

POK 现场可操控智能一体化电动执行器,是在 POE 电动执行器基础上研发的新产品,实现了精小型电动执行器智能体一体化,具有整体调节型、整体开关型、远程 / 就地控制、MODBUS、PROFIBUS 现场总线控制。

POK field manipulation intelligent integration of electric actuators, electric actuators in POE based on the development of new products, to achieve a fine small electric actuator agent in one, With overall adjustment type , the overall switching, remote / local control , MODBUS, PROFIBUS field bus control.



液晶显示窗口 A liquid crystal display window

采用专门定制的高分辨率液晶显示屏,简单的数字与标识符界面显示,为用户提供了极大的方便。用户很容易观察执行器控制状态。独特的背景照明系统液晶显示器提供所有灯光条件的高可视度,即使在夜晚也可清晰的进行观测与设定。

Actuator with customized high resolution LCD screen, digital and identifier interface simple display, provides great convenience for the user. It is easy for users to observe the actuator control state. High visibility background lighting system for liquid crystal display unique provide all lighting conditions, even in the night also can be clearly observed and setting.

就地操作 Operation on the spot

就地的磁钢旋钮开关在完全与电气箱隔离的状态下可转换现场和远程控制状态,轻松的控制、设定执行器。

Local magnetic steel knob switch in a completely isolated from the electrical box convertible under the condition of field and remote control state, easy control actuator.



红外线控制技术 The infrared control technology

POK 执行器采用先进的红外线遥感技术,在无需打开执行器箱盖情况下,通红外遥控器就可以完成设置、操作和诊断,实现免侵入式设计。通过遥控器可以查阅存储在执行器中的各种配置文件和远运行数据。

POK actuator using advanced infrared remote sensing technology, the actuator cover without opening the case , through the infrared remote control can complete the setup , operation, and diagnostics, to achieve free -intrusive design . The remote control allows access to stored in the execution the actuator in a variety of configuration files and run away data .

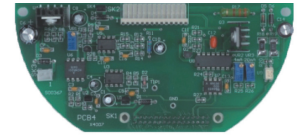


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自动相位保护和修正 Automatic phase protection and correction

内置相同步器,三相电源的相位旋转时刻受到监视,确保执行器按指令正确运转,当出现相位颠倒时,相同步器自动改正,保证执行器按指令的方向执行。执行器内部相位监视器时刻监视三相电源,一旦出现一相或多相丢失的情况,立即禁止执行器操作,并发出报警信号。

The built-in synchronizer, phase rotation moment three-phase supply by monitoring, to ensure the correct operation of the actuator according to instructions, when there is phase reversed, automatic correction of the same step, ensure the actuator according to instruction execution. Actuator internal phase monitor to monitor the three-phase power, once one or more phases of lost, immediately banned actuator, and sends out the alarm signal.



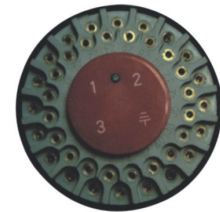
超强检错报警功能 Super error detection alarm function

执行器一旦发生故障时,内部的智能化检错报警功能会自动检错和报警,显示执行器的故障原因,准确指示执行器运行状态。根据不同的故障原因,显示不同的报警信号,将大大缩短用户排除故障所需要时间,尽快将执行器恢复到正常工作状态。

Actuators once a failure occurs, internal intelligent error detection alarm automatically error detection and alarm, display of actuators reason, accurate instructions actuators running state. According to the different fault reason, show different alarm signal, will greatly shortening the time of users needed to troubleshoot, return actuators to normal working state as soon as possible.

阀位测量 Valve position measurement

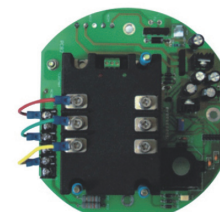
POK 执行器利用霍尔效应磁性计数编码器精确计量执行器的行程,无需限位开关或机械齿轮。POK actuator using the Holzer effect of magnetic count encoder accurate measurement of the actuator stroke, without any limit switch or mechanical gear.



电机过热保护 Motor overheating protection

执行器电机线圈预埋热敏开关,一旦线圈温度超过预设值 120°C,热敏开关将断开相应触点,禁止执行器运行,并发出报警信号。

The actuator motor coil embedded thermal switch, once the coil temperature exceeds a preset temperature 120 °C, temperature switch will open the corresponding contact, prohibit the actuator operation, and sends out the alarm signal.



瞬时逆转保护 Instantaneous reversal protection

当执行器向一个方向转动时,突然接到反向运转命令,执行器内部的控制逻辑将会延时一段预设的时间后,才执行器反向运转命令。这种功能将减少电机电流的冲击,延长接触器的寿命,同时防止冲击负载对阀杆、齿轮箱等机械传动装置造成损伤,有效保护电机。

When the actuators to a direction, suddenly receive reverse operation command, the inside of the actuator control logic will the delay The preset time, actuator reverse operation command. This function will reduce the impact of the motor current and prolong the contactor life, at the same time, to prevent the impact load on the valve stem, gear box, such as the damage to the mechanical transmission device, effectively protect the motor.

阀门堵转保护 Valve blocking protection

当执行器接到信号开始运转时,如果阀门被卡住,执行器在预设的时间内没有动作,内部电路将断开相应的触点,强制中止执行器运,同时发出报警信号。

When the actuator receives signals the start of operation, if the valve is stuck, actuator no action at the preset time, the internal circuit will open the corresponding contact, forced to suspend the actuator, and send out alarm signals.

