

QYW-CQ 系列智能多功能保护器

QYW-CQ series intelligent multi-function protector

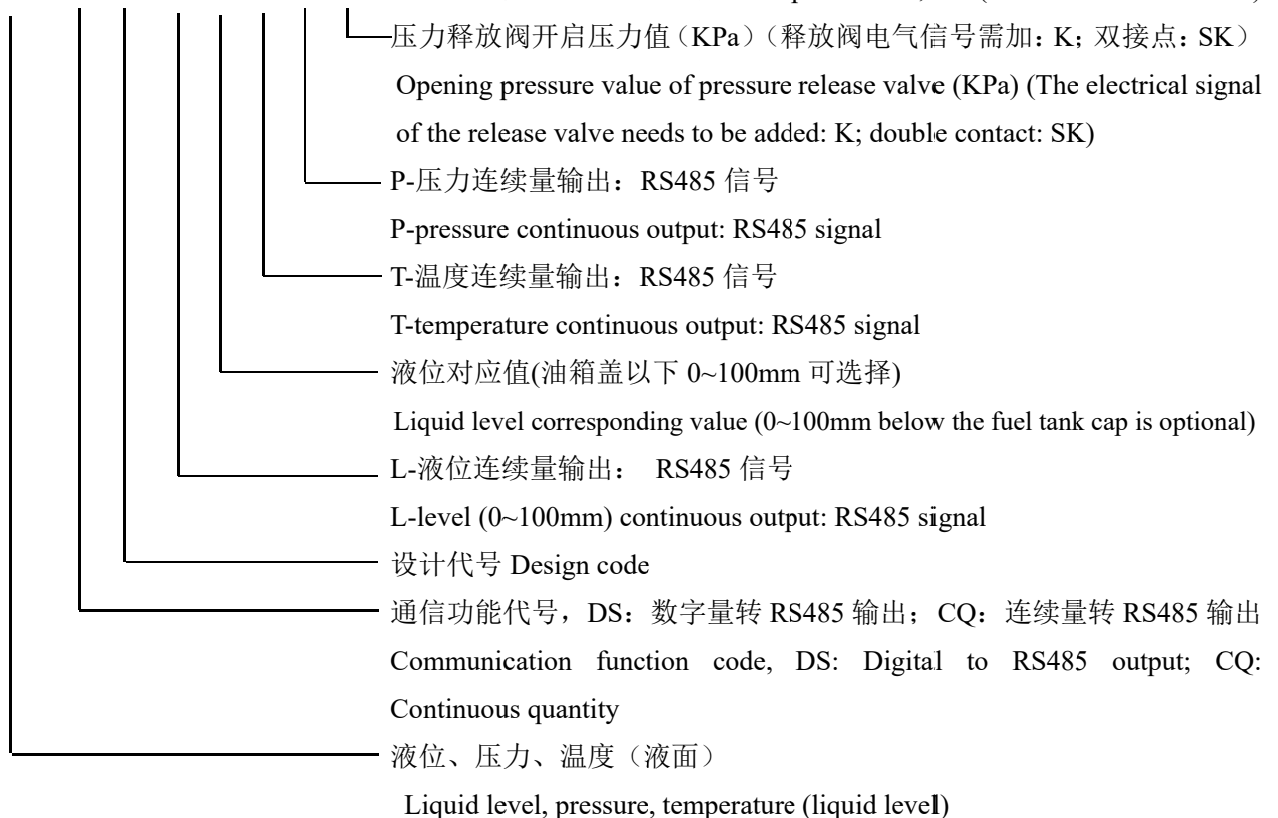
1. 产品介绍(Product description):

QYW-CQ 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: 液位连续量监控、压力连续量监控、油面温度连续量监控, 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及诊断变压器故障, 适用于智能化全密封变压器及智能化箱式变电站。

QYW-CQ series intelligent multi-function protector is a special protection device with fully sealed transformer with RS485 communication function, which can provide the transformer with continuous liquid level monitoring, continuous pressure monitoring, continuous oil surface temperature monitoring, and oil injection and supplement Functions such as oil, pressure relief and pressure relief valve (optional) with output of live contact. 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-□-□ / □-□-□-□-□-□-特殊代号, TH 湿热地带适用 Special code, TH (for hot and humid areas)



标注实例: QYW-CQ-2/L-0~50-T-P-25K (TH) 表示第二次设计, 带液位连续量输出 RS485 信号, 输出液位值为油箱盖以下 0~50mm; 带温度连续量输出 RS485 信号; 带压力连续量输出 RS485 信号; 带电气节点的压力释放阀, 开启压力值为 25KPa, 湿热地带适用 (满足三防要求)。

