



JOB NAME:	CONTRACTOR:
JOB LOCATION:	APPROVAL:
ENGINEER:	CONTRACTOR P.O.:
APPROVAL:	REPRESENTATIVE:

**M8E710085-0\* - M8E710064-0\* - M8E710065-0\***  
**FNPT THREADED                      SOCKET WELD                      BUTT WELD**

**710085 BRACKET MOUNTED, 3-PC, 2-WAY CARBON STEEL, FULL PORT BALL VALVE FOR STEAM IN NPT, SOCKET WELD OR BUTT WELD W/VALBIA METAL ELECTRIC ACTUATOR SIZES 1/4" TO 4"**

*001	12V AC/DC	*002	24V AC/DC	*003	100-240V AC
*01*	BATTERY BACKUP	*02*	POSITIONER	*04*	BATTERY BACKUP W POSITIONER

**SPECIFICATIONS**

The M8E710085, M8E710064 and the M8E710065 series feature 25% carbon filled PTFE seats, a Stainless steel ball with relief hole for thermal cycling protection, and pressure equalizing seats. This valve can withstand up to a 250 psi working steam pressure. The valve also meets NACE MR 0175 and MR0103. The valve is assembled with a bracket to help dissipate the heat from the actuator.

The actuator housing is made from die cast aluminum with a polyester powder coating for maximum external protection from the elements either outside or indoors. The housing also includes captive cover bolts.

Also standard actuator features include: 2 extra limit switches, dual voltage motors, dual ISO patterns, a square drive, a manual override, a dome position indicator, a torque limiter, 1/2" conduit connections, and a 75% duty cycle motor. Optional battery-backup and positioning models are available.

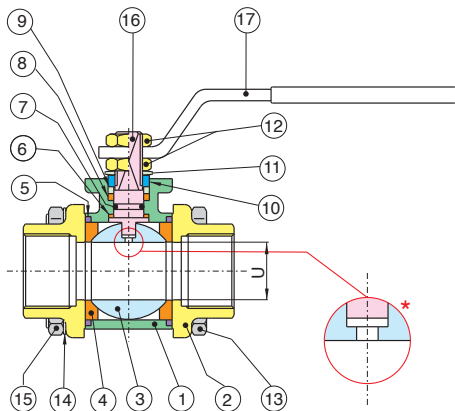
**ACTUATOR FEATURES**

- Dual Voltages
- 24V AC/DC and 100-240V AC Models Available
- ISO 5211 dual patterns
- 75% Duty Cycle
- Anti-condensation heater, (when red wire is connected to power)
- High-Strength, Die Cast Aluminum Powder Coated Housing
- Temperature Range -4°F to 131°F
- NEMA 4 Housing
- Two Auxiliary Switches Standard
- Torque limiter standard
- 1/2" conduit connection

**VALVE FEATURES**

- 3-piece WCB body
- Full port, sizes 1/4" to 4"
- Blow out proof stem, adjustable stem packing.
- Thermal relief hole in the stem slot
- ISO 5211 mounting pad with double "D" stem
- 100% electronically tested in the open and closed position at 80 psi.
- TUV T.A. Luft approved.
- Steam pressure to 250 psi.
- Temperature range: -4° F to 406° F.
- 25% carbon filled P.T.F.E ball seats.

**BILL OF MATERIALS FOR 710085/710064/710065**

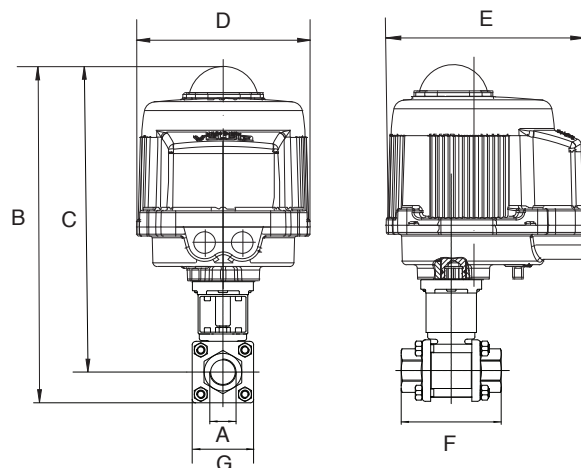


\* THERMAL RELIEF HOLE IN THE STEM SLOT.

