Lexium MDrive Ethernet TCP/IP LMDAE571

NEMA size 23 (57 mm) Quick Reference

Notes and Warnings

This document is intended to provide an overview of critical specifications, wiring and connections. The product manual must be read and understood prior to using this device. > **Product Manual Downloads**

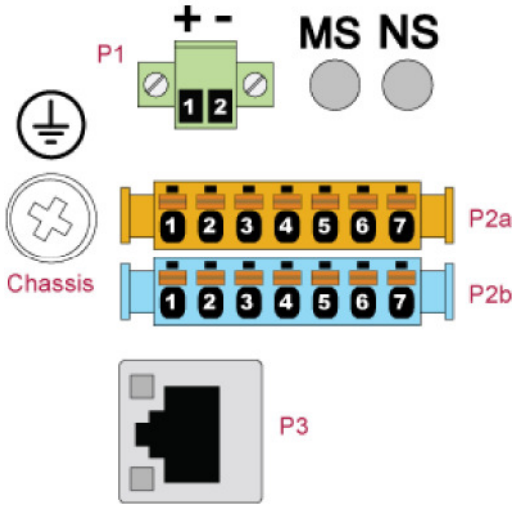
Overview of product

Part number	LMDAE571
NEMA size	23 (57 mm)
Input Voltage	+12 to +60 VDC
Stack length	Single
Holding torque	103.4 oz-in (73 N-cm)
Feedback loop	Absolute closed loop with HMT
Communication	
Default IP	192.168.33.1
Default Subnet	255.255.0.0

Connector overview

Connectors

- P1: DC Power input
- P2: Multifunction Interface
- P3: Ethernet network interface



LEDs

- MS: Module status
- NS: Network status

Lexium MDrive connectors are keyed and color-coded.

- P1: Green
- P2A (top) **– Orange**
- P2B (bottom) **– Blue**

Replacement connector sets may be ordered from SEM. Part number: **CK-15**

Specifications

Input Voltage	[+VDC] nominal	24 /48
	[+VDC] min/max	12/60
Supply current	[A] max per unit	3.5
Aux supply	[+VDC]	12 / 24
Aux current	[mA] max per unit	200
Temperature	[C°] heat sink	85
	[C°] motor	100
IP rating	–	IP20

Connecting the Power Supply

Read the Product Hardware Manual Section 5: Engineering before connecting DC Power.

- Use shielded twisted pairs for cabling with shield earthed at the power supply end.
- Power supply wiring should be shielded twisted pairs. Use 18 AWG wires if load is less than 4 amps, or 16 AWG for more than 4 amps.
- Never use a “daisy-chain” power supply wiring scheme to system components.

Pin 1	Power supply output voltage
Pin 2	Power supply return (Ground)

Connecting communication

Lexium MDrive Ethernet uses an RJ45 connector with standard Ethernet wiring, standard off-the-shelf RJ45 and CAT 5 cabling may be used with no special wiring considerations beyond those defined in IEEE 802.3.

Connecting I/O (Multifunction interface)

See product hardware manual for detailed description of pin functions and interface methods and requirements.

Connector P2A (Orange)

Pin 1	INPUT_REFERENCE
Pin 2	INPUT 1/CAPTURE (+5 to +24 VDC)
Pin 3	INPUT 2 (+5 to +24 VDC)
Pin 4	INPUT 3 (+5 to +24 VDC)
Pin 5	INPUT 4 (+5 to +24 VDC)
Pin 6	External Battery +
Pin 7	External Battery —

Connector P2B (Blue)

Pin 1	AUX_PWR (+12 to +24 VDC, 200 mA max)
Pin 2	OUTPUT 1+ (100 mA max)
Pin 3	OUTPUT 1— (100 mA max)
Pin 4	DO NOT CONNECT
Pin 5	DO NOT CONNECT
Pin 6	SIGNAL_OUTPUT_ COLLECTOR (5.5 mA max)
Pin 7	SIGNAL_OUTPUT_ EMITTER (5.5 mA max)

LED Indicators

Select a protocol to view LED states

Software - Ethernet Configuration Utility

The Ethernet TCP/IP Configuration Utility is a graphical user interface (GUI) used to set the protocol stack and configuration parameters of the Lexium MDrive Ethernet products.

Note that the Ethernet TCP/IP Configuration Utility is required to set the TCP/IP parameters such as the subnet mask, IP address and to load the protocol stack.

This GUI is a component of the Lexium MDrive Software Suite, which contains the software for all SEM Lexium MDrive products and may be downloaded at **https://motion.schneider-electric.com/lmd/lexium-mdrive-software.php**

To install:

1. Download and install the Lexium MDrive Software Suite, open the program.
2. Click the button labeled: Install Lexium MDrive Ethernet Interface.
3. Follow the on-screen prompts. Install button will change to Launch.
4. Launch Ethernet TCP/IP Configuration Utility to begin parameterization.

The Manual for the Software Suite contains detailed usage instructions for this software and may be accessed via this link **https://motion.schneider-electric.com/lmd/downloads/literature/lmd_software_suite.pdf**

Establish Ethernet communication

Prerequisites

A network interface card set on a network IP of 192.168.33.XXX and a subnet mask of 255.255.0.0. To access these settings from your Windows Control Panel open Network and Sharing Center, Select "Change Adapter Settings, right-click the connection representing your Network adapter and select "Properties".

In the Networking Tab of the properties dialog select Internet Protocol Version 4 (TCP/IPv4) and click the "Properties" button. The IP and subnet mask may be viewed/changed there.

To connect and configure:

1. Launch the Ethernet TCP/IP Configuration Utility, it should open to the Config tab.
2. Select the IP of the Adapter (NIC) in the upper left corner of the screen.
3. The IP address in the Connection frame at the upper right of the screen should be 192.168.33.1, with a port number of 503. (This is the MCode/TCP - Configuration port.
4. Click Connect
5. Set the IP and Subnet mask to the requirements of your system.
6. Cycle power to the device.
7. Reconnect with the changed setting and configure the desired protocol stack.
8. if using the device as a programmable controller over MCode/TCP port 503, you may close the TCP/IP Configuration Utility and reconnect using the Motion Control Programmer to send commands/program the device.