4 channel cutoff relay TR230
Mounting and Operating Instructions

(Translation of original operating manual)

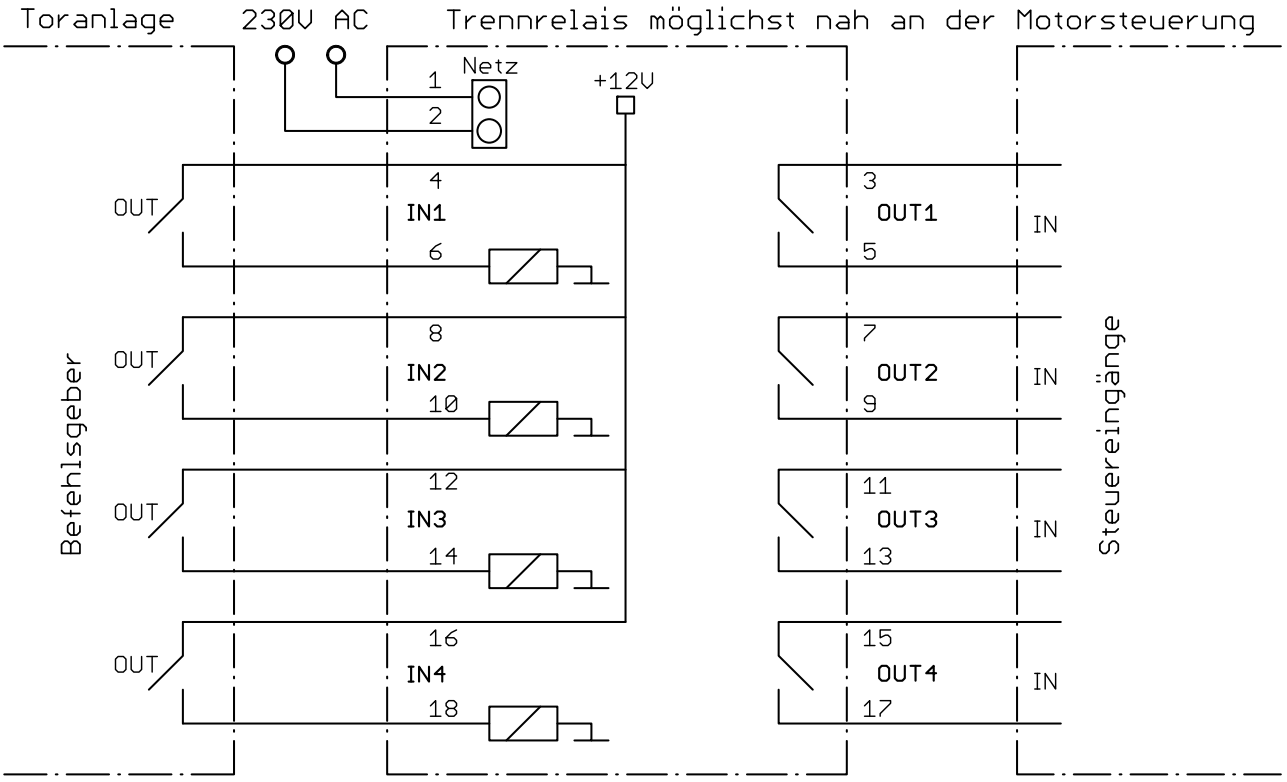
Always read before initial operation!

1 Intended use, wiring diagram and functions

1.1. Intended use

The 4 channel 230 V AC cutoff relays, TR230, can be used to switch up to four control lines to, for example, control inputs of motor controls. The interference influences and the resulting malfunctions that are generated through couplings from mains and motor connection lines and EMC interferences are suppressed through the galvanic isolation through relays.
The warranty and the guarantee claims expire in case the device is used outside of the intended use.

1.2. Connecting diagram and functions



The inputs IN1, IN2, IN3, IN4 must be connected potential-free.
External voltage must not be connected to these inputs.
Stress the outputs OUT1, OUT2, OUT3, OUT4 with max. 30 V AC/DC, 100 mA!

The switch status of the output is synchronous to the input status,
this means:
IN - normally open contact = OUT - normally open contact (NO),
IN - normally closed contact = OUT - normally closed contact (NC).
Therefore, function and safety inputs of motor controls can be connected.

The effectiveness of the system is only provided if the wires from the outputs of the cutoff relay TR230 to the motor control are as short as possible!

Otherwise, the initial interference influence still exist.

2 Safety Instructions

Please keep these instructions so that you have them available if you have any questions later.

Work on the control unit
- Switch off the supply voltage!
- Only switch the voltage on again after you have checked all the connections again.

Mounting, installation, commissioning and maintenance
- Solely by specialists, e.g. by a qualified electrician, who can judge the work-safety conditions.

- Based on the directives and the accepted rules of engineering.

Mounting and operation
- The remote control of devices and systems which involve an increased risk of accident (e.g. crane systems) is prohibited!

- Observe locally applicable regulations.
- Heed accident prevention regulations, VDE and EVU regulations.
- Information can be obtained from power stations, VDE and employers' liability insurance companies.
- No technical modifications may be carried out.
  Any change will result in a loss of liability and warranty.

- Reliable operation is only possible with careful mounting and installation according to these instructions. No guarantee or liability is assumed for damages which arise from non-compliance with these instructions.

Disregarding these safety instructions can lead to bodily injuries and property damages!

2.1 Installation information

Work on the control unit may only be carried out with the device voltage-free! Mortal danger exists due to electric shock! Non-compliance can lead to severe or fatal injuries.

Increased inner temperature through direct sun radiation reduces service life.
Water or insects inside the control unit lead to failure or destruction
To avoid damage to the control unit:
- Protect the control unit from influences of the weather.
- Only mount with housing.
- Use fastening lugs for the installation

To prevent housing deformation and leaks, mount on a flat surface, only tighten screws moderately.
- Mount in an upright position, cable feed from below.
- Open the self-sealing grommet using a round screwdriver. Do not cut open with a blade!

3 Storage and transport conditions

Disregard can lead to failure, even after initial operation!
Store dry, dust-free and secure against impact and falling.
Storage temperature -20°C...+80°C at 30 %...60 % rel. humidity.
Transport only with sufficient and well-padded additional packaging.
- The existing packaging is not designed as transport packaging.
- Damage caused by disregard is not covered by the warranty!

4 Technical data

Operating voltage:	- 230V AC, ±10% 50Hz
Power consumption:	- 1.4W - all inputs open. 2.1W - all inputs closed.
Output:	- Relays, 1 normally open contact each, potential-free max. load: 100mA, 30V AC/DC
Operating temperature:	- -20°C - +50°C at 30 % - 80 % rel. humidity.
Dimensions:	- app. 80 mm x 80 mm x 52 mm, plastic housing IP65 (dimensions without fastening lugs)
Weight:	- app. 170g incl. housing

5 Environmental protection / Disposal

The wireless receiver does not contain any integrated batteries. Solely ROHS-conforming components are used. Properly dispose of old and defective appliances and device parts at a collecting point! Do not put them in domestic waste!

6 Declaration of conformity

Declaration of conformity Type TR230:
The manufacturer herewith declares that the receiver meets the requirements of the Directive R&TTE 1999/5/EC when used as intended.
For further information please refer to the URL of the manufacturer stated on the unit.

7 Document change history

From	Changes	File name
19/02/2015	First issue	28510800_TR230_DE_2015-02-17