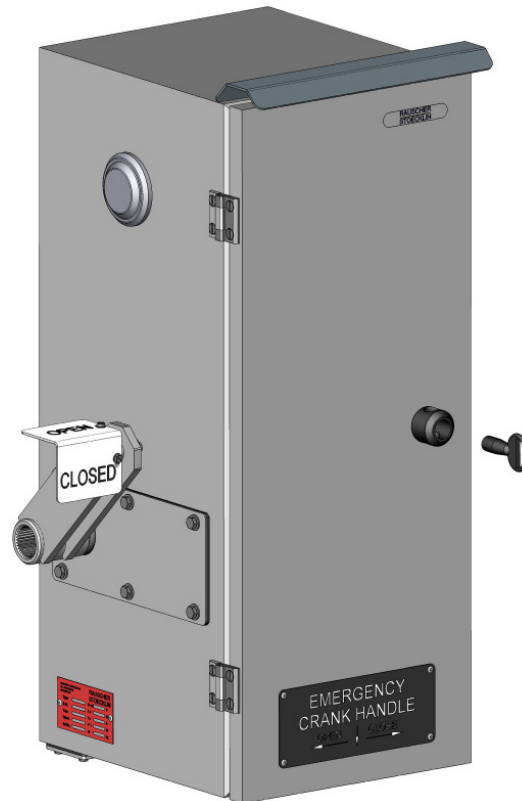


## Motor drive MFL

Motor drive for overhead line switchgear



The motor drive MFL provides a safe and reliable motorisation for any OHL switchgear working with a linear movement through a rod linkage or a flexible connection like Flexball®, and is usually installed at the mast lower part.

Its modular design basically consists of 3 sub-assemblies which are: the operating gear block, the electrical module and the outside cubicle.

The basic version includes an electrical remote and an on-site

manual operation through an emergency crank handle, whereas a more elaborate version, completed with a local electrical operation, is available.

In addition to these standard designs, thanks to the modular system, the electrical part can easily be adapted in order to allow further customer specific functions (more contacts, signalisation, mechanical or electrical interlocking, etc.).

## Features and benefits

- Suitable for outdoor use under worst weather conditions (stainless steel cabinet, IP54)
- Easy fixing on the supporting structure through 4 M16 bolts on the cubicle rear
- Blind plate at the cabinet bottom part for easy and safe cable entry
- Door lock suitable for padlock
- Motor wiring protected against humidity and overheating
- Extremely robust operating gear block equipped with automatic decoupling device for each end-position preventing the spindle from being blocked or overstressed
- Emergency crank handle to be used for adjustment or in case of voltage failure
- Protection against external mishandling: the switch cannot be manually actuated as long as the door is closed
- Interlocking switch on the version with local electrical operation: remote and local operations cannot be activated simultaneously
- High flexibility of the electrical module to fulfil specific user's requirements
- Although the standard voltage is 230 VAC, a large range of other power supplies is possible (48 VDC to 380 VAC)

## Technical data

### Electrical data

|   |     |         |
|---|-----|---------|
| Supply voltage $U_{nom}$                        | Vac | 230     |
| Frequency range                                 | Hz  | 16.7-60 |
| Power input                                     | W   | 230     |
| Safety limit switch (for each end position)     |     | yes     |
| Safety limit switch for hand operation          |     | yes     |
| Voltage-free contact (NO) for each end-position |     | 1x      |

