INT69 VSY-II® Protection module
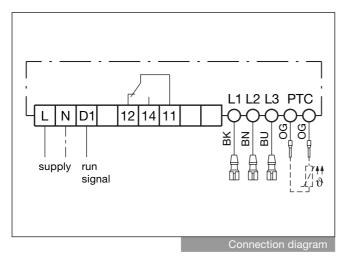
KRIWAN

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% 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 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

Subject to technical modifications without notice

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