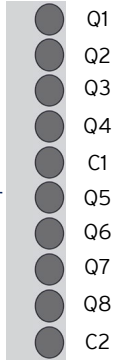




- HE179DQM803-A (standard):  
Fixed network ID and single RJ45 CAN Connector
- HE179DQM803 (premium):  
Rotary switch to select network ID and two RJ45 CAN Connectors



Q1	Output 1
Q2	Output 2
Q3	Output 3
Q4	Output 4
C1	Common 1
Q5	Output 5
Q6	Output 6
Q7	Output 7
Q8	Output 8
C2	Common 2

### Pinout Map

Pin #	Name	Types	Description	Voltage	Current
1	Output 1	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
2	Output 2	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
3	Output 3	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
4	Output 4	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
5	Common 1	Input	Shared Rail	0-30VDC / 0-240VAC	< 5A
6	Output 5	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
7	Output 6	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
8	Output 7	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
9	Output 8	Output	Relay N/O Contact	0-30VDC / 0-240VAC	< 3A
10	Common 2	Input	Shared Rail	0-30VDC / 0-240VAC	< 5A

### CAN Connector Pinout Map

Pin #	Signal	Description	Voltage
1	CANL	Low-level CAN bus line (1Mhz)	5V CAN Bus
2	CANH	High-level CAN bus line (1Mhz)	5V CAN Bus
3	GND	Supply Voltage	0V
4			
5			
6	Shield	Cable Shield	Earth
7	GND	Supply Voltage	0V
8			
9			
10			

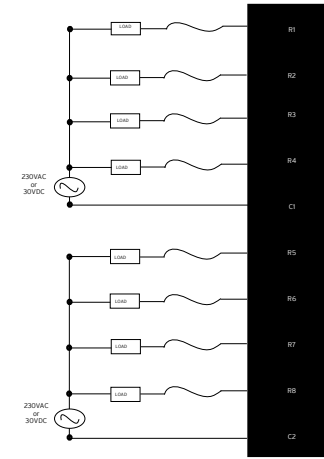
#### HE179DQM803:

- Comes with a termination plug for the second CAN port which should be used ONLY when the unit is the last node on the network.
- Has a (16) sixteen position (hex) switch to select node numbers 0-F, this corresponds to 0-15 and is configurable by the user. The user must use the selected node number in Cscope to configure the module

#### HE179DQM803-A:

- Has the termination resistor onboard and must always be the last node on the network.
- Does not have a node ID switch and is fixed at address (20) twenty (decimal)

### 8 Relay Out, 2 Common In



## Precautions

All applicable codes and standards need to be followed in the installation of this product. Adhere to the following safety precautions whenever any type of connection is made to the module:

1. Connect the safety (earth) ground on the power connector first before making any other connections.
2. When connecting to the electric circuits or pulse-initiating equipment, open their related breakers.
3. Do NOT make connection to live power lines.
4. Make connections to the module first; then connect to the circuit to be monitored.
5. Route power wires in a safe manner in accordance with good practice and local codes.
6. Wear proper personal protective equipment including safety glasses and insulated gloves when making connections to power circuits.
7. Ensure hands, shoes, and floor are dry before making any connection to a power line.
8. Make sure the unit is turned OFF before making connection to terminals.
9. Make sure all circuits are de-energized before making connections.
10. Before each use, inspect all cables for breaks or cracks in the insulation. Replace immediately if defective.
11. Use copper conductors in Field Wiring only, 60/75° C.
12. Do not disconnect while circuit is live unless area is known to be non-hazardous.
13. Do not remove or replace jumpers or connectors while circuit is live unless the area is known to be free of ignitable concentrations of flammable gases or vapors.
14. EXPLOSION HAZARD - substitution of components may impair suitability for Class I, Division 2.
15. Use caution when making connections to the controller to protect against static discharge. Special care must be taken when replacing the battery or inserting or adjusting I/O or communication boards.
16. Use caution when connecting controllers to PCs via serial or USB. PCs and especially laptops may use "floating power supplies" that are ungrounded. This could cause a voltage potential between the laptop and controller. Make sure the controller and laptop are grounded for maximum protection.
17. Failure to follow these guidelines can damage the controller and/or controllers.

