

GRB protection module for PTCs according. DIN VDE V 0898-1-401 (old DIN 44081 / DIN 44082)

Application:

Motor protection based on PTC thermistors is one of the most effective and reliable protective measures against thermal overloading of electrical machines.

The protective device consists of the triggering device GRB and the PTC sensors.

Due to its compact design, the GRB is suitable for installation in electrical devices or the terminal box of electrical machines.



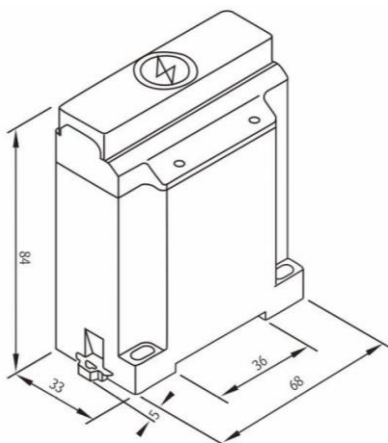
Technical data

Power supply	DC 24V ±20%	AC 110V ±20% 50Hz...60Hz	AC 220V ±20% 50Hz...60Hz
Power consumption	<0.8VA		
Ambient temperature	-30°C...70°C		
Relay	AC/DC 100mV...AC250V 0.5mA...6A 300VA		
	ca. 1.000.000 cycled		
Frequency	Single PTC	Triple PTC	
	1kΩ ±10%	3kΩ ±10%	
Reset resistance	Single	Triple	
	500Ω...600Ω	1.500Ω...1.800Ω	
No. of PTC thermistors in series	1...9		
Weight	< 0.20kg		

Case types

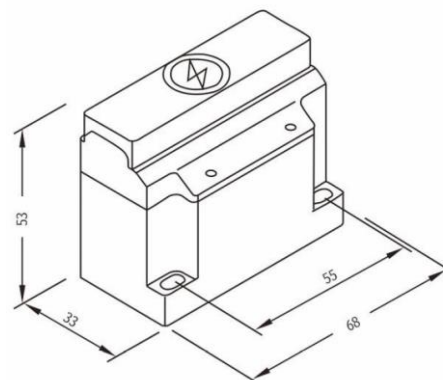
Type 2

Screw-on & DIN rail mounting | case height = 84mm



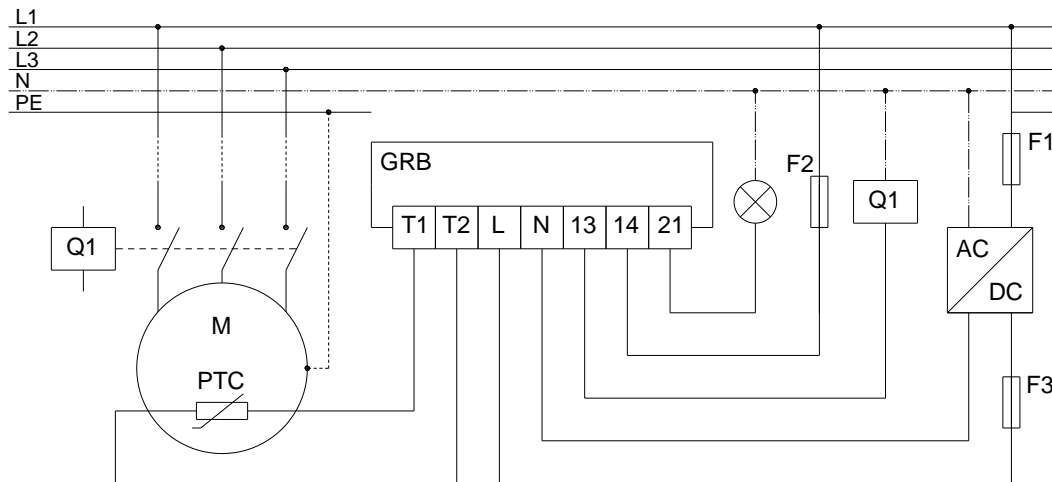
Type 3

Screw-on & DIN rail mounting | case height = 53mm



Changes and errors excepted

Connection reference diagram



Function description

Up to nine PTCs according to DIN VDE V 0898-1-401 (old DIN 44081/82), also with different response temperatures, can be connected in series at a measuring circuit input of the GRB.

It is thus possible to monitor several measuring points with just one GRB trigger device.

If one of the connected PTCs reaches its response temperature, it becomes high-resistance, which causes the tripping device to switch.

After cooling down, the GRB switches back automatically.

The relays are designed as changeover contacts, which means that e.g. optical / acoustic alarms can be switched.

Relay type B of the GRB series works according to the closed-circuit principle, i.e. in the event of a sensor or cable break, the relay falls into the rest position and switches off.

Order code

	GRB	-	2	B	-	220	-	3
Motor overheat protection device:	GRB							
Case type:	Type 2 = case heigh = 84mm Type 3 = case heigh = 53mm							
Relais-Type:	B = 13 & 14 open in the event of an error (closed-circuit principle) C = 13 & 14 close in case of error							
Power supply:	DC 24V AC 110V AC 220V							
Numer of PTCs in series	1...9 PTCs							

Example: GRB-2B-220-3
GRB-3B-220-1