

OUT360R-D 系列油(液)位监视器 Oil Level Monitoring



应用 Application

OUT360R-D 系列油(液)位监视器适用于:

储油式油分离器的低/高油位监视

储液器, 排液桶的高/低液位监视

当容器内的油位过低/过高时进行保护

OUT360R-D 安装在容器的低位/高位保护监视点, 利用摆臂原理监测油位, 把实际的油(液)位通过高精度霍尔传感器反馈给微处理器, 运算后控制继电器干接点输出。

接通电源后继电器吸合, 上部绿色 LED 点亮。

OUT360R-D1: 当油(液)位低于油视镜的中心线时, 下部黄色 LED 点亮, 延时 10 秒 $\pm$ 2 秒, 继电器断开并上部绿色 LED 灭; 当油位恢复后(高于中心线), 黄色 LED 灯熄灭, 继电器延时 3S 后再次吸合, 并绿色 LED 点亮。

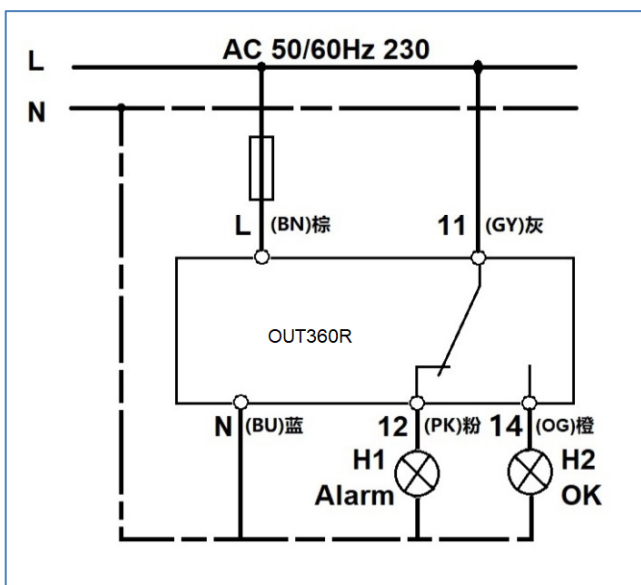
OUT360R-D2: 当油(液)位高于油视镜的中心线时, 下部黄色 LED 点亮, 延时 10 秒 $\pm$ 2 秒, 继电器断开并上部绿色 LED 灭; 当油位恢复后(低于中心线), 黄色 LED 灯熄灭, 继电器延时 3S 后再次吸合, 并绿色 LED 点亮。

OUT360R-D is intended for systems requiring oil level monitoring and alarm, mainly used for Oil separator, reservoir, and Drain tank, etc..

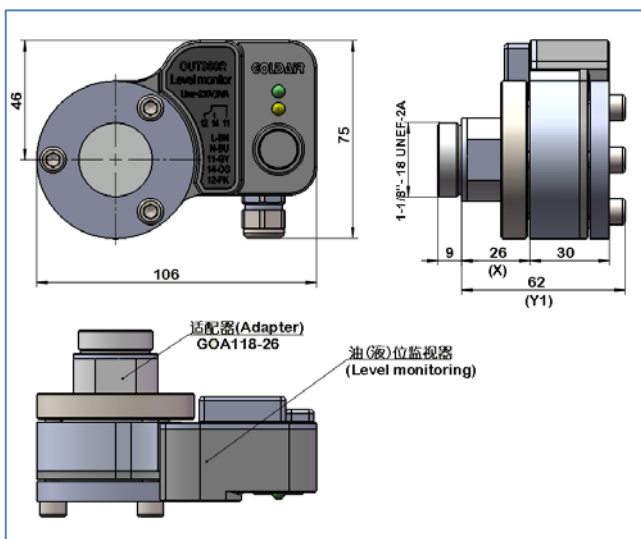
OUT360R-D1 uses a Hall-Sensor to measure the oil level. Unaffected from foaming oil or light a magnetic float changes its position according to the oil level. The hall sensor converts these magnetic field changes into an equivalent signal, which is used by the integrated electronic controller to monitor the actual oil level by LEDs. If the oil level drops into the yellow zone and after a delay time of 10s, OUT360R-D1 generates an alarm signal, the alarm contact (SPDT) changes into alarm state and the green Led OFF. If the oil level comes back to normal, the Alarm will be reset.

OUT360R-D2 mainly used for high oil level monitoring.

