

QYW-DS 系列智能多功能保护器

QYW-DS series intelligent multi-function protector

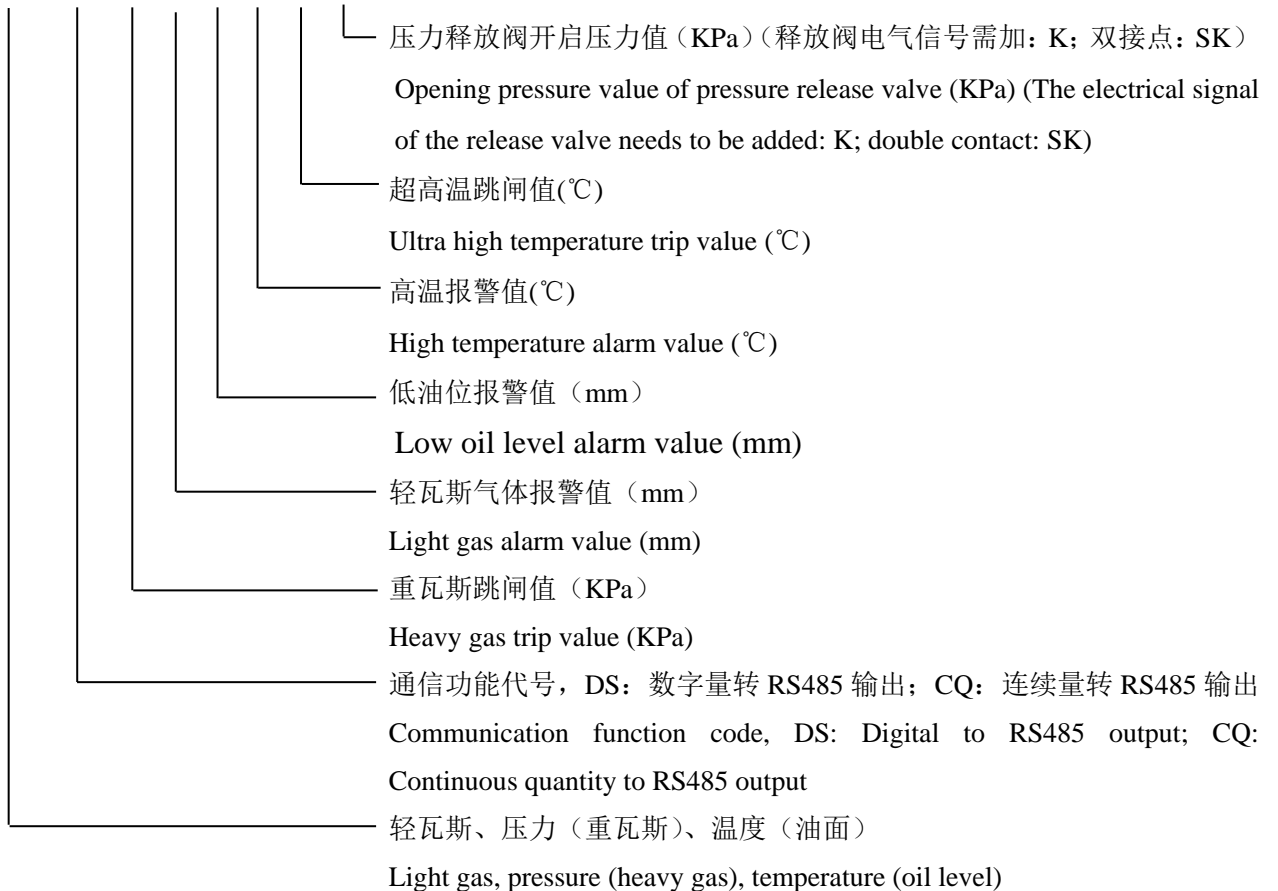
1. 产品介绍(Product description):

