

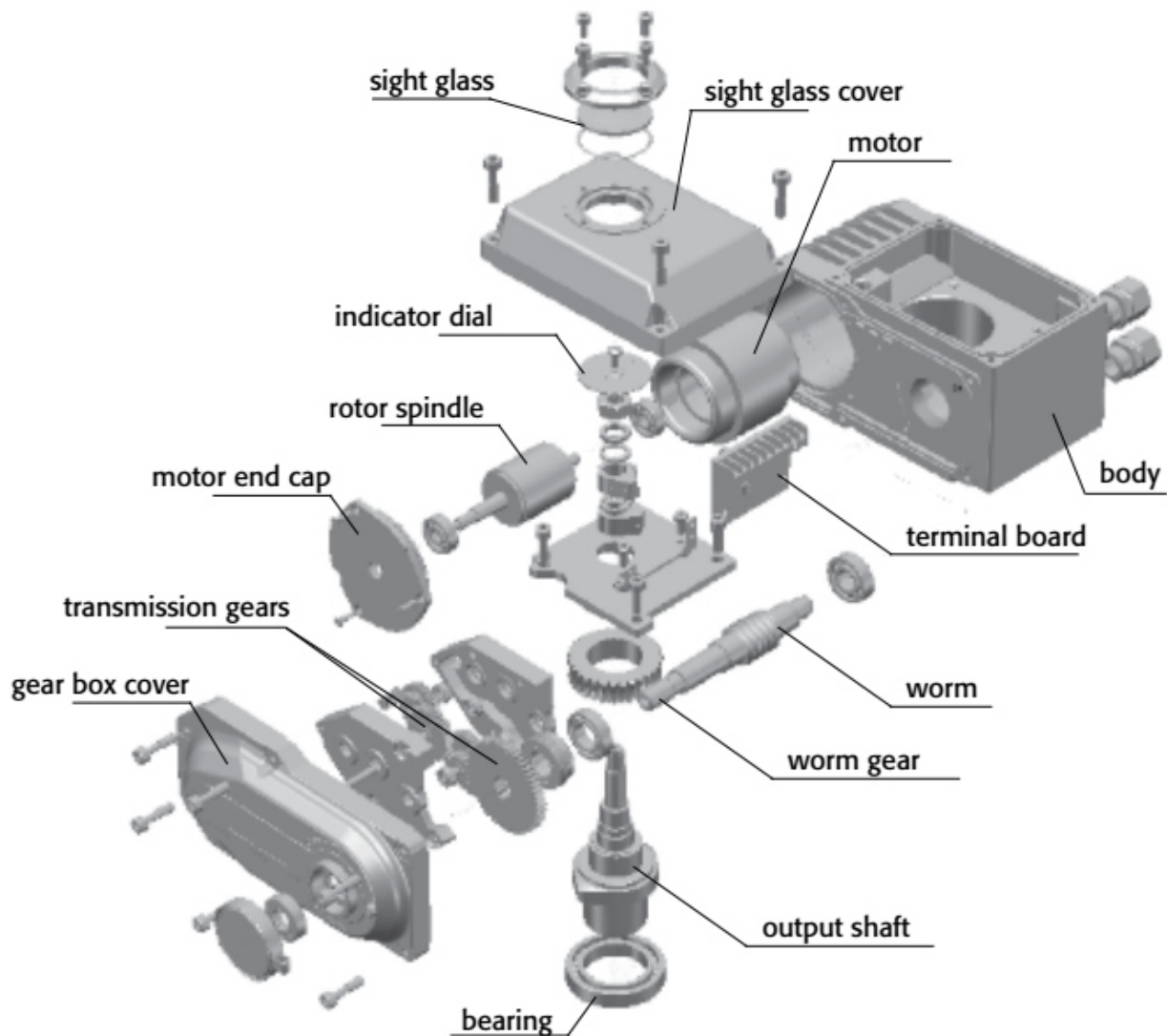
EA Series Electric Actuator



Summary

EA Series electric actuator is used for controlling 0°-270° rotation of the valves and other similar products, such as butterfly valve, ball valve, damper, flapper valve, plug valve, louver valve and so on. It widely applies to petroleum, chemical, water treatment, shipping, paper making, power plant, heating, light industry and other industries. It can be driven by 380V/220V/110V AC power or 24V/110V DC power, inputs 4-20mA current signal or 0-10V DC voltage signal as control signal. It moves the valve to the right position, and achieves automatic control, its maximum output torque is 2000N·M. (CE certificate approved).

