

XEC Series Actuators

12 VDC Electric Actuators for Choke Valves



The Triac® XEC Series electric actuators come complete with a choke valve control circuit board. The circuit board is equipped with a torque limiting feature to prevent damage to gear train. There is an alarm circuit to indicate a “jammed” choke. The motor is reversible. The motor and torque limiting feature ensure long operating life. Actuators include mechanical travel stops and limit switches to indicate fully opened or closed position.

The Triac® XEC Series electric actuators for choke valves are the preferred choice when long life 12VDC actuation is required.



- 12VDC power supply
- 70% Duty Cycle motor
- Two 3/4" conduit entries
- Class F motor insulation
- 4 Internal Switches (2-Indication; 2-Motor Control)
- Electronic Over-torque Limiter
- Pulse control signal to relays
- Low power consumption when not in operation
- Ambient temperatures: -4°F to 158°F
- Optional low temperature -40°F (XEC and XE Only)
- Declutchable Manual Override (10 Turns per 90°, Auto Release on Motor Power)
- External adjustable travel stops
- Self-locking, double reduction worm gear assembly with minimal back lash
- Anodized & polyester powder coated enclosure

The XEC Series is our standard recommendation for use with choke valves. Please see our full product line of electric actuators for applications with other requirements.

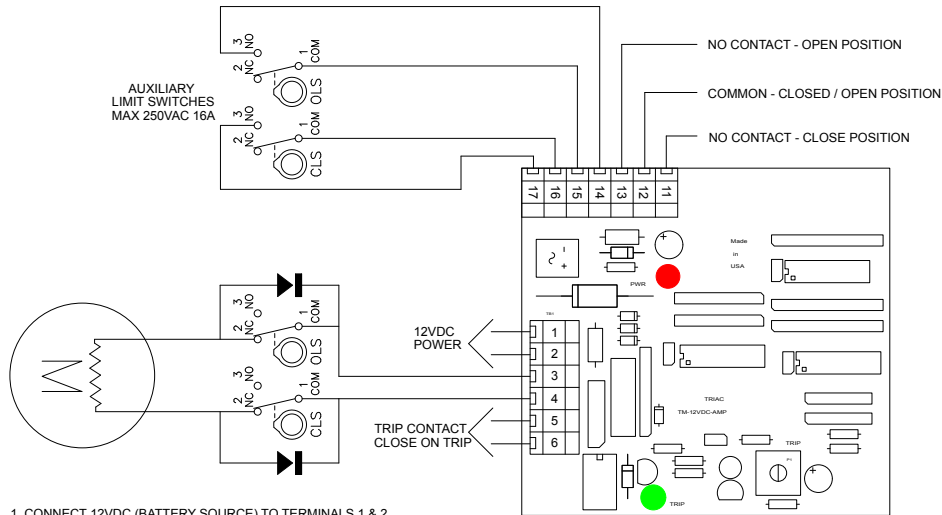
- » XE Series 12 VDC should be used instead for cases where the customer is using a valve controller (such as TotalFlow by ABB®).
- » XC Series (XC-00690B) is available for applications that are required to meet CSA Approved Class I, Division 1 & 2, Groups C, D standards. Motor control board is not available in CSA model.



