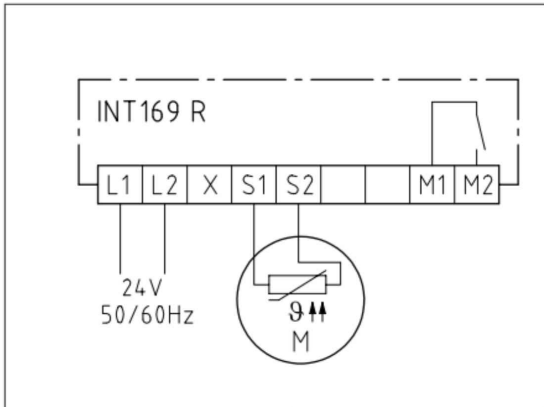


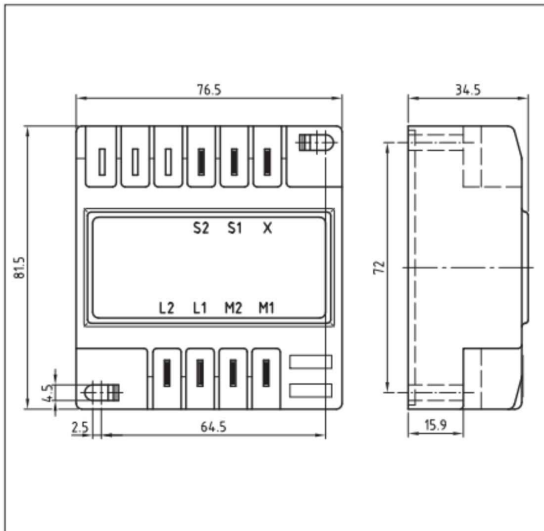
INT169 R[®] Motor protector



INT169 R



Connection diagram



Dimensions in mm

Application:

The INT169 R protection module is designed to protect against:

- excessive motor winding temperatures by monitoring the resistance of positive temperature coefficient (PTC) thermistors embedded in the windings.

- operation at low voltage

A wide ambient temperature range as well as high availability are further positive aspects.

Functional description:

As the winding temperature approaches the design response temperature of the PTC thermistors, the increase in thermistor resistance is sensed by the INT169 R. The output relay drops out immediately and a time delay of 4 minutes (minimum off time) is activated when the response threshold is exceeded or a too fast temperature increase is detected (caused by locked rotor conditions). After these 4 minutes have elapsed and the resistance has dropped below the reset threshold, the output relay is

reenergised and the motor may be restarted. The device also trips out if the voltage drops below a preset level or if a phase is lost. The same 4 minute time delay is activated when the supply voltage recovers, thus preventing contactor chatter under low voltage conditions. The minimum off time can be bypassed by connecting terminal „X“ and „S1“, provided that the fault condition has been corrected. Sensor and mains circuit are galvanically



The unit must be connected by trained electrical personnel. All

valid standards for connecting electrical equipment must be observed.

Technical data

| | |
|-----------------------------------|---------------------------------|
| Supply | AC 50/60Hz 24V ±15% 3VA |
| Ambient temperature range | -40...+70°C |
| Temperature sensor | PTC |
| Number of sensors | 3 (in series) |
| R _{trip} | 30kΩ ± 4kΩ |
| R _{reset} | 10.5kΩ ± 1.5kΩ |
| Time delay (min. off time) | 240s ± 60s |
| Low voltage limits | 16.5V |
| Relay | AC 240V, max. 2.5A, C300 |
| Mechanical service life | approx. 1 mio. switching cycles |
| Housing | PA66 GF25 |
| Protection class acc. to EN 60529 | IP00 |
| Approval | UL File No. E75899 |
| Connection | 6.3mm connectors |
| Mounting | screw-mounted |
| Dimensions | 76.5 x 81.5 x 34.5mm |
| Weight | approx. 200g |

Ordering information

INT169 R with 4min min. off time | 31 A 277 S23

Subject to technical modifications without notice