Economic Style Electric Actuator

ITQ Series



Golden Rules

INTERNATIONAL
BS EN ISO 9001:2000
UKAS QUALITY MANAGEMENT

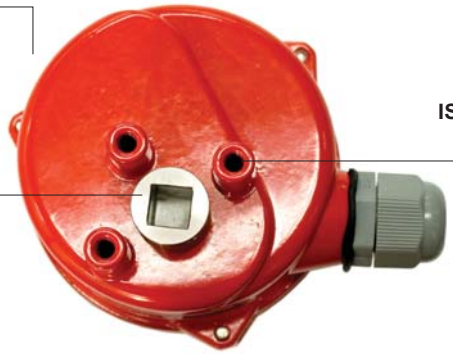
INNOBIZ
기술혁신형중소기업

CE KTL

ECONOMIC TYPE ITQ ELECTRIC ACTUATOR



PG11 Cable Gland with Wires



ISO F03 Flange

11X11mm
Square Female Shaft
with insert 9X9mm

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.

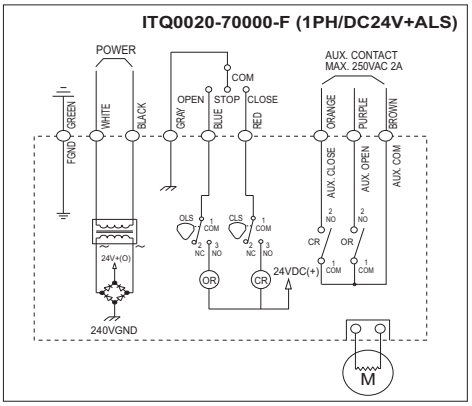
PERFORMANCE

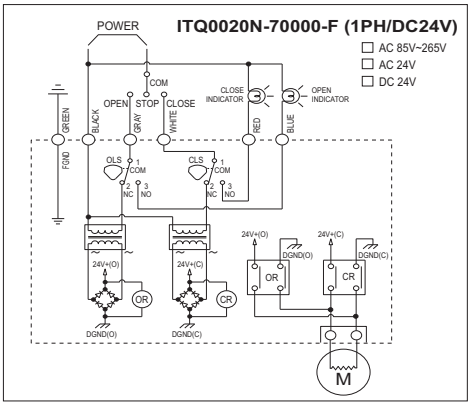
Model	Rate torque (Nm)	Duty cycle (%)	Operating time		Stem Adaption (Square Female shaft	Rated current				Motor insulation class	Weight (kgs)
						24V		1Phase			
			50Hz /60Hz	24DC(No Load)		AC	DC	110	220		
ITQ 0020	25	50	11	11	11 X 11 mm	0.60	0.55	0.16	0.08	E	1

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





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 Spanner and dial position indication
- Compact and light weight.
- High duty cycle.





Indicator



14mm Double Square Female Shaft





Cam Set

PERFORMANCE

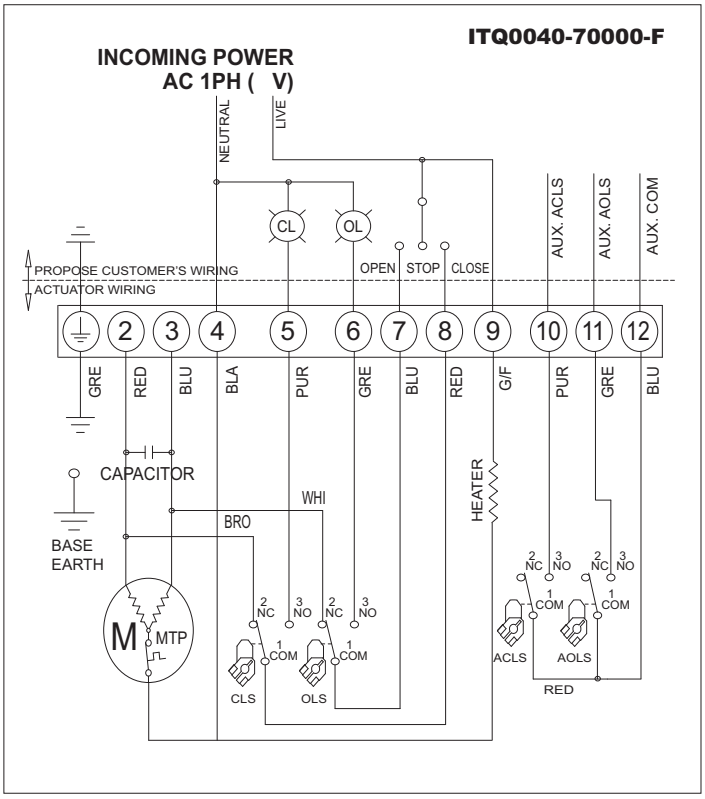
Model	Rate torque (Nm)	Duty cycle (%)	Operating time			Stem Adaption (Double square Female shaft	Rated current					Motor insulation class	Weight (kgs)	No of handwheel turn
			50Hz	60Hz	24DC (No Load)		1Phase		3Phase		DC			
							110	220	380	440	24V			
ITQ 0040	40	50	14	12	12	14X14mm	0.27	0.18	N/A	N/A	0.8	E	3	7.5

