



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 (on model 1060, 1065 & 1080).
- Auxiliary switches (on model 1021 & 1080).

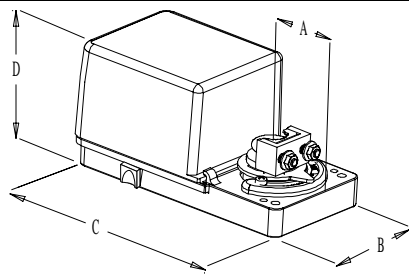
New Number

BBTS1000	BT000S
BBTS1005	BT005S
BBTS1021	BT020S
BBTS1060	BT060S
BBTS1065	BT065S
BBTS1080	BT080S

Technical Data	BBTS1000 <i>BT000S</i>	BBTS1005 <i>BT005S</i>	BBTS1021 <i>BT020S</i>	BBTS1060 <i>BT060S</i>	BBTS1065 <i>BT065S</i>	BBTS1080 <i>BT080S</i>
Auxiliary switches	No	No	Yes (2)	No	No	Yes (2)
Feedback	No	Yes	No	No	Yes	No
Fail safe - Enerdrive	No			Yes		
Power consumption	6 VA			15VA Peak, 6VA		
Control signal	3 wire / 2 position, 3 wire / 3 point floating			2 wire / 2 position, 4 wire / 3 point floating		
Running time through 90°	90 - 110 sec (Fail-safe 20-30 sec)					
Torque	50 in.lb. [5,6 Nm] at rated voltage					
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 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.					
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

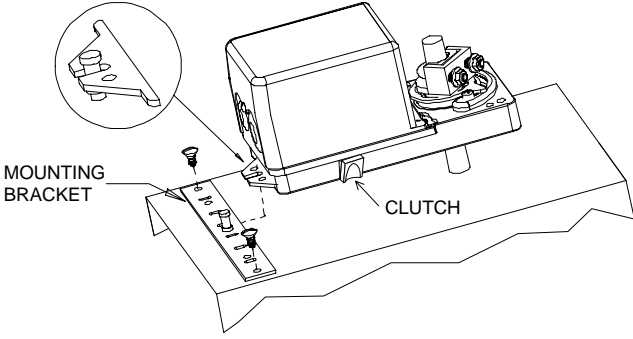
We strongly recommend that all neptronic® products be wired to a separate transformer and that transformer shall service only neptronic® products. This precaution will prevent interference with, and/or possible damage to incompatible equipment.

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.

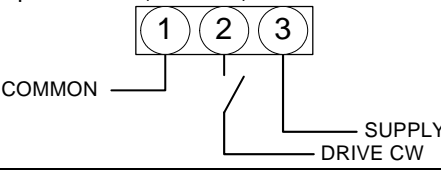
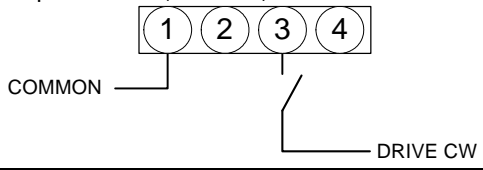
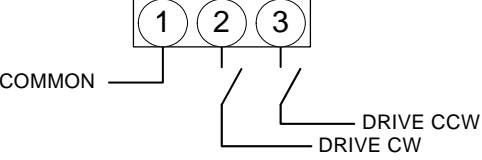
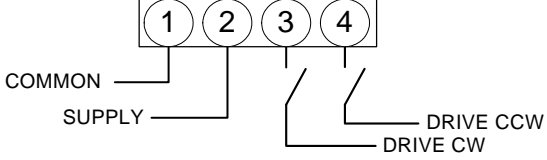
¹ Enerdrive System U.S.A. Patent #5,278,454



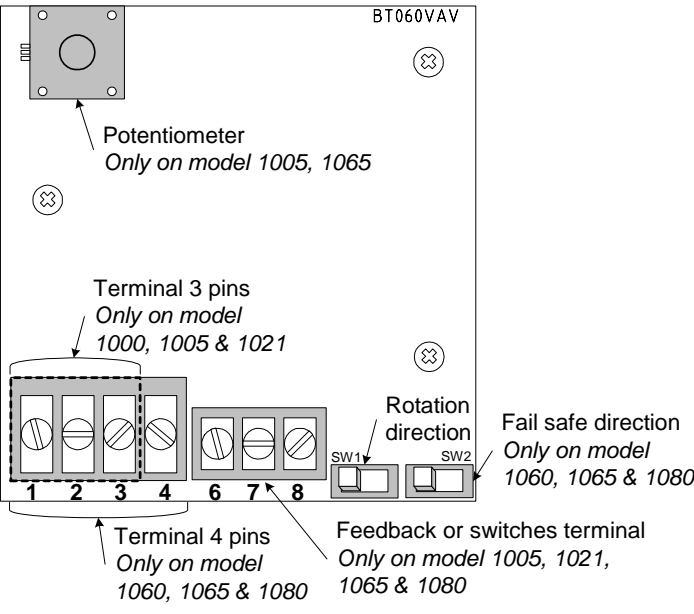




Mechanical installation

 <p>MOUNTING BRACKET</p> <p>CLUTCH</p>	<ol style="list-style-type: none"> 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.
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Wiring Diagrams

<p>Models BBTS1000, 1005 & 1021</p> <p>3 wire / 2 position (ON-OFF)</p> 	<p>Models BBTS1060, 1065 & 1080</p> <p>2 wire / 2 position (ON-OFF)</p> 
<p>3 wire / 3 point floating</p> 	<p>4 wire / 3 point floating</p> 

PC Board

 <p>BT060VAV</p> <p>Potentiometer Only on model 1005, 1065</p> <p>Terminal 3 pins Only on model 1000, 1005 & 1021</p> <p>Terminal 4 pins Only on model 1060, 1065 & 1080</p> <p>Rotation direction SW1 SW2</p> <p>Fail safe direction Only on model 1060, 1065 & 1080</p> <p>Feedback or switches terminal Only on model 1005, 1021, 1065 & 1080</p>	<p>Dip switch settings</p> <p>Rotation direction (SW1)</p> <p>CW (0 to 90°)  CCW (90 to 0°) </p> <hr style="border-top: 1px dashed black;"/> <p>Fail safe direction (SW2)</p> <p>Fail safe return at 0°  Fail safe return at 90° </p>
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Stroke adjustment

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