Features



- **Actuator Cover**—The cover is made of hard aluminum alloy with anodize treatment and polyester powder coating. It is highly corrosion-resistant and waterproof level is IP67. IP68 and explosion-proof type is optional.
- **Motor**—Fully enclosed squirrel-cage motor with small size, large torque, small inertia force and F class insulation rating. Internal hot protection switch avoids damaging of the motor.
- **Manual Structure**—The design of handle is safe, reliable, labor-saving and small. When the actuator is not energized, it can be operated by handle. When you don't need manual operation, put the wrench in the slot on back side of the actuator.
- **Position Indicator** —Installed in the center axis for observing position of valve. To avoid ponding and observe conveniently, it is designed by convex lens.

- **Seal** — It has good seal performance. And its protection class is IP67, also IP68 is optional.
- **Limit Switch**—Mechanical and electronic double limit. Mechanical limit screw is adjustable, safe and reliable. Electronic limit switch is controlled by the cam. Position of limit switch can be set accurately and conveniently by simple adjustment.
- **Self-lock**— Precise worm and worm gear transfer large torque efficiently with low noise(max. 50 dB) and long life. The self-lock function prevents inversion and insure stability and reliability. High-effective lubricant oil has been added ex-factory, it doesn't need to add any more.
- **Anti-off bolt** — The bolt will attach to the cover when removing the cover. All external bolts are made of stainless steel.
- **Installation** — Installation size at the bottom of Electric Actuator meets international standard ISO5211 and DIN3337. The pores are ditetragon that it is easy to install by linear or 45° . The actuator can be installed vertically or horizontally.
- **Circuit** — Controlling circuit meets single-phase or three-phase power supply standard with reasonable and compact layout. Terminals meet various of additional functional requirements effectively.

Performance Parameter

Model	Max output torque	Operating time to 90°	Output axis	Motor	Single-phase rated current (220V 50HZ)	Handwheel turns	Weight
	N·M	S	mm	W	A	N	Kg
ODL-003	30	30	11*11/φ15	8	0.15	5	2.2
ODL-005	50	30	14*14/φ20	10	0.25	10	3.6
ODL-008	80	30	14*14/φ20	10	0.25	10	3.6
ODL-010	100	30/40	17*17/φ20	15	0.35	7.5	4.6
ODL-015	150	30/40	17*17/φ25	15	0.37	7.5	4.6
ODL-020	200	30	27*27/φ42	45	0.3	48	13
ODL-030	300	30	27*27/φ42	45	0.31	48	13.4
ODL-040	400	30	27*27/φ42	60	0.33	48	13.8
ODL-060	600	30	27*27/φ42	90	0.33	48	14
ODL-080	800	45	27*27/φ42	180	0.47	48	14.3
ODL-100	1000	135	Max φ65	180	0.47	130	60
ODL-160	1600	135	Max φ65	180	0.85	130	60
ODL-200	2000	135	Max φ65	180	0.85	130	60

Standard Technical Parameter

Actuator Cover	Aluminum alloy, waterproof level: IP67, NEMA4 or 6	
Power supply	110/220V AC, 1 Phase; 380/440V AC, 3 Phase; 50/60HZ, ±10%	
Power supply of Control	110/220V AC, 1 Phase; 50/60HZ, ±10%	
Motor	Squirrel-cage Asynchronous Motor	
Limit Switch	2* open/close, SPDT, 250V AC, 10A	
Assistant Limit Switch	2* open/close, SPDT, 250V AC, 10A	
Stroke	90° - 270± 10° (please inform us if over 90°)	Optional: 0° - 270°
Failure Protection/Operating Temperature	Internal thermal protection. Open: 120°C ± 5°C, Close: 97°C ± 15°C	
Indicator	Continuous position indicate	
Manual Operation	Mechanical handle (option: handwheel)	
Self-lock Device	Self-lock by worm and worm gear	
Mechanical Limit	External adjusting bolts (2 pieces)	
Connecting hole	M18 (2 pieces)	
Ambient Temperature	-20°C ~+70°C	
Lubrication	Aluminum-base grease(EP type)	
Material	Steel, Aluminum alloy, Aluminum bronze, Polycarbonate	
Ambient Humidity	Max 90% RH	
Anti-vibration	X Y Z 10g, 0.2~34HZ, 30 minutes	
External Coating	Dry powder, Epoxy polyester	

