The BLU09 Series Brushless DC Motors come in a compact package with high power density. These motors are cost-effective solutions to many velocity control applications. The sensor-less feature can help simplify your design. With its small footprint, it is great for compact applications. We can also customize the windings to perfectly match your voltage, current, and maximum operating speed. Special shaft modifications, cables and connectors are also available upon request.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model #</th>
<th>FRAME Size</th>
<th>Rated Voltage (V)</th>
<th>Max Speed (RPM)</th>
<th>Max Power (W)</th>
<th>Peak Torque (oz-in)</th>
<th>Peak Current (A)</th>
<th>Line to Line Resistance (ohms)</th>
<th>Line to Line Inductance (mH)</th>
<th>Torque Constant (oz-in/A)</th>
<th>Weight (lbs)</th>
<th>Shaft Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLU092S-24V-14400</td>
<td>09</td>
<td>24</td>
<td>18000</td>
<td>22</td>
<td>3.68</td>
<td>2.75</td>
<td>5.30</td>
<td>0.34</td>
<td>1.77</td>
<td>0.17</td>
<td>Single 42.93</td>
</tr>
<tr>
<td>BLU093S-24V-34400</td>
<td>09</td>
<td>24</td>
<td>40000</td>
<td>84</td>
<td>4.94</td>
<td>4.75</td>
<td>0.90</td>
<td>0.05</td>
<td>0.80</td>
<td>0.20</td>
<td>Single 49.8</td>
</tr>
<tr>
<td>BLU093S-32V-34400</td>
<td>09</td>
<td>32</td>
<td>40000</td>
<td>102</td>
<td>5.66</td>
<td>5.00</td>
<td>1.70</td>
<td>0.08</td>
<td>1.07</td>
<td>0.20</td>
<td>Single 49.8</td>
</tr>
</tbody>
</table>

Note: The 7th character “S” denotes a single shaft, use “D” for double shaft. Custom leadwires, cables connectors, and windings are available upon request.
**DIMENSIONS**

4985 E. Landon Drive  Anaheim, CA 92807  
Tel. (714) 992-6990  
Fax. (714) 992-0471  
www.anaheimautomation.com

**SPECIFICATIONS**

**Winding Type:** 3 Phase, Y Connection  
**Insulation Resistance:** 200M Ohm

**Shaft Run Out:** 0.02mm  
**Insulation Class:** Class F

**Radial Play:** 0.01mm  
**End Play:** 0.1mm

**Maximum Radial Force:** 16N  
**Maximum Axial Force:** 4N

**Dielectric Strength:** 500V

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**Phases**

<table>
<thead>
<tr>
<th>RED</th>
<th>BLK</th>
<th>WHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase A</td>
<td>Phase B</td>
<td>Phase C</td>
</tr>
</tbody>
</table>

**Hall**

<table>
<thead>
<tr>
<th>Green</th>
<th>Blue</th>
<th>Brown</th>
<th>Yellow</th>
<th>Orange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hall Power</td>
<td>Hall Gnd</td>
<td>Hall A</td>
<td>Hall B</td>
<td>Hall C</td>
</tr>
</tbody>
</table>

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**Hall Sensor Specifications**

Supply Voltage: 3.8VDC to 30VDC

Current, $I_{sat}$: 10mA max  
Current, $I_{on}$: 10mA max

Rated Sinking Current: 20mA

Saturation Voltage: 0.4VDC max @ 25°C

Output Leakage Current: 10μA

Output Switching Time @ 25°C  
Rise, 10% to 90% 1.5μs  
Fall, 90% to 10% 1.5μs

Output Type: Open Collector