

ELECTRIC QUARTER TURN ACTUATOR

MODEL: HQ015 - 120



FEATURES AND BENEFITS

- High torque and various control options to meet specific requirements
- High Corrosion resistance due to hard anodizing internally and externally.
- Space heater(2W) standard preventing moisture and condensation build up.
- 4 Limit Switches (2 operation open/close, 2 additional for client use).
- Open/Close over torque switches are standard providing added protection against damage.
- Manual over ride featuring de-clutchable lever and handwheel.
- Fan cooled motor is reversible and features high output power, high efficiency and contains built in thermal overload protection (150°C Open, 97° Close) preventing over heating and damage to the motor coil.
- Open/Close stopper bolts protect gearing against over travel during manual operation.
- Removable drive bushing can be machined to suit any valve.

OPTIONS

- Water Tight IP68, 10M 72HRS (WTA)
- Explosion Proof, Ex d IIB T4 (EXA)(ATEX)
- Potentiometer Unit, 1000 Ω (PIU)
- Proportional Control Unit (PCU)
 - Input / Output 4-20mA
 - Input / Output 0-10V DC (240 ONLY)
- Additional Torque Switches (ATS)
- Current Position Transmitter (CPT)
- Rechargeable Battery Back up (RBP), 240V AC (015, 020, 030 sizes only)

APPLICATIONS

Challenger Valves and Actuators are the **“Right Choice for Valves and Actuation”** when quality matters.

HQ 015-120 electric actuator is specially designed for quarter turn valve operation such as Ball, Butterfly, Plug valves/Dampers and similar usages.

Servicing industries such as : Water & Waste Water, Mining, Desalination, Pumping, Industrial Processing, Irrigation, Materials Handling and Chemical Services.



TECHNICAL SPECIFICATION

Construction : Quarter turn electric actuator

Voltage Option:

- 240V AC
- 110V AC
- 24V AC
- 24V DC
- 415V 3 Phase

Maximum Output Torque: 150-1200Nm

Operating Time: 21-37 seconds

Mounting: ISO 5211

Enclosure:IP67

Rated Current:

- 240V AC - .73A-1.8A
- 110V AC - 1.5A-3.8A
- 24V AC - 8.8A-12.8A
- 24V DC - 8.8A-12.8A
- 415V AC- .59A-1.1A



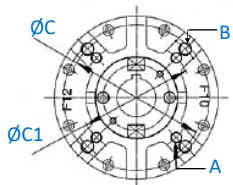
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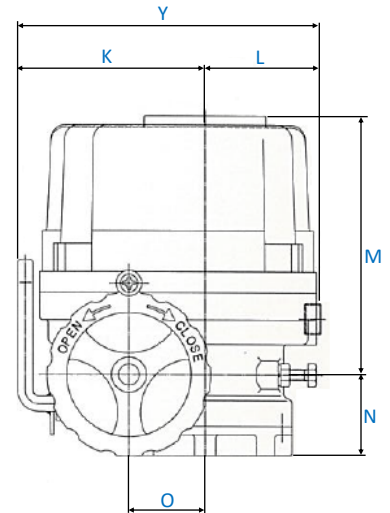
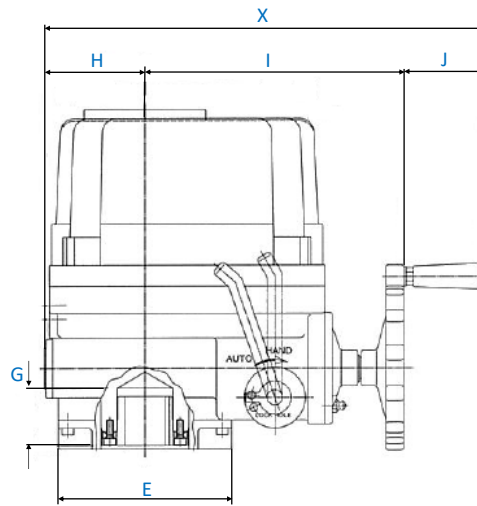
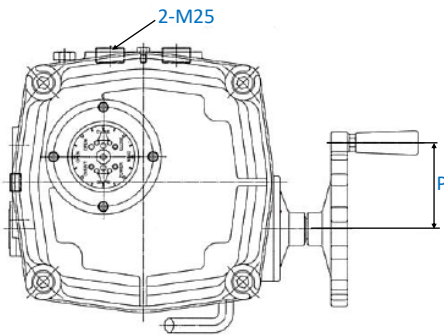


