

INT69 TM[®] Motor protector

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INT69 TM

Application

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

The protection unit is composed of the INT69 TM motor protector and the PTC sensors. Due to its compact construction, the INT69 TM is suitable for installation in electrical devices or in the terminal boxes of electrical machines.

Functional description

At the measuring circuit input of the INT69 TM, it is possible to connect up to nine DIN 44081, DIN 44082 conform PTC sensors. Sensors with different nominal response temperatures may be used. Thus it is possible to monitor several measuring points with only one INT69 TM motor protector.

If the temperature in one of the monitored parts or sections reaches the nominal response temperature of the respective PTC sensor, the sensor becomes highly resistive and the motor protector switches off. After cooldown or elimination of the error and a subsequent reset delay, the machine can be restarted.

The relay's switching output is a potential-free changeover contact. This circuit works in accordance with the closed-circuit principle, i.e. even in the event of a sensor or cable break, the relay returns to its rest position and switches off.

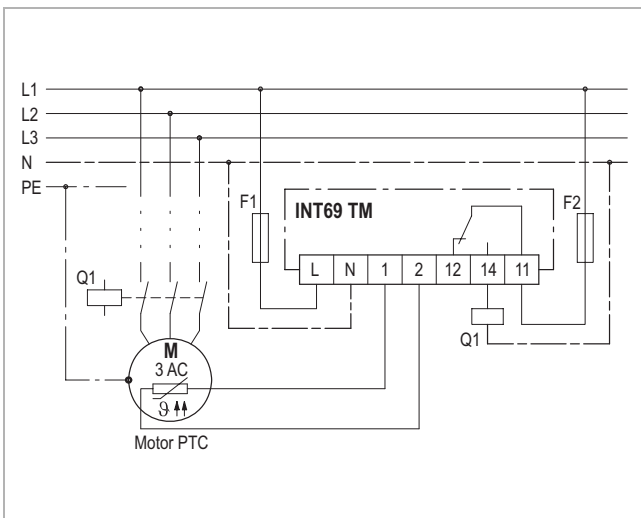
The sensor, relay and supply current circuits are galvanically isolated from each other.



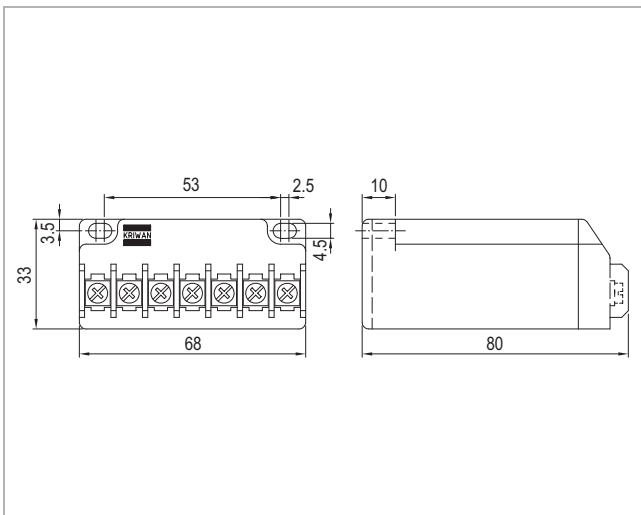
The mounting, maintenance and operation are to be carried out by an electrician. The valid European and national standards for connecting electrical equipment have to be observed.

Connected sensors and connection lines that extend from the terminal box have to feature at least a basic insulation.

See back side for further specifications



Wiring diagram



Dimensions in mm

Technical changes reserved



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Technical specifications

| | |
|---|--|
| Supply voltage | |
| - 22 A 463 S021 | AC 50/60Hz 115-240V ±10% 3VA |
| - 31 A 463 S021 | AC 50/60Hz 24V ±10% 3VA |
| Permitted ambient temperature | -30...+70°C |
| Temperature measuring circuits | |
| - Type | 1-9 PTC sensors acc. to DIN 44081, DIN 44082 in series |
| - $R_{25, total}$ | <1.8k Ω |
| - R_{trip} | 4.5k Ω ±20% |
| - R_{reset} | 2.75k Ω ±20% |
| - Max. length connection line | 30m |
| Reset delay | 5min ±1min |
| Reset of reset delay | Main reset >5s only possible if there is no error current |
| Relay | |
| - Contact | AC 240V 2.5A C300 at least AC/DC 24V 20mA |
| - Mechanical service life | Approx. 1 million switching cycles |
| Protection class acc. to EN 60529 | IP00 |
| Connection type | Screw type terminal |
| Housing material | PA glass-fibre-reinforced |
| Mounting | Can be snapped onto 35mm standard rail acc. to EN 60715 or screw mounted |
| Dimensions | See dimensions in mm |
| Weight | Approx. 200g |
| Check base | EN 61000-6-2, EN 61000-6-3 EN 61010-1 Overvoltage category II Pollution level 2 |
| Approval | UL File No. E75899 cUR _{us} |
| Order data | |
| INT69 TM Motor protector (AC 115-240V) | 22 A 463 S021 |
| INT69 TM Motor protector (AC 24V) | 31 A 463 S021 |
| Accessories and application information | see www.kriwan.com |