SMC11

Compact microstep power driver

Technical data:
- Operating voltage: DC 12 V to 35 V
- Max. Phase current: 1.0 A / full step (1.25 A with heat sink)
  1.4 A / microstep (1.8 A with heat sink)
- Current adjustment: via potentiometer
- Operating mode: Bipolar
- Operating mode: Full step (1/1), half step, quarter step, eighth step (preset)
- Protection function: overcurrent, overvoltage and overtemperature
- Step frequency: 0 to 200 kHz
- Current reduction: switchable to 40%
- Input signals: 0 V active ( L< 0.8 V; 3.5 V < H < 6 V or open)
- Temperature range: 0 to +40°C
- Connection type: JST plug connection
- Weight: 10 g
- Attachment method: 2 holes of Ø19.05 for M2.5 - fitted directly to stepper motor

Attention: The supply voltage must have a charging capacitor with at least 4700 μF (Z-K4700/50) so that the permitted voltage is not exceeded during the braking procedure. The connection to the motor must not be disconnected during operation! An erroneous power supply or motor connection can destroy the controller!

X1 input assignments:
1 = Phase A
2 = Phase A\1
3 = Phase B
4 = Phase B\1

X2 input assignments:
1 = VSS operating voltage
2 = Enable ( L=active, H or open = disable )
3 = Direction
4 = Clock
5 = Operating voltage (0 V GND)
6 = Current reduction

Input circuit

Step switchover

Configuration:
The module is configured for one-eighth step in the factory.

<table>
<thead>
<tr>
<th>Step mode</th>
<th>J1</th>
<th>J2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1 Step</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1/2 Step</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1/4 Step</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1/8 Step</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Ordering designation: SMC 11

Current adjustment
- Max. Phase current: (microstep)
  1.4 A (without heat sink)
  1.8 A (only with heat sink)