N POS	PART NAME	MATERIAL	N PCS
1	BODY	ASTM A105-WCB	1
2	END CAP	ASTM A105-WCB	2
3	BALL	AIS 304-CF8	1
4	BALL SEAT	P.T.F.E.	2
5	SEAL	P.T.F.E.	2
6	STEM SEAL	R.T.F.E.	1
7	O-RING	SS316	1
8	STEM SEAL	P.T.F.E.	1
9	PACKING GLAND	STEEL	1

N POS	PART NAME	MATERIAL	N PCS
10	END STOP	AISI 430 (1/4" - 2")	2
		STEEL (2-1/2" - 4")	1
11	SPRING WASHER	STEEL (2-1/2" - 4")	2
12	NUT	STEEL	2
13	BOLT	STEEL (1/4" - 2")	4
		STEEL (2-1/2" - 4")	6
14	WASHER	STEEL (1/4" - 2")	4
		STEEL (2-1/2" - 4")	6
15	NUT	STEEL (1/4" - 2")	4
		STEEL (2-1/2" - 4")	6
16	STEM	AISI 304	1
17	HANDLE	STEEL	1

\*VARIES WITH SIZE

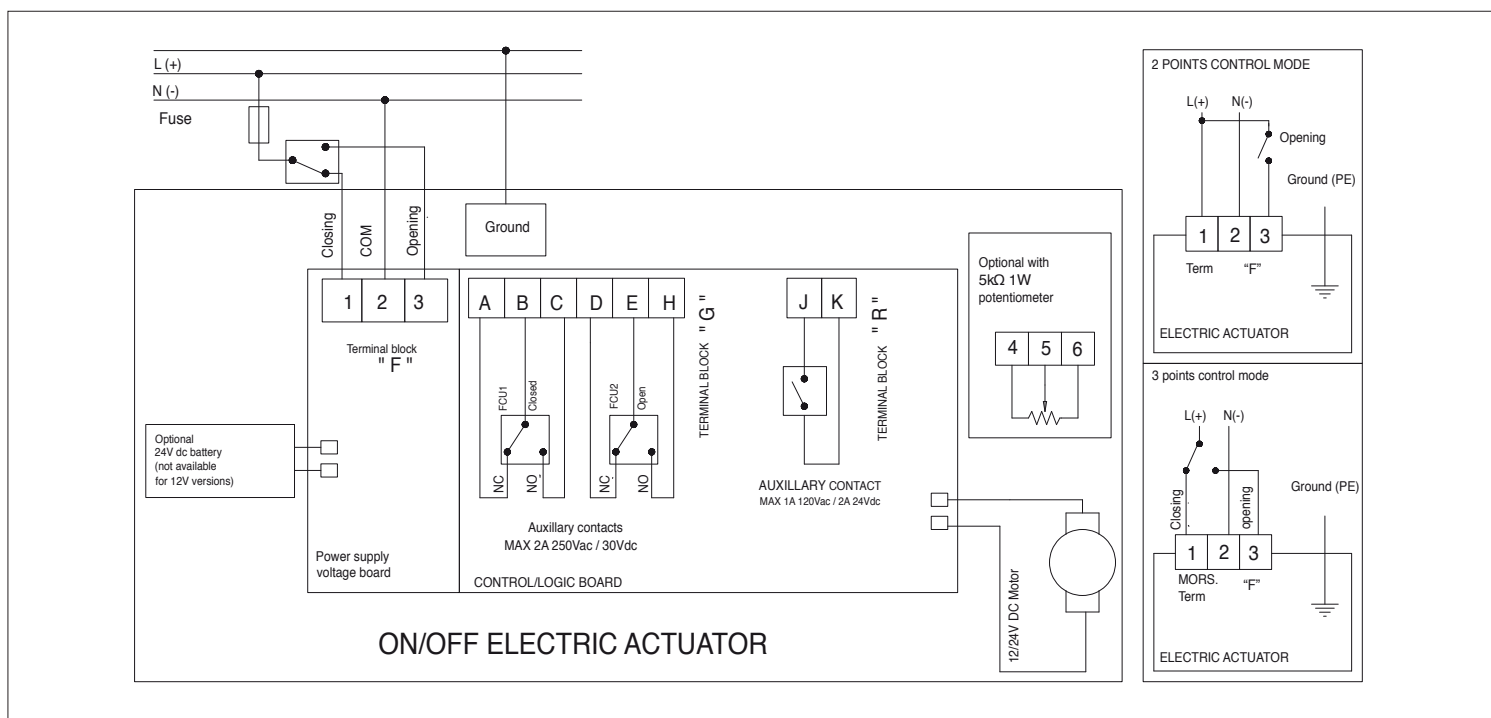


## DIMENSIONS

Size	A	B	C	D	E	F	G	ACT.
1/4"	.250	13.49	12.74	7.83	7.36	2.24	1.30	VB030M
3/8"	.375	13.62	12.87	7.83	7.36	2.24	1.30	VB030M
1/2"	.500	14.55	13.53	7.83	7.36	2.56	1.50	VB030M
3/4"	.750	15.06	13.95	7.83	7.36	2.99	1.85	VB030M
1"	1.00	16.01	14.71	7.83	7.36	3.62	2.28	VB030M
1-1/4"	1.25	16.52	15.13	7.83	7.36	4.21	2.64	VB030M
1-1/2"	1.50	18.68	16.97	8.66	7.76	4.57	3.00	VB060M
2"	2.00	19.60	17.74	8.66	7.76	5.35	3.54	VB060M
2-1/2"	2.50	24.96	22.73	10.63	10.47	6.06	5.28	VB110M
3"	3.00	26.12	23.66	10.63	10.47	7.09	6.39	VB110M
4"	4.00	28.78	25.82	10.63	10.47	8.54	7.48	VB190M

