

2035 0 Step Motor Drive with Oscillator

Full & Half Stepping
2.0 amps, 35 VDC

Features

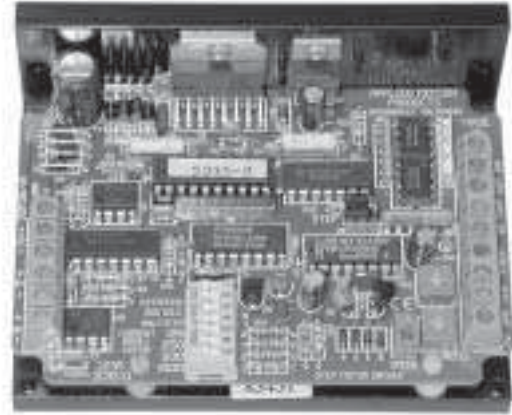
- DC bus voltage 12-35 VDC motor supply (including ripple)
- Switch selectable motor current from 0.125–2.0 amps/phase
- Switch selectable full or half step
- Switch selectable idle current reduction, 0 or 50%
- Optically isolated 5–24 VDC inputs, step, direction and enable
- Enable input to turn off current to the motor
- On-board oscillator generates step pulses and accel/decel ramps
- On-board trimpot or external speed adjustment
- Optically isolated 5–24 VDC Tach output for monitoring speed
- 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

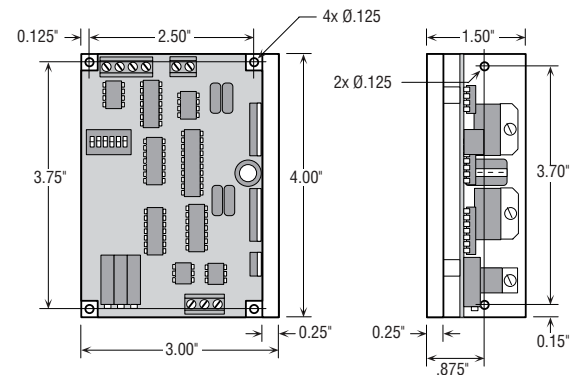
The 20350 step motor driver is a full or half step drive, step phase sequencer with three state switching amplifiers and optoisolated circuits. This drive has a built in ramping pulse generator (oscillator) with adjustable speed, acceleration and deceleration. Oscillator speed range is 0–5,000 Hz. Speed can be set from on-board trimpot or external pot.

A jumper allows you to select the internal oscillator. In oscillator mode, the pulse input becomes a run/stop signal: when this signal is set high, the motor accelerates to a preset speed and slews. Lowering the input signal causes the drive to decelerate to rest.

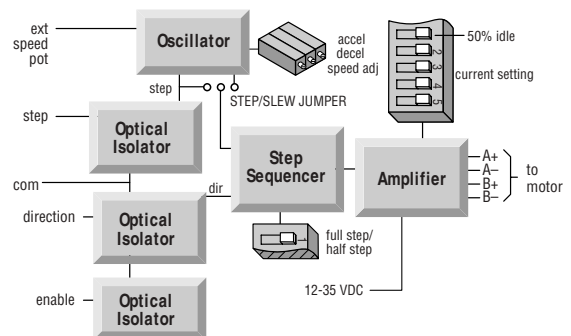
The amplifier regulates motor current by chopping at a constant, inaudible frequency. Phase current is selected from 16 levels by a DIP switch.



MECHANICAL OUTLINE



BLOCK DIAGRAM



Recommended motors for the 2035 0 drive:

Size 11	Size 14	Size 17	Size 23
HT11-012	5014-842	HT17-068	HT23-394
HT11-013		HT17-071	HT23-397
		HT17-075	HT23-400

2035 O Torque Curves

