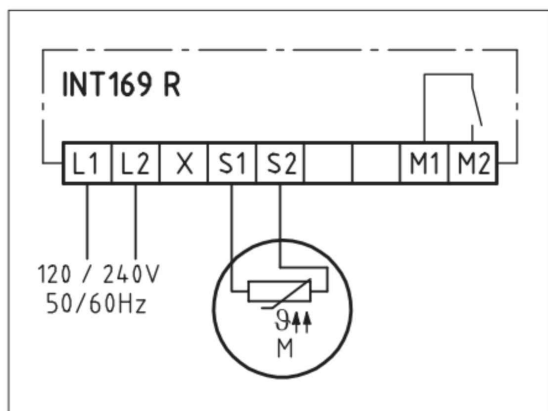


INT169 R[®] Motor protector

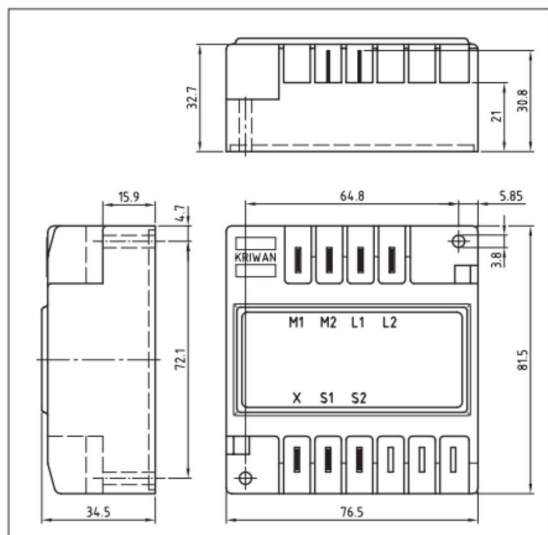
dual voltage



INT169 R



Connection diagram



Dimensions in mm

Application:

The INT369 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

The supply circuit operates on either 120V or 240V, 50/60Hz automatically - no external preselection is necessary. 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 insulated.



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 120/240V -20...+10% 3VA
Ambient temperature range	-40...+70°C
Temperature sensor	PTC to DIN 44081/082
R _{trip}	30kΩ ± 4kΩ
R _{reset}	10.5kΩ ± 1.5kΩ
Time delay (min. off time)	240s ± 40s
Low voltage limits	85V (120V) / 170V (240V)
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	22 A 277
INT169 R without min. off time	22 A 277 S21

Subject to technical modifications without notice