

## **Instruction manual Motor Protection Switch K3100**






Dear customer,  
Thank you for purchasing this product.

The article has been finally tested and meets the requirements of the applicable European and national directives. We hereby confirm CE conformity, the corresponding declarations are on file with us as the manufacturer.

In order to maintain the delivery condition of the product and to ensure safe operation, you as the user must observe these operating instructions. Therefore, please read the operating instructions in full before using the product and observe all operating and safety instructions!

These operating instructions belong to the product mentioned. It contains important information on commissioning and handling. Pay attention to this, even if you pass this product on to third parties. Therefore, please keep these operating instructions for future reference

## Warnings

-  The version without a motor protection switch may only be connected to the mains after a motor protection switch has been fitted.
-  There is a danger to life if live parts of the appliance are touched.
-  During installation, retrofitting and maintenance work, ensure that all electrical conductors, terminals and connecting parts are de-energized.

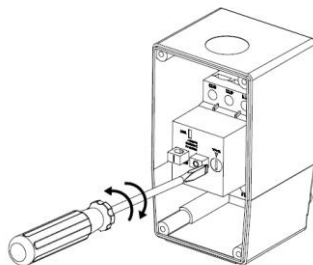
## Connection

The appliance may only be connected by qualified personnel and only with the mains plug disconnected. To do this, open the cover, install a suitable motor protection switch and connect the connecting cable. Then refit the cover. The motor protection switch is now ready for operation.

Fasten the housing with M5 threaded screws.

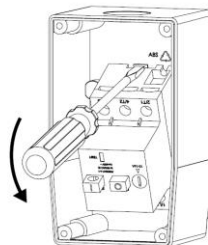
## Setting/replacing the motor protection switch

### Setting



Set to rated motor current

### Replacing



## Fault - Cause - Remedy

| Fault   | Cause   | Remedy   |
|---|---|--|
| Motor protection switch cannot be switched on | Incorrect supply voltage (for version with undervoltage release)                      | Check voltage  |
|   | Incorrect connection of the undervoltage coil (for version with undervoltage release) | Check connection   |
|   | Motor protection has tripped thermally  | Observe a cooling time of approx. 15 min. Then test again. |
|   | Short circuit on connected load   | Check connected device                                     |
| Motor protection triggers too early           | Motor protection switch setting too low   | Check setting and correct if necessary                     |
|   | Load draws too high a current   | Check connected loads                                      |

## Warranty

- 12 months after date of shipment (calendar week and year are stated on the type plate).
- Damage caused by overload, normal wear and tear, incorrect wiring, or incorrect treatment is not covered by warranty.
- Any warranty is voided if the power class of the switch is not suitable for the application.
- Warranty claims are only accepted if the complete device is sent in. Warranty claims beyond the switch are not accepted.

It is not economic to repair switches that are older than three years. Please do not send them for repair. All switches must be sent postage paid.

## Versions

| Description         | Version               |           |                     |                     |
|---------------------|-----------------------|-----------|---------------------|---------------------|
|                     | Earthing contact plug | CEE 2P+T  | CEE 3P+N+ET16A 400V | CEE 3P+N+T 32A 400V |
| Only housing        | VA99.0277             | VA99.0293 | VA98.3121           | 0098.3132           |
| with MS 0.10-0.16 A | VB99.0277             | VB99.0293 | VB98.3121           |                     |
| with MS 0.16-0.25 A | VC99.0277             | VC99.0293 | VC98.3121           |                     |
| with MS 0.25-0.40 A | VD99.0277             | VD99.0293 | VD98.3121           |                     |
| with MS 0.40-0.63 A | VE99.0277             | VE99.0293 | VE98.3121           |                     |
| with MS 0.63-1.00 A | VF99.0277             | VF99.0293 | VF98.3121           |                     |
| with MS 1.00-1.60 A | VG99.0277             | VG99.0293 | VG98.3121           |                     |
| with MS 1.60-2.50 A | VH99.0277             | VH99.0293 | VH98.3121           |                     |
| with MS 2.50-4.00 A | VI99.0277             | VI99.0293 | VI98.3121           |                     |
| with MS 4.00-6.30 A | VJ99.0277             | VJ99.0293 | VJ98.3121           |                     |
| with MS 6.30-10.0 A | VK99.0277             | VK99.0293 | VK98.3121           | VB98.3132           |
| with MS 10.0-16.0 A | VL99.0277             | VL99.0293 | VL98.3121           | VC98.3132           |
| with MS 16.0-20.0 A |                       |           |                     | VD98.3132           |
| with MS 20.0-25.0 A |                       |           |                     | VE98.3132           |
| with MS 25.0-32.0 A |                       |           |                     | VF98.3132           |

