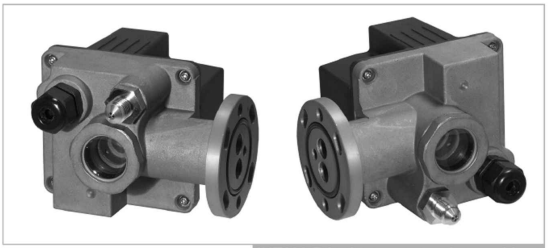
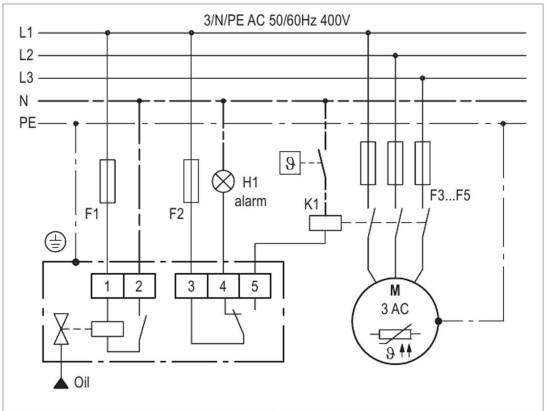
INT280 B® Oil level regulator

KRIWAN

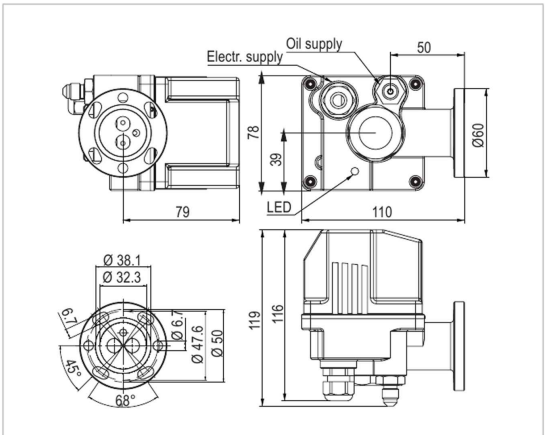
INT280 B®



INT280 B in the two mounting positions



Wiring diagram



Dimensions in mm

⚠ The user has to ensure that the connections are properly tight. The electrical connection needs to be carried out according to the wiring diagram.

⚠ 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.

Application

The INT280 B monitors and controls the oil level in the refrigerant compressors. In particular, the problem of bad oil distribution in multi-compressor packs is solved, thanks to active oil supply from a shared oilreservoir. The oil level regulator keeps the oil level at half the height of the sight glass.

Functional description

If the optical monitoring unit detects that the oil level is low, the integrated oil supply solenoid valve is activated by the electronics. Via the solenoid valve, oil is cyclically injected into the compressor crankcase. The INT280 B generates an alarm signal and activates the relay output if the oil level is still too low after a defined period of time. During the "oil deficiency" alarm status, the electronics of the INT280 B continues to operate the solenoid valve, in order to inject oil into the crankcase. The alarm status is automatically reset if the oil level is at half the height of the sight glass.

LED status display

Level OK	Green illuminates
Filling	Green flashes
Oil level too low	Red illuminates
Internal error	Red flashes

Technical specifications

Supply voltage	
- 31 S 381 S31	AC 50/60Hz 24V ±10% 15VA
- 41 S 381 S31	AC 50/60Hz 115V ±10% 15VA
- 52 S 381 S31	AC 50/60Hz 230V ±10% 15VA
Permitted ambient temperature	-30...+60°C
Permitted rel. humidity	10-95% r.h. without condensation
Medium temperature	-30...+100°C
Operating pressure	-1...+50bar
Test pressure	75bar
Differential pressure	1-25bar (across valve)
Relay	
- Contact	AC 240V 2.5A C300 at least AC/DC 24V 20mA
- Mechanical service life	Approx. 1 million switching cycles
Connection type	Screw type terminal
Protection class acc. to EN 60529	IP65
Housing material	Aluminium PA glass-fibre-reinforced
Flange connection	3- /4- hole
Oil connection	7/16"-20 UNF
Flow rate through valve at 1bar differential pressure	1 ltr./min. (water 20°C)
Permitted oils	Standard mineral and ester oil, without additives
Permitted refrigerants	All non-corrosive, non-flammable standard refrigerants
Mounting position	Horizontal (180° rotatable), ±2°
Dimensions	Refer to dimensions in mm
Weight	Approx. 800g
Check base	EN 61000-6-2, EN 61000-6-3, EN 61010-1

Order data

INT280 B Oil level regulator (AC 24V)	**31 S 381 S31**
INT280 B Oil level regulator (AC 115V)	**41 S 381 S31**
INT280 B Oil level regulator (AC 230V)	**52 S 381 S31**

Technical changes reserved

Product group S

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