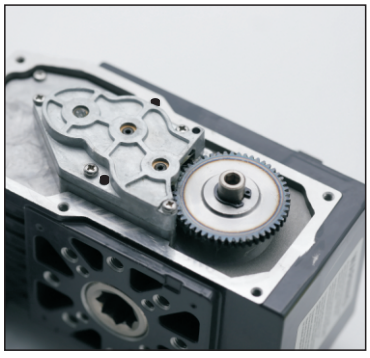
J&O FLUID CONTROL CO., LIMITED

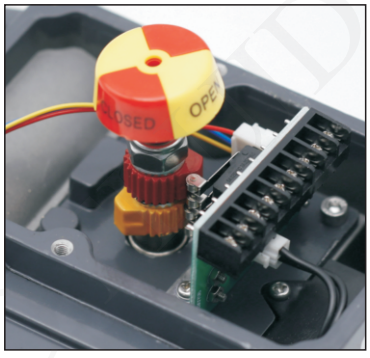
Electric Actuator

Ingress protection rating IP67
By improving the gasket and concave structure of upper cap binding surface, the sealing is more reliable.

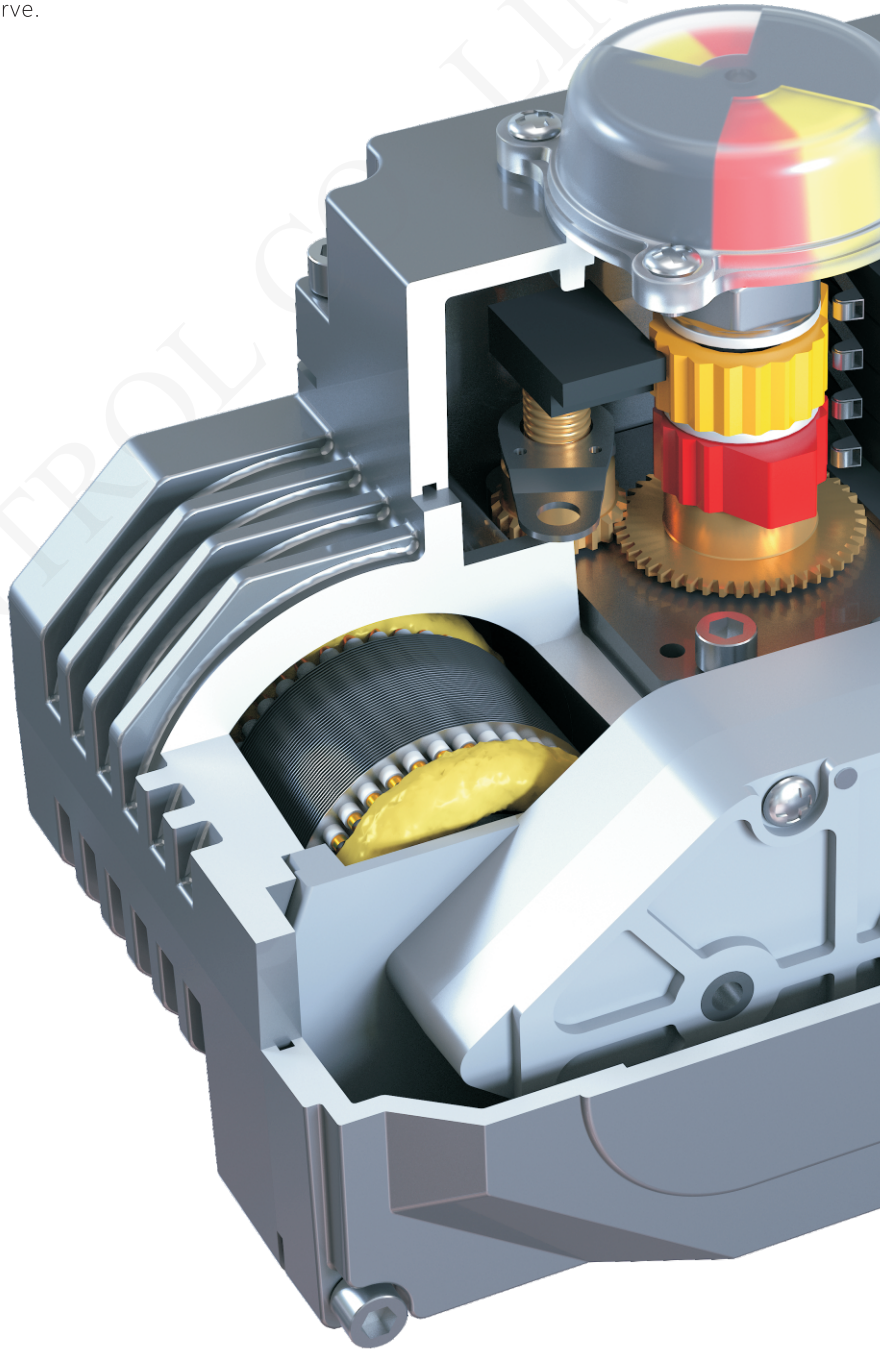
Convex indicator
Indicator is installed on the center shaft and adopts convex design, no cumulate water, more convenient to observe.



