

Economic Style Electric Actuator ITQ Series



NEW



INNOBIZ
기술혁신형중소기업



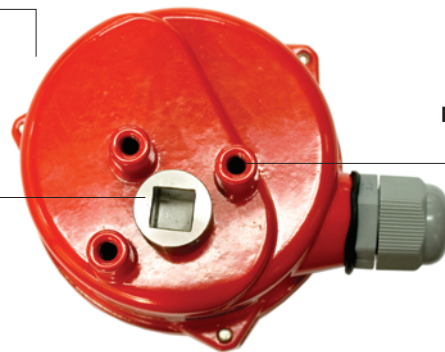
ECONOMIC TYPE ITQ ELECTRIC ACTUATOR

ITQ 0020

- Suitable for small 1" ball valve automation.
- Very high efficiency & cyclic life.
- Free voltage (85~265 VAC, 1Phase) and optional 24VAC/DC
- Very compact and light weight.



PG11 Cable Gland with Wires



ISO F03 Flange

11X11mm
Square Female Shaft
with insert 9X9mm

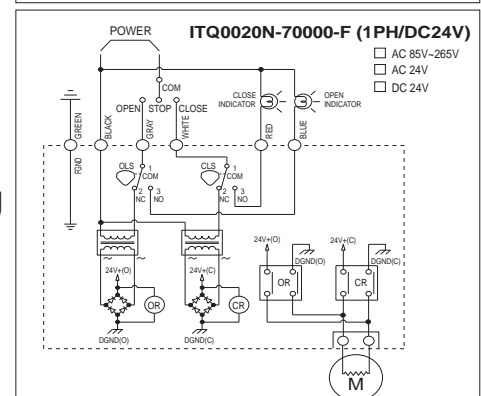
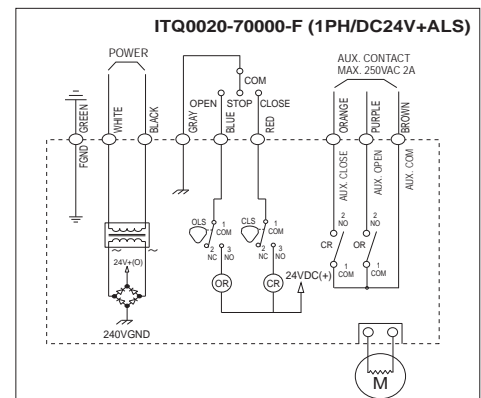
PERFORMANCE

| Model | Rate torque (Nm) | Duty cycle (%) | Operating time | | Stem Adaption (Square Female shaft) | Rated current | | | | Motor insulation class | Weight (kgs) |
|----------|------------------|----------------|----------------|---------------|-------------------------------------|---------------|------|--------|------|------------------------|--------------|
| | | | 50Hz /60Hz | 24DC(No Load) | | 24V | | 1Phase | | | |
| ITQ 0020 | 25 | 50 | 11 | 11 | 11 X 11 mm | 0.60 | 0.55 | 0.16 | 0.08 | E | 1 |

STANDARD SPECIFICATION

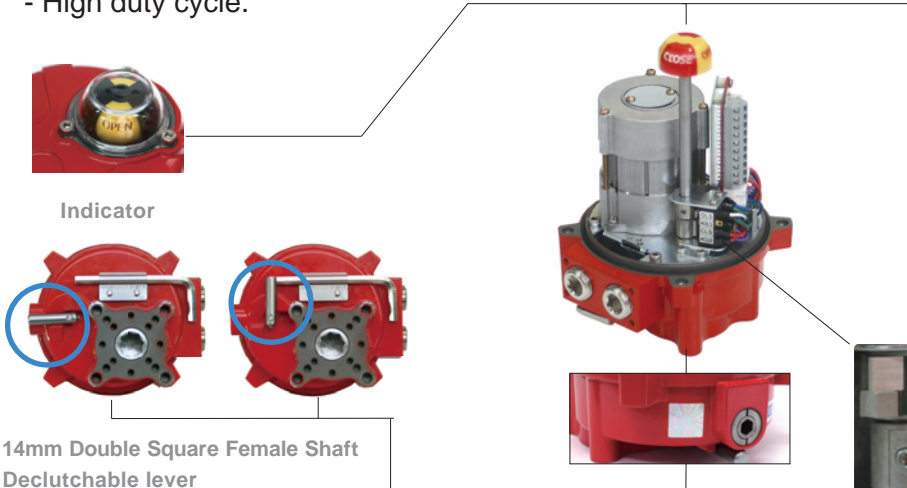
| | |
|--------------------------------------|--|
| Enclosure | IP66, O-ring Sealed |
| Main Power | Free Voltage(110/220VAC/1Ph/50/60Hz) 24 VAC/DC |
| Duty cycle(on-off) | S2 : 50% |
| Motor | DC motor |
| Limit switches | 2 ea for Open & Close (5A, 250VAC) |
| (Option) Extra Limit switches | Relays for Open & Close (5A, 250AC) |
| Mounting | ISO F03, 11 X 11 - DP12 Square female Shaft with insert 9X9mm |
| Travel angle | 90°C ± 5°C |
| Cable entry & Wiring | 1-PG11 Cable gland with wires 30cm long |
| Surface protection | Polyester coating |
| Ambient temperature | -10°C~ + 65°C |
| Humidity(R.H) | 90% |