Surface View and Installation Dimension

1. EA-003

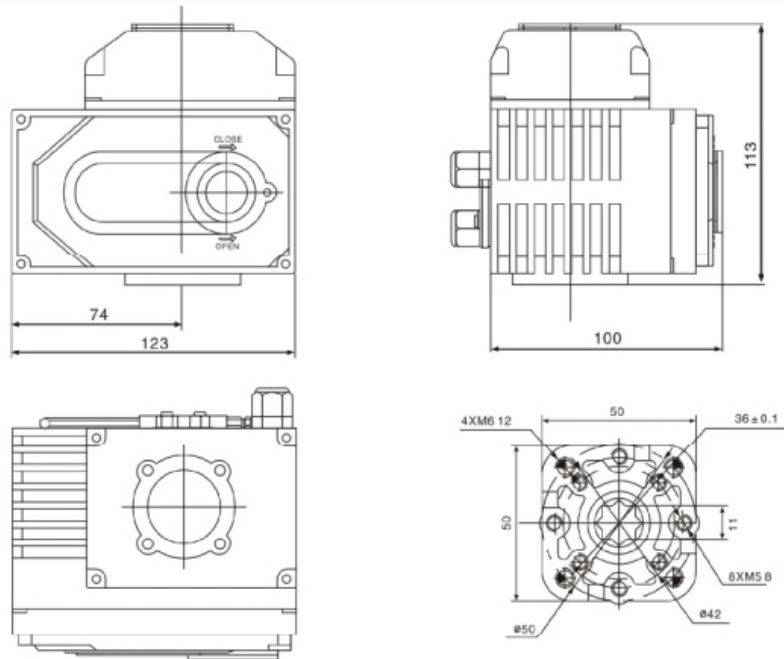


图1

2. EA-005 ~ EAL-008

(The part of dotted line is for analog quantity control box, open/closetype actuators don't have this part.)

