

## RolloTec cutoff relay

Order no.: 2930

## RolloTec cutoff relay RMD

Order no.: 2931

## RolloTec cutoff relay with extension unit outgoing feeders

Order no.: 2969

## RolloTec cutoff relay with extension unit outgoing feeders RMD

Order no.: 2919

# Operation and Assembly instructions

## 1 Safety instructions

Electrical equipment must only be installed and assembled by qualified electricians. Always follow the relevant accident prevention regulations.

Failure to comply with these instructions may result in damage to the device, fire or other hazards.

Disconnect before working on the device or load. Take into account all circuit breakers that supply dangerous voltages to the device or load.

Use the device only for controlling Venetian blind, roller shutter or awning drives with electronic or mechanical limit switches. Do not switch any other loads.

Secure blinds/shutters against unauthorised and unintentional operation. There must not be any persons or objects in the movement range of the blinds/shutters.

These operating instructions are an integral component of the product, and must be retained by the end user.

## 2 Structure of the device

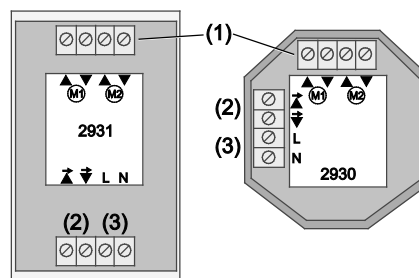


Figure 1

### Terminals

(1) Motor M1 and M2

▲ Motor Up

▼ Motor Down

- (2) Master control
  - ▲ Master control Up
  - ▼ Master control Down
- (3) Power supply
  - L Phase
  - N Neutral conductor

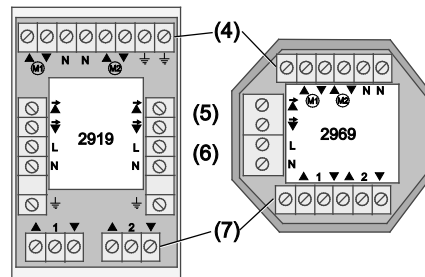


Figure 2

### Terminals

- (4) Motor M1 and M2
  - ▲ Motor Up
  - ▼ Motor Down
  - N Neutral conductor
  - ⏚ Protective earth conductor (RMD only)
- (5) Master control
  - ▲ Master control Up
  - ▼ Master control Down
- (6) Power supply
  - L Phase
  - N Neutral conductor
  - ⏚ Protective earth conductor (RMD only)
- (7) Extensions
  - ▲1▼ Single control motor 1 (Up / L / Down)
  - ▲2▼ Single control motor 2 (Up / L / Down)

## 3 Function

### Intended use

The RolloTec cutoff relay is used for electrical decoupling of two conventional motor drives that are operated in parallel via a signal generator.

## Product features

- For control of two Venetian blind / roller shutter drives
  - Separate mains power supply
  - With input for master control
  - Implementation of group circuits through parallel connection of several cutoff relays
  - Observe connected loads (technical data)
- i** Maintain change-over time of at least 0.5 seconds on change of direction. Follow the motor manufacturers' instructions.

## Master control

All connected drives are moved simultaneously using the master command of a signal generator (Figures 3 (8), 4 (11)). The following signal generators can be used:

- mechanically or electrically interlocked Venetian blind / roller shutter push-buttons
- Venetian blind / roller shutter push-buttons
- RolloTec control sections, e.g. with buttons or timers
- KNX/EIB Venetian blind actuators
- Controllers with potential-free contacts

## Single control

For cutoff relays with extension unit outgoing feeders, an additional separate operation of the drives is possible (Figures 3 (9), 4 (12)).

- i** Connection only to mechanically or electrically interlocked push-buttons. Do not use Venetian blind switches.
- i** As long as a master command is present, single control of the drives is not possible.

## 4 Information for electricians

### 4.1 Assembly and electrical connections



#### **DANGER!**

**Touching live parts can result in an electric shock.**

**An electric shock can lead to death.**

**Before working on the device or load, disconnect all associated circuit breakers.  
Cover all live parts in the area.**

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#### **DANGER!**

**The connection of several control sections to the master input or to an extension unit output is not permitted.**

**Operation in different directions simultaneously can cause malfunctions or destruction of the drives or control sections.**

**The cutoff relay may only be activated by a single control section.**

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The cutoff relay is installed between the control section(s) and the drives.

- i** Not more than one drive per motor output may be connected to the cutoff relay.

## Connecting and mounting the cutoff relay

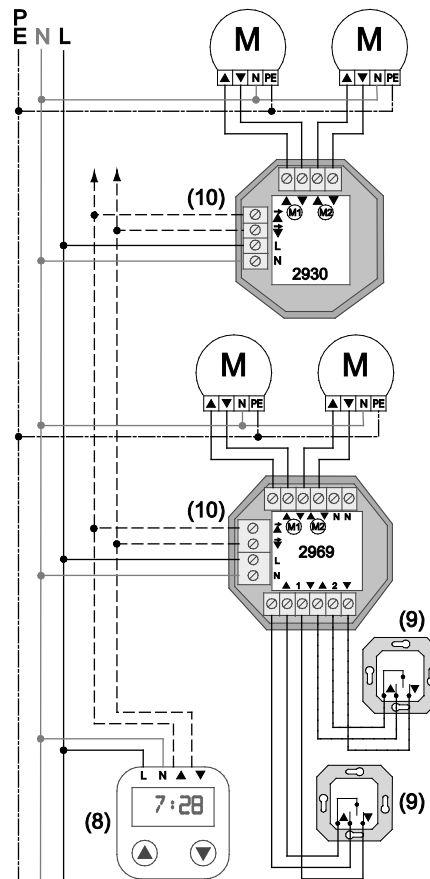


Figure 3

- Connect cutoff relay according to connection diagram (Figure 3).
  - Mount cutoff relay in
    - separate junction box.
    - Switch box according to DIN 49073.
- i** Recommendation: Use deep switch box.  
The cutoff relay is connected and ready for operation.

