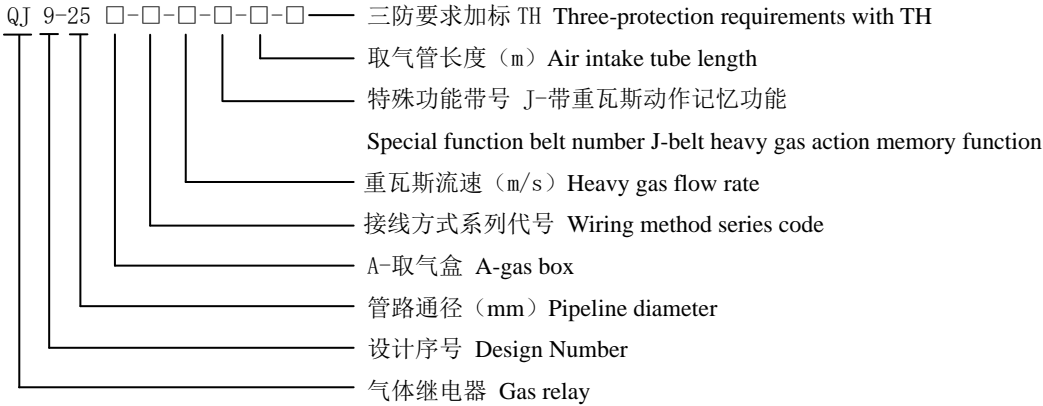


QJ9-25 双浮球系列气体继电器

QJ9-25 Double Float Ball Series Gas Relay

1. 型号说明 Model Description



QJ9-25 系列气体继电器用于变压器开关、海上风电变压器，内部采用双浮球结构，具有轻瓦斯、重瓦斯、缺油三种信号输出，性能更加安全可靠，深受广大用户欢迎。

The QJ9-25 series gas relay is used for transformer switches and offshore wind power transformers. It adopts a double floating ball structure internally and has three signal outputs: light gas, heavy gas, and oil shortage. Its performance is safer and more reliable, and it is highly welcomed by users.

使用范围: (a). 安装方式: 继电器管路轴线应与变压器箱盖平行, 允许通往储油柜的一端稍高, 但其轴线与水平面的倾斜度不超过 4%; (b). 环境要求: $-30^{\circ}\text{C}\sim+70^{\circ}\text{C}$ (可根据用户需求定制最高可支持 $-45^{\circ}\text{C}\sim+70^{\circ}\text{C}$); 工作环境要求: $-30^{\circ}\text{C}\sim+115^{\circ}\text{C}$ (可根据用户需求定制最高可支持 $-45^{\circ}\text{C}\sim+115^{\circ}\text{C}$); (c). 相对湿度: $+20^{\circ}\text{C}$ 时, 不大于 95%; (d). 防护等级: IP65 适用范围: 海拔 0~4000m; (e). 工频耐压: 常开接点 2000V, 1min, 常闭接点或单刀双掷接点: 相间 1000V, 1min, 对地 2000V, 1min; (f). 绝缘性能: 常开接点 2500V, 1000M Ω , 常闭接点或单刀双掷接点: 相间 1000V, 500M Ω , 对地 2500V, 1000M Ω .

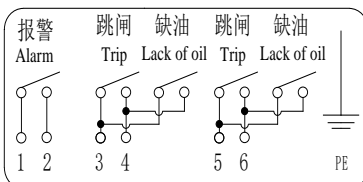
标注实例: QJ9-25A-03-1.5-J-4TH 表示第 9 次设计的管路通径为 $\Phi 25\text{mm}$, 带取气盒, 03 系列 (1 轻 2 重 2 缺油, 缺油与重瓦斯并联后出线), 重瓦斯流速为: 1.5m/s, 带重瓦斯动作记忆功能 (此重瓦斯记忆功能需要逆时针拧动探针旋钮复位), 导气管长度为 4m 有三防功能的气体继电器。

Scope of use: (a) Installation method: the axis of relay pipeline shall be parallel to the transformer tank cover, and the end leading to the oil conservator is allowed to be slightly higher, but the inclination between the axis and the horizontal plane shall not exceed 4%; (b) Environmental requirements: -30°C to $+70^{\circ}\text{C}$ (can be customized according to user needs to support up to -45°C to $+70^{\circ}\text{C}$); Work environment requirements: $-30^{\circ}\text{C}\sim+115^{\circ}\text{C}$ (customizable according to user needs, can support up to $-45^{\circ}\text{C}\sim+115^{\circ}\text{C}$); (c) Relative humidity: no more than 95% at $+20^{\circ}\text{C}$; (d) Protection class: IP65. Scope of application: Altitude 0~4000m.; (e) Power frequency withstand voltage: normally open contact 2000V, 1min, normally closed contact or single pole double throw contact: phase to phase 1000V, 1min, ground 2000V, 1min; (f) Insulation performance: normally open contact 2500V, 1000M Ω , normally closed contact or single pole double throw contact: phase to phase 1000V, 500M Ω , ground 2500V, 1000M Ω .