TECHNICAL DATA:

HQ MODEL	MAX OUTPUT TORQUE Nm	OPERATING TIME (SEC)	MOUNTING MAX BORE SIZE	RATED CURRENT (Amps) 60/50Hz				NUMBER OF HANDLE TURN	WEIGHT (Kgs)
				24V DC	110V AC	240V AC	415V AC		
HQ-015	150	21/25	Ø22	8.8	1.50	0.73	0.59	11	16.6
HQ-020	200	21/25	Ø22	9.8	1.50	0.73	0.59	11	16.6
HQ-030	300	26/31	Ø35	10.6	1.37	0.68	0.43	13.5	22
HQ-050	500	26/31	Ø35	-	4.27	1.37	0.57	13.5	23
HQ-080	800	31/37	Ø45	-	3.80	1.80	1.10	16.5	29
HQ-120	1200	31/37	Ø45	-	3.80	1.80	1.10	16.5	29



BASE ISO5211



MODEL	MOUNTING BASE ISO5211		NO. & SIZE OF BOLT HOLES		E	G	H	I	J	K	L	M	N	O	P	X	Y
	ØC	ØC1	A	B													
HQ-015	F10(102mm)	F07(70mm)	4 X M8	4 X M10	125	45	73	200	65	142	87	200	68	54	78	338	268
HQ-020	F07(70mm)	F10(102mm)	4 X M8	4 X M10	125	45	73	200	65	142	87	200	68	54	78	338	268
HQ-030	F10(102mm)	F12(125mm)	4 X M10	4 X M12	148	52	82	221	65	160	99	235	69	65	78	368	304
HQ-050	F10(102mm)	F12(125mm)	4 X M10	4 X M12	148	52	82	221	65	160	99	235	69	65	78	368	304
HQ-080	F12(125mm)	F14(140mm)	4 X M12	4 X M16	178	60	103	242	65	186	111	256	74	78	110	410	330
HQ-120	F12(125mm)	F14(140mm)	4 X M12	4 X M16	178	60	103	242	65	186	111	256	74	78	110	410	330

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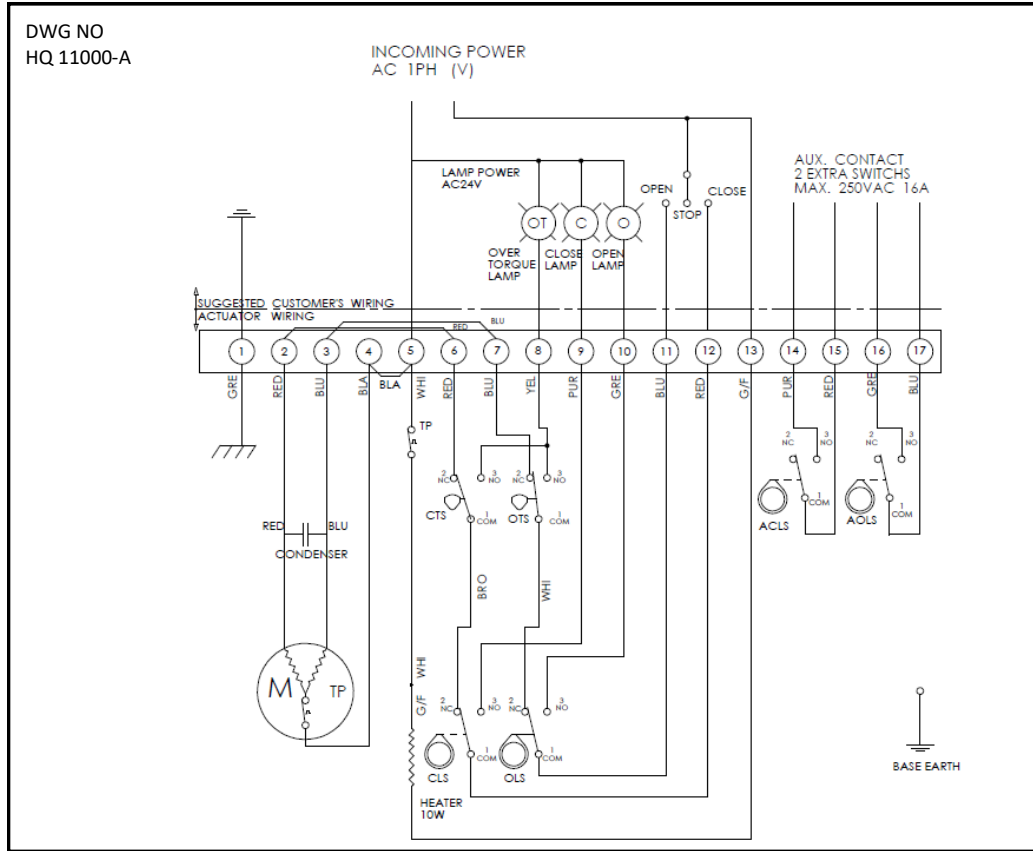


