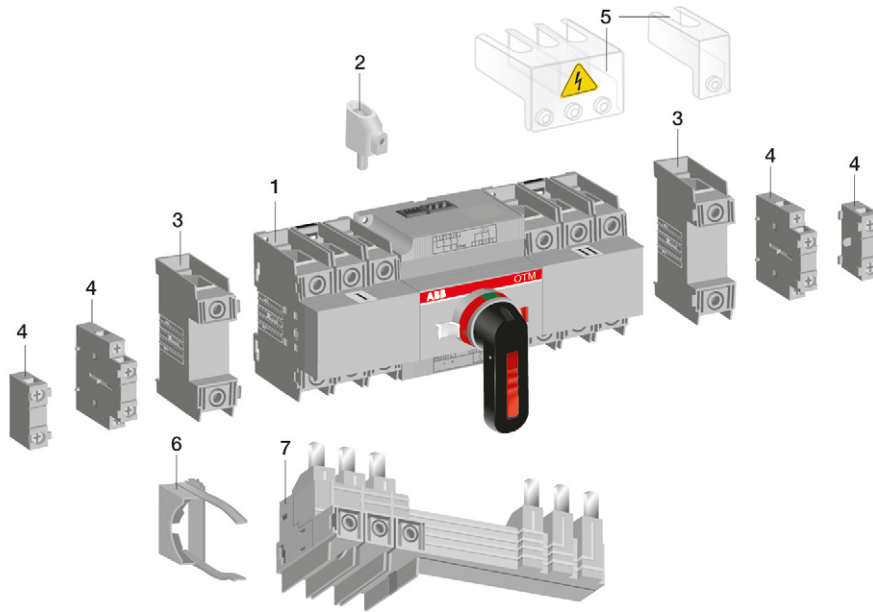
1 Manual change-over switch | 2 Extended shaft | 3 Terminal clamp | 4 Auxiliary contact | 5 Terminal shroud | 6 Pistol type handle | 7 Direct mounting type handle | 8 Metallic handle | 9 Bridging bar | 10 Cam attachment for interlocking



# Selection overview

## Accessories

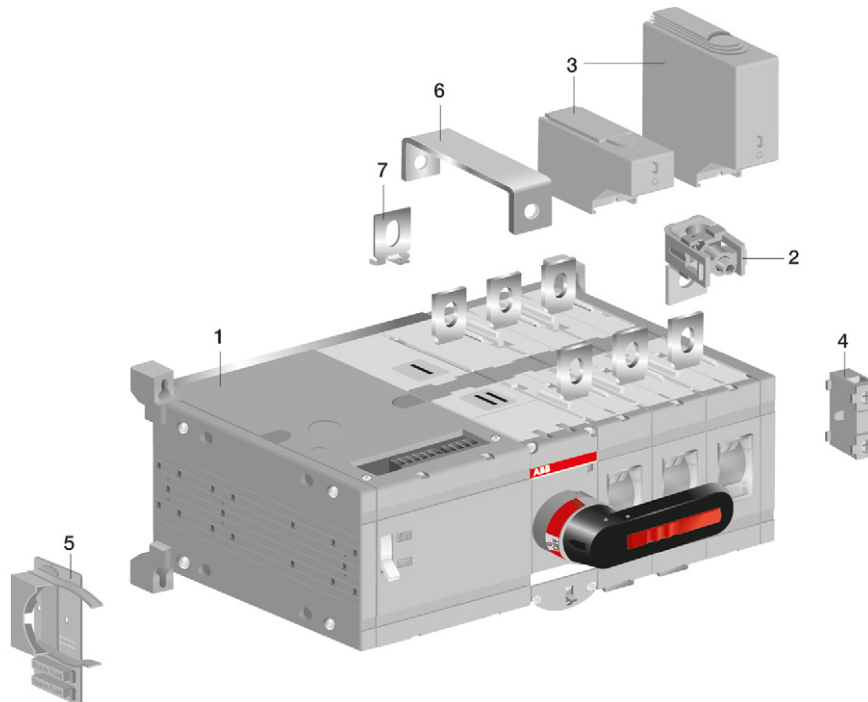
### OTM40F...OTM125F\_C



S07159

1 Motorized change-over switch | 2 Terminal clamp | 3 Fourth pole | 4 Auxiliary contact | 5 Terminal shroud | 6 Handle storage clip | 7 Parallel connection kit

### OTM160...OTM2500\_C



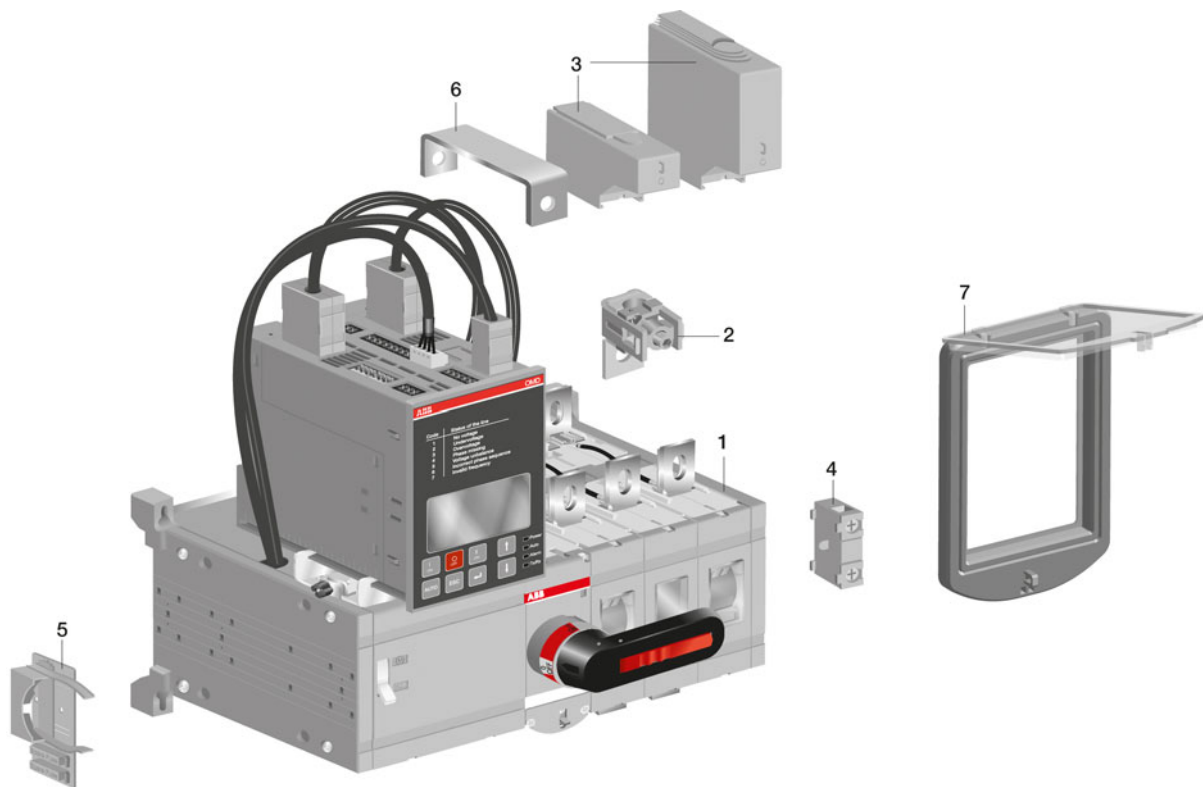
S07160

1 Motorized change-over switch | 2 Terminal clamp | 3 Terminal shroud | 4 Auxiliary contact | 5 Storage for handle and fuses | 6 Bridging bar | 7 Voltage sensing connectors

# Selection overview

## Accessories

OTM160...OTM1600\_D\_C



1 Automatic transfer switch | 2 Terminal clamp | 3 Terminal shroud | 4 Auxiliary contact | 5 Storage for handle and fuses | 6 Bridging bar | 7 Cover plate

# Ordering information

## Accessories

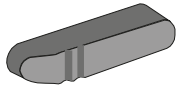
**OHRS2\_**  
S01368A



**OHRS3\_**  
S01369A



**OHBS9\_**  
S00535A



**OHBS11**  
S01473A



**OHBS12**  
S01472A



### Handle knobs

No shaft needed, direct mounting on the top of the switch.

| Suitable<br>for<br>switches      | Colour | Type     | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|----------------------------------|--------|----------|-----------------|-------------------------|-------------------------|
| <b>Padlockable in 0-position</b> |        |          |                 |                         |                         |
| OT16...80F_C                     | Black  | OHBS2/1  | 1SCA109090R1001 | 1                       | 0.01                    |
| OT16...80F_C                     | Black  | OHBS2    | 1SCA109089R1001 | 10                      | 0.01                    |
| OT16...80F_C                     | Red    | OHRS2/1  | 1SCA108599R1001 | 1                       | 0.01                    |
| OT16...80F_C                     | Red    | OHRS2    | 1SCA108598R1001 | 10                      | 0.01                    |
| OT16...80F_C                     | Black  | OHBS12/1 | 1SCA109094R1001 | 1                       | 0.01                    |
| OT16...80F_C                     | Black  | OHBS12   | 1SCA108252R1001 | 10                      | 0.01                    |
| OT16...80F_C                     | Red    | OHRS12/1 | 1SCA109097R1001 | 1                       | 0.01                    |
| OT16...80F_C                     | Red    | OHRS12   | 1SCA108253R1001 | 10                      | 0.01                    |
| OT100...125F_C                   | Black  | OHBS11/1 | 1SCA109093R1001 | 1                       | 0.02                    |
| OT100...125F_C                   | Black  | OHBS11   | 1SCA109092R1001 | 10                      | 0.02                    |
| <b>Non-padlockable</b>           |        |          |                 |                         |                         |
| OT16...80F_C                     | Black  | OHBS3/1  | 1SCA108319R1001 | 1                       | 0.01                    |
| OT16...80F_C                     | Black  | OHBS3    | 1SCA108320R1001 | 10                      | 0.01                    |
| OT16...80F_C                     | Red    | OHRS3/1  | 1SCA108688R1001 | 1                       | 0.01                    |
| OT16...80F_C                     | Red    | OHRS3    | 1SCA108667R1001 | 10                      | 0.01                    |
| OT100...125F_C                   | Black  | OHBS9/1  | 1SCA108689R1001 | 1                       | 0.01                    |
| OT100...125F_C                   | Black  | OHBS9    | 1SCA108665R1001 | 10                      | 0.01                    |
| OT100...125F_C                   | Red    | OHRS9/1  | 1SCA108690R1001 | 1                       | 0.01                    |
| OT100...125F_C                   | Red    | OHRS9    | 1SCA108666R1001 | 10                      | 0.01                    |

# Ordering information

## Accessories

OHBS2\_  
S01520A



OHY\_  
S07165



OHB\_  
S07164



OHB274\_  
S07162



OHB200\_P\_  
S07163



## External handles

### Selector handle, indication I-O-II

IP65, Nema type 1, 3R, 12. Padlockable in O -position with maximum three padlocks with bail diameter 5...8 mm (two lower holes) and 5...6.3 mm (the upper hole). Door interlock in I- and II-position and when padlocked in O-position. The type and ordering numbers are for one piece.

| Suitable for switches | Colour     | Shaft diameter [mm] | Type        | Order number    | Delivery Weight/ batch [pcs] | unit [kg] |
|-----------------------|------------|---------------------|-------------|-----------------|------------------------------|-----------|
| OT16...125F_C         | Black      | 6                   | OHBS2AJE011 | 1SCA105220R1001 | 1                            | 0.07      |
| OT16...125F_C         | Red-yellow | 6                   | OHYS2AJE011 | 1SCA105301R1001 | 1                            | 0.07      |

### Pistol type handle, plastic, indication I-O-II

Units / type = 1 pc.

| Suitable for switches | Colour | Shaft diameter [mm] | Type | Order number | Delivery Weight/ batch [pcs] | unit [kg] |
|-----------------------|--------|---------------------|------|--------------|------------------------------|-----------|
|-----------------------|--------|---------------------|------|--------------|------------------------------|-----------|

#### Padlockable in all positions

IP65, Nema type 1, 3R, 12. Door interlock in I- and II-position and when padlocked.

Padlocking possibility with three padlocks, bail dia Ø 5...10 mm.

|                 |            |    |                |                 |   |      |
|-----------------|------------|----|----------------|-----------------|---|------|
| OT16...125F_C   | Black      | 6  | OHB45J6E311    | 1SCA022817R2130 | 1 | 0.10 |
| OT16...125F_C   | Red-yellow | 6  | OHY45J6E311    | 1SCA022817R2300 | 1 | 0.10 |
| OT160...250_C   | Black      | 6  | OHB65J6E311    | 1SCA022662R4730 | 1 | 0.12 |
| OT315...400_C   | Black      | 12 | OHB95J12E311   | 1SCA022779R2140 | 1 | 0.12 |
| OT630...800_C   | Black      | 12 | OHB125J12E311  | 1SCA022615R1730 | 1 | 0.14 |
| OT1000...2500_C | Black      | 12 | OHB200J12PE311 | 1SCA104685R1001 | 1 | 0.40 |

#### Padlockable in the O-position

IP65, Nema type 1, 3R, 12. Door interlock in I- and II-position and when padlocked.

Padlocking possibility with three padlocks, bail dia Ø 5...10 mm.

|                 |            |    |                |                 |   |      |
|-----------------|------------|----|----------------|-----------------|---|------|
| OT16...125F_C   | Black      | 6  | OHB45J6E011    | 1SCA022594R7110 | 1 | 0.10 |
| OT16...125F_C   | Red-yellow | 6  | OHY45J6E011    | 1SCA022817R2210 | 1 | 0.10 |
| OT160...250_C   | Black      | 6  | OHB65J6E011    | 1SCA022383R2480 | 1 | 0.12 |
| OT160...250_C   | Red-yellow | 6  | OHY65J6E011    | 1SCA022779R1840 | 1 | 0.12 |
| OT315...400_C   | Black      | 12 | OHB95J12E011   | 1SCA022621R0760 | 1 | 0.12 |
| OT315...400_C   | Red-yellow | 12 | OHY95J12E011   | 1SCA022621R0920 | 1 | 0.12 |
| OT630...800_C   | Black      | 12 | OHB125J12E011  | 1SCA022589R3340 | 1 | 0.14 |
| OT630...800_C   | Red-yellow | 12 | OHY125J12E011  | 1SCA022615R1650 | 1 | 0.14 |
| OT1000...2500_C | Black      | 12 | OHB274J12E011  | 1SCA122306R1001 | 1 | 0.54 |
| OT1000...2500_C | Black      | 12 | OHB200J12PE011 | 1SCA022873R4230 | 1 | 0.40 |
| OT1000...2500_C | Red-yellow | 12 | OHY200J12PE011 | 1SCA104686R1001 | 1 | 0.40 |

#### Handle not padlockable and no door interlocking

IP65, operating angle 90°.

|                |       |    |              |                 |   |      |
|----------------|-------|----|--------------|-----------------|---|------|
| OT160...250_CF | Black | 6  | OHB65J6E69   | 1SCA112052R1001 | 1 | 0.12 |
| OT315...400_CF | Black | 12 | OHB95J12E69  | 1SCA112058R1001 | 1 | 0.12 |
| OT630...800_CF | Black | 12 | OHB145J12E69 | 1SCA112066R1001 | 1 | 0.14 |

# Ordering information

## Accessories

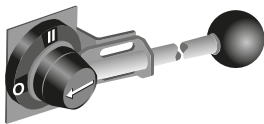
OHB\_  
S07166



OHB200\_P\_  
S07167



YASDA\_  
S07168



### External handles

#### Pistol type handle, plastic, indication I - I+II - II

IP65, operating angle 90°. The type and ordering numbers are for one piece.

| Suitable for switches                                  | Colour | Shaft diameter [mm] | Type          | Order number    | Delivery batch [pcs] | Weight/ unit [kg] |
|--------------------------------------------------------|--------|---------------------|---------------|-----------------|----------------------|-------------------|
| <b>Handle not padlockable and no door interlocking</b> |        |                     |               |                 |                      |                   |
| OT160...250_CL                                         | Black  | 6                   | OHB65J6E65    | 1SCA112050R1001 | 1                    | 0.12              |
| OT315...400_CL                                         | Black  | 12                  | OHB95J12E65   | 1SCA112056R1001 | 1                    | 0.12              |
| OT630...800_CL                                         | Black  | 12                  | OHB145J12E65  | 1SCA112063R1001 | 1                    | 0.14              |
| OT1000...2500_CL                                       | Black  | 12                  | OHB200J12PE65 | 1SCA112078R1001 | 1                    | 0.40              |

#### Metallic handles, indication I-O-II

IP65, Nema types 1, 3R, 4, 4X, 12. Padlockable with 3 padlocks in OFF- position, door interlock in I- and II- position.

| Handle length [mm] | Colour | Shaft diameter [mm] | Type    | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|--------------------|--------|---------------------|---------|-----------------|-------------------|-------------------|
| 220                | Metal  | 12                  | YASDA21 | 1SCA022098R9420 | 1                 | 0.68              |
| 320                | Metal  | 12                  | YASDA6  | 1SCA022071R2890 | 1                 | 0.80              |

# Ordering information

## Accessories

OTV\_



OTVS1



### Handles, direct mounting

Includes a shaft and a mechanism cover. The type and ordering numbers are for one piece.

#### Plastic handle, indication I-O-II

| Suitable for switches                                                                         | Colour | Type        | Order number    | Delivery batch [pcs] | Weight/ unit [kg] |
|-----------------------------------------------------------------------------------------------|--------|-------------|-----------------|----------------------|-------------------|
| <b>Padlockable with three padlocks in 0-position.</b>                                         |        |             |                 |                      |                   |
| OT160...250_C                                                                                 | Black  | OTV250ECK   | 1SCA022783R0090 | 1                    | 0.08              |
| OT315...400_C                                                                                 | Black  | OTV400ECK   | 1SCA022783R0170 | 1                    | 0.26              |
| OT630...800_C                                                                                 | Black  | OTV800ECK   | 1SCA022797R2470 | 1                    | 0.30              |
| OT1000...2500_C                                                                               | Black  | OTV1000ECK  | 1SCA107481R1001 | 1                    | 0.75              |
| Includes a shaft (no mechanism cover)                                                         |        |             |                 |                      |                   |
| OTM40...125F_C                                                                                | Black  | OHB65D6CM   | 1SCA022807R9430 | 1                    | 0.12              |
| <b>Padlockable with three padlocks in 0-position. Types -ECMK include also microswitches.</b> |        |             |                 |                      |                   |
| OTM160...250_C                                                                                | Black  | OTV250ECMK  | 1SCA022804R0570 | 1                    | 0.10              |
| OTM315...400_C                                                                                | Black  | OTV400ECMK  | 1SCA022843R2900 | 1                    | 0.28              |
| OTM630...800_C                                                                                | Black  | OTV800ECMK  | 1SCA022804R3410 | 1                    | 0.32              |
| OTM1000...2500_C                                                                              | Black  | OTV1000ECMK | 1SCA111301R1001 | 1                    | 0.77              |
| <b>Handle not padlockable, operating angle 90°.</b>                                           |        |             |                 |                      |                   |
| OT160...250_CF                                                                                | Black  | OTV250ECFK  | 1SCA113141R1001 | 1                    | 0.08              |
| OT315...400_CF                                                                                | Black  | OTV400ECFK  | 1SCA113147R1001 | 1                    | 0.26              |
| OT630...800_CF                                                                                | Black  | OTV800ECFK  | 1SCA113151R1001 | 1                    | 0.30              |

#### Plastic handle, indication I - I+II - II

| Suitable for switches                               | Colour | Type        | Order number    | Delivery batch [pcs] | Weight/ unit [kg] |
|-----------------------------------------------------|--------|-------------|-----------------|----------------------|-------------------|
| <b>Handle not padlockable, operating angle 90°.</b> |        |             |                 |                      |                   |
| OT160...250_CL                                      | Black  | OTV250ECLK  | 1SCA113137R1001 | 1                    | 0.08              |
| OT315...400_CL                                      | Black  | OTV400ECLK  | 1SCA113143R1001 | 1                    | 0.26              |
| OT630...800_CL                                      | Black  | OTV800ECLK  | 1SCA113148R1001 | 1                    | 0.30              |
| OT1000...2500_CL                                    | Black  | OTV1000ECLK | 1SCA113152R1001 | 1                    | 0.75              |

### Handle and spare fuse storage clip

OTM40...125F\_, the handle can be stored in the handle storage clip OTVS0. The clip can be fixed to a panel frame using the included adhesive tape.

OTM160...2500E\_, the handle and two spare fuses can be stored in the OTVS1 and OTVS2. OTVS1 and OTVS2 can be installed onto the left side of the switch. Snap-on mounting, no tools required. On OTM1000...2500E\_, the size of the handle prevents the installation onto the switch frame. However, the handle clip can be installed separately onto the panel frame and the fuse holder clip onto the switch frame.

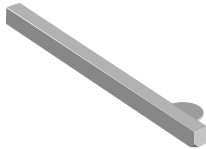
| Suitable for switches | Type  | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------|-------|-----------------|-------------------|-------------------|
| OTM40...125F          | OTVS0 | 1SCA117524R1001 | 1                 | 0.02              |
| OTM160...250E_        | OTVS1 | 1SCA111413R1001 | 1                 | 0.02              |
| OTM315...2500E_       | OTVS2 | 1SCA111414R1001 | 1                 | 0.04              |



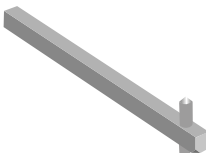
# Ordering information

## Accessories

OXS6X\_  
S01026A



OSP6X\_  
S00050A



### Extended shafts

The type and ordering numbers are for one piece.