Transmission part is more reasonable and reliable
1.The gear box is made of zinc alloy, which is harder than aluminum alloy, avoid wearing and cracking; furthermore the gear box is fixed by location pins so that more accurate and stable.
2.All gears are made of 40 chromium steel which is processed by double heat treatment and finishing. Therefore, wear and fatigue resistance is stronger, solid and reliable.



Quicker and easier adjustment
By improving the electrical cam structure, integrate 4 cams into 2 cams, isolated with disc springs, and compressed with lock nuts. Limit can remain stable in ultra high and low temperature.



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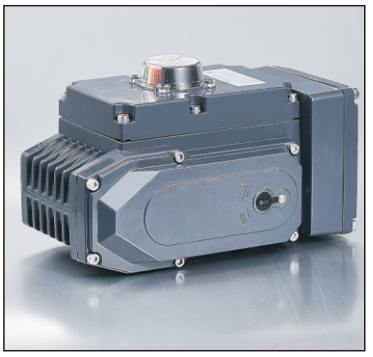
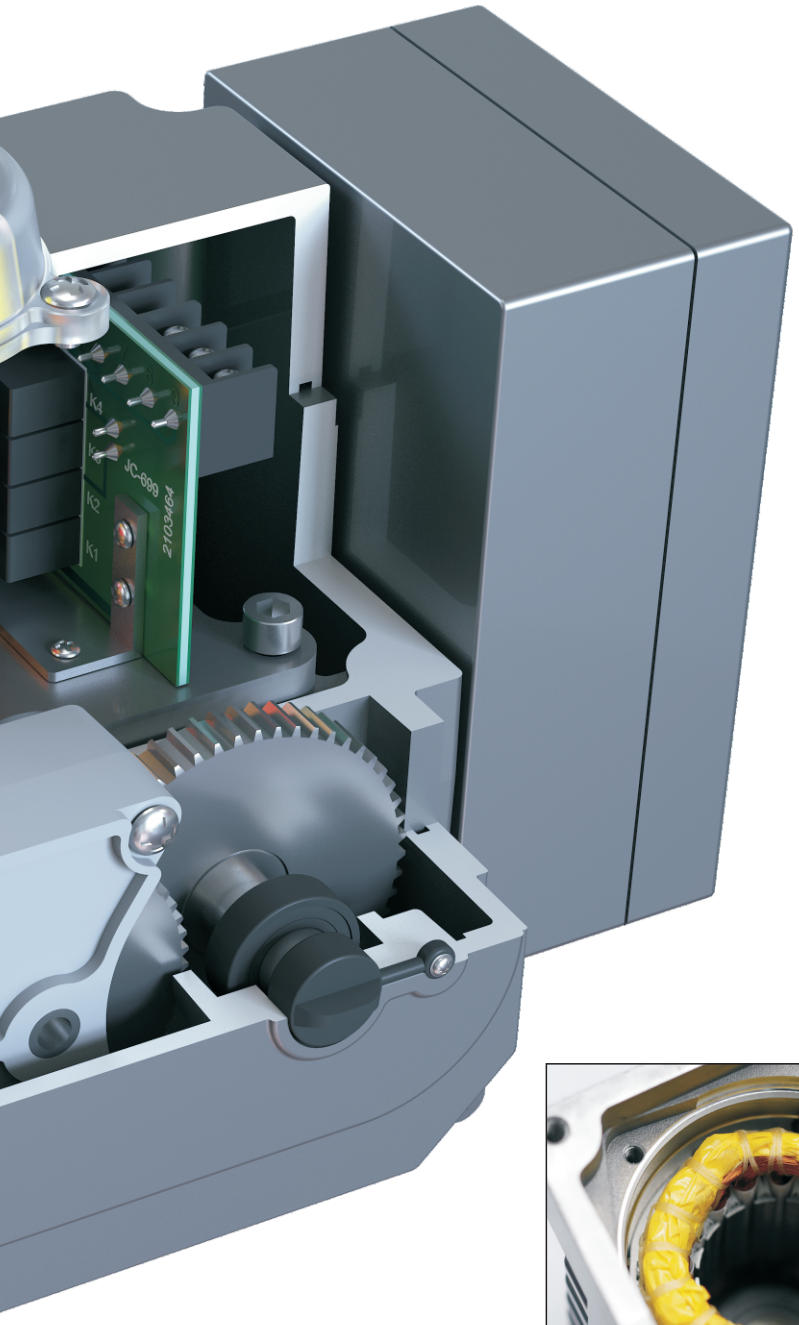
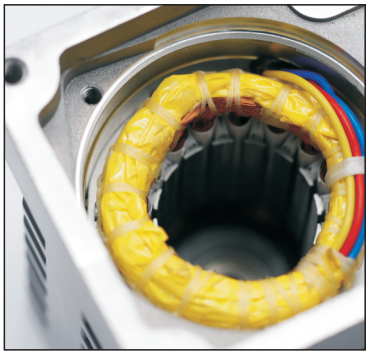


