



### Feature:

- Clutch for manual adjustments.
- Maintenance free.
- Position indicator.
- Fail safe by *Enerdrive System*<sup>1</sup> (on model 060 & 080).
- Auxiliary switches (on model 020 & 080).

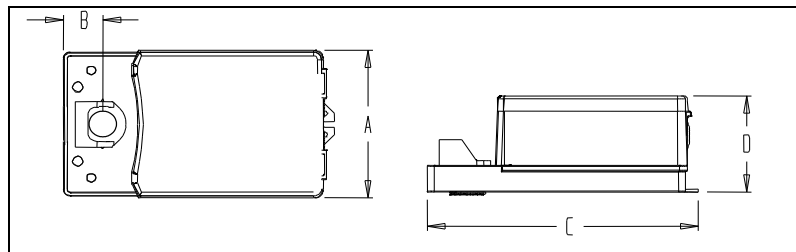
### Old Number

<b>TBT3000A</b>	<b>TT000</b>
<b>TBT3005A</b>	<b>TT005</b>
<b>TBT3021A</b>	<b>TT020</b>
<b>TBT3060A</b>	<b>TT060</b>
<b>TBT3065A</b>	<b>TT065</b>
<b>TBT3080A</b>	<b>TT080</b>
<b>RBT5000A</b>	<b>RT000</b>
<b>RBT5005A</b>	<b>RT005</b>
<b>RBT5021A</b>	<b>RT020</b>
<b>RBT5060A</b>	<b>RT060</b>
<b>RBT5065A</b>	<b>RT065</b>
<b>RBT5080A</b>	<b>RT080</b>

Technical Data	TT000 <i>TBT 3000A</i>	TT005 <i>TBT 3005A</i>	TT020 <i>TBT 3021A</i>	TT060 <i>TBT 3060A</i>	TT065 <i>TBT 3065A</i>	TT080 <i>TBT 3080A</i>	RT000 <i>RBT 5000A</i>	RT005 <i>RBT 5005A</i>	RT020 <i>RBT 5021A</i>	RT060 <i>RBT 5060A</i>	RT065 <i>RBT 5065A</i>	RT080 <i>RBT 5080A</i>
Auxiliary switches	No	No	Yes(2)	No	No	Yes (2)	No	No	Yes(2)	No	No	Yes (2)
Feedback	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	No
Fail safe - <i>Enerdrive</i>	No			Yes			No			Yes		
Power consumption	8 VA			24 VA Peak, 8 VA			10 VA			24 VA Peak, 10 VA		
Control signal	3 wire / 2 position, 3 wire / 3 point floating			2 wire / 2 position, 4 wire / 3 point floating			3 wire / 2 position, 3 wire / 3 point floating			2 wire / 2 position, 4 wire / 3 point floating		
Weight	4.5 lbs. [2 kg]						7 lbs. [3.2 kg]					
Torque	180 in.lb. [20 Nm] at rated voltage						360 in.lb. [40 Nm] at rated voltage					
Running time through 90°	60 to 85 sec Torque dependant											
Power supply	22 to 26 VAC or 28 to 32 VDC											
Electrical connection	18 AWG [0.8 mm <sup>2</sup> ] minimum											
Inlet bushing	2 inlet bushing of 7/8 in [22.2 mm]											
Angle of rotation	0 to 90 degrees, mechanically adjustable with SLD (optional), (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.											

**Warning: Do not press the clutch when actuator is powered**

### Dimensions



Dimension	Inches	Metric (mm)
<b>A</b>	5.20	132.1
<b>B</b>	1.33	33.8
<b>C</b>	9.13	231.9
<b>D</b>	3.55	90.2

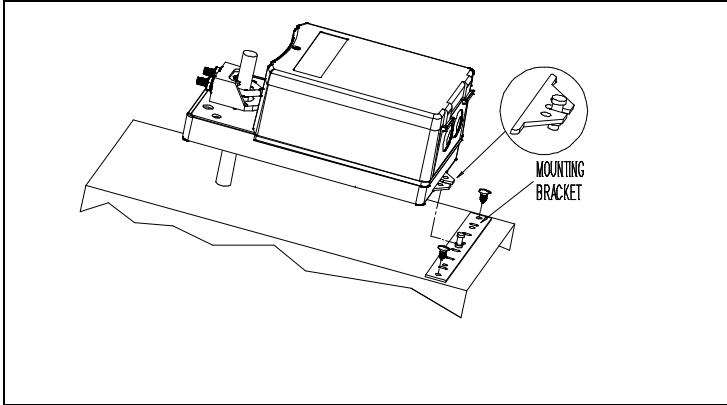
### Caution

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.

