



## Specification & Installation instruction



### Feature:

- Power supply high voltage 120 or 240 VAC (on model LT3...).
- Clutch for manual adjustments.
- Maintenance free.
- Position indicator.
- Fail safe by *Enerdrive System*<sup>1</sup> (on model 060, 065, 080, 360, 365 & 380).
- Auxiliary switches (on model 020, 080, 320 & 380).

### Old Number

<b>LDT3000A</b>	<b>LT000</b>
<b>LDT3005A</b>	<b>LT005</b>
<b>LDT3021A</b>	<b>LT020</b>
<b>LDT3060A</b>	<b>LT060</b>
<b>LDT3065A</b>	<b>LT065</b>
<b>LDT3080A</b>	<b>LT080</b>
<b>LDTHV3300A</b>	<b>LT300</b>
<b>LDTHV3305A</b>	<b>LT305</b>
<b>LDTHV3321A</b>	<b>LT320</b>
<b>LDTHV3360A</b>	<b>LT360</b>
<b>LDTHV3365A</b>	<b>LT365</b>
<b>LDTHV3380A</b>	<b>LT380</b>

Technical Data	LT000 LDT 3000A	LT005 LDT 3005A	LT020 LDT 3021A	LT060 LDT 3060A	LT065 LDT 3065A	LT080 LDT 3080A	LT300 LDTHV 3300A	LT305 LDTHV 3305A	LT320 LDTHV 3321A	LT360 LDTHV 3360A	LT365 LDTHV 3365A	LT380 LDTHV 3380A
Auxiliary switches	No	No	Yes(2)	No	No	Yes (2)	No	No	Yes(2)	No	No	Yes (2)
Feedback	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	No
Fail safe - <i>Enerdrive</i>	No			Yes			No			Yes		
Power consumption	5 VA			30 VA Peak, 5 VA			8 VA			35 VA Peak, 8 VA		
Control signal	3 wire / 2 position, 3 wire / 3 point floating			2 wire / 2 position, 4 wire / 3 point floating			3 wire / 2 position, 4 wire / 3 point floating			2 wire / 2 position, 4 wire / 3 point floating		
Weight	4.5 lbs. [2 kg]						4.8 lbs. [2.2 kg]					
Power supply	28 to 32 VDC or 22 to 26 VAC						110 to 130 VAC or 220 to 250 VAC 50/60Hz					
Approvals												
Torque	140 in.lb. [16 Nm] at rated voltage											
Running time through 90°	60 to 85 sec Torque dependant											
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	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.											
<b>Warning: Do not press the clutch when actuator is powered</b>												

### Dimensions

Dimension	Inches	Metric (mm)
<b>A</b>	5.20	132.1
<b>B</b>	1.33	33.8
<b>C</b>	9.13	231.9
<b>D</b>	3.39	86.1

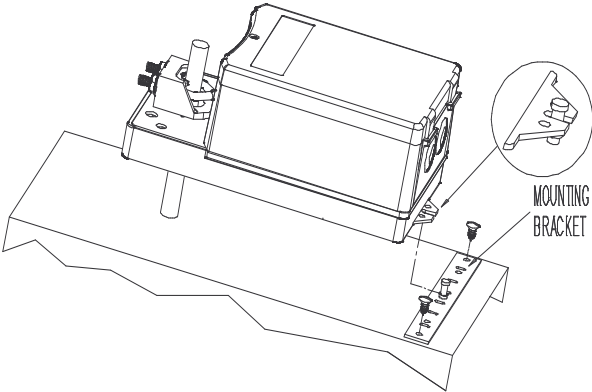
### Caution

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.

