

机械式多回转电动执行器 说明书 V2.01

User Manual for Mechanical Multi-Rotary
Electric Actuator V2.01

一. 遥控和按键说明

1.1 全开全关位标定步骤

长按“全开位”按键 5S 以上,显示屏进入显示 F-O(Full-Open),此时表明可标定全开位置。将阀门开到全开位置后,短按“全开位”按键 后全开位置立即保存, 然后退回到主界面。

长按“全关位” 按键 5S 以上,然后显示屏显示 F-C(Full-Close),此时表明可标定全关位置。将阀门开到全关位置后,短按“全关位” 按键后全关位置立即保存, 然后退回到主界面。

注 1: 标定全开全关位之前先通过开阀或者关阀来判定阀门动作方向是否正确, 如果不正确请颠倒接线端子 UVW 三根线的任意两根线序即可。

1.2 开关过力矩值设定步骤

长按“开力矩” 按键 5S 以上,显示屏进入显示 SOT(Set Open Torque)和当前开向力矩设定百分比值交叉显示,短按“开力矩” 按键,当前开向力矩设定值会增加,短按“关力矩” 按键,当前开向力矩设定值会减小,再次长按“开力矩” 按键,保存修改, 然后退回到主界面。

长按“关力矩” 按键 5S 以上,显示屏进入显示 SCT(Set Close Torque)和当前关向力矩设定百分比值交叉显示,短按“开力矩” 按键,当前关向力矩设定值会增加,短按“关力矩” 按键,当前关向力矩设定值会减小,再次长按“关力矩” 按键,保存修改, 然后退回到主界面。

注 1: 长按四个按键 5S 以上, 则强制退出设置退回到主界面。

I. Remote Control and Button Operation Instructions

1.1 Calibration Steps for Full Open and Full Closed Positions

Press and hold the "Full Open" button for more than 5 seconds; the display will then show "F-O" (FULL Open), indicating that the full-open position can be calibrated. Once the valve has been opened to the full-open position, briefly press the "Full Open" button to immediately save this position, then return to the main interface.

Press and hold the "Full Closed Position" button for more than 5 seconds; the display will then show "F-C (FULL CLOSE)", indicating that the full closed position can be calibrated. After opening the valve to the full closed position, briefly press the "Full Closed Position" button to immediately save the full closed position, then return to the main interface.

Note 1: Before calibrating the fully open and fully closed positions, first determine whether the valve actuation direction is correct by opening or closing the valve; if it is incorrect, simply reverse the wiring of any two of the three terminals (UVW).

1.2 Switch Overload Torque Setting Procedure

Press and hold the "Open Torque" button for over 5 seconds; the display will then show SOT (Set Open Torque) and the current open torque setpoint percentage value in a cross-display mode. Press the "Open Torque" button briefly to increase the current open torque setpoint value; press the "Close Torque" button briefly to decrease the current open torque setpoint value. To save the changes, press and hold the "Open Torque" button again, then return to the main interface.

Press and hold the "Close Torque" button for over 5 seconds; the display will then show SCT (Set Close Torque) and the current closed torque setpoint percentage value in a cross-display mode. Briefly press the "Open Torque" button to increase the current closed torque setpoint value; briefly press the "Close Torque" button to decrease it; then, press and hold the "Close Torque" button again to save the changes, after which the device will return to the main interface.

Note 1: Long-press any of the four buttons for more than 5 seconds to forcibly exit the settings and return to the main interface.