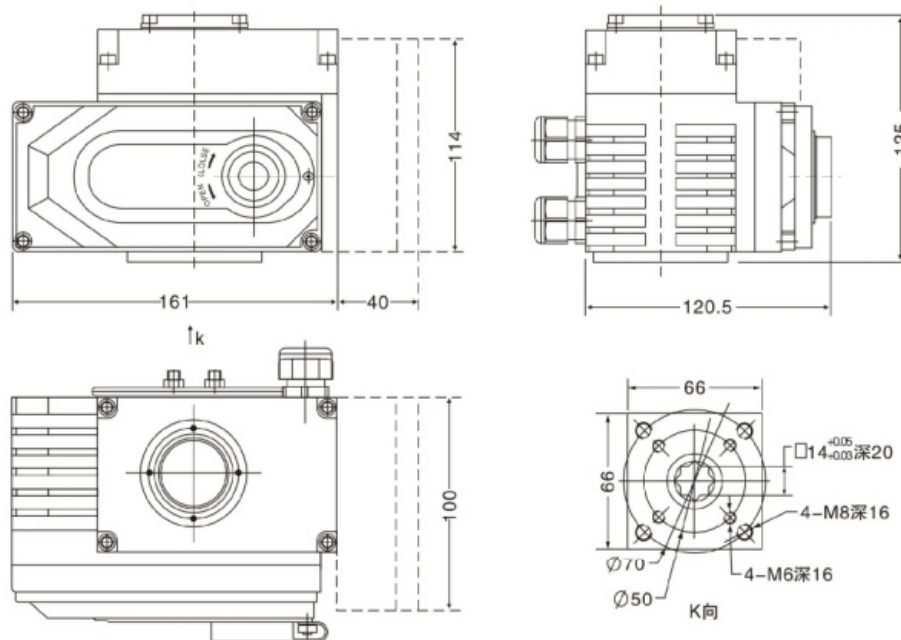


图2

3. EA-010 ~ EA-015

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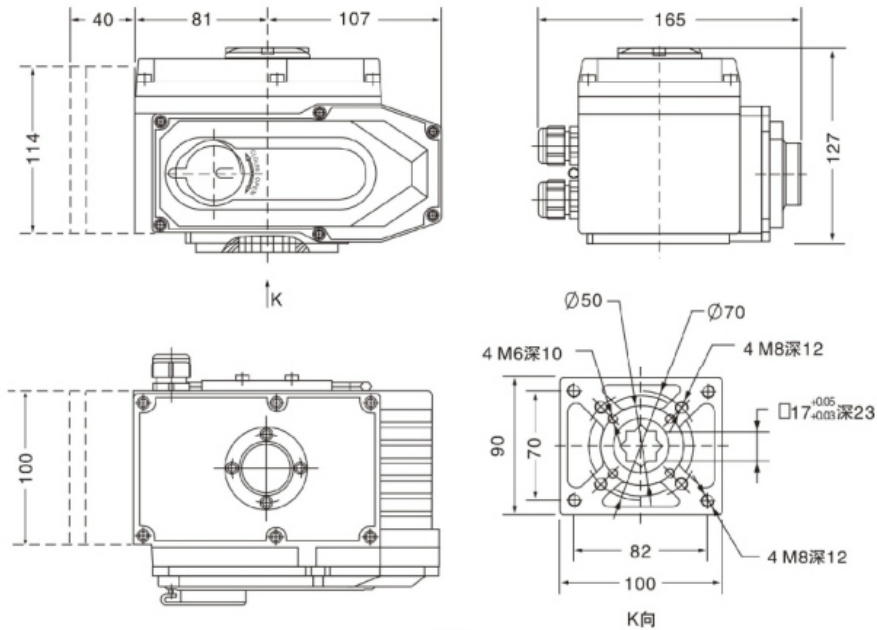


图3

4. EA-020 ~ EA-080

(The part of dotted line is for analog quantity control box, open/closetype actuators don't have this part.)