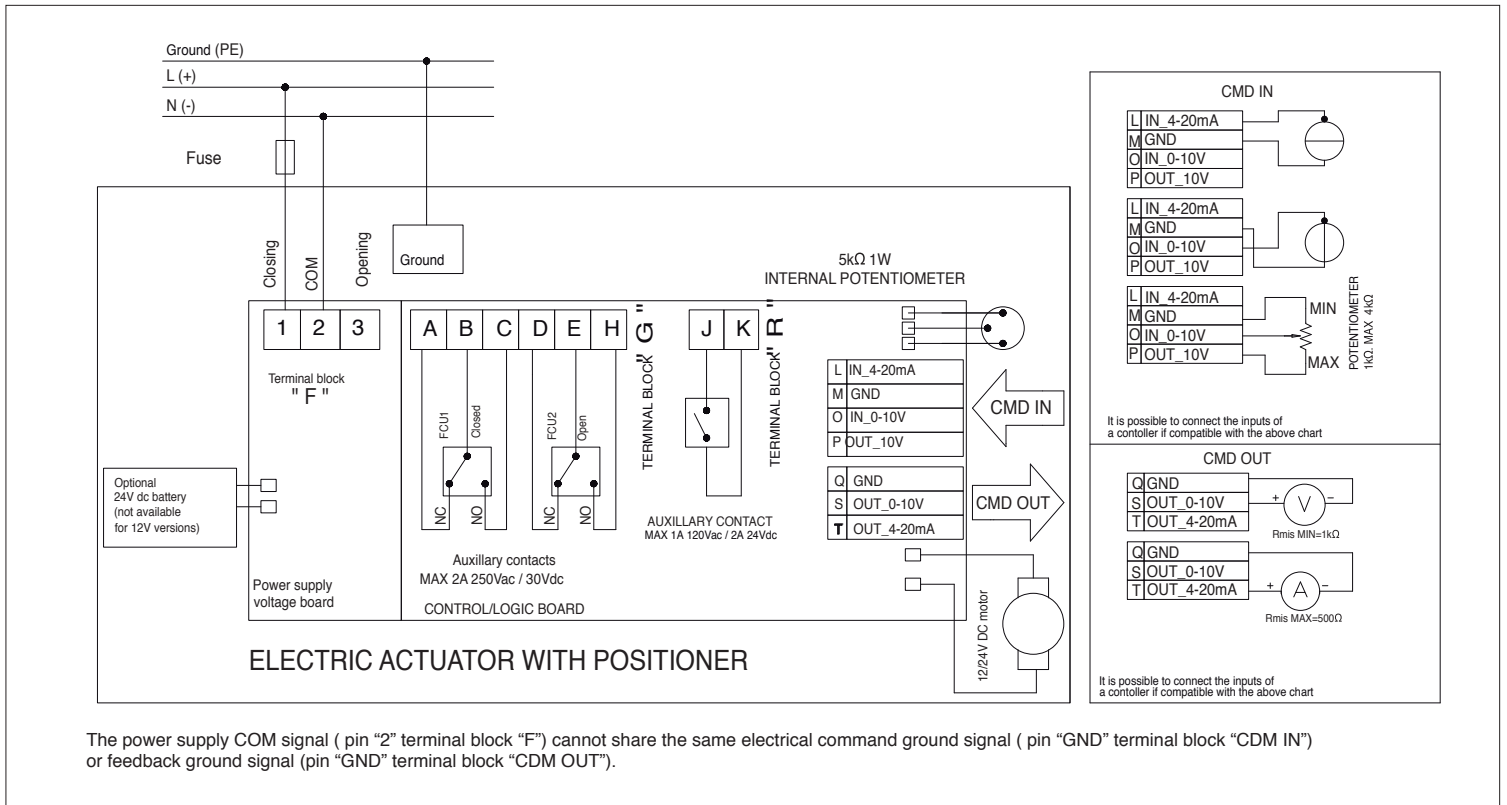
## ON/OFF WIRING DIAGRAM

12V AC/DC, 24V AC/DC & 100-240VAC



# POSITIONER WIRING DIAGRAM

12V AC/DC, 24V AC/DC & 100-240VAC



# 3-POSITION WIRING DIAGRAM

12V AC/DC, 24V AC/DC & 100-240VAC