#### Shafts for selector type handles

| Suitable for switches | Installation depth [mm] | Length [mm] | Type     | Order number    | Delivery batch [pcs] | Weight/unit [kg] |
|-----------------------|-------------------------|-------------|----------|-----------------|----------------------|------------------|
| Shaft diameter 6 mm   |                         |             |          |                 |                      |                  |
| OT16...40F_C          | 103...114               | 85          | OXS6X85  | 1SCA101647R1001 | 10                   | 0.03             |
| OT16...40F_C          | 123...134               | 105         | OXS6X105 | 1SCA108043R1001 | 10                   | 0.03             |
| OT16...40F_C          | 138...149               | 120         | OXS6X120 | 1SCA101654R1001 | 10                   | 0.04             |
| OT16...40F_C          | 148...159               | 130         | OXS6X130 | 1SCA101655R1001 | 10                   | 0.04             |
| OT63...80F_C          | 121...131               | 85          | OXS6X85  | 1SCA101647R1001 | 10                   | 0.03             |
| OT63...80F_C          | 141...151               | 105         | OXS6X105 | 1SCA108043R1001 | 10                   | 0.03             |
| OT63...80F_C          | 156...166               | 120         | OXS6X120 | 1SCA101654R1001 | 10                   | 0.04             |
| OT63...80F_C          | 166...176               | 130         | OXS6X130 | 1SCA101655R1001 | 10                   | 0.04             |
| OT 100...125F_C       | 120...130               | 85          | OXS6X85  | 1SCA101647R1001 | 10                   | 0.03             |
| OT 100...125F_C       | 140...150               | 105         | OXS6X105 | 1SCA108043R1001 | 10                   | 0.03             |
| OT 100...125F_C       | 155...165               | 120         | OXS6X120 | 1SCA101654R1001 | 10                   | 0.04             |
| OT 100...125F_C       | 165...175               | 130         | OXS6X130 | 1SCA101655R1001 | 10                   | 0.04             |

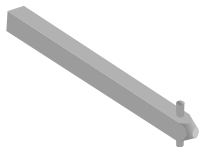
#### Shafts for pistol type handles

| Suitable for switches | Installation depth [mm] | Length [mm] | Type     | Order number    | Delivery batch [pcs] | Weight/unit [kg] |
|-----------------------|-------------------------|-------------|----------|-----------------|----------------------|------------------|
| Shaft diameter 6 mm   |                         |             |          |                 |                      |                  |
| OT16...40F_C          | 164...175               | 150         | OSP6X150 | 1SCA022295R5600 | 10                   | 0.05             |
| OT16...40F_C          | 184...195               | 170         | OSP6X170 | 1SCA108224R1001 | 10                   | 0.05             |
| OT16...40F_C          | 279...290               | 265         | OSP6X265 | 1SCA108225R1001 | 10                   | 0.08             |
| OT16...40F_C          | 414...425               | 400         | OSP6X400 | 1SCA108226R1001 | 10                   | 0.12             |
| OT63...80F_C          | 183...194               | 150         | OSP6X150 | 1SCA022295R5600 | 10                   | 0.05             |
| OT63...80F_C          | 203...214               | 170         | OSP6X170 | 1SCA108224R1001 | 10                   | 0.05             |
| OT63...80F_C          | 298...309               | 265         | OSP6X265 | 1SCA108225R1001 | 10                   | 0.08             |
| OT63...80F_C          | 433...444               | 400         | OSP6X400 | 1SCA108226R1001 | 10                   | 0.12             |
| OT 100...125F_C       | 192...206               | 150         | OSP6X150 | 1SCA022295R5600 | 10                   | 0.05             |
| OT 100...125F_C       | 212...226               | 170         | OSP6X170 | 1SCA108224R1001 | 10                   | 0.05             |
| OT 100...125F_C       | 307...321               | 265         | OSP6X265 | 1SCA108225R1001 | 10                   | 0.08             |
| OT 100...125F_C       | 442...456               | 400         | OSP6X400 | 1SCA108226R1001 | 10                   | 0.12             |
| Shaft diameter 6 mm   |                         |             |          |                 |                      |                  |
| OT160...250_C         | 166...214               | 90          | OSP6X90  | 1SCA022064R1180 | 10                   | 0.03             |
| OT160...250_C         | 209...254               | 130         | OSP6X130 | 1SCA022057R0570 | 10                   | 0.04             |
| OT160...250_C         | 240...285               | 161         | OSP6X161 | 1SCA022067R1760 | 10                   | 0.05             |
| OT160...250_C         | 289...334               | 210         | OSP6X210 | 1SCA022295R6080 | 10                   | 0.06             |
| OT160...250_C         | 369...414               | 290         | OSP6X290 | 1SCA022042R6370 | 10                   | 0.08             |
| OT160...250_C         | 439...484               | 360         | OSP6X360 | 1SCA022042R6530 | 10                   | 0.11             |

# Ordering information

## Accessories

OXP12X  
S00047A



### Extended shafts

#### Shafts for pistol type handles

| Suitable<br>for<br>switches | Installation  |                | Type               | Order number    | Units/ Weight/<br>type unit |      |
|-----------------------------|---------------|----------------|--------------------|-----------------|-----------------------------|------|
|                             | depth<br>[mm] | Length<br>[mm] |                    |                 | [pcs]                       | [kg] |
| Shaft diameter 12 mm        |               |                |                    |                 |                             |      |
| OT315...400_C               | 209...266     | 107            | OX <b>P</b> 12X107 | 1SCA022029R9750 | 1                           | 0.12 |
| OT315...400_C               | 243...307     | 148            | OX <b>P</b> 12X148 | 1SCA022658R5570 | 1                           | 0.17 |
| OT315...400_C               | 261...325     | 166            | OX <b>P</b> 12X166 | 1SCA022325R7100 | 1                           | 0.20 |
| OT315...400_C               | 280...344     | 185            | OX <b>P</b> 12X185 | 1SCA022325R6710 | 1                           | 0.22 |
| OT315...400_C               | 345...409     | 250            | OX <b>P</b> 12X250 | 1SCA022325R6980 | 1                           | 0.29 |
| OT315...400_C               | 375...439     | 280            | OX <b>P</b> 12X280 | 1SCA022137R5140 | 1                           | 0.33 |
| OT315...400_C               | 420...484     | 325            | OX <b>P</b> 12X325 | 1SCA022042R5810 | 1                           | 0.38 |
| OT315...400_C               | 490...554     | 395            | OX <b>P</b> 12X395 | 1SCA022042R5990 | 1                           | 0.46 |
| OT315...400_C               | 560...624     | 465            | OX <b>P</b> 12X465 | 1SCA022042R6020 | 1                           | 0.54 |
| OT630...800_C               | 287...355     | 148            | OX <b>P</b> 12X148 | 1SCA022658R5570 | 1                           | 0.17 |
| OT630...800_C               | 324...422     | 185            | OX <b>P</b> 12X185 | 1SCA022325R6710 | 1                           | 0.22 |
| OT630...800_C               | 389...487     | 250            | OX <b>P</b> 12X250 | 1SCA022325R6980 | 1                           | 0.29 |
| OT630...800_C               | 464...562     | 325            | OX <b>P</b> 12X325 | 1SCA022042R5810 | 1                           | 0.38 |
| OT630...800_C               | 534...632     | 395            | OX <b>P</b> 12X395 | 1SCA022042R5990 | 1                           | 0.46 |
| OT630...800_C               | 604...702     | 465            | OX <b>P</b> 12X465 | 1SCA022042R6020 | 1                           | 0.54 |
| OT1000...2500_C             | 339...425     | 166            | OX <b>P</b> 12X166 | 1SCA022325R7100 | 1                           | 0.20 |
| OT1000...2500_C             | 423...509     | 250            | OX <b>P</b> 12X250 | 1SCA022325R6980 | 1                           | 0.29 |
| OT1000...2500_C             | 498...584     | 325            | OX <b>P</b> 12X325 | 1SCA022042R5810 | 1                           | 0.38 |
| OT1000...2500_C             | 568...654     | 395            | OX <b>P</b> 12X395 | 1SCA022042R5990 | 1                           | 0.46 |
| OT1000...2500_C             | 638...724     | 465            | OX <b>P</b> 12X465 | 1SCA022042R6020 | 1                           | 0.54 |

# Ordering information

## Accessories

OA1G01

OA7G10

S00261A



OA1G10

OA8G01

OA3G10

S00261A



OA2G11

S01025A



### Auxiliary contacts

The type and ordering numbers are for one piece.

See the contact functions, pages 84 - 85.

#### Auxiliary contact blocks for OT16...125F and OTM40...125F

Snap-on mounting to the switch, IP 20, max. 2 blocks/ side.  $I_{th} = 16$  A, suitable for cable cross sections max.  $2 \times 2,5$  mm<sup>2</sup>. Simultaneous action with the main contacts.

| Suitable for switches | Contact functions | Installation side | Type                 | Order number    | Delivery batch [pcs] | Weight/unit [kg] |
|-----------------------|-------------------|-------------------|----------------------|-----------------|----------------------|------------------|
| OT_16...125F_C        | 1NO               | Right             | OA1G10               | 1SCA022353R4970 | 10                   | 0.03             |
| OT_16...125F_C        | 1NC               | Right             | OA8G01               | 1SCA022744R2240 | 10                   | 0.03             |
| OT_16...125F_C        | 1NO               | Left              | OA7G10               | 1SCA022673R1140 | 10                   | 0.03             |
| OT_16...125F_C        | 1NC               | Left              | OA1G01               | 1SCA022353R4890 | 10                   | 0.03             |
| OT63...125F3C         | 1NO+1NC           | Either            | OA2G11 <sup>1)</sup> | 1SCA022379R8100 | 10                   | 0.03             |
| OTM40...125F3C        | 1NO+1NC           | Either            | OA2G11 <sup>1)</sup> | 1SCA022379R8100 | 10                   | 0.03             |

<sup>1)</sup> Not mountable on 4-pole change-over switches

#### Auxiliary contact blocks for OT160...2500 and OTM160...2500

Mounting on the right side of the switch: Max. 4 auxiliary contact blocks/switch (totally 8 blocks). Types \_AU have gold plated contacts for harsh environments and low operating voltages. Simultaneous action with the main contacts, IP20.

| Suitable for switches | Contact functions | Installation side | Type     | Order number    | Delivery batch [pcs] | Weight/unit [kg] |
|-----------------------|-------------------|-------------------|----------|-----------------|----------------------|------------------|
| OT_160...2500_C_      | 1NO               | Right             | OA1G10   | 1SCA022353R4970 | 10                   | 0.03             |
| OT_160...2500_C_      | 1NC               | Right             | OA3G01   | 1SCA022456R7410 | 10                   | 0.03             |
| OT_160...2500_C_      | 1NO               | Right             | OA1G10AU | 1SCA022436R7910 | 10                   | 0.03             |
| OT_160...2500_C_      | 1NC               | Right             | OA3G01AU | 1SCA022819R5260 | 10                   | 0.03             |

### Function tables

#### Function table of OT160...2500 and OTM160...2500 auxiliary contacts / Switch I (max. 2+2)

| Handle position | Main contacts | OA1G10 NO | OA3G01 NC |
|-----------------|---------------|-----------|-----------|
| I               | closed        | closed    | open      |
| 0               | open          | open      | closed    |
| II              | closed        | open      | closed    |

#### Function table of OT160...2500 and OTM160...2500 auxiliary contacts / Switch II (max. 2+2)

| Handle position | Main contacts | OA1G10 NO | OA3G01 NC |
|-----------------|---------------|-----------|-----------|
| I               | closed        | open      | closed    |
| 0               | open          | open      | closed    |
| II              | closed        | closed    | open      |

# Ordering information

## Accessories

OTPS40F\_  
S00262A



OTPS80F\_  
S00263A



OTPS60F\_  
S01342A

OTPS125F\_  
S01342A



### Fourth poles

#### Fourth poles for OT16...125F

Snap-on mounting to the left or right side of the switches, IP20. Simultaneous operation with power poles. The type and ordering numbers are for one piece.

| Suitable<br>for<br>switches | Rated current,<br>up to 415V<br>AC-21A/AC-22A/AC-23A<br>I[A] | Type                     | Order number    | Delivery Weight/<br>batch unit |      |
|-----------------------------|--------------------------------------------------------------|--------------------------|-----------------|--------------------------------|------|
|                             |                                                              |                          |                 | [pcs]                          | [kg] |
| OT16...40F_C                | 40/40/23                                                     | OTPS40FPN1 <sup>1)</sup> | 1SCA105001R1001 | 10                             | 0.03 |
| OT16...40F_C                | 40/40/23                                                     | OTPS40FPN2 <sup>2)</sup> | 1SCA105000R1001 | 10                             | 0.03 |
| OT63...80F_C                | 80/80/75                                                     | OTPS80FP                 | 1SCA105461R1001 | 10                             | 0.06 |
| OT100...125F_C              | 125/125/90                                                   | OTPS125FP                | 1SCA105099R1001 | 10                             | 0.14 |

#### Fourth poles for OTM40...125F

Snap-on mounting to the left or right side of the switches, IP20. Simultaneous operation with power poles. The type and ordering number is for one piece.

| Suitable<br>for<br>switches | Rated current,<br>up to 415V<br>AC-21A/AC-22A/AC-23A<br>I[A] | Type      | Order number    | Delivery Weight/<br>batch unit |      |
|-----------------------------|--------------------------------------------------------------|-----------|-----------------|--------------------------------|------|
|                             |                                                              |           |                 | [pcs]                          | [kg] |
| OTM40F_                     | 40/40/40                                                     | OTPS60FP  | 1SCA111009R1001 | 1                              | 0.14 |
| OTM63...125F_               | 125/125/90                                                   | OTPS125FP | 1SCA105099R1001 | 1                              | 0.14 |

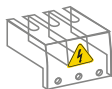
<sup>1)</sup> Installation to the left side

<sup>2)</sup> Installation to the right side

# Ordering information

## Accessories

OTS\_T3  
S00265A



OTS\_T1  
S00462A



OTS\_L\_  
S01638A



OTS\_S\_  
S01637A



### Terminal shrouds

#### Terminal shrouds, transparent plastic

Snap-on mounting to the switches, IP20. The full shrouding of a 3-pole change-over switch is achieved with four 3-pole shrouds. The type and ordering numbers are for one piece.

| Suitable for switches          | Type     | Order number    | Delivery batch [pcs] | Weight/unit [kg] |
|--------------------------------|----------|-----------------|----------------------|------------------|
| <b>For three pole switches</b> |          |                 |                      |                  |
| OT16...40F_C                   | OTS40T3  | 1SCA105317R1001 | 10                   | 0.01             |
| OT63...80F_C                   | OTS63T3  | 1SCA022353R6750 | 10                   | 0.01             |
| OT100...125F_C, OTM 40...125F_ | OTS125T3 | 1SCA022379R9680 | 10                   | 0.01             |
| <b>For fourth pole</b>         |          |                 |                      |                  |
| OTPS40FPN1                     | OTS40T1  | 1SCA105314R1001 | 10                   | 0.01             |
| OTPS40FPN2                     | OTS40T1  | 1SCA105314R1001 | 10                   | 0.01             |
| OTPS80FP                       | OTS63T1  | 1SCA022353R6910 | 10                   | 0.01             |
| OTPS60FP, OTPS125FP            | OTS125T1 | 1SCA022379R9760 | 10                   | 0.01             |

#### Terminal shrouds, grey plastic

Snap-on mounting to the switches, IP 20. A kit includes three or four shrouds which can be used on either side of the switch. Suitable for the upperswitch. Transparent shrouds for OT\_160...2500 available on request, please replace the letter "G" with "T".

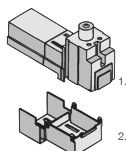
| Suitable for switches | No. of poles | Description | Type         | Order number    | Units/type [pcs] | Weight/unit [kg] |
|-----------------------|--------------|-------------|--------------|-----------------|------------------|------------------|
| OT_160...250_C        | 3            | Long type   | OTS250G1L/3  | 1SCA022731R8150 | 3                | 0.09             |
| OT_160...250_C        | 3            | Short type  | OTS250G1S/3  | 1SCA022731R8310 | 3                | 0.06             |
| OT_160...250_C        | 4            | Long type   | OTS250G1L/4  | 1SCA022731R8230 | 4                | 0.12             |
| OT_160...250_C        | 4            | Short type  | OTS250G1S/4  | 1SCA022731R8400 | 4                | 0.08             |
| OT_315...400_C        | 3            | Long type   | OTS400G1L/3  | 1SCA022736R8840 | 3                | 0.15             |
| OT_315...400_C        | 3            | Short type  | OTS400G1S/3  | 1SCA022736R9060 | 3                | 0.09             |
| OT_315...400_C        | 4            | Long type   | OTS400G1L/4  | 1SCA022736R9490 | 4                | 0.20             |
| OT_315...400_C        | 4            | Short type  | OTS400G1S/4  | 1SCA022736R9650 | 4                | 0.12             |
| OT_600...800_C        | 3            | Long type   | OTS800G1L/3  | 1SCA022776R7890 | 3                | 0.32             |
| OT_600...800_C        | 3            | Short type  | OTS800G1S/3  | 1SCA022776R8190 | 3                | 0.17             |
| OT_600...800_C        | 4            | Long type   | OTS800G1L/4  | 1SCA022776R7970 | 4                | 0.42             |
| OT_600...800_C        | 4            | Short type  | OTS800G1S/4  | 1SCA022776R8270 | 4                | 0.26             |
| OT_1000...1600_C      | 3            | Long type   | OTS1600G1L/3 | 1SCA022871R9510 | 3                | 0.64             |
| OT_1000...1600_C      | 3            | Short type  | OTS1600G1S/3 | 1SCA022871R9600 | 3                | 0.37             |
| OT_1000...1600_C      | 4            | Long type   | OTS1600G1L/4 | 1SCA022871R9780 | 4                | 0.85             |
| OT_1000...1600_C      | 4            | Short type  | OTS1600G1S/4 | 1SCA022871R9860 | 4                | 0.49             |
| OT_2000...2500_C      | 3            | Long type   | OTS2500G1L/3 | 1SCA107261R1001 | 3                | 0.77             |
| OT_2000...2500_C      | 3            | Short type  | OTS2500G1S/3 | 1SCA107260R1001 | 3                | 0.47             |
| OT_2000...2500_C      | 4            | Long type   | OTS2500G1L/4 | 1SCA107262R1001 | 4                | 1.00             |
| OT_2000...2500_C      | 4            | Short type  | OTS2500G1S/4 | 1SCA107271R1001 | 4                | 0.61             |

# Ordering information

## Accessories

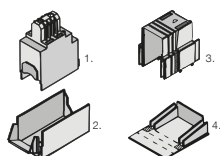
### OZXB2K

1. S00215A, 2. S00216A



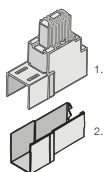
### OZXB3K

1. S00218A, 2. S00219A, 3. S00217A, 4. S00220A



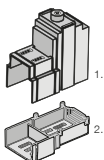
### OZXB4K

1. S00221A, 2. S00222A



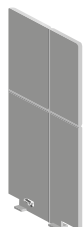
### OZXB5K

1. S00223A, 2. S00224A

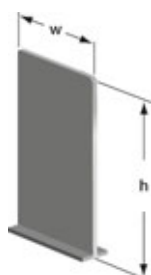


### OTB\_

KE00052A



### PB\_



## Terminal shrouds for terminal clamps

Snap-on mounting to the terminal clamps, transparent plastic, IP 2X

| Suitable for switches | No. of poles | Type   | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------|--------------|--------|-----------------|-------------------|-------------------|
| OZXB2, 2L             | 3            | OZXB2K | 1SCA022264R0010 | 3                 | 0.05              |
| OZXB3, 4              | 3            | OZXB3K | 1SCA022264R0440 | 3                 | 0.20              |
| OZXB5, 6              | 3            | OZXB4K | 1SCA022199R2850 | 3                 | 0.24              |
| OZXB7, 7L             | 3            | OZXB5K | 1SCA022283R8040 | 3                 | 0.13              |

## Phase separators

Grey plastic plate for maintaining clearance between the phases without terminal shrouds.

Snap-on mounting. The package includes 12 plates and 6 filling plates.

| Suitable for switches                | Type       | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|--------------------------------------|------------|-----------------|-------------------|-------------------|
| OT600U, OT630...800E, 3- and 4-pole  | OTB800/6C  | 1SCA107272R1001 | 12                | 0.55              |
| OT800U, OT1000...2500, 3- and 4-pole | OTB1600/6C | 1SCA104661R1001 | 12                | 0.74              |

## Phase barriers

The phase barriers designed for ABB Tmax T4-T5 MCCB's can also be used for OT\_160...800 change-over switches. 3-pole change-overs need 8 barriers and 4-pole change-overs need 12 barriers for full protection.

| Suitable for switches | No. of poles | Height h [mm] | Cutting width W of the phase barrier [mm] | Type       | Order number | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------|--------------|---------------|-------------------------------------------|------------|--------------|-------------------|-------------------|
| OT_160...250E_C       | 3            | 100           | 55                                        | PB100 low  | 1SDA054970R1 | 4                 |                   |
| OT_160...250E_C       | 3            | 200           | 55                                        | PB200 high | 1SDA054972R1 | 4                 |                   |
| OT_160...250E_C       | 4            | 100           | 55                                        | PB100 low  | 1SDA054971R1 | 6                 |                   |
| OT_160...250E_C       | 4            | 200           | 55                                        | PB200 high | 1SDA054973R1 | 6                 |                   |
| OT_315...400E_C       | 3            | 100           | 67                                        | PB100 low  | 1SDA054970R1 | 4                 |                   |
| OT_315...400E_C       | 3            | 200           | 67                                        | PB200 high | 1SDA054972R1 | 4                 |                   |
| OT_315...400E_C       | 4            | 100           | 67                                        | PB100 low  | 1SDA054971R1 | 6                 |                   |
| OT_315...400E_C       | 4            | 200           | 67                                        | PB200 high | 1SDA054973R1 | 6                 |                   |
| OT_600...800E_C       | 3            | 100           | 90                                        | PB100 low  | 1SDA054970R1 | 4                 |                   |
| OT_600...800E_C       | 3            | 200           | 90                                        | PB200 high | 1SDA054972R1 | 4                 |                   |
| OT_600...800E_C       | 4            | 100           | 90                                        | PB100 low  | 1SDA054971R1 | 6                 |                   |
| OT_600...800E_C       | 4            | 200           | 90                                        | PB200 high | 1SDA054973R1 | 6                 |                   |

# Ordering information

## Accessories

OZXT1  
S00738A



OZXT2...3  
S01349A



OZXT6  
S07190



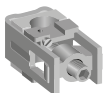
OZXL1  
S01361A



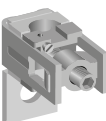
OZXB1L  
S00177A



OZXB2  
S00179A



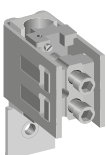
OZXB2L, 7L  
S00182A



OZXB8, 9  
S01806A



OZXB3, 5  
S00186A



### Terminal clamps

| Suitable for switches | Cable cross section [mm²] | Type | Order number | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------|---------------------------|------|--------------|-------------------|-------------------|
|-----------------------|---------------------------|------|--------------|-------------------|-------------------|

#### Terminal clamp sets for Al- and Cu-cables insulated versions

|               |                        |       |                 |   |      |
|---------------|------------------------|-------|-----------------|---|------|
| OT63...125F_  | 16...50 Al/2.5...50 Cu | OZXT1 | 1SCA022469R6310 | 3 | 0.06 |
| OT100...125F_ | 16...120 Al/Cu         | OZXT2 | 1SCA022620R7200 | 3 | 0.21 |
| OT100...125F_ | 2x(16...50) Al/Cu      | OZXT3 | 1SCA022639R0720 | 3 | 0.21 |
| OTM40...125F_ | 16...50 Al/2.5...50 Cu | OZXT1 | 1SCA022469R6310 | 3 | 0.06 |
| OTM63...125F_ | 16...120 Al/Cu         | OZXT2 | 1SCA022620R7200 | 3 | 0.21 |
| OTM63...125F_ | 2x(16...50) Al/Cu      | OZXT3 | 1SCA022639R0720 | 3 | 0.21 |

Including 0.75...2.5 mm² voltage sensing connection. Voltage sensing wires are not included

|              |                        |       |                 |   |      |
|--------------|------------------------|-------|-----------------|---|------|
| OTM40...125F | 16...50 Al/2.5...50 Cu | OZXT6 | 1SCA122537R1001 | 3 | 0.06 |
|--------------|------------------------|-------|-----------------|---|------|

#### Terminal clamp sets for Al- and Cu-cables

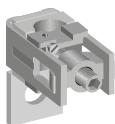
| Suitable for switches | Suitable shroud     | Cable cross section [mm²] | Type     | Order number    | Units/ type [pcs] | Delivery batch [pcs] | Weight/ unit [kg] |
|-----------------------|---------------------|---------------------------|----------|-----------------|-------------------|----------------------|-------------------|
| OT100...125F_         |                     | 10...70                   | OZXL1    | 1SCA022439R6770 | 3                 | 1                    | 0.14              |
| OTM40...125F_         |                     | 10...70                   | OZXL1    | 1SCA022439R6770 | 3                 | 1                    | 0.14              |
| OT_160...250E_C       | OTS250_L            | 10...70                   | OZXB1L   | 1SCA022169R2030 | 3                 | 1                    | 0.15              |
| OT_160...250E_C       | OTS250_L            | 10...70                   | OZXB1L/1 | 1SCA022194R0030 | 1                 | 50                   | 0.05              |
| OT_160...250E_C       | OZXB2K              | 25...120                  | OZXB2    | 1SCA022119R7610 | 3                 | 1                    | 0.34              |
| OT_160...250E_C       | OZXB2K              | 25...120                  | OZXB2/1  | 1SCA022194R0200 | 1                 | 50                   | 0.12              |
| OT_160...250E_C       | OZXB2K              | 25...120                  | OZXB2L   | 1SCA022158R7750 | 3                 | 1                    | 0.43              |
| OT_160...250E_C       | OZXB2K              | 25...120                  | OZXB2L/1 | 1SCA022194R0460 | 1                 | 50                   | 0.15              |
| OT_160...250E_C       | OTS250_L            | 95...185                  | OZXB8    | 1SCA022744R1510 | 3                 | 1                    | 0.50              |
| OT_160...250E_C       | OTS250_L            | 95...185                  | OZXB8/1  | 1SCA022744R1600 | 1                 | 20                   | 0.15              |
| OT_160...250E_C       | OTS250_L            | 95...240                  | OZXB9    | 1SCA022750R3210 | 3                 | 1                    | 0.50              |
| OT_160...250E_C       | OTS250_L            | 95...240                  | OZXB9/1  | 1SCA022750R3300 | 1                 | 20                   | 0.15              |
| OT_315...400E_C       | OZXB2K              | 25...120                  | OZXB2L   | 1SCA022158R7750 | 3                 | 1                    | 0.43              |
| OT_315...400E_C       | OZXB2K              | 25...120                  | OZXB2L/1 | 1SCA022194R0460 | 1                 | 50                   | 0.15              |
| OT_315...400E_C       | OZXB3K              | 95...185                  | OZXB3    | 1SCA022136R8100 | 3                 | 1                    | 1.28              |
| OT_315...400E_C       | OZXB3K              | 95...185                  | OZXB3/1  | 1SCA022194R0620 | 1                 | 20                   | 0.43              |
| OT_315...400E_C       | OZXB3K 2x(95...185) |                           | OZXB4    | 1SCA022137R4760 | 3                 | 1                    | 1.71              |
| OT_315...400E_C       | OZXB3K 2x(95...185) |                           | OZXB4/1  | 1SCA022194R0890 | 1                 | 20                   | 0.57              |
| OT_315...400E_C       | OZXB5K              | 120...240                 | OZXB7    | 1SCA022185R0040 | 3                 | 1                    | 1.00              |
| OT_315...400E_C       | OZXB5K              | 120...240                 | OZXB7/1  | 1SCA022194R1430 | 1                 | 20                   | 0.34              |
| OT_315...400E_C       | OZXB5K              | 120...240                 | OZXB7L   | 1SCA022185R7130 | 3                 | 1                    | 1.17              |
| OT_315...400E_C       | OZXB5K              | 120...240                 | OZXB7L/1 | 1SCA022194R1600 | 1                 | 20                   | 0.40              |
| OT_315...400E_C       | OTS400_L            | 95...185                  | OZXB8    | 1SCA022744R1510 | 3                 | 1                    | 0.50              |
| OT_315...400E_C       | OTS400_L            | 95...185                  | OZXB8/1  | 1SCA022744R1600 | 1                 | 20                   | 0.15              |
| OT_315...400E_C       | OTS400_L            | 95...240                  | OZXB9    | 1SCA022750R3210 | 3                 | 1                    | 0.50              |
| OT_315...400E_C       | OTS400_L            | 95...240                  | OZXB9/1  | 1SCA022750R3300 | 1                 | 20                   | 0.15              |



