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Find the *ABB / Baldor / Reliance 6MDEN-6P6102* at our website: *Click HERE*

DATA SHEET

# MD65 DRIVES

Rockwell Automation





## Reliance® MD65 AC DRIVES

Rockwell Automation is proud to introduce the newest sensorless vector control microdrive: The MD65. Following on the success of the MD60, the MD65 continues to establish the reliability and ease-of-use expected in the Reliance brand drives.

### PERFORMANCE FEATURES

- Adjustable Current Limit
  - 10% - 150%
- Operator Interface Module
  - Integral Drive Mounted
- Display Lines
  - 4-Character LED Display
- Programmable Preset Speeds
  - Eight
- Analog Outputs
  - One (0 - 10vdc or 4 - 20mA)
- Auto Restart
  - Yes
- Frequency Avoidance
  - One Band
- Fault Memory
  - Three Deep
- Digital Inputs
  - Four Logic (Configurable)

### DRIVE SPECIFICATIONS

- Analog Inputs: Two Total
  - 0 - 10vdc: One
  - 4 - 20ma: One
- Digital Outputs
  - Two Opto-coupled (Configurable)
- Relay Outputs
  - One Form C (Configurable)
- Meter Outputs
  - 0-10vdc: One Analog Usable for Meter (Configurable)
- Maximum Load:
  - 15 HP @ 600 VAC
- Overload Capacity
  - Drive Output 150% for One Minute, 200% for Three Seconds
- Frequency Accuracy
  - Digital Keypad: +/- 0.5% of Set Output
  - Digital Keypad: +/- 0.5% of Maximum Output Frequency
- Input Voltage Tolerance
  - Typically +/- 10%
- Rated Input Frequency
  - 50/60 Hz (47 - 63 Hz Range)
- Carrier Frequency:
  - 2 - 16kHz (4kHz default)
- Operating Temperature:
  - -10° to 50°C (IP20)
- Snubber (Dynamic Braking):
  - Built-In Transistor
- Dynamic Braking External:
  - Resistor Terminals or DC Bus for Snubber Kit
- DC Braking:
  - Included
- Volt/Hz
  - Custom V/Hz Curve
  - Speed Regulation: +/- 2% of motor base speed
  - 40:1 Operating Speed Range
- Sensorless Vector:
  - With Autotune
  - Speed Regulation: +/- 1% of motor base speed
  - 60:1 Operating Speed Range
- Frequency Control Range:
  - 0 - 400 Hz
- Accel/Decel:
  - Independently Adjustable: Two
- Time Range:
  - 0.1 to 600 Seconds
- S Curve Acceleration
  - Yes
- Din Rail Mount
  - Yes on B Frame
- Integral Speed Pot
  - Yes
- Sink/Source Inputs
  - Selectable, 24vdc Logic
- Electronic Overload Trip
  - Electronic Motor Overload Class 10 Protection
- Communication Option Card
  - DeviceNet™
  - EtherNet/IP
  - Profibus™
- Serial Communications
  - RS-485 Included for Optional PC Interface Program
- PID Control
  - Included
- StepLogic™
  - Timers, Counters & Sequence Logic Program

### PROTECTIVE FEATURES

- Power Loss Ride Through
  - 500 Milliseconds
- Under Voltage
  - Level Depends on Voltage Class (240, 480, or 575)
- Ground Fault
  - Phase-to-Ground on Drive Output
- Output Short Circuit
  - Phase-to-Phase on Drive Output
- Over Temperature
  - Heatsink Monitor
- Output Voltage
  - DC Bus
- Drive Overload
  - Exceed Drive rating of 150% for One Minute
- Over Current
  - Hardware Overcurrent Circuit, Software Overcument Fault

### AGENCY CERTIFICATIONS

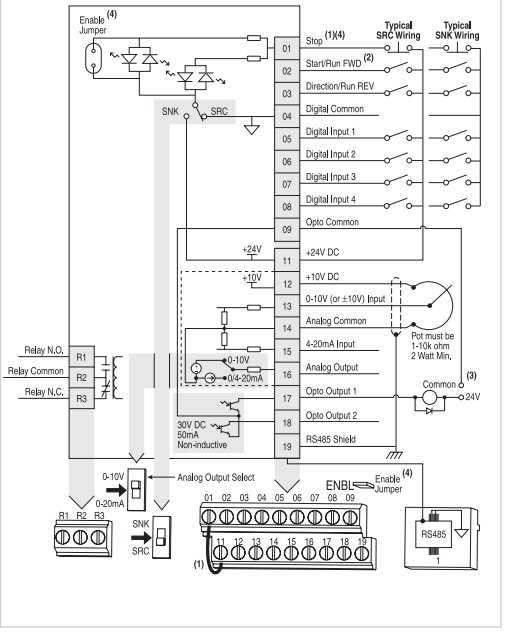
> Listings
  - UL, cUL, CE, C-Tick

- ✔ *Pulp & Paper*
- ✔ *Aggregate*
- ✔ *Unit Handling*
- ✔ *Cement*
- ✔ *Nuclear*
- ✔ *Petro-Chem*
- *Food & Beverage*
- ✔ *Mining*
- ✔ *Entertainment*