二. 报警信息

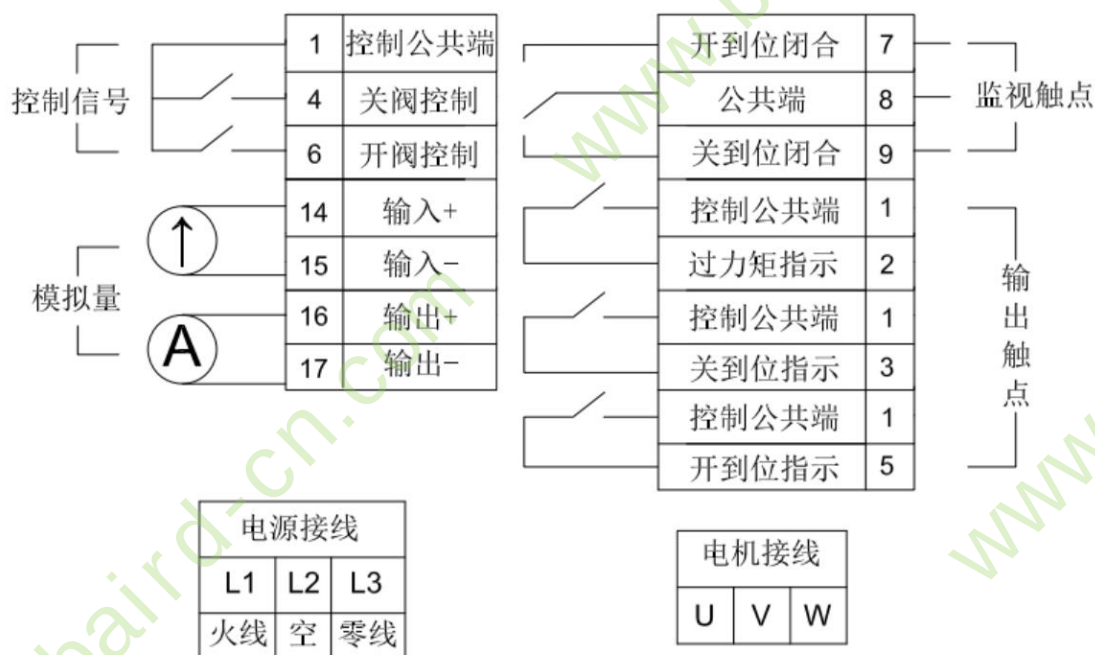
报警代码	报警信息	报警原因	解决方法
E01	关向过矩	关阀过程中, 力矩值超过设定关 过矩值.	手轮或电动反向开 阀解除报警
E02	开向过矩	开阀过程中, 力矩值超过设定开 过矩值.	手轮或电动反向关 阀解除报警
E03	编码器错误	编码器松动或出现 故障	检查编码器接线是 否有松动或编码器 损坏
E04	强制手动	手轮按下, 进行手 摇开关阀。	松开手轮, 强制手 动模式即刻退出。
E05	三相线序错误	执行器三相控制正 反转线序接反。	任意颠倒三相控制 线序中的两根线序 即可。

三. 硬件接线

II. Alarm Information

Alarm code	Warning message	Reason for reporting	Resolvent
E01	Guan Xiangguoju	During the valve closing process, the torque exceeded the preset closing torque threshold.	Release the alarm by turning the handwheel or operating the electric reverse-valve.
E02	Apply counter-torque	During the valve opening process, the torque exceeded the preset opening torque threshold.	Release the alarm via the handwheel or the electric reverse-valve.
E03	Encoder error	The encoder is loose or has malfunctioned.	Check the encoder wiring for loose connections or any damage to the encoder.
E04	Forced Manual	Press the handwheel to operate the hand-cranked switch valve.	Release the handwheel to immediately exit forced manual mode.
E05	Three-phase line sequence error	The three-phase control wiring for forward and reverse rotation of the actuator is reversed.	Simply reverse the polarity of any two lines in the three-phase control wiring sequence.