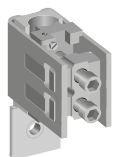
# Ordering information

## Accessories

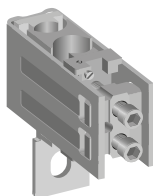
OZXB2L, 7L  
S00182A



OZXB3, 5  
S00186A



OZXB4, 6  
S00188A



### Terminal clamps

| Suitable<br>for<br>switches | Cable cross<br>section<br>[mm <sup>2</sup> ] | Suitable<br>shroud | Type | Order number | Units/<br>type<br>[pcs] | Delivery<br>batch<br>[pcs] | Weight/<br>unit<br>[kg] |
|-----------------------------|----------------------------------------------|--------------------|------|--------------|-------------------------|----------------------------|-------------------------|
|-----------------------------|----------------------------------------------|--------------------|------|--------------|-------------------------|----------------------------|-------------------------|

#### Terminal clamp sets for Al- and Cu-cables

|                   |               |           |          |                 |   |    |      |
|-------------------|---------------|-----------|----------|-----------------|---|----|------|
| OT_630...800E_C   | 120...300     | OZXB4K    | OZXB5    | 1SCA022137R2470 | 3 | 1  | 2.28 |
| OT_630...800E_C   | 120...300     | OZXB4K    | OZXB5/1  | 1SCA022194R1010 | 1 | 20 | 0.76 |
| OT_630...800E_C   | 2x(120...300) | OZXB4K    | OZXB6    | 1SCA022137R4920 | 3 | 1  | 3.12 |
| OT_630...800E_C   | 2x(120...300) | OZXB4K    | OZXB6/1  | 1SCA022194R1270 | 1 | 20 | 1.04 |
| OT_1000...1600E_C | 95...185      | OTS1600_L | OZXB3    | 1SCA022136R8100 | 3 | 1  | 1.28 |
| OT_1000...1600E_C | 95...185      | OTS1600_L | OZXB3/1  | 1SCA022194R0620 | 1 | 20 | 0.13 |
| OT_1000...1600E_C | 2x(95...185)  | OTS1600_L | OZXB4    | 1SCA022137R4760 | 3 | 1  | 1.71 |
| OT_1000...1600E_C | 2x(95...185)  | OTS1600_L | OZXB4/1  | 1SCA022194R0890 | 1 | 20 | 0.60 |
| OT_1000...1600E_C | 120...300     | OTS1600_L | OZXB5    | 1SCA022137R2470 | 3 | 1  | 2.22 |
| OT_1000...1600E_C | 120...300     | OTS1600_L | OZXB5/1  | 1SCA022194R1010 | 1 | 20 | 0.80 |
| OT_1000...1600E_C | 2x(120...300) | OTS1600_L | OZXB6    | 1SCA022137R4920 | 3 | 1  | 3.03 |
| OT_1000...1600E_C | 2x(120...300) | OTS1600_L | OZXB6/1  | 1SCA022194R1270 | 1 | 20 | 1.00 |
| OT_1000...1600E_C | 120...240     | OTS1600_L | OZXB7L   | 1SCA022185R7130 | 3 | 1  | 1.20 |
| OT_1000...1600E_C | 120...240     | OTS1600_L | OZXB7L/1 | 1SCA022194R1600 | 1 | 20 | 0.39 |
| OT_2000...2500E_C | 95...185      | OTS2500_L | OZXB3    | 1SCA022136R8100 | 3 | 1  | 1.28 |
| OT_2000...2500E_C | 95...185      | OTS2500_L | OZXB3/1  | 1SCA022194R0620 | 1 | 20 | 0.13 |
| OT_2000...2500E_C | 2x(95...185)  | OTS2500_L | OZXB4    | 1SCA022137R4760 | 3 | 1  | 1.71 |
| OT_2000...2500E_C | 2x(95...185)  | OTS2500_L | OZXB4/1  | 1SCA022194R0890 | 1 | 20 | 0.60 |
| OT_2000...2500E_C | 120...300     | OTS2500_L | OZXB5    | 1SCA022137R2470 | 3 | 1  | 2.22 |
| OT_2000...2500E_C | 120...300     | OTS2500_L | OZXB5/1  | 1SCA022194R1010 | 1 | 20 | 0.80 |
| OT_2000...2500E_C | 2x(120...300) | OTS2500_L | OZXB6    | 1SCA022137R4920 | 3 | 1  | 3.03 |
| OT_2000...2500E_C | 2x(120...300) | OTS2500_L | OZXB6/1  | 1SCA022194R1270 | 1 | 20 | 1.00 |
| OT_2000...2500E_C | 120...240     | OTS2500_L | OZXB7L   | 1SCA022185R7130 | 3 | 1  | 1.20 |
| OT_2000...2500E_C | 120...240     | OTS2500_L | OZXB7L/1 | 1SCA022194R1600 | 1 | 20 | 0.39 |

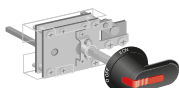
# Ordering information

## Accessories

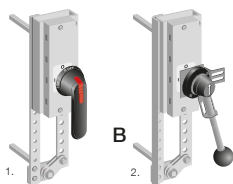
OWC6D\_  
S01282A



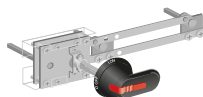
OESAZW1  
S01234A



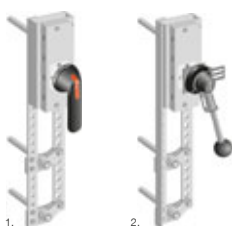
OTZW25, OETLZW11  
OETLZW12  
1. S00054B, 2. S00055A



OTZW17  
S01245A



OTZW26, OETLZW13  
1. S00058B, 2. S00056A



## Conversion kits

### Change-over kits

| Suitable for switches | For shafts/<br>Shafts distance<br>[mm] | Type     | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|-----------------------|----------------------------------------|----------|-----------------|-------------------------|-------------------------|
| OT16...40             | OXS6_, OXP6_                           | OWC6D40  | 1SCA022865R4550 | 1                       | 0.03                    |
| OT63...80             | OXS6_, OXP6_                           | OWC6D80  | 1SCA022865R4630 | 1                       | 0.07                    |
| OT100...125           | OXS6_, OXP6_                           | OWC6D125 | 1SCA104494R1001 | 1                       | 0.09                    |

The modular change-over switches can be built by adding a compact snap-on kit on the top of two switch-disconnectors. The kits do not require any additional foot print area, only the height is increased 12 mm.

|               |                 |          |                 |   |      |
|---------------|-----------------|----------|-----------------|---|------|
| OT16...125    | 90+(0...10)x15  | OESAZW1  | 1SCA022064R3710 | 1 | 0.78 |
| OT160...250   | 210+(0...18)x20 | OTZW25   | 1SCA022778R6920 | 1 | 2.8  |
| OT315...400   | 210+(0...11)x20 | OETLZW11 | 1SCA022078R0030 | 1 | 3.0  |
| OT630...800E_ | 210+(0...20)x20 | OETLZW12 | 1SCA022078R0200 | 1 | 4.6  |

### By-pass kits

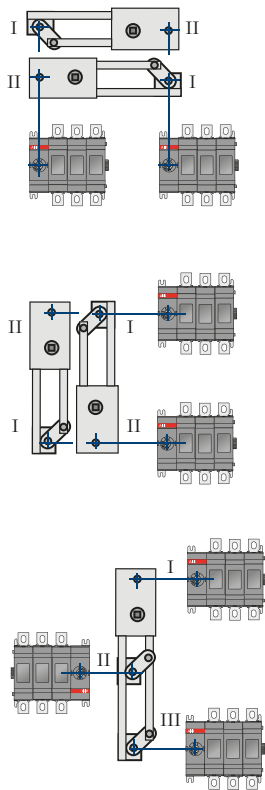
| Suitable for switches | Shafts distance<br>[mm]             | Type     | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|-----------------------|-------------------------------------|----------|-----------------|-------------------------|-------------------------|
| OT16...125            | Between 1 and 2:<br>90+(0...6)x15   | OTZW17   | 1SCA022387R1620 | 1                       | 0.88                    |
|                       | Between 1 and 3:<br>90+(0...10)x15  |          |                 |                         |                         |
| OT160...250           | Between 1 and 2:<br>210+(0...9)x20  | OTZW26   | 1SCA022778R7060 | 1                       | 3.3                     |
|                       | Between 1 and 3:<br>250+(0...9)x20  |          |                 |                         |                         |
| OT315...800E_         | Between 1 and 2:<br>210+(0...18)x20 | OETLZW13 | 1SCA022078R0460 | 1                       | 4.0                     |
|                       | Between 1 and 3:<br>250+(0...18)x20 |          |                 |                         |                         |

# Ordering information

## Accessories

### Change-over and by-pass switches

S01233A

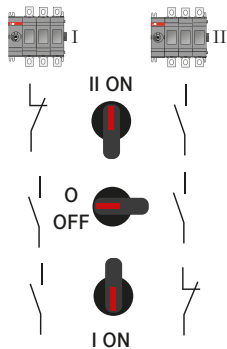


### Conversion kits

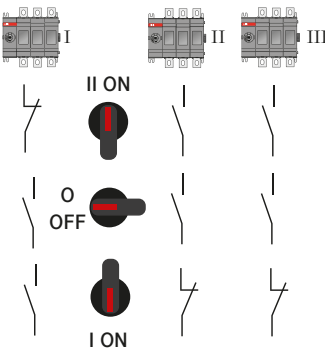
#### Shafts and handles for conversion kits

| Conversion kit type | Included in conversion kit delivery |                    |
|---------------------|-------------------------------------|--------------------|
|                     | Shaft                               | Handle             |
| OESAZW1             | x (2 pcs)                           | OHB80J6E011        |
| OTZW25              | x (2 pcs)                           | OHB95J12E011       |
| OETLZW11            | x (2 pcs)                           | OHB145J12E011      |
| OETLZW12            | x (2 pcs)                           | YASDA21 (metallic) |
| OTZW17              | x (3 pcs)                           | OHB80J6E011        |
| OTZW26              | x (3 pcs)                           | OHB95J12E011       |
| OETLZW13            | x (3 pcs)                           | YASDA 6            |

#### Change-over switches



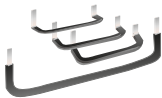
#### Bypass switches



# Ordering information

## Accessories

OZXA32  
S01469



OZXA33  
S01470



OZXA38  
S02078



OZXA39  
S02077A



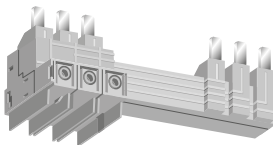
OZXA40  
S02079A



OZXA41  
S02080A



OMZC\_  
S07104



### Parallel connection kits

Finger protected connection bars for parallel connection of the upper or lower terminals. The bars accept additional cables, the maximum size is stated below.

| Suitable for switches | Cable cross section [mm²]        | Type    | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------|----------------------------------|---------|-----------------|-------------------|-------------------|
| OT16...40F3C          | 6 (fine stranded), 10 (stranded) | OZXA33  | 1SCA022685R0310 | 1                 | 0.02              |
| OT16...40F4C          | 6 (fine stranded), 10 (stranded) | OZXA32  | 1SCA022683R4110 | 1                 | 0.03              |
| OT63...80F3C          | 25                               | OZXA38  | 1SCA022785R2140 | 1                 | 0.06              |
| OT63...80F4C          | 25                               | OZXA39  | 1SCA022790R3820 | 1                 | 0.09              |
| OT100...125F3C        | 50                               | OZXA40  | 1SCA022790R3910 | 1                 | 0.16              |
| OT100...125F4C        | 50                               | OZXA41  | 1SCA022790R4040 | 1                 | 0.24              |
| OTM40F3C_             | 2.5...25/2x2.5...16              | OMZC003 | 1SCA121324R1001 | 1                 | 0.5               |
| OTM40F4C_             | 2.5...25/2x2.5...16              | OMZC004 | 1SCA121325R1001 | 1                 | 0.65              |
| OTM40...125F3C_       | 10...70                          | OMZC03  | 1SCA117037R1001 | 1                 | 0.5               |
| OTM40...125F4C_       | 10...70                          | OMZC04  | 1SCA117038R1001 | 1                 | 0.65              |

# Ordering information

## Accessories

OTZC13...34



OTZC43...44  
OTZC53...54



OTZR\_



### Bridging bars

The bridging bars provide a connection link either on the incoming or outcoming side of the switch.

| Suitable<br>for<br>switches | No.<br>of<br>poles | Type   | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|-----------------------------|--------------------|--------|-----------------|-------------------------|-------------------------|
| OT_160...250_C              | 3                  | OTZC13 | 1SCA022767R6910 | 3                       | 0.6                     |
| OT_160...250_C              | 4                  | OTZC14 | 1SCA022767R7040 | 4                       | 0.8                     |
| OT_315...400_C              | 3                  | OTZC23 | 1SCA022767R7120 | 3                       | 0.6                     |
| OT_315...400_C              | 4                  | OTZC24 | 1SCA022767R7210 | 4                       | 0.8                     |
| OT_600_C...800E_C           | 3                  | OTZC33 | 1SCA022785R7020 | 3                       | 1.0                     |
| OT_600_C...800E_C           | 4                  | OTZC34 | 1SCA022785R7110 | 4                       | 1.3                     |
| OT_1000...1250E_C           | 3                  | OTZC43 | 1SCA022868R0710 | 3                       | 4.2                     |
| OT_1000...1250E_C           | 4                  | OTZC44 | 1SCA022868R0800 | 4                       | 5.6                     |
| OT800U_, OT_1600E_C         | 3                  | OTZC53 | 1SCA022868R0980 | 3                       | 5.6                     |
| OT800U_, OT_1600E_C         | 4                  | OTZC54 | 1SCA022868R1010 | 4                       | 7.4                     |
| OT_2000...2500E_C           | 3                  | OTZC63 | 1SCA022868R1100 | 3                       | 10.8                    |
| OT_2000...2500E_C           | 4                  | OTZC64 | 1SCA022868R1360 | 4                       | 14.5                    |

### Reversing bars

A reversing switch can be built by using phase sequence bars in two phases. The kit includes two phase sequence conversion bars. The missing bridging bars must be ordered separately, see above. For example 3-pole switches: one 4-pole standard bridging bar kit is required (one bar for the reversing side, three bars for the other side).

| Suitable<br>for<br>switches | Type  | Order number    | Units/<br>type<br>[pcs] | Weight/<br>unit<br>[kg] |
|-----------------------------|-------|-----------------|-------------------------|-------------------------|
| OT_160...250_C              | OTZR1 | 1SCA100352R1001 | 2                       | 0.3                     |
| OT_315...400_C              | OTZR2 | 1SCA104647R1001 | 2                       | 0.3                     |
| OT_600_C...800E_C           | OTZR3 | 1SCA100355R1001 | 2                       | 0.4                     |

# Ordering information

## Accessories

**OMD200**  
S07183



**OMD300**  
S07184



**OMD800**  
S07185



**OMZD1**  
S07187



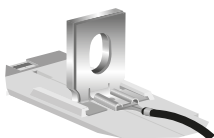
**OMZB18...28**  
S07179



**OMZB38**  
S07180



**OMZB18...28 mounted**  
S07181



**OMZB48**  
S07182



### Automatic control units

OMD automatic control units can be used with OTM40...2500\_CM\_ motorized change-over switches in order to assemble an automatic transfer switch. The type and ordering codes include the OMD control unit, PCB connectors and 2 fasteners for door mounting.

#### If used with OTM40...125\_CMA\_:

1 x OTM40...125\_CMA\_ motorized change-over switch and 6/8 x OZXT6 terminal clamps (including voltage sensing connection) must be ordered separately to be able to assemble an automatic transfer switch.

#### If used with OTM160...2500\_CM\_:

1 x OTM160...2500\_CM\_ motorized change-over switch, 1 x OMZB\_ voltage sensing connectors and 2 x OA1G10 auxiliary contacts must be ordered separately to be able to assemble an automatic transfer switch. The control unit can be mounted on a door or on DIN rail. Information about the control features on page 31-32. Dimension drawings on page 79.

| Suitable for switches | Type           | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------|----------------|-----------------|-------------------|-------------------|
| OTM40...2500_CM_      | OMD200E480C-A1 | 1SCA123789R1001 | 1                 | 0.8               |
| OTM40...2500_CM_      | OMD300E480C-A1 | 1SCA123790R1001 | 1                 | 1.0               |
| OTM40...2500_CM_      | OMD800E480C-A1 | 1SCA123791R1001 | 1                 | 1.3               |

### Panel fasteners

For mounting the OMD automatic control unit on the door. The type and ordering code is for 1 piece, so 2 units must be ordered for mounting the control on the door.

| Suitable for OMD control unit | Type  | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|-------------------------------|-------|-----------------|-------------------|-------------------|
| OMD200_, OMD300_, OMD800_     | OMZD1 | 1SCA022787R5190 | 1                 |                   |

### Voltage sensing connectors\*

For 0.5...1.5mm<sup>2</sup> voltage sensing connection of the top or bottom power poles. The connector package includes also the faston terminals (see the picture). One package includes 8 connectors and 8 faston terminals. Wires are not included.

| Suitable for switches     | Faston terminal cable cross section [mm <sup>2</sup> ] | Type   | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|---------------------------|--------------------------------------------------------|--------|-----------------|-------------------|-------------------|
| OT_160...250_C            | 0.5...1.5                                              | OMZB18 | 1SCA120153R1001 | 8                 | 0.2               |
| OT_315...400_C            | 0.5...1.5                                              | OMZB28 | 1SCA120154R1001 | 8                 | 0.2               |
| OT_630...800E_C           | 0.5...1.5                                              | OMZB38 | 1SCA120155R1001 | 8                 | 0.2               |
| OT800U, OT_1000...2500E_C | 0.5...1.5                                              | OMZB48 | 1SCA120156R1001 | 8                 | 0.2               |

\* Terminal clamp OZXT6 is recommended to use with OTM40...125\_C for voltage sensing connection.

Terminal clamp OZXT6 includes 0.75...2.5 mm<sup>2</sup> voltage sensing connection. See ordering information on page 51.

# Ordering information

## Accessories

**OMZC2**  
A07207

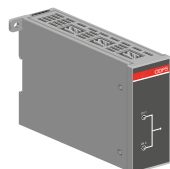


### Cover plate

Providing protection against accidental contact. Padlockable transparent cover. The type and ordering codes are for 1 piece.

| Suitable for                                  | Type  | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|-----------------------------------------------|-------|-----------------|-------------------|-------------------|
| OMD control unit<br>OMD200_, OMD300_, OMD800_ | OMZC2 | 1SCA101001R1001 | 1                 |                   |

**ODPSE230C**  
A07078

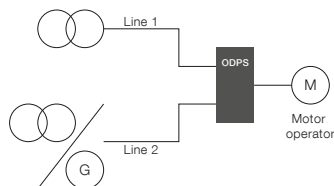


### Dual power source

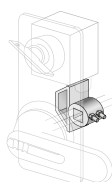
Provides power supply to the motor operator by using two lines. The device has two inputs, from line I (LN I) and line II (LN II), and one output for the motor operator. The motor operator is automatically energized whenever power is available in one of the lines. Can be used with 230VAC motor operators. Snap-on mounted PCB connectors are included in the delivery. The device can be DIN-rail or screw mounted. Dimension drawings on page 82.

| Suitable for              | Type      | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|---------------------------|-----------|-----------------|-------------------|-------------------|
| switches<br>OTM40...2500_ | ODPSE230C | 1SCA116892R1001 | 1                 | 0.3               |

**Connection diagram**  
S07186



**OETLZW16, 5**  
S00059A



### Interlocking device for locks

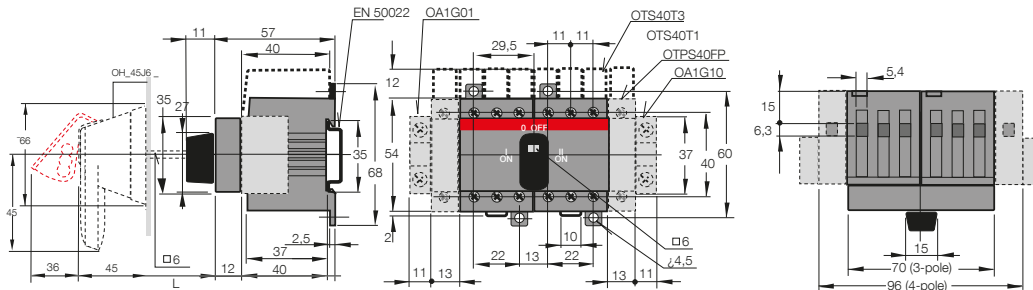
Cam attachment for Castell, Lowe & Fletcher or Ronis interlock. Lock, handle or shaft not included. Mounting to OXP-shaft, works together with OH-door handle and a shaft. This accessory is mounted to the operating shaft of the switch and therefore only compatible with external handles.

| Suitable for              | Type     | Order number    | Units/ type [pcs] | Weight/ unit [kg] |
|---------------------------|----------|-----------------|-------------------|-------------------|
| switches<br>OT16...125F_C | OETLZW16 | 1SCA022093R2070 | 1                 | 0.17              |
| OT160...250_C             | OETLZW16 | 1SCA022093R2070 | 1                 | 0.17              |
| OT315...2500_C            | OETLZW5  | 1SCA022052R3900 | 1                 | 0.14              |



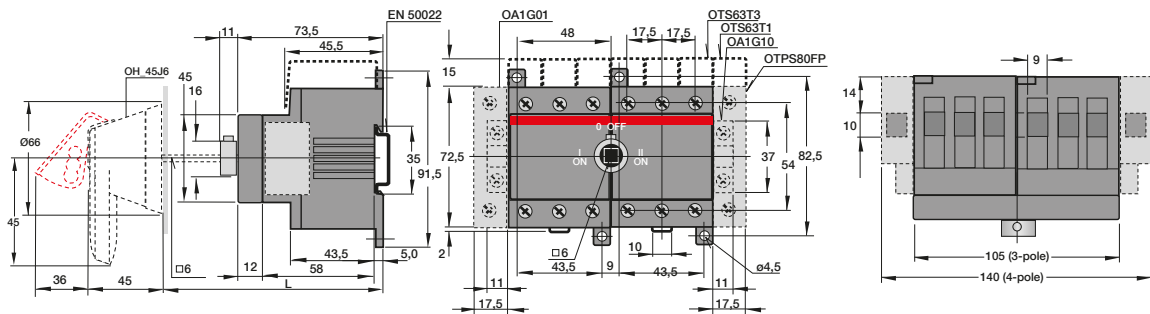
Dimension drawings  
Modular change-over switches

## OT16...40



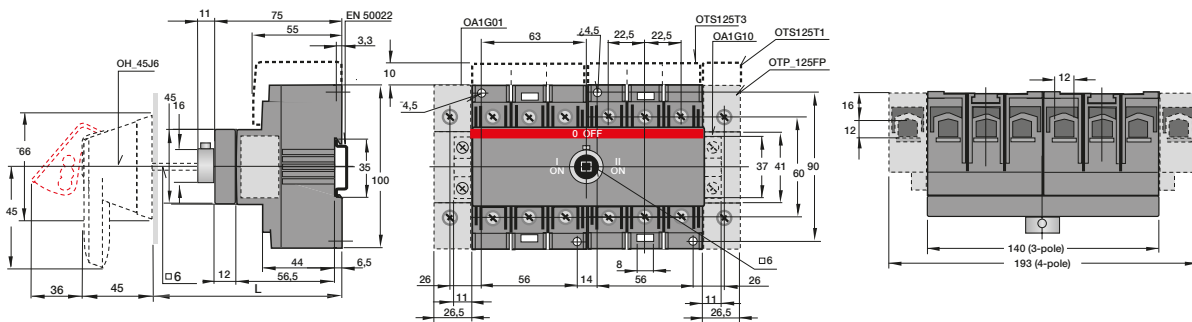
| OH_45J6E311 |           |
|-------------|-----------|
| Shaft OXP6x | L [mm]    |
| 150         | 164...175 |
| 170         | 184...195 |
| 265         | 279...290 |
| 400         | 414...425 |

## OT63...80



| Shaft OXP6x | L [mm]    |
|-------------|-----------|
| 150         | 183...194 |
| 170         | 203...214 |
| 265         | 298...309 |
| 400         | 433...444 |

## OT100...125

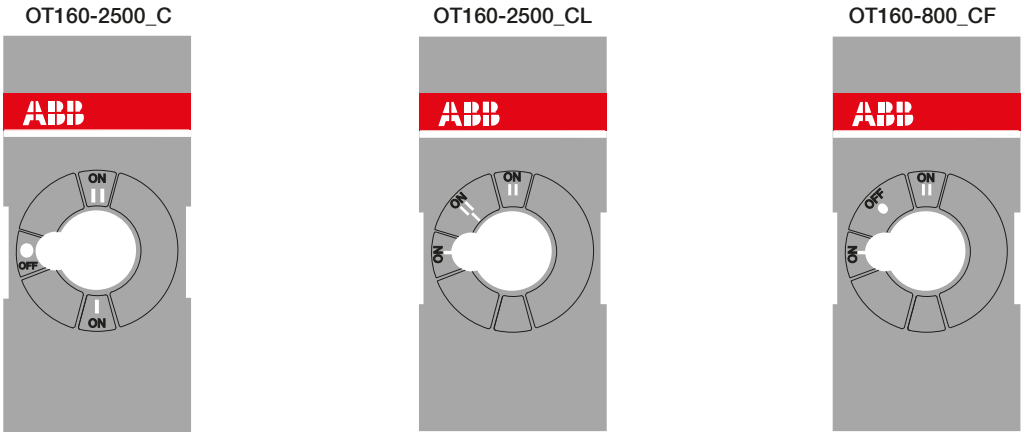


| Shaft OXP6x | L [mm]    |
|-------------|-----------|
| 150         | 192...206 |
| 170         | 212...226 |
| 265         | 307...321 |
| 400         | 442...456 |