CHALLENGER

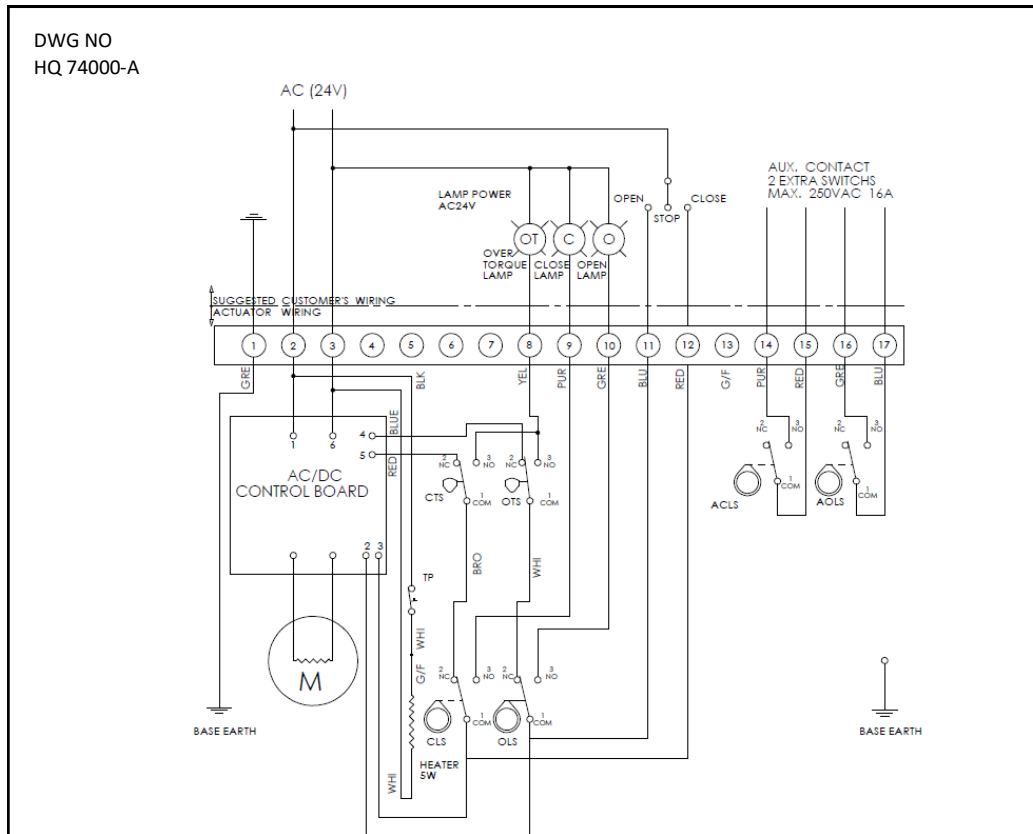
VALVES AND ACTUATORS

WIRING DIAGRAMS: ON/OFF

HQ 015-120
110V AC & 240V AC



HQ 015-050
