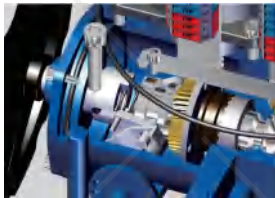
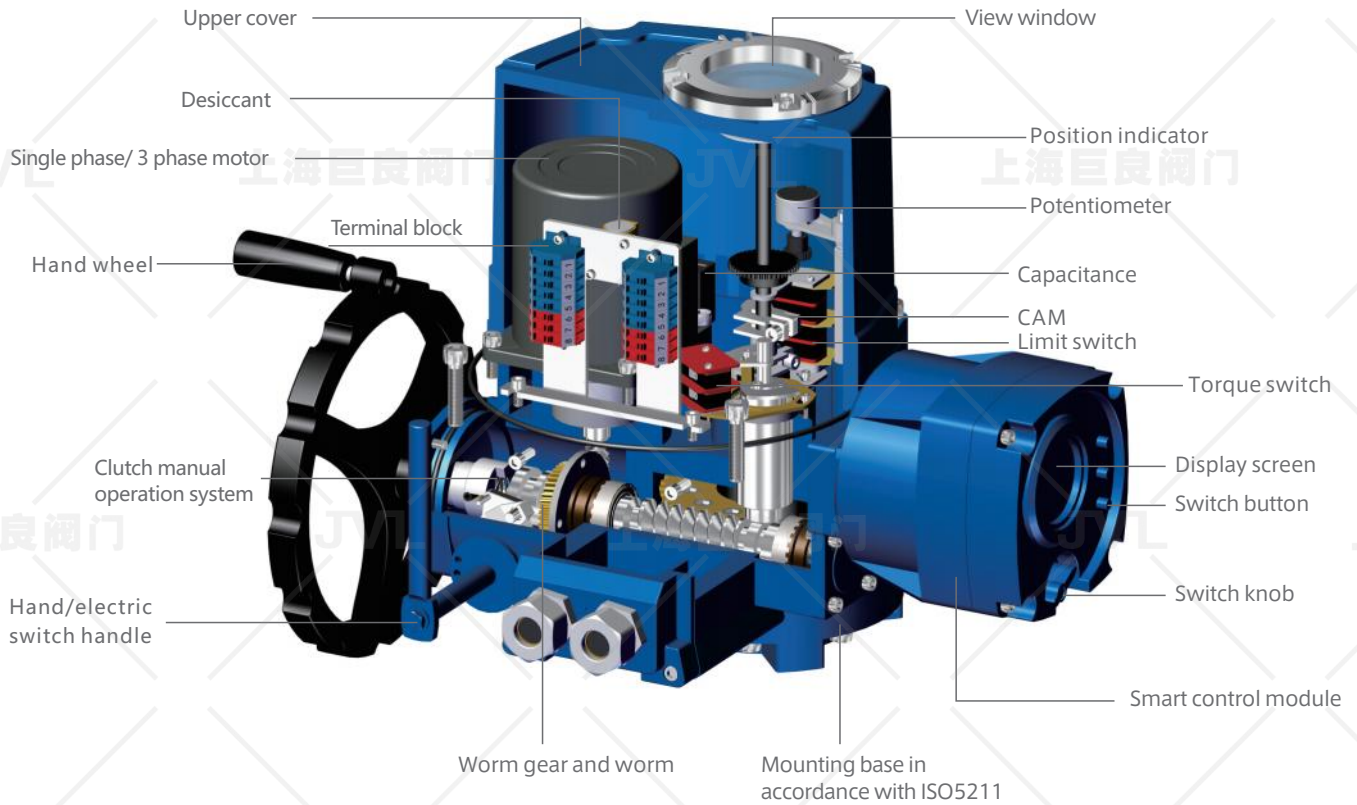


Model: JLB SERIES EXPLOSION PROOF ELECTRIC ACTUATOR**Overview**

"JLB" series explosion-proof electric actuators are used to control 0°~90° rotating valves and other similar products, such as butterfly valve, ball valve, damper valve, baffle valve, plug valve, shutter valve, etc. Widely used in petroleum, chemical, water treatment, shipbuilding, paper, power plant, heating, light industry and other industries. It can be driven by a 380V/220V/110V AC power supply or a 24V/110V DC power supply, using switching signal or analog signal as control signal to achieve automatic control, with a max. output torque of 2000N.M. (CE certification and explosion-proof certificate)