注: 用户可根据变压器结构或实际使用情况来要求出厂前智能多功能保护器的参数:

例如: 2.1、液面连续量输出中标配为: 油箱盖以下 0~50mm, 根据变压器结构可能只需要 0~50mm 或其他值,

产品在出厂前可以按要求生产;

2.2、配带压力释放阀的开启压力值可选: 25KPa~40KPa; 压力释放阀电气节点类型可选: a. 带1对常开点(1、2), b. 带1对常开常闭点(1、2、3), c. 带2对常开点(1、2、3、4)……。

Annotation example: QYW-CQ-2/L-0~50-TP-25K (TH) represents the second design, with continuous level output RS485 signal, the output level value is 0~50mm below the tank cap; with continuous temperature output RS485 signal; RS485 signal with continuous pressure output; pressure release valve with electrical node, opening pressure value is 25KPa, suitable for hot and humid areas (meeting the requirements of three preventions).

Note: The user can request the parameters of the intelligent multi-function protector before leaving the factory according to the structure of the transformer or the actual use:

For example: 2.1. The standard configuration in the continuous output of liquid level is: 0~50mm below the fuel tank cap. Depending on the transformer structure, it may only require 0~50mm or other values. The product can be produced as required before leaving the factory;

2.2. The opening pressure value with pressure relief valve is optional: 25KPa~40KPa; the electrical node type of pressure relief valve is optional: a. with 1 pair of normally open points (1,2), b. with 1 pair of normally open and normally closed Point (1, 2, 3), c. with 2 pairs of normally open points (1, 2, 3, 4)...

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、防护等级: IP65; 适用环境: TH 和 TA

3.4、4路继电器输出点接点容量: AC 250V 5A; 其余开关接点容量: AC 250V 3A, DC 250V 0.3A。

3.5、绝缘耐压(干接点): 2000V, 1min;

3.56、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, protection grade: IP65; applicable environment: TH and TA

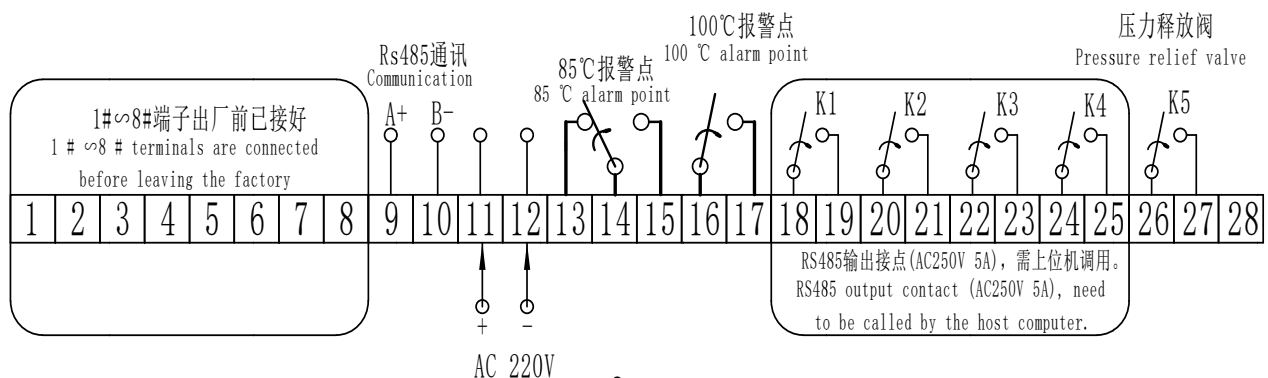
3.4, 4-channel relay output contact capacity: AC 250V 5A; other switch contact capacity: AC 250V 3A, DC 250V

0.3A.

3.5, insulation withstand voltage (dry contact): 2000V, 1min;

3.56. Installation direction: Installed on the top of the lid, parallel to the lid.

4. 电气接线图(Electrical wiring diagram):



- 注:** 1、接线端子 1#~8#端子出厂前已接好;
 2、端子 9#和 10#对应为 RS485 A+和 B-通讯接线;
 3、端子 11#和 12#对应为 AC220V 电源输入;
 4、端子 18#、19#、20#、21#、22#、23#、24#、25#分别对应 K1、K2、K3、K4 四对继电器输出接点, 接点容量: AC 250V 5A
 5、端子 26#、27#对应 K5 压力释放阀电气报警节点;