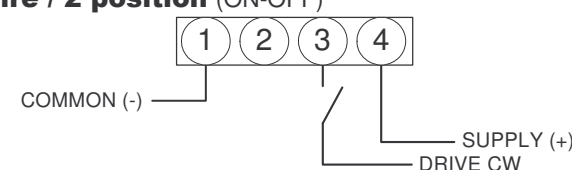
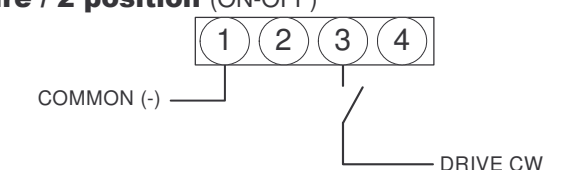
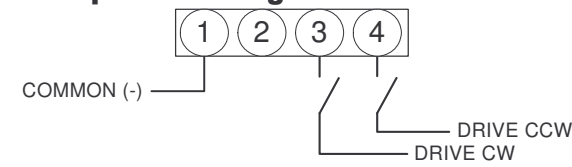
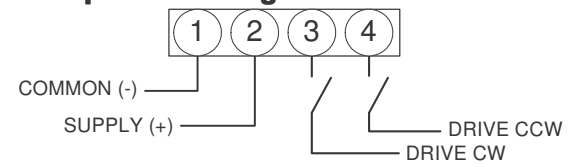
<sup>1</sup> *Enerdrive System* U.S.A. Patent #5,278,454



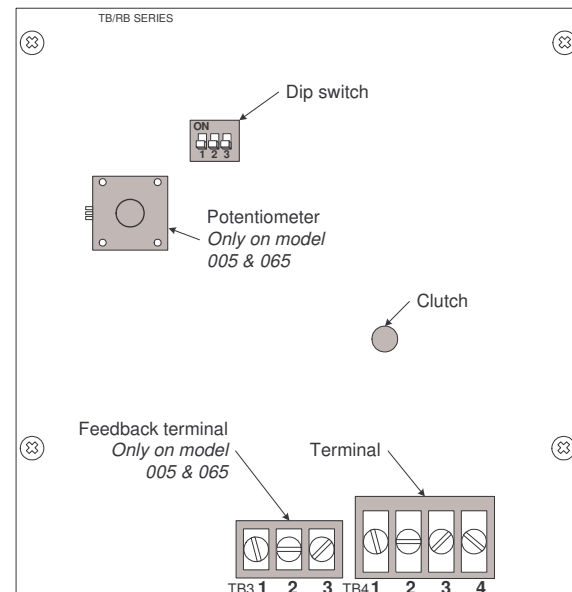
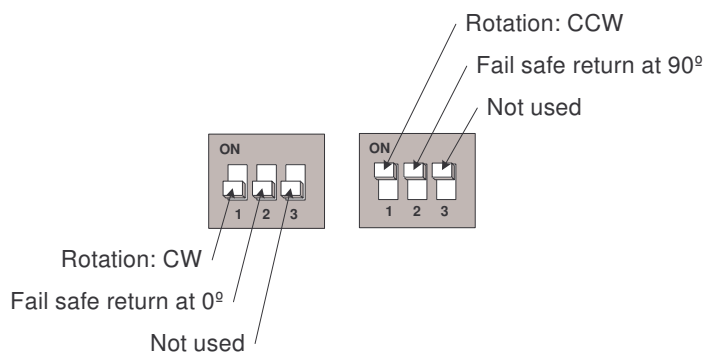
**Mechanical installation**

	<ol style="list-style-type: none"> <li>1. Manually close the damper blades and positioned the actuator at 0° or 90°.</li> <li>2. Slide the actuator onto the shaft.</li> <li>3. Tighten the nuts on the "U" bolt to the shaft with a 10mm wrench to a torque of 150 in.lb. [17 Nm].</li> <li>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.</li> <li>5. Fix the bracket to the ductwork with #8 self-tapping screws.</li> </ol>
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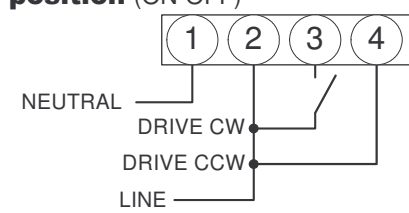
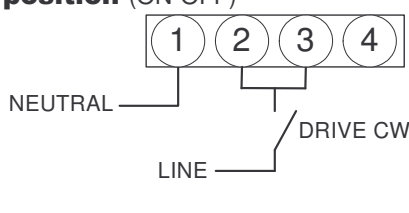
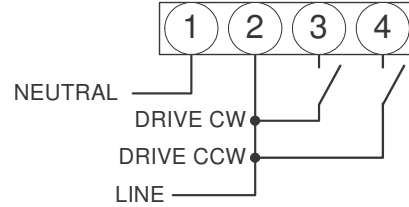
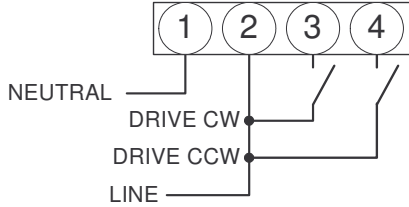
**Wiring Diagrams LT0...**