Fresh appearance and upscale
Avoiding the monotony of appearance more attractive.

Modulating type is more stable and reliable
1.Increased the size of module, thereby components selection range is wider, power is higher;
2.Bare board heat dissipation is better;
3.Smart setting, one key location, avoid users confusion because of too many buttons;
4.Module installed outboard to solve the contradiction of actuator maximum temperature is 120℃, while electronic components of module is only 65℃.



Keep manual handle conveniently
Add a handle clamp to the mechanical limit bolt so that the hex wrench not easy to lose in the site.



Lower motor temperature
By increasing the size of motor, under the same power, the capacitance and starting current is reduced, therefore reduce fevers.

More reliable and easier to assemble with valve
1.Easy mounting base which meets standard ISO5211, same as pneumatic actuators, conducive to reducing inventory.
2.The valve stem is directly inserted into the worm gear, so that the arm of valve and output shaft is shorter and output is more stable.

PERFORMANCE FEATURES

1.Shell: The shell is made of aluminum alloy, with anodic oxidation treatment and polyester powder coating. It is strong corrosion-resistant and ingress protection rating is IP67.
2.Motor: Fully enclosed squirrel-cage motor, small size, large torque, and small inertia force, F-class insulation rating, with thermal protection to avoid damaging.
3.Manual Structure: The design of manual structure is safe, reliable, small and save effort. Manual operation can be performed when the power is off. Generally, put the handle in the clamp, so conveniently.
4.Indicator: Indicator is installed on the center shaft and adopts convex design, no cumulate water, more convenient to observe.
5.Space heater: It is used to control temperature to avoid condensing, keep internal electrical components dry.
6.Sealing: Well sealing performance and ingress protection rating is IP67.
7.Limit switch: Mechanical, electronic double limit. Mechanical limit bolt is adjustable, safe and reliable; electronic limit switch is controlled by cam. Set position simply, accurately and conveniently, and not affected by excessive handle.
8.Self-locking: The precision worm gear mechanism can efficiently transmit large torque, low noise(max. 50dB), long life; it has self-locking to prevent reversal, also stable and reliable transmission without lubricating.
9.Anti-off bolt: The bolt are attached to the shell and will not off when remove the shell.
10.Installation: The bottom connection dimensions conform to the ISO5211/DIN3337 international standard. The hole is a double square to facilitate installation in line or 45° angle, which is highly adaptable. It's adaptable that can be installed vertically or horizontally.
11.Circuit: Control circuit conforms to the standard of single-phase or three-phase power, the wiring layout is compact and reasonable, terminals meet various of additional functional requirements effectively.