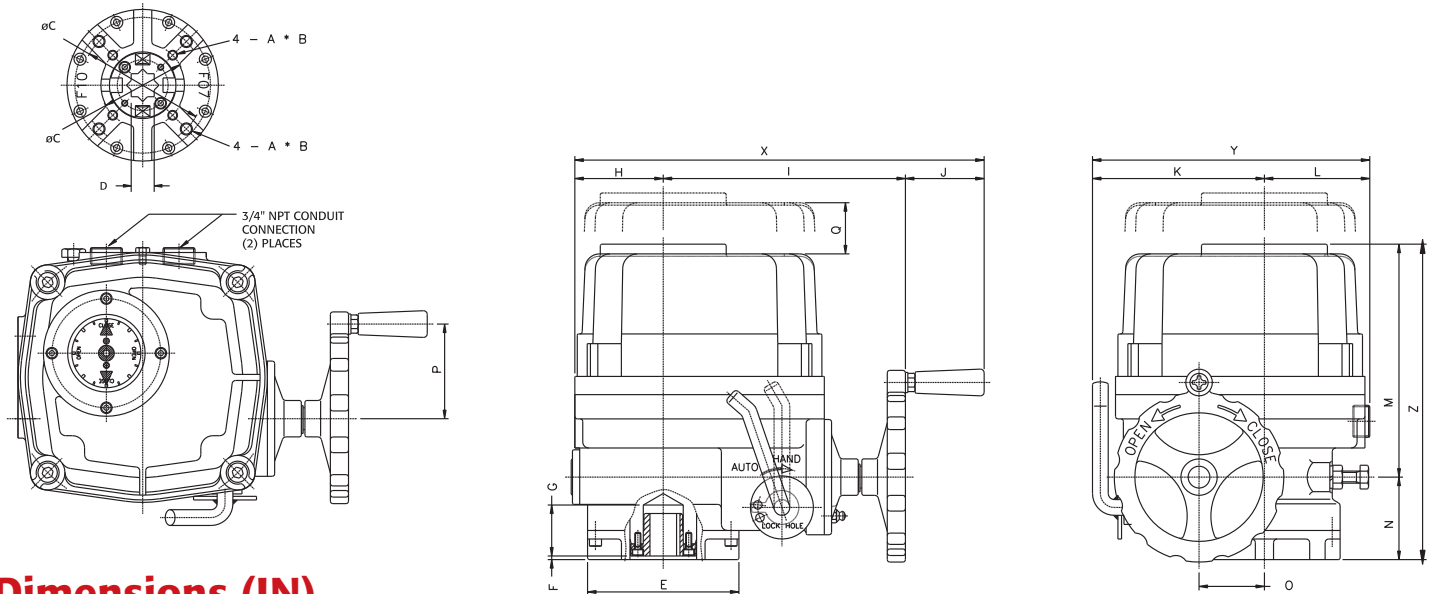
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Wiring Diagram

SE1337 (for XEC-690B)



1. CONNECT 12VDC (BATTERY SOURCE) TO TERMINALS 1 & 2.
POSITIVE ON TERM 1 / NEGATIVE ON TERM 2 - ACTUATOR WILL DRIVE CW
POSITIVE ON TERM 2 / NEGATIVE ON TERM 1 - ACTUATOR WILL DRIVE CCW
2. IF TRIP SETTING NEED ADJUSTMENT AFTER VALVE ASSEMBLY HAS BEEN INSTALLED IN THE FIELD
TURN THE TRIP POTENTIOMETER CCW UNTIL IT STOPS.
WHILE THE ACTUATOR IS MOVING TURN THE TRIP POTENTIOMETER CW UNTIL THE TRIP RED LED GOES OUT. JOG THE ACTUATOR BACK AND FORTH
MAKING SURE THE TRIP LED STAYS TURNED OFF.
3. CONNECT PLC DISCRETE INPUT TO TERMINALS 5 & 6. PLC LOGIC SHOULD DE-ENERGIZE ACTUATOR OR REVERSE ACTUATOR TO CLEAR VALVE JAM. THE
TM-12VDC-AMP CIRCUIT BOARD DOES NOT CONTROL THE ACTUATOR, ONLY COMMUNICATES WHEN THE ACTUATOR MOTOR HAS STALLED.



Dimensions (IN)

Model	ISO 5211	A	B	C	D sq	E	F	G	H	I	J	K	L	M	N	O	P	Q	X	Y	Z
XEC-690B*	F07	M8	0.47	2.756	0.669	3.46	0.12	1.26	1.97	6.18	2.01	3.94	2.76	6.57	2.09	1.57	2.36	4.72	10.16	6.69	9.25

Model	Output Torque	Amps
	In-Lbs	12VDC
XEC-690B*	690	13.5 FLA

*Use model number XC-00690B when CSA explosion proof rating is required. Refer to Electric Actuators general catalog for XC actuator specific details.



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