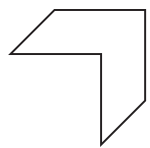


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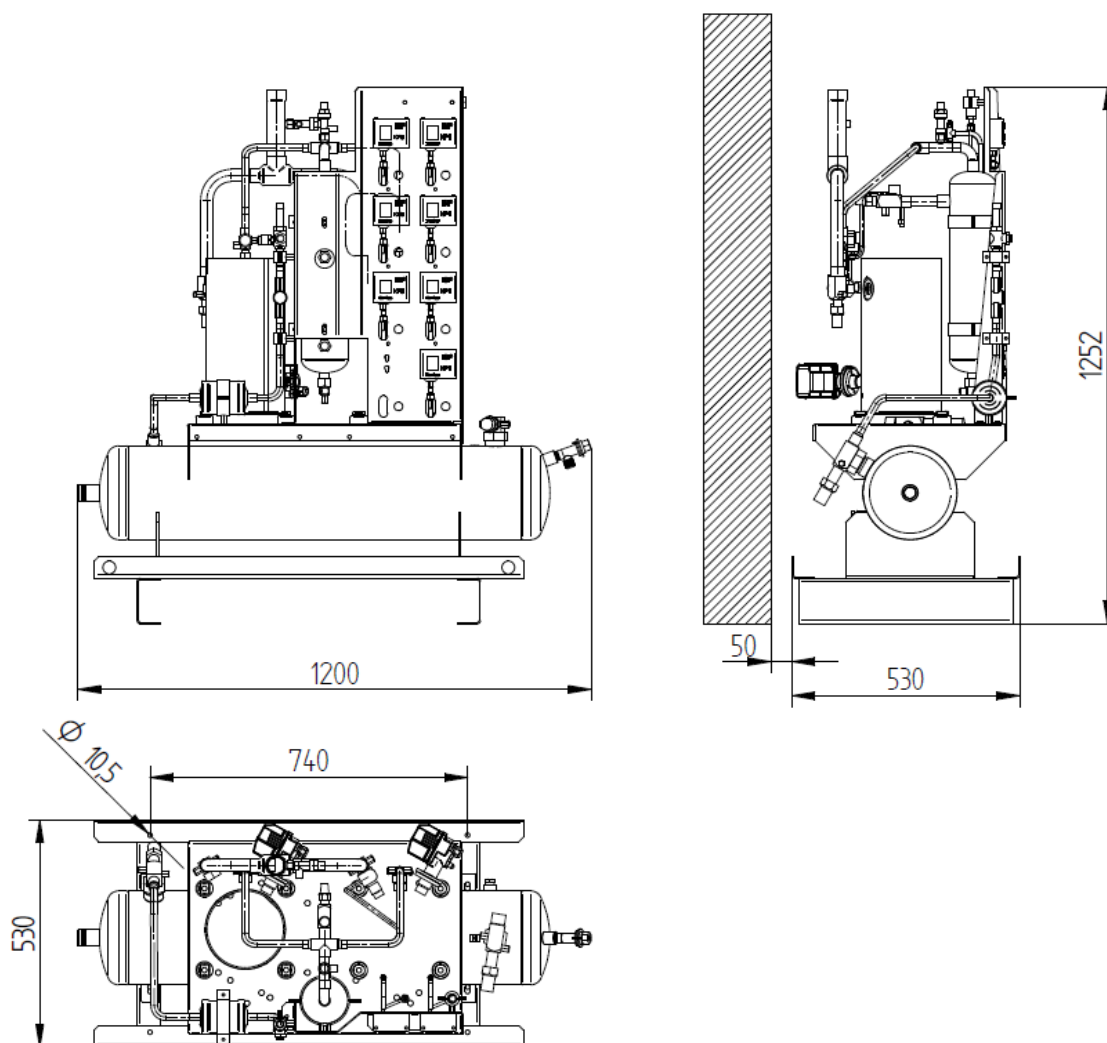
Operating instructions



Cooling solutions, delivered with care.

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Dimensional characteristics



Technical data

Model	Fluid	Cooling capacity [KW] (*)	Input power [KW] (*)	I [A] (*)	I max.	I dem [A]	Input power max.[KW] (*)	Lp [dB(A)]	Lp [dB(A)] with sound shell	Weight [Kg]
ZBD30+ZB30	R404A	14.4	6.0	10.4	15.8	59.4	9.1	41	35	196
	R407A	14.3	5.8	13.6			9.1			
	R407F	14.4	5.8	10.3			8.5			
ZBD45+ZB45	R404A	21.1	8.7	15.6	24.2	86.1	13.6	43	37	200
	R407A	19.7	8.1	16.4			12.62			
	R407F	21.2	8.5	15.1			12.8			

(*) Evaporating temperature : -10°C – Condensing temperature : 42°C- Superheat : 10K - Subcooling: 3K

Please refer to the associated commercial and/or software documentation for further details.