STANDARD TECHNICAL PARAMETER

Shell	Ingress protection rating IP67
Power	110/220VAC 1ph，380/440VAC 3ph，50/60Hz，±10%
Control power	110/220VAC 1ph, 50/60Hz, ±10%
Control Signal	Input/output signal 4-20mA
Motor	Squirrel-cage motor
Limit switch	2 x Open/Close, SPDT, 250VAC 10A
Auxiliary limit switch	2 x Open/Close, SPDT, 250VAC 10A
Range	90°~270°±10(Please specify in advance if over 90°)
Fail-safe / operating temperature	Built-in thermal protection, open 120℃±5℃/close 97℃±5℃
Indicator	Continuous position indication
Manual operation	Mechanical handle(optional)
Self-locking	Worm and gear with self-locking
Mechanical Limit	2x external adjustable stopper
Space heater	7~10W(110/220VAC) anti-condensation
Conduit entries	2 x M18
Ambient temperature	-30℃~+70℃
Lubrication	Aluminum-base grease(EP type)

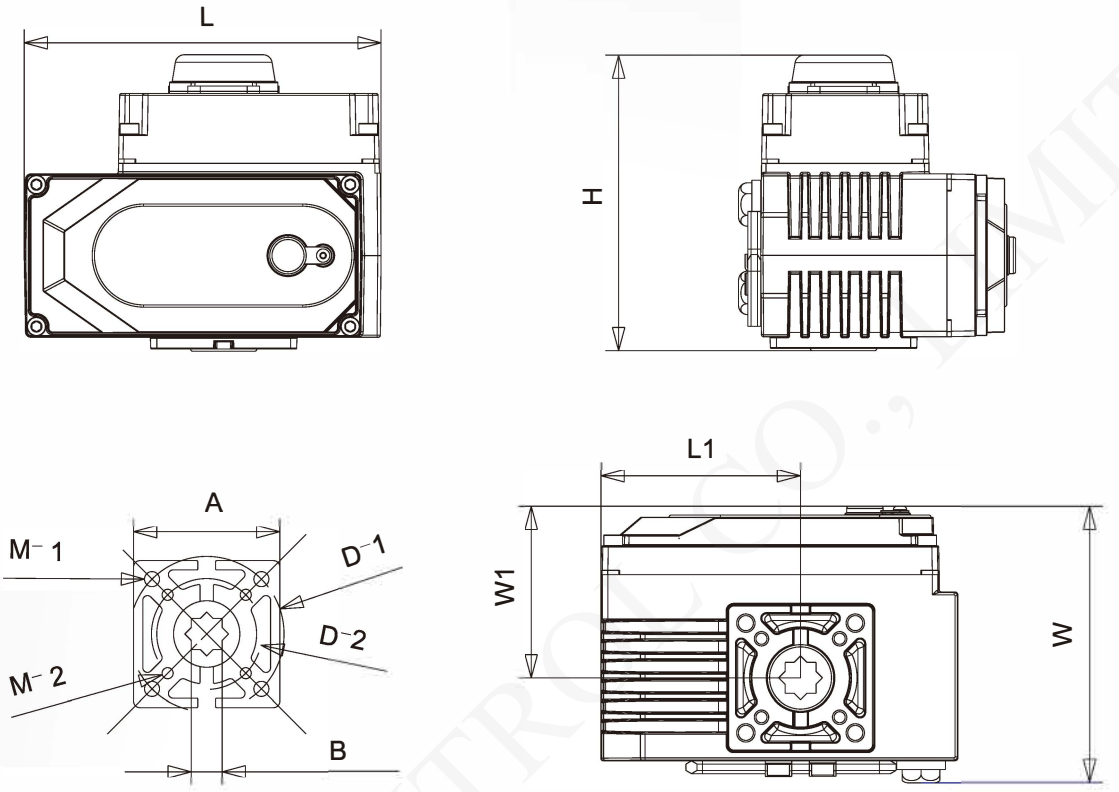
PERFORMANCE PARAMETER

Model	Max output torque(N·m)	Operating time 90°(S)	Drive shaft(mm)		Power (W)	Rated current(A) 220VAC/1ph	Weight(kg)		
			Square	Deep			On/off type	Modulating type	Intelligent type
JO-05	50	28	14x14	24	14	0.144	3.5	4.1	4.3