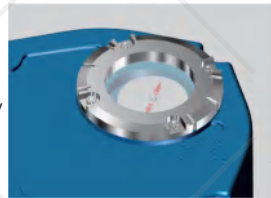
Performance characteristics

1. Housing: The cover is made of hard aluminum alloy with anodizing treatment and polyester powder coating. High corrosion resistance, protection class is IP67.
2. Motor: Fully enclosed squirrel-cage motor, small size, large torque, small inertia force, F class insulation. Internal thermal protection switch to avoid damage to the motor.
3. Manual handwheel: The handwheel design is safe and reliable, saving time and effort. When the actuator is not energized, pull the clutch to the correct position and operate it with the handwheel. When energized, the clutch will automatically reset.
4. Position indicator: Mounted on the center shaft to observe the valve position. The lens is made of explosion-proof tempered glass with higher strength.
5. Heater and thermostat: Used to keep the internal temperature of the actuator chamber to avoid condensation of the interior of the chamber due to changes in ambient temperature.
6. Switch limits: Two mechanical and electronic limits. The mechanical limit screw is adjustable, safe & reliable. The electronic limit is a micro switch controlled by the CAM. The position of the limit CAM can be adjusted simply to set the electric stroke accurately and conveniently.
7. Torque Switch: Provides overload protection (except for JLB010/15) and avoids damage to the valve and actuator by automatically cutting off the power supply when the valve is blocked. (Factory Settings without user modification)
8. Self locking: Precision worm gear transmission with high torque, low noise, and long service life. The self-locking function prevents reverse rotation, and ensures reliability & safety. High efficiency lubricating oil has been added before leaving the factory, and there is no need to add it again during use.
9. Anti release bolts: When the cover is removed, the bolts will adhere to the cover plate. All external bolts are made of stainless steel.
10. Installation: The installation dimensions of the bottom of the electric actuator comply with international standards ISO5211 and DIN3337. The holes are square and easy to install through linear or 45°. The actuator can be installed vertically or horizontally.
11. Wire: Circuit control conforms to single-phase or three-phase power supply standards, reasonable and compact layout. Terminals effectively meet various additional function requirements.
12. Smart module: Uses highly integrated, low power MCU and analog circuit control board. Due to the all-metal external installation, the motor heat source and control panel are effectively separated, greatly improving the anti-interference and heat resistance of software and hardware.
13. Digital display of valve position: During actuator opening and closing operations, the LCD displays real-time changes in valve position.
14. Automatic adjustment of phase sequence: Smart actuator automatically identifies and adjusts the phase sequence of three-phase power supply.



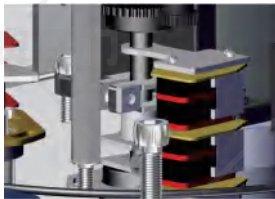
Manual operation (clutch system)

- Manual/automatic changeover handle and handwheel for manual operation.
- After power on, the handle will automatically reset and switch to automatic mode.



Two small slots on the view window

- There are two small slots on the window cover to facilitate the drainage of rainwater, and the convex mirror does not accumulate water, easier to observe.



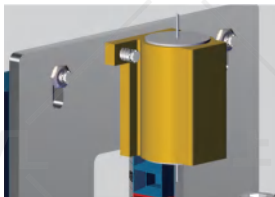
Cam and limit switch

- It is fastened on top by two screws and is easy to set.
- Each cam can be set individually.
- Once set, each cam will always remain in this position.



Torque switch

- Torque switch can prevent damage to internal components caused by motor overheating due to overload.
- Once the torque switch works, the actuator should stop operating immediately.



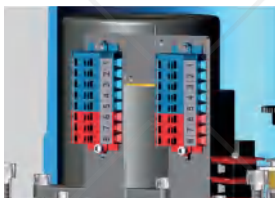
Dryer

- 7~10W, it made of ceramic with a metal shell for fast heat dissipation and long service life, and equipped with a thermal protector to prevent overheating, providing good heating and dehumidification effects.



Anti release bolt

- The upper cover bolts are specially designed to prevent them from falling off during maintenance and installation.
- All external bolts are made of stainless steel and will not rust.