## Suitable motor protection switches

| Part no.  | Rated current |
|-----------|---------------|
| 4037.5101 | 0.10-0.16 A   |
| 4037.5102 | 0.16-0.25 A   |
| 4037.5103 | 0.25-0.40 A   |
| 4037.5104 | 0.40-0.63 A   |
| 4037.5105 | 0.63-1.00 A   |
| 4037.5106 | 1.00-1.60 A   |
| 4037.5107 | 1.60-2.50 A   |
| 4037.5108 | 2.50-4.00 A   |
| 4037.5109 | 4.00-6.30 A   |
| 4037.5110 | 6.30-10.0 A   |
| 4037.5111 | 10.0-16.0 A   |
| 4037.5112 | 16.0-20.0 A   |
| 4037.5113 | 20.0-25.0 A   |
| 4037.5114 | 25.0-32.0 A   |

## Other housing versions without MS switch

| Part no.  | Description   |
|-----------|---|
| 0098.3100 | Housing without plug, closed all round  |
| 0098.3101 | Housing without plug, with 2x M20 screw connection                            |
| 0098.3105 | Housing with mains and motor cable, mains cable with CEE plug 3P+N+E 16A 400V |
| 0098.3110 | Enclosure with CEE collar plug 3P+N+E 16A 400V                                |
| 0098.3115 | Housing with CEE collar plug 3P+N+E 16A 400V and motor cable                  |

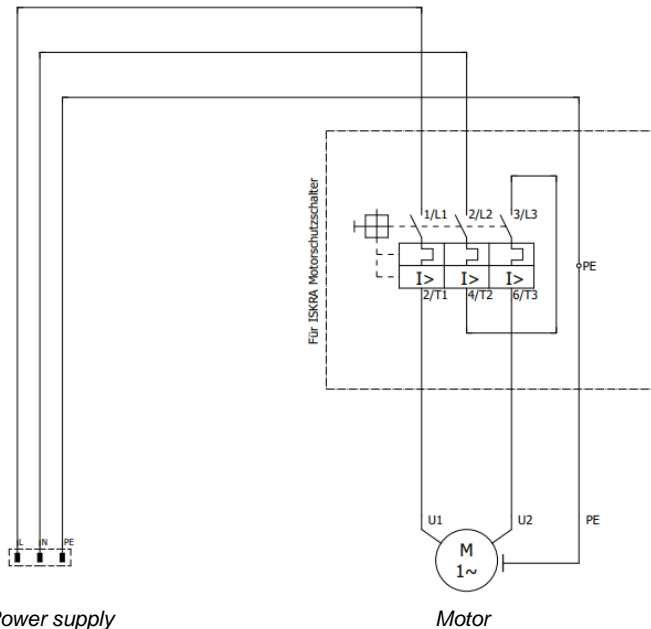
You can find further accessories on our website [www.klibo.de](http://www.klibo.de)

## Circuit diagrams

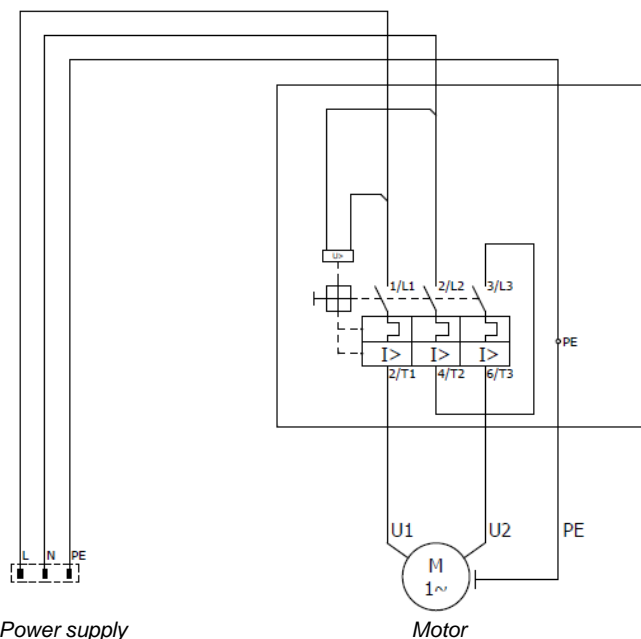
### 1-phase mains supply

For 1-phase mains supply, all poles of the motor protection switch must be connected. The jumper required for this is included in the delivery.