<sup>1</sup> *Enerdrive System* U.S.A. Patent #5,278,454

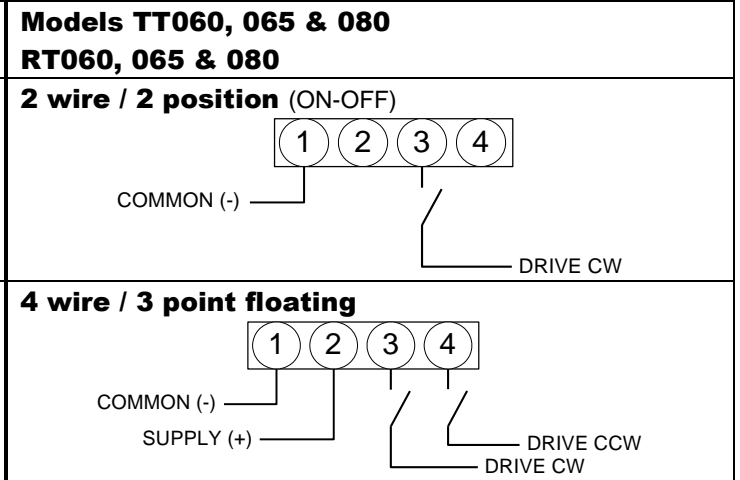
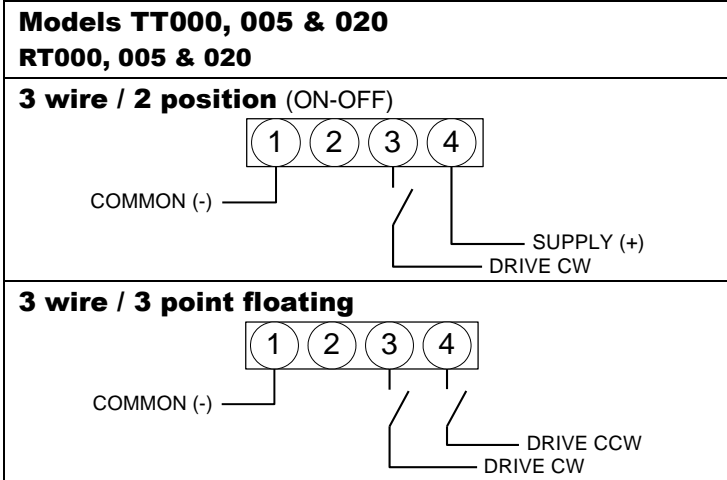


**Mechanical installation**

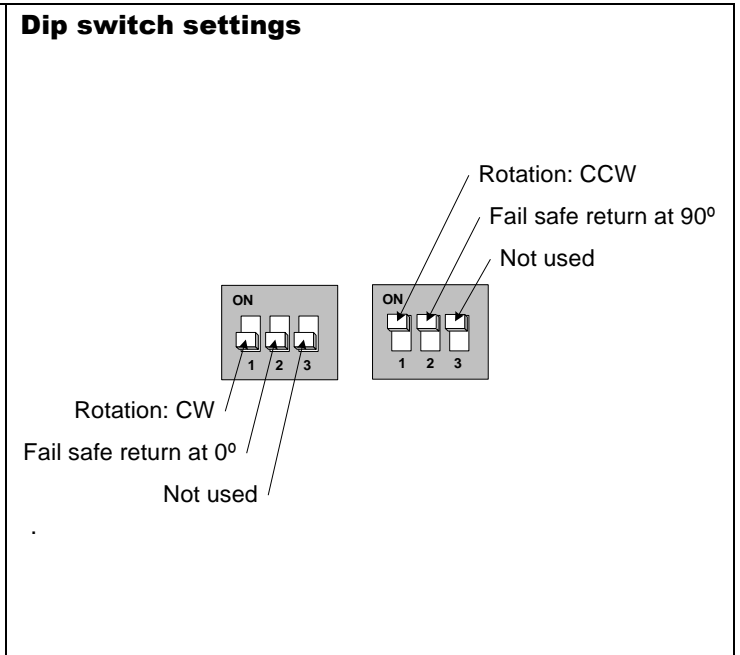
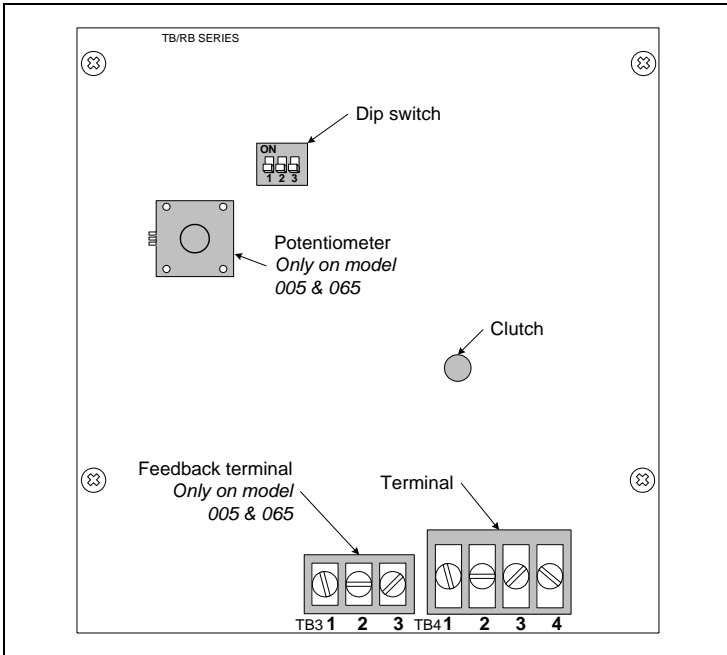


1. Manually close the damper blades and positioned the actuator at 0° or 90°.
2. Slide the actuator onto the shaft.
3. Tighten the nuts on the "U" bolt to the shaft with a 10mm wrench to a torque of 150 in.lb. [17 Nm].
4. Slide the mounting bracket under the actuator. Ensure free movement of the slot 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**

To adjust the stroke, use the stroke limiting device (SLD). (not included)