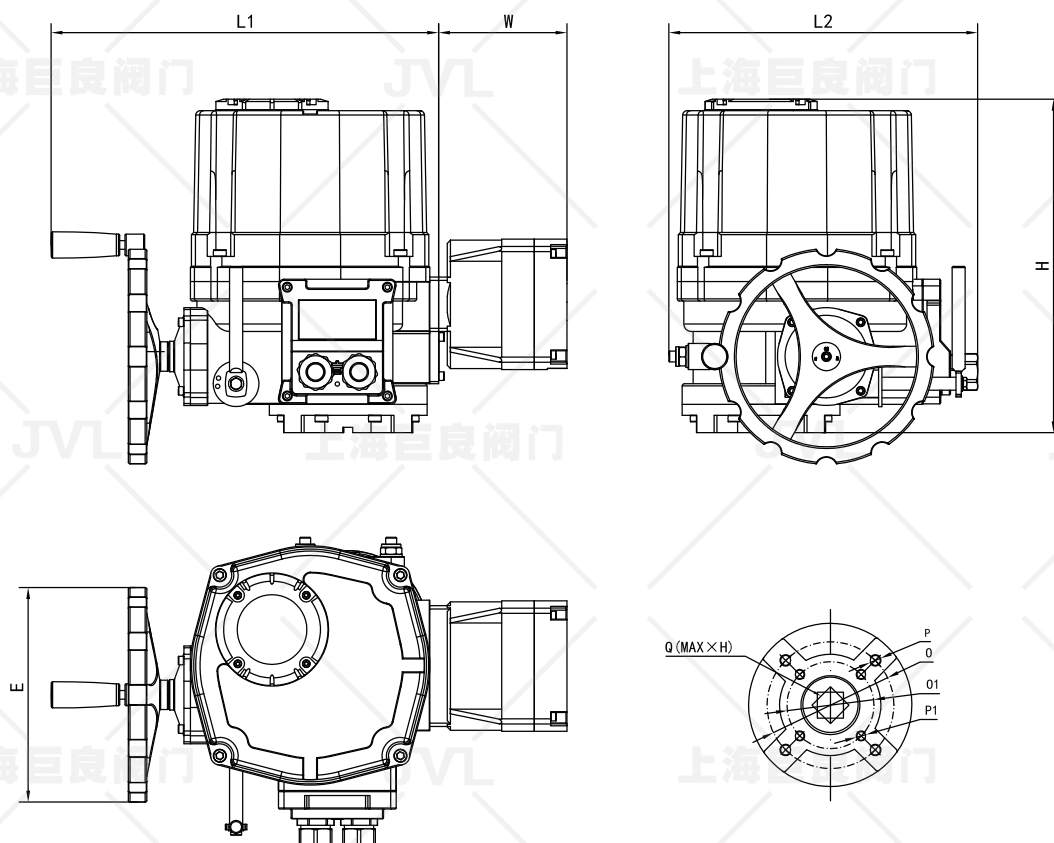
Terminal block

- Enough terminals for easy use
- Ensure tight and reliable wire connections



The combination of the upper cover and the body is an inclined plane

- Due to the vertical joint surface between the upper cover and the body of other actuators, it is difficult to remove the upper cover due to the small dimensional tolerance.
- The JLB actuator is designed with a 3° bevel dimension, which solves this problem. The tolerance is still very small, but it is easy to remove the upper cover.



▼ OUTLINE AND CONNECTION DIMENSIONS

Model	Outline dimension									
	L1	L2	H	E	W	O	P	O1	P1	Q×H
JLB-010	320	220	270	125	140	70	4-M8	50	4-M6	20×40
JLB-015	320	220	270	125	140	70	4-M8	50	4-M6	20×40
JLB-020	355	250	275	180	140	102	4-M10	70	4-M8	22×45
JLB-030	375	290	315	180	140	102	4-M10	70	4-M8	22×45
JLB-040	375	290	315	180	140	102	4-M10	70	4-M8	35×55
JLB-050	375	290	315	180	140	102	4-M10	70	4-M8	35×55
JLB-060	400	330	360	180	140	125	4-M12	102	4-M10	45×70
JLB-080	400	330	360	180	140	125	4-M12	102	4-M10	45×70
JLB-090	400	330	360	180	140	125	4-M12	102	4-M10	45×70
JLB-100	400	330	360	180	140	125	4-M12	102	4-M10	45×70
JLB-200	400	330	520	180	140	165	4-M20	-	-	45×70

●Note: Part W is analog quantity control box, switch type without this size.