24V AC



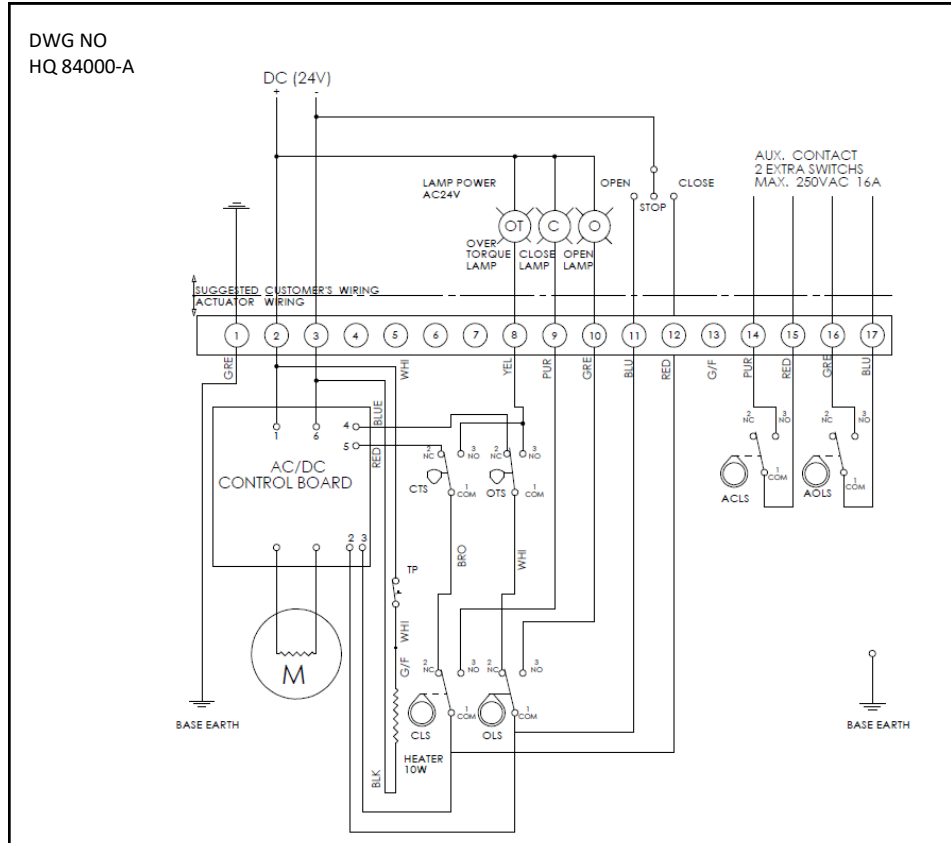
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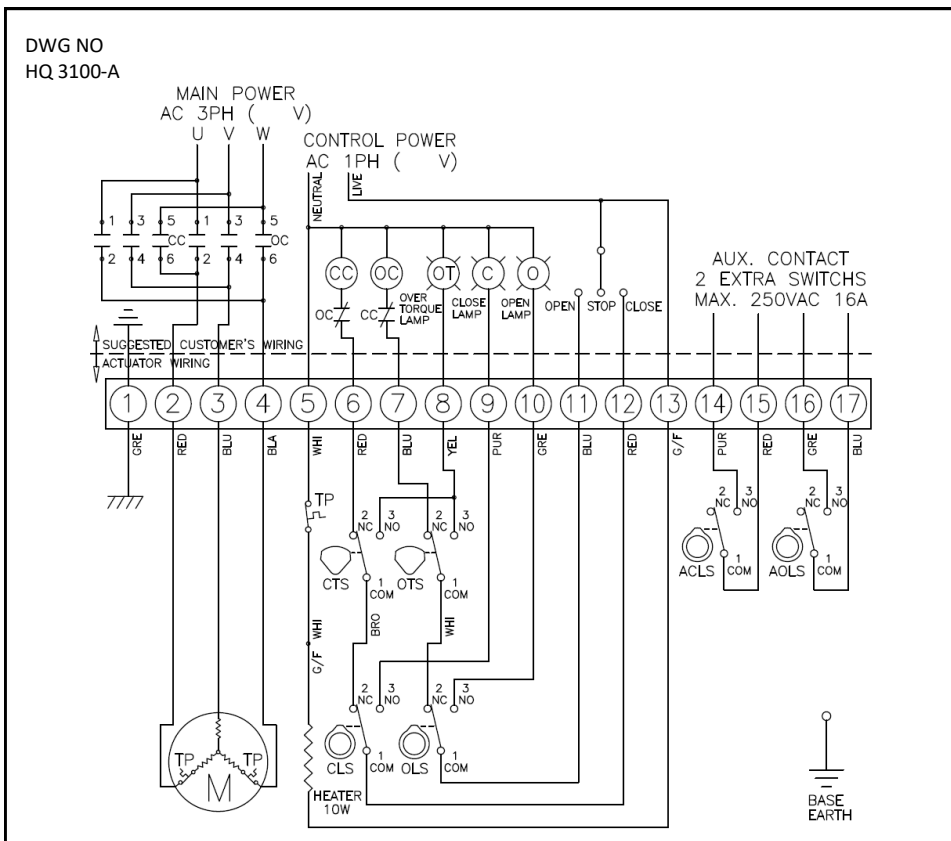


