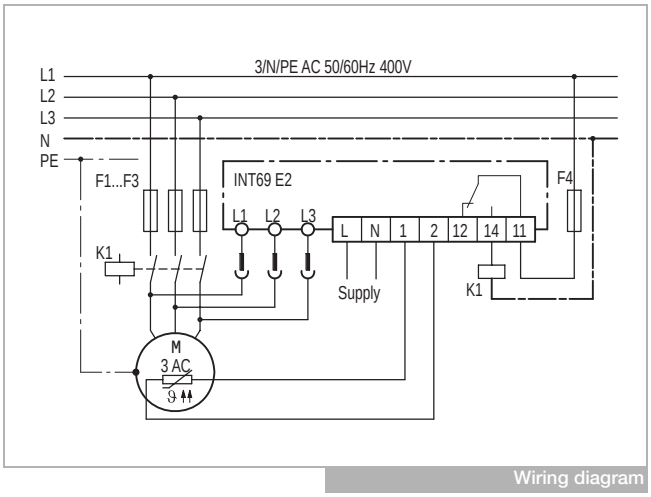
INT69 E2 Motor protector

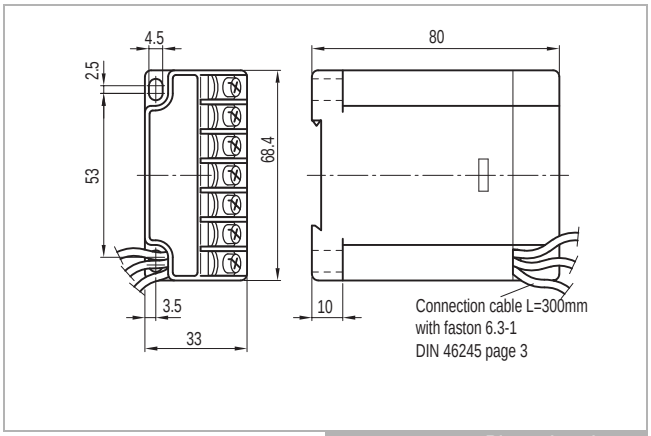
KRIWAN

INT69 E2

INT69 E2



Wiring diagram



Dimensions in mm

⚠ The unit must be connected by trained electrical personnel. All valid European and national standards for connecting electrical equipment and cooling installations must be observed.

Order data

INT69 E2 Motor protector	**25 A 614**

Application

Monitoring of motor temperature, phase sequence and phase failure of motors in refrigerant compressors, in particular during operation with frequency converters.

Functional description

- The INT69 E2 can monitor up to nine PTC thermistors even with differing rated shut-off temperatures. If one or more PTC thermistors become highly resistive, the motor protector switches off. A restart of the motor is done promptly after the motor winding cools down below the reset value. If the shut-off temperature is exceeded three times within two hours, then the shut-off is locked.
- The monitoring of the phase sequence becomes active 1 second after the motor has started, for a time window of 5 seconds. In case of a wrong phase sequence the relay switches off and locks.
- The phase failure detection is active for about 1 second after the motor start until the motor stop. In case of a detected phase failure, the motor is shut off and a restart commences after about 10 seconds. After the fourth shut-off within 20 minutes or at the 11th shut-off within 24 hours, there is a locked shut-off.
- After the motor is shut off, the phase monitoring is inactive for 10 seconds to avoid an unintended shut off by a motor that possibly may be rotating in reverse.
- Locked shut-off due to internal error.
- The lock-out can be removed by a mains reset (>5s).
- Separation between PTC measuring circuit and phase inputs by protective impedance.
- Potential-free change-over contact in closed-circuit principle.
- Broad-range power unit for universal connection possibilities for worldwide application.
- Suitable for frequency converter operation (active filter).

Technical specifications

Supply voltage	AC/DC 50/60Hz 24-240V (UL 230), -25...+10% 2VA
Permitted ambient temperature	-30...+70°C
Temperature measuring circuits	
- Type	PTC, accord. to DIN 44081/082
- Number of sensors	1-9 in series
- $R_{25,total}$	<1.8kΩ
- R_{trip}	11.4kΩ ±20%
- R_{reset}	2.95kΩ ±20%
- Max. length	<30m
Phase monitoring	3 AC 20-100Hz 80-575V ±10%
- Phase sequence	Active about 1 second after motor start for about 5 seconds Lock-out shut-off
- Phase failure	Active about 1 second after the motor start until the motor stop Automatic restart after 10s; Four shut-offs within 20min or 11 shut-offs within 24h leads to a locked shut-off.
- Monitoring inactiv	10 seconds after the motor stop.
Reset of lock-out	Power off >5s
Output relay (change-over contact)	Max. AC 240V 2.5A C300
- AgNi 90/10 + hard gold-plated	Min. 100mV min. 0.5mA After a one-time operation AC/DC >36V or >50mA resistive load: min. AC/DC >24V, >20mA
Mechanical service life	Approx. 1 million switching cycles
Protection class acc. to EN 60529	IP00
Connection type	6.3mm flat plug sleeves and screw terminals
Housing material	PA66, glass-fibre-reinforced
Mounting	To snap open to 35mm standard rail as under EN 60715 or screw mounting
Dimensions [mm]	68.4x33x80 (LxWxH)
Weight	Approx. 120g
Check base	EN 61000-6-2, EN 61000-6-3 EN 61010-1
Approvals	UL File No. E75899

Technical changes reserved

KRIWAN Industrie-Elektronik GmbH · Allmand 11 · D-74670 Forchtenberg · phone ++49-7947-822-0 · fax ++49-7947-1288 · e-mail: info@kriwan.com · home: www.kriwan.com

Product group A
Edition: 710.00367.0