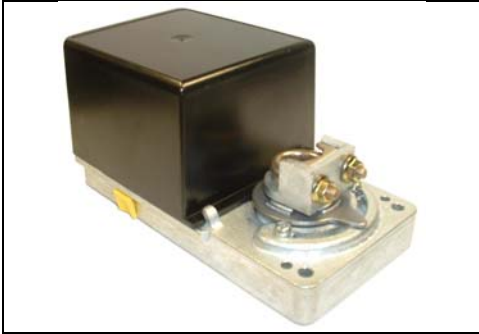




Specification & Installation instruction



Feature:

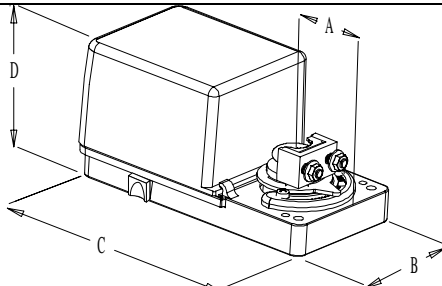
- Mounts easy on round & square shaft (optional).
- External clutch for manual adjustments.
- Control signal fully programmable.
- Maintenance free.
- Position indicator.
- Fail safe by *Enerdrive System*¹
- Auxiliary switches (on models ending by 80S)

CM060S
 CM080S
 CM160S
 CM180S
 CM260S
 CM280S

Technical Data	CM060S	CM080S	CM160S	CM180S	CM260S	CM280S
Auxiliary switches	No	Yes(2)	No	Yes(2)	No	Yes(2)
Power supply	22 to 26VAC 50/60Hz or 28 to 32VDC		110 to 130 VAC 50/60Hz		220 to 250 VAC 50/60Hz	
Approvals						
Torque	18 in.lb. [2 Nm] at rated voltage					
Fail safe - Enerdrive	Yes					
Power consumption	10VA Peak, 3VA					
Control signal	2 to 10 VDC					
Running time through 90°	80 - 100 sec (Fail-safe 20-40 sec)					
Electrical connection	18 AWG [0.8mm ²] minimum					
Inlet bushing	2 inlet bushing of 5/8 in [15.9 mm] & 7/8 in [22.2 mm]					
Angle of rotation	0 to 90 degrees, mechanically adjustable (factory set with 90° stroke)					
Direction of rotation	Reversible, Clockwise (CW) or Counterclockwise (CCW) (factory set with CW direction)					
Ambient temperature	0°F to +122°F [-18° C to +50° C]					
Storage temperature	-22°F to +122°F [-30° C to +50° C]					
Relative Humidity	5 to 95 % non condensing.					
Enclosure type	NEMA type 2 / IP42					
Weight	3 lbs. [1.4 kg]					

Warning: Do not press the clutch when actuator is powered

Dimensions



Dimension	Inches	Metric (mm)
A	1.50	38.1
B	3.26	82.8
C	6.60	167.5
D	<i>model ending by 60</i>	3.01
	<i>model ending by 80</i>	3.72

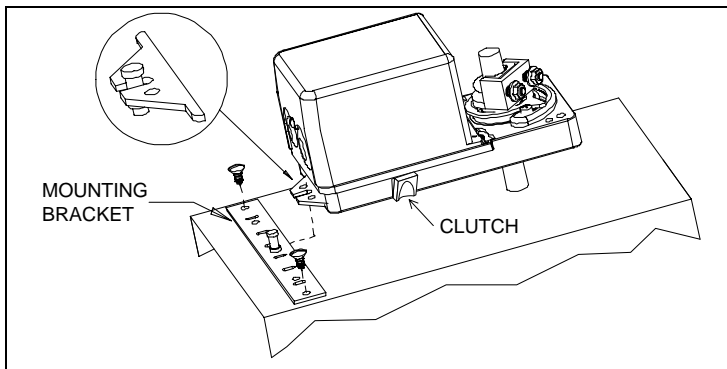
Caution

We strongly recommend that all neptronic® products be wired to a separate transformer and that transformer shall service only neptronic® products. This precaution will prevent interference with, and/or possible damage to incompatible equipment.
 When multiple actuators are wired on a single transformer, polarity must be observed. Long wiring runs create voltage drop which may affect the actuator performance.

