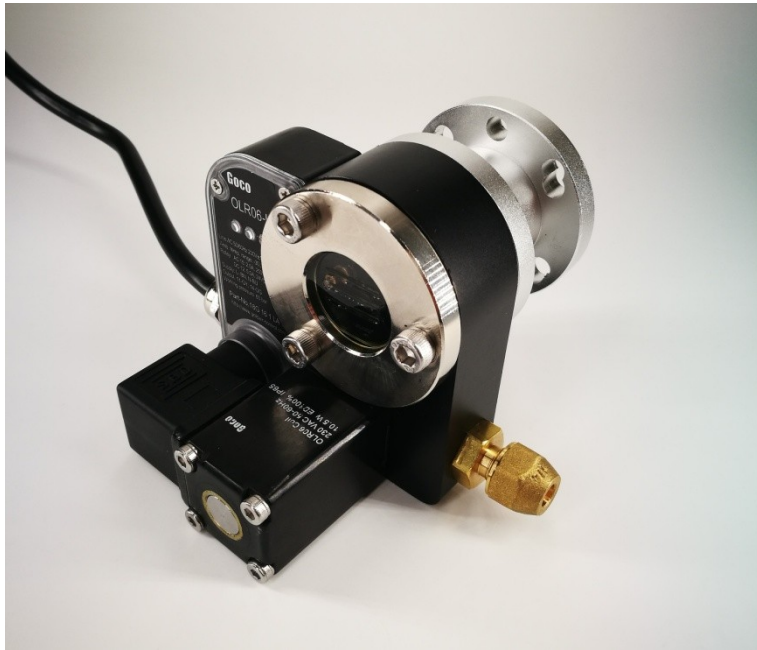


OUT680 Oil Level Regulator



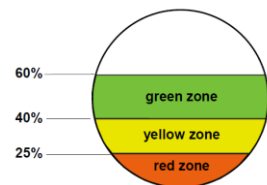
OUT680 monitors and controls the oil level in the refrigerant compressors. In particular, the problem of bad oil distribution in multi-compressor packs is solved, thanks to active oil supply from a shared oil reservoir. The oil level regulator keeps the oil level between 40% to 60% height of the sight glass.

Features

- 3 Zone level Control by using precise Hall-Sensor measurement, not prone to errors by foaming or light like optical sensors.
- Alarm, status and level indication by LED's
- Easy installation by sight-glass replacement and front side mounting without nuts
- High quality integral solenoid valve and High anti-fouling;
- Self contained unit with oil level sensor and integral solenoid to manage oil level supply
- Inlet filter, oil optic mirror, filling valve removable cleaning
- Applicable to HIGH and LOW pressure oil management system;
- Adapters suitable for various types of compressors
-

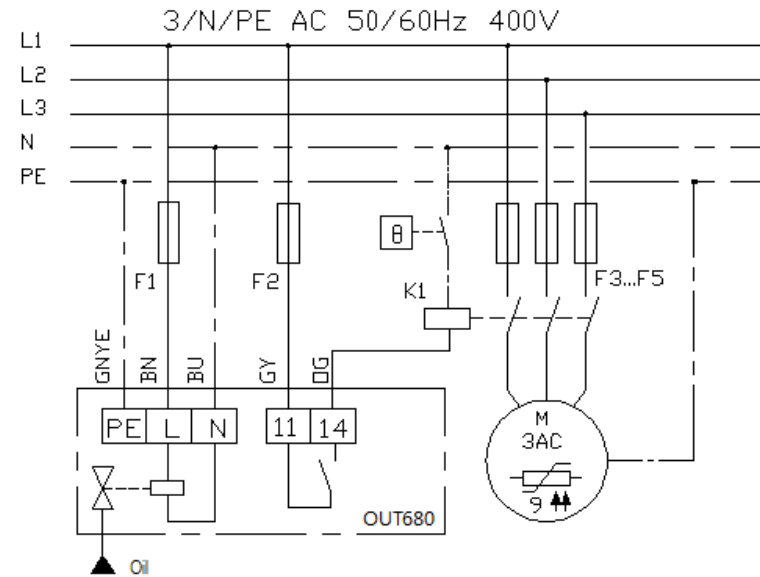
Functional description

OUT680 uses a Hall-Sensor to measure the oil level. A magnetic float changes its position according to the oil level, not prone to errors by foaming or light. The hall sensor converts these magnetic field changes into an equivalent signal, which is used by the electronic controller to open or close an integrated solenoid valve which feeds missing oil direct into the compressor sump. If the oil level drops into the red zone OUT680 generates and alarm signal and the alarm contact (SPNO) changes into alarm state. The latter may be used to shut down the compressor. In the Alarm status the OUT680 is still feeding oil into the compressor. If the oil level comes back to normal, the alarm will be reset.