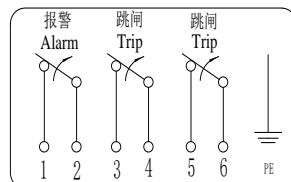
Example annotation: : QJ9-25A-03-1.5-J-4 TH represents the 9th design of a pipeline with a diameter of $\Phi 25\text{mm}$, equipped with an air intake box, 03 series (1 light, 2 heavy, 2 oil deficient, oil deficient and heavy gas parallel connected before outgoing), heavy gas flow rate of 1.5m/s, with heavy gas action memory function (this heavy gas memory function requires counterclockwise rotation of the probe knob to reset), gas conduit length of 4m, and a gas relay with three prevention functions.

2. 信号开关接线图及电气参数 Signal switch wiring diagram and electrical parameters

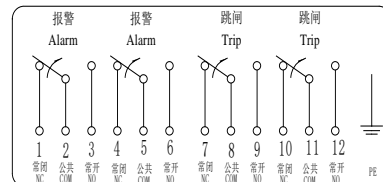
2.1 电气接线图 Electrical wiring diagram



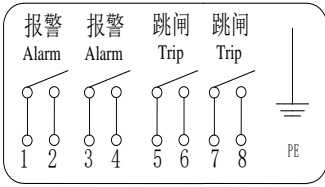
03系列 (03 Series)



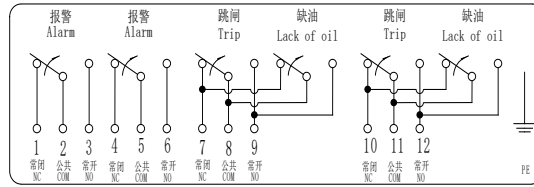
04系列 (04 Series)



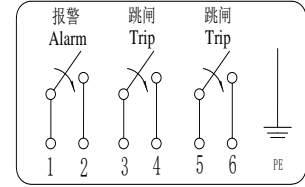
05系列 (05 Series)



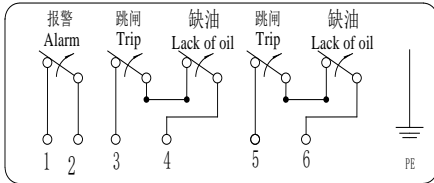
06系列 (06 Series)



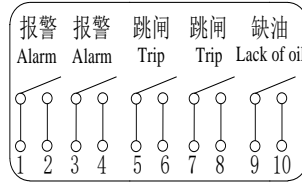
07系列 (07 Series)



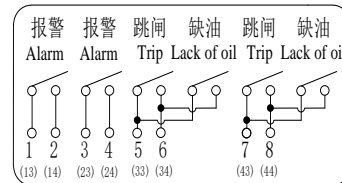
08系列 (08 Series)



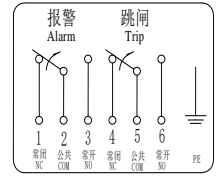
09系列 (09 Series)



10系列 (10 Series)



14系列 (14 Series)



30系列 (30 Series)