¹ Enerdrive System U.S.A. Patent #5,278,454

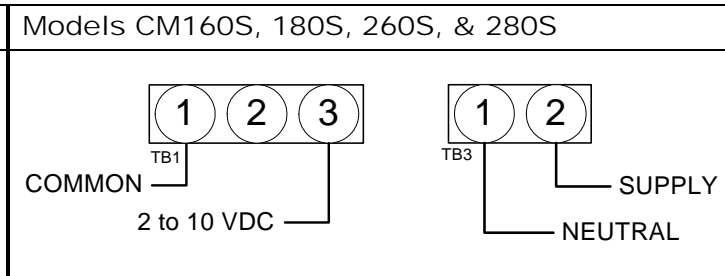
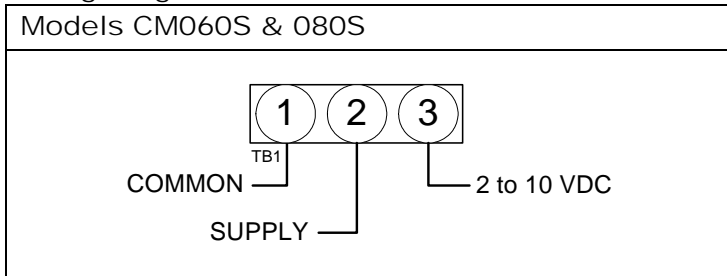


Mechanical installation

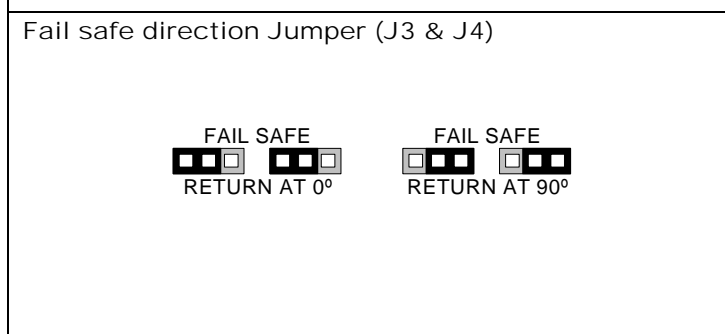
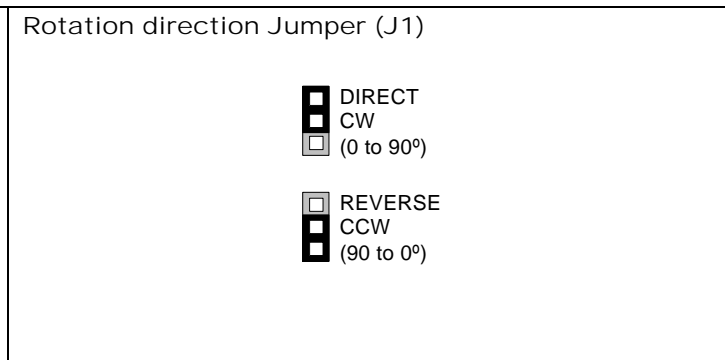
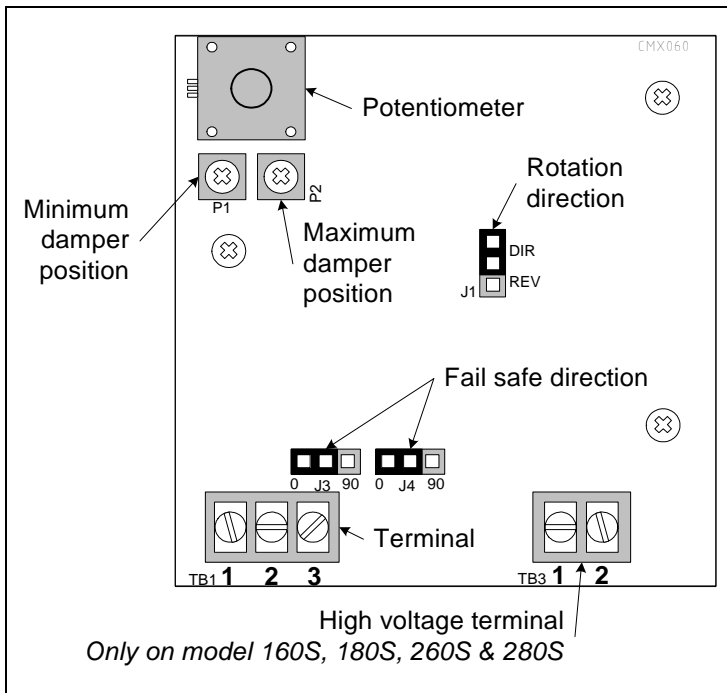


1. Manually close the damper blades and positioned the actuator at 0° or 90°.
2. Slide the actuator onto the shaft.
3. Tighten the nuts on the “U” bolt to the shaft with a 8mm wrench to a torque of 60 in.lb. [6,7 Nm].
4. Slide the mounting bracket under the actuator. Ensure free movement of the slot at the base of the actuator. The bracket pin must be placed in the mid distance of the slot.
5. Fix the bracket to the ductwork with #8 self-tapping screws.

Wiring Diagrams



PC Board



Stroke adjustment

- The actuator is factory calibrated to modulate from 0 to 90 degrees.
- To adjust the stroke of the actuator, connect the control signal.
- Set control input at 0% demand and turn “P1” until the actuator reaches its minimum position.
 - Set control input at 100% demand and turn “P2” until the actuator reaches its maximum position.