#### Without undervoltage coil

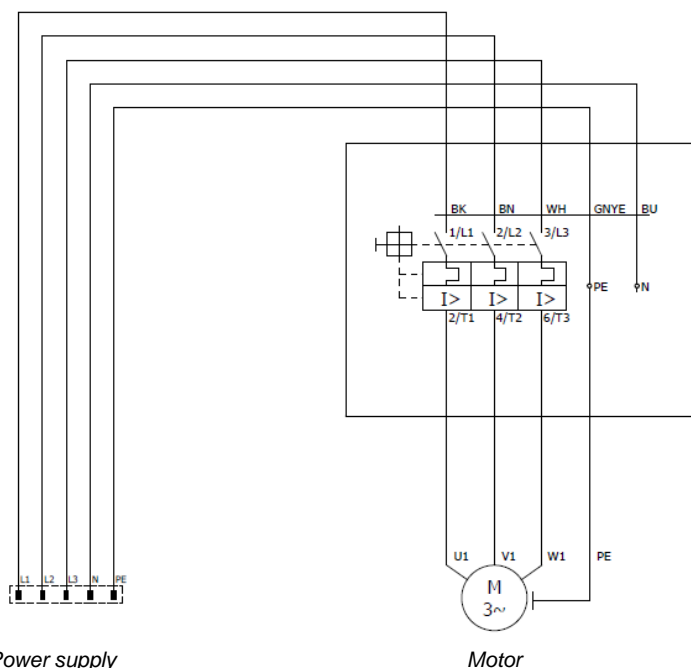


#### With undervoltage coil

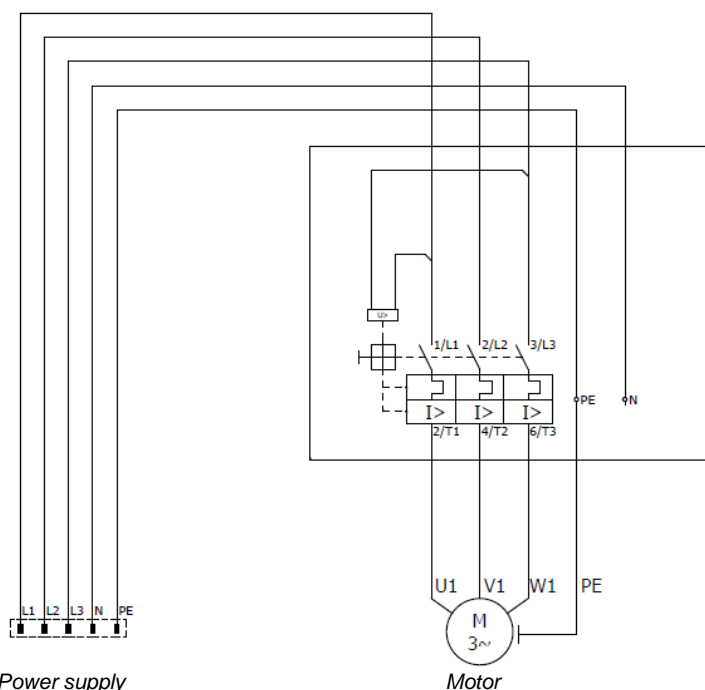


## 3-phase mains supply

### Without undervoltage coil



### With undervoltage coil



## Safety information for motor protection switch K3100

- **Follow the manufacturer's instructions:** Read and follow the manufacturer's operating instructions carefully. These contain important information on installation and use.
- **Use a suitable version:** Ensure that the motor-protective circuit-breaker is suitable for the power, current and voltage used. An incorrectly dimensioned motor-protective circuit-breaker can lead to damage or dangerous situations.
- **Safe installation:** Install the motor-protective circuit-breaker in accordance with the applicable regulations and standards. The connection must be carried out by a qualified electrician.
- **Mains fuse protection:** The motor-protective circuit-breaker must be protected with appropriate back-up fuses. Please refer to the data sheet for the appropriate back-up fuses for the different power classes.
- **Water and dust protection:** Use the motor-protective circuit-breaker with suitable protection types (e.g. IP protection classes) if they are used in damp or dusty environments.
- **Regular maintenance:** Regularly check the condition of the motor-protective circuit-breaker and the connected devices for wear or damage.
- **Emergency stop/emergency stop switch:** Versions with emergency stop/emergency stop must be checked regularly by pressing the emergency stop/emergency stop mushroom button.
- **Maintenance, adjustment or repair work:** Switch off all connected devices beforehand and disconnect the corresponding mains plugs. Disconnect the mains supply or the back-up fuse.
- **Warnings:** See operating instructions for warnings.

**If you have any questions, please contact our technical advisory service:**

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