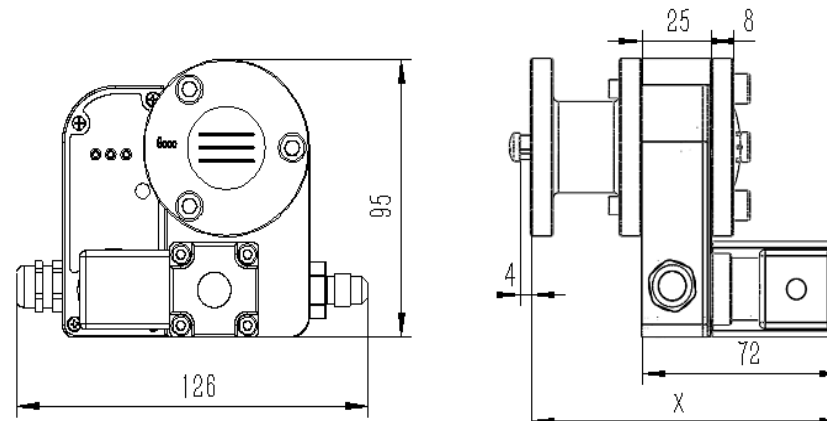


LEDs	Status / Function	Function	Alarm
●	Oil Level in green zone (60 - 40%)		
● ●	Oil Level in green zone (60 - 40%)	Injection, delay 10s	
● ●	Oil Level in yellow zone (40 - 25%)	Injection	
● ●	Oil Level in red zone (25 - 0%)	Injection	Yes, delay 20s or 120s

Wiring diagram (suggestion)



Dimensions in mm



Installation instructions

- Before the OUT680 is switched on for the first time, the oil level should already be at 1/4 to 1/2 of the sight glass.
- Prior to installation, ensure that the O-ring at the connecting flange is seated properly.
- The electrical connection needs to be carried out with correct supply voltage and frequency according to the wiring diagram.
- For use at low temperatures, an oil sump heater has to be installed, to ensure trouble-free operation of the device.
- An oil filter has to be installed in the oil infeed line of the OUT680, to prevent the solenoid valve seat from getting dirty.

Technical specifications

Supply voltages(see type plate)	AC 50/60Hz 230V±10% 18VA AC 50/60Hz 24V±10% 18VA
Permitted ambient temperature	-30...+60°C
Permitted rel. humidity	10...95%, without condensation
Medium temperature	-30...+100°C
Operating pressure	-1...46bar
Test pressure	69bar
Max. differential pressure	30bar
Output relay	AC 240V,2.5A, C300; > 24V AC/DC > 20mA
Mechanical service life	Approx. 3x10 ⁶ switching cycles
Connecting cable	5xAWG20 (0.5mm ²) ; length 1m, colour coded and numbered+GNYE
Protection class	IP65
Housing material	Aluminium; PA66/PA6+GF
Flange connection	3-/4-hole flange
Oil connection	7/16"-20 UNF
Permitted oils	Standard mineral and ester oil, without additive
Permitted refrigerants	HFC,HCFC,CFC,CO ₂
Mounting position	Horizontal, ±1°
Weight	Approx. 950g

Scope of supply

- OUT680 Oil Level Regulator
- O-ring for flange (Cr 70A; 10.82*1.78、 32.99*2.62)
- 7/16"-20 UNF SAE 37° Flared nut for oil connection

Order data

Supply voltage (V)	Order No.
AC 50/60Hz 230V ±10%	15G16 680 01
AC 50/60Hz 24V ±10%	15G16 680 03