

# Coreline

## Electric actuator

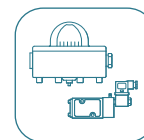
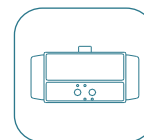
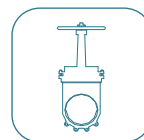
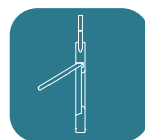
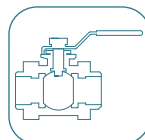
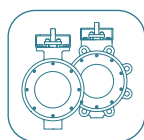
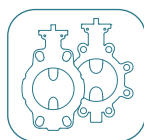


English

Fig. 556



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### Protection level up to IP67

By improving the concave and convex structure of the upper and lower cap binding surface of the product, the sealing is more reliable.



### Transmission part is more reasonable and reliable

1. The gear box is made of aluminium alloy to avoid the cracking of gear box.
2. Gear with 40 chromium steel threaded by finishing the two heat, it is more solid and reliable, wear resistance and fatigue resistance is stronger



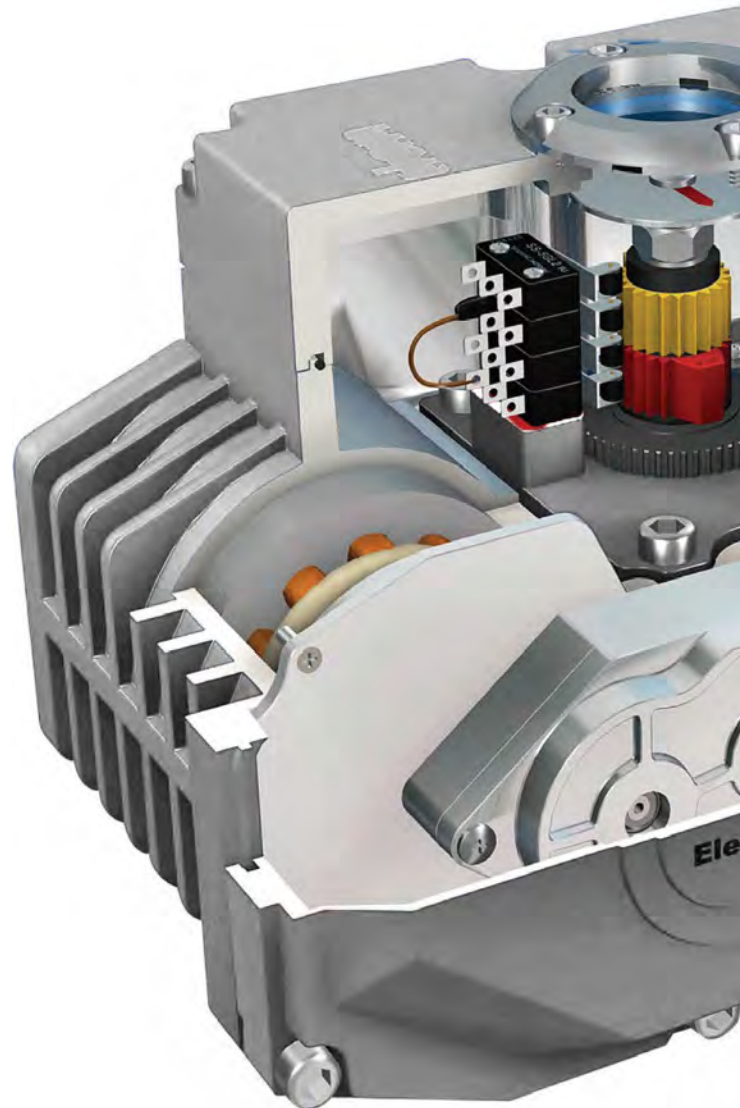
### Lower motor temperature

By increasing the size of the motor, with the same power, and reducing the capacitance and starting current, thereby reducing the degree of heating