III. Hardware Wiring



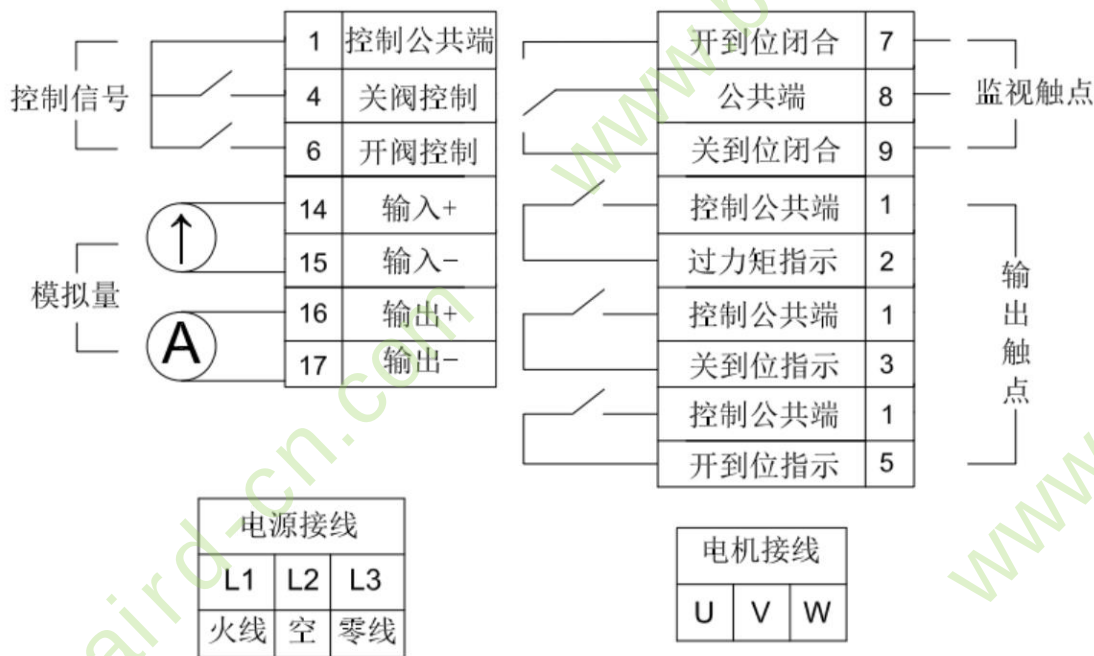
注意：

- 1) 电源端子支持三相380V供电或单相220V供电。
当供电为三相380V时，三相进线直接接到L1 L2 L3即可，无线序要求。
当供电为单相220V时，单相进线直接接到火线L和零线N即可。
- 2) 控制信号端子的7、8、9号为无源节点，请根据实际需求进行接线。
- 3) 机器内部为高压电源，使用时请勿打开机壳，非专业人士请勿私自对机器进行维修。

四．敬告用户

因下列原因造成的产品故障不在厂家免费保修服务范围之内：

- (1)、用户不依照《产品说明书》中所列程序进行正确的操作；
- (2)、用户未经与厂家沟通自行修理产品或擅自改造产品；



注意:

- 1) 电源端子支持三相380V供电或单相220V供电。
当供电为三相380V时，三相进线直接接到L1 L2 L3即可，无线序要求。
当供电为单相220V时，单相进线直接接到火线L和零线N即可。
- 2) 控制信号端子的7、8、9号为无源节点，请根据实际需求进行接线。
- 3) 机器内部为高压电源，使用时请勿打开机壳，非专业人士请勿私自对机器进行维修。

IV. Notice to Users

Product failures caused by the following reasons shall not be covered by the manufacturer's free warranty service:

- (1) The user fails to perform the correct operations in accordance with the procedures set forth in the "Product Manual";
- (2) Users who repair the product without prior consultation with the manufacturer, or who make unauthorized modifications to the product;

- (3)、因用户环境不良导致产品器件异常老化或引发故障;
- (4)、因用户超过产品的标准范围使用产品;
- (5)、由于地震、火灾、风水灾害、雷击、异常电压或其他自然灾害等不可抗力的原因造成的产品损坏;
- (6)、因购买后由于人为摔落及运输导致硬件损坏。

五. 免责声明

无论从合同、保修期、疏忽、民事侵权行为、严格的责任或其他任何角度讲, 厂家和他的供货商及分销商都不承担以下由于使用设备所造成的特殊的、间接的、继发的损失责任。其中包括但不限于仅限于利润和收入的损失, 使用供货设备和相关设备的损失, 资金的花费, 代用设备的花费, 工具费和服务费, 停机时间的花费, 延误, 及购买者的客户或任何第三方的损失。另外, 除非用户能够提供有力的证据, 否则公司及它的供货商将不对某些指控如: 因使用不合格原材料、错误设计或不规范生产所引发的问题负责, 解释权归本公司所有。如果您对执行器还有疑问, 请与 公司或其办事处联系。技术数据、信息、规范均为出版时的最新资料, 公司保留不事先通知而更改的权利, 并对由此造成的损失不承担任何责任, 解释权归本公司所有。

(3) , where abnormal aging of product components or the occurrence of malfunctions are caused by adverse user environment conditions;

(4) , where the user uses the product outside its specified standard range;

(5) Damage to the products caused by force majeure, such as earthquakes, fires, feng shui-related disasters, lightning strikes, abnormal voltages, or other natural disasters;

(6) Hardware damage may occur following purchase due to accidental drops or transportation-related damage.

V. Disclaimer

Under no circumstances—whether based on contract terms, warranty periods, negligence, civil torts, strict liability, or any other legal ground—will the manufacturer, its suppliers, or its distributors be held liable for any special, indirect, or consequential losses arising from the use of the equipment. Such losses include, but are not limited to, loss of profit and revenue; loss of the supplied equipment and related equipment; expenditure of funds; costs of substitute equipment; tooling and service fees; costs associated with downtime; delays; and losses incurred by the purchaser's customers or any third party. Furthermore, unless the user can provide compelling evidence, the Company and its suppliers shall not be liable for certain claims, such as those arising from the use of substandard raw materials, erroneous design, or non-compliant manufacturing practices; the Company reserves the right of final interpretation. Should you have any further questions regarding the actuators, please contact the Company or its authorized offices. All technical data, information, and specifications are subject to the latest versions as of the date of publication; the Company reserves the right to amend such materials without prior notice, and shall not be held liable for any losses resulting therefrom; the Company reserves the right of final interpretation.