STANDARD SPECIFICATION

Enclosure	IP66, O-ring Sealed
Main Power	110/220VAC/1Ph/50/60Hz, 24VDC
Duty cycle(on-off)	S2 : 50%, max 30minutes
Motor	Induction motor
Limit switches	2 ea for each travel
Space heater	2W
Manual operation	Extruded shaft on bottom
Indicator	Continous Mechanical position indicator
Mounting	ISO F03/F05/07 flange with double square female shaft
Travel angle	$90^{o} \pm 10^{o}$
Cable entries	2 - PG 13.5
Terminal block	Spring loaded push type
Surface protection	Anodized polyester coating
Ambient temperature	$-20^{o}C$~$+70^{o}C$
Humidity(R.H)	90%

WIRING

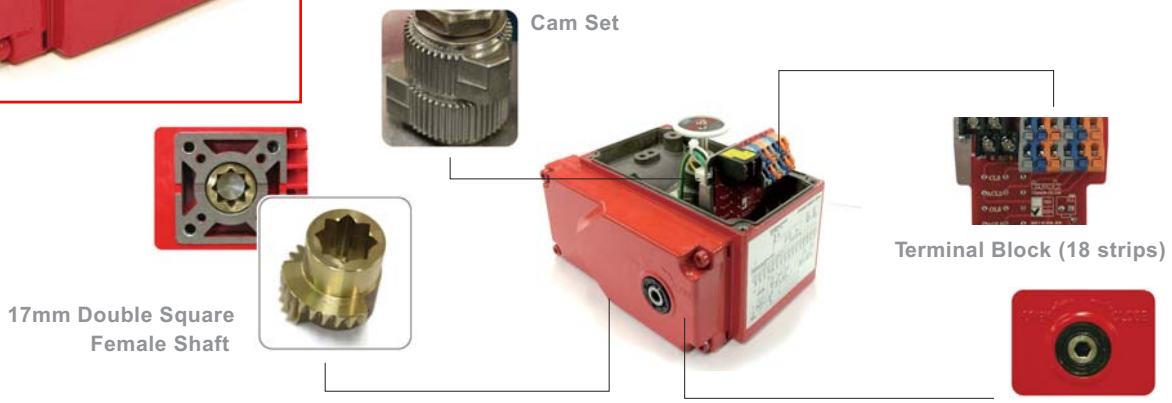
ITQ 0040 110/220 ON/OFF





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 provent 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			
							110	220	380	440	24V			
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
Motor	S4, 50%, 1200 start/Hour
Duty cycle(modulating)	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	$90^{o} \pm 10^{o}$ 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	$-20^{o}C$~$+70^{o}C$
Humidity(R.H)	90%

