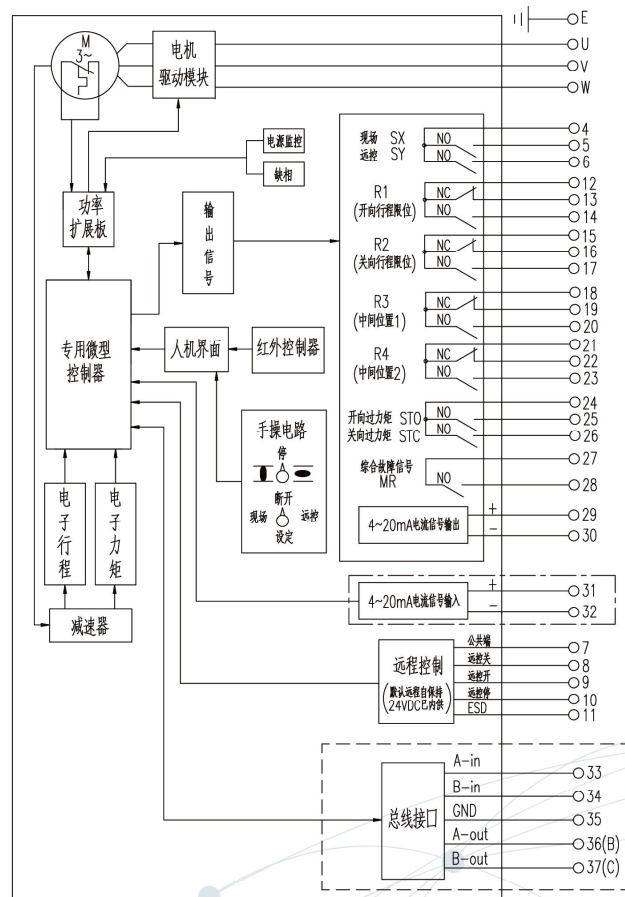


第十一章:电气原理和接线图 Electrical Schematic Diagram and Wiring Diagram

11.1、电气原理和接线图 Electrical Schematic Diagram and Wiring Diagram



- 注:
1. 虚线框内总线控制模块为特供供货;点划线框内模拟量输入功能为调节型产品所特有,开关型产品无此功能。
 2. 括号内端子B和C为防爆型产品接线端子。
 3. 图中输出接点状态为执行机构通电,正常工作,无故障,处于中间位置的状态。

Note:

1. What in dash line frame of this figure is for special order. The function of analog input in dot dash line frame is unique for regulating products, but not for switching products.
2. Terminals B and C in brackets are explosion proof products terminals.
3. The output contact status in the figure is that the actuator is energized, working normally, without fault, and in the middle position.

11.2、控制方式 Control Mode

电动执行机构控制方式有现场控制、远程控制和紧急自保三种形式。

The actuator has three control modes: local control, remote control, and emergent self-hold.

11.2.1 现场控制 Local Control

当红色旋钮处于现场位置时,就可通过黑色旋钮实现现场的打开、关闭和停止功能。

When the red knob is located at Local position, the actuator can carry out functions of valve opening, valve closing and stop via black knob.

11.2.2 远程控制 Remote Control

当红色旋钮处于遥控位置时,就可通过接线端子(或总线)实现远程的打开、关闭和停止功能。远程控制的电源为24V直流(内部已提供)。控制信号的电压为: $V_{on} > 20V$, $V_{off} < 1.5V$ 。

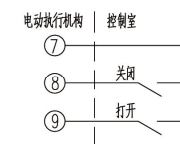
When the red knob is located at Remote position, the actuator can carry out functions of valve opening, valve closing and stop via terminals. Power supply of Remote Control is DC 24 V (built in), power supply voltage of control signal is: $V_{on} > 20V$, $V_{off} < 1.5V$.