### Construction characteristics

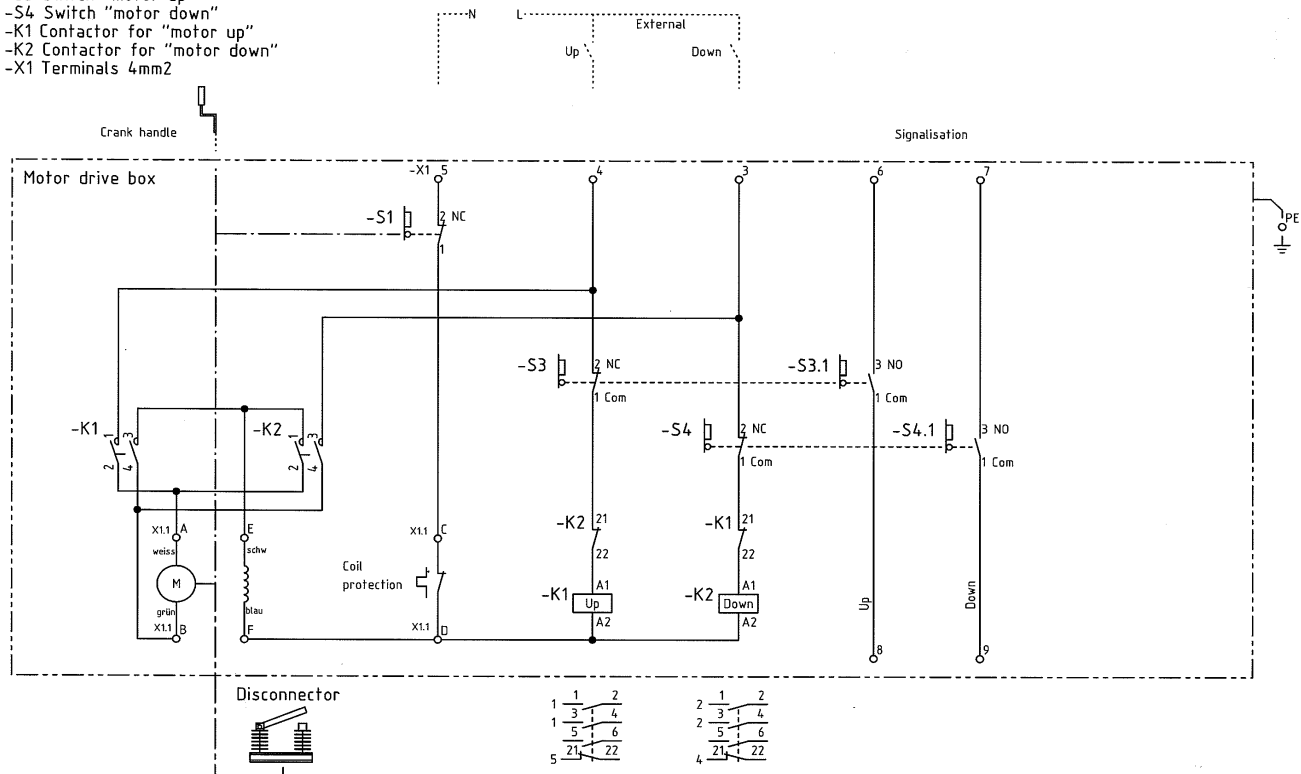
|   |        |          |
|---|--------|----------|
| Protection grade  |        | IP 54    |
| Mechanical life   | cycles | > 10'000 |
| Outside lever rotation angle (from open to close)                   | °      | 90       |
| Operating time (depending on mechanical load and voltage tolerance) | s      | 3 – 7    |
| Stroke  | mm     | 120/190  |
| Emergency crank handle  |        | yes      |
| Number of turns by operating through the emergency crank handle     | approx | 15       |
| Temperature range   | °C     | -30/+50  |
| Approximate weight  | kg     | 35       |
| Door padlock maximal diameter                                       | mm     | 8        |
| Maintenance   |        | free     |

## Wiring diagrams

### Basic version

#### Components table

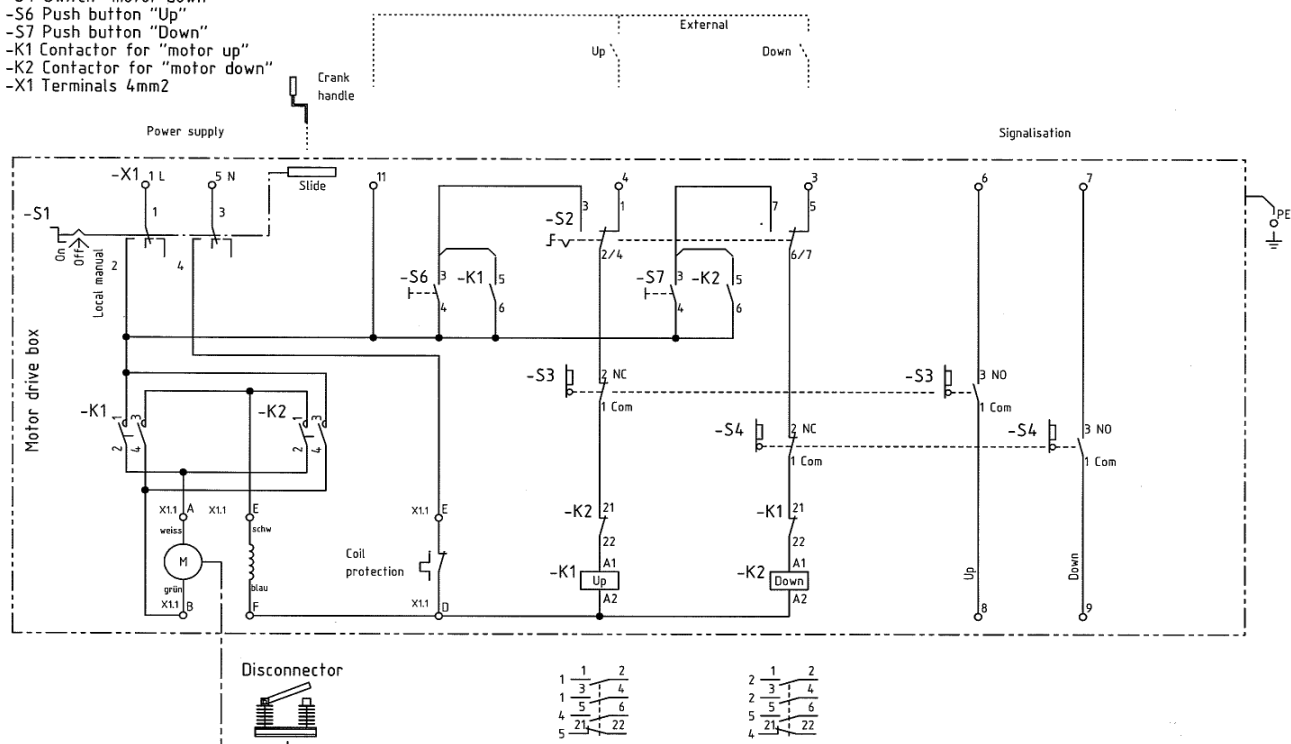
- S1 Crank handle switch
- S3 Switch "motor up"
- S4 Switch "motor down"
- K1 Contactor for "motor up"
- K2 Contactor for "motor down"
- X1 Terminals 4mm<sup>2</sup>



