Application
The motor protector based on PTC sensors provides one of the most effective and reliable protective measures against thermal overload of electrical machines. The protection device is composed of the INT69 G motor protector and the PTC sensors. Due to its compact construction, the INT69 G is suitable for installation in electrical equipment or in the terminal boxes of electrical machines.

Functional description
At the measuring circuit input of the INT69 G, 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 G 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, restarting is only possible if the electronic lock of the output relay is released by interrupting the voltage supply. Ex works the lock-out bridge is installed at terminals B1-B2. Alternatively the locked version can be changed to an unlocked version by removing bridge B1-B2. In that case the device switches itself on again after the cooldown.

The relay switch output is designed as a potential free change-over contact. This switching circuit function according to the closed-circuit principle, i.e. the relay drops back to the reset position also in case of sensor or cable failure and shuts off.

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

Technical specifications

- **Supply voltage**: AC 50-60Hz 115-230V ±10% 3VA
- **Permitted ambient temperature**: -30...+70°C
- **Temperature measuring circuits**
  - **Type**: 1-9 PTC acc. to DIN 44081, DIN 44082 in series
  - R_\text{total} < 1,8 kΩ
  - R_\text{trip} 4,5 kΩ ±20%
  - R_\text{reset} 2,75 kΩ ±20%
  - Max. length connection line 30m
- **Resetting the lock**: Power off >5s
- **Relay**
  - Contact: AC 240V 2,5A C300 at least AC/DC 24V 20mA
  - Mechanical service life: Approx. 1 mio. switching cycles
- **Protection class acc. to EN 60529**: IP00
- **Connection type**: Flat plug sleeves (PTC), screw terminals
- **Housing material**: PA glass-fibre-reinforced
- **Mounting**: Can be snapped onto 35mm standard rail as per EN 60715 or screw mounted
- **Dimensions**: Refer to dimensions in mm
- **Weight**: Approx. 200g

Order data

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<th>INT69 G</th>
<th>51153</th>
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Accessories and application information: see www.kriwan.com

Application
The mounting, maintenance and operation are to be carried out by an electrician. The valid European and national standards for connecting electrical equipment and cooling installations have to be observed. Connected sensors and connection lines that extend from the terminal box have to feature at least a basic insulation.