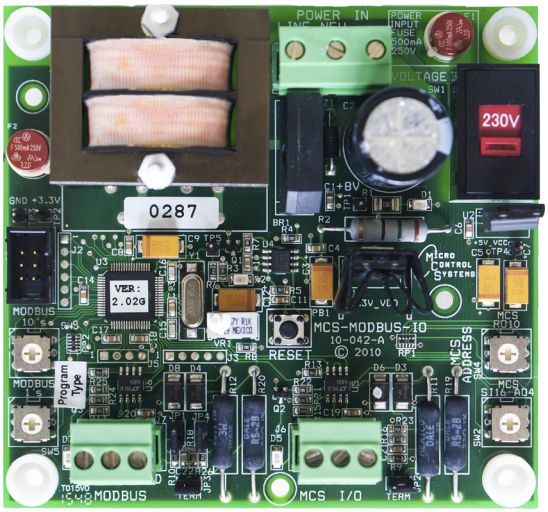
MCS-MODBUS-I/O
Description & Specifications

RoHS Compliant

c UL us
File No: E169780



Part # **MCS-MODBUS-I/O**

Description

The **MCS-MODBUS-I/O** gives the MCS-MAGNUM the ability to act as a Modbus Master using the Modbus RTU Protocol. This allows the **MCS-MAGNUM** to communicate to Modbus slave devices (such as Variable Frequency Drives, Compressors, etc.) to send and access parameters.

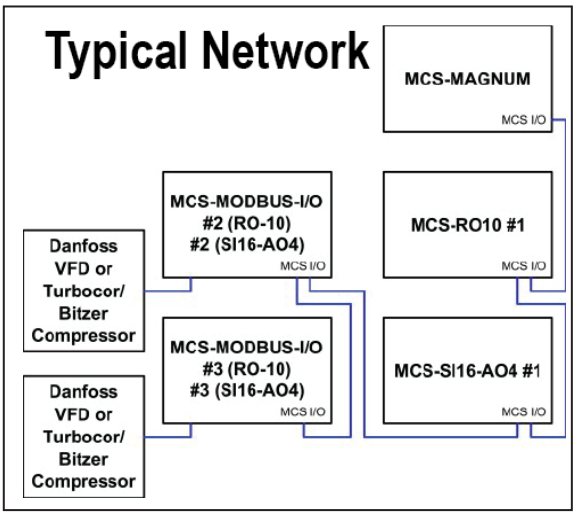
The MCS-MODBUS-I/O performs like a **MCS-RO10** and **MCS-SI16-AO4** to the MCS-MAGNUM. This allows the MCS-MAGNUM to control 10 relays, 4 analog outputs and read 16 sensors.

Specifications

Dimensions	4.25”w, 4.00”h, 2.50”d
Mounting Holes	4 holes using #6 screws through nylon collars at corners of board
Cover	Lexan with standoffs
Operating Temperature	-40°F to +158°F (-40°C to +70°C)
Operating Humidity	0-95% Non-Condensing
Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Printed Circuit Board	Four layer with separate power and ground planes
Input Power (Standard)	115 or 230vac ±10% 50/60Hz at 77°F (25°C) ambient, 20VA max (Voltage is field selectable)
Power Detection	Automatic power fail reset
MCS-I/O Comm Port	1 at 38,400 baud
Modbus Comm Port	RS485 with optional baud rates of 9600, 19200, and 38400
Other Settings	1 stop bit, 8 data bits, No Parity

Options

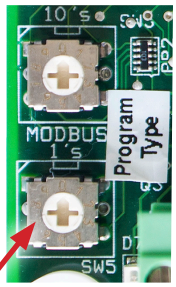
-24	24vac input power ±10% 50/60Hz @ 77°F (25°C) ambient



Multiple MCS-MODBUS-I/O boards may be connected to the MCS-MAGNUM following MCS-I/O standards.

The MCS-MODBUS-I/O has pre-defined configurations that are field selectable via the PROGRAM TYPE dials, up to 99 different slave devices, ***one Modbus per slave.***

Please see the MCS-MODBUS manual for a current list of inputs and outputs for the pre-defined configurations. The MCS-MODBUS can be shipped from the factory with the switches set for your configuration.



By setting the program select to ‘9’, the MCS-MODBUS-IO board can also be configured by the user with free configuration software, MCS-CONNECT.

Program Type Switch 9 is reserved for ‘USER’ setup

PROGRAM SELECT	CONFIGURATION NAME
0	YASKAWA VFD A1000-HARDWIRED / MODBUS
1	TURBOCOR CMP
2	Reserved for future
3	DANFOSS VLT DRIVE
4	BITZER Compressor
5	DANFOSS CDS 303 DRIVE
6	EMERSON_CSD-100
7	MCS-POWERMETER 3037
8	RUKING_VFD
* 9	USER
10	ABB AC880
11	EMERSON EVC-1150B
12	SKF/MBC
13	KEB VFD
14	SKF/MBC - TANDEM
15	KEB VFD - TANDEM

Revision 2019-02-27

5580 Enterprise Pkwy., Fort Myers, FL 33905
Office: 239-694-0089 • Fax: 239-694-0031 www.mcscontrols.com