

**Feature:**

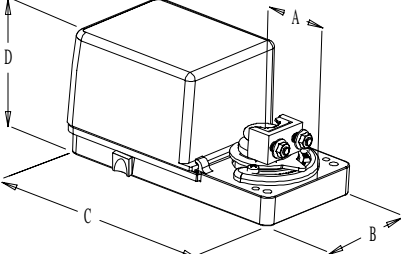
- Mounts easy on round & square shaft (with option –8).
- External clutch for manual adjustments.
- Maintenance free.
- Position indicator.
- Fail safe by *Enerdrive System*¹ (on model 1060 & 1080).
- Auxiliary switches (on model 1021 & 1080).

BBTF1000A
BBTF1021A
BBTF1060A
BBTF1080A

Technical Data	BBTF1000A	BBTF1021A	BBTF1060A	BBTF1080A
Auxiliary switches	No	Yes (2)	No	Yes (2)
Fail safe - Enerdrive	No		Yes	
Power consumption	15 VA		24VA Peak, 15VA	
Control signal	3 wire / 2 position, 3 wire / 3 point floating		2 wire / 2 position, 4 wire / 3 point floating	
Running time through 90°	6 to 8 sec Torque depending			
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	model 1000 & 1060	3.01 / 76.4
	model 1021 & 1080	3.72 / 94.5

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

	<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 BBTF1000A & 1021A</p> <p>3 wire / 2 position (ON-OFF)</p>	<p>Models BBTF1060A & 1080A</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>Dip switch settings</p>
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Stroke adjustment

To adjust the stroke, press and release the reset button to start the auto-stroke process. The LED should be illuminated.

- First option:
The actuator will then travel in both directions to find it's limit.
The LED will extinguish, the process is complete.
- Second option:
When the desired end position is reached, press and release the reset button. The actuator will now return back to its origin position. (you can also press and release the reset button when it's reaches the origin position)
The LED will extinguish, the process is complete.