## Hazardous Location Notice

Power, input and output (I/O) wiring must be in accordance with Class 1, Division 2 wiring methods [Article 501-4(b) of the National Electrical Code, NFPA 70] for installations in the U.S. or as specified in Section 18-1J2 of the Canadian Electrical Code for installations within Canada and in accordance with the authority having jurisdiction.

1. THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A B C D or NON-HAZARDOUS LOCATIONS ONLY.
2. WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

AVERTISSEMENT - RISQUE D'EXPLOSION LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CLASSE I, DIVISION 2 INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE I, DIVISION 2

3. WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS AND FREE OF IGNITABLE CONCENTRATIONS.  
ATTENTION - RISQUE D'EXPLOSION - NE DECONNECTEZ PAS L'EQUIPEMENT A MOINS DE L'AVOIR MIS HORS TENSION OU QUE LA ZONE EST CONNUE NON-DANGEREUSE ET NE CONTIENT PAS DE CONCENTRATIONS INFLAMMABLES.

## FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation

## Technical Support

For further details, please refer to the datasheets. For assistance and manual updates, contact Technical Support at the following locations:

### North America

+1 (317) 916-4274  
[www.hornerautomation.com](http://www.hornerautomation.com)  
techsppt@heapg.com

### Europe

+353 (21) 4321-266  
[www.hornerautomation.eu](http://www.hornerautomation.eu)  
technical.support@horner-apg.com

## Installation Procedure

The DQM803 uses a Din Rail Mounted installation method. Follow these steps for the correct installation and operation of the unit. The DIN rail should be 35 mm x 7.5 mm and made to EN 60715 standards.

1. Snap the bus connectors into the DIN rail.
2. Insert and latch the module at the top of the DIN rail first and rocking down until the latch at the bottom of the DIN rail engages.
3. Connect communication cables to the CAN port.

To remove a module:

Insert a flat blade screwdriver into the metal DIN rail latch at the bottom of the module. Pry down to release the latch, then rock the module up and off the DIN Rail. Modules may be removed while powered, however I/O scanning on the remaining modules will stop and I/O will go to the default state until a new module is inserted and all modules in the configuration are present.

## Specifications

Outputs	8
Commons	2
Bus Protocol	CsCAN (Control Station Controller Area Network)
Bus Connector	Modular Jack
Network Baudrate	125k Baud Only. The module is limited to a fixed CAN baudrate of 125k baud.
Contact Ratings	
AC Voltage Maximum	240 VAC
AC Current Maximum	5A per Output
DC Voltage Maximum	30 VDC
DC Current Maximum - Relay*	3A per Relay
DC Current Maximum - Common*	5A per Common
Minimum Output	5V@100mA
Life Expectancy	10 <sup>7</sup> cycles 100k @ rated load

\*The total load for the four relays in each group must not exceed the maximum common load.

## Software Configuration

The DQM803 (both models) are configured through CAN and are listed under "other." All of the relays are represented by a %Q.

## LED Status Indication

The output LEDs are in a block at the top of the DQM803 modules, and represent the status of the outputs. Additional LEDs for power and status are located above the output LEDs.



## Micro I/O - HE179DQM803(-A)

HE179DQM803-A (standard)  
HE179DQM803 (premium)



Minimum Cscape Version	10.2
Required Power (Inrush)	30VDC
Primary Power Range	10-30VDC
Relative Humidity	5 to 95% , Non-Condensing
Operating Temperature	-40°C to + 60°C
Storage Temperature	-40°C to + 85°C
Dimensions	130mm x 75.5mm x 21.75mm
Weight	5.47 oz (155g)
Altitude	3000 Meters
Related Pollution Degree	Evaluated for Pollution Degree 2 Rating
Certifications (UL/CE)	North America: <a href="https://hornerautomation.com/certifications/">https://hornerautomation.com/certifications/</a> Europe: <a href="http://www.horner-apg.com/en/support/certification.aspx">http://www.horner-apg.com/en/support/certification.aspx</a>

