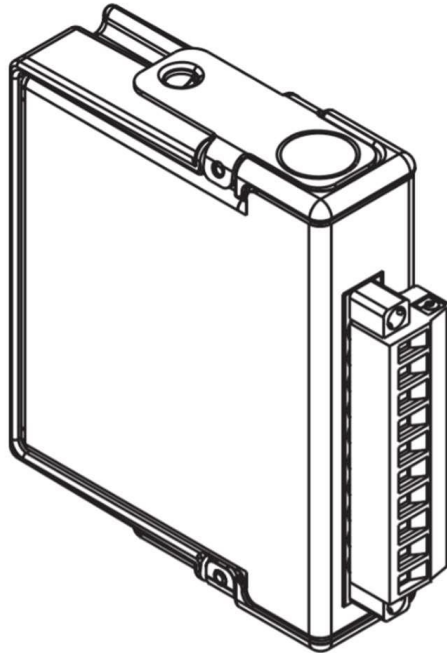


CCM 2282/2283

Stepper motor driver and analyser



Specifications

Compatibility Unipolar and bipolar stepper motors

For use with NI cRIO controller

Drive modes Voltage control

- 0-30V unipolar mode
- 10-30V bipolar mode

Current control (resolution 1mA)

- 0-0,4A unipolar mode
 - 0-3A RMS bipolar mode
-

Step rate 0-1000 pps

Operating modes

- Wave drive (one-phase-on at a time)
- Full step (two-phases-on at a time)
- Half step
- Half step with current boost
- Micro stepping (up to 1/16 step)

**Measurements
(only CCM 2283)**

| | |
|---------------------------------|--|
| Resistance | Range: 0-800Ω Accuracy: ±0,2Ω |
| Coil voltage measurement | +30V / -30V at 1.500 s/sec 4 channel simultaneous sampling resolution 1mV |
| Coil current measurement | +4,3A / -4,3A (3A RMS) at 1.500 s/sec 4 channel simultaneous sampling resolution 1mA |

Wiring

| Pin | Bipolar stepper motor | Unipolar stepper motor |
|-----|--|------------------------|
| 0 | A+ | A |
| 1 | A- | B |
| 2 | Not used | Common supply |
| 3 | B+ | C |
| 4 | B- | D |
| 5 | Not used | Common supply |
| 6 | Not used (optional 12V-24V supply for control circuit) | 12V-24V supply |
| 7 | GND | GND |
| 8 | Motor supply (10-30V) | Motor supply (0-30V) |
| 9 | GND | GND |

Operational safety and compliance

Absolute maximum ratings Input 36V – higher input voltage will cause damage to the module

Operating conditions 0°C ≤ Ta ≤ 40°C
IP 40
Use a shielded cable to connect motor
Follow general electronic safety precautions

Other remarks Measuring and Testing Equipment for laboratory use
Dispose as hazardous waste
Specifications are subject to change