WIRING DIAGRAMS: ON/OFF

HQ015-050
24V DC



HQ015-120
415V AC

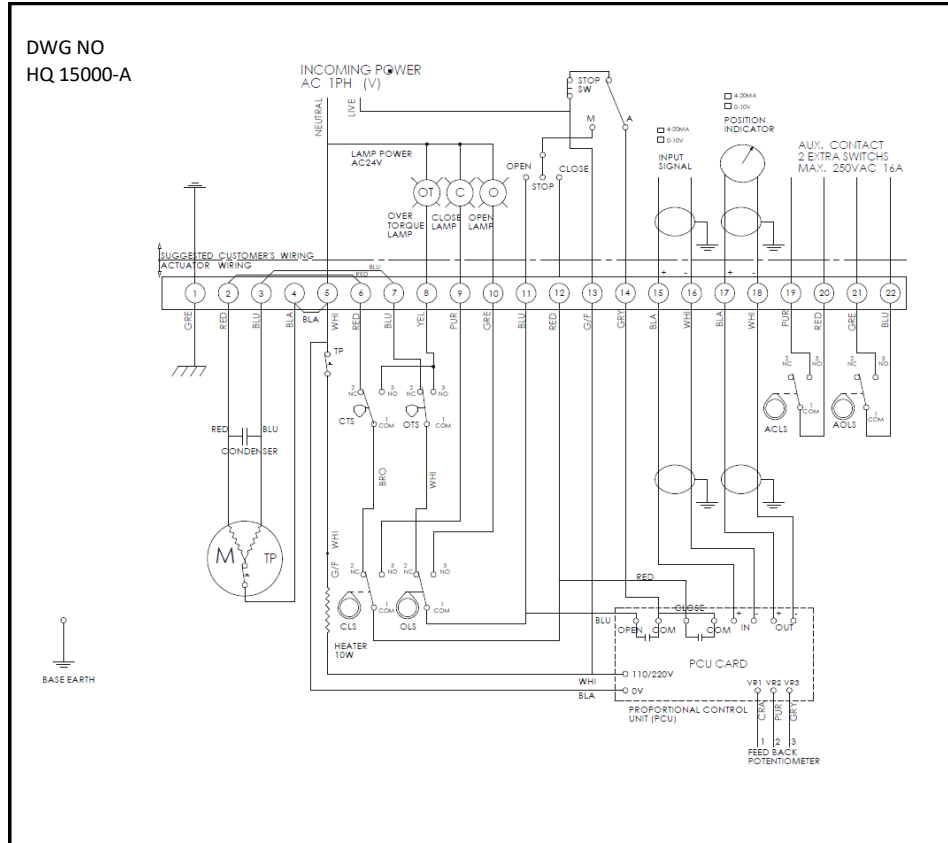


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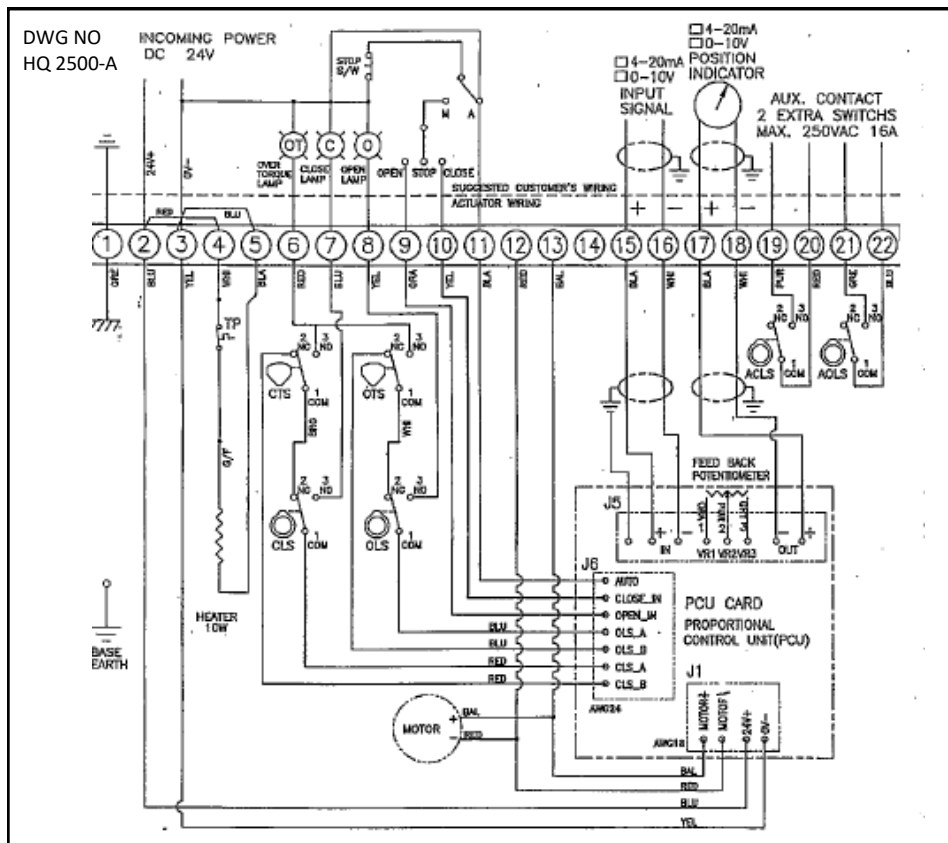


