



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 60, 65 & 80).
- Auxiliary switches (on model 20 & 80).

Old Number

BBTS1000	BT000S
BBTS1005	BT005S
BBTS1021	BT020S
BBTS1060	BT060S
BBTS1065	BT065S
BBTS1080	BT080S
BBTS1800	BT800S
	BT805S
	BT820S
BBTS1860	BT860S
	BT865S
	BT880S

Technical Data	BT000S <i>BBTS1000</i>	BT005S <i>BBTS1005</i>	BT020S <i>BBTS1021</i>	BT060S <i>BBTS1060</i>	BT065S <i>BBTS1065</i>	BT080S <i>BBTS1080</i>	BT800S <i>BBTS1800</i>	BT805S	BT820S	BT860S <i>BBTS1860</i>	BT865S	BT880S
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	6 VA			15VA Crête, 6VA			4 watts			12 watts initial charging, 4 watts normal operation		
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		
Power supply	22 to 26 VAC or 28 to 32 VDC						40 to 56 VDC					
Running time through 90°	90 - 110 sec. (Fail-safe 20-35 sec)											
Torque	50 in.lb. [5,6 Nm] at rated voltage											
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	-22°F to +122°F [-30°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]											
Ingress protection	IP22 equivalent to Nema type 2, IP54 equivalent to Nema type 3R if water tight inlet bushings (not supplied NEP617) are installed											
Warning: Do not press the clutch when actuator is powered												

Dimensions

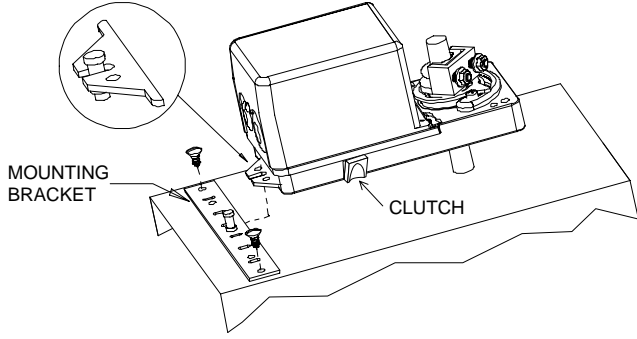
	Dimension	Inches	Metric (mm)
	A	1.50	38.1
	B	3.26	82.8
	C	6.60	167.5
	D	3.01	76.4

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.

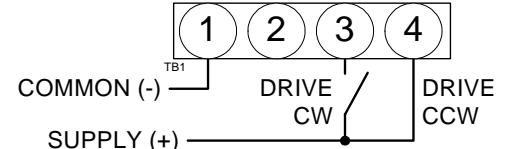
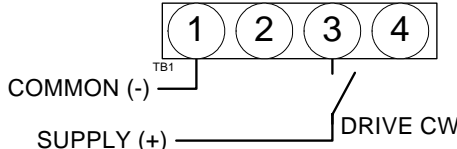
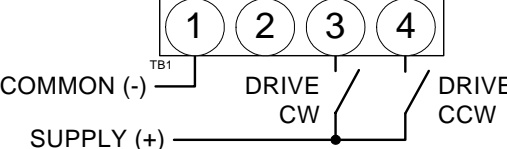
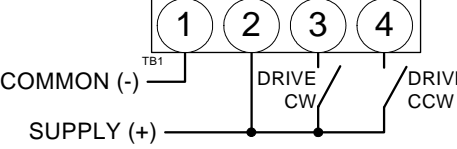
¹ Enerdrive System U.S.A. Patent #5,278,454

Mechanical installation

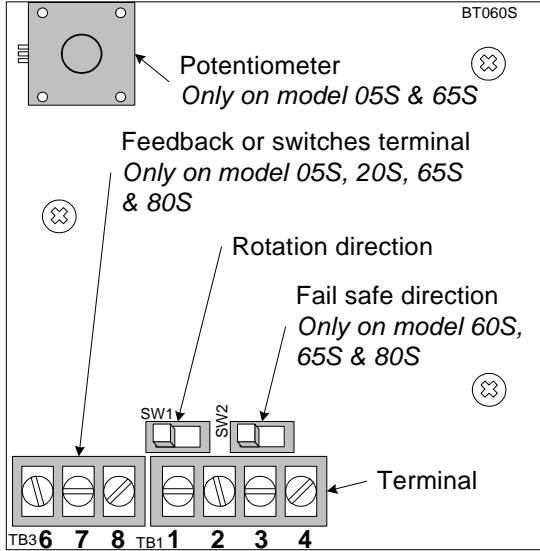


1. Manually close the damper blades and positioned the actuator at 0° or 90°.
2. Slide the actuator onto the shaft.
3. Tighten the nuts on the “U” bolt to the shaft with a 8mm wrench to a torque of 60 in.lb. [6,7 Nm].
4. Slide the mounting bracket under the actuator. Ensure free movement of the slot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

Models BT000S, 005S, 020S, 800S, 805S & 820S	Models BT060S, 065S, 080S, 860S, 865S & 880S
3 wire / 2 position (ON-OFF) 	2 wire / 2 position (ON-OFF) 
3 wire / 3 point floating 	4 wire / 3 point floating 

PC Board



BT060S

Potentiometer
Only on model 05S & 65S

Feedback or switches terminal
Only on model 05S, 20S, 65S & 80S

Rotation direction

Fail safe direction
Only on model 60S, 65S & 80S

SW1 SW2


Terminal

TB3 6 7 8 TB1 1 2 3 4


Dip switch settings

Rotation direction (SW1)

CW
(0 to 90°)




CCW
(90 to 0°)




Fail safe direction (SW2)

Fail safe
return at 0°



Fail safe
return at 90°



Stroke adjustment

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