

Item no.: 2490687, 2490688

Data Sheet

Current Monitoring Relay

2490687 TC-GRI8-03



2490688 TC-GRI8-04



Applications

- Serves for monitoring heating in rail switches, heating cables, and consumption of one-phase motors indicate current flow.

Function Features:

- Over or under current for 60995c3/ Over and under current for 60995c4
- Adjustable delay 0.1 – 10 s to eliminate short current peaks.
- Current setting AC 1.6-16A
- Power up delay.
- Possible to use for current scanning from the current transformer.
- Universal supply AC/DC 24 – 240 V.
- Relay status is indicated by LED.
- 1-MODULE, DIN rail mounting.

Item no.: 2490687, 2490688

Data Sheet

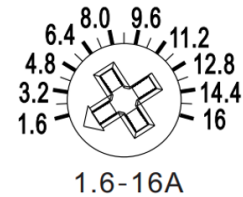
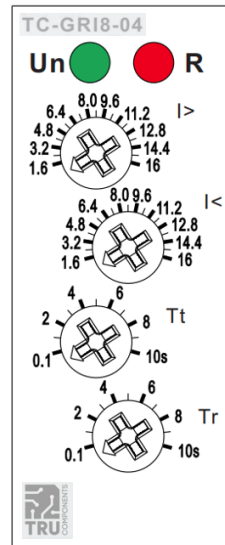
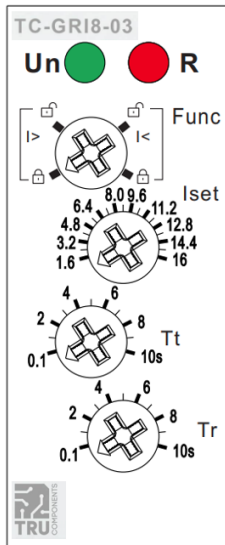
Technical data

Technical parameters	2490687			2490686	
Function	Over or Undercurrent			Over & undercurrent	
Supply terminals	A1-A2				
Rated supply voltage	AC/DC 24V-240V				
Rated supply frequency	50/60Hz,0				
Power consumption	max 1.5VA				
Allowed supply fluctuation range	-15%; +10%				
Current range	0.1~1A	0.2~2A	0.5~5A	0.8~8A	1.6~16A
Current frequency	AC 50Hz				
Max. operating current	2A	4A	8A	12A	22A
Current adjustment method	Rotary microswitch				
Time delay	adjustable 0.1-10 s				
Power up delay	adjustable 0.1-10 s				
Supply indication	green LED				
Setting accuracy	10%				
Repeat accuracy	<1 %				
Temperature coefficient	<0.1 % /°C				
Current measurement accuracy	5 % (10% for 0.05-0.5A range)				
Hysteresis	5%				
Output	1×SPDT				
Current rating	1×10A(AC1)				
Switching voltage	250VAC/24VDC				
Min. switching power DC	500mW				
Output indication	red LED				
Mechanical life	1×10 ⁷				
Electrical life(AC1)	1×10 ⁵				
Operating temperature	-20°C to +55°C				
Storage temperature	-35°C to +75°C				
Max. cable size (mm ²); torque	1x2.5mm ² or 2x1.5mm ² ; 0.8 Nm				
Installation	Din rail mounting				
Protection degree	IP20				
Mounting attitude	≤2000 m				
Overvoltage category	III.				
Standard	EN/IEC60947-5-1				

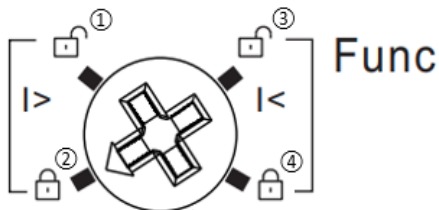
Item no.: 2490687, 2490688

Data Sheet

Panel Diagram



2490687 TC-GRI8-03 Function setting



①②: Over current monitoring

① is unlocked status. If the controller current exceeds the preset value, the relay's contact will be switched. The "R" LED will be on and indicate the over current status (There is a delay time that can be set). Once the current falls below the preset value, the relay's indication is back to normal.

② is locked status. Once the over current is detected, the relay will continuously indicate the over current status until reset the product. The power supply must be disconnected to reset the product.

③④: Under current monitoring

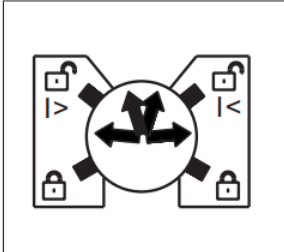
③ is unlocked status. If the controller current falls the preset value, the relay's contact will be switched. The "R" LED will be on and indicate the under current status (There is a delay time that can be set). Once the current rises above the preset value, the relay's indication is back to normal.