WIRING DIAGRAM: MODULATING

HQ015-120
240V AC



HQ015-050
24V DC

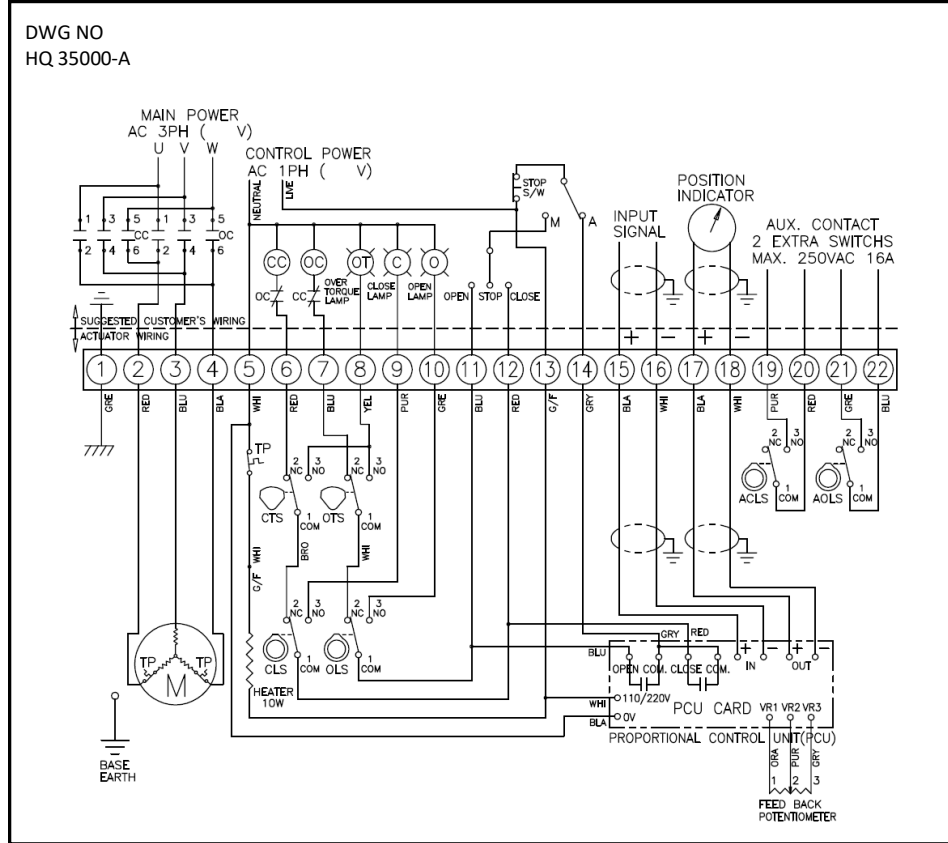


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WIRING DIAGRAM: MODULATING

HQ015-120
415V AC



Actuator sizing to suit Challenger Valves

MODEL	WAFER B/FLY (WSSE)	LUGGED B/FLY (LSSE)	DOUBLE FLANGED (USSE)	SS 3 PCE B/V (SS3301)	SS 3 WAY B/V (SS490)	SS FLANGED B/V (SS901D)	SS 3 WAY FLANGED B/V (SS401)	BRASS B/V (B501)
HQ015	125	125	150	65	50	40	-	100
	150	150		80		50		
				100		65		
						80		
HQ020	200	200	-	-	-	-	50	-
	300	300						
HQ030	250	250	200	-	-	-	-	-
	300	300						
HQ050	-	-	225	-	-	-	-	-
			250					
HQ080	350	350	300	-	-	-	-	-
			350					
HQ120	400	400	375	-	-	-	-	-
			400					

*Sizing based on wet service