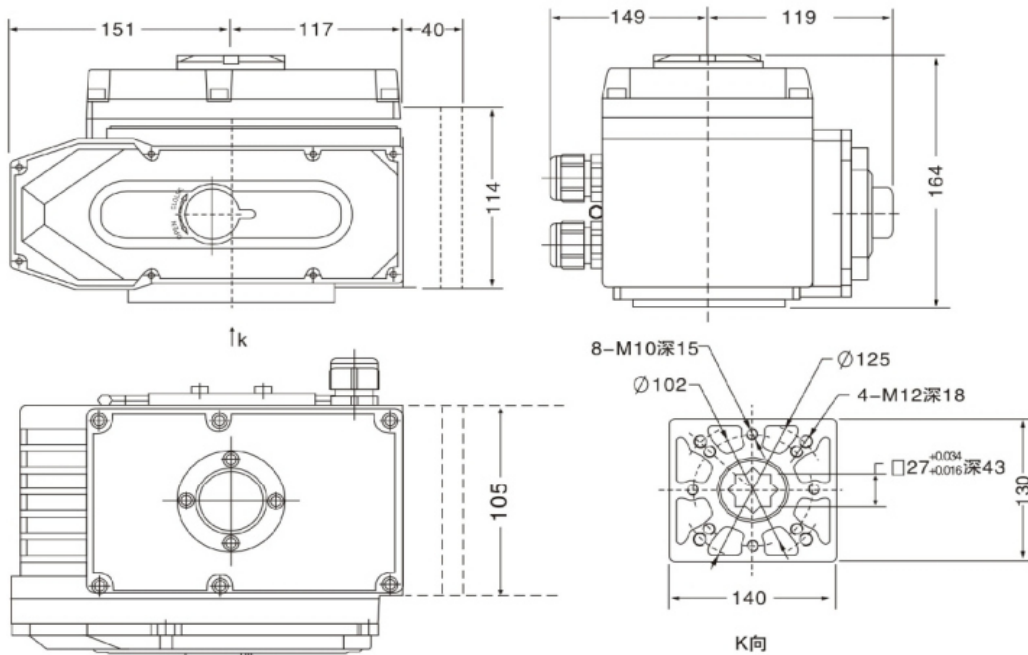


图4

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5. EA-100 ~ EA-200

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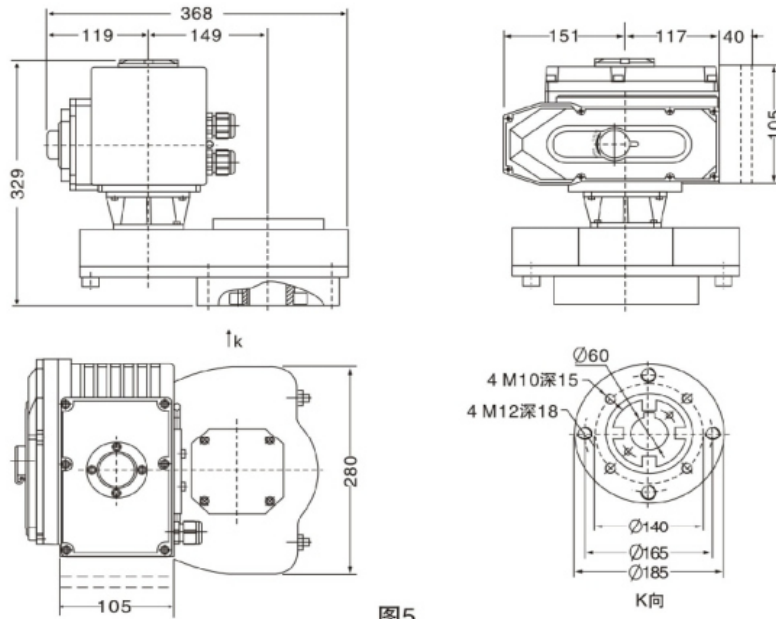
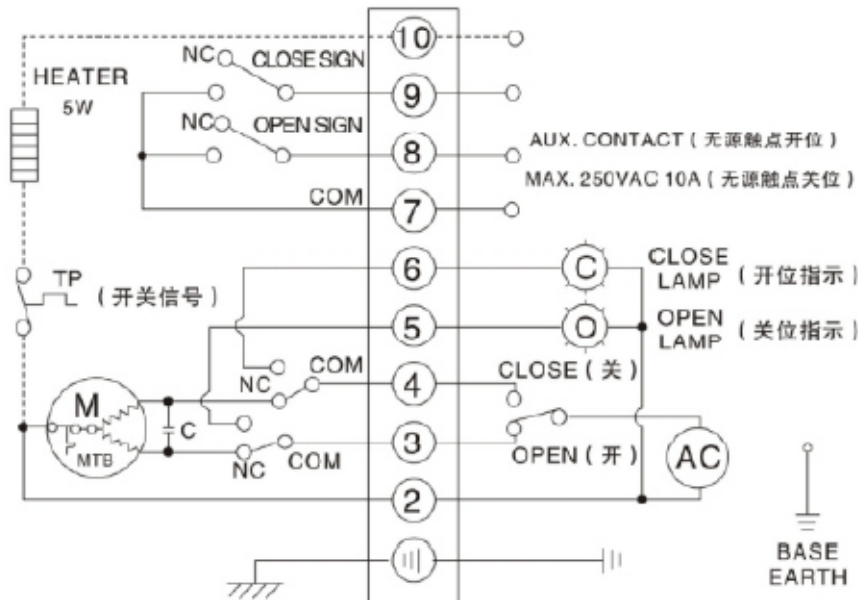


图5

Circuit Diagram

1. Dry contact signal output circuit diagram of standard open/close type S01



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2. Dry contact signal output circuit diagram of analog quantity

