

Actuators Specification & Installation Instructions



#### Features: тмооош IP 65 (Nema 4 protection with Rain Hood $\triangleright$ TM020W enclosure). Dust and water proof clutch for manual $\geq$ *TM060W* adjustments. TM080W Supplied with cable (pigtail). $\triangleright$ ≻ Control signal 2-10Vdc. RM000W $\triangleright$ Fail safe by Enerdrive System<sup>1</sup>. RM020W Maintenance free. RM060W RM080W

Technical Data	тмооож	TM020W	TM060W	тмо80w	RM000W	RM020W	RM060W	RM080W
Auxiliary switches	No	Yes (2) non adjustable	No	Yes (2) non adjustable	No	Yes (2) non adjustable	No	Yes (2) non adjustable
Fail safe - Enerdrive	No		Yes		No		Yes	
Power consumption	8VA		30VA peak, 8VA		10VA		30VA peak, 10VA	
Torque	1	80 in.lb. [20 Nm	] at rated voltage		360 in.lb. [40 Nm] at rated voltage			
Weight		4.5 lbs	. [2 kg]		7 lbs. [3.2 kg]			
Power supply	28 to 32 VDC or 22 to 26 VAC							
Running time through 90°	60 to 85 sec torque dependant							
Control signal	Analog (2-10 VDC)							
Feedback signal	4-20mA							
Angle of rotation	0 to 93 degrees max., after power up automatically self adjustable to ≤ 93 <sup>o</sup>							
Electrical connection	1 meter long 6 wires plenum cable, 18 AWG [0.8 mm <sup>2</sup> ] option 020, & 080 supplied with a second 1 meter long 3 wires plenum cable, <u>1</u> 8 AWG [0.8 mm <sup>2</sup> ].							
Direction of rotation	Reversible, clockwise (CW) or counter clockwise (CCW)							
Operating 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.							
Ingress protection	IP 65 (For outside applications, use RH7 or RH11 Rain Hood enclosure)							
Warning: Do not press the clutch when actuator is powered								

#### **Dimensions**



#### 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



# **Wiring Diagrams**



## **Direction Selection**

Rotation CW (0-90°)		Rotation CCW (90-0°)			
	Leave cable #4 (Direction selection) open	Connect cable #4 (Direction selection) to cable #1 (Common VAC)			

# **Fail Safe Direction Selection**

Fail safe (Enerdrive) is available only with "060" and "080" models.

Fail safe return to 0º	Fail safe return to 90º		
Leave cable #5 (Direction selection) open	Connect cable #5 (Direction selection) to cable #1 (Common 0 VAC)		

### Auxiliary Switches (models 020 and 080)

Auxiliary switches are available only with "020" and "080" models. Auxiliary switch rating: 5 Amp resistive, 250 Vac



## **Auto Stroke**

The auto stroke (actuator automatically runs from 0 to end position) is activated every time the actuator is powered up.