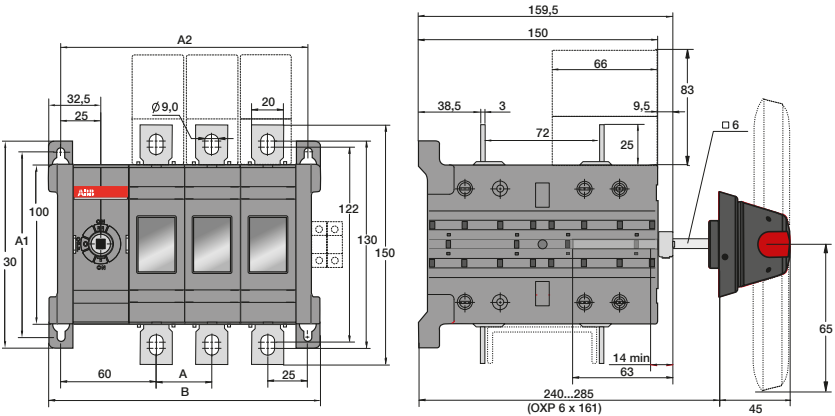
# Dimension drawings

## Manual change-over switches

Position indication in OT\_160...2500\_



OT160...OT250E03/04C\_P

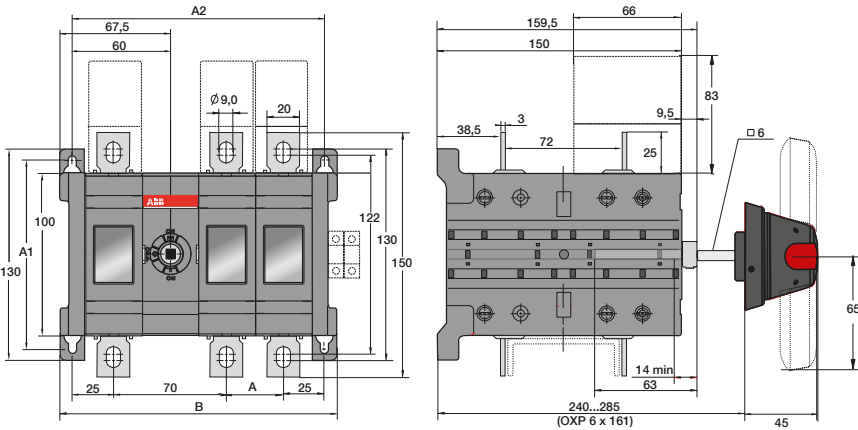


| OT160-250_C_ |     |     |     |
|--------------|-----|-----|-----|
| [mm]         | E02 | E03 | E04 |
| A            | 35  | 35  | 35  |
| A1           | 116 | 116 | 116 |
| A2           | 120 | 155 | 190 |
| B            | 135 | 170 | 205 |

# Dimension drawings

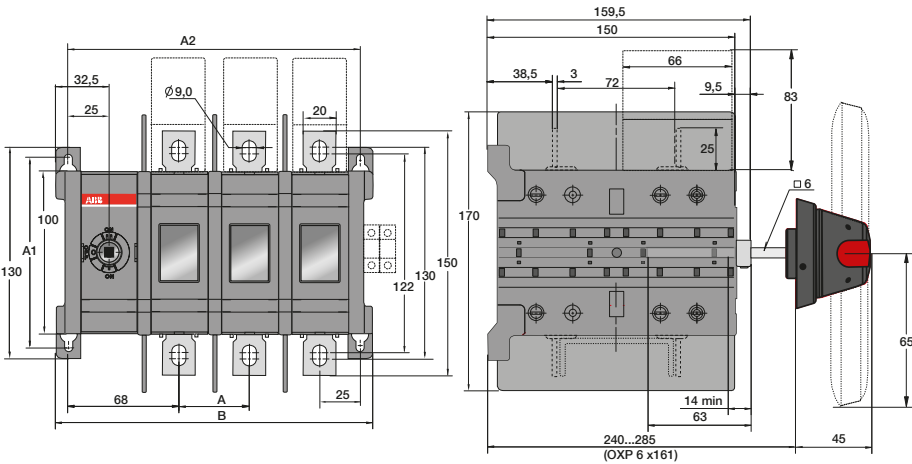
## Manual change-over switches

### OT160...OT250E12/13/33C\_P



| OT160-250_C_ |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|
| [mm]         | E12 | E13 | E22 | E23 | E33 |
| A            | 35  | 35  | 35  | 35  | 35  |
| A1           | 116 | 116 | 116 | 116 | 116 |
| A2           | 155 | 190 | 190 | 225 | 260 |
| B            | 170 | 205 | 205 | 240 | 275 |

### OT160...OT250E03/04WC\_P

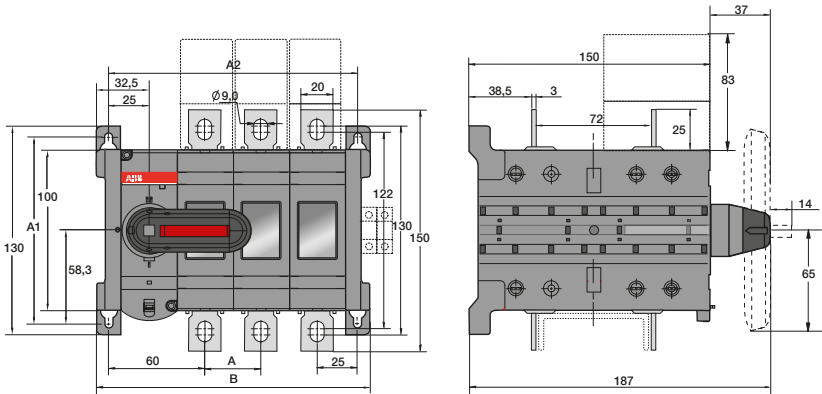


| OT160-250_WC_ |     |     |     |
|---------------|-----|-----|-----|
| [mm]          | E02 | E03 | E04 |
| A             | 43  | 43  | 43  |
| A1            | 116 | 116 | 116 |
| A2            | 136 | 179 | 222 |
| B             | 151 | 194 | 237 |

# Dimension drawings

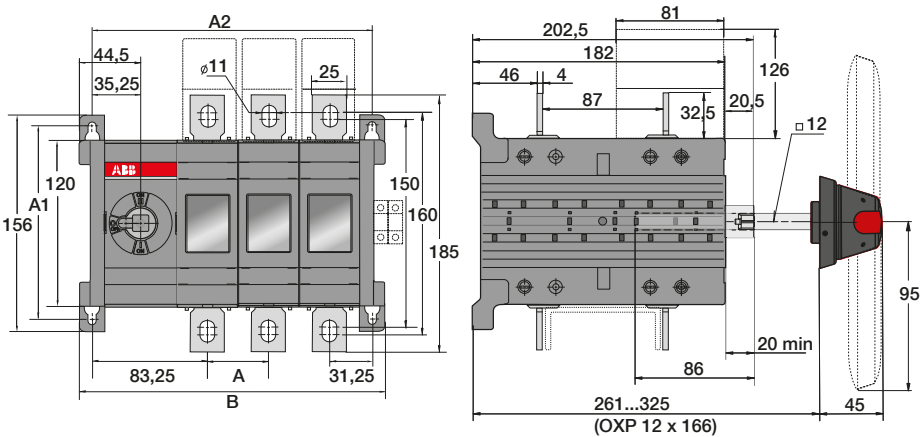
## Manual change-over switches

OT160...250E03/04\_ with direct mounted handle



| OTM160-250_C |     |     |
|--------------|-----|-----|
| [mm]         | E03 | E04 |
| A            | 35  | 35  |
| A1           | 116 | 116 |
| A2           | 156 | 191 |
| B            | 171 | 206 |

OT315...400E03/04C\_P

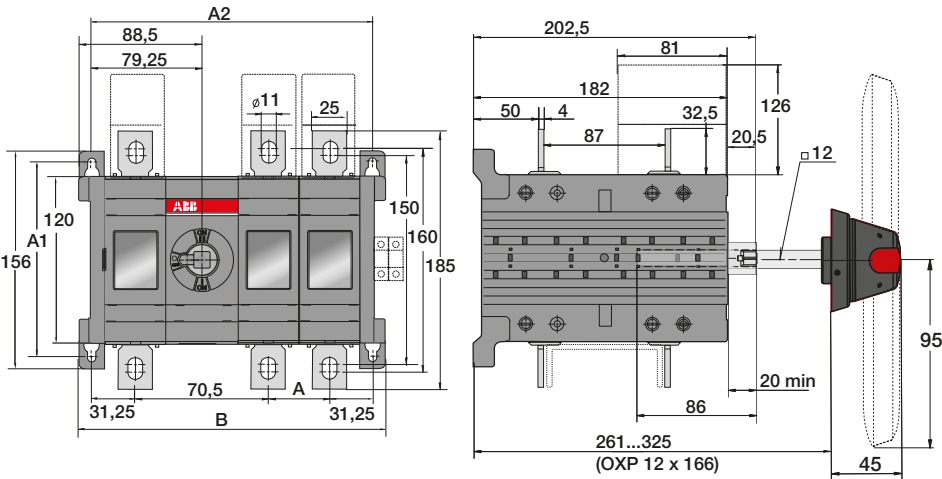


| OT315-400_C |       |       |       |
|-------------|-------|-------|-------|
| [mm]        | E02   | E03   | E04   |
| A           | 44    | 44    | 44    |
| A1          | 142   | 142   | 142   |
| A2          | 158,5 | 202,5 | 246,5 |
| B           | 177   | 221   | 265   |

# Dimension drawings

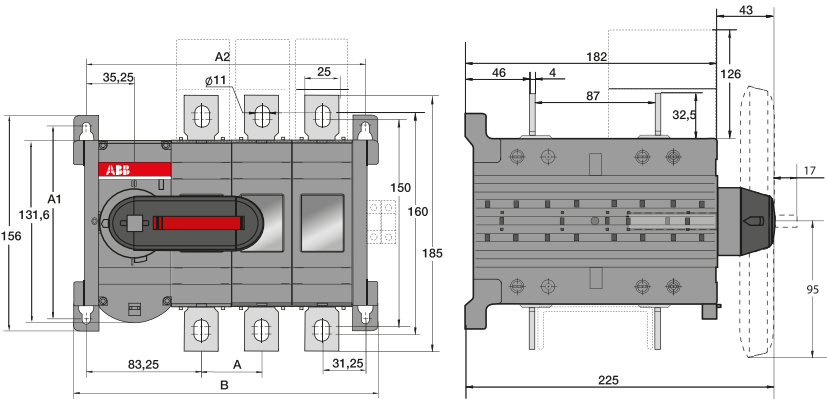
## Manual change-over switches

### OT315...OT400E12/13/33C\_P



| OT315-400_C |       |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|
| [mm]        | E12   | E13   | E22   | E23   | E33   |
| A           | 44    | 44    | 44    | 44    | 44    |
| A1          | 142   | 142   | 142   | 142   | 142   |
| A2          | 202,5 | 246,5 | 246,5 | 290,5 | 334,5 |
| B           | 221   | 265   | 265   | 309   | 253   |

### OT315...400E03/04\_ with direct mounted handle

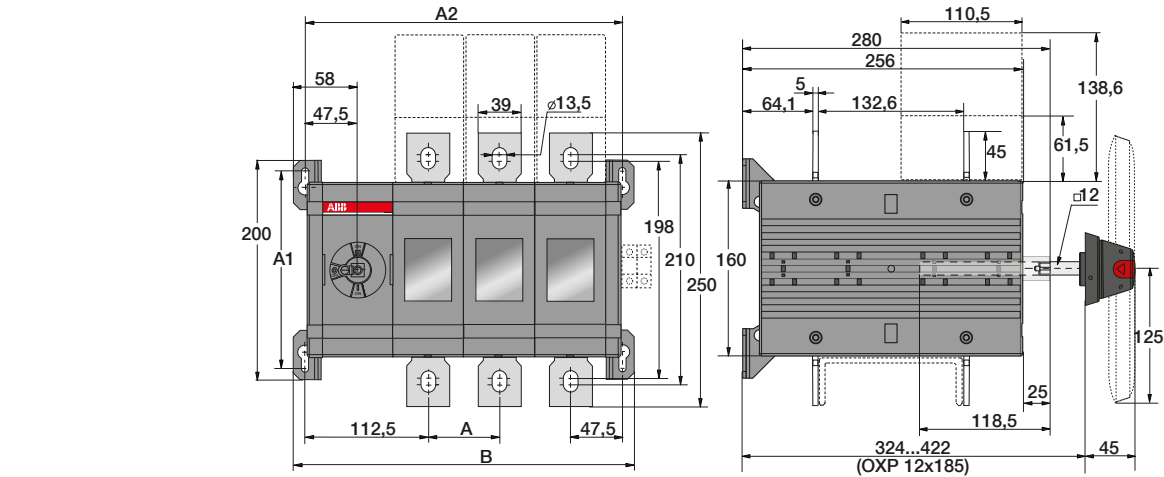


| OT315_400_C |       |       |
|-------------|-------|-------|
| [mm]        | E03   | E04   |
| A           | 44    | 44    |
| A1          | 142   | 142   |
| A2          | 202,5 | 246,5 |
| B           | 221   | 265   |

# Dimension drawings

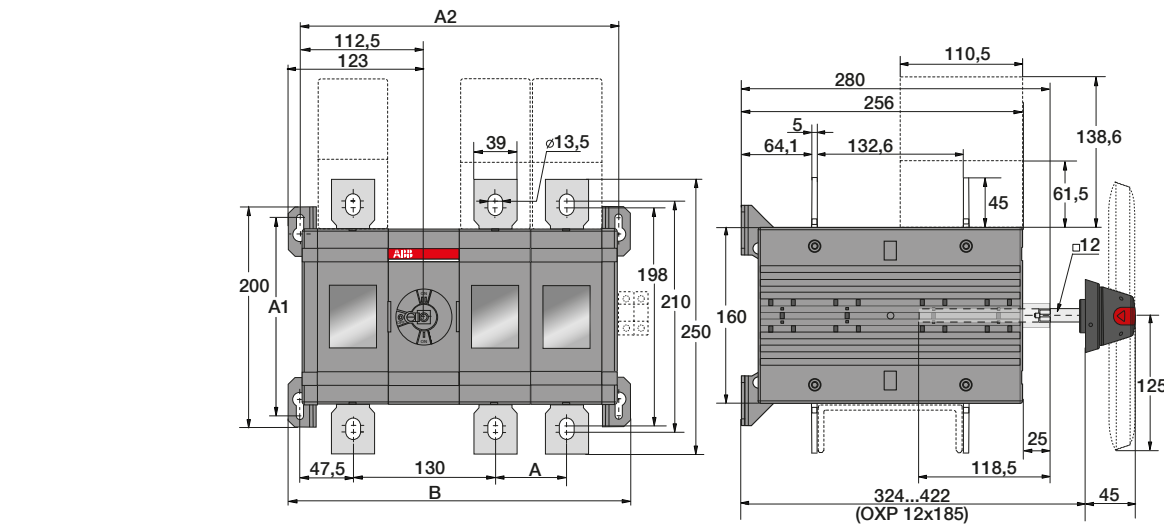
## Manual change-over switches

OT630...800E03/04C\_P



| OT630-800_C_ |     |     |     |  |
|--------------|-----|-----|-----|--|
| [mm]         | E02 | E03 | E04 |  |
| A            | 65  | 65  | 65  |  |
| A1           | 180 | 180 | 180 |  |
| A2           | 225 | 290 | 355 |  |
| B            | 246 | 311 | 376 |  |

OT630...800E12/13/33C\_P

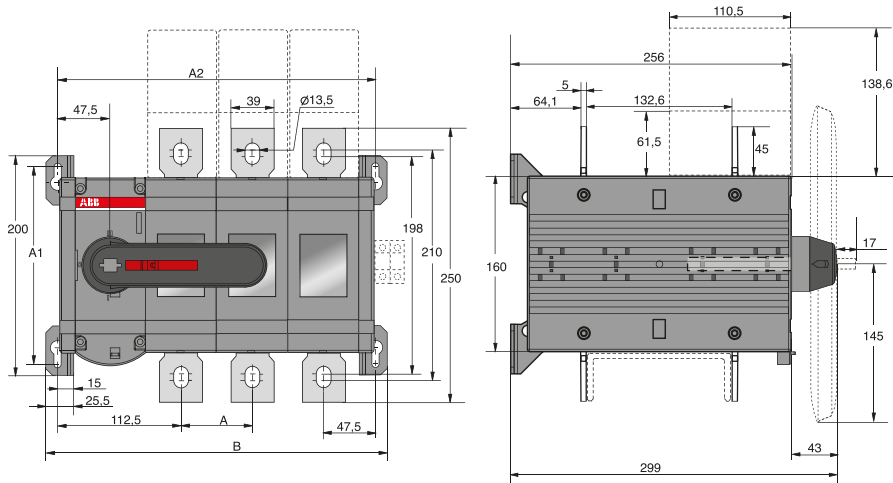


| OT630-800_C_ |     |     |     |     |     |
|--------------|-----|-----|-----|-----|-----|
| [mm]         | E12 | E13 | E22 | E23 | E33 |
| A            | 65  | 65  | 65  | 65  | 65  |
| A1           | 180 | 180 | 180 | 180 | 180 |
| A2           | 290 | 355 | 355 | 420 | 485 |
| B            | 311 | 376 | 376 | 441 | 506 |

# Dimension drawings

## Manual change-over switches

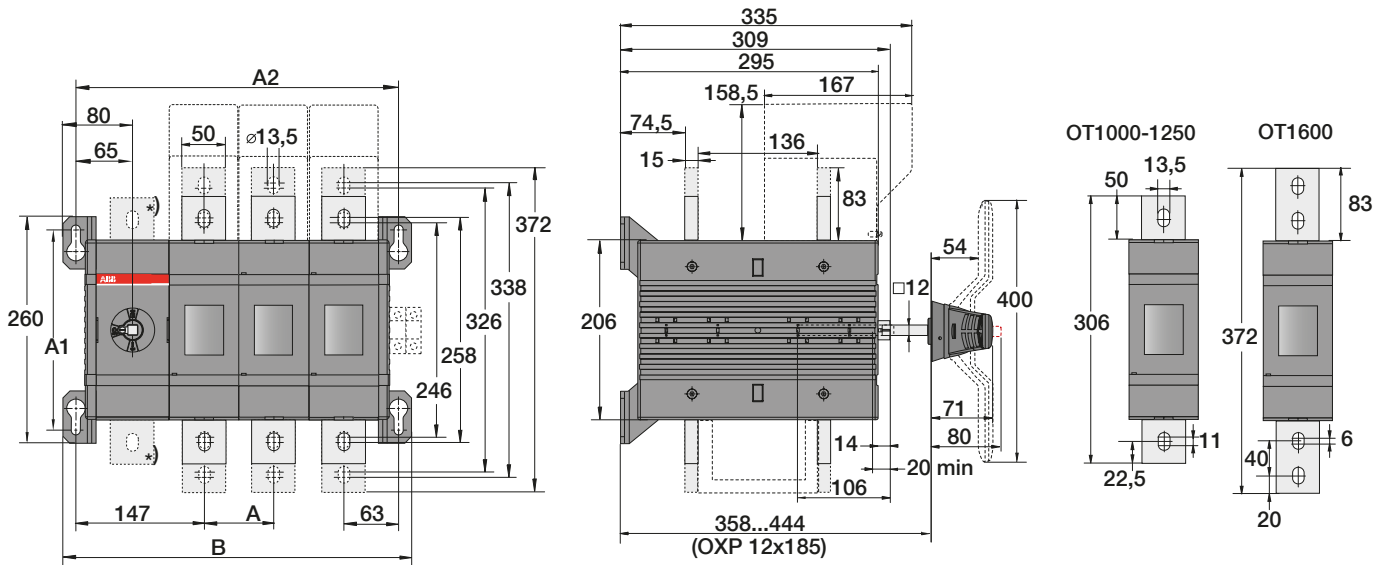
OT630...800E03/04\_ with direct mounted handle



OT600\_800\_CK

| [mm] | E03 | E04 |
|------|-----|-----|
| A    | 65  | 65  |
| A1   | 180 | 180 |
| A2   | 290 | 355 |
| B    | 311 | 376 |

OT1000...1600E03/04CP



\*) N3 types

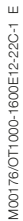
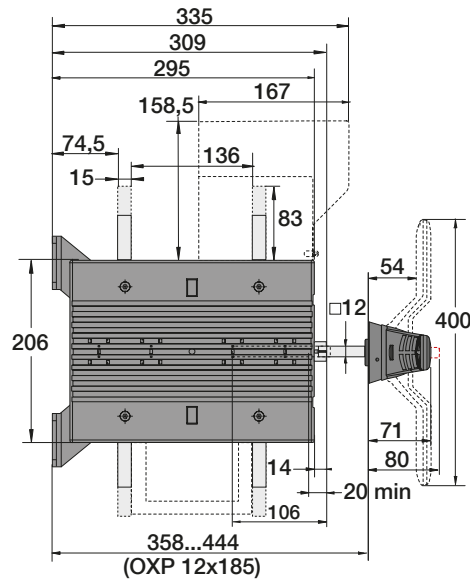
OT1000-1600\_C\_

| [mm] | E02 | E03 | E04 |
|------|-----|-----|-----|
| A    | 80  | 80  | 80  |
| A1   | 230 | 230 | 230 |
| A2   | 290 | 370 | 450 |
| B    | 320 | 400 | 480 |



Dimension drawings  
Manual change-over switches

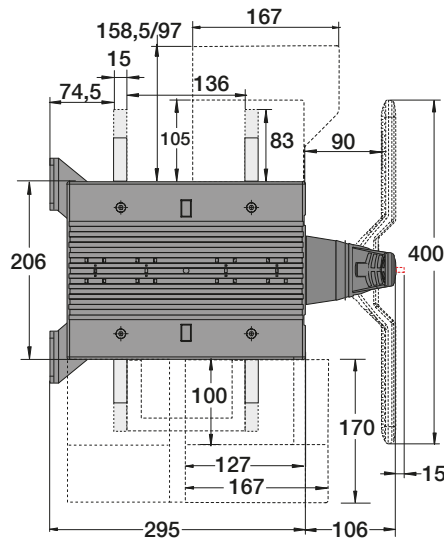
OT1000...1600E12/E13/E22CP



\*) N3 types

| OT1000-1600_C_ |     |     |     |
|----------------|-----|-----|-----|
| [mm]           | E12 | E13 | E22 |
| A              | 80  | 80  | 80  |
| A1             | 230 | 230 | 230 |
| A2             | 370 | 450 | 450 |
| B              | 400 | 480 | 480 |

### OT1000...1600E03/04 with direct mounted handle



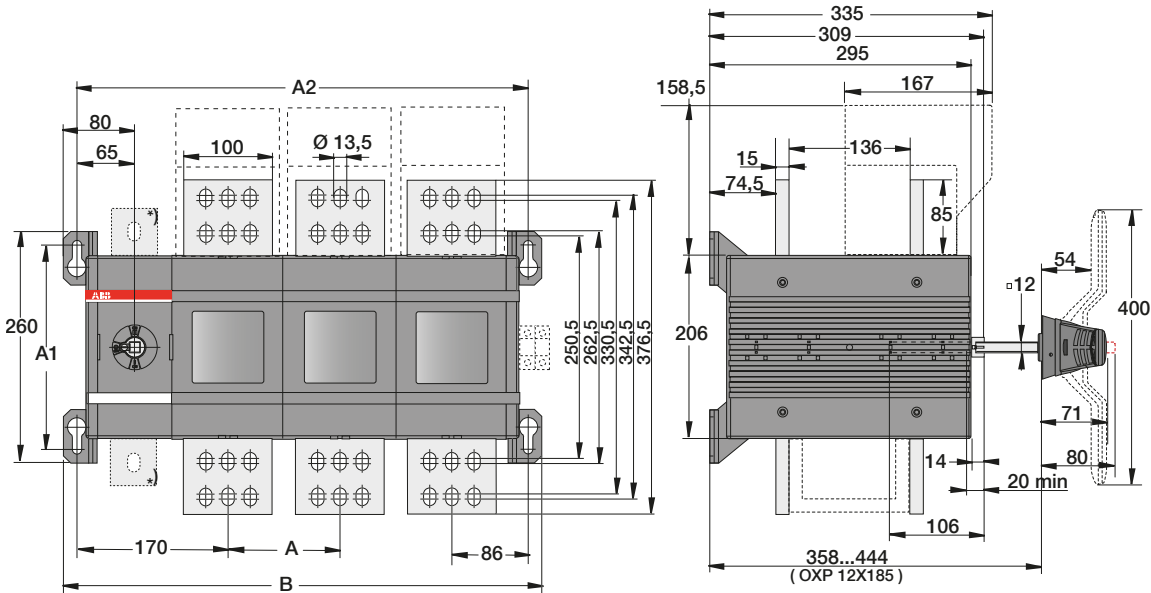
\* ) N3 types

| OT1000/1250/1600E_CK |     |     |     |
|----------------------|-----|-----|-----|
| [mm]                 | E02 | E03 | E04 |
| A                    | 80  | 80  | 80  |
| A1                   | 230 | 230 | 230 |
| A2                   | 290 | 370 | 450 |
| B                    | 320 | 400 | 480 |

