Plug & Drive® stepper motors

PD4-I5709 and PD4-I5918 series stepper motor with integrated controller

Technical data

- **Operating voltage:** DC 24 V to 70 V
- **Phase current:** Rated current 4.2A; Adjustable to max. 6.3 A/phase
- **Interface:** RS485, (optional CAN)
- **Operating mode:** Position, speed, flag position, clock direction, analog, joystick, analog position
- **Step resolution:** 1/1, 1/2, 1/4, 1/5, 1/8, 1/10, 1/32, adaptive (1/128)
- **Step frequency:** 0 to 50kHz in the clock/direction mode, 0 to 25 kHz in all other modes
- **Inputs:** 6 optocoupler inputs (24 V), or analog input
- **Outputs:** 3 transistor outputs (open collector)
- **Position monitoring:** Automatic error correction up to 0.9°
- **Current reduction:** adjustable 0 - 100%
- **Protection circuit:** Overvoltage, undervoltage and heatsink temperature > 80 °C
- **Temperature range:** 0 to + 40°C
- **Delivery condition:** D-SUB 15 for I/O and power, D-SUB 9 for RS-485

**Note:** An intermediate circuit capacitor of at least 4,700 µF (Z-K4700/50) must be provided on the supply voltage.

Outline drawing (mm)

Available power sizes (others on request)

<table>
<thead>
<tr>
<th>Type</th>
<th>Holding torque (duration) Ncm</th>
<th>Holding torque (max.) Ncm</th>
<th>Weight kg</th>
<th>“A”* mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD4-I5709X3008-P</td>
<td>61</td>
<td>61</td>
<td>0.45</td>
<td>43.5</td>
</tr>
<tr>
<td>PD4-I5709L4008-P</td>
<td>140</td>
<td>190</td>
<td>1.00</td>
<td>77.5</td>
</tr>
<tr>
<td>PD4-I5918X3008-P</td>
<td>54</td>
<td>54</td>
<td>0.49</td>
<td>41.0</td>
</tr>
<tr>
<td>PD4-I5918M4508-P</td>
<td>69</td>
<td>105</td>
<td>0.71</td>
<td>54.0</td>
</tr>
<tr>
<td>PD4-I5918L3008-P</td>
<td>190</td>
<td>190</td>
<td>1.00</td>
<td>76.0</td>
</tr>
<tr>
<td>PD4-I5918L4508-P</td>
<td>125</td>
<td>190</td>
<td>1.00</td>
<td>76.0</td>
</tr>
<tr>
<td>PD4-I5918D4208-P</td>
<td>180</td>
<td>250</td>
<td>1.30</td>
<td>115.0</td>
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</tbody>
</table>

Option
Speed-Torque curves

PD4-I5709X3008-P

PD4-I5709L4008-P

PD4-I5918X3008-P

PD4-I5918M4508-P

PD4-I5918L3008-P

PD4-I5918L4508-P

PD4-I5918D4208-P