WIRING



NEW ITQ 0040

- Suitable for on-off small ball / plug valves and damper automation.
- By combination of spur gears, provide very high efficiency
- The motor is a specially designed induction motor that produces high starting torques and thermally protected from overheating.
- Manual operation by Hex Wrench and dome position indication
- Compact and light weight.
- High duty cycle.



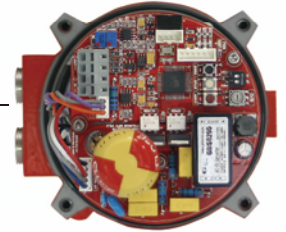
Indicator

14mm Double Square Female Shaft
Declutchable lever

Manual Hex Wrench



Cam Set



RPC (Option)
(Remote Position Controller)
Input & Output Signal
4~20mADC

PERFORMANCE

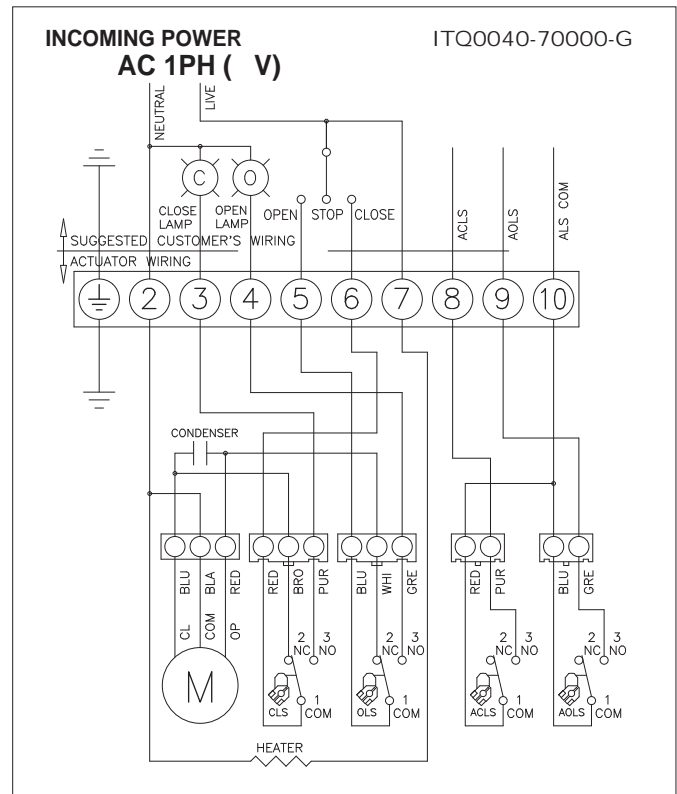
| Model | Rate Torque (Nm) | Duty Cycle (%) | Operating Time (Sec.) | | | Stem Adaption (Double Square Female Shaft) | Rated current (A) | | | Motor Insulation Class | Weight (kgs) | No of Handwheel Turn |
|----------|------------------|----------------|-----------------------|------|-----------------|--|-------------------|------|-----|------------------------|--------------|----------------------|
| | | | 50Hz | 60Hz | DC24V (No Load) | | 1Phase AC | | DC | | | |
| | | | | | | | 110V | 220V | | | | |
| ITQ 0040 | 40 | 50 | 16 | 13 | 7 | 14X14mm | 0.27 | 0.21 | 0.8 | B | 2.5 | 6 |

