



General

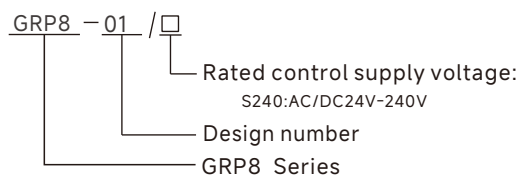
■ Applications

- To protect against thermal overload of motors caused by high switching frequency, heavy duty starting, phase failure on one phase, bad cooling, high ambient temperature.

■ Function Features

- 1 input for PTC-resistors or bimetal contacts.
- Broken wire detection in sensor circuit.
- 1 or 2 changeover contacts.
- Can be externally connected with a reset button.
- 1-MODULE,DIN rail mounting.

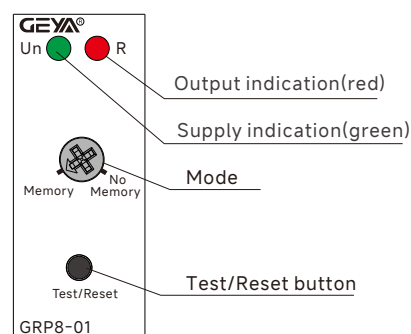
■ Model and connotation



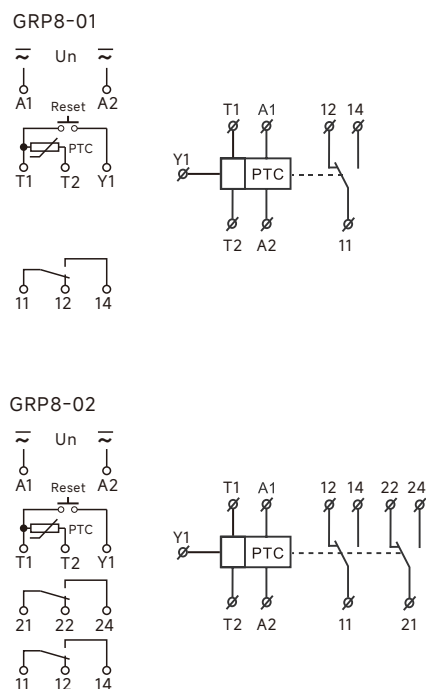
Technical parameters

	GRP8-01	GRP8-02
Function	Thermistor motor protection relay	
Supply terminals	A1-A2	
Voltage range	AC/DC 24-240V 50/60Hz	
Burden	AC 0.09-3VA/DC 0.05-1.7W	
Supply voltage tolerance	-15%;+10%	
Supply indication	green LED	
Max cold PTC resistance	1500Ω	
Alarm setpoint	3100Ω±10%	
Return setpoint	1650Ω±10%	
Short-circuit detection	0 to10Ω	
Output	1×SPDT	2×SPDT
Current rating	10A/AC1	
Switching voltage	250VAC/24VDC	
Min.breaking capacity DC	500mW	
Output indication	red LED	
Mechanical life	1×10 ⁷	
Electrical life(AC1)	1×10 ⁵	
Operating temperature	-20°C ~ +55°C	
Storage temperature	-35°C ~ +75°C	
Mounting/DIN rail	Din rail EN/IEC 60715	
Protection degree	IP20	
Operating position	any	
Overvoltage cathegory	III.	
Pollution degree	2	
Max.cable size(mm ²)	1×2.5mm ² 或 2×1.5mm ² 0.4N·m	
Dimensions		
Weight	62g	82g
Standards	IEC60947-8	

Panel Diagram

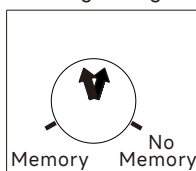


Wiring Diagram



Set points for attention

Wrong setting

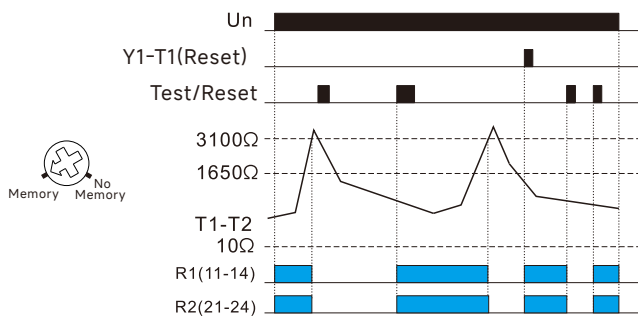


When set to the wrong position, the red and green indicator lights will double flash to indicate an error, and the relay will disconnect.