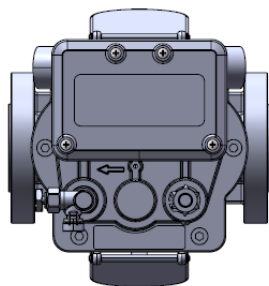
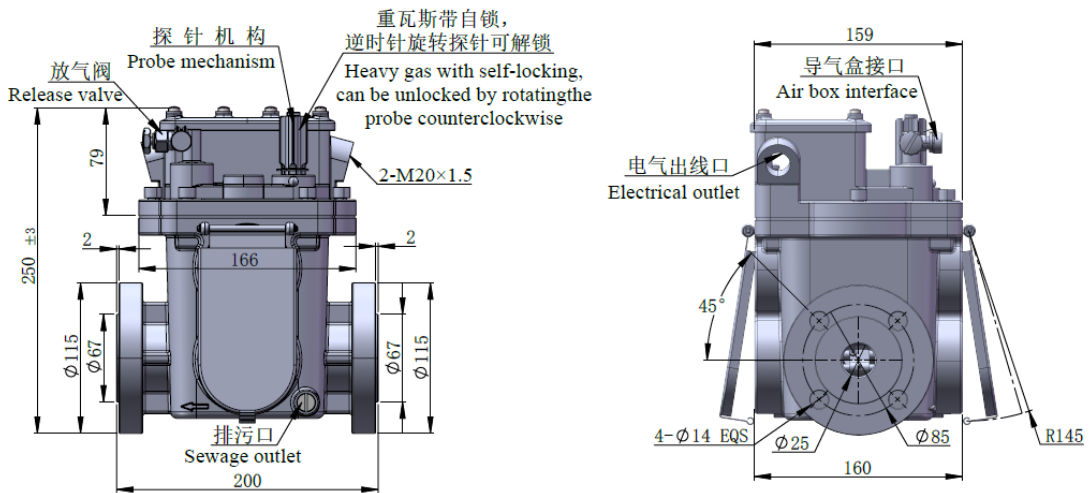
2.2 接线端子示意图、信号开关接点容量

Schematic diagram of wiring terminals and contact capacity of signal switches

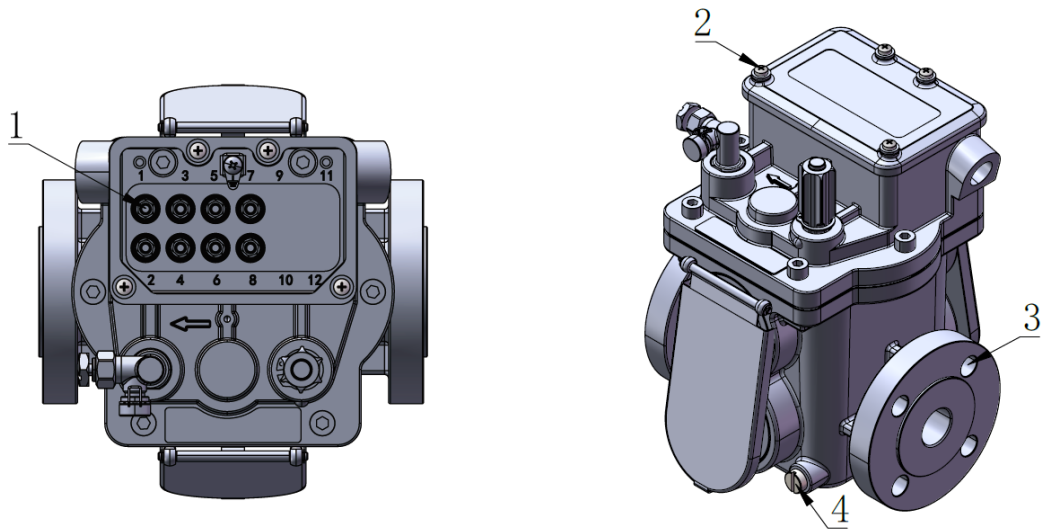


电源种类 Type of power supply	电压(V) Voltage	电流 Electric current A	
		电阻负载 Resistive load	感性负载 Inductive
AC	220V	2	0.3 功率因素 Power Factor $\cos\phi \leq 0.6$
DC		1	0.3 时间常数 Time constant $S \leq 5 \times 10^{-3}s$




3. QJ9-25 外形尺寸 QJ9-25 external dimensions



色卡编号 Color card No	颜色 Color	可选性 Optionality of choice
RAL7035	浅灰色 Light grey	默认 (Default)



扭矩参考表
 Torque Reference Table

序号 Number	装配位置 Assembly position	螺纹规格 Thread specification	推荐扭矩 Recommended torque	装配工具规格 Assembly tool specifications		备注 Notes
1	接线端子 Connecting terminal	M5	4~5Nm		8mm	建议手动安装 Suggest manual installation
2	接线盒盖 Terminal box cover	M5	4~5 Nm		PH2	建议手动安装 Suggest manual installation
3	法兰安装孔 Flange installation hole	M12 螺栓 Bolt	35~40Nm		19mm	
4	排污塞 Sewage outlet	M8	18~22 Nm	