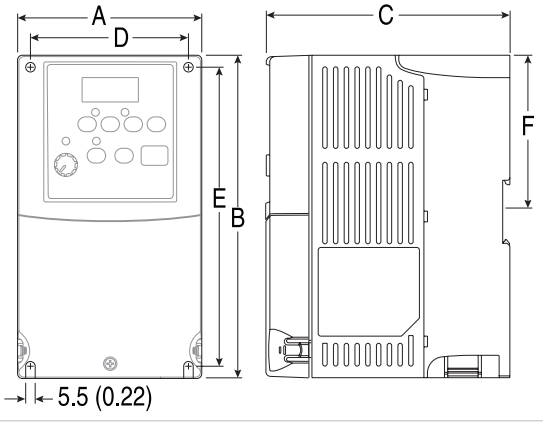
RELIANCE ELECTRIC

## DIMENSIONS AND TYPICAL TERMINAL ASSIGNMENTS

### TYPICAL TERMINAL ASSIGNMENTS




| Frame | A | B | C | D | E | F | Shipping Weight lbs (kg) |
|---|---|---|---|---|---|---|---|
| in (B mm) | 3.94 (100) | 7.09 (180) | 5.35 (136) | 3.43 (87) | 6.61 (168) | 3.44 (87.4) | 4.9 (2.2) |
| in (C mm) | 5.1 (130) | 10.2 (260) | 7.1 (180) | 4.57 (116) | 9.7 (246) | | 9.5 (4.3) |




| Input Voltage | kW | HP | Output Current | Model Number | Frame |
|---|---|---|---|---|---|
| 120V 50/60 Hz 1-Phase | 0.4 | 0.5 | 2.3A | 6MDVN-2P3102 | B |
| | 0.75 | 1 | 5.0A | 6MDVN-5P0102 | B |
| | 1.1 | 1.5 | 6.0A | 6MDVN-6P0102 | B |
| 240V 50/60 Hz 1-Phase | 0.4 | 0.5 | 2.3A | 6MDAN-2P3112 | B |
| | 0.75 | 1 | 5.0A | 6MDAN-5P0112 | B |
| | 1.5 | 2 | 8.0A | 6MDAN-8P0112 | B |
| | 2.2 | 3 | 12.0A | 6MDAN-012112 | C |
| 240V 50/60 Hz 1-Phase | 0.4 | 0.5 | 2.3A | 6MDAN-2P3102 | B |
| | 0.75 | 1 | 5.0A | 6MDAN-5P0102 | B |
| | 1.5 | 2 | 8.0A | 6MDAN-8P0102 | B |
| | 2.2 | 3 | 12.0A | 6MDAN-012102 | C |
| 240V 50/60 Hz 3-Phase | 0.4 | 0.5 | 2.3A | 6MDBN-2P3102 | B |
| | 0.75 | 1 | 5.0A | 6MDBN-5P0102 | B |
| | 1.5 | 2 | 8.0A | 6MDBN-8P0102 | B |
| | 2.2 | 3 | 12.0A | 6MDBN-012102 | B |
| | 3.7 | 5 | 17.5A | 6MDBN-017102 | B |
| | 5.5 | 7.5 | 24 | 6MDBN-024102 | C |
| | 7.5 | 10 | 33 | 6MDBN-033102 | C |
| 480V 50/60 Hz 3-Phase | 0.4 | 0.5 | 1.4A | 6MDDN-1P4102 | B |
| | 0.75 | 1 | 2.3A | 6MDDN-2P3102 | B |
| | 1.5 | 2 | 4.0A | 6MDDN-4P0102 | B |
| | 2.2 | 3 | 6.0A | 6MDDN-6P0102 | B |
| | 4 | 5 | 10.5A | 6MDDN-010102 | B |
| | 5.5 | 7.5 | 12.0A | 6MDDN-012102 | C |
| | 7.5 | 10 | 17 | 6MDDN-017102 | C |
| | 11.1 | 15 | 24 | 6MDDN-024102 | C |
| 600V 50/60 Hz 3-Phase | 0.75 | 1 | 1.7A | 6MDEN-1P7102 | B |
| | 1.5 | 2 | 3.0A | 6MDEN-3P0102 | B |
| | 2.2 | 3 | 4.2A | 6MDEN-4P2102 | B |
| | 4 | 5 | 6.6A | 6MDEN-6P6102 | B |
| | 5.5 | 7.5 | 9.9A | 6MDEN-9P9102 | C |
| | 7.5 | 10 | 12.2A | 6MDEN-012102 | C |
| | 11.1 | 15 | 19.0A | 6MDEN-019102 | C |

For more information on the new MD65 drive, contact your authorized Reliance brand distributor or log onto www.reliance.com



www.rockwellautomation.com www.dodge-pt.com www.reliance.com www.ptplace.com www.ptplace.ca www.ptplace.com.mx


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POWER Plus PERFORMANCE
DODGE RELIANCE ELECTRIC


RAPS-960-3 8/04-0M-K



This material is not intended to provide operational instructions. Appropriate Rockwell Automation instruction manuals and precautions should be studied prior to installation, operation or maintenance of equipment.

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