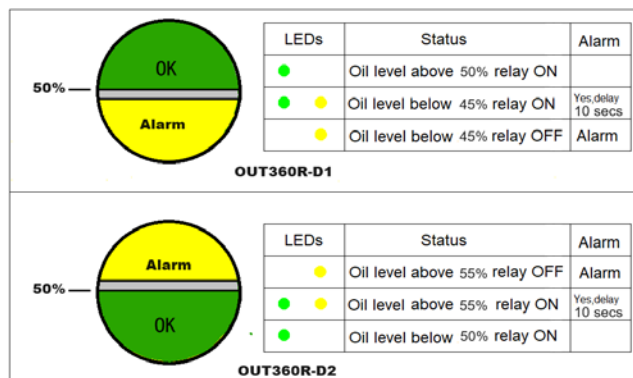
接线原理图 Wiring diagram



外形尺寸图 1 Dimension drawing1 [mm]



指示灯示例 Sight-Glass Level Control Zones

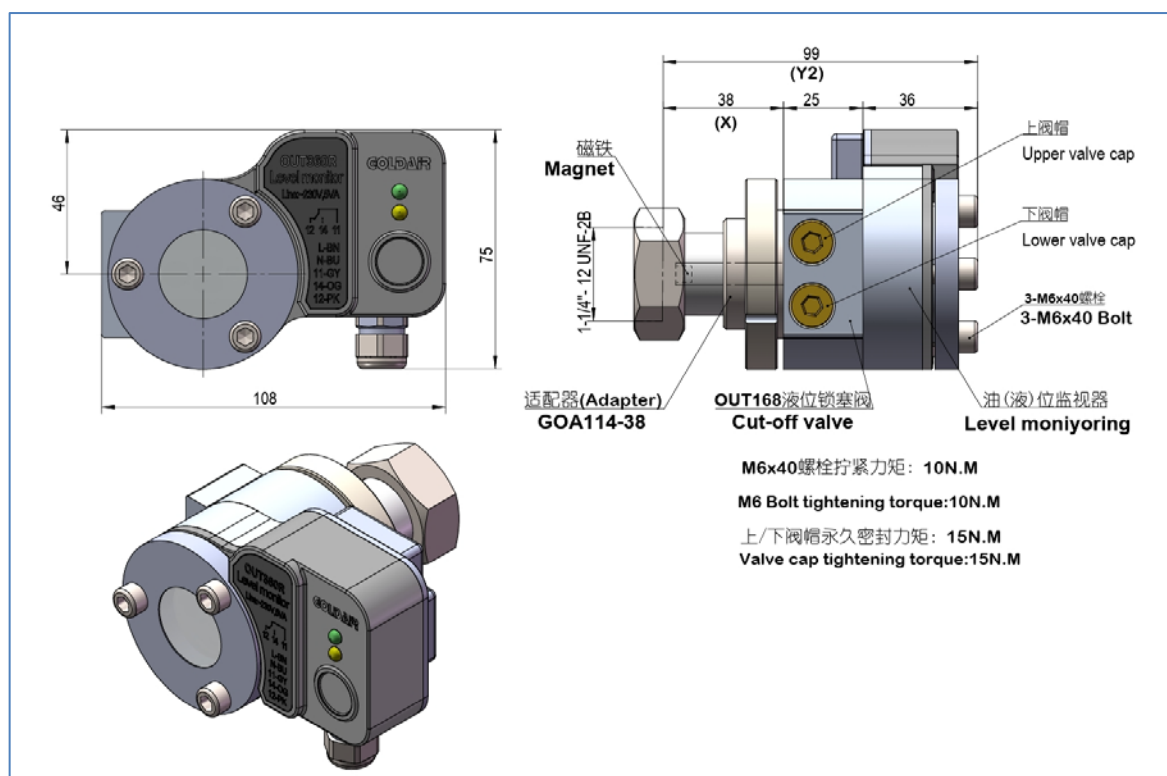


技术参数 Technical Data

供电电压 Supply voltage	AC 50/60Hz 230V+15%...-20% 3VA
环境/储存温度 Ambient/Storage temperature	-30...+70°C
湿度 Humidity	10...95%, 无凝露 No condensation
介质最高温度 Medium High temperature	Max.+100°C, Max.+120°C(<720h)
介质最低温度 Medium Low temperature	Min.-30°C(壳体不可长期结霜 no frost for a long time on the shell) 1*
报警延时 Alarm delay	10s±2s
工作/测试压力 Working/Test pressure	60bar/69bar
输出继电器 Relay contact (SPDT)	AC15: 2.5A,250VAC DC12: 5A,24VDC
连接电缆 Connection type	5 芯 AWG20#颜色编码 L=2 米 Cable 5xAWG20, L=2m, colure coded
保护等级 Protection class (EN 60529)	IP65
材料 Materials	铝合金 Aluminum; PA6/PA66+GF
油介质 Permitted oils	标准矿物和酯油, 不含添加剂 Standard mineral and ester oil,without additive
制冷剂介质 Medium compatibility	HFC,HCFC,CO2 (亚临界 Subcritical)
安装位置 Mounting position	水平安装±1° Horizontal, +/- 1°
重量 Weight	约 1kg (含 GOA118 适配器)
订货号 Order No.	
OUT360R-D1	22G15 360R D1
OUT360R-D2	22G15 360R D2

注解 *1: OUT360R 电控盒内有防水灌封, 可承受短时的结霜结露, 但只保证 IP65 防护等级。 OUT360R electric control box has a waterproof potting seal, which can withstand short-term frost and dew, but only for IP65.