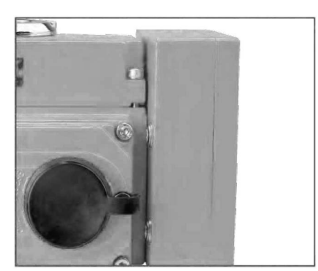
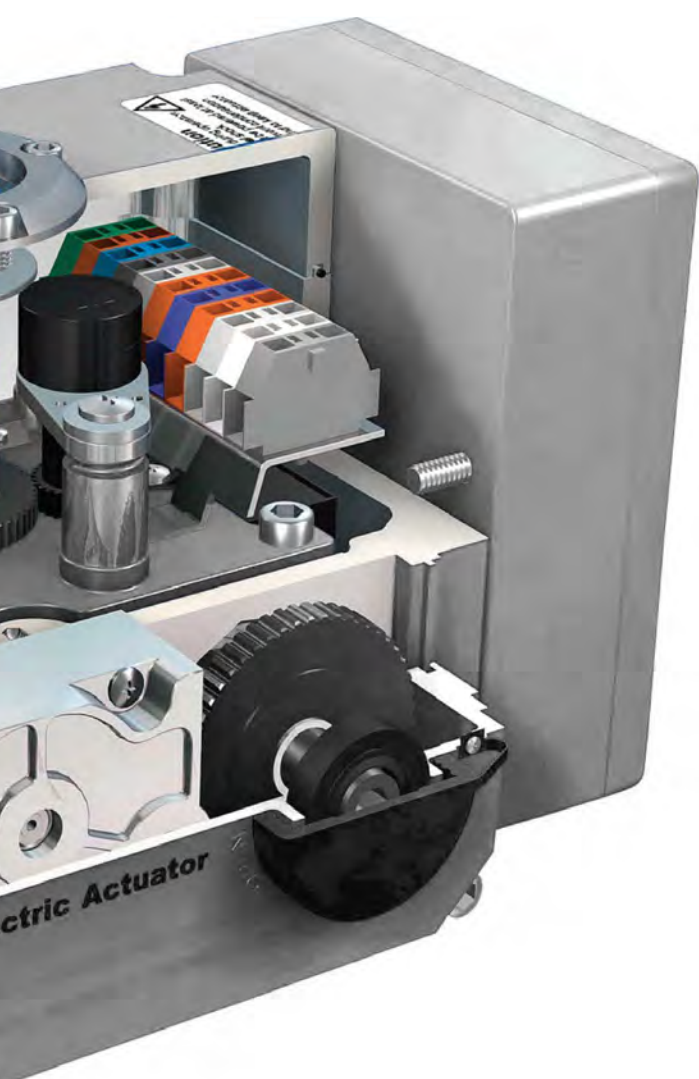
### Quicker and easier adjustment

By improving the electrical cam structure, integrate the four cam into two, isolated with butterfly spring, pressed with locking nut above. Limit can remain stable at ultra high and low temperature.



## Window structure

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### Modulating type is more stable and reliable

1. Increase the size of the module.larger component selection.higher power.
2. Using of weak control power supply, field voltage instability will not affect the quality of the module.
3. Using the bare board for better heat dissipation.
4. Smart setting.one key location, avoiding debugging disorder because of to many keys .
5. Using outboard installation of smart module to solve the contradiction of actuator maximum temperature is 120 °C, electronic components and modules use temperature is only 65 °C.



### More reliable and easy to assemble with valve

Easy mounting base standard to ISO5211.The stem is directly connected to the worm inside of the actuator, the arm of valve and output shaft is shorter, output is more stable.



### Easy to keep manual handle

Position the handle clamp above the mechanical limit screw, so that the wrench is not easy to be lost in the site.

## OPTION SPECIFICATION

No.	Option scheme	Remark
1	Heater	Except 556-003
2	Water-proof actuator (IP68, 10M,250HR)	556 series
3	Potentiometer unit (1 K-10 K)	Except 556-003
4	Proportion control unit (control signal 4-20mA DC/1-5V/1-10V)	Except 556-003
5	Local control units (local control open/stop/close optional switch, local/remote switch)	Except 556-003
6	Travel 120°, 180°,270°	556 series
7	Direct current motor (24VDC)	556 series
8	Electric current position sensor (output 4-20mA DC)	Except 556-003
9	Self-reset when power failure	556 series
10	Quick opening (2.8 S, 5 S, 10 S, 15 S)	556 series

## SUMMARY

"556" series electric actuator is used for controlling 0°~ 270° rotation valves and other similar products, such as butterfly valves, ball valves, damper, flapper valves, cock valves etc. It widely applies to petroleum, chemical, water treatment, ships, paper making, power plants, heating, light industry and other industries. Operated by 380V/220V/110V AC or 24V/110V DC power input 4 - 20mA or 0-10V DC control signal, moves valve to the right position and achieves to automatic control the maximum output torque is 5000 Nm.