JO-10	100	28	17x17	27	23	0.280	4.7	5.3	5.5
JO-15	150	28	17x17	27	30	0.320	4.9	5.5	5.7
JO-20	200	28	22x22	26	63	0.489	8.5	9.2	9.5
JO-40	400	28	22x22	26	80	0.600	8.8	9.5	9.8
JO-60	600	28	22x22	26	95	0.746	9.1	9.8	10.1
JO-100	1000	28	27x27	40	120	0.800	11.6	12.3	12.6
JO-200	2000	45	27x27	40	130	0.940	11.9	12.6	12.9
JO-260	2600	60	27x27	40	151	1.300	12.1	12.8	13.1

OPTIONAL VALVE REFERENCE TABLE

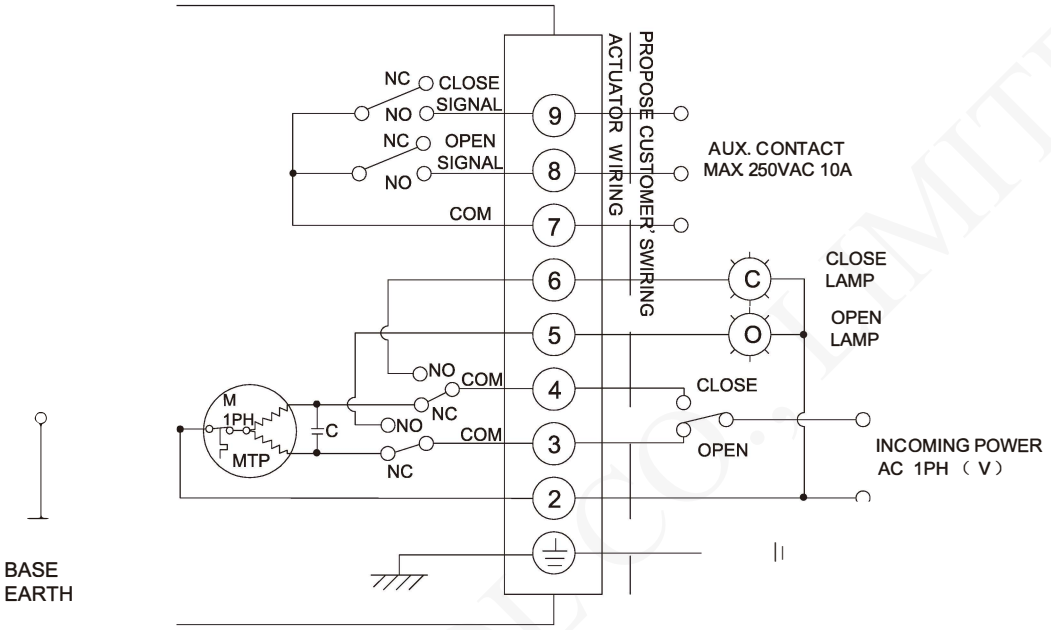
No.	On/off type	Modulating type	Intelligent type	Optional valve reference table (pressure≤1.6Mpa)		
	220V/380V	220V/380V	220V/380V	Soft seal Ball valve	Soft seal Butterfly valve	Aeration butterfly valve
1	J0-05	J0-05	J0-05	DN15-32	DN25-80	DN50-80
2	J0-10	J0-10	J0-10	DN40-50	DN100-125	DN100-200
3	J0-15	J0-15	J0-15	DN65	DN125-150	DN200-250
4	J0-20	J0-20	J0-20	DN65-80	DN150-200	DN250-300
5	J0-40	J0-40	J0-40	DN80-100	DN200-250	DN350-400
6	J0-60	J0-60	J0-60	DN100-125	DN250-300	DN500-600
7	J0-100	J0-100	J0-100	DN125-150	DN300-350	DN600-800
8	J0-200	J0-200	J0-200	DN150-200	DN350-400	DN800-1000
9	J0-260	J0-260	J0-260	DN200-250	DN500-600	DN1000-1200

