Integrated Drive/Controller

SPECIFICATION

OMD35

The OMD35 is a microstep motor driver integrated with an advanced motion controller. Capable of microstepping up to 1/256 steps, the OMD35 can support 7 Amp of motor phase current. Its small design is compatible to mount directly on to a NEMA 23 stepper motor, and includes a through-hole in the center so the shaft of a linear actuator motor can pass through when mounted on the motor. Without the heat-sync the OMD35 will support up to 4 Amps. The connectors are screw terminal plugs for easy

and secure wiring.



FEATURES

- Integrated Stepper Motor Drive and Controller
- RS485 communications (ModBus optional)
- Velocity = 0 to 2M steps per second
- Step resolutions include: full, 1/2, 1/4, 1/8, 1/16, 1/64, 1/128, 1/256.
- Single supply voltage +18VDC to +80VDC
- Up to 7.0 Amp phase current for high torque motors
- Center pass-through hole for linear actuator stepper motors
- Up to 4 Amps without a heat-sink
- Motor current and microstepping set through the interface for convenience
- Matches the NEMA 23 dimension for direct motor mounting
- Use existing motors or select the optimum motor for the application for cost control and best performance
- Screw-terminal connector plugs for convenient and reliable wiring
- LED indicator for status
- Automatic current decay mode detection
- Control signal inputs support +5 to +20V

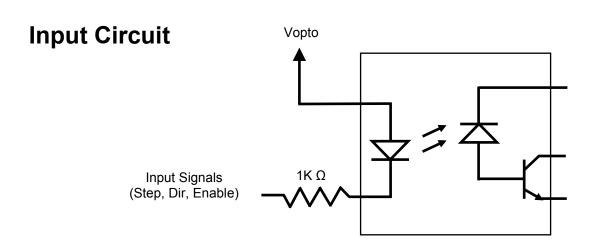


503-629-8081, Fax: 503-629-0688 E-mail: SalesOR@OMSmotion.com

www.OMSmotion.com

Electrical Specifications

Parameter	Min	Тур	Max	Unit	Notes
Supply Voltage	18		80	VDC	
Run Output Current/Phase	0		7.0	Α	DIP-Switch selectable
Hold Output Current/Phase	0		7.0	Α	DIP-Switch selectable
Vopto	5		20	V	
Input Voltage (STEP/DIR/ENABLE)	0	5	Vopto	V	
STEP frequency	0		2	MHz	The maximum frequency is gated by the optocoupler's circuitry.



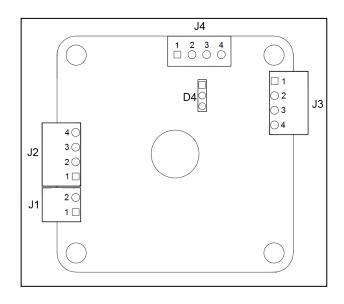
Environmental Specifications

•	Operating Temperature	. 0.0 to +40° C
•	Storage Temperature	- 40° to +125° C
•	Weight	. 96.4g (including mating connectors & heat sink)
•	Humidity	20 to 95% Ф, non-condensing
•	Outline	2.22" x 2.82" x 1.17" (including mating connectors)



Connector Pin-out

OMD35



PIN	J4
1	GND
2	VSupply
3	P1A
10	VOPTO+

PIN	J3
1	GND
2	D-/B
3	D+/A
10	Vcc / Cfg.

PIN	J1
1	18-80 VDC
3	GND

PIN	J2
1	Phase A1
2	Phase A2
3	Phase B1
4	Phase B2

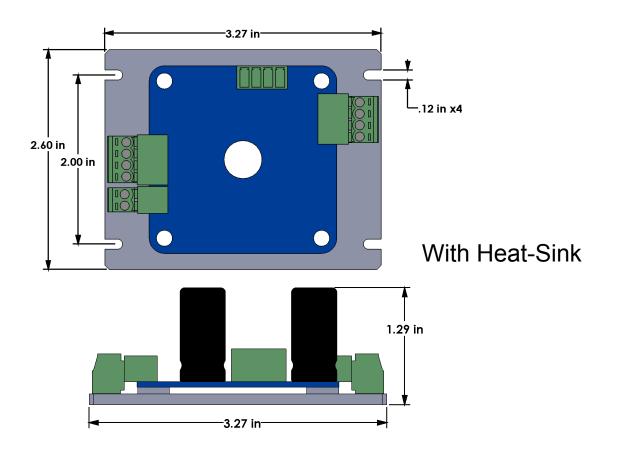
STATUS LED

D4, PATTERN		DESCRIPTION
	Short Flash ON (red)	Drive disabled (J3.4 short to J3.1)
	Red ON solid	Power Low
	Fast Blink (green)	Initialize
	Slow Blink (green)	Motor Disabled (ABL = no motor current)
	Flash OFF (green)	Motor in Hold Current (no motion active)
	Green On solid	Motor in Run Current (motion active)
	Double Flash OFF (red)	Transition to Drive Disable (motion active)

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Dimensions Capacitor A9 in Mating Connector 3.22 in 3.20 in Without Heat-Sink





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ORDERING INFORMATION		
Model	Description	
OMD35	Integrated Stepper Drive & Controller, 7A	