▼ CHARACTERISTIC PARAMETER

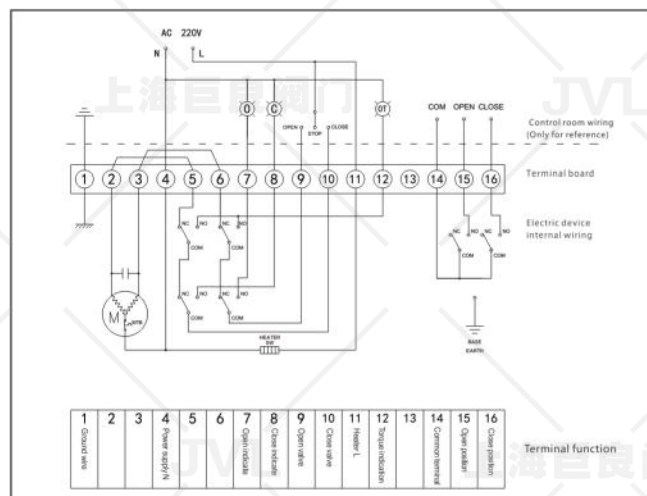
Model	Output torque	Stroke time	Max dia.	Motor power	Rated current(A)			Hand wheel	Weight(kg)
	N·M	90°	mm	W	DC 24V	AC 220V	AC 380V	N	
JLB-010	100	22	Φ20	25	0.85	0.55	0.15	11	12
JLB-015	150	22	Φ20	40	1.2	0.9	0.2	11	12
JLB-020	200	25	Φ20	40	1.2	0.9	0.2	11	15
JLB-030	300	35	Φ35	60	2.0	1.0	0.3	13.5	20
JLB-040	400	35	Φ35	90	3.0	1.2	0.4	13.5	21
JLB-050	500	35	Φ35	90	3.0	1.2	0.4	13.5	21
JLB-060	600	45	Φ45	120	-	1.9	0.5	16.5	26
JLB-080	800	45	Φ45	120	-	1.9	0.5	16.5	27
JLB-090	900	45	Φ45	180	-	2.4	0.8	16.5	27
JLB-100	1000	45	Φ45	200	-	2.6	0.9	16.5	27
JLB-200	2000	110	Φ65	200	-	2.6	0.9	49.5	64

▼ STANDARD TECHNICAL PARAMETER

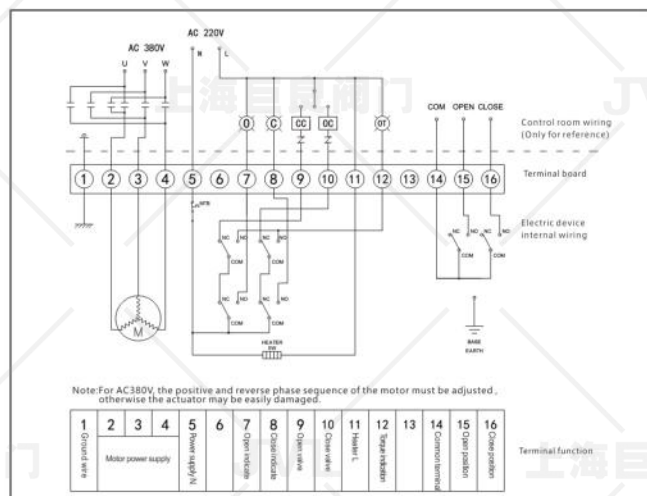
Name	Technical parameter	Note
Housing	Water proof class IP67	Optional: IP68 explosion proof
Motor	Squirrel cage asynchronous motor	
Limit switch	1open/1close、SPDT、250V AC 10A	
Auxiliary limit switch	1open/1close、SPDT、250V AC 10A	
Torque switch	1open/1close、SPDT、250V AC 10A	JLB10/15
Stroke	90°±10°	Optional 0°-270°
Fault protection/operating temp.	Inner thermal protection、Open at 115°C±5°C/Close at 97°C±5°C	
Indicator	Continuous position indicate	
Manual operation	Mechanical handle, which can be operated by hand wheel	
Self-locking device	Worm gear and worm mechanism provide self-locking	
Mechanical limit	2 external adjustments	
Heater & thermostat	7-10W	
Wiring hole	G 3/4" (2)	
Ambient temp.	-20°C~+70°C	
Lubrication	Aluminium base grease(EP type)	
Material	Steel, aluminum alloy, aluminum bronze, polycarbonate	
Ambient humidity	Max. 90% RH	
Seismic performance	XY Z10g、0.2~34HZ、30 minutes	
Surface coating layer	Dry powder、epoxy polyester	