# Dimension drawings

## Manual change-over switches

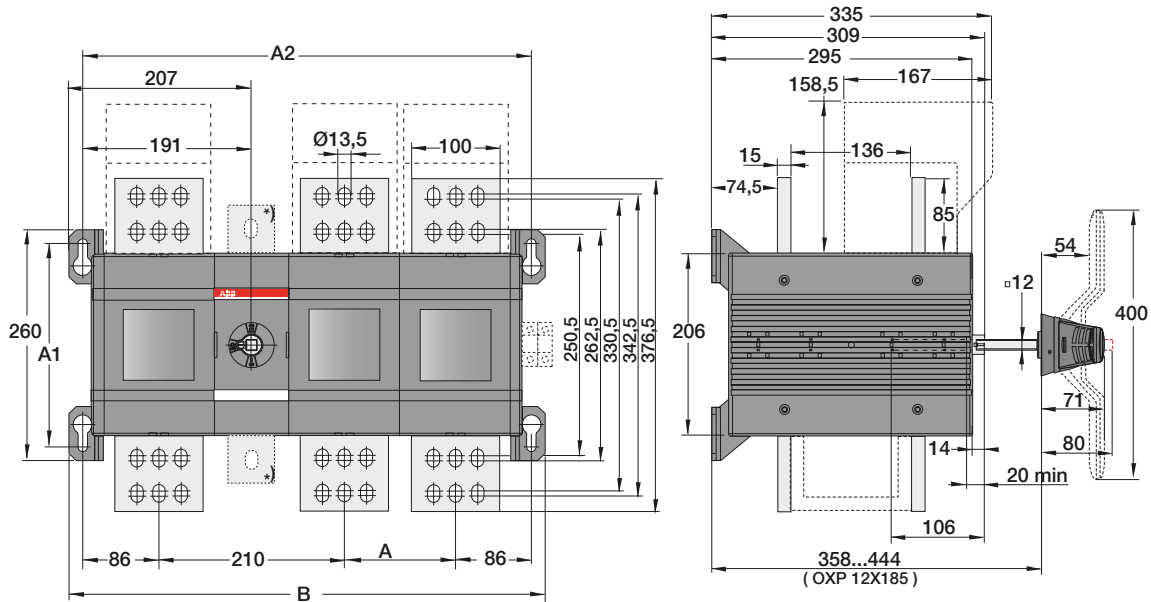
### OT2000...2500E03/04CP



\*) N3 types

| OT2000-2500_C_ |     |     |     |  |
|----------------|-----|-----|-----|--|
| [mm]           | E02 | E03 | E04 |  |
| A              | 126 | 126 | 126 |  |
| A1             | 230 | 230 | 230 |  |
| A2             | 382 | 508 | 634 |  |
| B              | 412 | 538 | 664 |  |

### OT2000...2500E12/E13/E22CP



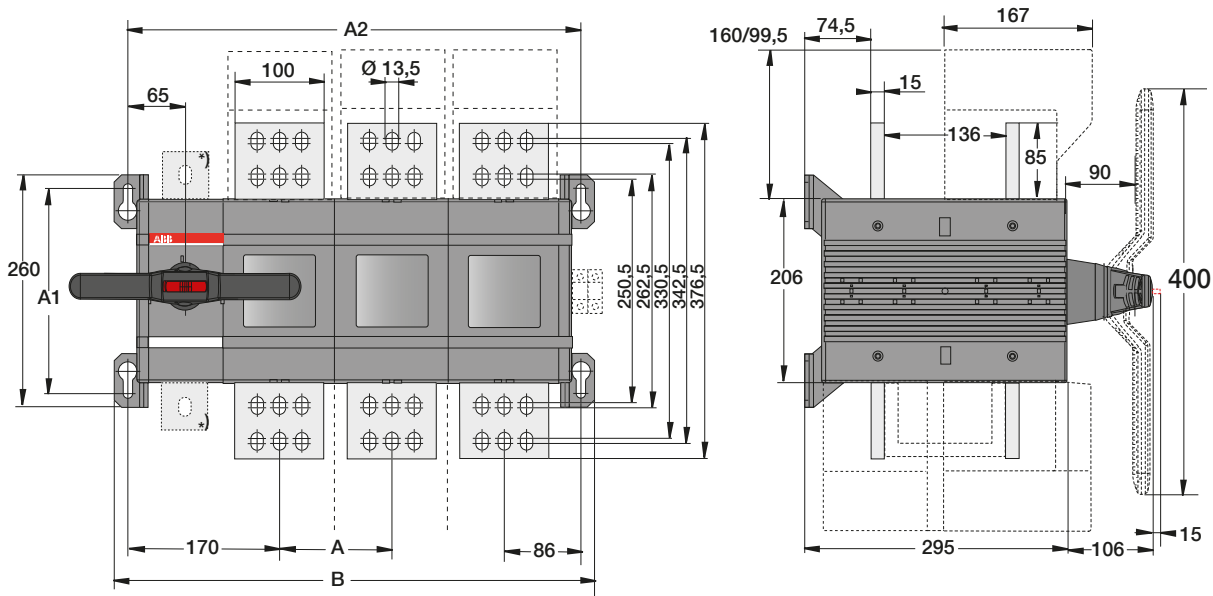
\*) N3 types

| OT2000-2500_C_ |     |     |     |  |
|----------------|-----|-----|-----|--|
| [mm]           | E12 | E13 | E22 |  |
| A              | 126 | 126 | 126 |  |
| A1             | 230 | 230 | 230 |  |
| A2             | 508 | 634 | 634 |  |
| B              | 538 | 664 | 664 |  |

# Dimension drawings

## Manual change-over switches

OT2000...2500E03/04\_ with direct mounted handle



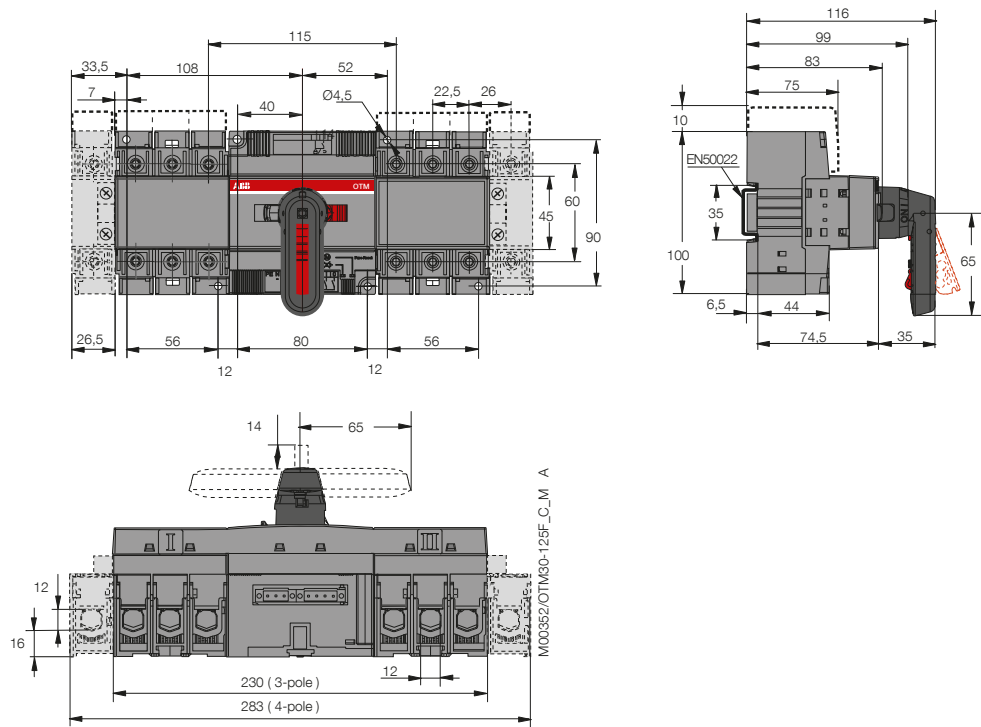
\*) N3 types

| OT2500-CK |     |     |     |
|-----------|-----|-----|-----|
| [mm]      | E02 | E03 | E04 |
| A         | 126 | 126 | 126 |
| A1        | 230 | 230 | 230 |
| A2        | 382 | 508 | 634 |
| B         | 412 | 538 | 664 |

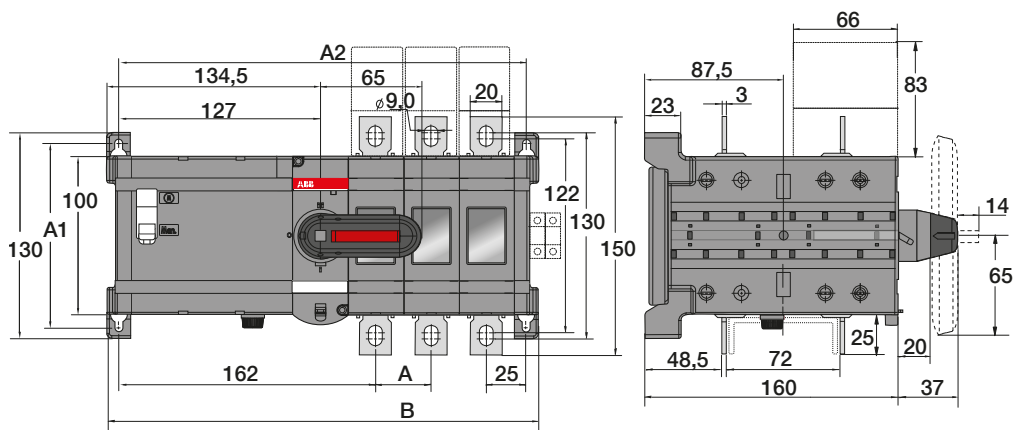
# Dimension drawings

## Motorized change-over switches

OTM40...125F3/4\_CM



OTM160...250E2/3/4CM

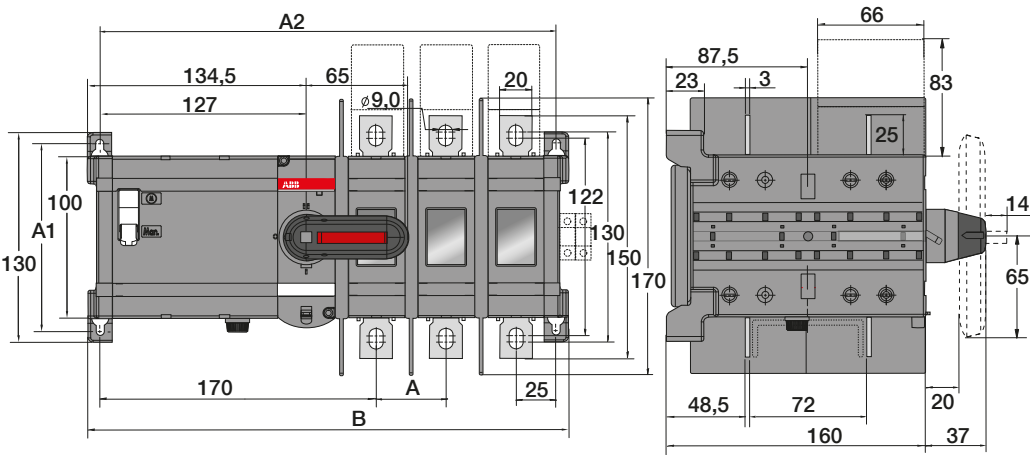


| OTM160-250_C_M |     |     |     |
|----------------|-----|-----|-----|
| [mm]           | E2  | E3  | E4  |
| A              | 35  | 35  | 35  |
| A1             | 116 | 116 | 116 |
| A2             | 223 | 258 | 293 |
| B              | 238 | 273 | 308 |

# Dimension drawings

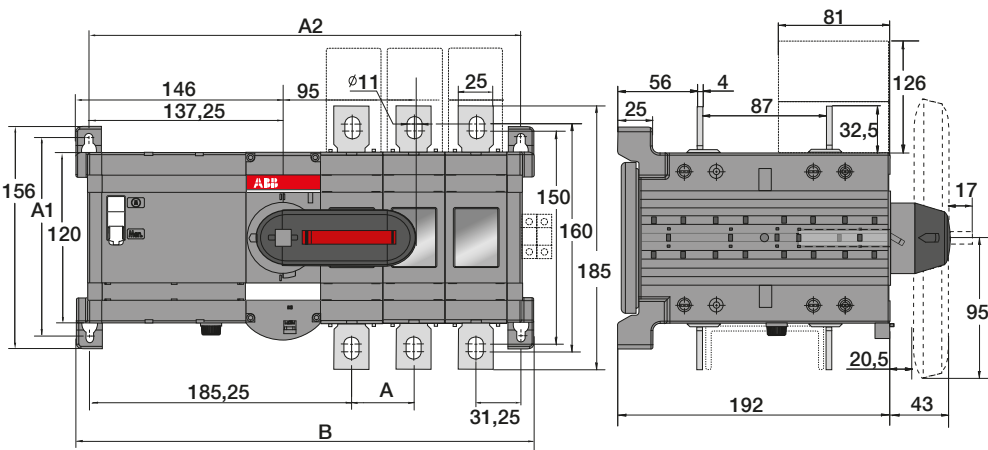
## Motorized change-over switches

OTM160...250E2/3/4WCM



| OTM160-250_WCM |     |     |     |
|----------------|-----|-----|-----|
| [mm]           | E2  | E3  | E4  |
| A              | 43  | 43  | 43  |
| A1             | 116 | 116 | 116 |
| A2             | 239 | 262 | 325 |
| B              | 254 | 297 | 340 |

OTM315...400E2/3/4CM

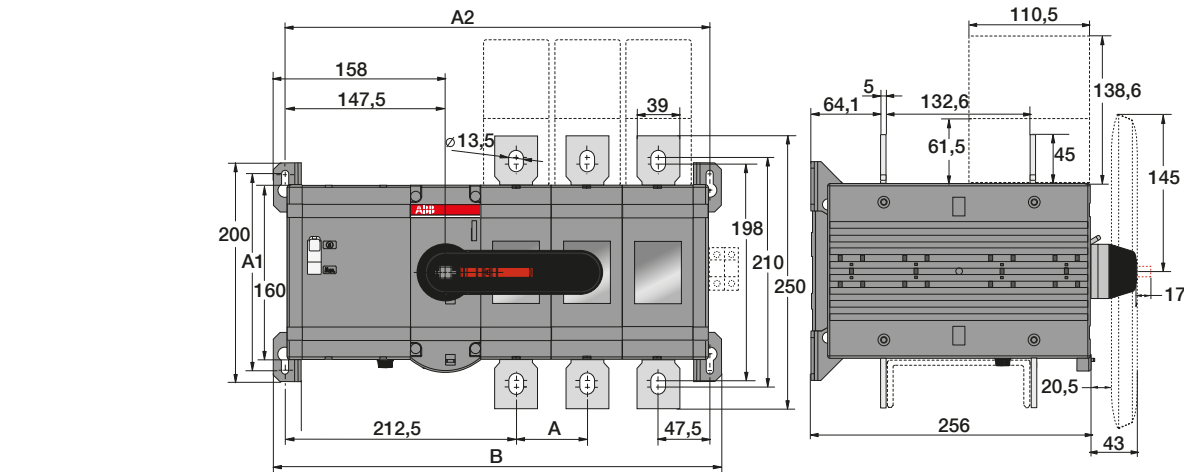


| OTM315-400_C_M |     |     |     |
|----------------|-----|-----|-----|
| [mm]           | E2  | E3  | E4  |
| A              | 44  | 44  | 44  |
| A1             | 142 | 142 | 142 |
| A2             | 261 | 305 | 349 |
| B              | 280 | 323 | 367 |

# Dimension drawings

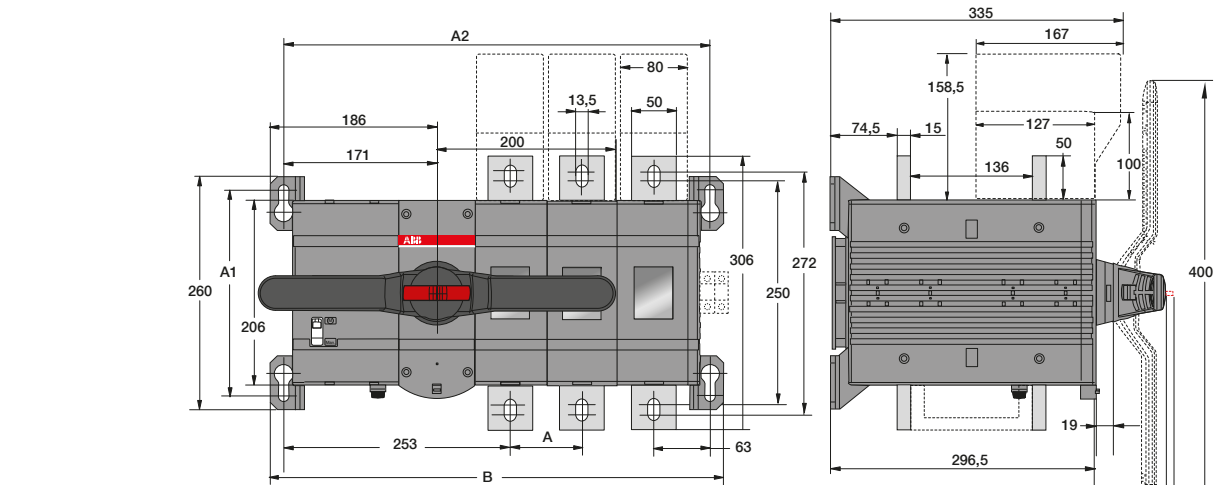
## Motorized change-over switches

OTM630...800E2/3/4CM



| OTM630-800E_C_M |     |     |     |  |
|-----------------|-----|-----|-----|--|
| [mm]            | E2  | E3  | E4  |  |
| A               | 65  | 65  | 65  |  |
| A1              | 180 | 180 | 180 |  |
| A2              | 325 | 390 | 455 |  |
| B               | 346 | 411 | 476 |  |

OTM1000...1250E2/3/4CM

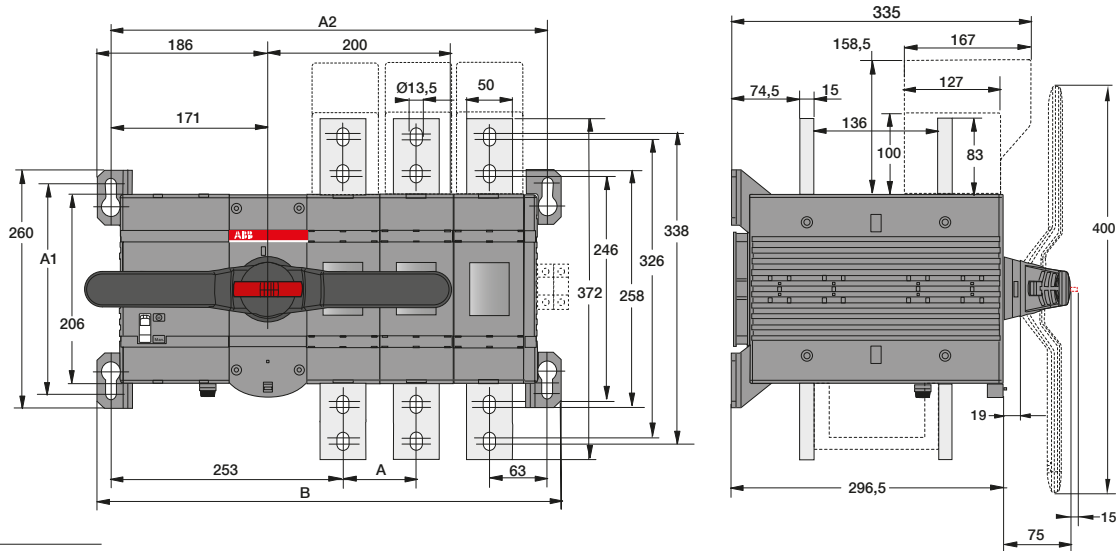


| OTM1000-1250_C_M |       |       |       |  |
|------------------|-------|-------|-------|--|
| [mm]             | E2    | E3    | E4    |  |
| A                | 80    | 80    | 80    |  |
| A1               | 230   | 230   | 230   |  |
| A2               | 296,5 | 476,5 | 556,5 |  |
| B                | 426,5 | 506,5 | 586,5 |  |

# Dimension drawings

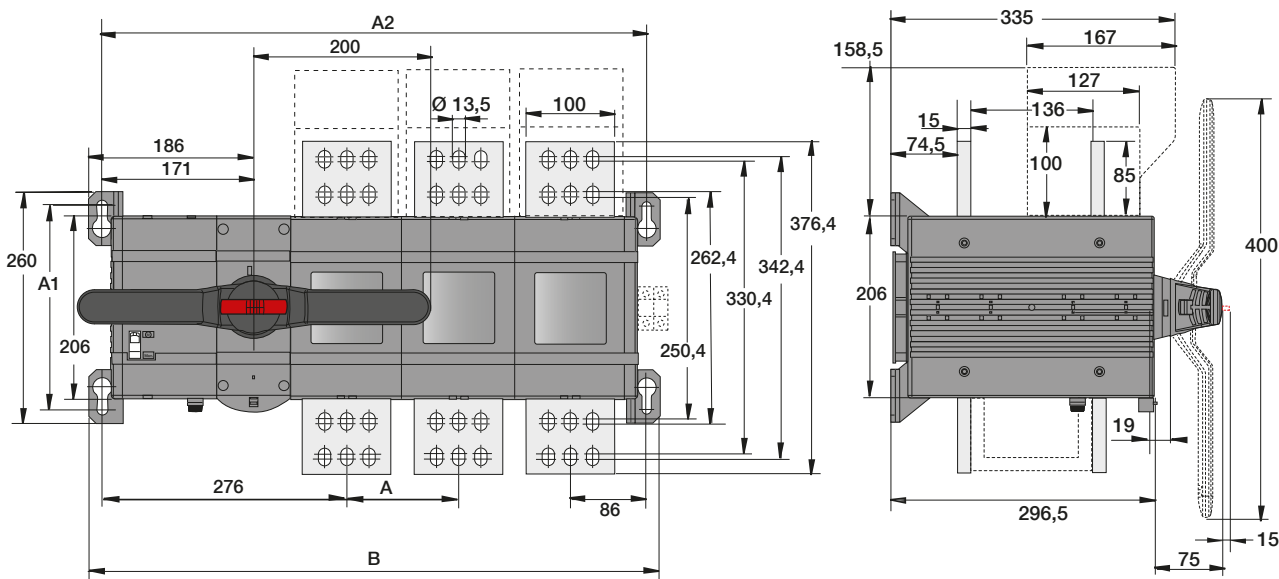
## Motorized change-over switches

OTM1600E2/3/4CM



| OTM1600 C_M |       |       |       |
|-------------|-------|-------|-------|
| [mm]        | E2    | E3    | E4    |
| A           | 80    | 80    | 80    |
| A1          | 230   | 230   | 230   |
| A2          | 396,6 | 476,5 | 556,5 |
| B           | 426,5 | 506,5 | 586,5 |