## PERFORMANCE FEATURES

- The shell is made of aluminum alloy, with anodic oxidation treatment and polyester powder coating. It is strong corrosion-resistant and enclosure IP67,NEMA 4 and 6, IP68 is optional.
- Motor. Fully enclosed squirrel-cage asynchronous motor, small, large torque, and small inertia force,F-class insulation rating, with thermal protection to avoid damaging.
- Manual structure. The design of handle is safe, reliable, labor-saving, small. If without power, operated by handle.
- Indicator. Installs indicator in the center shaft and adopts convex mirror design, no cumulate water, more convenient to observe.
- Space heater. is used for controlling temperature to avoid condensing internal of housing and keep dry.
- Sealing. Well sealing performance and enclosure IP67, IP68 is optional.
- Mechanical limitswitches are adjustable, safe and reliable.
- Electronical limitswitches are controlled with cams, where the setting is simple and accurate.
- Self-locking-Accurate worm and worm gear transfer large torque efficiently , high efficiency, low noise (max. 50 dB), long life, with self-locking, prevent inversion, stable and reliable transmission parts.
- Captive bolts are used to attach the bolts to the cover, so that bolts don't fall off when removing the cover.
- The installation size meets international standard ISO5211 / DIN3337.
- Circuit--Controlling circuit meets the single-phase or three-phase power supply standard, circuit layout is reasonable and compact, terminals meet various of additional functional requirements effectively.

## Dimensions and Technical data

### PERFORMANCE PARAMETER

Model	Max output torque (Nm)	Operating time 90°(S)	Drive shaft (mm)		Power (W)	Rated current (A) 230VAC/1ph 24V DC	Weight (Kg.)
			230V / 24V	Square			
556-003	30	20/20	9X9/11X11	13,5/15,5	8/8	0,15/0,7	2,1
556-005	50	30/30	11X11/14X14	15,5/18	10/10	0,25/1,61	3,6
556-008	80	30/30	11X11/14X14	15,5/18	10/10	0,25/2,05	4,6
556-010	100	30/60	14X14/17X17	18/22,5	15/15	0,35/1,72	13
556-015	150	40/60	14X14/17X17	18/22,5	15/15	0,37/1,72	13,4
556-020	200	30/30	22X22	26	45/60	0,3/5,3	13,8
556-030	300	30/30	22X22	26	45/60	0,31/5,6	14
556-040	400	30/30	22X22	32,5	60/60	0,33/5,8	14,3
556-060	600	40/40	27X27	32,5	60/60	0,33/6,1	68
556-080	800	40/40	27X27	32,5	90/120	0,47/11,5	14,3
556-100	1000	40/40	27X27	65	90/120	0,47/15,5	14,5
556-160	1600	60/60	Max d.40	65	90/120	0,85/15,5	68
556-200	2000	60/60	Max d.40	65	90/120	0,85/15,5	68
556-300	3000	120/120	Max d.40	65	90/120	0,85/15,5	68
556-400	4000	200/200	Max d.40	65	90/120	0,85/15,5	68
556-500	5000	200/200	Max d.40	65	90/120	0,85/15,5	68