QYW-DS 系列智能多功能保护器是带 RS485 通信功能全密封变压器的专用保护装置, 可对变压器提供: 重瓦斯保护、压力超限保护、轻瓦斯气体保护、低油位保护、油位显示(油位表)、油面温度显示、油面温度高温报警、油面温度超高温报警, 还具有注油、补油、压力释放及带电接点输出的压力释放阀(选配)等功能。RS485 通信和 Modbus-RTU 通信可极大方便供电部门实时监视全密封变压器运行情况 & 诊断变压器故障, 适用于智能化全密封变压器及智能化箱式变电站。

QYW-DS series intelligent multi-function protector is a special protection device with fully sealed transformer with RS485 communication function, which can provide the transformer with heavy gas protection, pressure over-limit protection, light gas protection, low oil level protection, oil level display (Oil level gauge), oil surface temperature display, oil surface temperature high temperature alarm, oil surface temperature ultra high temperature alarm, and also has the functions of oil injection, oil replenishment, pressure release and pressure release valve (optional) with live contact output. RS485 communication and Modbus-RTU communication can greatly facilitate the power supply department to monitor the operation of the hermetically sealed transformer in real time and diagnose transformer faults. It is suitable for intelligent hermetically sealed transformers and intelligent box-type substations.

2. 产品型号及规格(Product model and specifications):

QYW—□ / □-□-□-□-□-□



标注实例: QYW-DS/30-30-40-85-105-35 表示重瓦斯报警值为 30KPa, 轻瓦斯气体报警油位为油箱盖下部 30 mm, 低油位报警值为油箱盖下部 40 mm, 油面高温报警值为 85°C, 油面超高温跳闸值为 105°C,

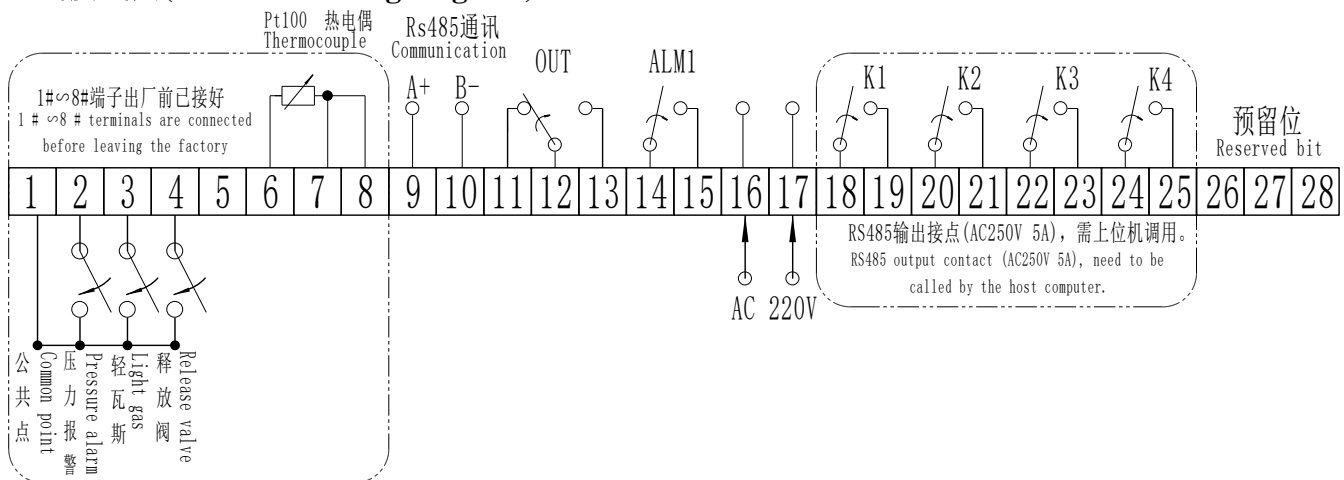
压力释放阀 (选配) 开启压力值为 35KPa。

Marking example: QYW-DS / 30-30-40-85-105-35 indicates that the heavy gas alarm value is 30KPa, the light gas alarm oil level is 30 mm under the tank cap, and the low oil level alarm value is 40 mm under the tank cap, oil level The high-temperature alarm value is 85 °C, the oil surface ultra-high temperature trip value is 105 °C, and the pressure release valve (optional) opening pressure value is 35KPa.