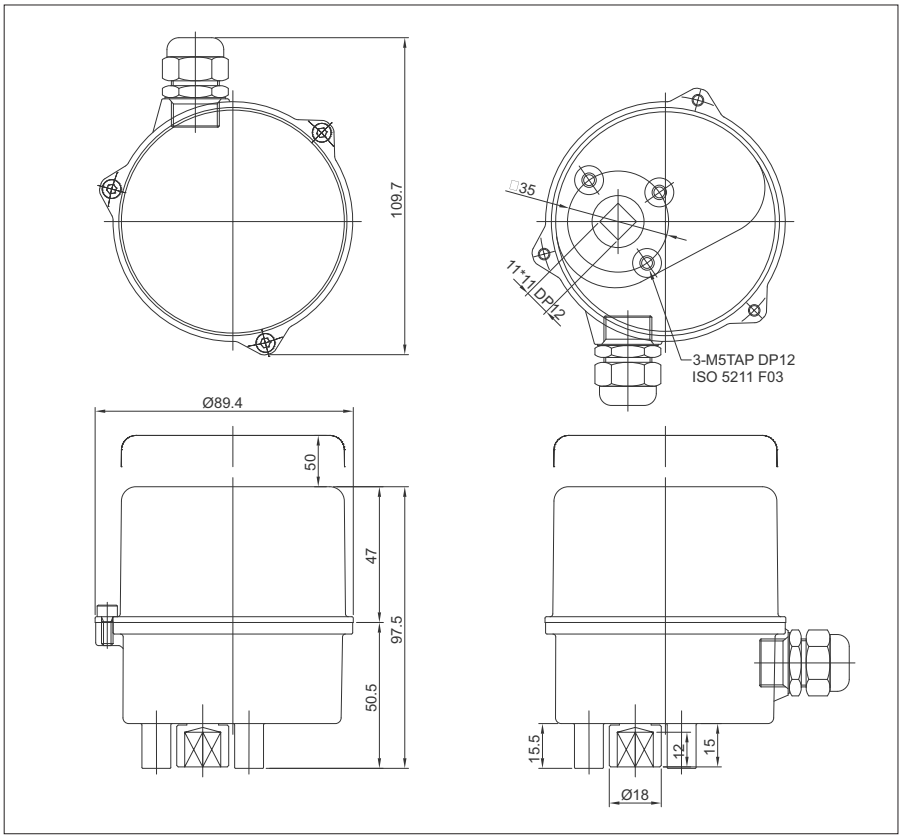
OPTION AVAILABILE (0080 Only)

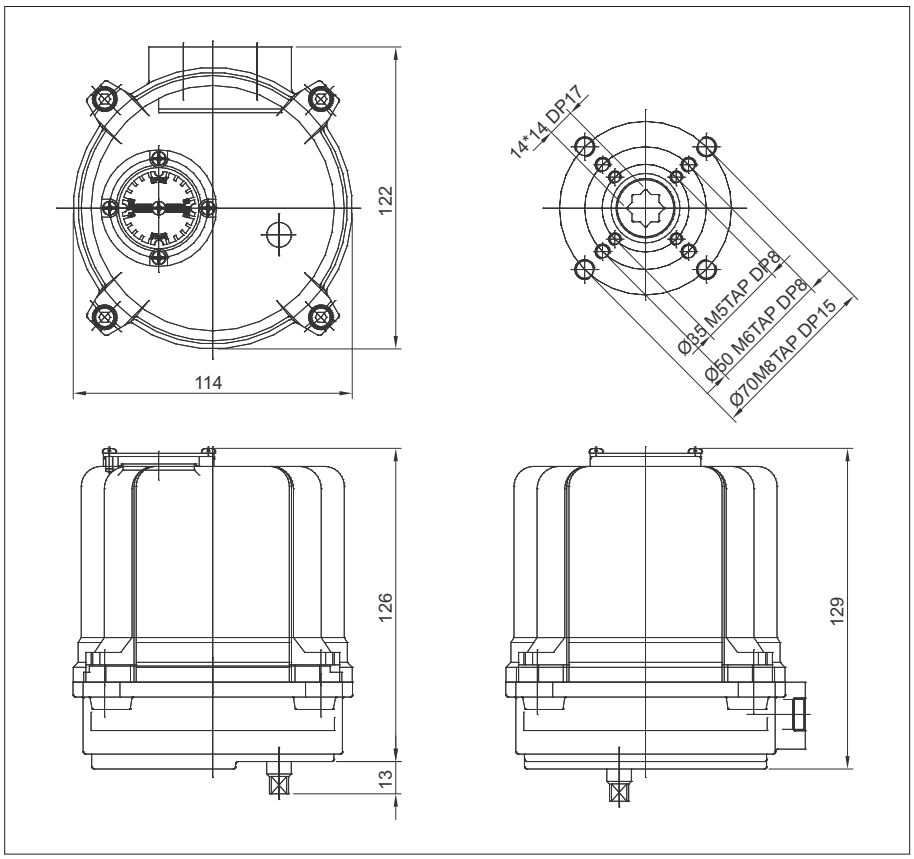
CT	-Current transmitter (output signal : 4-20mA) -Zero / Span Adjustment
RPC	-Remote position controller (by input and output signal) -Input : 4-20mA, 0-10VDC, 2~10VDC, 1~5VDC, 0~5VDC -Output : 4-20mA, 0-10VDC, *Option : 0-10VDC, 2~10VDC, 1~5VDC, 0~5VDC -Auto-calibration -Reverse operating direction