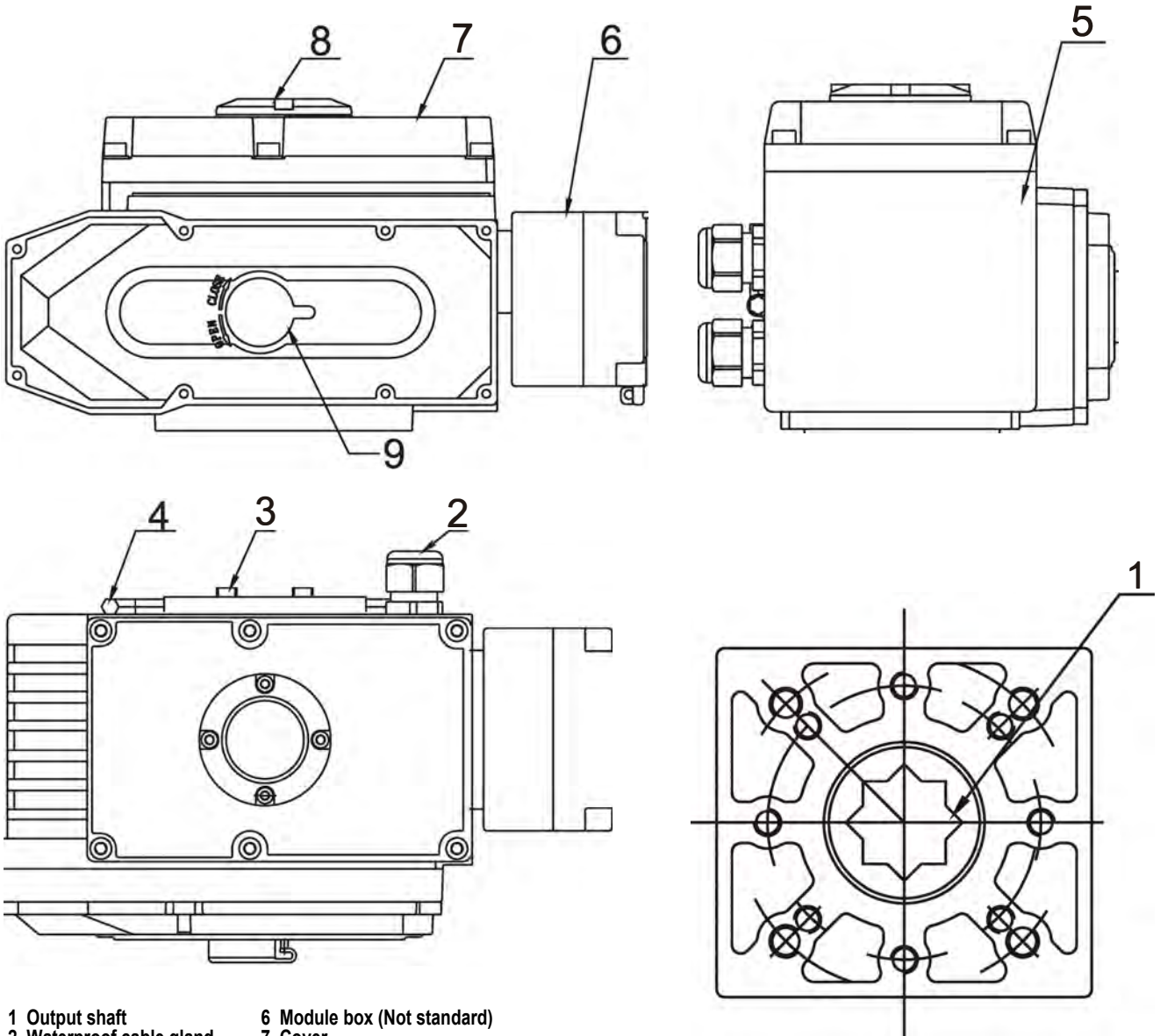
### STANDARD TECHNICAL PARAMETER

Shell	Enclosure IP67. NEMA 4 and 6	
Power	Standard 220 VAC/1 ph Optional: 110 VAC/1 ph, 380V/440V 3 ph, 50/60Hz, ± 10% 24V DC/110V - DC/220V DC	
Controlling power	110/220V AC 1 phase, 50/60 Hz, ±10%	
Motor	Squirrel-cage synchronous motor	
Limit switch	2 x open / close, SPDT, 250V AC 10A	
Auxillary limit switch	2 x open / close, SPDT, 250V AC 10A	
Travel	90° - 270° ± 10° (please specify in advance if over 90°)	0° - 270°
Fail safe / operating temperature	Internal-placed thermal protection, on 120°C ± 5°C/ off 97° ± 5°C	
Indicator	Continuous situation indication	
Manual operation	Mechanical hendle (handwheel is optional)	
Self-locking device	Self-locking by worm and worm gear	
Mechanical limit	2 x external adjustable stopper	
Space heater	30 W (110/220V AC) anti-condensation	
Conduit entries	2 pieces M18 x 1.5	
Ambient temperature	-30°C - + 70°C	
Lubrication	Grease moly (EP type)	
Material	Steel, aluminium alloy, aluminium bronze, polycarbonate	
Ambient humidity	Max 90% RH	Non- condensing
Anti-vibration	X Y Z 10g. 0.2 + 34 Hz, 30 minutes	
External coating	Dry powder, Epoxy polyester	