STANDARD SPECIFICATION

| | |
|-------------------------------|--|
| Enclosure | IP67, O-ring Sealed |
| Main Power | 110/220VAC/1Ph/50/60Hz, 24VDC |
| Duty cycle(on-off) | S2 : 30 min |
| Duty cycle(modulating) | S4 : 50% |
| Motor | Induction motor |
| Limit switches | 2 ea for each travel |
| Space heater | 2W |
| Manual operation | Declutchable Lever & shaft on bottom |
| Indicator | Continuous Mechanical position indicator |
| Mounting | ISO F03/F04/F05/F07 flange with double square female shaft |
| Travel angle | 90° ± 5° |
| Cable entries | 2-M20×1.5(option : 2-PF(PT)½") |
| Terminal block | Spring loaded push type |
| Surface protection | Anodized polyester coating |
| Ambient temperature | -20°C~+70°C |
| Humidity(R.H) | 90% |

WIRING

ITQ 0040 110/220 ON/OFF

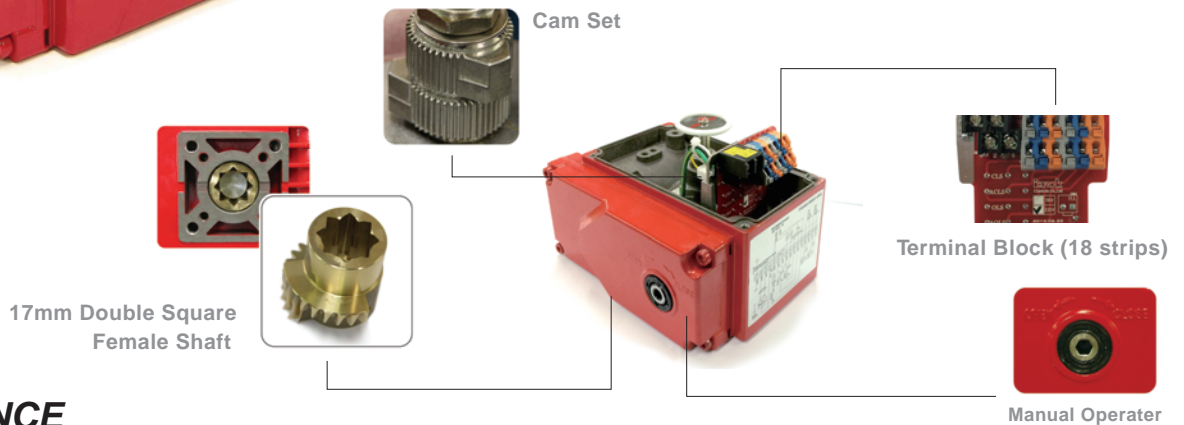


ECONOMIC TYPE ITQ ELECTRIC ACTUATOR

ITQ 0080



- Newly designed and developed for especially small ball & plug valves and damper automation.
- Self locking combination of spur and worm gears that require no brake
- The motor is a specially designed induction motor that produces high starting torques and thermally protected from overheating
- Mechanical Stopper bolts to prevent from over travel
- Easy set cams without special tool.
- Manual operation by wrench directly to the worm gearbox and dial position indication



PERFORMANCE

| Model | Rate torque (Nm) | Duty cycle (%) | Operating time | | | Stem Adaption (Double square Female shaft) | Rated current | | | | Motor insulation class | Weight (kgs) | No of handwheel turn | |
|----------|------------------|----------------|----------------|------|----------------|---|---------------|------|--------|------|------------------------|--------------|----------------------|--------|
| | | | 50Hz | 60Hz | 24DC (No Load) | | 1Phase | | 3Phase | | | | | DC 24V |
| | | | | | | | 110 | 220 | 380 | 440 | | | | |
| ITQ 0080 | 80 | 50 | 16 | 14 | 12 | 17X17mm | 0.97 | 0.52 | 0.52 | 0.56 | 3.8 | E | 3.5 | 7 |