OTM2000...2500E3/4CM



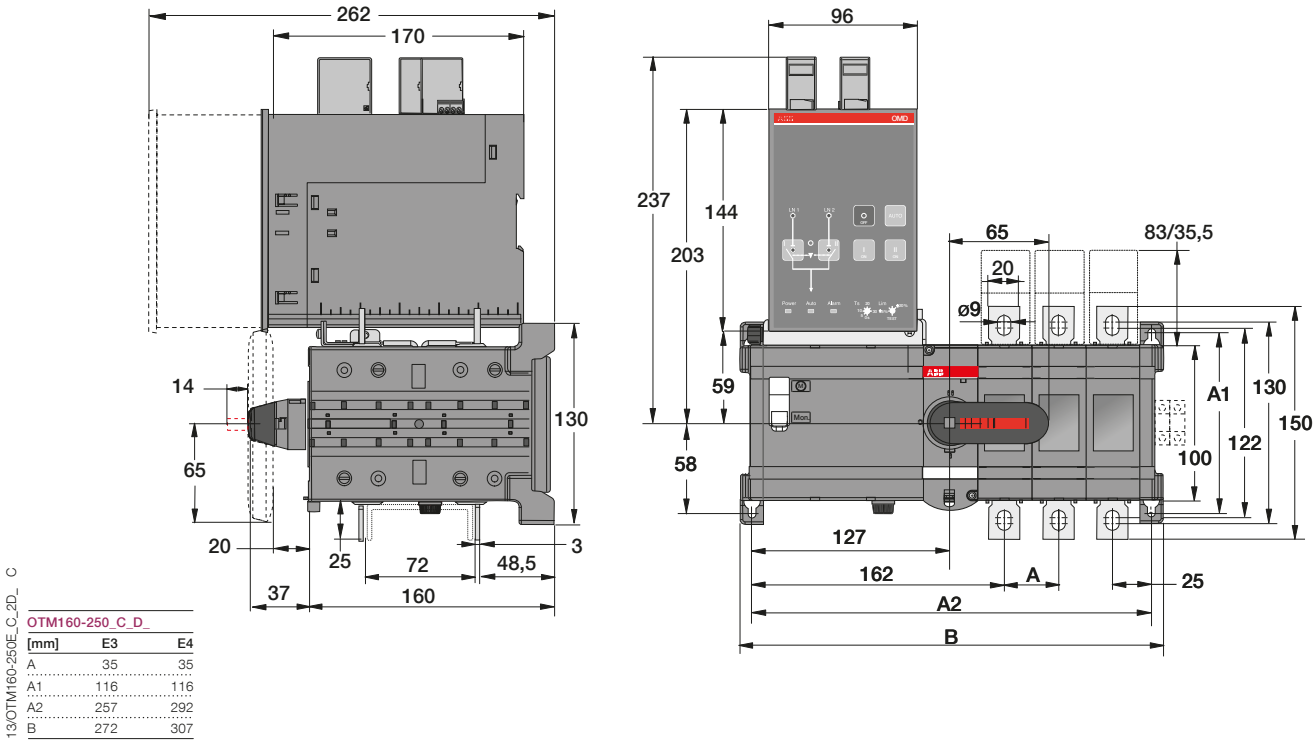
| OTM2000-2500 C_M |       |       |       |
|------------------|-------|-------|-------|
| [mm]             | E2    | E3    | E4    |
| A                | 126   | 126   | 126   |
| A1               | 230   | 230   | 230   |
| A2               | 488,5 | 614,5 | 740,5 |
| B                | 518,5 | 644,5 | 770,5 |



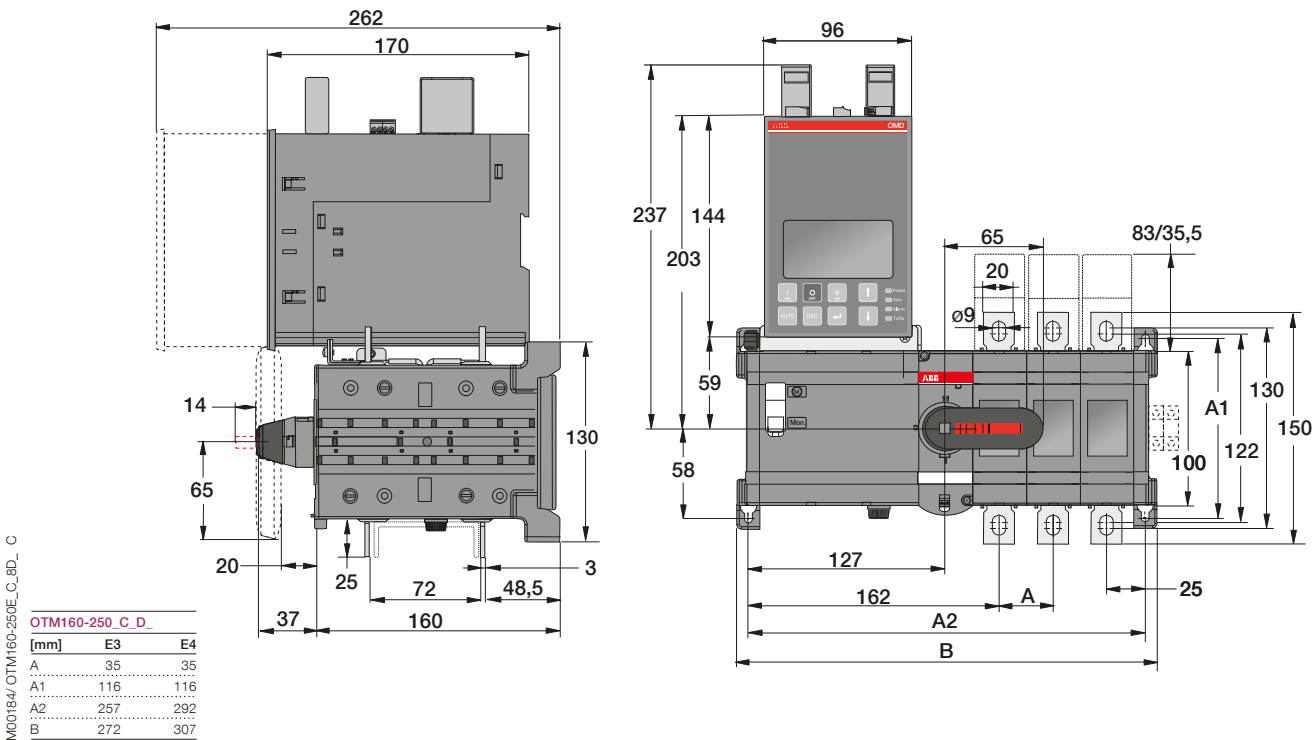
# Dimension drawings

## Automatic transfer switches

OTM160...250E\_C\_2D\_ , OTM160...250E\_C\_3D\_



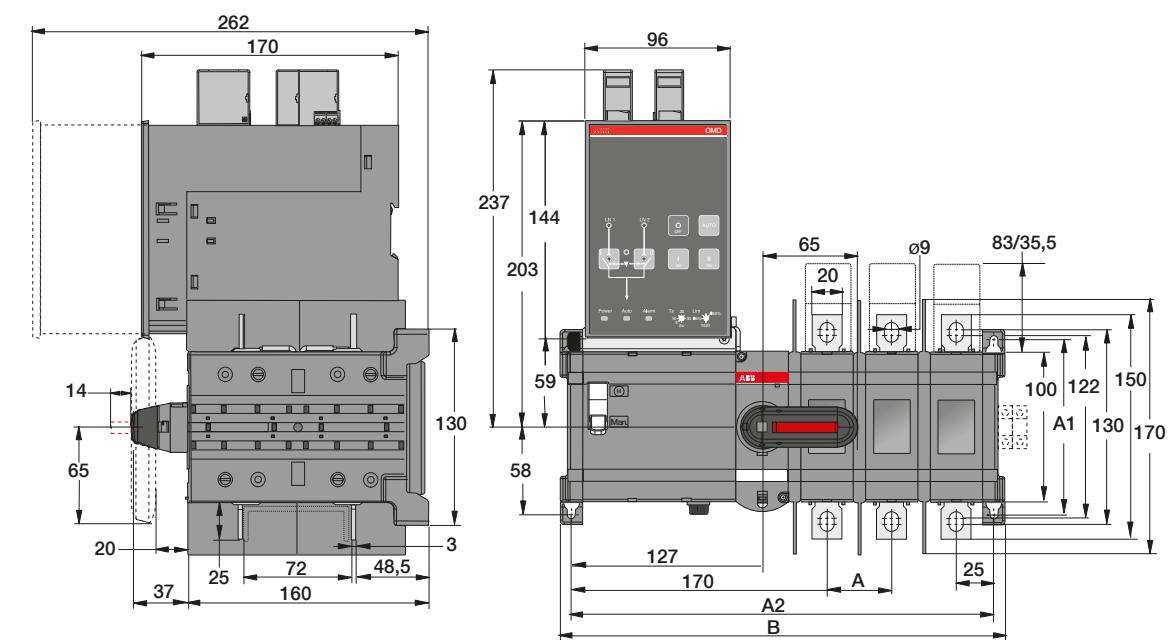
OTM160...250E\_C\_8D\_



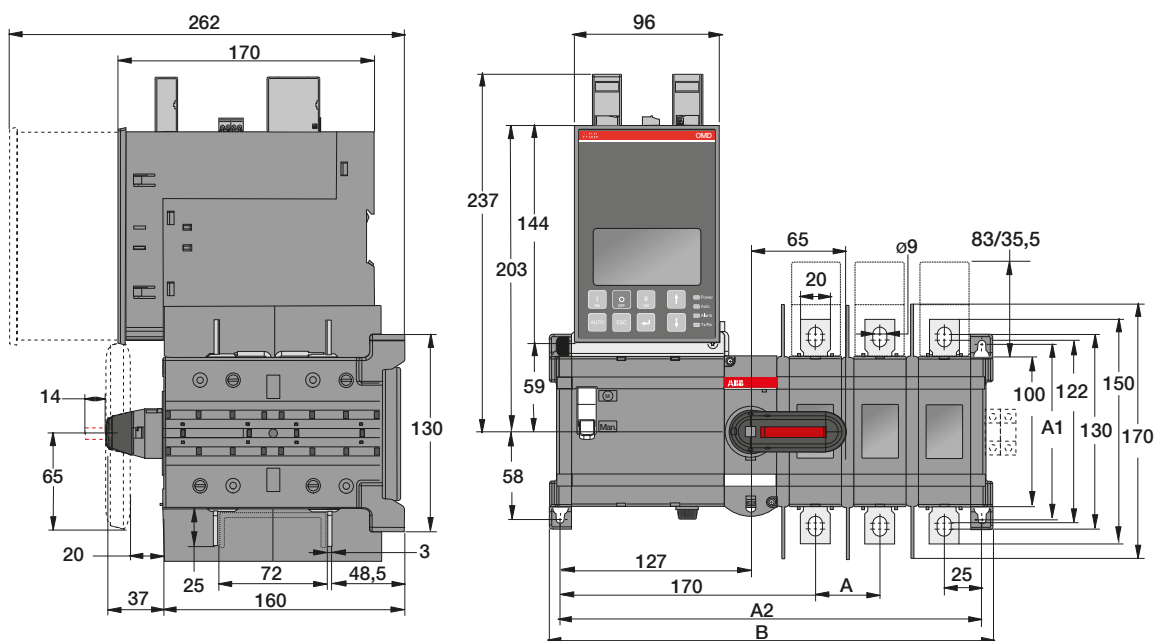
# Dimension drawings

## Automatic transfer switches

OTM160...250E\_WC\_2D\_, OTM160...250E\_WC\_3D\_



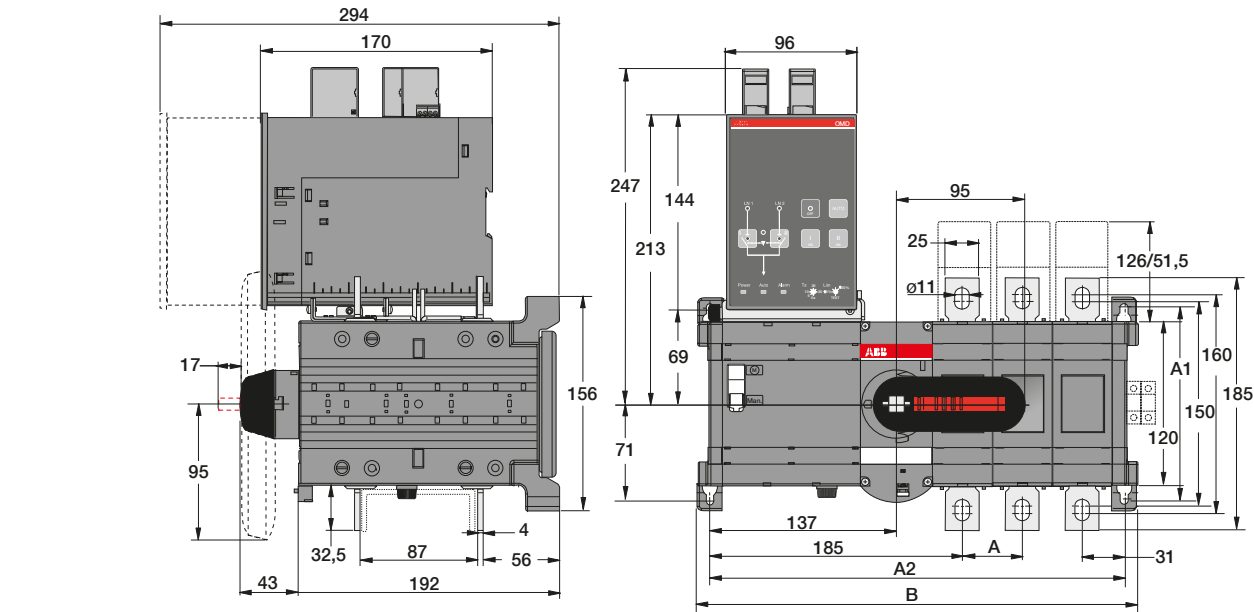
OTM160...250E\_WC\_8D\_



# Dimension drawings

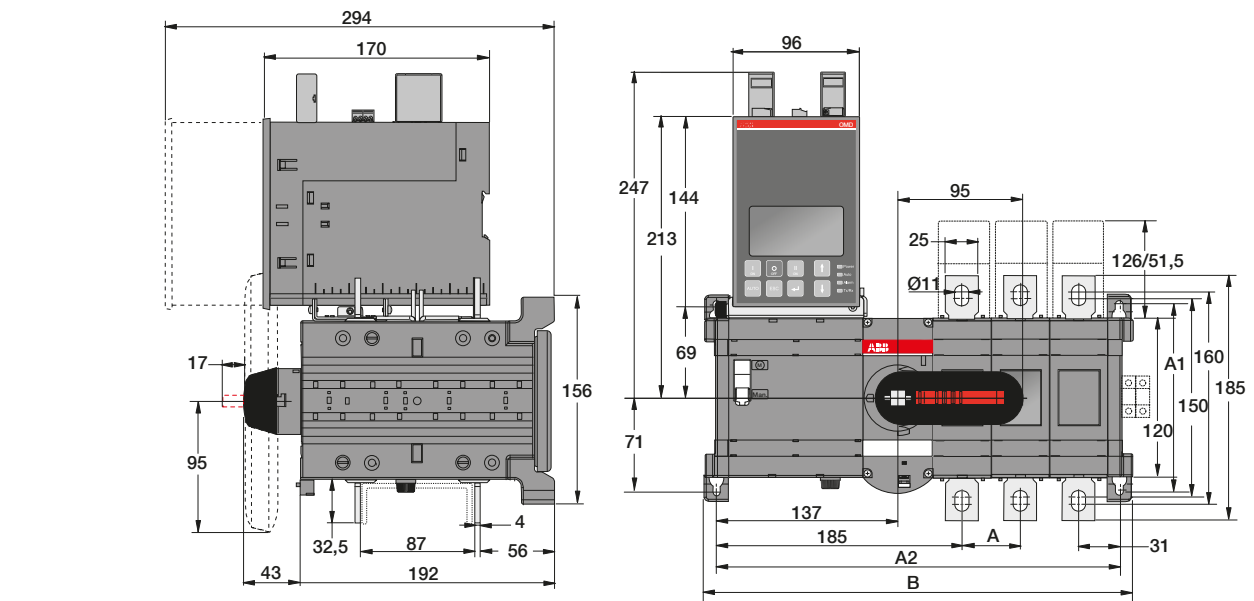
## Automatic transfer switches

OTM315...400E\_C\_2D\_, OTM315...400E\_C\_3D



| OTM315-400_C_D_ |       |       |
|-----------------|-------|-------|
| [mm]            | E3    | E4    |
| A               | 44    | 44    |
| A1              | 142   | 142   |
| A2              | 304,5 | 348,5 |
| B               | 323   | 367   |

OTM315...400E\_C\_8D\_

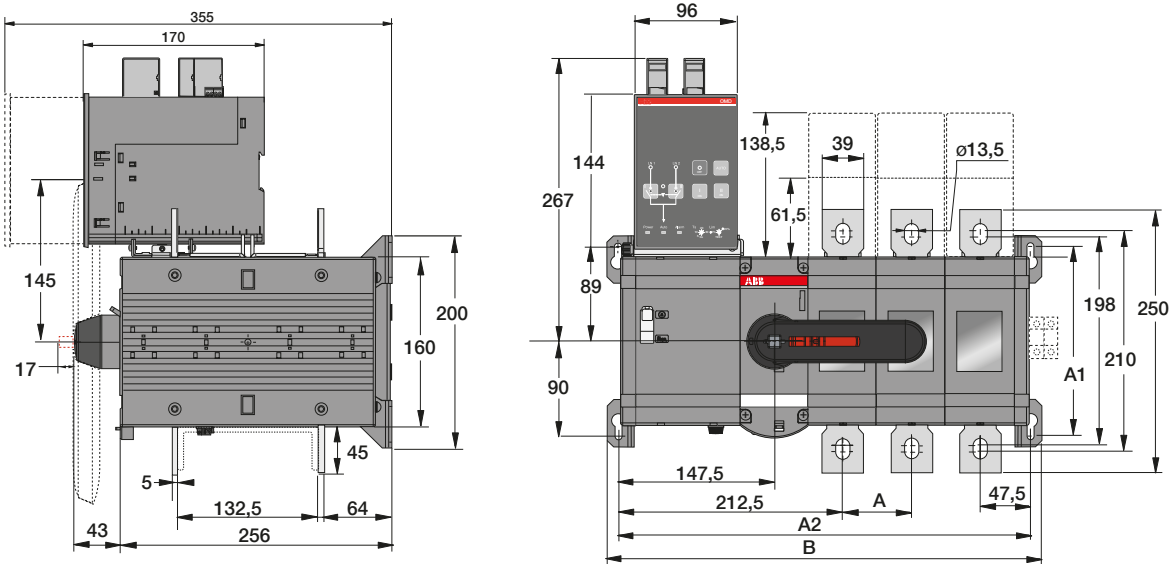


| OTM315-400_C_D_ |       |       |
|-----------------|-------|-------|
| [mm]            | E3    | E4    |
| A               | 44    | 44    |
| A1              | 142   | 142   |
| A2              | 304,5 | 348,5 |
| B               | 323   | 367   |

# Dimension drawings

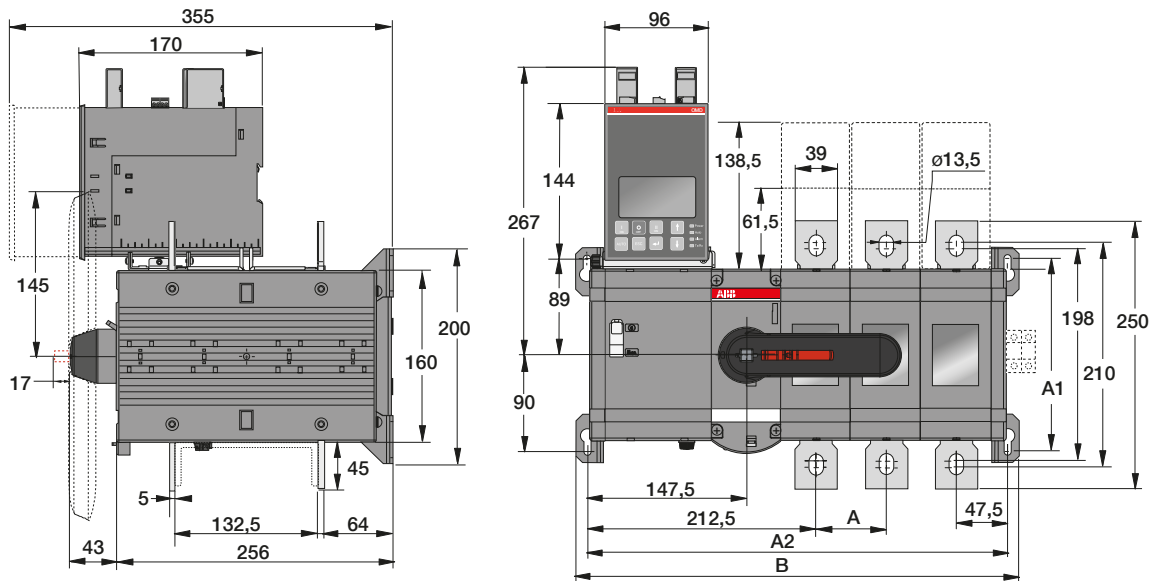
## Automatic transfer switches

OTM630...800E\_C\_2D\_, OTM630...800E\_C\_3D\_



| OTM630-800_C_D_ |     |     |     |  |
|-----------------|-----|-----|-----|--|
| [mm]            | E2  | E3  | E4  |  |
| A               | 65  | 65  | 65  |  |
| A1              | 180 | 180 | 180 |  |
| A2              | 325 | 390 | 455 |  |
| B               | 346 | 411 | 476 |  |

OTM630...800E\_C\_8D\_

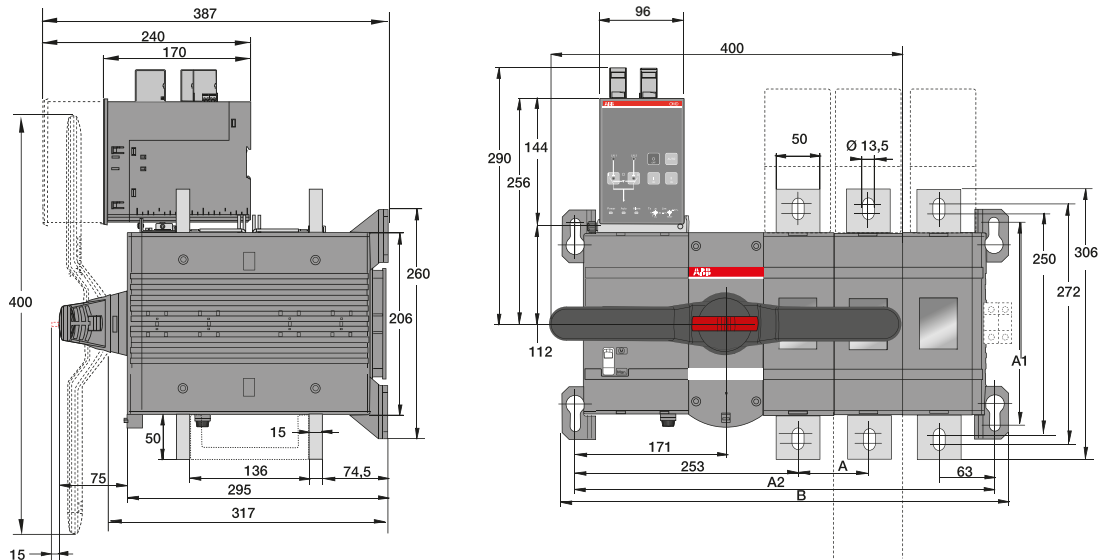


| OTM630-800_C_D_ |     |     |     |  |
|-----------------|-----|-----|-----|--|
| [mm]            | E2  | E3  | E4  |  |
| A               | 65  | 65  | 65  |  |
| A1              | 180 | 180 | 180 |  |
| A2              | 325 | 390 | 455 |  |
| B               | 346 | 411 | 476 |  |

# Dimension drawings

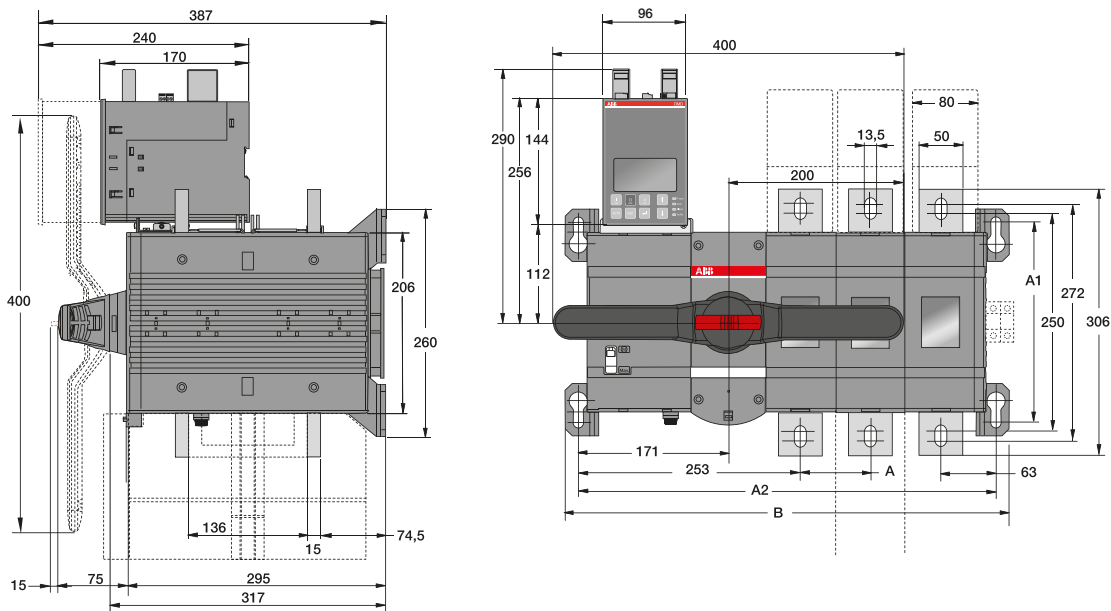
## Automatic transfer switches

OTM1000...1250E\_C2D\_, OTM1000...1250E\_C3D\_



| OTM1000-1250E_C_D |     |     |     |  |
|-------------------|-----|-----|-----|--|
| [mm]              | E2  | E3  | E4  |  |
| A                 | 80  | 80  | 80  |  |
| A1                | 230 | 230 | 230 |  |
| A2                | 396 | 476 | 556 |  |
| B                 | 426 | 506 | 586 |  |