# Dimensions and Technical data

## OUTLINE DRAWING

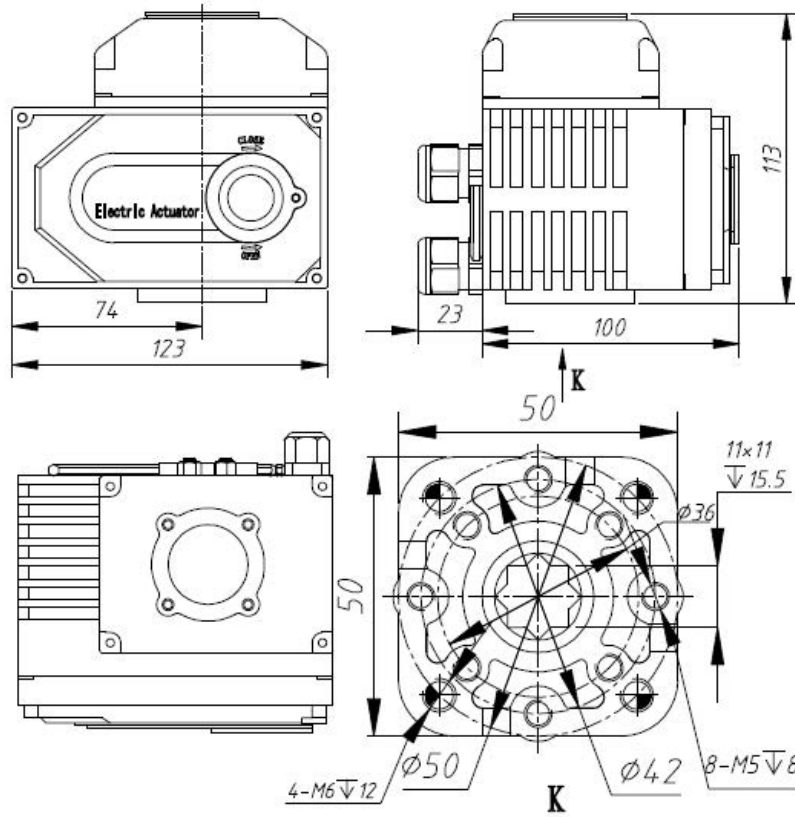
### 556 Configuration



# Dimensions and Technical data

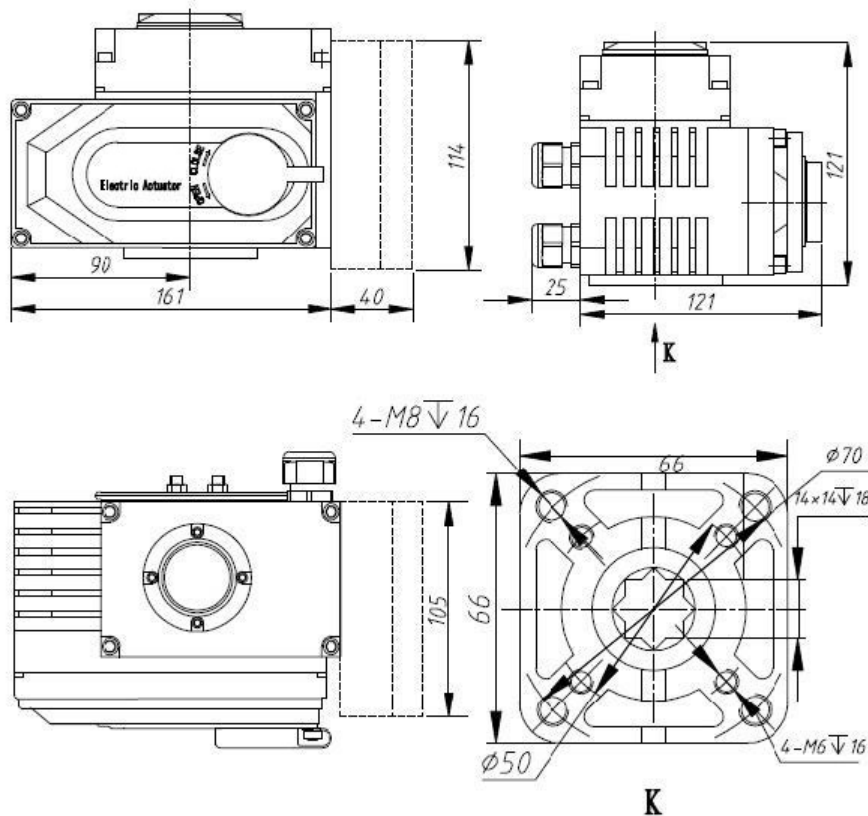
## 556 - 003 General Drawing

Unit:mm



## 556 - 005~008

Unit:mm



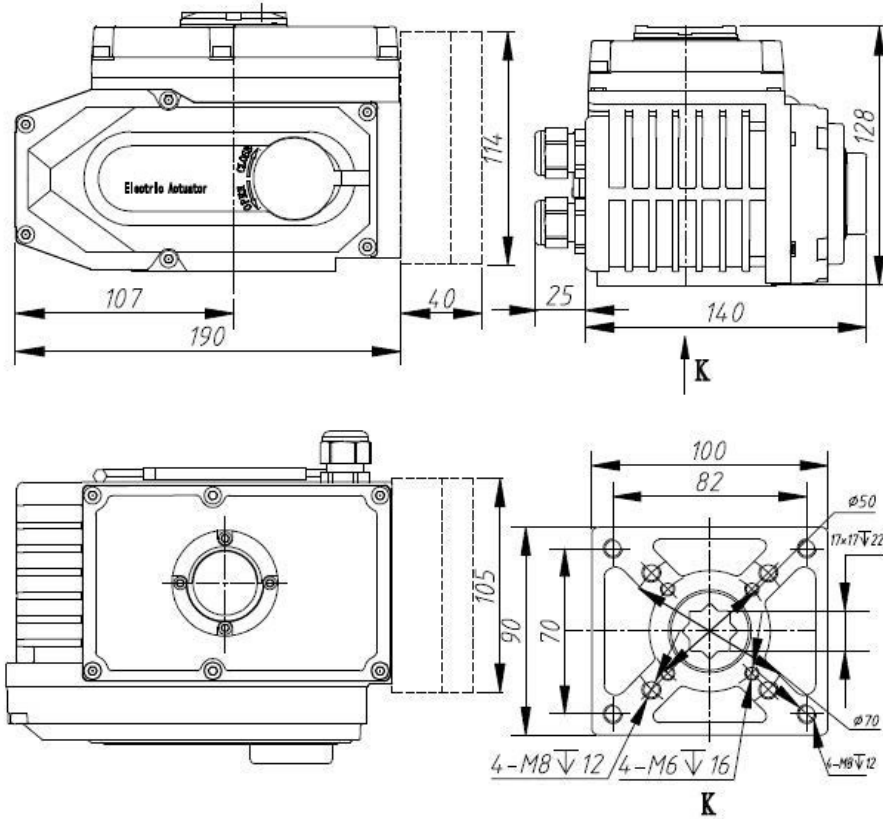
**Notice:**  
Modulation module  
drawn with dotted  
lines are optional.