OUTLINE DRAWING

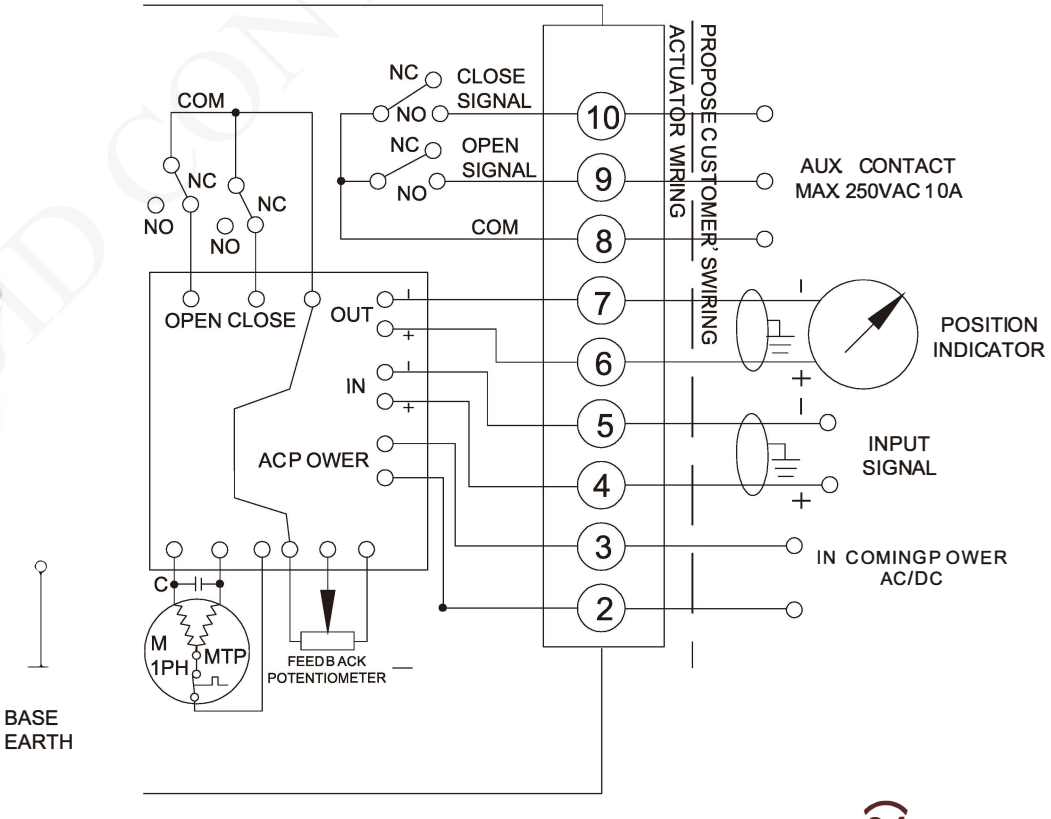


No.	L	W	H	A	B x deep	D1	D2	M1 x deep	M2 x deep	L1	W1
J0-05	161	138	134	66x66	14x14x24	F07 Φ70	F05 Φ50	4-M8x17	4-M6x13	90	75
J0-10	190	155	140	100x88	17x17x27	F07 Φ70	F05 Φ50	4-M8x12	4-M6x12	106	80
J0-15	190	155	140	100x88	17x17x27	F07 Φ70	F05 Φ50	4-M8x12	4-M6x12	106	80
J0-20	242	185	175	108x108	22x22x26	F10 Φ102	F07 Φ70	4-M10x20	4-M8x17	139	105
J0-40	242	185	175	108x108	22x22x26	F10 Φ102	F07 Φ70	4-M10x20	4-M8x17	139	105
J0-60	242	185	175	108x108	22x22x26	F10 Φ102	F07 Φ70	4-M10x20	4-M8x17	139	105