外形尺寸图 2 (装上 OUT168 液位截止阀) Dimension drawing 2 (with OUT168)



适配器供货选型 Adapter Selection

型号 Type	联结规格 Description	适配器长度(X) Length(X)	未装 OUT168 总高度 (Y1) Height (Y1)-without OUT168	装上 OUT168 总高度(Y2) Height (Y2)-With OUT168	备注 Note
GOA118-26	1-1/8"-18UNEF-2A 外螺纹 Screw adapter1-1/8"-18UNEF-2A	26	62	87	外形尺寸图 1 Dimension drawing1
GOA114-38	1-1/4"-12 UNF-2B 旋转锁紧适配接头 Rotalock adapter 1-1/4"-12 UNF-2B	38	74	99	外形尺寸图 2 Dimension drawing 2
GOA134-42	1-3/4"-12 UNF-2B 旋转锁紧适配接头 Rotalock adapter 1-3/4"-12 UNF-2B	42	78	103	
GOA34-46	3/4"-14NPTF 圆锥外管螺纹 Screw adapter3/4"-14NPTF	30	66	91	
GOA24M-26	M24x1 外螺纹 Screw adapter M24x1	26	62	87	
GOA118CSH	加长 1/8"-18UNEF-2A 外螺纹 Screw adapter1-1/8"-18UNEF-2A (Lengthen)	96	132	157	
GOA34F	3-4 孔法兰 Flange adapter 3-4-hole	45	81	106	

OUT168 液位截止阀 Cut-off valve (Optional)

OUT168 液位截止阀用于油位监视器与压缩机的闭锁。装在油位监视器与适配器之间，在检修需要时可以关闭液位截止阀，对油位监视器进行维修更换，而不需要对压缩机中液体泄压放空。

1、螺纹适配器安装：松开锁塞阀上的三颗 M6 内六角螺栓，使适配器在三孔夹板内能自由旋转，把带有密封材料（密封胶或者垫圈）的适配器拧紧至油视镜上，确保密封，扭矩不超过 75N.M；然后把三孔夹板的缺口对准 OUT168 液位截止阀背部的标记处，套上三颗 M6 螺栓，整体把截止阀调整至水平位置（阀帽在左边），水平度不超过 $\pm 1^\circ$ ，把螺栓拧紧（注意连接处的 O 型圈安装到位）。

2、法兰适配器或旋转锁定适配器安装时，直接把 OUT168 调节至水平 $\pm 1^\circ$ ，并阀帽朝左，拧紧螺丝。

3、OUT168 液位截止阀出厂时为打开状态，当需要时，先拆下阀帽，再把 2 个截止阀阀芯顺时针拧紧至关闭，可以把油位监视器拆下检修，完成检修固定好油位监视器后，再把 2 个截止阀阀芯逆时针旋转 4 圈左右（禁止超过 5 圈）至完全打开状态，然后再次把阀帽完全拧紧至永久密封。

OUT168 Cut-off valve is utilized as oil circuit blockage, and installed between oil level regulator and adapter, which could be switched off when maintenance needs and replacement of oil level regulator. And it is not necessary to drain the oil within the compressor.

1. Install OUT168 Cut-off valve horizontally, and valve cap on the left, tighten bolts.

2. OUT168 cut-off valve is defaulted as open status when out factory.

3. When it needs technique maintenance, Firstly, remove the valve cap, and then tighten the upper and lower valve spool clockwise until completely close, and then remove oil level monitor to maintenance, keep oil level monitor in place after maintenance, then turn the spool of the two stop valves anticlockwise about 4 rounds (not exceeding 5 rounds) to the completely open status. Ultimately, tighten the valve cap completely again to a permanent seal.

友情提醒 Caution

1.应用注意：定期检查摆臂跟随油位的灵活性，如果磁性摆臂浮子被黑色油脂吸附时请及时清洗。

Application notes: Periodically check the flexibility of the magnetic float to follow the oil level, If the magnetic float is adsorbed by black grease, please clean it in time.

2. 在正确安装及使用前提下发现产品质量问题，请寄回 GOLDAIR 公司进行保修或者更换，保修的期限按照合同约定，没有约定的为 18 个月。GOLDAIR 不承担保修产品的来回运费，不承担因用户使用该产品对财产或人员的损害、停工或者任何直接的、间接的、偶然的、实际的、刑罚的、惩罚性的、附加的或余波所及的损害，或者因本产品的安装、使用或本产品无法使用导致的任何其它责任，即使 GOLDAIR 已被告知可能会发生此类损害。

If any product quality issues are found under the premise of correct installation and use, please send them back to GOLDAIR for warranty or replacement. The warranty period is as agreed in the contract, and if there is no agreement, it is 18 months.

GOLDAIR shall not be liable for the round-trip shipping costs of the warranty product or for any incidental losses to property or personnel that may arise from the use of the product.