3. 工作条件(Working conditions):

- 3.1、环境温度: $-45^{\circ}\text{C} \sim +70^{\circ}\text{C}$, 工作温度: $-45^{\circ}\text{C} \sim +105^{\circ}\text{C}$;
- 3.2、相对湿度: 当空气温度为 25°C 时, 湿度不大于 90%
- 3.3、开关接点容量 (温控部分): AC 250V 3A, DC 250V 0.3A。
- 3.4、绝缘耐压: 2000V, 1min。
- 3.5、安装方向: 安装于箱盖顶部, 与箱盖平行。
- 3.1. Ambient temperature: $-45^{\circ}\text{C} \sim +70^{\circ}\text{C}$, working temperature: $-45^{\circ}\text{C} \sim +105^{\circ}\text{C}$;
- 3.2 Relative humidity: when the air temperature is 25°C , the humidity is not more than 90%
- 3.3 Switch contact capacity (temperature control part): AC 250V 3A, DC 250V 0.3A.
- 3.4 Insulation withstand voltage: 2000V, 1min.
- 3.5. Installation direction: Install on the top of the box cover, parallel to the box cover.

4. 电气接线图(Electrical wiring diagram):



- 注:**
- 1、接线端子 1#~8#在出厂前已经接好, 只需将航空插头插好即可;
 - 2、端子 9#、10#为 RS485 通讯接线;
 - 3、端子 11#、12#、13#(OUT)为高温报警点, 端子 14#、15#(ALM1)为超高温跳闸点;
 - 4、端子 16#、17#为 AC 220V 电源线。
 - 5、端子 18#~25# (K1、K2、K3、K4) 为 RS485 输出接点 (AC250V 5A), 需上位机调用;
 - 6、RS485 信号线不可与 AC220V 电源线从同一接口走线。

- Note:**
1. The terminals 1 # ~ 8 # have been connected before leaving the factory, just plug in the aviation plug;
 2. Terminals 9 # and 10 # are RS485 communication wiring;
 3. Terminals 11 #, 12 #, 13 # (OUT) are high temperature alarm points, and terminals 14 #, 15 # (ALM1) are ultra high temperature trip points;
 4. Terminals 16 # and 17 # are AC 220V power cords.
 5. Terminals 18 # ~ 25 # (K1, K2, K3, K4) are RS485 output contacts (AC250V 5A), which need to be called by the host

computer;

6. The RS485 signal line cannot be routed from the same wiring port as the AC220V power line.

七、外形尺寸图(Dimension drawing):