# Dimensions and Technical data

## General Drawing

Unit:mm

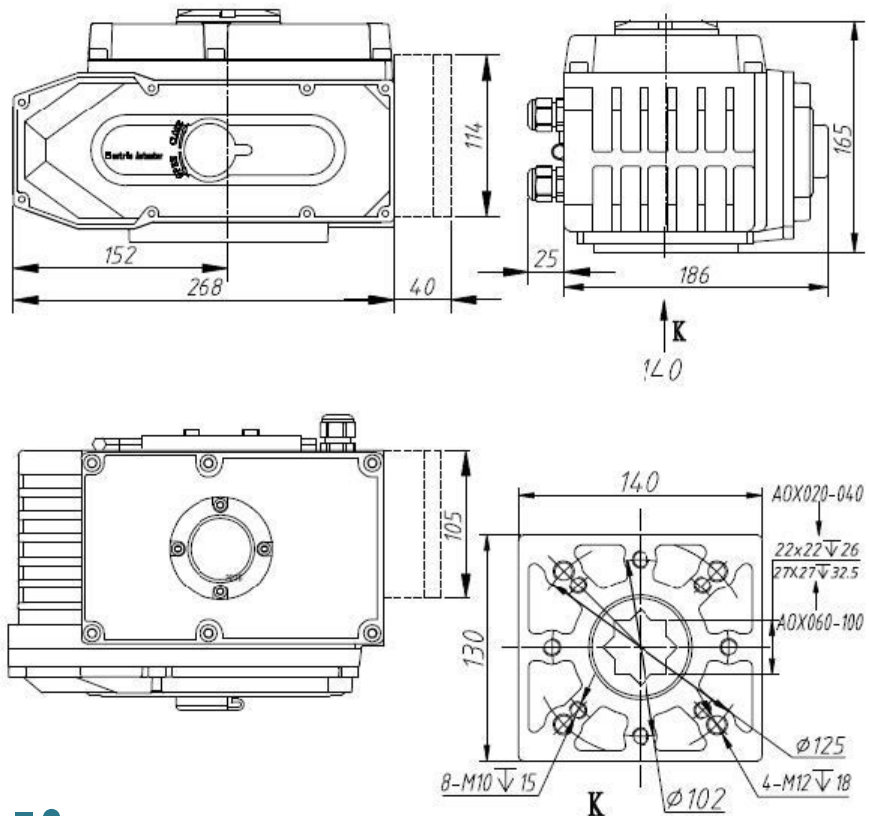
556 - 010~015



**Notice:**  
Modulation module  
drawn with dotted  
lines are optional.

556 - 020~100

Unit:mm



**Notice:**  
Modulation module  
drawn with dotted  
lines are optional.

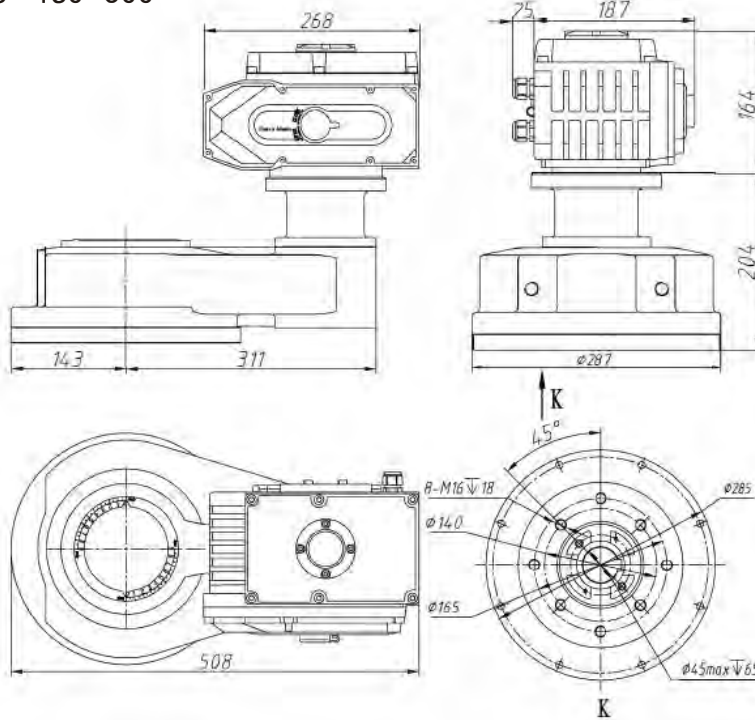