Appendix 1: Installation log sheet

Company:		Date			
Technician:					
Unit	Suction pressure	bar			
	Suction temperature	°C			
	Delivery pressure	bar			
	Power supply voltage (uu, uv, uw)	V			
	Cut-out value HP pressure switch	bar			
	Cut-out value LP pressure switch	bar			
Compressor 1	Input amperage (u, v, w)	A			
	Delivery temperature	°C			
	Crankcase heater in good working order	Y/N			
	Oil level (full ¾ ½ ¼)				
Compressor 2	Input amperage (u, v, w)	A			
	Delivery temperature	°C			
	Crankcase heater in good working order	Y/N			
	Oil level (full ¾ ½ ¼)				
Refrigerant Circuit	Presence of humidity	Y/N			
	Pump down working correctly	Y/N			
	Refrigerant safety devices working correctly	Y/N			
	Hoses in good state	Y/N			
	Circuit sealing	Y/N			
Electrical Cabinet	Connections properly tightened	Y/N			
	Electrical safety devices working correctly	Y/N			

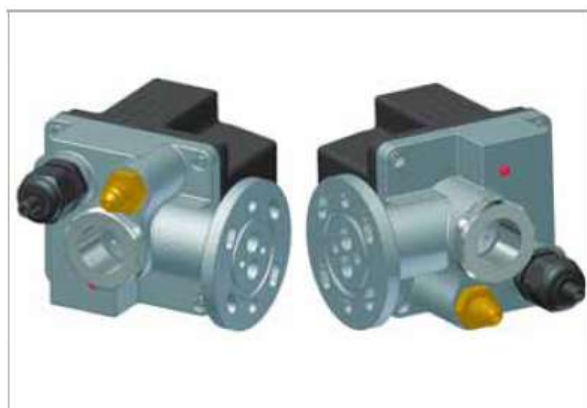
Remarks:

Appendix 2 : Operating instructions for oil management system series "INT 280 230V"

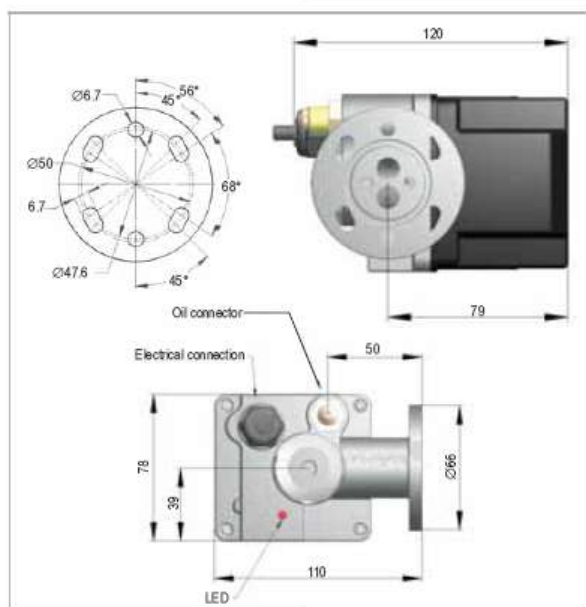


INT280® Oil level regulator

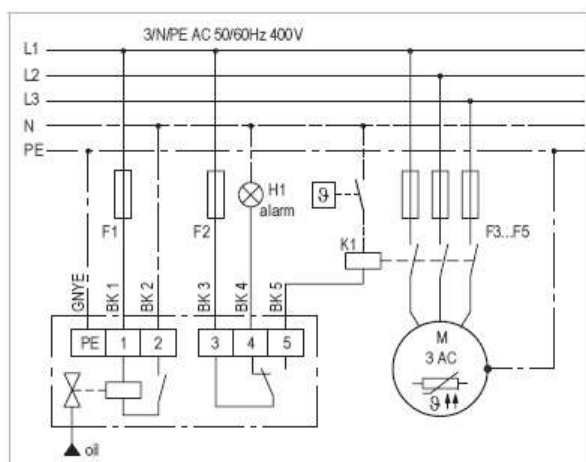
INT280®



INT280 in the two mounting positions



Dimensions in mm



Wiring diagram (suggestion)

Application

The INT280 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 oil reservoir. 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 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 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 is continuously lit
Filling	Green flashes
Oil level too low	Red is continuously lit
Internal error	Red flashes

Installation instructions

The user has to ensure that the flange is properly tight. The electrical connection needs to be carried out according to the wiring diagram.

The unit must be connected by trained electrical personnel. All valid European and national standards for connecting electrical equipment must be observed.

Technical specifications

Supply voltage	AC 24V 50/60Hz $\pm 10\%$, 15VA AC 115V 50/60Hz $\pm 10\%$, 15VA AC 230V 50/60Hz $\pm 10\%$, 15VA
Permitted ambient temperature	-30...+60°C
Medium temperature	-30...+100°C
Operating pressure	-1...46bar
Differential pressure	1...25bar (across valve)
Relay	AC 240V, 2.5A, C300
Mechanical service life	Approx. 10 ⁶ switching cycles
Protection class acc. to EN 60529	IP65
Connecting cable	6xAWG18 (0.75mm ²), length 1m
Housing material	Aluminium PA66/PA6, glass-fibre-reinforced
Flange connection	3- /4- hole flange
Oil connection	7/16"-20 UNF
Permitted oils	Standard mineral and ester oil, without additives
Permitted refrigerants	All non-corrosive standard refrigerants
Dimensions	Refer to dimensions
Weight	Approx. 950g

Order data

AC 24V	31 S 381
AC 115V	41 S 381
AC 230V	52 S 381



LFB France

42 rue Roger Salengro - BP 205
69741 GENAS CEDEX - FRANCE

Tél. : +33 4 72 47 13 00 - Fax : +33 4 72 47 13 96
friga-bohn.lennoxemea.com

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