J0-100	270	204	185	140x130	27x27x40	F12 Φ125	F10 Φ102	4-M12x20	4-M10x20	153	110
J0-200	270	204	185	140x130	27x27x40	F12 Φ125	F10 Φ102	4-M12x20	4-M10x20	153	110
J0-260	270	204	185	140x130	27x27x40	F12 Φ125	F10 Φ102	4-M12x20	4-M10x20	153	110

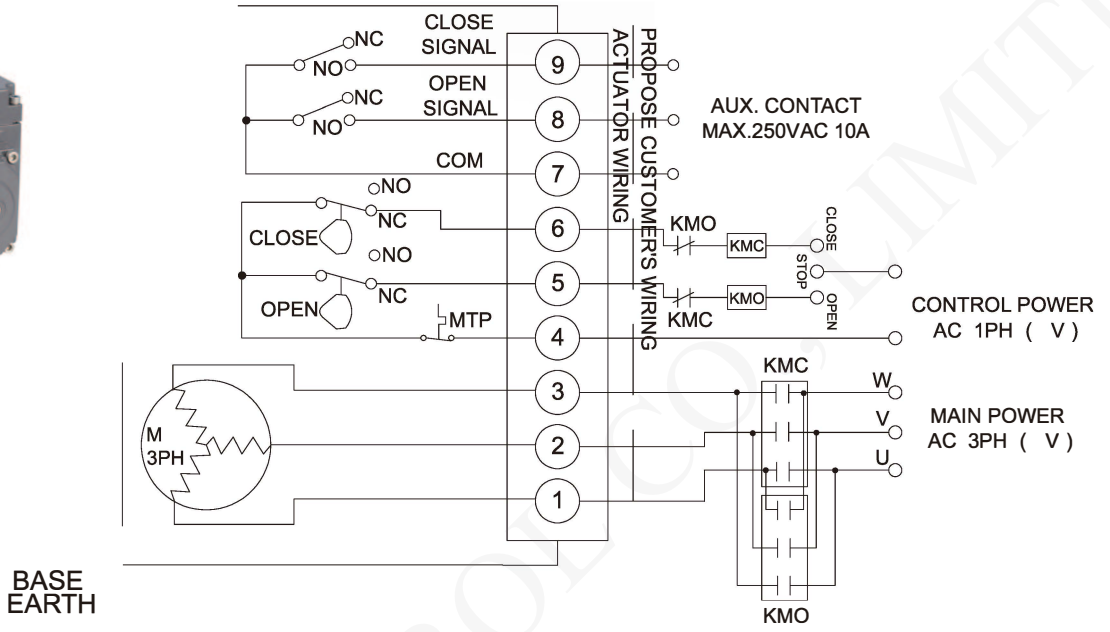
JO-05～260, AC110V/220V/50/60Hz, On/off type



JO-05～260, DC24V/AC110V/AC220V/50/60Hz, Modulating type, Intelligent type



JO-05~260, AC380V/440V/50/60Hz, On/off type



JO-05~260, DC12V/24V, On/off type