OTM1000...1250E\_C\_8D

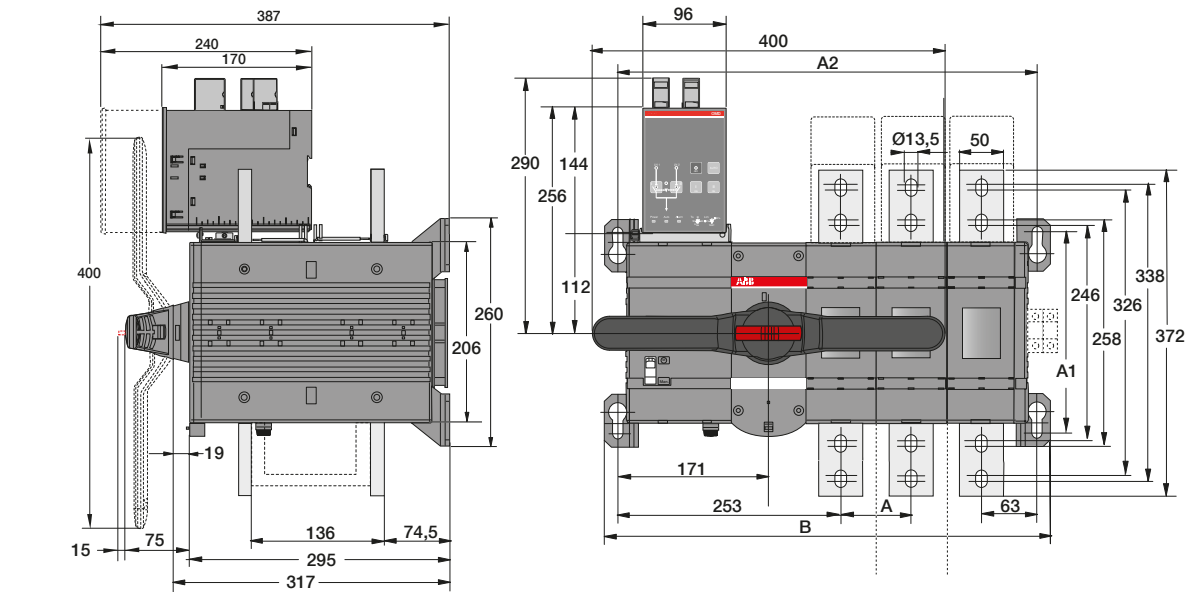


| OTM1000-1250E_C_D |     |     |     |  |
|-------------------|-----|-----|-----|--|
| [mm]              | E2  | E3  | E4  |  |
| A                 | 80  | 80  | 80  |  |
| A1                | 230 | 230 | 230 |  |
| A2                | 396 | 476 | 556 |  |
| B                 | 426 | 506 | 586 |  |

# Dimension drawings

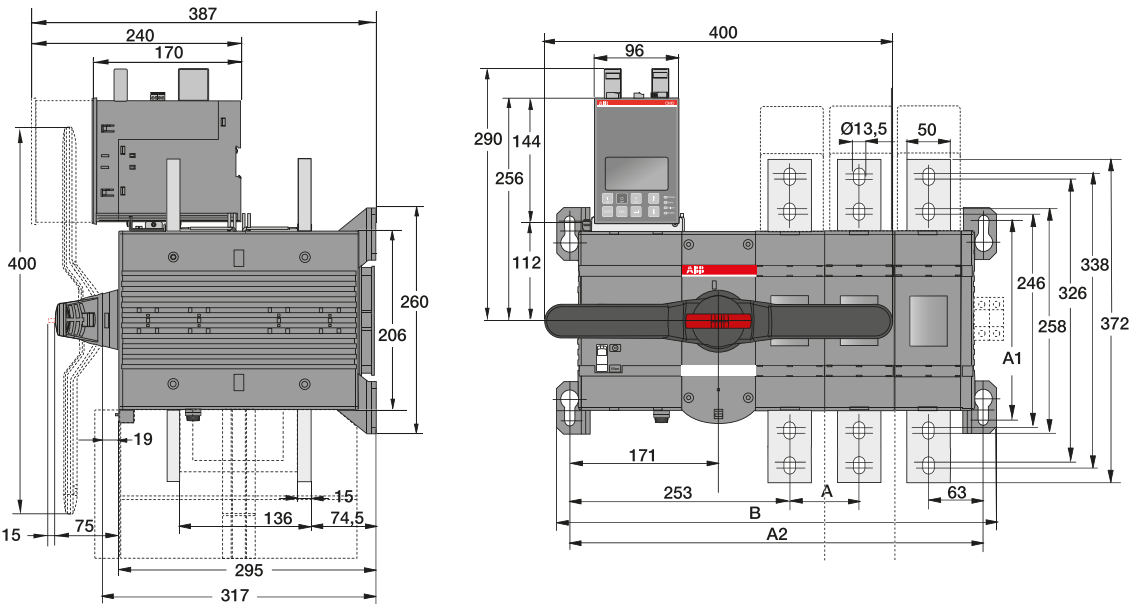
## Automatic transfer switches

OTM1600E\_C2D\_, OTM1600E\_C3D\_



| OTM1600_C_D_ |     |     |     |
|--------------|-----|-----|-----|
| [mm]         | E2  | E3  | E4  |
| A            | 80  | 80  | 80  |
| A1           | 230 | 230 | 230 |
| A2           | 396 | 476 | 556 |
| B            | 426 | 506 | 586 |

OTM1600E\_C8D\_

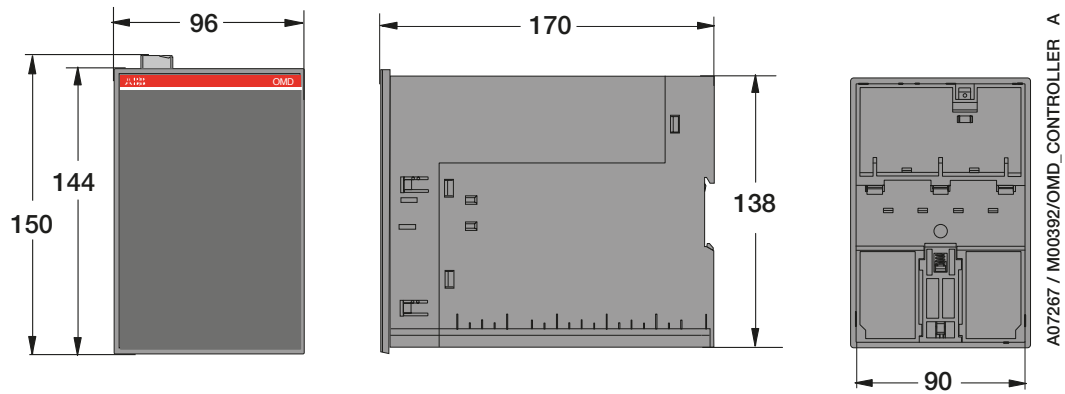


| OTM1600E_C_D |     |     |     |
|--------------|-----|-----|-----|
| [mm]         | E2  | E3  | E4  |
| A            | 80  | 80  | 80  |
| A1           | 230 | 230 | 230 |
| A2           | 396 | 476 | 556 |
| B            | 426 | 506 | 586 |

# Dimension drawings

## Automatic control units

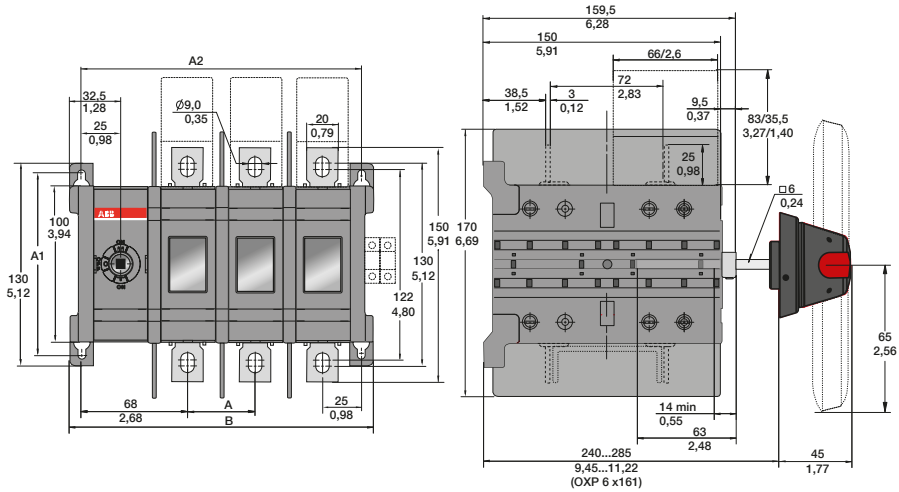
OMD200/300/800





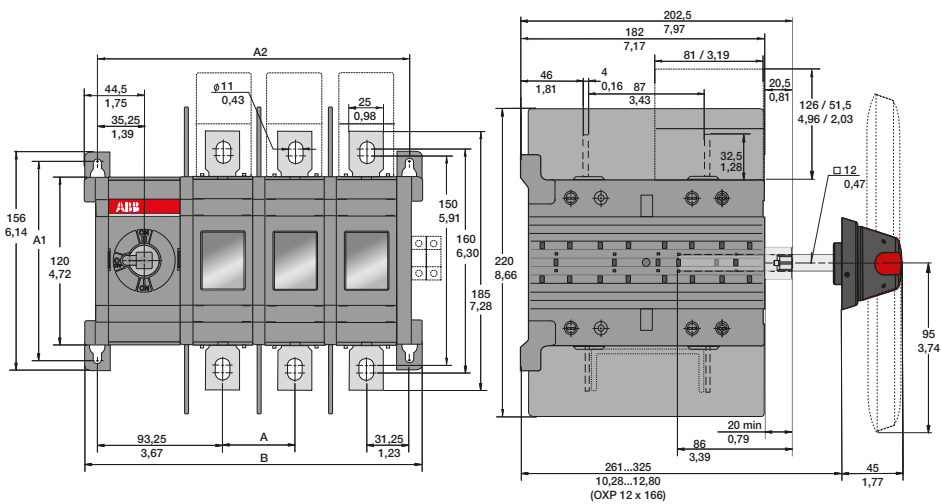
# UL/CSA -types

## OT200U03/04CP



| OT200_C_ |          |          |          |
|----------|----------|----------|----------|
| [mm/in]  | U02      | U03      | U04      |
| A        | 43/1,69  | 43/1,69  | 43/1,69  |
| A1       | 116/4,57 | 116/4,57 | 116/4,57 |
| A2       | 136/5,35 | 179/7,05 | 222/8,74 |
| B        | 151/5,94 | 194/7,64 | 237/9,33 |

## OT400U03/04CP

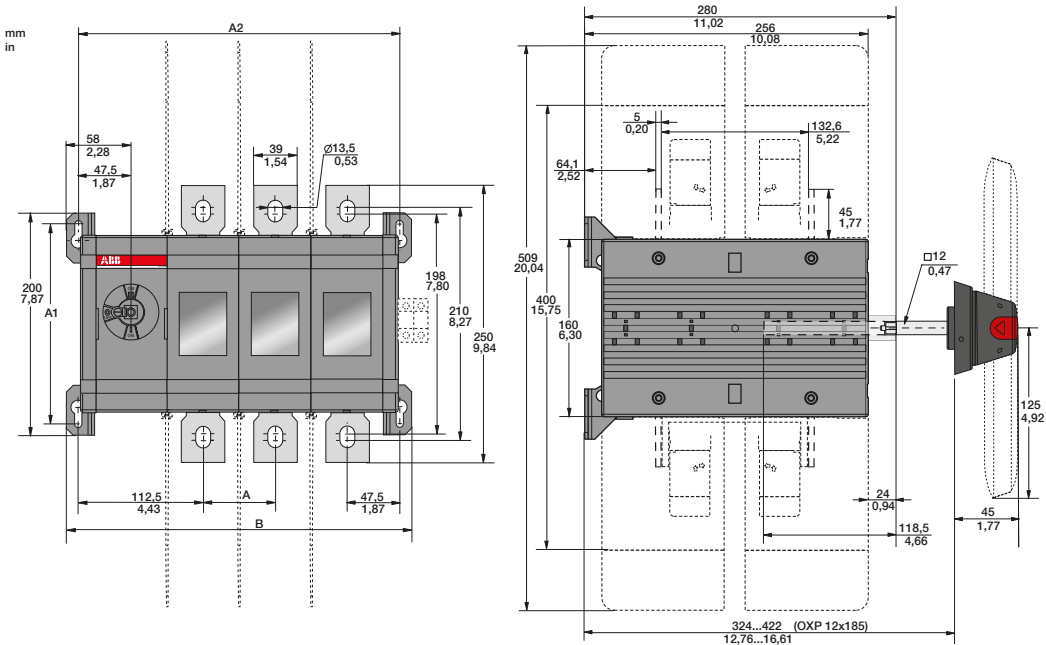


| OT400_C_ |            |            |             |
|----------|------------|------------|-------------|
| [mm/in]  | U02        | U03        | U04         |
| A        | 54/2,13    | 54/2,13    | 54/2,13     |
| A1       | 142/5,59   | 142/5,59   | 142/5,59    |
| A2       | 178,5/7,03 | 232,5/9,15 | 286,5/11,28 |
| B        | 197/7,76   | 251/9,88   | 305/12,01   |

# Dimension drawings

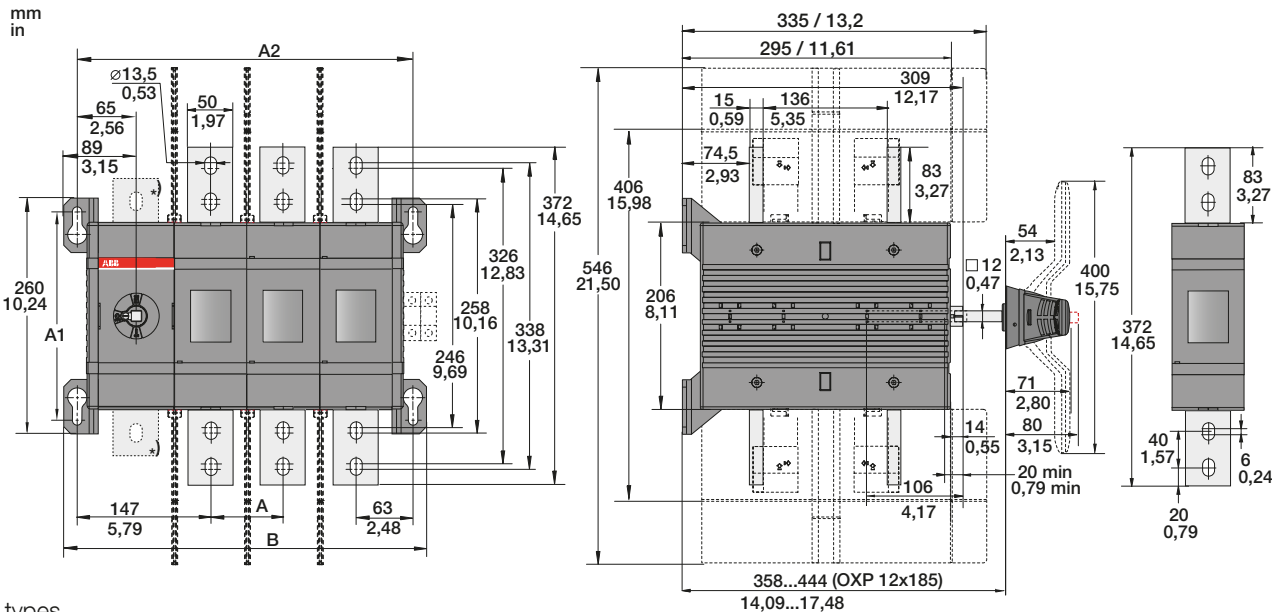
## Manual change-over switches, UL/CSA -types

OT600U03/04CP



| OT600_C_ |          |           |           |
|----------|----------|-----------|-----------|
| [mm/in]  | U02      | U03       | U04       |
| A        | 65/2,56  | 65/2,56   | 65/2,56   |
| A1       | 180/7,09 | 180/7,09  | 180/7,09  |
| A2       | 225/8,86 | 290/11,42 | 355/13,98 |
| B        | 246/9,69 | 311/12,24 | 376/14,80 |

OT800U03/04CP



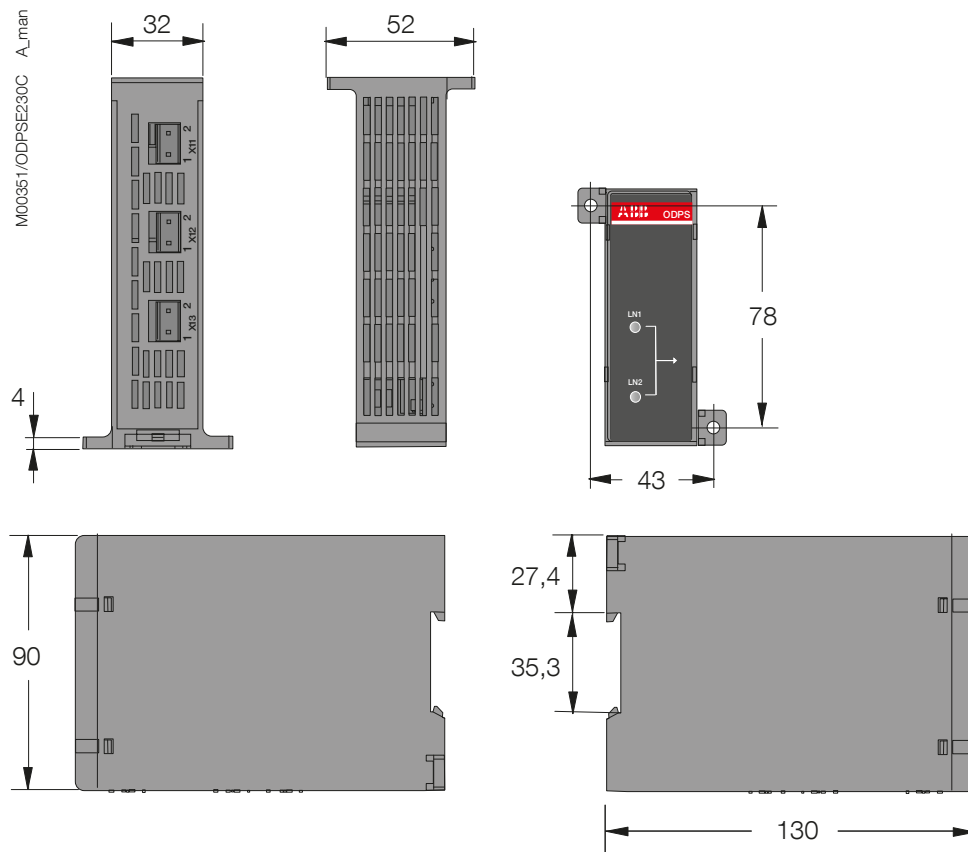
| OT800_C_ |           |           |           |
|----------|-----------|-----------|-----------|
| [mm]     | U02       | U03       | U04       |
| A        | 80/3,15   | 80/3,15   | 80/3,15   |
| A1       | 230/9,06  | 230/9,06  | 230/9,06  |
| A2       | 290/11,42 | 370/14,56 | 450/17,72 |
| B        | 320/12,60 | 400/15,75 | 480/18,90 |

\*) N3 types

# Dimension drawings

## Dual power source

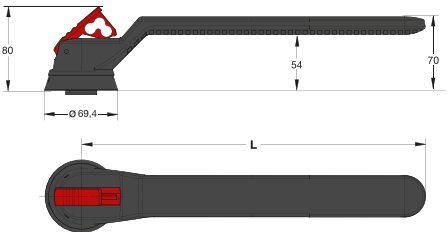
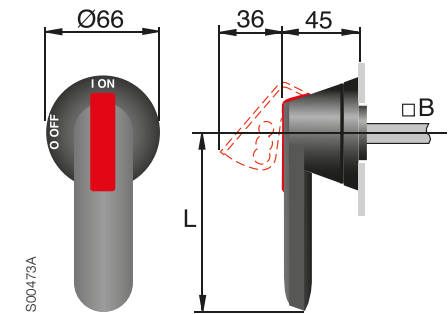
### ODPSE230C



# Dimension drawings

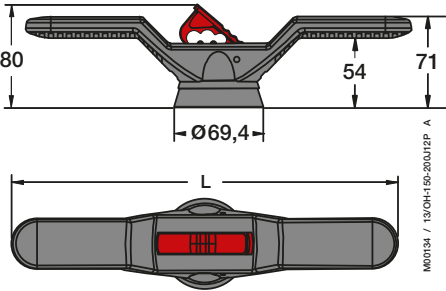
## Handles

### Plastic handles



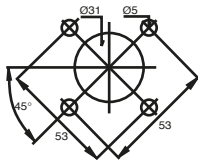
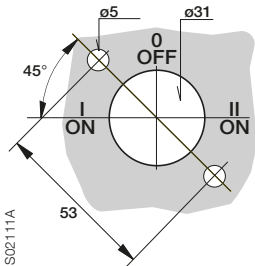
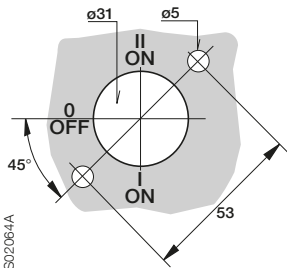
| Type      | L   |
|-----------|-----|
| OH_274J12 | 274 |

| Handle type | Handle length L [mm] | Shaft B [mm] |
|-------------|----------------------|--------------|
| OH_45J6E_   | 45                   | 6            |
| OH_65J6E_   | 65                   | 6            |
| OH_95J12E_  | 95                   | 12           |
| OH_125J12E_ | 125                  | 12           |
| OH_145J12E_ | 145                  | 12           |
| OH_175J12E_ | 175                  | 12           |
| OH_200J12E_ | 200                  | 12           |
| OH_275J12E_ | 275                  | 12           |

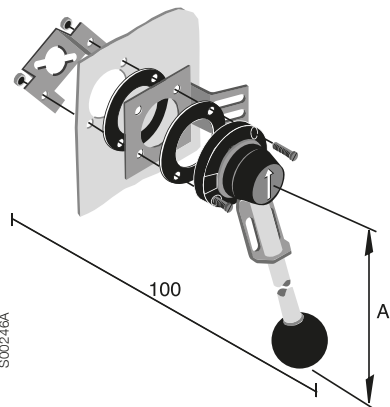


| Handle type | L   |
|-------------|-----|
| OHB150J12P  | 300 |
| OHB200J12P  | 400 |

### Door drilling for OH\_ handles:

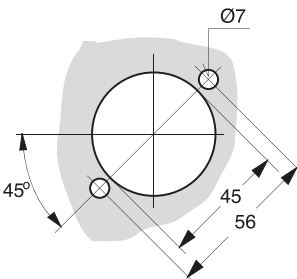


### Metallic handles

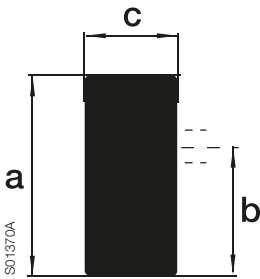


YASDA 21 (A=220)  
YASDA 6 (A=320)

### Door drilling for YASDA:



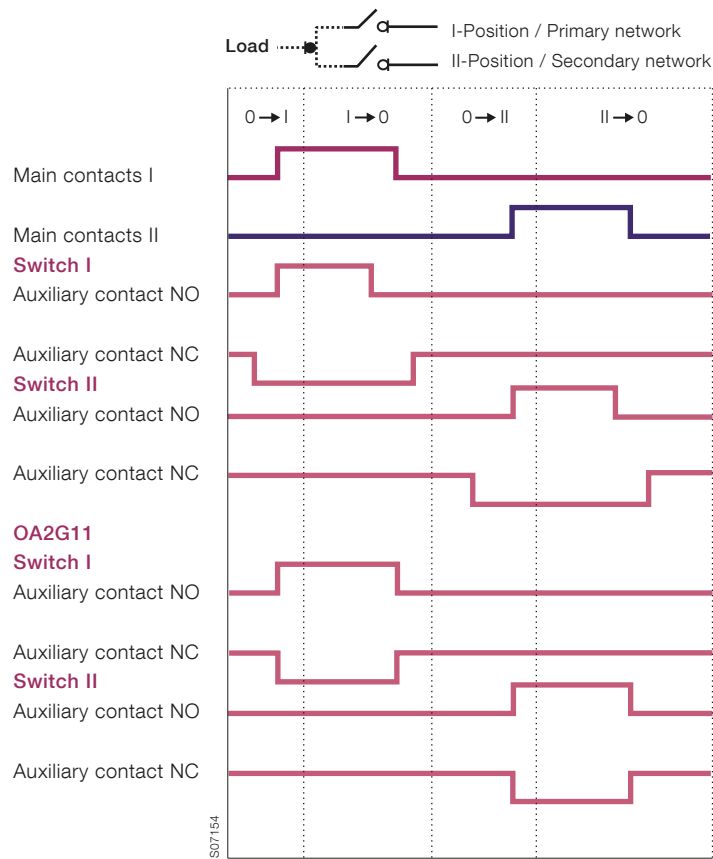
### Handle knobs



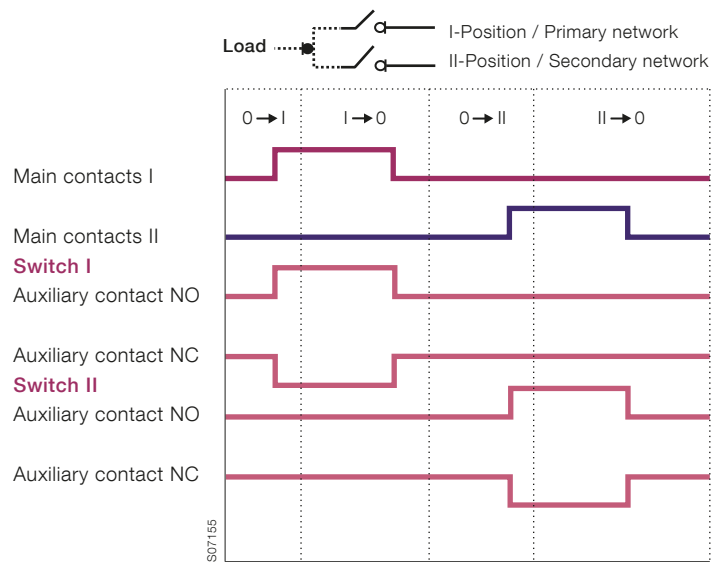
|                | a    | b    | c  |
|----------------|------|------|----|
| OHBS2, OHRS2   | 40   | 25   | 13 |
| OHBS3, OHRS3   | 39   | 23   | 18 |
| OHBS9, OHRS9   | 72   | 55   | 16 |
| OHBS11, OHRS11 | 57.5 | 34.5 | 20 |
| OHBS12, OHRS12 | 37   | 22.5 | 19 |