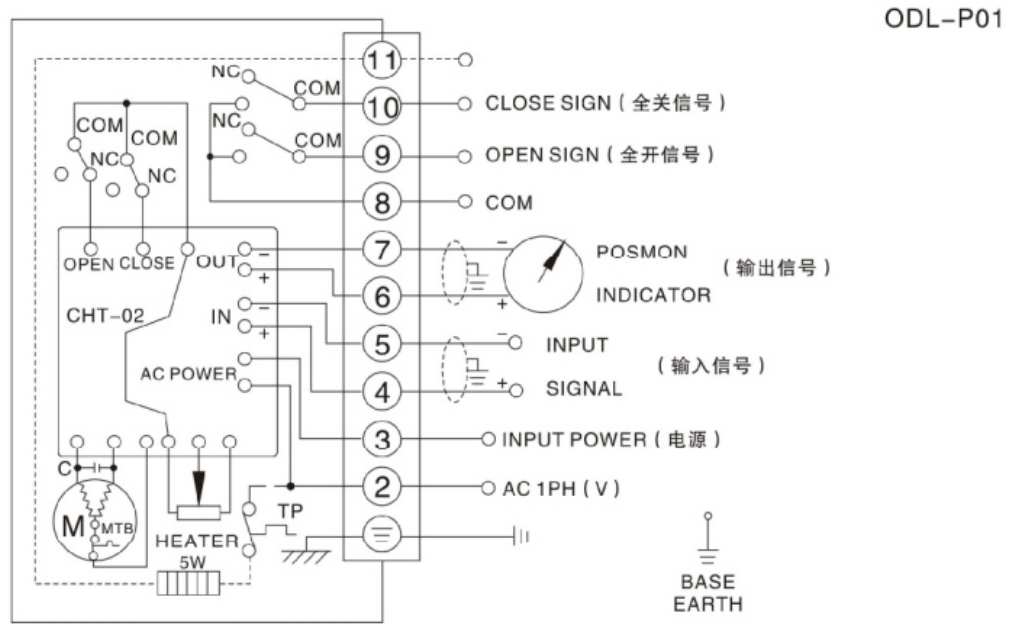
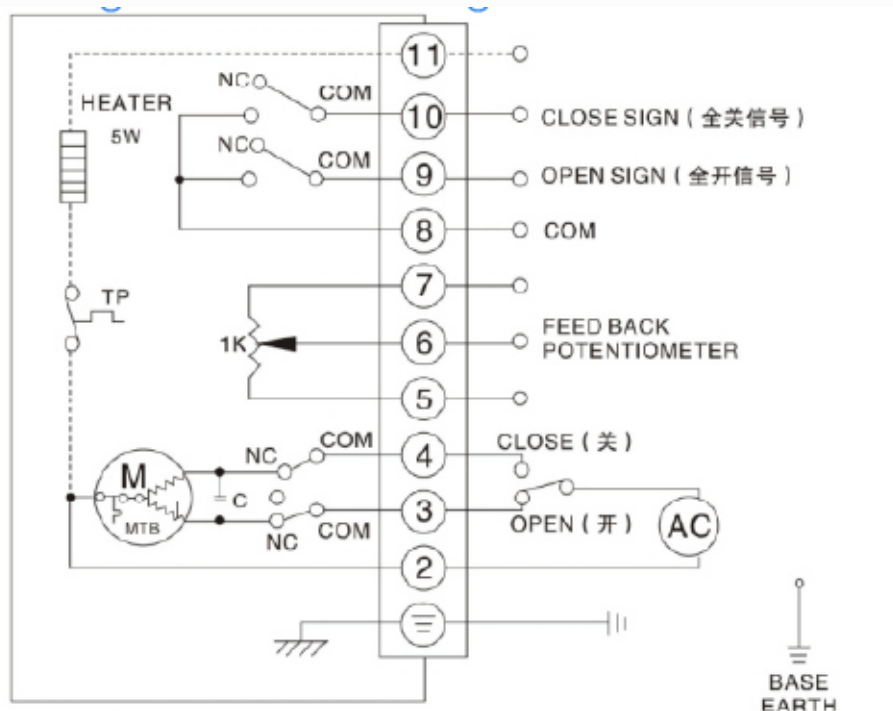


