

Intelligent Type 2-phase Stepper Motor Driver



MD2U-ID20 Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- Unipolar constant current drive method
- STOP current setting provides holding torque (brake function)
- Isolated photocoupler input design minimizes influence from electrical noise
- Power supply Range: 24 - 35 VDC

Product Components

- Product
- Instruction manual

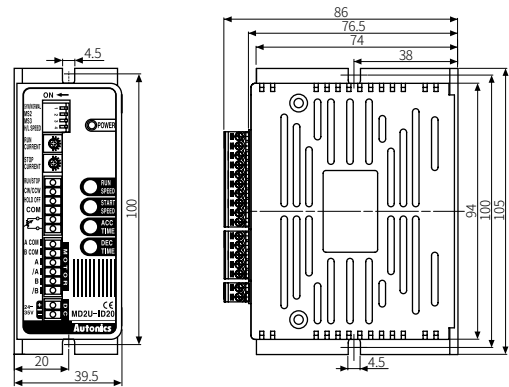
Specifications

Model	MD2U-ID20
Power supply ⁰¹⁾	24 - 35 VDC \pm 10%
Max. current consumption	3 A (based on ambient temp. 25°C, ambient humi. 55%RH)
RUN current ⁰²⁾	0.5 - 2 A / Phase
STOP current	20 to 70% of RUN current (set by STOP current setting rotary switch)
RUN method	Unipolar constant current drive
Standard step angle	1.8° / Step
Max. RUN speed	1500 rpm
Input resistance	3.3 k Ω (CW/CCW, RUN/STOP, HOLD OFF)
Insulation resistance	Between all terminal and case: \geq 200 M Ω (500 VDC \equiv megger)
Dielectric strength	Between all terminal and case: 1,000 VAC \sim 50 / 60 Hz for 1 minute
Noise immunity	\pm 500 VDC \equiv square wave noise (pulse width: 1 μ s) by the noise simulator
Vibration	1.5 mm double amplitude at frequency 10 to 55 Hz (for 1 minute) in each X, Y, Z direction for 2 hours
Shock	300 m/s ² (\approx 30 G) in each X, Y, Z direction for 3 times
Ambient temp.	0 to 50°C, storage: -10 to 60°C (no freezing or condensation)
Ambient humi.	35 to 85% RH, storage: 35 to 85% RH (no freezing or condensation)
Approval	CE EAC
Unit weight (packaged)	\approx 109 g (\approx 303 g)

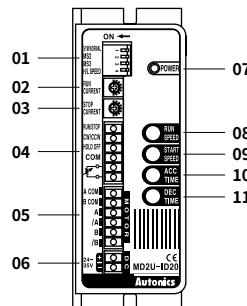
01) If a power supply is over 30 VDC, the torque characteristics in the high speed range will improve, but the driver's temperature will increase as well. Install the unit in well-ventilated area.
02) RUN current varies depending on the RUN frequency, and the max. instantaneous RUN current varies depending on load.

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.



Unit Descriptions



- 01. Function selection DIP switch
- 02. RUN current setting rotary switch
- 03. Stop current setting rotary switch
- 04. Input terminal
- 05. Motor terminal
- 06. Power terminal
- 07. Power indicator
- 08. RUN speed setting rotary switch
- 09. Start speed Setting rotary switch
- 10. Acceleration time setting rotary switch
- 11. Deceleration time setting rotary switch