# Dimensions and Technical data

## General Drawing

Unit:mm

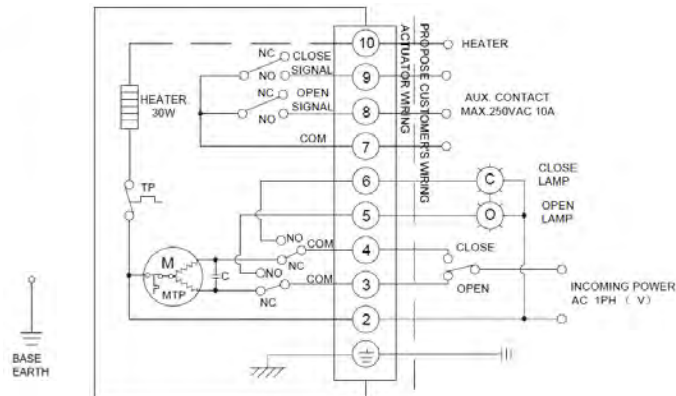
556 - 160~500



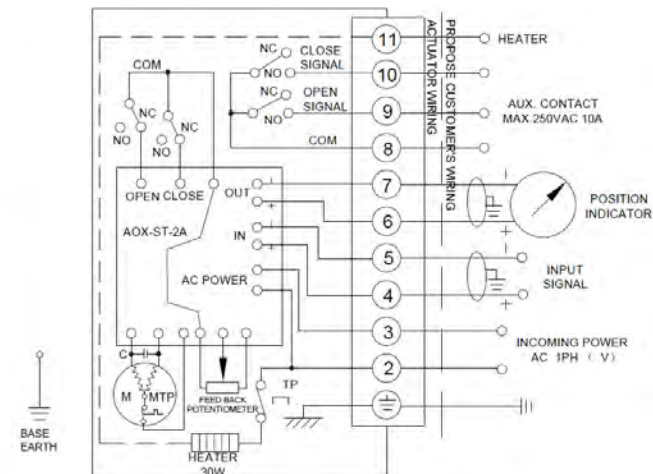
**Notice:**  
Gear module are optional.

## Wiring diagram

556 - 003-500 110/220VAC/50/60Hz, 1pH (on/of type) 110



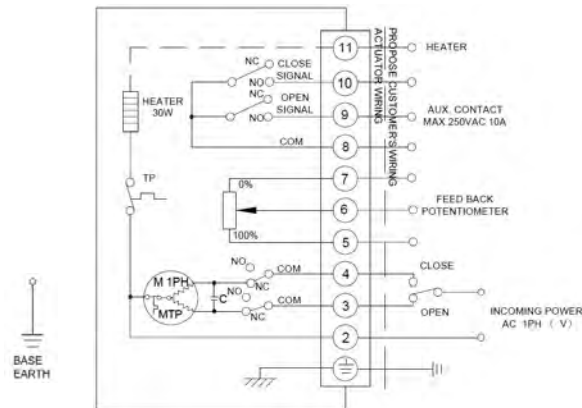
556 - 005-500 110/220VAC/50/60Hz, 1pH (modulating type) 120



