Actuator
Installation instruction

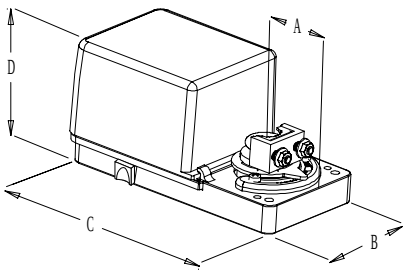
Feature:

- Mounts easy on round & square shaft (with option –8).
- External clutch for manual adjustments.
- Maintenance free.
- Position indicator.
- Fail safe by *Enerdrive System*[1]
- Auxiliary switches (on model 1080).

	New Number
MDTS1060	*DT060S*
MDTS1065	*DT065S*
MDTS1080	*DT080S*

Technical Data	**MDTS1060** ***DT060S***	**MDTS1065** ***DT065S***	**MDTS1080** ***DT080S***
Auxiliary switches	No	No	Yes (2)
Feedback	No	Yes	No
Fail safe - *Enerdrive*	Yes		
Power consumption	15VA Peak, 6VA		
Control signal	2 wire / 2 position, 4 wire / 3 point floating		
Running time through 90º	90 - 110 sec (Fail-safe 70-80 sec)		
Torque	50 in.lb. [5,6 Nm] at rated voltage (Fail-safe 35 in.lb. [3,9 Nm])		
Power supply	22 to 26 VAC or 28 to 32 VDC		
Electrical connection	18 AWG [0.8 mm^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 90º stroke)		
Direction of rotation	Reversible, Clockwise (CW) or Counterclockwise (CCW) (factory set with CW direction)		
Ambient temperature	0ºF to +122ºF [-18º C to +50º C]		
Storage temperature	-22ºF to +122ºF [-30º C to +50º C]		
Relative Humidity	5 to 95 % non condensing.		
Weight	3 lbs. [1.4 kg]		
Warning: Do not press the clutch when actuator is powered			

Dimensions



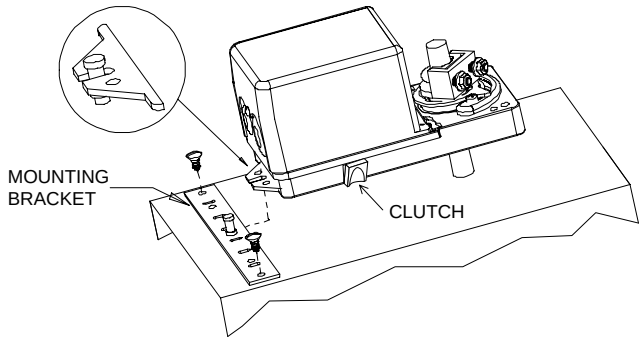
Dimension	Inches	Metric (mm)
A	1.50	38.1
B	3.26	82.8
C	6.60	167.5
D	3.01	76.4

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

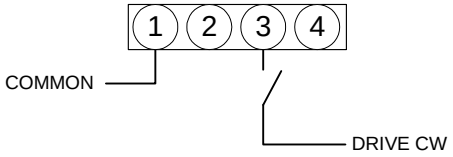
Mechanical installation



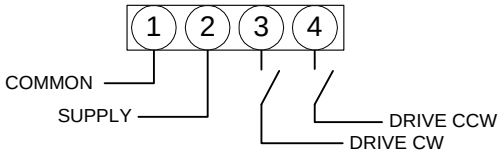
1. Manually close the damper blades and positioned the actuator at 0º or 90º.
2. Slide the actuator onto the shaft.
3. Tighten the nuts on the “U” bolt to the shaft with a 8mm wrench to a torque of 60 in.lb. [6,7 Nm].
4. Slide the mounting bracket under the actuator. Ensure free movement of the slot 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

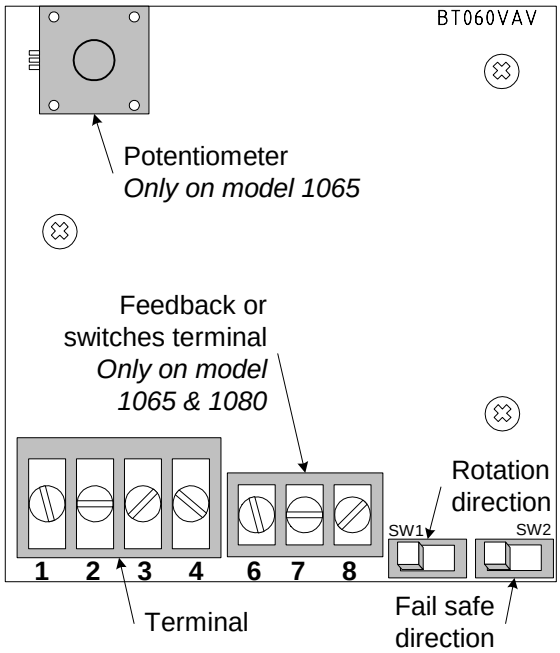
2 wire / 2 position (ON-OFF)



4 wire / 3 point floating



PC Board



Dip switch settings

Rotation direction (SW1)

CW (0 to 90º)

CCW (90 to 0º)

Fail safe direction (SW2)

Fail safe return at 0º

Fail safe return at 90º

Stroke adjustment

To adjust the stroke, move the adjustment screws at the desired position.