Notes and Warnings
Installation, configuration and maintenance must be carried out by qualified technicians only. You must have detailed information to be able to carry out this work. This information can be found in the user manuals.

• Motor overload protection and over temperature sensing is required.
• Unexpected dangers may be encountered when working with this product.
• Incorrect use may destroy this product and connected components!

The user manuals are not included. You can obtain them from the Internet at: http://motion.schneider-electric.com.

Required for Setup*

• PC running Microsoft® Windows XP Service Pack 2 or greater.
• Motion Control Programmer integrated program editor and terminal emulator (available online).
• MD-CS100-000 or MD-CS101-000 prototype development cordset (recommended: MD-CS200-000 or equivalent Lumberg Euro AC cable for AC line communication converter). Or CANopen communications converter (required for UL acceptance).
• RS-422/485 communications converter (recommended: MD-CC401-001 USB to CANopen dongle).
• RS-232/422/485 communications interface (required for UL acceptance).

Depending on your MDrive connectors configuration, you may also need:
• I/O and Power interface to 19-pin M23 circular connector (recommended: MD-CS500-000 or MD-CS101-000 prototype development contact).
• If you purchased your MDrive with a QuickStart Kit, you have received all of the connecting cables needed for initial functional setup and system testing.

Getting Started
All documentation, software and resources are available online at: motion.schneider-electric.com.

Connecting Power and I/O
Your MDrive is configured with power and I/O on separate connectors. Please refer to the opposite side of this document for connecting details and available connectivity options including Prototype Development Cables and mating connector recommendations.

Connecting Communications — RS-422/485
1. Connect RS-422/485 communications converter to MDrive and PC.
2. Install the communication converter drivers onto PC (available online).
3. Install and open Motion Control Programmer.
4. Apply power to MDrive.
5. Within Motion Control Programmer, click into the Terminal Window (shown below).
6. Key in CTRL+C. The Mdrive sign-on message: "Copyright 2001-2017 by Schneider Electric Motion USA." should appear, verifying that communications is active.

Connecting Communications — CANopen
A “Getting Started” tutorial using the CANopen Tester GUI with the MD-CC500-000 USB to CANopen dongle is located in the CANopen implementation manual, available online.

Mechanical Specifications

All documentation, software, program examples and resources are available online at: motion.schneider-electric.com.

MDrive 34AC Motion Control Quick Reference R050817
### MDrive 34AC

**Motion Control Connectivity Options**

#### I/O

- **19-pin M23 industrial connector** (male)
  - Outside: Pins 1–12
  - Inside: Pins 13–19

- **3-pin Euro AC connector** (male)
  - 12.8' (4.0m)

#### Communications — RS-422/485

- **5-pin M12 industrial connector** (female)
  - To MDrive: 5-pin M12 (male)
  - To computer: USB port

#### Communications — CANopen version

- **5-pin M12 circular connector** (male)
  - To MDrive: 5-pin M12 (male)
  - To computer: USB port

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**Prototype Development Cordset**

- **p/n (straight connector):** MD-CC401-001
- **p/n (right-angle connector):** MD-CC401-001

Pre-wired mating connector interfaces to an MDrive 19-pin M23 connector, with flying leads other end, for quick test/development.

**Mating Connector Recommendations**

The MD-CS100-000 is recommended with 19-pin M23 connector.

**Communications Converter p/n: MD-DD01-001**

- Electrically isolated in-line USB to RS-422/485 converter pre-wired with mating connector to conveniently program and set configuration parameters.

### MDrive 34AC

**Motion Control Connectivity Options**

#### AC Power

- **3-pin Euro AC connector** (male)
  - 13.0' (4.0m)

#### Prototype Development Cordset

- **p/n (straight connector):** MD-CS200-000
- **p/n (right-angle connector):** MD-CS201-000

Pre-wired mating connector interfaces to an MDrive 3-pin EuroAC connector, with flying leads other end, for quick test/development.

**Mating Connector Recommendations**

The MD-CS200-000 is recommended with 3-pin Euro AC connector.

**Communications — CANopen version**

- **5-pin M12 circular connector** (male)
  - To MDrive: 5-pin M12 (male)

**Mating Connector Recommendations**

The following field-solderable mating connector is recommended for use with the MDriveAC Plus. Use of this connector meets UL Acceptability requirements.

**Communications Converter p/n: MD-DD01-001**

- Electrically isolated in-line USB to CANopen converter. USB "A" Type connector to DB-9 (Male). An Interface cable must be constructed by the user to Interface to the MDrive.

**Mating Cable Requirements**

- **Parts Required**
  - Connectors: (1) DB-9 (female), (1) 5-pin M12 (female)
  - Power Supply: +7 to +30 VDC
  - Terminating Resistor: 120.0 Ω

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**UL Conditions of Acceptability**

For full description of the UL Conditions of Acceptability please visit [http://www.imshome.com/support/ce_ul_rohs_conform.html](http://www.imshome.com/support/ce_ul_rohs_conform.html)