DC Brushless Motor
AM-BL45100A/B Series

ASSUN MOTOR
2015 edition. Specifications are subject to change without notice.

**BRUSHLESS MOTOR**

<table>
<thead>
<tr>
<th>MOTOR MODEL</th>
<th>AM-BL45100A/B</th>
<th>AM-BL45100B</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINAL VOLTAGE</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>NO LOAD SPEED ±12%</td>
<td>11240</td>
<td>5900</td>
</tr>
<tr>
<td>NO LOAD CURRENT Max 150%</td>
<td>600</td>
<td>320</td>
</tr>
<tr>
<td>TERMINAL RESISTANCE</td>
<td>69.0</td>
<td>161.5</td>
</tr>
<tr>
<td>INDUCTANCE</td>
<td>10984</td>
<td>5466</td>
</tr>
<tr>
<td>MECHANICAL TIME CONSTANT</td>
<td>4.3</td>
<td>3.1</td>
</tr>
<tr>
<td>SPEED CONSTANT</td>
<td>3034</td>
<td>2195</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>150000</td>
<td>57143</td>
</tr>
</tbody>
</table>

**BALL BEARING**

<table>
<thead>
<tr>
<th>MOTOR MODEL</th>
<th>AM-BL45100A/B</th>
<th>AM-BL45100B</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM POWER OUTPUT</td>
<td>892.8</td>
<td>339.0</td>
</tr>
<tr>
<td>MAXIMUM EFFICIENCY</td>
<td>88</td>
<td>86</td>
</tr>
<tr>
<td>TORQUE CONSTANT</td>
<td>109.8</td>
<td>109.8</td>
</tr>
<tr>
<td>PRESS-FIT FORCE</td>
<td>170 N</td>
<td>170 N</td>
</tr>
<tr>
<td>MAXIMUM ROLLING BEARING LOADS</td>
<td>8 N</td>
<td>170 N</td>
</tr>
<tr>
<td>AXIAL (DYNAMIX)</td>
<td>4.3</td>
<td>3.1</td>
</tr>
<tr>
<td>MECHANICAL TIME CONSTANT</td>
<td>109.8</td>
<td>109.8</td>
</tr>
<tr>
<td>SPEED CONSTANT</td>
<td>3034</td>
<td>2195</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>846.5</td>
<td>850.2</td>
</tr>
</tbody>
</table>

**ADDITIONAL INFORMATION**

- **MAXIMUM ROLLING BEARING LOADS**
  - AXIAL (DYNAMIX) | 8 N |
  - PRESS-FIT FORCE | 170 N |
  - MAXIMUM ROLLING BEARING LOADS | 8 N |
  - MAXIMUM RADIAL PLAY | ≤0.02mm |
  - MAXIMUM WINDING TEMPERATURE | 85°C |

- **TOTAL LENGTH (GEARBOX AND MOTOR)**

<table>
<thead>
<tr>
<th>TOTAL LENGTH</th>
<th>L1:145</th>
<th>L2:246</th>
<th>L3:EN22-S</th>
<th>L3:EN36-T</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABLE 1: WINDING A</td>
<td>38.6</td>
<td>100.0</td>
<td>10.7</td>
<td>10.0</td>
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<tr>
<td>CABLE 2: WINDING B</td>
<td>49.4</td>
<td>12.0</td>
<td></td>
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<tr>
<td>CABLE 3: WINDING C</td>
<td>60.2</td>
<td>71.0</td>
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</tr>
<tr>
<td>CABLE 4: HALL B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CABLE 5: HALL C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CABLE 6: HALL C</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**REMARKS**

Clients can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.

For more gearbox specs, see Assun Motor website.

Motor Data Tested at 25°C. Motor Operation exceeds continuous limits of operating range will compromise the life of the device.