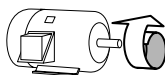
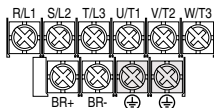


## Power Wiring

Power Wire Rating	Recommended Copper Wire
Unshielded 600V, 75°C (167°F) THHN/THWN	15 Mils insulated, dry location
Shielded 600V, 75°C or 90°C (167°F or 194°F) RHH/RHW-2	Belden 29501-29507 or equivalent
Shielded Tray rated 600V, 75°C or 90°C (167°F or 194°F) RHH/RHW-2	Shawflex 2ACD/3ACD or equivalent

### Power Terminal Block (A Frame Shown)

Terminal	Description
R/L1, S/L2	1-Phase Input
R/L1, S/L2, T/L3	3-Phase Input
U/T1	To Motor U/T1
V/T2	To Motor V/T2
W/T3	To Motor W/T3
BR+, BR-	Dynamic Brake Resistor Connection
⊕	Safety Ground - PE



Switch any two motor leads to change forward direction.

### Power Terminal Block Specifications

Frame	Maximum Wire Size <sup>(1)</sup>	Minimum Wire Size <sup>(1)</sup>	Torque
A	3.3 mm <sup>2</sup> (12 AWG)	0.8 mm <sup>2</sup> (18 AWG)	1.7-2.2 N-m (16-19 lb.-in.)
B	5.3 mm <sup>2</sup> (10 AWG)	1.3 mm <sup>2</sup> (16 AWG)	

<sup>(1)</sup> Maximum/minimum sizes that the terminal block will accept - these are not recommendations.

### Input Power Conditions

Input Power Condition	Corrective Action
Low Line Impedance (less than 1% line reactance)	<ul style="list-style-type: none"> <li>Install Line Reactor<sup>(2)</sup></li> <li>or Isolation Transformer<sup>(2)</sup></li> </ul>
Greater than 120 kVA supply transformer	
Line has power factor correction capacitors	
Line has frequent power interruptions	
Line has intermittent noise spikes in excess of 6000V (lightning)	
Phase to ground voltage exceeds 125% of normal line to line voltage	<ul style="list-style-type: none"> <li>Install Isolation Transformer<sup>(2)</sup> with grounded secondary</li> <li>or Remove MOV jumper to ground.</li> </ul>
Ungrounded Distribution System	

<sup>(2)</sup> Refer to Appendix B of the PowerFlex 4 *User Manual* on CD for accessory ordering information.

## I/O Wiring Recommendations<sup>(3)</sup>

Wire Type(s)	Description	Minimum Insulation Rating
Belden 8760/9460 (or equiv.)	0.8 mm <sup>2</sup> (18AWG), twisted pair, 100% shield with drain.	300V 60 degrees C (140 degrees F)
Belden 8770 (or equiv.)	0.8 mm <sup>2</sup> (18AWG), 3 conductor, shielded for remote pot only.	

<sup>(3)</sup> If the wires are short and contained within a cabinet which has no sensitive circuits, the use of shielded wire may not be necessary, but is always recommended.

### I/O Terminal Block Specifications

Maximum Wire Size <sup>(4)</sup>	Minimum Wire Size <sup>(4)</sup>	Torque
1.3 mm <sup>2</sup> (16 AWG)	0.13 mm <sup>2</sup> (26 AWG)	0.5-0.8 N-m (4.4-7 lb.-in.)

<sup>(4)</sup> Maximum / minimum that the terminal block will accept - these are not recommendations.

Refer to the PowerFlex 4 *User Manual* on CD for maximum power and control cable length recommendations