WIRING LAYOUT

1.AC220V Standard switch type wiring schematic diagram

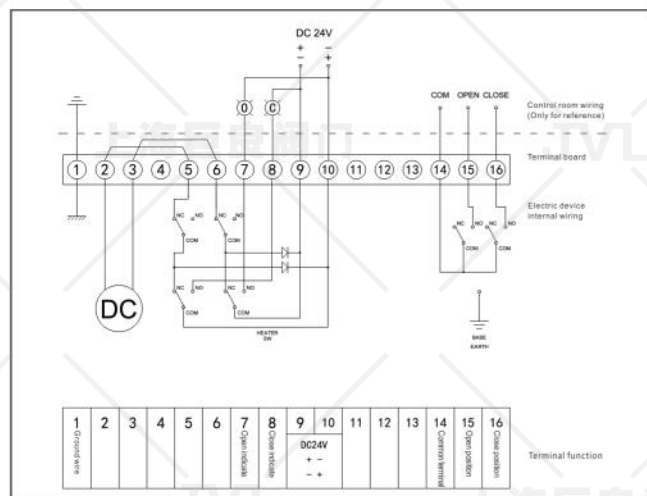


2.AC380V Standard switch type wiring schematic diagram

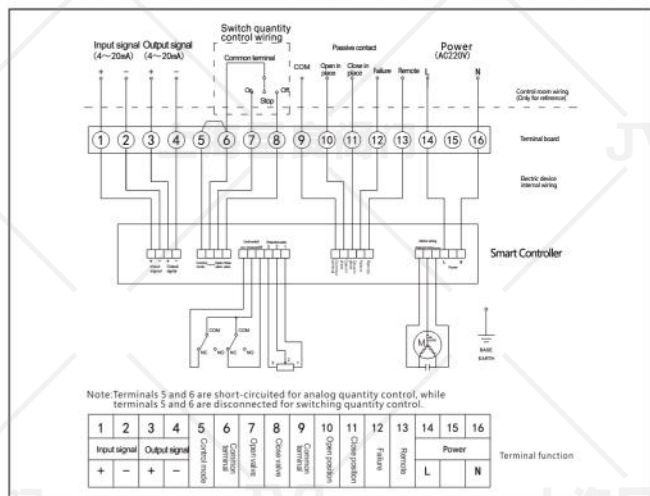


Note: For AC380V, the positive and reverse phase sequence of the motor must be adjusted, otherwise the actuator may be easily damaged.

3.DC24V Standard switch type wiring schematic diagram

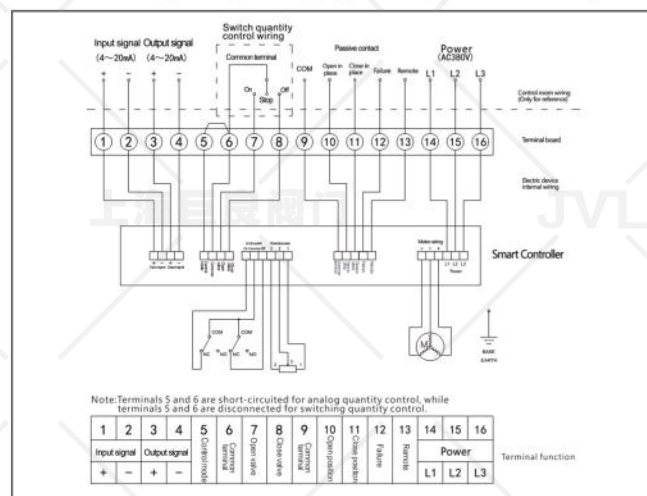


4.AC220V Integral regulating type wiring schematic diagram



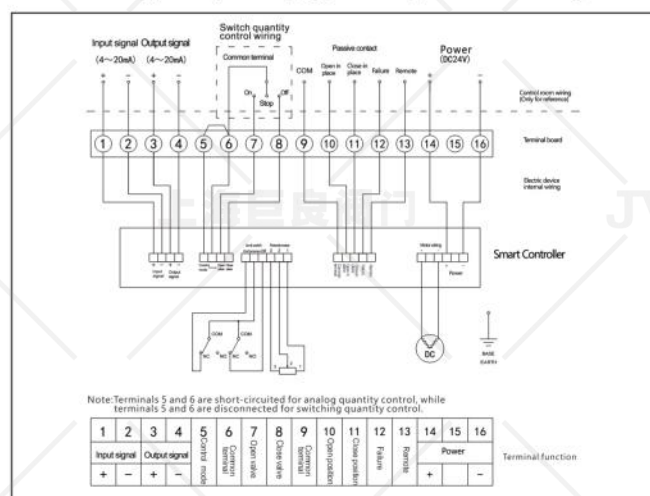
Note: Terminals 5 and 6 are short-circuited for analog quantity control, while terminals 5 and 6 are disconnected for switching quantity control.

5.AC380V Integral regulating type wiring schematic diagram



Note: Terminals 5 and 6 are short-circuited for analog quantity control, while terminals 5 and 6 are disconnected for switching quantity control.

6.DC24V Integral regulating type wiring schematic diagram



Note: Terminals 5 and 6 are short-circuited for analog quantity control, while terminals 5 and 6 are disconnected for switching quantity control.