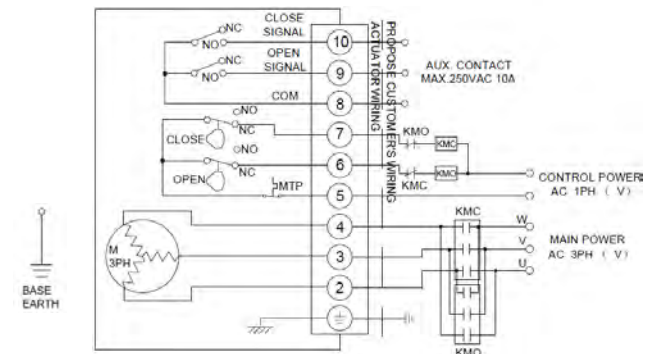


## Wiring diagram

556 - 005-500 110/220VAC/50/60Hz, 1pH (potentiometer output type) 160

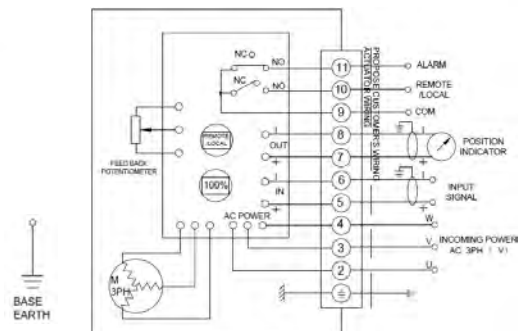


556 - 005-500 380/440VAC/50/60Hz, 3pH (Outer control on/of type) 210

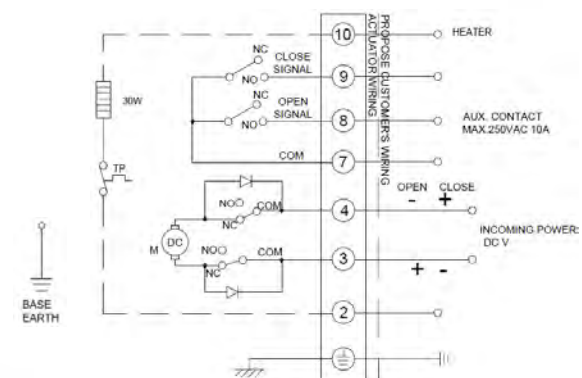


## Wiring diagram

556 - 005-500 380/440VAC/50/60Hz, 3pH (Intelligent modulating type) 240

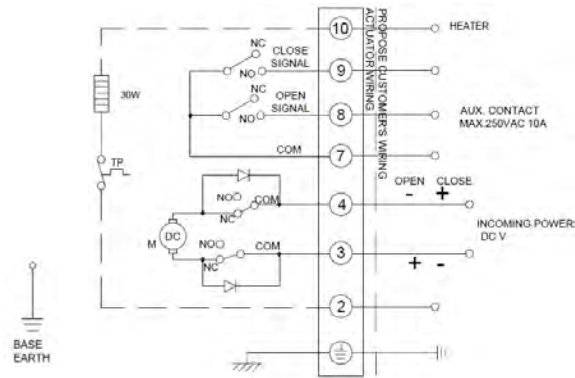


556 - 003-500 12/24VD (On/of type) 310

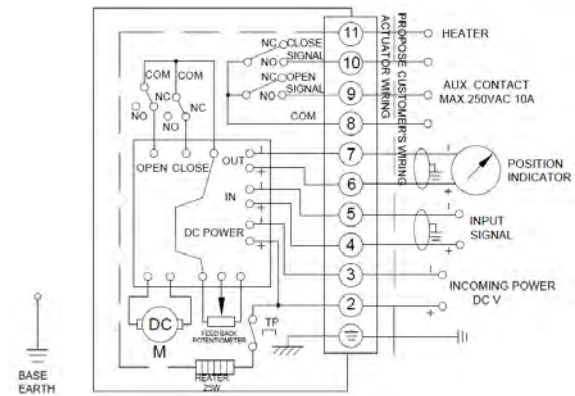


## Wiring diagram

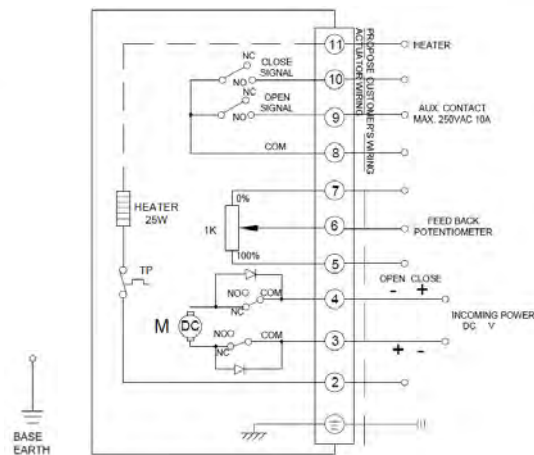
556 - 005-500 24V DC (On/Off type)



556 - 005-500 24V DC (Modulating type)



556 - 005-500 24V DC (On/Off type with potentiometer)



## Model types



# Coreline

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