

# **Actuators**

# Specification & Installation Instructions



Fe	Features:				
>	IP 65 equivalent to Nema Type 4				
	enclosure.				

Dust and water proof clutch for manual adjustments.

> Supplied with cable (pigtail).

> Control signal 2-10Vdc.

Fail safe by Enerdrive System<sup>1</sup>.

Maintenance free.

TM000W

TM020W

TM060W

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TM080W

RM000W

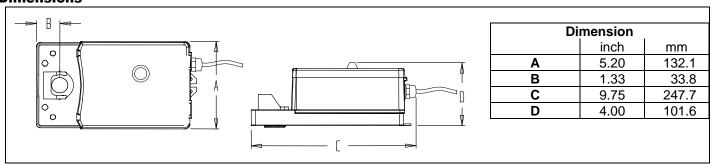
RM020W

RM060W

RM080W

Technical Data	тмооом	TM020W	TM060W	TM080W	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	8\	8VA 30VA peak, 8VA		10VA		30VA peak, 10VA		
Torque	1	80 in.lb. [20 Nm	n] at rated voltage		360 in.lb. [40 Nm] at rated voltage			је
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., <b>after power up automatically self adjustable to ≤ 93º</b>							
Electrical connection	1 meter long 6 wires plenum cable, 18 AWG [0.8 mm²] option 020, & 080 supplied with a second 1 meter long 3 wires plenum cable, 18 AWG [0.8 mm²].							
Direction of rotation	Reversible, clockwise (CW) or counter clockwise (CCW)							
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.							
Ingress protection	IP65 equivalent to Nema type 4 with special protection against corrosive agents							
	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.

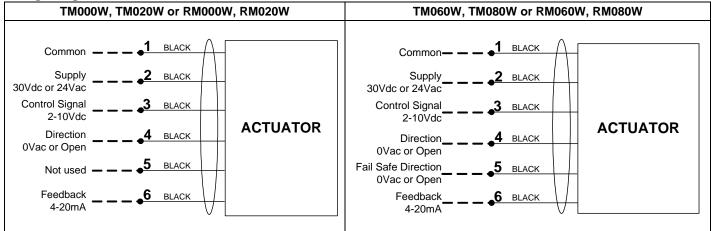
When multiple actuators are wired on a single transformer, polarity must be observed. Long wiring runs create voltage drop which may affect the actuator performance.



TM-W RM-W-210811-ESA

<sup>&</sup>lt;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)

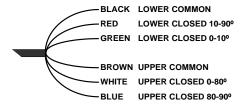
#### **Fail Safe Direction Selection**

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

Fail safe return to 0º	Fail safe return to 90°
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.