DIMENSIONAL DRAWING

ITQ 0020





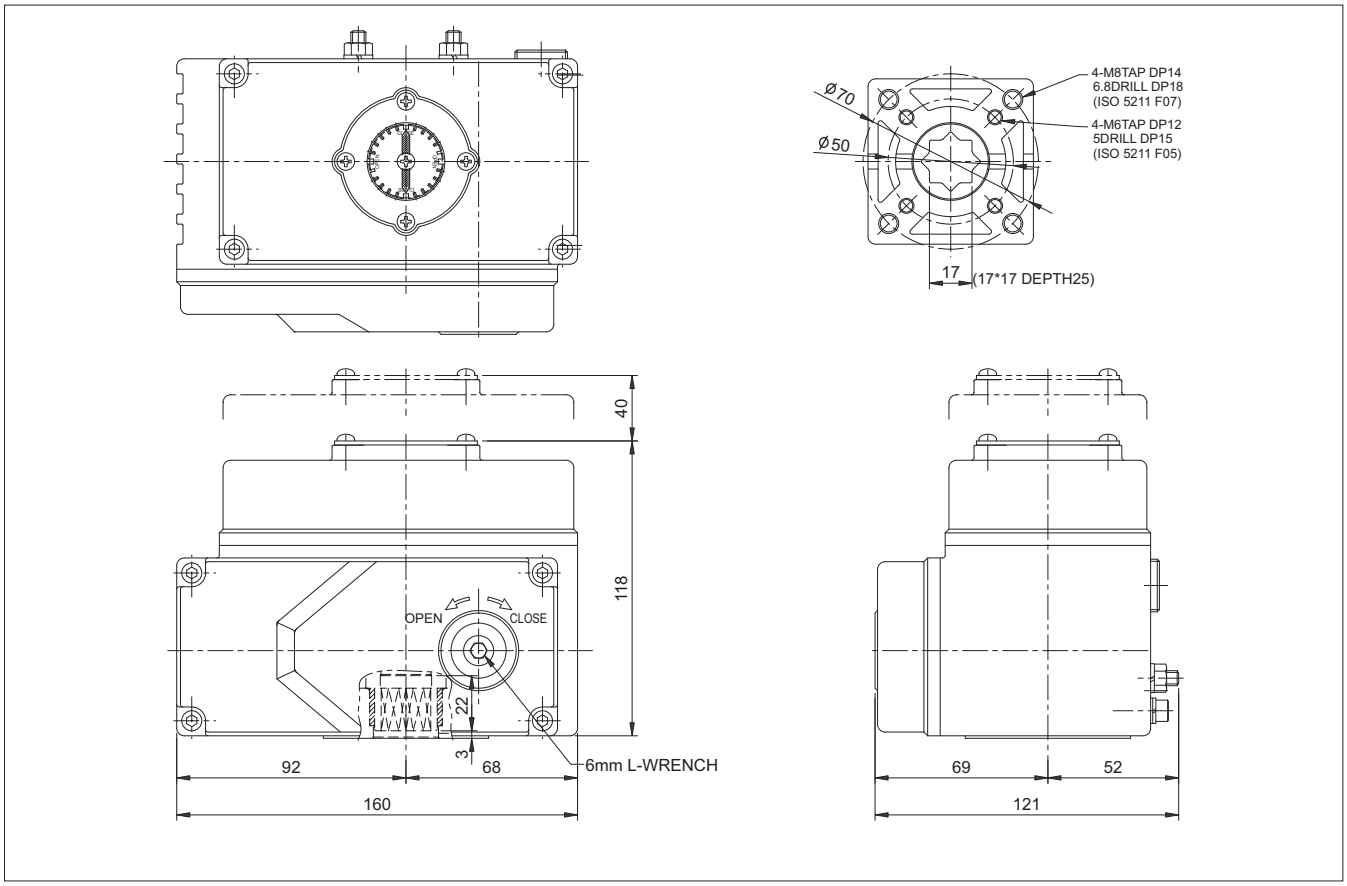


ITQ 0040



DIMENSIONAL DRAWING

