



# Actuator for smoke damper Specification & Installation instruction



### Feature:

- Designed to operate reliably in smoke control systems requiring Underwriter's Laboratories UL555S (rated at 250°F).
- Mounts easy on round shaft.
- Maintenance free.
- Position indicator.
- Fail safe by *Enerdrive System*<sup>1</sup>

**LT060X11**  
**LT080X11**  
**LT160X11**  
**LT180X11**  
**LT260X11**  
**LT280X11**

Technical Data	LT060X11	LT080X11	LT160X11	LT180X11	LT260X11	LT280X11
Auxiliary switches	No	Yes	No	Yes	No	Yes
Power supply	22 to 26VAC 50/60Hz or 22 to 26VDC		110 to 130 VAC 50/60Hz		220 to 240 VAC 50/ 60Hz	
Weight	4.5 lbs. [2 kg]		4.8 lbs. [2.2 kg]			
Fail safe - <i>Enerdrive</i>	Yes					
Power consumption	Running 24VA, Holding 5VA					
Control signal	2 wire / 2 position					
Running time through 90°	20 to 30 sec Torque dependant Fail safe: 15 sec. max at rated torque.					
Torque	90 in.lb. [11 Nm] at rated voltage					
Electrical connection	18 AWG [0.8 mm <sup>2</sup> ] minimum					
Inlet bushing	2 inlet bushing of 7/8 in [22.2 mm]					
Angle of rotation	0 to 90 degrees, mechanically adjustable with SLD (optional), (factory set with 90° stroke)					
Direction of rotation	Reversible, Clockwise (CW) or Counterclockwise (CCW) (factory set with CW direction)					
Ambient temperature Operation	0°F to +122°F [-18° C to +50° C] 3 cycles at +250°F [+121° C]					
Storage temperature	-22°F to +122°F [-30° C to +50° C]					
Relative Humidity	5 to 95 % non condensing.					
Enclosure type	NEMA type 2 / IP42					

**Warning: Do not press the clutch when actuator is powered**

**Warning for LT160/180/260/280X11: High Voltage. Risk of electric chock.**

### Dimensions

Dimension	Inches	Metric (mm)
A	5.20	132.1
B	1.33	33.8
C	9.13	231.9
D	3.52	89.4

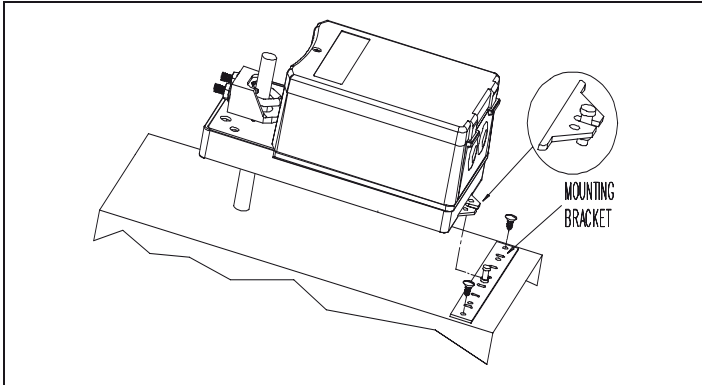
### Caution

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.

<sup>1</sup> *Enerdrive System* U.S.A. Patent #5,278,454



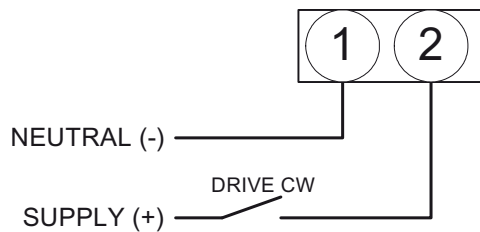
**Mechanical installation**



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 10mm wrench to a torque of 150 in.lb. [17 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

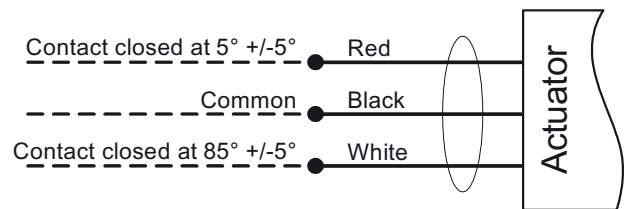
**Wiring Diagrams**

**Power supply - 2 wire / 2 position (ON-OFF)**

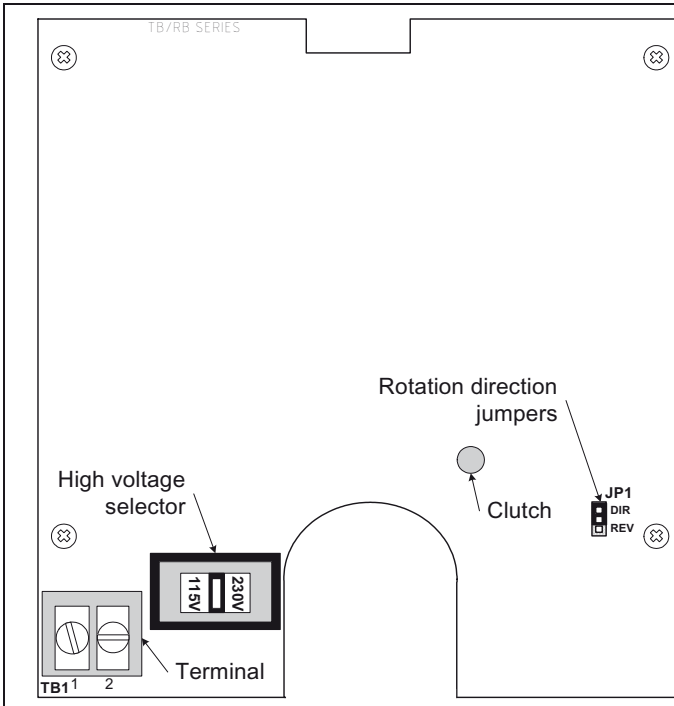


**Warning for LT160/180/260/280X11:**  
 High Voltage. Risk of electric chock.

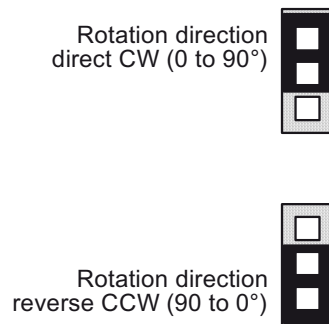
**Auxiliary switches (3 wires)**



**PC Board**



**Rotation direction Jumper**



**Stroke adjustment**

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