# Contact functions Diagrams

## Contact functions for OT16...125\_C

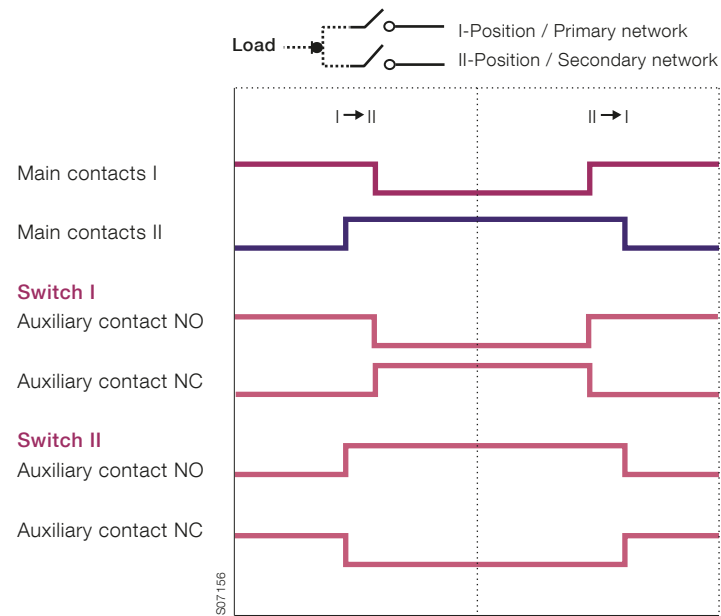


## Contact functions for OT\_160...2500\_C



# Contact functions Diagrams

## Contact functions for OT160...800\_CL



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| OA2G11          | 1SCA022379R8100 | Auxiliary contact             | 47   |
| OA3G01          | 1SCA022456R7410 | Auxiliary contact             | 47   |
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| OT200U03CP   | 1SCA022771R5910 | Manual change-over switch | 37   | OT40F4C      | 1SCA104934R1001 | Manual change-over switch | 20   |
| OT200U04CP   | 1SCA022771R6210 | Manual change-over switch | 37   | OT600U03CP   | 1SCA022785R5320 | Manual change-over switch | 37   |
| OT2500E03CLP | 1SCA117249R1001 | Manual change-over switch | 36   | OT600U04CP   | 1SCA022785R5410 | Manual change-over switch | 37   |
| OT2500E03CP  | 1SCA105615R1001 | Manual change-over switch | 23   | OT630E03CFP  | 1SCA106915R1001 | Manual change-over switch | 24   |
| OT2500E04CLP | 1SCA117252R1001 | Manual change-over switch | 36   | OT630E03CLP  | 1SCA106917R1001 | Manual change-over switch | 36   |
| OT2500E04CP  | 1SCA103906R1001 | Manual change-over switch | 23   | OT630E03CP   | 1SCA022785R6050 | Manual change-over switch | 22   |
| OT2500E12CLP | 1SCA117619R1001 | Manual change-over switch | 36   | OT630E04CFP  | 1SCA108753R1001 | Manual change-over switch | 24   |
| OT2500E12CP  | 1SCA103891R1001 | Manual change-over switch | 23   | OT630E04CLP  | 1SCA106947R1001 | Manual change-over switch | 36   |
| OT2500E13CLP | 1SCA117622R1001 | Manual change-over switch | 36   | OT630E04CP   | 1SCA022785R6130 | Manual change-over switch | 22   |
| OT2500E13CP  | 1SCA103895R1001 | Manual change-over switch | 23   | OT630E12CFP  | 1SCA106963R1001 | Manual change-over switch | 24   |
| OT2500E22CP  | 1SCA103902R1001 | Manual change-over switch | 23   | OT630E12CLP  | 1SCA106968R1001 | Manual change-over switch | 36   |



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| OT630E13CFP      | 1SCA106988R1001 | Manual change-over switch    | 24   |
| OT630E13CLP      | 1SCA106981R1001 | Manual change-over switch    | 36   |
| OT630E13CP       | 1SCA022785R9070 | Manual change-over switch    | 22   |
| OT630E33CP       | 1SCA118652R1001 | Manual change-over switch    | 22   |
| OT63F3C          | 1SCA105338R1001 | Manual change-over switch    | 20   |
| OT63F4C          | 1SCA105369R1001 | Manual change-over switch    | 20   |
| OT800E03CFP      | 1SCA106916R1001 | Manual change-over switch    | 24   |
| OT800E03CLP      | 1SCA106928R1001 | Manual change-over switch    | 36   |
| OT800E03CP       | 1SCA022785R6300 | Manual change-over switch    | 22   |
| OT800E04CFP      | 1SCA106945R1001 | Manual change-over switch    | 24   |
| OT800E04CLP      | 1SCA106952R1001 | Manual change-over switch    | 36   |
| OT800E04CP       | 1SCA022785R6210 | Manual change-over switch    | 22   |
| OT800E12CFP      | 1SCA106966R1001 | Manual change-over switch    | 24   |
| OT800E12CLP      | 1SCA106973R1001 | Manual change-over switch    | 36   |
| OT800E12CP       | 1SCA022785R8850 | Manual change-over switch    | 22   |
| OT800E13CFP      | 1SCA106983R1001 | Manual change-over switch    | 24   |
| OT800E13CLP      | 1SCA106976R1001 | Manual change-over switch    | 36   |
| OT800E13CP       | 1SCA022785R9230 | Manual change-over switch    | 22   |
| OT800E33CP       | 1SCA118649R1001 | Manual change-over switch    | 22   |
| OT800U03CP       | 1SCA104031R1001 | Manual change-over switch    | 37   |
| OT800U04CP       | 1SCA104036R1001 | Manual change-over switch    | 37   |
| OT80F3C          | 1SCA105402R1001 | Manual change-over switch    | 20   |
| OT80F4C          | 1SCA105418R1001 | Manual change-over switch    | 20   |
| OTB1600/6C       | 1SCA104661R1001 | Phase separator              | 50   |
| OTB800/6C        | 1SCA107272R1001 | Phase separator              | 50   |
| OTM1000E2CM230V  | 1SCA121279R1001 | Motorized change-over switch | 27   |
| OTM1000E3C8D230C | 1SCA112868R1001 | Automatic transfer switch    | 34   |
| OTM1000E3CM110V  | 1SCA113653R1001 | Motorized change-over switch | 28   |
| OTM1000E3CM230C  | 1SCA112677R1001 | Motorized change-over switch | 27   |
| OTM1000E3CM24D   | 1SCA113672R1001 | Motorized change-over switch | 30   |
| OTM1000E3CM48D   | 1SCA113663R1001 | Motorized change-over switch | 29   |
| OTM1000E4C2D230C | 1SCA112858R1001 | Automatic transfer switch    | 33   |
| OTM1000E4C3D230C | 1SCA112852R1001 | Automatic transfer switch    | 33   |
| OTM1000E4C8D230C | 1SCA112861R1001 | Automatic transfer switch    | 34   |
| OTM1000E4CM110V  | 1SCA113656R1001 | Motorized change-over switch | 28   |
| OTM1000E4CM230C  | 1SCA112703R1001 | Motorized change-over switch | 27   |
| OTM1000E4CM24D   | 1SCA113675R1001 | Motorized change-over switch | 30   |
| OTM1000E4CM48D   | 1SCA113666R1001 | Motorized change-over switch | 29   |
| OTM100F3CMA230V  | 1SCA120071R1001 | Motorized change-over switch | 25   |
| OTM100F4CMA230V  | 1SCA120098R1001 | Motorized change-over switch | 25   |
| OTM1250E2CM230V  | 1SCA121293R1001 | Motorized change-over switch | 27   |
| OTM1250E3C8D230C | 1SCA112862R1001 | Automatic transfer switch    | 34   |
| OTM1250E3CM110V  | 1SCA113652R1001 | Motorized change-over switch | 28   |
| OTM1250E3CM230C  | 1SCA112676R1001 | Motorized change-over switch | 27   |
| OTM1250E3CM24D   | 1SCA113671R1001 | Motorized change-over switch | 30   |
| OTM1250E3CM48D   | 1SCA113662R1001 | Motorized change-over switch | 29   |
| OTM1250E4C2D230C | 1SCA112857R1001 | Automatic transfer switch    | 33   |
| OTM1250E4C3D230C | 1SCA112851R1001 | Automatic transfer switch    | 33   |
| OTM1250E4C8D230C | 1SCA112864R1001 | Automatic transfer switch    | 34   |
| OTM1250E4CM110V  | 1SCA113655R1001 | Motorized change-over switch | 28   |
| OTM1250E4CM230C  | 1SCA112702R1001 | Motorized change-over switch | 27   |
| OTM1250E4CM24D   | 1SCA113674R1001 | Motorized change-over switch | 30   |
| OTM1250E4CM48D   | 1SCA113665R1001 | Motorized change-over switch | 29   |
| OTM125F3CMA230V  | 1SCA120070R1001 | Motorized change-over switch | 25   |
| OTM125F4CMA230V  | 1SCA120097R1001 | Motorized change-over switch | 25   |
| OTM1600E2CM230V  | 1SCA121280R1001 | Motorized change-over switch | 27   |
| OTM1600E3C8D230C | 1SCA112866R1001 | Automatic transfer switch    | 34   |
| OTM1600E3CM110V  | 1SCA113654R1001 | Motorized change-over switch | 28   |
| OTM1600E3CM230C  | 1SCA112678R1001 | Motorized change-over switch | 27   |
| OTM1600E3CM24D   | 1SCA113673R1001 | Motorized change-over switch | 30   |
| OTM1600E3CM48D   | 1SCA113664R1001 | Motorized change-over switch | 29   |

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| OTM1600E4C3D230C | 1SCA112848R1001 | Automatic transfer switch    | 33   |
| OTM1600E4C8D230C | 1SCA112867R1001 | Automatic transfer switch    | 34   |
| OTM1600E4CM110V  | 1SCA113657R1001 | Motorized change-over switch | 28   |
| OTM1600E4CM230C  | 1SCA112704R1001 | Motorized change-over switch | 27   |
| OTM1600E4CM24D   | 1SCA113676R1001 | Motorized change-over switch | 30   |
| OTM1600E4CM48D   | 1SCA113667R1001 | Motorized change-over switch | 29   |
| OTM160E2CM230V   | 1SCA121216R1001 | Motorized change-over switch | 26   |
| OTM160E2WCM230V  | 1SCA121218R1001 | Motorized change-over switch | 26   |
| OTM160E3C8D230C  | 1SCA101017R1001 | Automatic transfer switch    | 34   |
| OTM160E3CM110V   | 1SCA022845R8530 | Motorized change-over switch | 28   |
| OTM160E3CM230C   | 1SCA022845R8610 | Motorized change-over switch | 26   |
| OTM160E3CM24D    | 1SCA022845R8110 | Motorized change-over switch | 30   |
| OTM160E3CM48D    | 1SCA022845R8450 | Motorized change-over switch | 29   |
| OTM160E3WC8D230C | 1SCA101036R1001 | Automatic transfer switch    | 34   |
| OTM160E3WCM110V  | 1SCA022846R3450 | Motorized change-over switch | 28   |
| OTM160E3WCM230C  | 1SCA022846R4000 | Motorized change-over switch | 26   |
| OTM160E3WCM24D   | 1SCA022846R3290 | Motorized change-over switch | 30   |
| OTM160E3WCM48D   | 1SCA022846R3370 | Motorized change-over switch | 29   |
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| OTM160E4C3D230C  | 1SCA106305R1001 | Automatic transfer switch    | 33   |
| OTM160E4C8D230C  | 1SCA101020R1001 | Automatic transfer switch    | 34   |
| OTM160E4CM110V   | 1SCA022846R1080 | Motorized change-over switch | 28   |
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| OTM160E4CM24D    | 1SCA022846R0860 | Motorized change-over switch | 30   |
| OTM160E4CM48D    | 1SCA022846R0940 | Motorized change-over switch | 29   |
| OTM160E4WC2D230C | 1SCA101033R1001 | Automatic transfer switch    | 33   |
| OTM160E4WC3D230C | 1SCA106306R1001 | Automatic transfer switch    | 33   |
| OTM160E4WC8D230C | 1SCA101039R1001 | Automatic transfer switch    | 34   |
| OTM160E4WCM110V  | 1SCA022846R7360 | Motorized change-over switch | 28   |
| OTM160E4WCM230C  | 1SCA022846R7440 | Motorized change-over switch | 26   |
| OTM160E4WCM24D   | 1SCA022846R7100 | Motorized change-over switch | 30   |
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| OTM2000E2CM230V  | 1SCA121289R1001 | Motorized change-over switch | 27   |
| OTM2000E3CM110V  | 1SCA113683R1001 | Motorized change-over switch | 28   |
| OTM2000E3CM230C  | 1SCA112709R1001 | Motorized change-over switch | 27   |
| OTM2000E3CM24D   | 1SCA113695R1001 | Motorized change-over switch | 30   |
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| OTM2000E4CM230C  | 1SCA112712R1001 | Motorized change-over switch | 27   |
| OTM2000E4CM24D   | 1SCA113697R1001 | Motorized change-over switch | 30   |
| OTM2000E4CM48D   | 1SCA113691R1001 | Motorized change-over switch | 29   |
| OTM200E2CM230V   | 1SCA121209R1001 | Motorized change-over switch | 26   |
| OTM200E2WCM230V  | 1SCA121294R1001 | Motorized change-over switch | 26   |
| OTM200E3C8D230C  | 1SCA101018R1001 | Automatic transfer switch    | 34   |
| OTM200E3CM110V   | 1SCA022845R8880 | Motorized change-over switch | 28   |
| OTM200E3CM230C   | 1SCA022845R8960 | Motorized change-over switch | 26   |
| OTM200E3CM24D    | 1SCA022845R8290 | Motorized change-over switch | 30   |
| OTM200E3CM48D    | 1SCA022845R8700 | Motorized change-over switch | 29   |
| OTM200E3WC8D230C | 1SCA101037R1001 | Automatic transfer switch    | 34   |
| OTM200E3WCM110V  | 1SCA022846R3880 | Motorized change-over switch | 28   |
| OTM200E3WCM230C  | 1SCA022846R3960 | Motorized change-over switch | 26   |
| OTM200E3WCM24D   | 1SCA022846R3610 | Motorized change-over switch | 30   |
| OTM200E3WCM48D   | 1SCA022846R3700 | Motorized change-over switch | 29   |
| OTM200E4C2D230C  | 1SCA106671R1001 | Automatic transfer switch    | 33   |
| OTM200E4C3D230C  | 1SCA106309R1001 | Automatic transfer switch    | 33   |
| OTM200E4C8D230C  | 1SCA101021R1001 | Automatic transfer switch    | 34   |
| OTM200E4CM110V   | 1SCA022846R1410 | Motorized change-over switch | 28   |
| OTM200E4CM230C   | 1SCA022846R1590 | Motorized change-over switch | 26   |
| OTM200E4CM24D    | 1SCA022846R1240 | Motorized change-over switch | 30   |
| OTM200E4CM48D    | 1SCA022846R1320 | Motorized change-over switch | 29   |
| OTM200E4WC2D230C | 1SCA101034R1001 | Automatic transfer switch    | 33   |

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| OTM200E4WCM110V  | 1SCA022846R7790 | Motorized change-over switch | 28   | OTM400E4CM230C  | 1SCA022847R3250 | Motorized change-over switch | 26   |
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| OTM200E4WCM48D   | 1SCA022846R7610 | Motorized change-over switch | 29   | OTM40F3CMA230V  | 1SCA120096R1001 | Motorized change-over switch | 25   |
| OTM2500E2CM230V  | 1SCA121291R1001 | Motorized change-over switch | 27   | OTM40F4CMA230V  | 1SCA120102R1001 | Motorized change-over switch | 25   |
| OTM2500E3CM110V  | 1SCA113684R1001 | Motorized change-over switch | 28   | OTM630E2CM230V  | 1SCA121268R1001 | Motorized change-over switch | 27   |
| OTM2500E3CM230C  | 1SCA112710R1001 | Motorized change-over switch | 27   | OTM630E3C8D230C | 1SCA108452R1001 | Automatic transfer switch    | 34   |
| OTM2500E3CM24D   | 1SCA113696R1001 | Motorized change-over switch | 30   | OTM630E3CM110V  | 1SCA022873R1050 | Motorized change-over switch | 28   |
| OTM2500E3CM48D   | 1SCA113690R1001 | Motorized change-over switch | 29   | OTM630E3CM230C  | 1SCA103567R1001 | Motorized change-over switch | 27   |
| OTM2500E4CM110V  | 1SCA113686R1001 | Motorized change-over switch | 28   | OTM630E3CM24D   | 1SCA022873R1210 | Motorized change-over switch | 30   |
| OTM2500E4CM230C  | 1SCA112713R1001 | Motorized change-over switch | 27   | OTM630E3CM48D   | 1SCA022873R1300 | Motorized change-over switch | 29   |
| OTM2500E4CM24D   | 1SCA113698R1001 | Motorized change-over switch | 30   | OTM630E4C2D230C | 1SCA108434R1001 | Automatic transfer switch    | 33   |
| OTM2500E4CM48D   | 1SCA113692R1001 | Motorized change-over switch | 29   | OTM630E4C3D230C | 1SCA108726R1001 | Automatic transfer switch    | 33   |
| OTM250E2CM230V   | 1SCA121211R1001 | Motorized change-over switch | 26   | OTM630E4C8D230C | 1SCA108453R1001 | Automatic transfer switch    | 34   |
| OTM250E2WCM230V  | 1SCA121220R1001 | Motorized change-over switch | 26   | OTM630E4CM110V  | 1SCA022873R1810 | Motorized change-over switch | 28   |
| OTM250E3C8D230C  | 1SCA101019R1001 | Automatic transfer switch    | 34   | OTM630E4CM230C  | 1SCA022873R1990 | Motorized change-over switch | 27   |
| OTM250E3CM110V   | 1SCA022845R9180 | Motorized change-over switch | 28   | OTM630E4CM24D   | 1SCA022873R2020 | Motorized change-over switch | 30   |
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| OTM250E3CM48D    | 1SCA022845R9000 | Motorized change-over switch | 29   | OTM63F4CMA230V  | 1SCA120101R1001 | Motorized change-over switch | 25   |
| OTM250E3WC8D230C | 1SCA101038R1001 | Automatic transfer switch    | 34   | OTM800E2CM230V  | 1SCA121270R1001 | Motorized change-over switch | 27   |
| OTM250E3WCM110V  | 1SCA022846R4690 | Motorized change-over switch | 28   | OTM800E3C8D230C | 1SCA108454R1001 | Automatic transfer switch    | 34   |
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| OTM250E4C2D230C  | 1SCA101016R1001 | Automatic transfer switch    | 33   | OTM800E3CM48D   | 1SCA022872R6050 | Motorized change-over switch | 29   |
| OTM250E4C3D230C  | 1SCA106313R1001 | Automatic transfer switch    | 33   | OTM800E4C2D230C | 1SCA108439R1001 | Automatic transfer switch    | 33   |
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| OTM250E4CM110V   | 1SCA022846R1830 | Motorized change-over switch | 28   | OTM800E4C8D230C | 1SCA108455R1001 | Automatic transfer switch    | 34   |
| OTM250E4CM230C   | 1SCA022846R1910 | Motorized change-over switch | 26   | OTM800E4CM110V  | 1SCA022872R8260 | Motorized change-over switch | 28   |
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| OTM250E4CM48D    | 1SCA022846R1750 | Motorized change-over switch | 29   | OTM800E4CM24D   | 1SCA022872R8420 | Motorized change-over switch | 30   |
| OTM250E4WC2D230C | 1SCA101035R1001 | Automatic transfer switch    | 33   | OTM800E4CM48D   | 1SCA022872R8510 | Motorized change-over switch | 29   |
| OTM250E4WC3D230C | 1SCA106314R1001 | Automatic transfer switch    | 33   | OTM80F3CMA230V  | 1SCA120093R1001 | Motorized change-over switch | 25   |
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| OTM250E4WCM48D   | 1SCA022846R8090 | Motorized change-over switch | 29   | OTPS60FP        | 1SCA111009R1001 | Fourth pole                  | 48   |
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| OTM315E4CM230C   | 1SCA022847R2870 | Motorized change-over switch | 26   | OTS2500G1S/4    | 1SCA107271R1001 | Terminal shroud              | 49   |
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| OTM400E3C8D230C  | 1SCA101061R1001 | Automatic transfer switch    | 34   | OTS250G1S/4     | 1SCA022731R8400 | Terminal shroud              | 49   |
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| OTM400E3CM230C   | 1SCA022847R1630 | Motorized change-over switch | 26   | OTS400G1L/4     | 1SCA022736R9490 | Terminal shroud              | 49   |
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| OTM400E3CM48D    | 1SCA022847R1470 | Motorized change-over switch | 29   | OTS400G1S/4     | 1SCA022736R9650 | Terminal shroud              | 49   |
| OTM400E4C2D230C  | 1SCA101060R1001 | Automatic transfer switch    | 33   | OTS40T1         | 1SCA105314R1001 | Terminal shroud              | 49   |
| OTM400E4C3D230C  | 1SCA106318R1001 | Automatic transfer switch    | 33   | OTS40T3         | 1SCA105317R1001 | Terminal shroud              | 49   |

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| OTS63T3     | 1SCA022353R6750 | Terminal shroud                    | 49   |
| OTS800G1L/3 | 1SCA022776R7890 | Terminal shroud                    | 49   |
| OTS800G1L/4 | 1SCA022776R7970 | Terminal shroud                    | 49   |
| OTS800G1S/3 | 1SCA022776R8190 | Terminal shroud                    | 49   |
| OTS800G1S/4 | 1SCA022776R8270 | Terminal shroud                    | 49   |
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| OTV1000ECLK | 1SCA113152R1001 | Handle                             | 44   |
| OTV1000ECMK | 1SCA111301R1001 | Handle                             | 44   |
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| OTV250ECMK  | 1SCA022804R0570 | Handle                             | 44   |
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| OTV400ECK   | 1SCA022783R0170 | Handle                             | 44   |
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| OTV400ECMK  | 1SCA022843R2900 | Handle                             | 44   |
| OTV800ECFK  | 1SCA113151R1001 | Handle                             | 44   |
| OTV800ECK   | 1SCA022797R2470 | Handle                             | 44   |
| OTV800ECLK  | 1SCA113148R1001 | Handle                             | 44   |
| OTV800ECMK  | 1SCA022804R3410 | Handle                             | 44   |
| OTVS0       | 1SCA117524R1001 | Handle and spare fuse storage clip | 44   |
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| OTVS2       | 1SCA111414R1001 | Handle and spare fuse storage clip | 44   |
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| OTZC23      | 1SCA022767R7120 | Bridging bar                       | 56   |
| OTZC24      | 1SCA022767R7210 | Bridging bar                       | 56   |
| OTZC33      | 1SCA022785R7020 | Bridging bar                       | 56   |
| OTZC34      | 1SCA022785R7110 | Bridging bar                       | 56   |
| OTZC43      | 1SCA022868R0710 | Bridging bar                       | 56   |
| OTZC44      | 1SCA022868R0800 | Bridging bar                       | 56   |
| OTZC53      | 1SCA022868R0980 | Bridging bar                       | 56   |
| OTZC54      | 1SCA022868R1010 | Bridging bar                       | 56   |
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| OTZR1       | 1SCA100352R1001 | Reversing bar                      | 56   |
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| EXP6X161    | 1SCA022067R1760 | Shaft                              | 45   |
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| EXP6X265    | 1SCA108225R1001 | Shaft                              | 45   |
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| OZXB3      | 1SCA022136R8100 | Terminal clamp          | 52   |
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| OZXB3/1    | 1SCA022194R0620 | Terminal clamp          | 52   |
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| OZXT6      | 1SCA122537R1001 | Terminal clamp          | 51   |
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