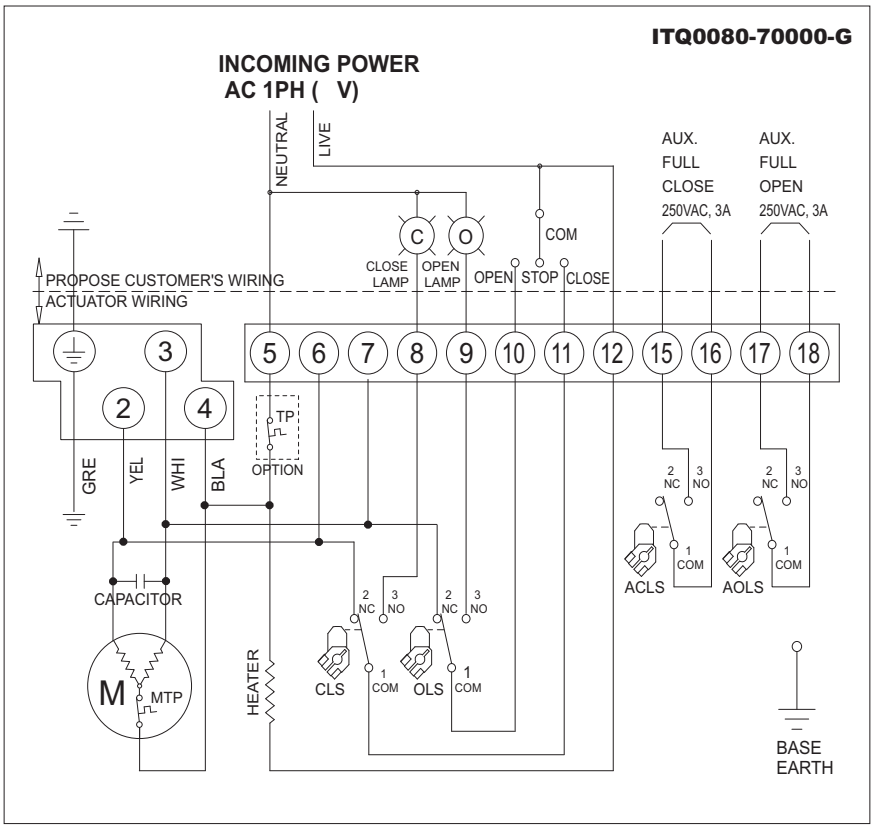
ITQ 0080



WIRING

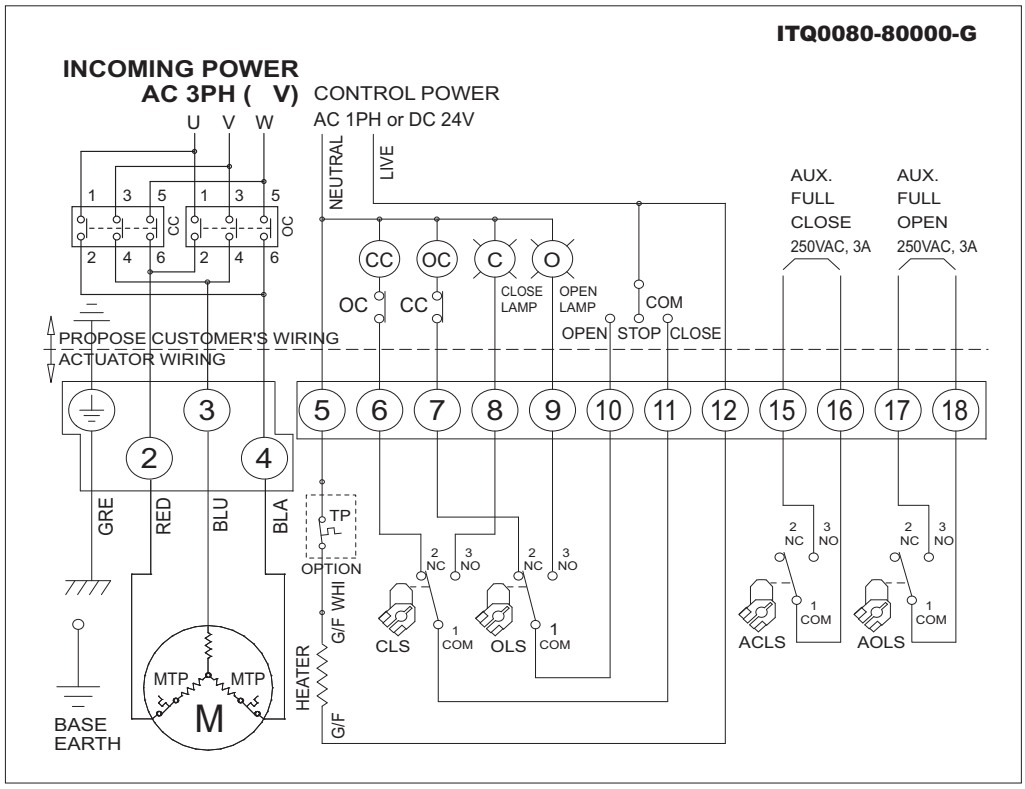
ITQ 0080 110/220 (On-Off)



