



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 & **80).
- Auxiliary switches (on model **21 & **80).

	New Number
BBMS2000	BM000S
BBMS2021	BM020S
BBMS2060	BM060S
BBMS2080	BM080S
BBMS2800	BM800S
BBMS2821	BM820S
BBMS2860	BM860S
BBMS2880	BM880S

Technical Data	BBMS2000 BM000S	BBMS2021 BM020S	BBMS2060 BM060S	BBMS2080 BM080S	BBMS2800 BM800S	BBMS2821 BM820S	BBMS2860 BM860S	BBMS2880 BM880S
Auxiliary switches	No	Yes (2)	No	Yes (2)	No	Yes (2)	No	Yes (2)
Fail safe - <i>Enerdrive</i>	No		Yes		No		Yes	
Power consumption	6 VA		20 VA Peak, 6 VA		6 Watts		20 Watts Peak, 6 Watts	
Power supply	22 to 26 VAC or 28 to 32 VDC				40 to 56 VDC			
Approvals								
Torque	50 in.lb. [5,6 Nm] at rated voltage							
Running time through 90°	90 - 110 sec (Fail-safe 20-30 sec)							
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]							
Control signal	2 to 10 VDC or 4 to 20 mA (factory set 2 to 10 VDC)							
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 **00 & **60	76.4
	model **21 & **80	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
BBMS/050309

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

Analogue

4 to 20 mA

PC Board

Dip switch settings

Rotation direction (SW1)

CW (0 to 90°)		CCW (90 to 0°)	
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Fail safe direction (SW2)
*(only on model **60 & **80)*

Fail safe return at 0°		Fail safe return at 90°	
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Stroke adjustment

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