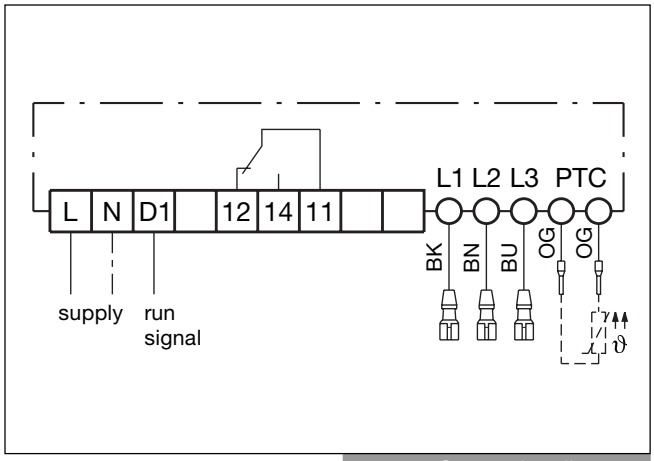
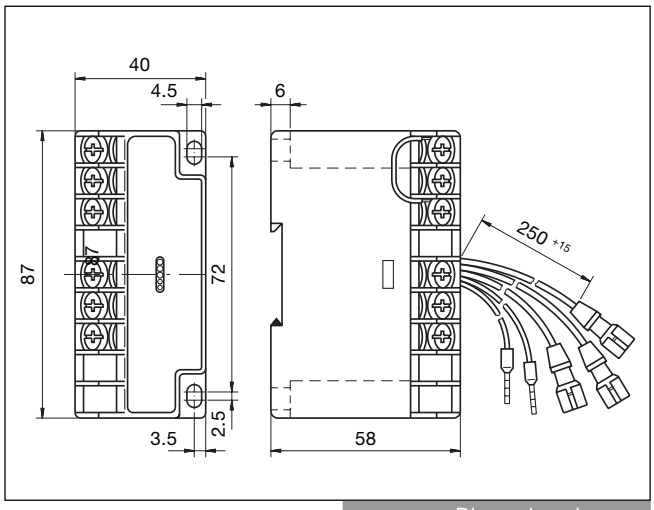
# INT69 VSY-II® Protection module




Connection diagram




Dimensions in mm

## Application:

The KRIWAN INT69 VSY-II protection module complements the convential temperature monitoring function of the well-known switching device INT69 VS with phase sequence monitoring (Y) for screw and scroll compressors.

## Functional description:

If the response temperature of any of the connected thermistors is exceeded, the module trips and locks out. The phase sequence monitor on the three-phase supply is active when the supply voltage is also present on terminal D1 (typically via contactor auxiliary contact). An anticlockwise phase sequence also results in a trip and lockout. The D1 input allows the user to suppress reverse rotation tripping due to pressure equalisation after shut down on screw compressors. The lockout can be cancelled by interrupting mains supply for approx. 5 seconds.

⚠ The unit must be connected by trained electrical personnel. All valid standards for connecting electrical equipment must be observed. Limit values for the supply voltage of the unit may not be exceeded.

## Technical data

| | |
|---|---|
| Supply voltage | AC 50/60Hz 230V ± 10% 3VA |
| Ambient temperature range | -20...+60°C |
| Measuring circuit: | |
| - type of sensors | PTC-thermistors acc. to DIN 44081/082 |
| - number of sensors | 1...9 in series, $R_{25\ total}$ < 1.8kΩ |
| - switching point | relay off: > 11.4kΩ ± 20%<br>relay on: < 2.95kΩ ± 20% |
| - connection | orange leads, with ferrules length approx. 300mm |
| Phase sequence monitoring: | |
| - operation recognition | L-potential on terminal D1 |
| - motor voltage | AC 20...80Hz 200...400V |
| - L1, L2, L3 connection | AWG20-leads (BK/BN/BU) length approx. 250mm with 6.3mm connectors |
| - recog. time phase sequence | < 0.5s |
| Relay | AC 250V, max. 5A, 300VA ind. |
| Mechanical service life | ca. 1 mio. switching cycles |
| Housing | PA6 GF30 |
| Protection class acc. to EN 60529 | with terminal cover: IP20<br>without terminal cover: IP00 |
| Mounting | snap-on 35mm standard rail acc. to DIN EN 50022 or screw-mounted |
| Dimensions with terminal cover | 87 x 40 x 58mm |
| Weight | approx. 210g |
| Works setting | jumper between L and D1 |
| **Part-No.** | **52 A 125 S33** |

Other supply voltages on request

## Function table:

| Temperature | phase sequence | contact D1 | alarm | comment |
|---|---|---|---|---|
| < trip value | / | inactive | good | phase sequence is not evaluated |
| > trip value | / | inactive | fault | trip PTC fault, phase sequence is not evaluated |
| < trip value | clockwise or inactive | active | good | normal condition |
| > trip value | clockwise or inactive | active | fault | trip due to PTC fault |
| < trip value | anti-clockwise | active | fault | trip due to phase sequence |
| > trip value | anti-clockwise | active | fault | trip due to fault of PTC and phase sequence |

Subject to technical modifications without notice

Product group A

Edition: 690.00071.1

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