

DELTA-P Oil Differential Pressure Switch



DELTA-P

Application:

Monitoring of oil differential pressure in refrigeration compressors. This is particularly important in multi-compressor packs due to the varying pressure conditions. The screw-in part of the DELTA-P switch is mounted directly into the pump housing; internal chan-

nels link the switch to the suction and discharge ports of the pump. No capillary connections are necessary. The electrical part of the switch can be fitted or removed without opening the refrigeration circuit.

Functional description:

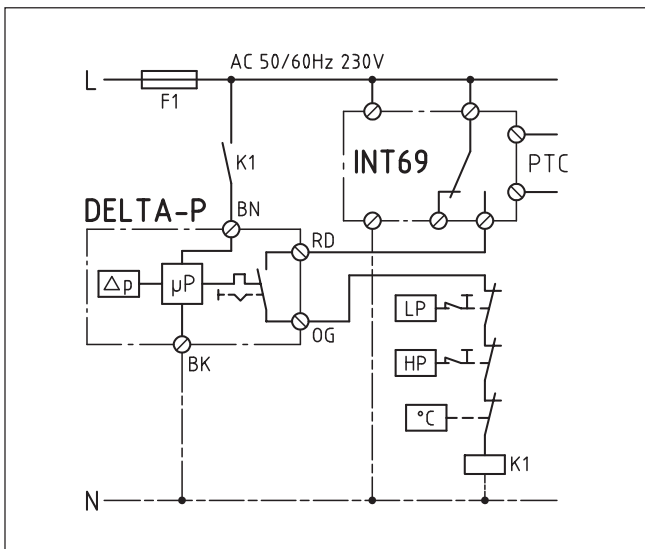
The differential pressure monitor is activated when the supply voltage is applied via an auxiliary contact of the motor contactor K1. A red LED signals insufficient differential oil pressure immediately. Once the preset value has been reached, this LED is extinguished. The output contact remains closed when the set value is reached / exceeded. If the oil differential pressure remains or

drops below the set value for longer than the delay time, the output contact opens and locks out mechanically. The switch can be reactivated by depressing the reset button. Shorter periods of insufficient differential pressure are also recognised by the internal microprocessor circuitry and lead to a trip and lockout after a correspondingly extended delay time (integration).



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

Limit values for the supply voltage of the unit may not be exceeded. The oil differential pressure switch needs no maintenance.



Connection diagram

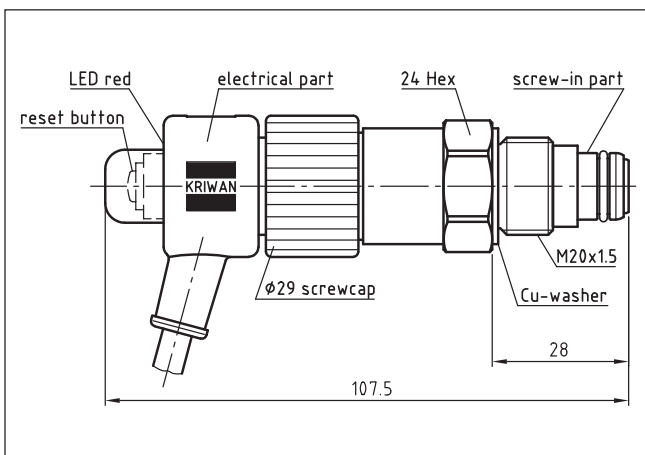
Technical data

Supply *)	AC 50/60Hz 230V ± 10% 10VA
Ambient temperature range	-30...+60°C
Time delay	see ordering information
Differential pressure *) (fixed)	0.65bar ± 0.15bar
Switching capacity	AC 250V, max. 2.5A, 720VA ind.
Refrigerant compatibility	yes (brass)
Protection class acc.to EN 60529	IP54 when mounted and cable output downwards
Approval	UL
Reset	mechanical / manual
Connection cable	4xAWG18 (0.75mm ²), L=1m colour coded cores
Weight	approx. 200g

Ordering information

DELTA-P Oil Pressure Switch, 90s time delay *)	52 D 555 S60
consisting of:	
screw-in part	02 D 555
electrical part	52 S 555 S60
DELTA-P Oil Pressure Switch, 120s time delay *)	52 D 554 S60
consisting of:	
screw-in part	02 D 555
electrical part	52 S 444 S60

*) other values available on request



Dimensions in mm

Subject to technical modifications without notice