STANDARD SPECIFICATION

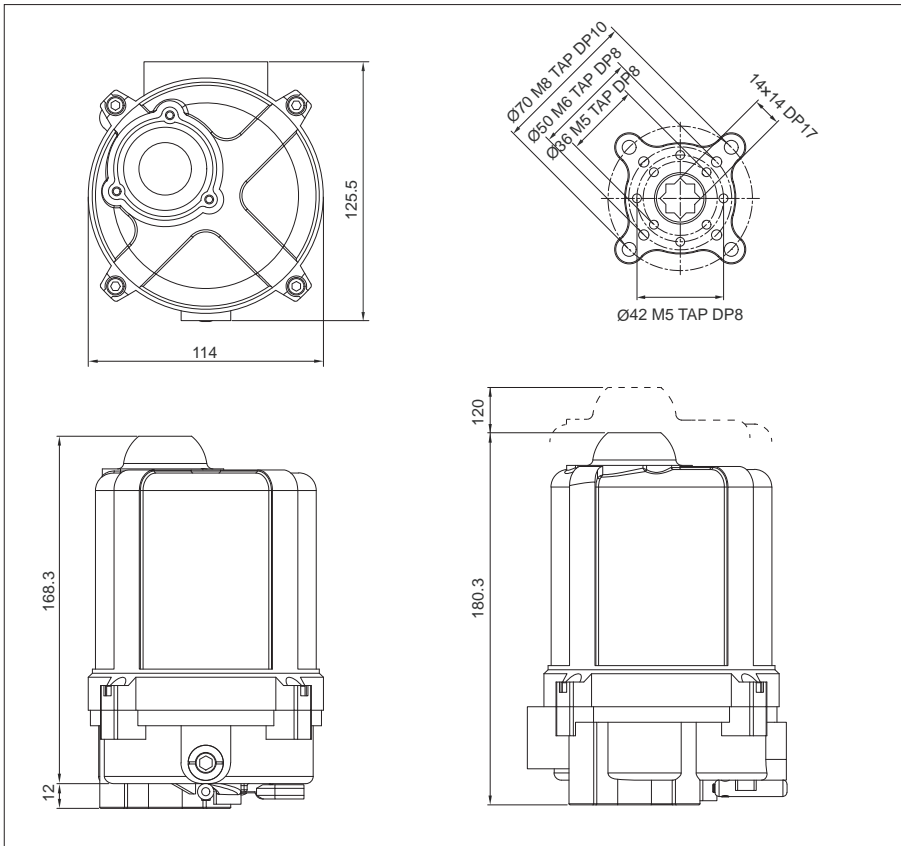
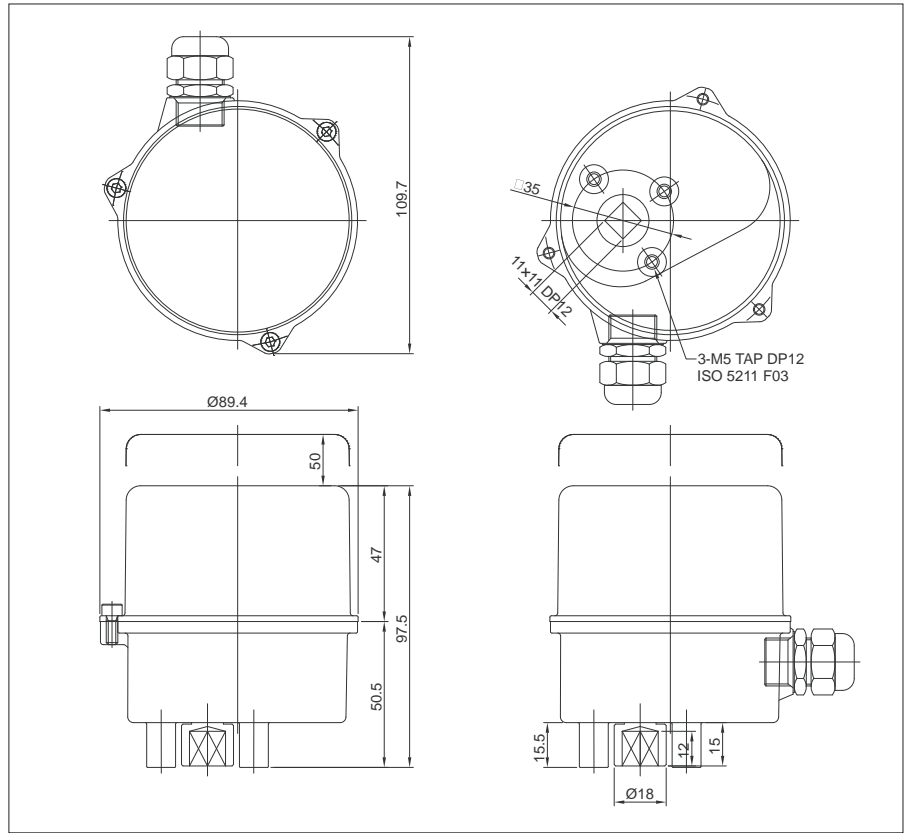
| | |
|-------------------------------|---|
| Enclosure | Weatherproof IP67, O-ring sealed |
| Main Power | 110/220VAC/1Ph/50/60Hz, 380/440VAC/3Ph/50/60/Hz,24VDC |
| Duty cycle(on-off) | S2 : 40%, Max 30 minutes |
| Duty cycle(modulating) | S4, 50%, 1200 start/Hour |
| Motor | Induction motor |
| Limit switches | 2 ea for each travel end (1 each as dry contact) |
| Space heater | 3W |
| Manual operation | By wrench (M6) directly to the worm gear |
| Indicator | Continous Mechanical position indicator |
| Mounting | ISO F05 & F07 flange with double square female shaft |
| Self locking | By means of worm gearing |
| Travel angle | 90° ± 10° by external adjustable mechanical stopper |
| Cable entries | 2 - M20 X 1.5 (option : 2- PF1/2) |
| Terminal block | Spring loaded push type |
| Surface protection | Anodized & polyester coating |
| Ambient temperature | -20°C~+70°C |
| Humidity(R.H) | 90% |

