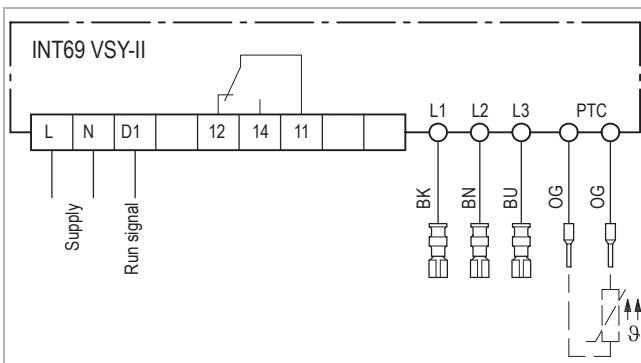


INT69 VSY-II® Protection module

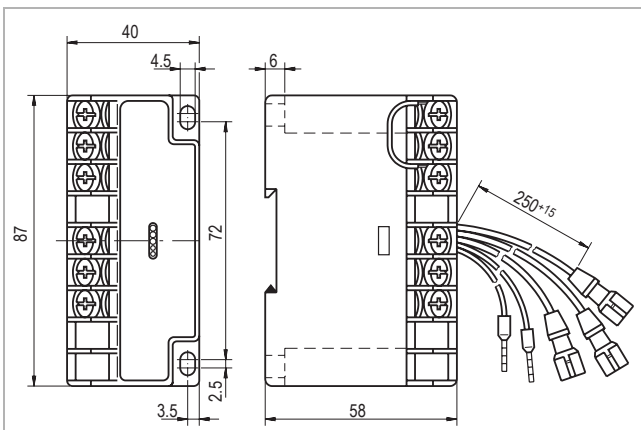
INT69 VSY-II®



INT69 VSY-II



Wiring diagram



Dimensions in mm

Function table

Temperature	Phase sequenz	Contact D1	Alarm	Status
< Trip value	/	Inactiv	Good	Phase sequenz is not elevated
> Trip value	/	Inactiv	Fault	Trip due to PTC-fault, phase sequenz is not elevated
< Trip value	Clockwise or inactiv	Activ	Good	Normal condition
> Trip value	Clockwise or inactiv	Activ	Fault	Trip due to PTC-fault
< Trip value	Anti-clockwise	Activ	Fault	Trip due to phase sequenz
> Trip value	Anti-clockwise	Activ	Fault	Trip due to PTC-fault and phase sequenz

Application

The KRIWAN INT69 VSY-II protection module complements the conventional 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 shutdown on screw compressors. The lockout can be cancelled by interrupting mains supply for approx. 5 seconds.

⚠ 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.

No galvanic isolation between sensor and supply circuits for direct current units.

Technical specifications

Supply voltage	AC 115V 50/60Hz ±10% 3VA
or	AC 230V 50/60Hz ±10% 3VA
or	AC 24V 50/60Hz -15...+10% 3VA
or	DC 24V ±20% 1W
Permitted ambient temperature	-20...+60°C
Temperature measuring circuits	
- Type	1-9 PTC acc. to DIN 44081/082 in series
- R _{25,total}	<1,8kΩ
- R _{trip, static}	>11,4kΩ ±20%
- R _{reset}	<2,95kΩ ±20%
- Thermistor connection	Orange leads, with ferrules length approx. 300mm
Phase sequence monitoring	
- Operating recognition	L-potential on terminal D1
- Motor voltage	AC 20-80Hz 200-400V Sinus
- L1, L2, L3 connection	AWG20-leads (BK/BN/BU) length approx. 250mm with 6,3mm flat plug sleeves
- Recognition time phase sequence	<0,5s
Relay	AC 240V max.2,5A C300
Mechanical service life	Approx. 1 million switching cycles
Protection class acc. to EN 60529	With terminal cover: IP20 Without terminal cover: IP00
Housing material	PA glass-fibre-reinforced
Mounting	To snap open to 35mm standard rail as under EN 50022 or screw mounting
Dimensions [mm]	87x40x58 (LxWxH)
Weight	Approx. 210g
Manufactory setting	Jumper between L and D1

Order data

INT69 VSY-II	52 A 125 S33	(AC 230V)
INT69 VSY-II	41 A 125 S33	(AC 115V)
INT69 VSY-II	31 A 125 S33	(AC 24V)
INT69 VSY-II	13 A 125 S33	(DC 24V)
INT69 VSY-II Phase sequenz monitoring for 10s	13 A 125 S35	(DC 24V)

Technical changes reserved