Note: 1. Terminals 1 # to 8 # of the wiring terminal have been connected before leaving the factory;

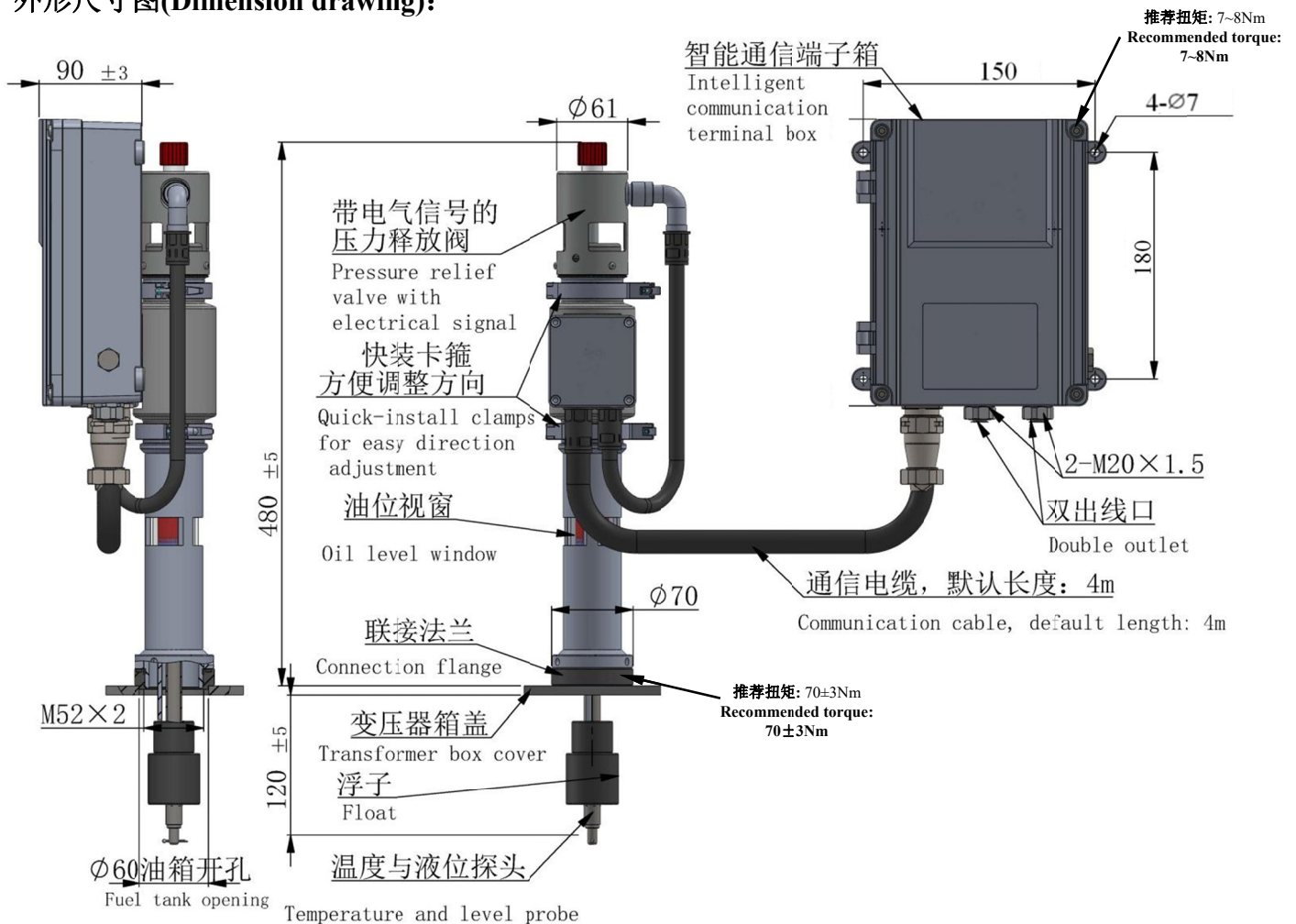
2. Terminals 9 # and 10 # correspond to RS485 A+and B - communication wiring;

3. Terminals 11 # and 12 # correspond to AC220V power input;

4. Terminals 18 #, 19 #, 20 #, 21 #, 22 #, 23 #, 24 #, and 25 # correspond to four pairs of relay output contacts K1, K2, K3, and K4, respectively. Contact capacity: AC 250V 5A

5. Terminals 26 # and 27 # correspond to the electrical alarm node of the K5 pressure relief valve;

5. 外形尺寸图(Dimension drawing):



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)