### Connecting and mounting the RMD cutoff relay

- Mount the cutoff relay only in distribution boxes or in control cabinets on a 35 mm DIN top hat rail.

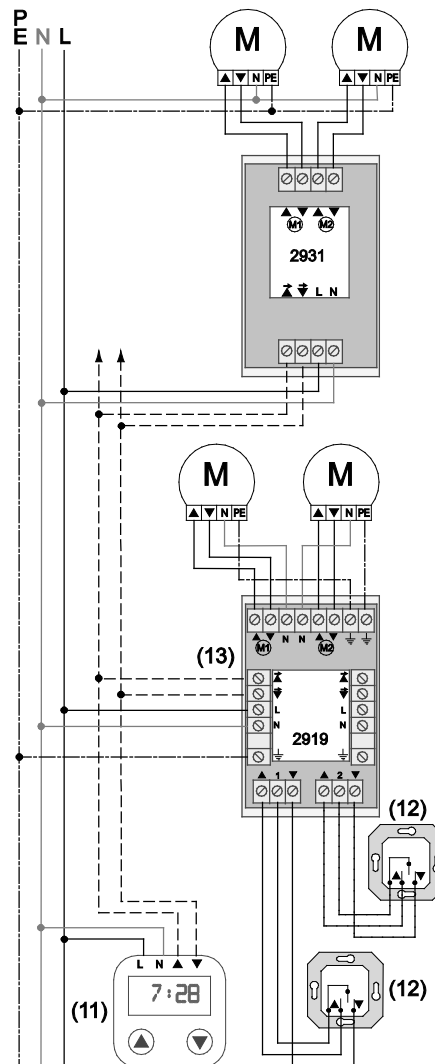


Figure 4

- Connect cutoff relay according to connection diagram (Figure 4).  
The cutoff relay is connected and ready for operation.

### Installing master control with more than 2 drives

In order to activate more than two drives at the same time, several cutoff relays have to be connected in parallel.

- i** The max. number of drives to be controlled in an electric circuit depends on the load limit of the upstream circuit breaker.
- i** Observe current consumption of the individual drives.
- i** When more than 8 drives are connected, distribute load to several circuit breakers. Ensure that connections are in phase.
- Connect cutoff relay according to connection diagram (Figure 3 (10) and Figure 4 (13)).

## 5 Appendix

### 5.1 Technical data

Rated voltage	AC 230 V~, 50/60 Hz
Neutral conductor necessary!	
Control voltage	AC 230 V~, 50/60 Hz
Circuit breaker fuse	10 A, Characteristic A or B
Current consumption (oper.)	approx. 10 mA
Switching current per output	
- ohmic	8 A
- inductive	3 A
Switch-on time (ED)	100 %
Change-over time for change of direction	min. 0.5 s
Operating temperature	0 ... +60 °C
Screw terminal connections small	
- single stranded	0.5 – 2.5 mm <sup>2</sup>
- finely stranded with conductor sleeve	0.5 – 1.5 mm <sup>2</sup>
Screw terminal connections large (mains and master input, only flush-mounted device with extension units)	
- single stranded	0.5 - 4 mm <sup>2</sup>
- finely stranded with conductor sleeve	0.5 – 2.5 mm <sup>2</sup>
Dimensions (W x H x T)	
- Order no. 2930	50 × 52 × 22 mm
- Order no. 2969	53 x 50 x 25 mm
- Order no. 2919, 2931 (RMD)	45 x 71 x 42 mm, 2.5 modules

### 5.2 Troubleshooting

#### Blinds/shutters move in different directions

Cause 1: Connecting cables of the drives are interchanged.

Exchange cables to the motors on the cutoff relay or on the terminals of the drive.

#### All blinds/shutters move in the wrong direction

Cause 1: Connecting cables for the master control are interchanged.

Exchange cables for the master control on the cutoff relay.

#### Blind/shutter moves in the wrong direction during single control

Cause 1: Connecting cables of the extension are interchanged.

Exchange cables on the extension terminals (Up / Down) of the cutoff relay  
or

Exchange cables on the extension.

#### Blind/shutter does not move

Cause 1: No mains voltage.

Switch on circuit breaker.

Cause 2: Thermal protection of the drive is activated.

Let drive cool down. Note information and specifications of the drive manufacturer.

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## 5.3 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

Our products are under guarantee within the scope of the statutory provisions.

If you have a warranty claim, please contact the point of sale or ship the device postage free with a description of the fault to the appropriate regional representative.

## 5.4 Address of manufacturer

**Berker GmbH & Co. KG**  
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