通过设定功能可设定以下4种遥控方式:

Following 4 kinds of Remote Control may be set via setting functions:

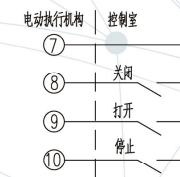
(1) 点动: 点动打开、关闭控制, 信号应持续到开关到位。

Click: open or close valve via click, with signal lasting till valve reaching designated position



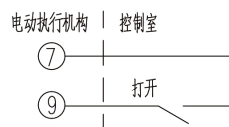
(2) 自保持: 带自保持的打开、停止、关闭控制, 信号应持续500ms以上。

Self-hold: open or close valve via self-hold control, with signal lasting for more than 500 ms



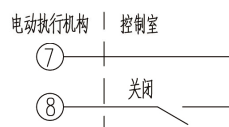
(3) 双线开: 两根线单个干接点控制, 接点闭合时打开, 断开时关闭。

On-opening style: opens when circuit is on, and closes when circuit is off.



(4) 双线关: 两根线单个干接点控制, 接点断开时打开, 闭合时关闭。

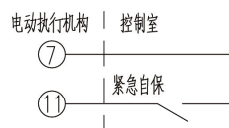
On-closing style: closes when circuit is on, and opens when circuit is off.



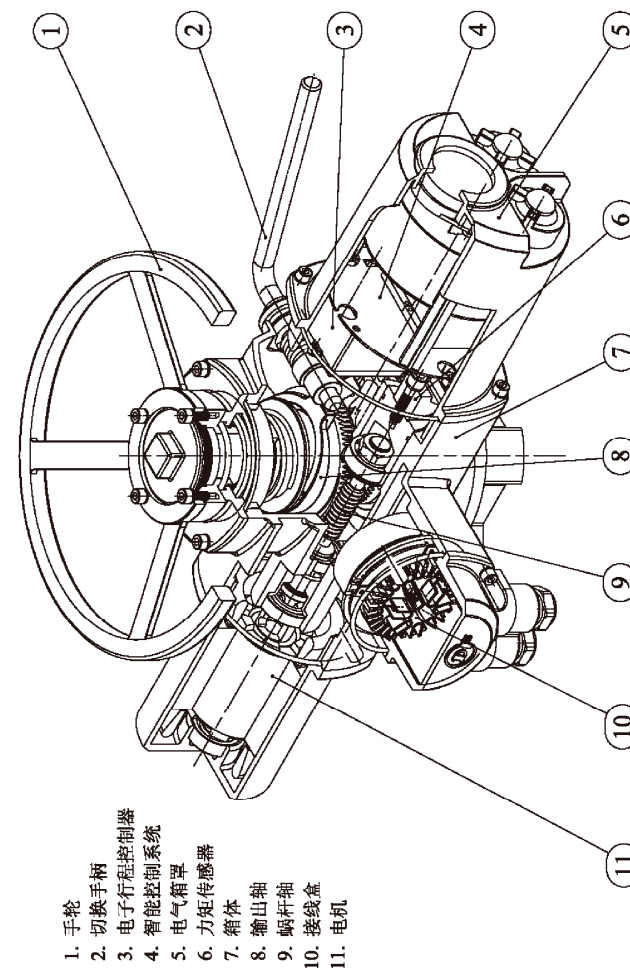
11.2.3 紧急自保 Emergent Self-hold

可超越其他控制信号(无论电动执行机构处于何种控制方式)强制执行(动作取决于事先设定), 此信号应一直维持到动作完成。

Emergent Self-hold can override other kinds of control signal (Whatever status the actuator is in) and enforce its implementation (The action depends on presetting). This signal will last till the completion of the action.



附录一: 产品结构简图



1. 手轮
2. 切换手柄
3. 电子行程控制器
4. 智能控制系统
5. 电气箱罩
6. 力矩传感器
7. 箱体
8. 输出轴
9. 蜗杆轴
10. 接线盒
11. 电机

Appendix 1: Structure Sketch Drawing

- | | | |
|------------------------------------|------------------|---|
| 1. Hand wheel | 2. Clutch lever | 3. Electronic position limit controller |
| 4. Intellectualized control system | | 5. Electrical compartment cover |
| 6. Torque sensor | 7. Housing | 8. Output shaft |
| 9. Worm shaft | 10. Terminal box | 11. Motor |