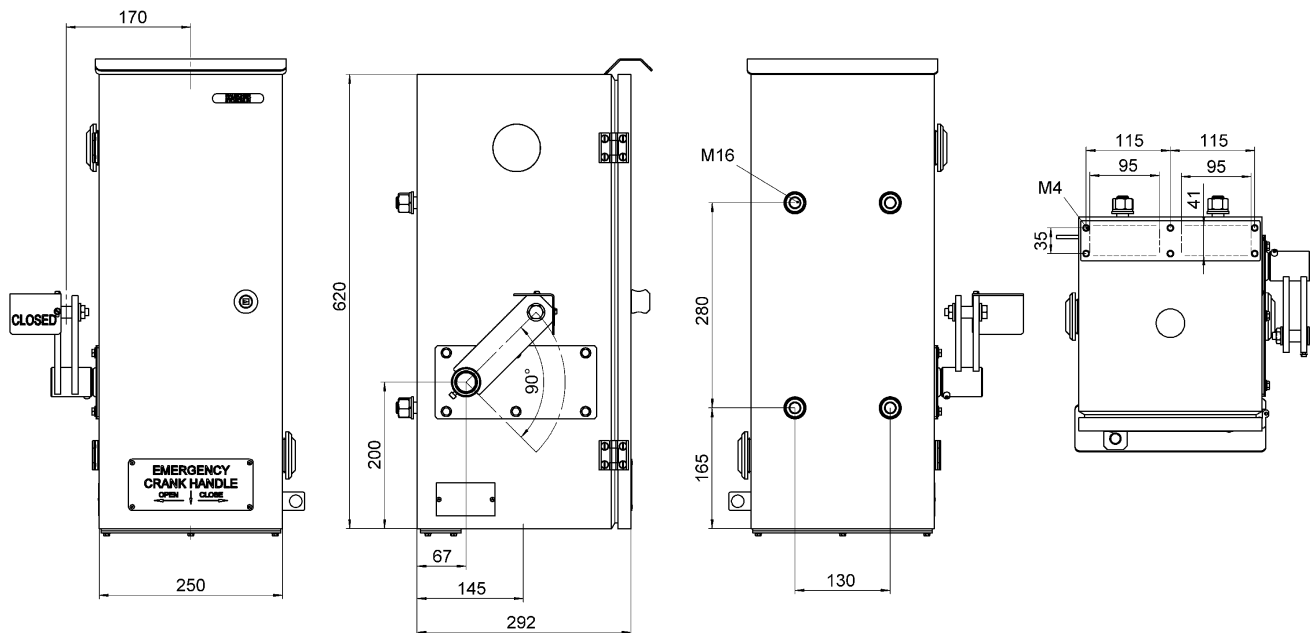
### Version with electrical local operation

#### Components table

- S1 Service switch "On/Off/local manual"
- S2 Electrical "Local/Remote" Switch
- S3 Switch "motor up"
- S4 Switch "motor down"
- S6 Push button "Up"
- S7 Push button "Down"
- K1 Contactor for "motor up"
- K2 Contactor for "motor down"
- X1 Terminals 4mm<sup>2</sup>



## Dimensional drawings



## Ordering information

| Types              | Description  | Article-No. |
|--------------------|--|-------------|
| MFL 250/230/AC     | Motor drive with remote electrical and local manual operations                   |             |
| MFL 250/ 230/AC/LE | Motor drive with remote electrical, local electrical and local manual operations |             |

### Options:

- H = heating with thermostat
- LI = interlocking switch "Local Manual" / "Remote" (in MFL 250/230/AC/LE already included)
- CO = additional voltage-free contacts (1x NO for each end-position)