GPRS 通讯模块 The GPRS communication module

GPRS 模块与电动执行器 485 总线接口相连, 实现远距离控制电动阀门。

The GPRS module and the actuator 485 bus interface, realize remote control electric valve.

性能参数 Performance parameters

功能 function	型号 model	POK-10	POK-16	POK-25	POK-50	POK-100	POK-200
电源 Power		AC24V/110V/220V/230V/240V/380V 50/60HZ DC24V/12V ±10% 允许波动。其它电压可定制					
力矩 Torque		100N.M	160N.M	250N.M	500N.M	1000N.M	2000N.M
时间 Time		30S	30S	30S	30S	60S	100S
电机 Motor		23W/H	23W/H	50W/H	90W/H	100W/H	100W/H
工作电流 Working Current		0.6A	0.7A	0.8A	1.2A	1.3A	1.3A
重量 Weight		3.7KG	3.7KG	6.8KG	8.0KG	12KG	12KG
信号 Signal		整体开关型: 开关式, 反馈 4 个无源信号、4 - 20mA 信号 整体调节型: 输入输出: 4-20mA、0-10V、1-5V、MODBUS、PROFIBUS 现场总线 The whole switch: switch type, 4, 4 - 20mA with passive signal feedback signal The overall: input and output: 4-20mA, 0-10V, 1-5V, MODBUS, PROFIBUS field bus					
位置信号 Position signal		执行器位置反馈信号: 500 Ω - 10K Ω 电位器或编码器 The implementation of feedback signal for position: 500 Ω 10K potentiometer or encode					
输入阻抗 Input Impedance		90 Ω					
定位精度 Positioning accuracy		可达到 0.4% Can reach 0.4%					
特点 Characteristic		配备红外遥控器, 用户可对设备进行个性化设置无需打开设备, 实现了非侵入式设置。 Equipped with infrared remote control, the user can personalize the equipment without opening the equipment, realize the non intrusive settings.					
		比例控制信号: 4-20mA、0-10V、1-5V、开关、MODBUS、PROFIBUS 现场总线 Proportional control signal: 4-20mA, 0-10V, 1-5V, switch, MODBUS, PROFIBUS field bus					
		现场控制单元: 远程 / 就地切换。就地控制: 开、关、停 Field control unit: remote / local switching. Local control: open, close, stop					
		多功能显示窗口, 用户随时了解设备基本设置参数和运行状态, 故障报警信息一目了然 Multi function display window, the user at any time to understand the basic equipment setup parameters and running status, fault alarm information stick out a mile					
		支持现场总线控制: MODBUS、PROFIBUS Support field bus control: MODBUS, PROFIBUS					
		三相电源自动鉴相、自动纠正, 现场安装无须关心相序。缺相自动保护设备安全。 Three phase power supply automatic phase, automatic correction, on-site installation without caring about the phase sequence. Automatic open phase protection equipment safety.					
		精度自调节功能, 出现振荡自动降低定位精度, 该功能可现场关闭或使用。 Precision self adjustment function, oscillation occurs automatically reduce the positioning accuracy, the function can be shut down or using the site.					
		具有完备的堵转和振荡判定等故障检测功能。检测到故障后, 将停止工作以保护设备及整个系统, 除通过显示屏显示故障外还通过无源触点向控制系统发出报警, 内置 4 无源触点输出: 故障输出、控制模式 (现场 / 远程)、开到位、关到位 With perfect blocking and determine the oscillation fault detection functions. After a fault is detected, will stop working to protect the equipment and the whole system, in addition to the display shows the fault is through passive contact alarm control system, built-in 4 passive contact output: the fault output, control mode (local / remote), open, closed in place					
		丰富的现场可设置工作模式, 正动作模式、逆动作模式, 可设备控制信号中断时, 阀门全开、停止、全关动作模式 Rich scene can set working mode, mode of action, the inverse operation mode, equipment control signal is interrupted, the valve fully open, fully closed, stop motion model					
		瞬时逆转保护, 如当执行器开阀动作时, 执行器接到关阀指令, 将先停止动作, 然后延时一段预设时间再执行器关阀动作, 以减少对设备冲击。 Instantaneous reversal protection, such as when the actuator to open valve, actuator to close valve command, will be the first to stop the action, and then delay for a preset time and actuator valve action, in order to reduce the impact of equipment.					
	采用固态继电器或接触器控制三相电源, 不存在漏电问题, 更安合可靠。 The solid state relay or contactor control three-phase power, there is no leakage problem, more safety and reliable.						

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接线图 Wiring diagram

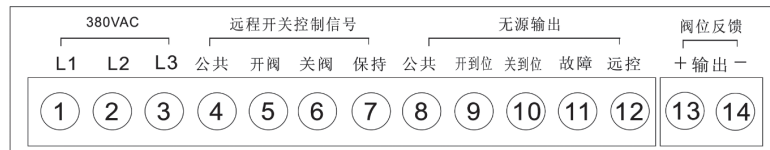
调节型 AC380V
Regulation type AC380V



调节型 AC220V
Regulation type AC220V



开关型 AC380V
Switch type AC380V



开关型 AC220V
Switch type AC220V



注:

1. 开关型控制信号为无源触点控制,切勿接入强电,否则烧毁设备
2. 两线制开关型控制接线端子 380V 为 4、6,220V 为 3、5
3. 单相型号电源电压可能是 220VAC/110VAC/24VAC, 图中只以 220VAC 为例