<p><b>Models LT000, 005 &amp; 020</b></p> <p><b>3 wire / 2 position (ON-OFF)</b></p> 	<p><b>Models LT060, 065 &amp; 080</b></p> <p><b>2 wire / 2 position (ON-OFF)</b></p> 
<p><b>3 wire / 3 point floating</b></p> 	<p><b>4 wire / 3 point floating</b></p> 

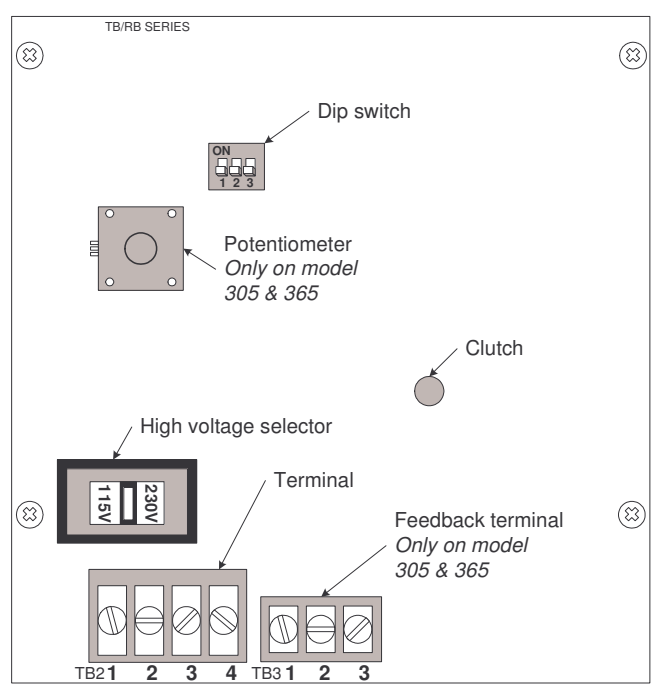
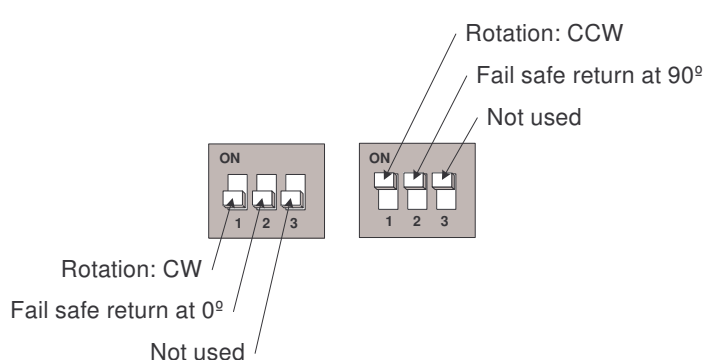
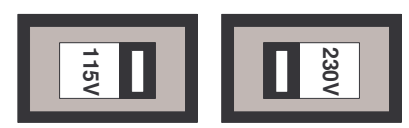
**PC Board LT0...**

<p><b>PC Board LT0...</b></p> 	<p><b>Dip switch settings</b></p> 
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**Wiring Diagrams LT3...**

Models LT300, 305 & 320	Models LT360, 365 & 380
<p><b>3 wire / 2 position (ON-OFF)</b></p> 	<p><b>2 wire / 2 position (ON-OFF)</b></p> 
<p><b>4 wire / 3 point floating</b></p> 	<p><b>4 wire / 3 point floating</b></p> 

**PC Board LT3...**

	<p><b>Dip switch settings</b></p>  <p><b>High voltage selector</b></p>  <p>Slide the high voltage selector as per voltage used.</p>
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**Stroke adjustment**

To adjust the stroke, use the stroke limiting device (SLD). (not included)