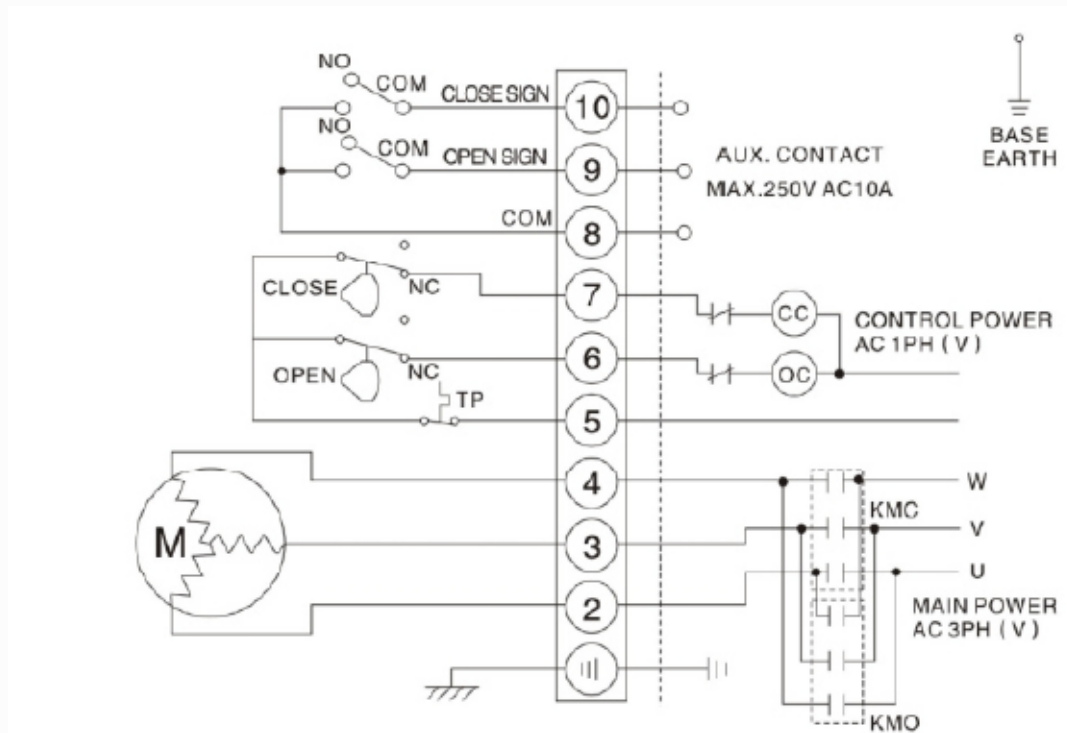
图7

3. Angle and dry contact signal output circuit diagram R01

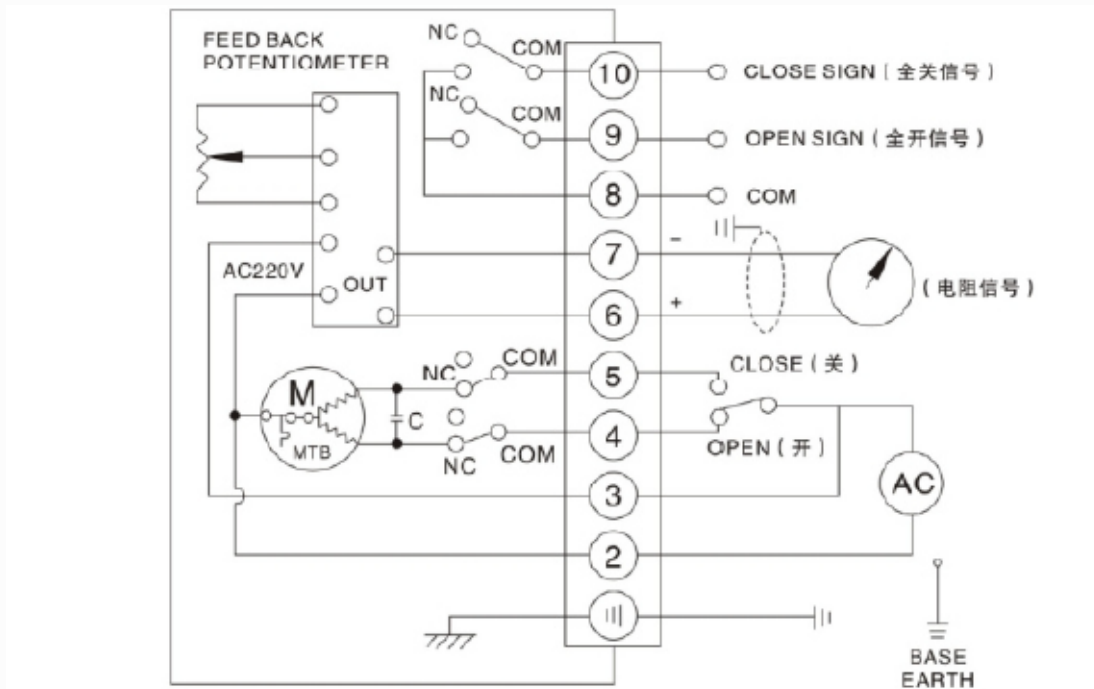


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4. 380/440VAC, 50/60Hz, 3 Phase (External control open/close type) K3 W01



5. On/off 4-20mA signal input and output circuit diagram FS01



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6. Dry contact signal output circuit diagram of DC standard open/close type DCS01

