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CR-810 DUO

Resistance relay



519083121595519

Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



Purpose

The resistance (thermal) relay is used to protect electrical equipment from an undesired rise in temperature using PTC thermistor sensors connected in series of 1÷6 pieces.

Functioning

Correct operation (contacts 11-12 closed) is signalled by the lighting of the green LED U (correct supply voltage, correct temperature of the controlled device, efficient circuit of the connected PTC sensors). If the temperature of at least one of the sensors rises above the rated value, its resistance rises above 3000 Ω . The relay is activated (opening of pins 11-12 and lighting of the red LED \downarrow). The system will be switched on automatically if the PTC sensor loop resistance drops below 1800 Ω (temperature drop of the controlled device). The contact of the executive relay will also be opened if the loop resistance drops to 70 Ω , e.g. in case of short-circuit of the PTC sensor wires (signalled by lighting of the red LED \triangle_{PTC}) or if the relay supply voltage is switched off.

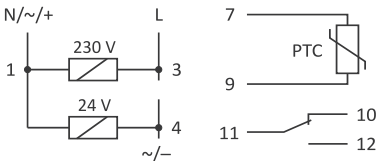
Mounting

1. Switch off power supply.
2. Mount the relay on the rail in the control box.
3. Connect the power supply wires according to the diagram as follows: 230 V to terminals 1-3; 24 V to terminals 1-4.

Note! Connect only one of the selected voltages.

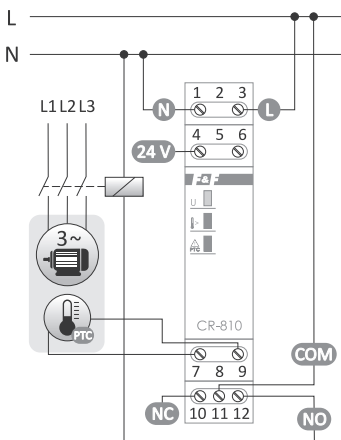
4. In the circuit of power supply to the coil of the contactor switching the protected receiver, connect in series contact 11-12.

Terminals description



- 1-3 230 V power supply relay
- 1-4 24 V power supply relay
- 7-9 PTC probe connection
- 10 output: normally closed (passive) contact
- 11 input: power supply COM contact
- 12 output: normally closed (active) contact

Wiring diagram



Technical data

power supply	230 V AC / 24 V AC/DC
contact	separated 1×NO/NC
maximum load current (AC-1)	16 A
contact opening resistance	$R > 3000 \Omega$, $R < 70 \Omega$
contact closing resistance	$110 \Omega < R < 1800 \Omega$
cold state resistance of sensor loop	$R = 1500 \Omega$
power indication	green LED
damage indication	2× red LED
power consumption	0.8 W
terminal	2.5 mm ² screw terminals
tightening torque	0.4 Nm
working temperature	-25÷50°C
dimensions	1 module (18 mm)
mounting	on TH-35 rail
ingress protection	IP20

Warranty

F&F products are covered by a 24-month warranty from the date of purchase. The warranty is only valid with proof of purchase. Contact your dealer or contact us directly.

CE declaration

F&F Filipowski sp. L.P. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE.

The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found www.fif.com.pl on the product subpage.