

OLC-K1 Optical Level Switch | Sensor | Part-No.34731706



OLC-K1

Functional description

The relay trips 3 seconds after connecting the supply voltage. A starting transition time is started for a defined time via input D1. After the end of this time, the level status is monitored. If no oil level is detected or if sponding LED status display. The built in LED flashes when there is an error and lights up steadily at missing level. The potential-free, normally open contact can be looped into a safety circuit without an auxiliary relay. An interruption of the supply voltage cancels the locked state again. An installation check monitors the proper assembly.

Flash code of the red LED

10Hz flashing: Internal error
 Voltage supply too low
 Not screwed into screw-in part

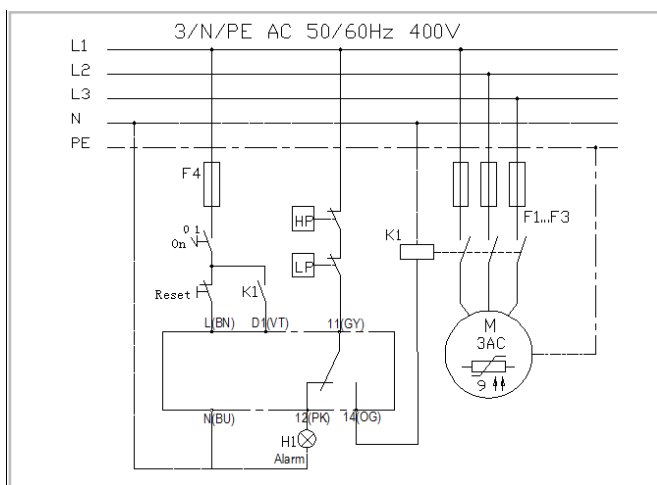
Continuous light: Level missing
 Off: Level good, no fault

Installation instructions

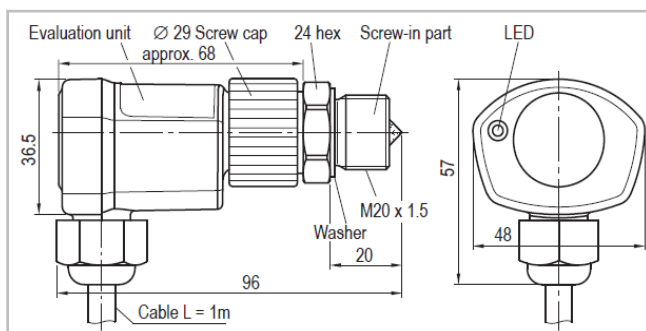
Mounting: The maximum torque of the screw-in unit is about 75Nm and has to be ensured by a ring spanner or a socket key. The mounting for the electronics(especially the glass) needs to be checked for cleanliness. After mounting the proper sealing has to be checked. Follow the rules when working on refrigeration systems! Insert the evaluation unit in the screw-in unit and screw tight by hand with the coupling ring(torque about 10Nm). Make sure that the cable outlet points down. The electrical connection needs to be carried out according to the proposal in the wiring diagram.



The mounting, maintenance and operation are to be carried out by an electrician.



wiring diagram



Dimensions in mm

Application

The OLC-K1 optical level switch | sensor is used for contactless monitoring of the liquid level in compressors. This is accomplished by a screw-in unit installed at the measuring point for optical level scanning as well as an electronic, removable evaluation unit. The evaluation unit can be replaced without opening the reservoir of the monitored media.

Technical specifications

Screw-in unit	
Max. Medium temperature	+120°C
Max. Operating pressure	50bar
Housing material	Steel nickel-plated
Weight	Approx.150g
Connection thread	M20x1.5mm short
Evaluation unit	
Supply voltage	AC 50/60Hz 115-230V±10% 3VA
Operating recognition(D1)	AC 50/60Hz 115-230V±10%
Permitted ambient temperature	-30...+60°C
Delays:	
-The relay trips after connecting the supply voltage(D1 active)	3s±1s
-Level monitoring after starting transition time(D1 active)	90±5S(time integration)
-Relay off(level missing)	5s±2s, locked
-Relay off(error)	5s±2s, locked
-Reset by interrupting the supply voltage	>3S
Output relay	Max,AC 240V 2.5A, C300 Min,AC/DC>24V>20mA
Mechanical service life	Approx.1 million switching cycles
Connection type	Cable 6xAWG-18(0.75mm ²), L=1m, colure coded
Protection class acc. To EN60529	IP54 in built-in status
Housing material	PA glass-fibre-reinforced
Mounting	Union nut
Weight	Approx. 220g
Order No.	16G 15 OLC 05