OPTION AVAILABLE (0080 Only)

| | |
|-----|---|
| CT | -Current transmitter (output signal : 4-20mA) |
| | -Zero / Span Adjustment |
| RPC | -Remote position controller (by input and output signal) |
| | -Input : 4-20mA, 0-10VDC, 2~10VDC, 1~5VDC, 0~5VDC |
| | -Output : 4-20mA |
| | *Option : 0-10VDC, 2~10VDC, 1~5VDC, 0~5VDC |
| | -Auto-calibration |
| | -Reverse operating direction |

DIMENSIONAL DRAWING

ITQ 0020



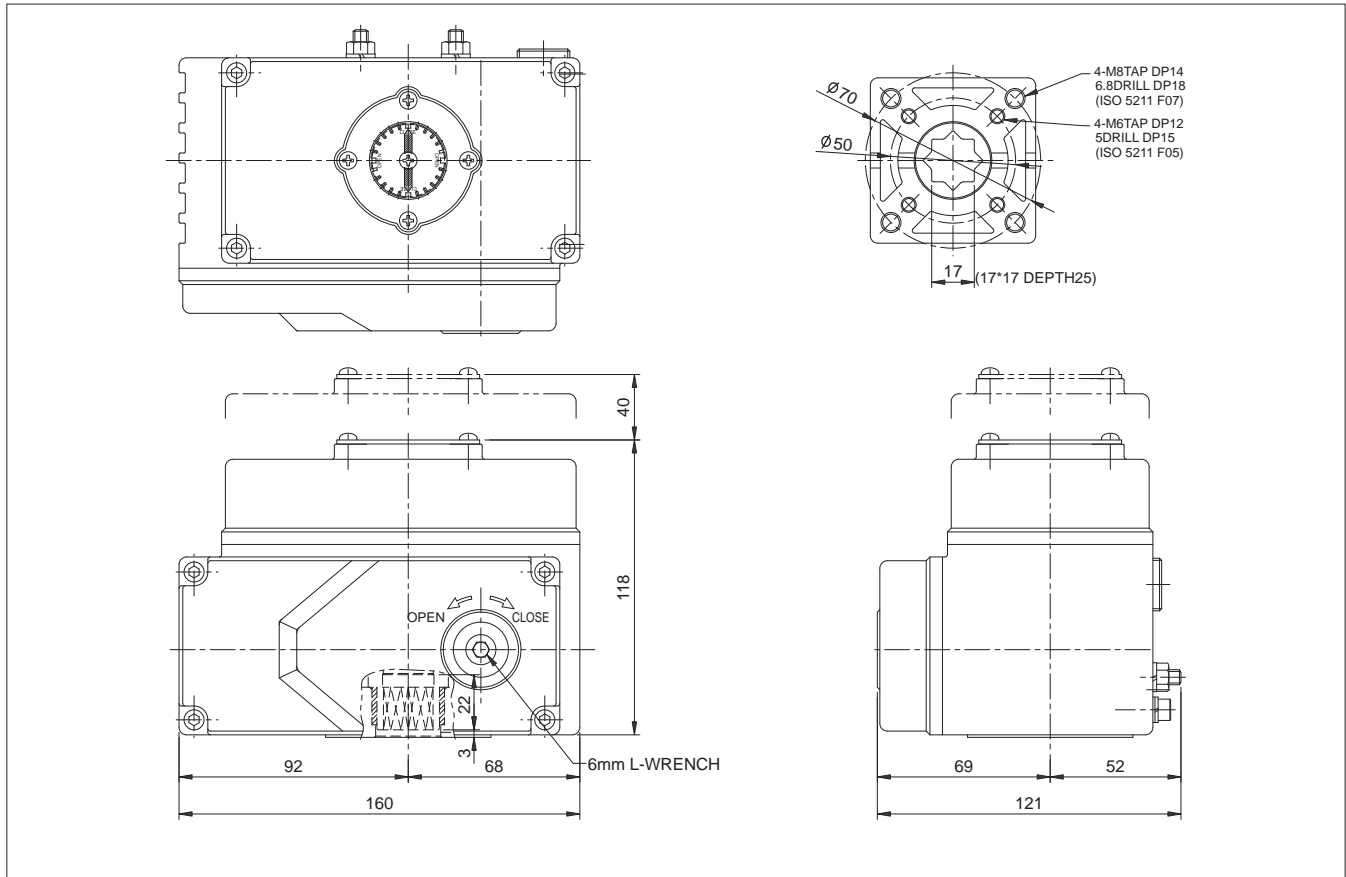
NEW ITQ 0040



ECONOMIC TYPE ITQ ELECTRIC ACTUATOR

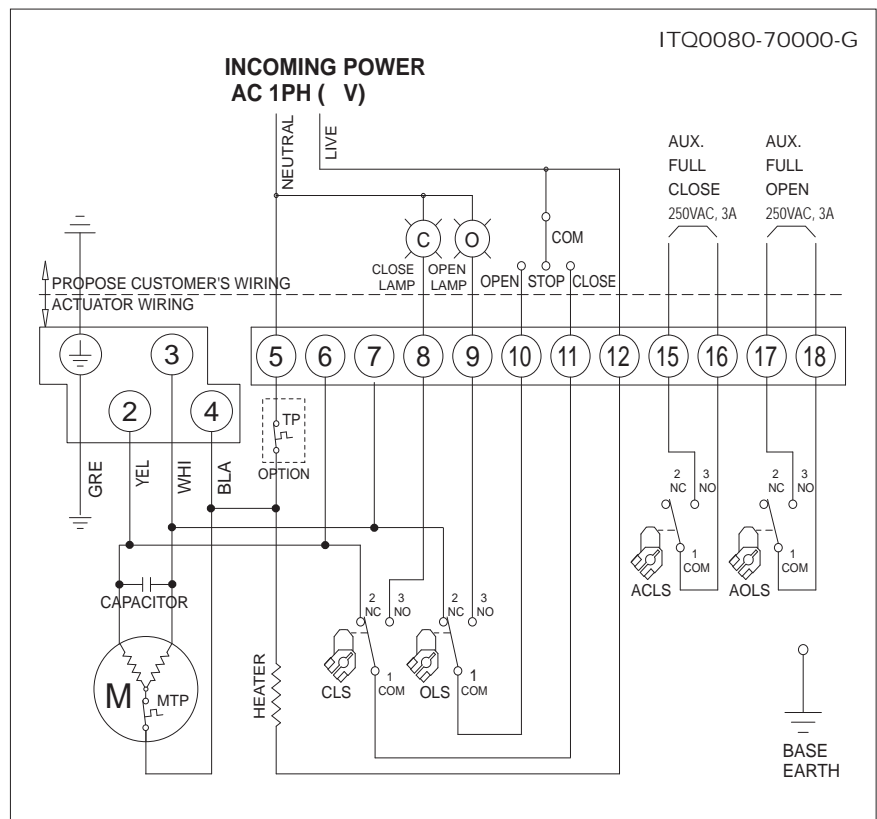
DIMENSIONAL DRAWING

ITQ 0080



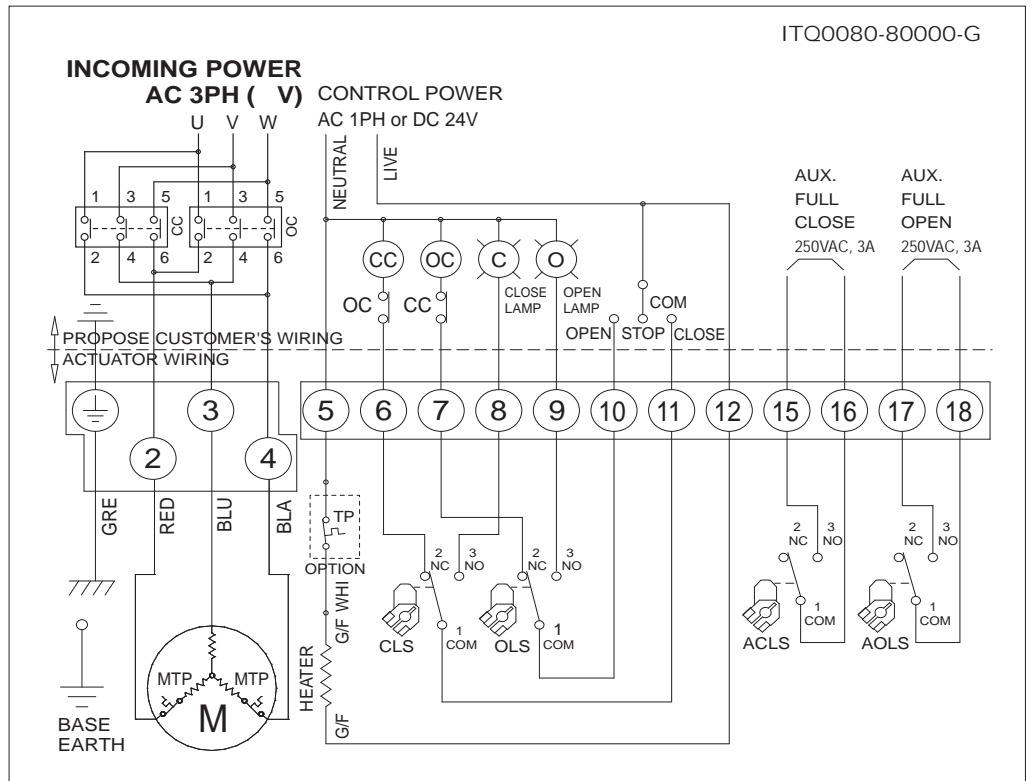
WIRING

ITQ 0080 110/220 (On-Off)