Function

The temperature control relay can take up to 6 PTC (positive temperature coefficient) probes wired in series between terminals T1 and T2.

Memory

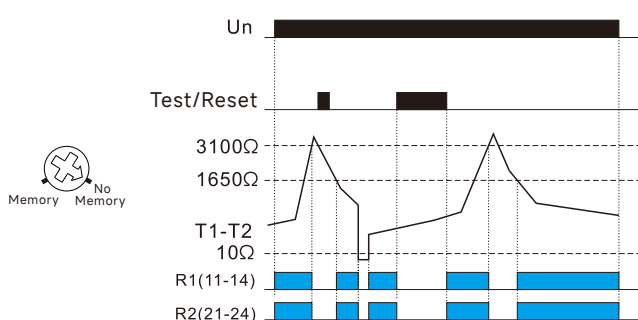


In "memory" mode, when a fault is detected, the "temperature" relay locks in the open position.

As soon as the temperature returns to the correct value, the relay can be unlocked (reset), either by pressing the "Test/Reset" button (for at least 200 ms), or by closing a volt-free contact (for at least 200 ms) between terminal Y1 and T1 (without a parallel load).

When a fault has been detected and the temperature has returned to normal, the "temperature" control relay can be unlocked (reset) by pressing the "Test/Reset" button.

No Memory



In "No Memory" mode, a fault is declared when the resistance of the temperature sensing circuit exceeds 3100 Ω.

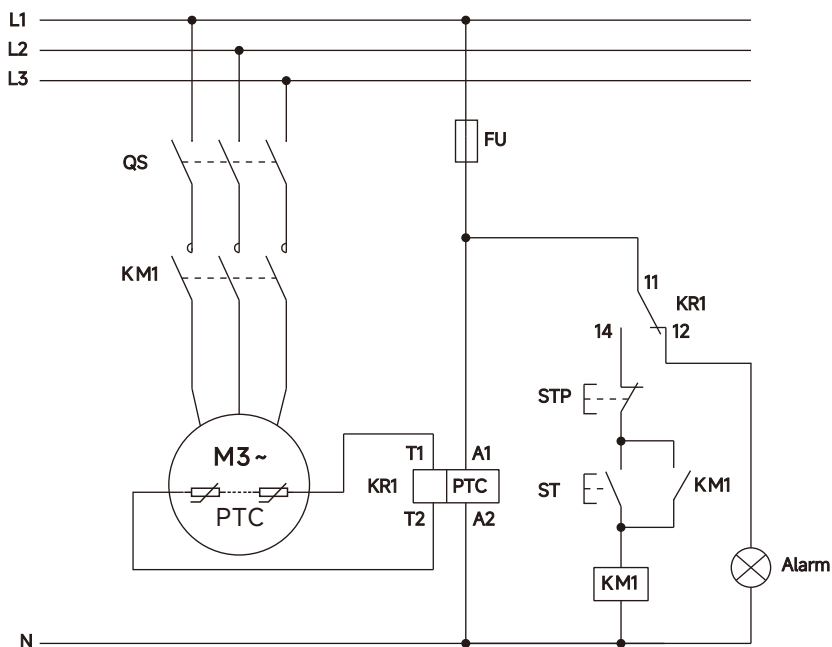
Return to normal status is detected when the resistance is once again below 1650 Ω.

The result of the control is indicated by the status of the "temperature" output relay, NO contact 11-14 is open in the event of a fault. Opening of the thermal sensing circuit, which has the same effect as a high temperature (resistance exceeds 3100 Ω), is therefore interpreted as a fault.

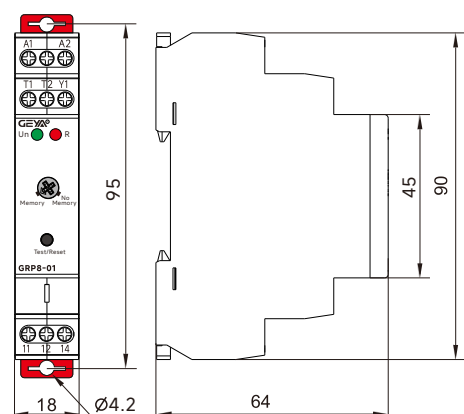
Total short-circuiting of the temperature probe(s), detected when resistance is less than 10 Ω, is treated as a fault.

LED R is on when the temperature is correct.

Application Examples



Dimensions(mm)



Disposal of Electrical Waste
All electrical waste should be disposed of in compliance with current WEEE regulations.



Caution

The products must be installed by qualified electricians. All and any electrical connections of the time relay shall comply with the appropriate safety standards.