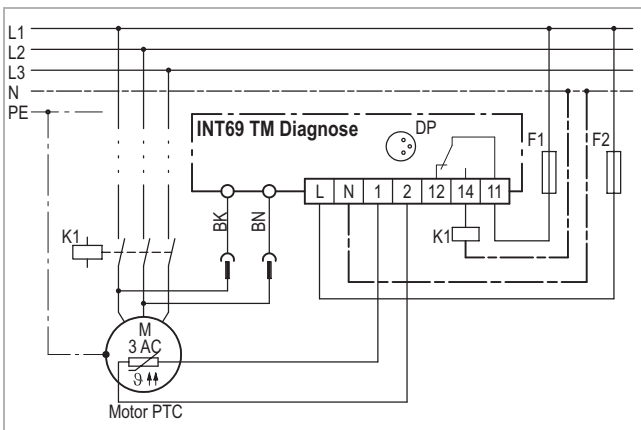


# INT69 TM<sup>®</sup> Diagnose

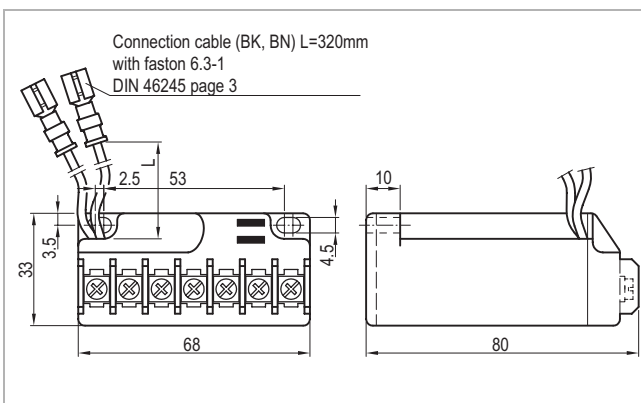
## INT69 TM<sup>®</sup> Diagnose



INT69 TM Diagnose



Wiring diagram



Dimensions in mm

**!** 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.

### Order data

|   |  |
|---|--|
| INT69 TM Diagnose                       | <b>22 A 418 S80</b>                                    |
| Accessories and application information | see <a href="http://www.kriwan.com">www.kriwan.com</a> |

### Application

The motor protector INT69 TM Diagnosis is a further development of the reliable KRIWAN motor protectors. Its supplementary flexible-response protective functions help to improve the availability and extend the service life of a refrigeration system.

The INT69 TM Diagnosis automatically saves operational and error data in a non-volatile memory. This data can be retrieved on a PC and analysed for diagnosis. The full scope of the diagnosis is achieved by using a KRIWAN-specific AMS sensor.

This motor protector is mainly employed on medium and large semi-thermal piston compressors.

### Functional description

The temperature monitoring of the motor winding is done with two evaluation processes:

- Static:** Switch-off is immediate if the nominal response temperature of the built-in AMS or PTC sensors is reached.
- Dynamic:** If the temperature increases unusually quickly, the motor is switched off immediately even if the temperature is still far below the nominal response temperature. This prevents excess temperatures from occurring.

A short circuit at an AMS or PTC input also leads to a switch-off. After cooldown or elimination of the error and a subsequent reset delay, the compressor can be restarted.

For operation in the specified manner, the supply voltage has to be on permanently on the INT69 TM Diagnosis.

### Technical specifications

|                                       |  |
|---------------------------------------|--|
| Supply voltage                        | AC 50/60Hz 115-230V ±10% 3VA   |
| Permitted ambient temperature         | -30...+70°C  |
| Temperature measuring circuits        | 1-2 AMS sensors in series<br>alternative 1-9 PTC acc. to<br>DIN 44081, DIN 44082 in series<br><1.8kΩ |
| - Type                                | 4.5kΩ ±20%<br>2.75kΩ ±20%  |
| - R <sub>25,total</sub>               | 30m  |
| - R <sub>trip, static</sub>           |  |
| - R <sub>reset</sub>                  |  |
| - Max. length connection line         |  |
| Short circuit monitoring system       | Typically <30Ω   |
| PTC                                   |  |
| Input, operating recognition motor    | AC 100V at 20Hz to 175V at 90Hz  |
| - Lower limit                         | AC 460V ±15%   |
| - Upper limit                         |  |
| Operation with frequency converters   | Suitable   |
| Reset delay                           |  |
| - Motor temperature static            | 5min ±1min   |
| - Motor temperature dynamic           | 5min ±1min   |
| Resetting the lock or the reset delay | Main reset >5 sec. only possible if there is no error current  |
| Relay                                 |  |
| - Contact                             | AC 240V 2,5A C300<br>at least AC/DC 24V 20mA   |
| - Mechanical service life             | Approx. 1 million switching cycles   |
| Interface                             | Diagnose port (DP)   |
| Protection class acc. to EN 60529     | IP00   |
| Connection type                       | Flat plug sleeves (operating recognition) screw terminals  |
| Housing material                      | PA glass-fibre-reinforced  |
| Mounting                              | Can be snapped onto 35mm standard rail as per EN60715 or screw mounted                               |
| Dimensions                            | Refer to dimensions in mm  |
| Weight                                | Approx. 200g   |
| Check base                            | EN 61000-6-2, EN 61000-6-3<br>EN 61010-1<br>Overvoltage category II<br>Pollution level 2             |
| Approval                              | UL File No. E75899 ,UR <sub>US</sub>   |

Technical changes reserved