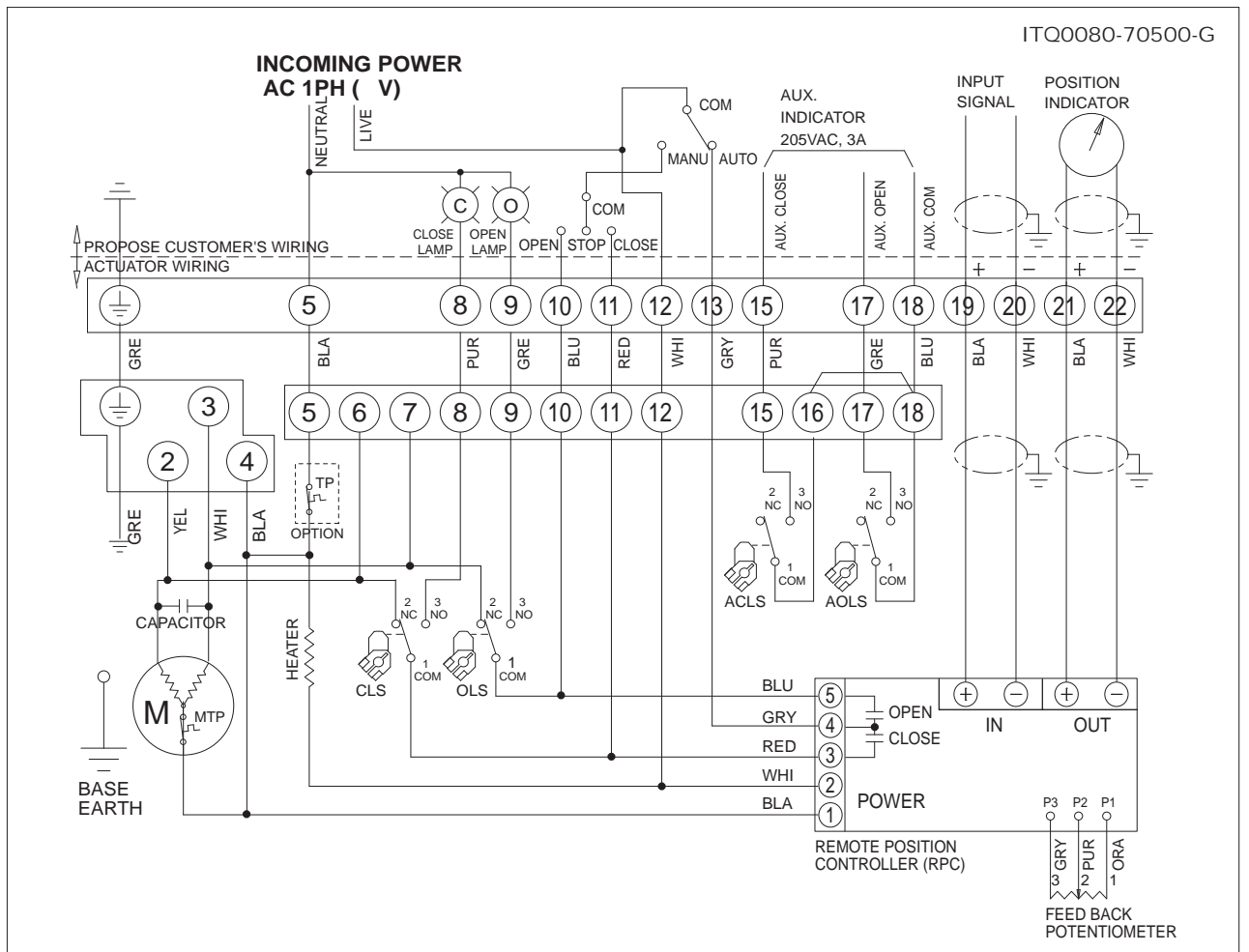


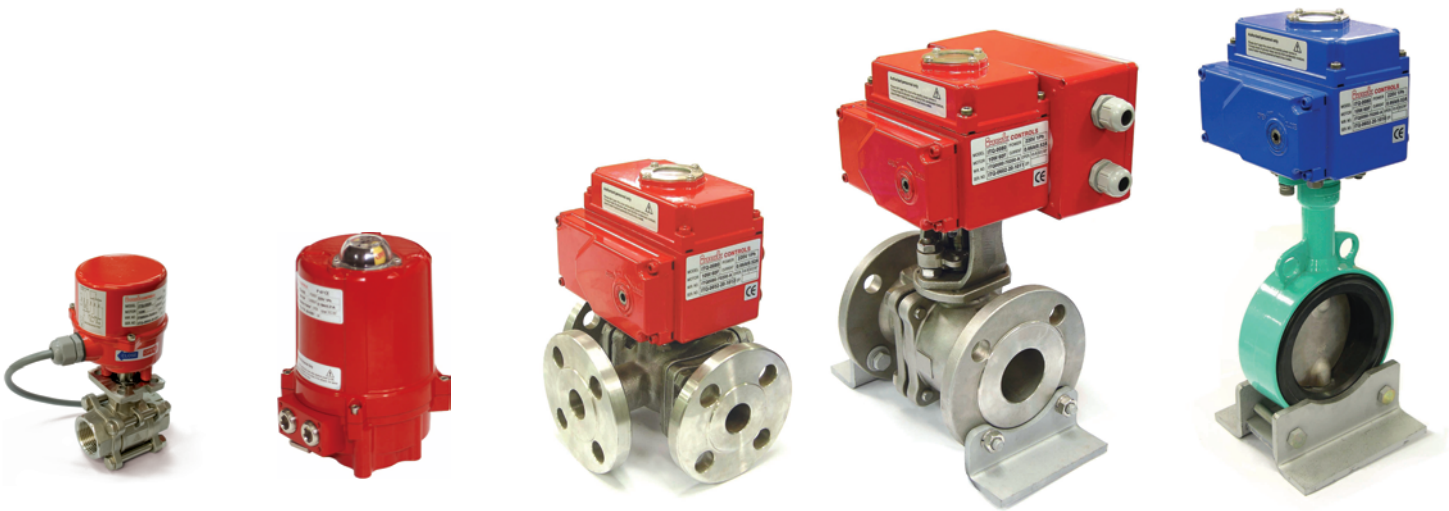
WIRING

ITQ 0080 380/440 ON/OFF



ITQ 0080 110/220 RPC





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