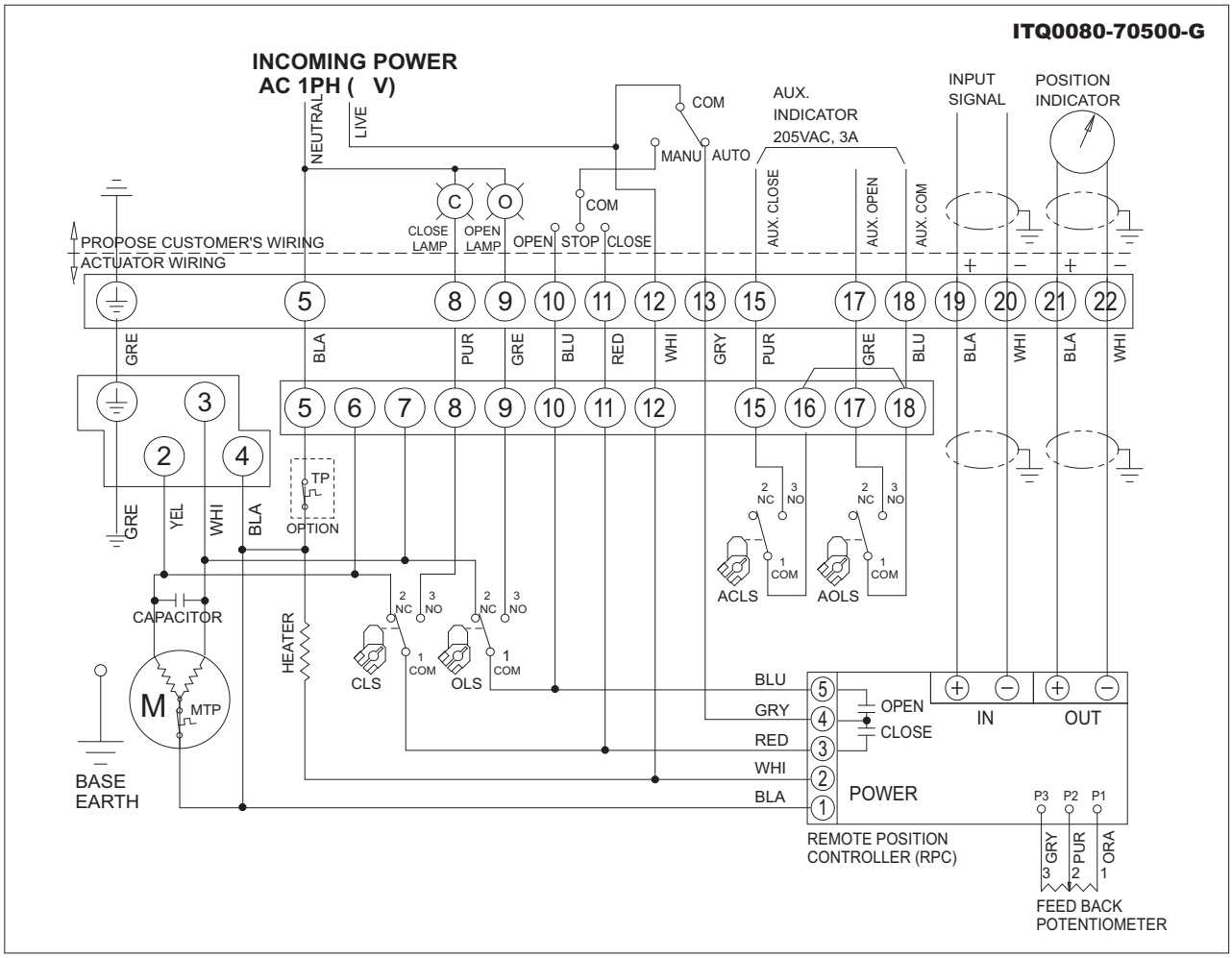


WIRING

ITQ 0080 380/440 ON/OFF



ITQ 0080 110/220 RPC





The details of this catalog are subject to change without prior notification.

Golden Rules Co., Ltd.

Website : http://www.goldenrules.co.kr