④ is locked status. Once the under current is detected, the relay will continuously indicate the under current status until reset the product. The power supply must be disconnected to reset the product.

Item no.: 2490687, 2490688

Data Sheet

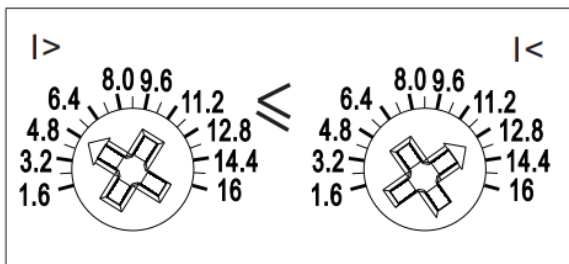
Wrong setting of TC-GRI8-03



As shown in the figure above, they are wrong settings. In that cases, LED-Un and LED-R will flash at the same time, which indicate the setting error. Normal operation will be resumed through resetting after power -off.

If the operating function is changed after power-on, the two LED indicators would flash while the relay operates based on original operating functions; the LED would resume the normal indication after the original setting is recovered.

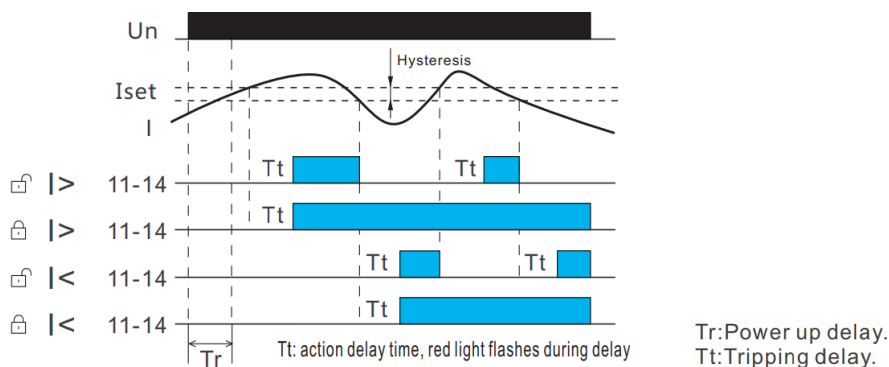
Wrong setting of TC-GRI8-04



The set over-current threshold value must be larger than under-current threshold value. Otherwise, the two LEDs would flash and the output relay would be disconnected.

Function Diagram

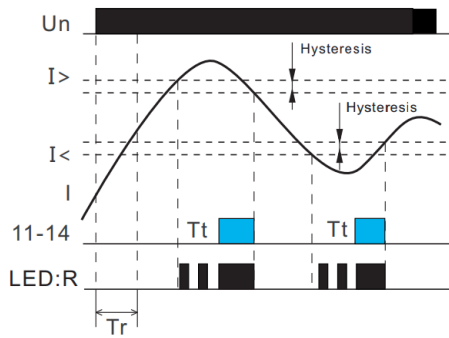
2490687 TC-GRI8-03



Item no.: 2490687, 2490688

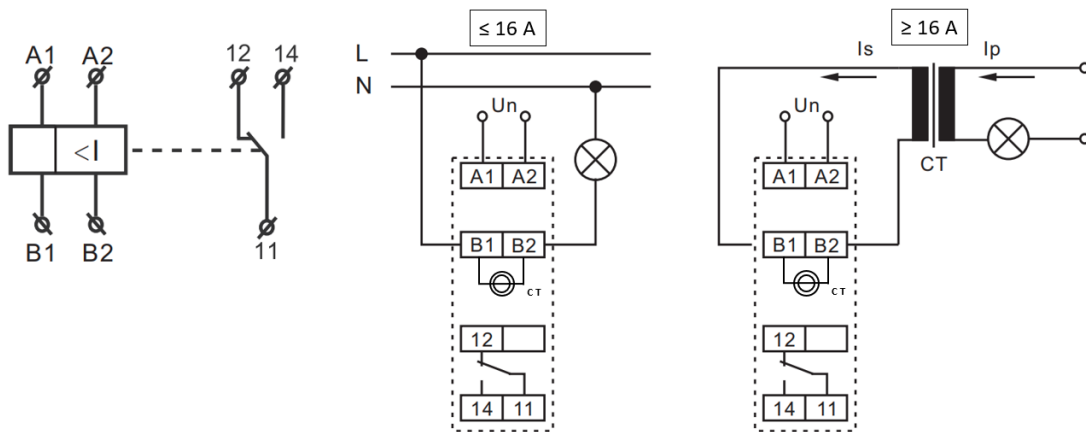
Data Sheet

2490688 TC-GRI8-04



Tr: Power up delay.
Tt: Tripping delay.

Wiring Diagram



Dimensions(mm)