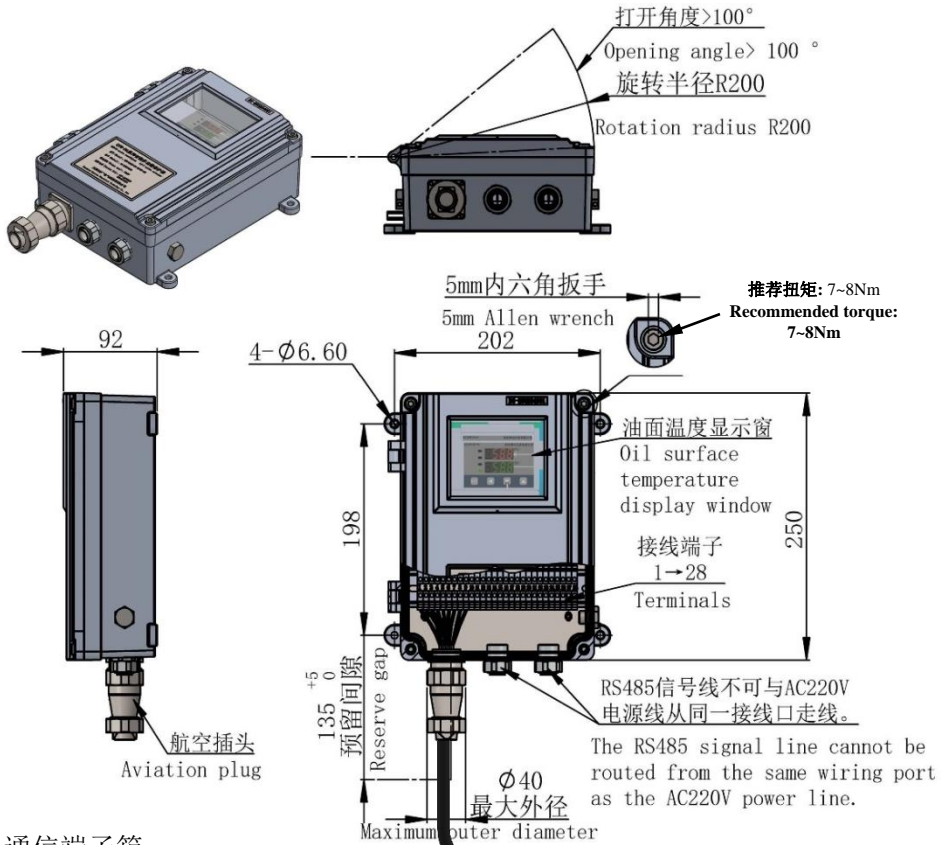
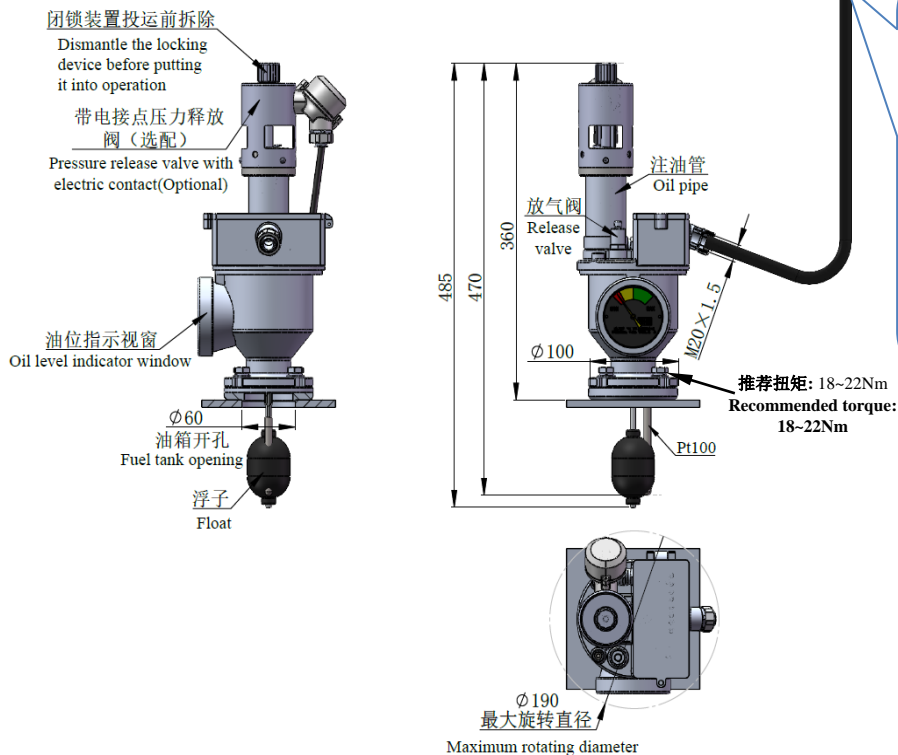


图 2 通信端子箱

Figure 2 Communication terminal box



此段电缆出厂前配好，默认为 4 米，长度如有增减，请在订货时备注上！
This section of cable is equipped before leaving the factory, the default is 4 meters, if the length increases or decreases, please note when ordering!

图 3 QYW-DS 系列智能多功能保护器

Figure 3 QYW-DS series intelligent multi-function protector

本产品提供多种颜色选择, 具体描述如下:

The product provides a variety of color options, specifically described as follows:

| 色卡编号 Color card No | 颜色 Color | 可选性 Optionality of choice |
|--------------------|----------------------|---------------------------|
| RAL7038 | 玛瑙灰 Agate grey | 默认 (Default) |
| RAL7042 | 交通灰 A Traffic grey A | 可选 (Optional) |
| RAL7035 | 浅灰色 Light grey | 可选 (Optional) |