2035 Step Motor Drive

Full & Half Stepping
2.0 amps, 35 VDC

Features
- DC bus voltage 12-35 VDC motor supply (including ripple)
- Switch selectable motor current from 0.125–2.0 amps/phase
- Switch selectable full or half step
- Switch selectable idle current reduction, 0 or 50%
- Optically isolated 5–24 VDC inputs for step, direction and enable
- Enable input to turn off current to the motor
- 70 watts of usable power
- Screw terminal connectors
- Dual H-bridge, inaudible PWM amplifier
- 3 state, pulse width modulated current control, switching at 20–30 KHz
- Drives 4, 6 or 8 lead size 11, 14, 17 or 23 step motors
- CE compliant

Description
The 2035 step motor driver is a full or half drive, step phase sequencer with three state switching amplifiers and optoisolated circuits. The drive also includes an automatic feature to lower motor current by 50% anytime the motor is left at rest for more than one second. This feature can be disabled.

The amplifier regulates motor current by chopping at a constant, inaudible frequency. Phase current is selected from 16 levels by a DIP switch. Full or half resolution is switch selectable.

Recommended motors for the 2035 drive:

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<td>5014-842</td>
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MECHANICAL OUTLINE

BLOCK DIAGRAM
2035 Torque Curves

**HT11-012 MOTOR**
- Motor Connection: 4 Lead Bipolar
- Drive Setting: Full Resolution • 1.0 A/Phase

**HT11-013 MOTOR**
- Motor Connection: 4 Lead Bipolar
- Drive Setting: Full Resolution • 1.0 A/Phase

**5014-842 MOTOR**
- Motor Connection: Parallel
- Drive Setting: Full Resolution • 1.0 A/Phase

**HT17-068 MOTOR**
- Motor Connection: Parallel
- Drive Setting: Full Resolution • 1.375 A/Phase

**HT17-071 MOTOR**
- Motor Connection: Parallel
- Drive Setting: Full Resolution • 1.625 A/Phase

**HT23-394 MOTOR**
- Motor Connection: Parallel
- Drive Setting: Full Resolution • 2.0 A/Phase

**HT23-397 MOTOR**
- Motor Connection: Parallel
- Drive Setting: Full Resolution • 2.0 A/Phase

**HT23-400 MOTOR**
- Motor Connection: Parallel
- Drive Setting: Full Resolution • 2.0 A/Phase