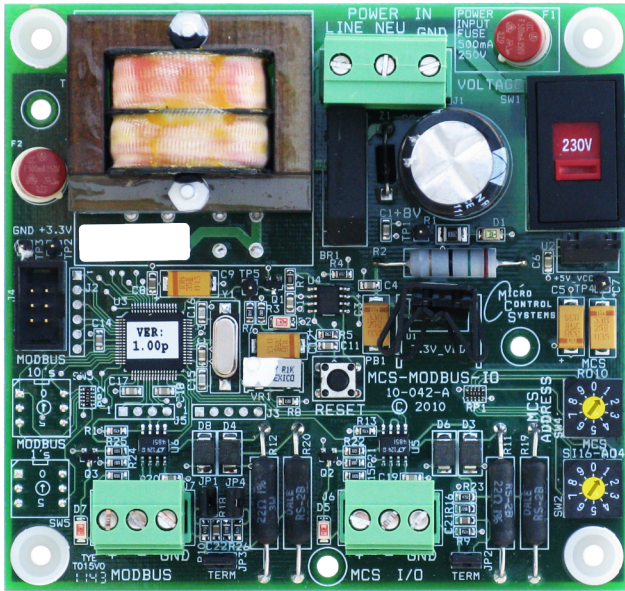# MCS-MODBUS-TC
Description & Specifications

Part # **MCS-MODBUS-TC**

Description

The **MCS-MODBUS-TC** 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 Turbocor Compressors to send and access parameters. The MCS-MOD-BUS-TC acts like and **MCS-RO10** and **MCS-SI16-AO4** to the MCS-MAGNUM . The MCS-MAGNUM currently writes 4 analog outputs and read 13 sensors inputs. A maximum of four (4) MCS-MODBUS-TC boards may be connected to the MCS-MAGNUM following the MCS-I/O standards.

Two selection dials on the lower right provide the MCS-MOD-BUS-TC addresses to the MAGNUM. The top dial provides the MCS-MODBUS-TC RO10 address on the MCS-I/O network. The bottom dial provides the MCS-MODBUS-TC SI16-AO4 address on the MCS-I/O network.

Sensor Inputs

1. CMPx FAULT	8. CHOKE SPDx
2. CTL MODE x	9. SURGE SPDx
3. IGV OPN% x	10. ACT SPDx
4. SUCT PSIx	11. CMPRATIOx
5. DISC PSIx	12. AMPSx
6. CAVITY TMPx	13. IGV STEPSx
7. INVERTTMPx	

Analog Outputs

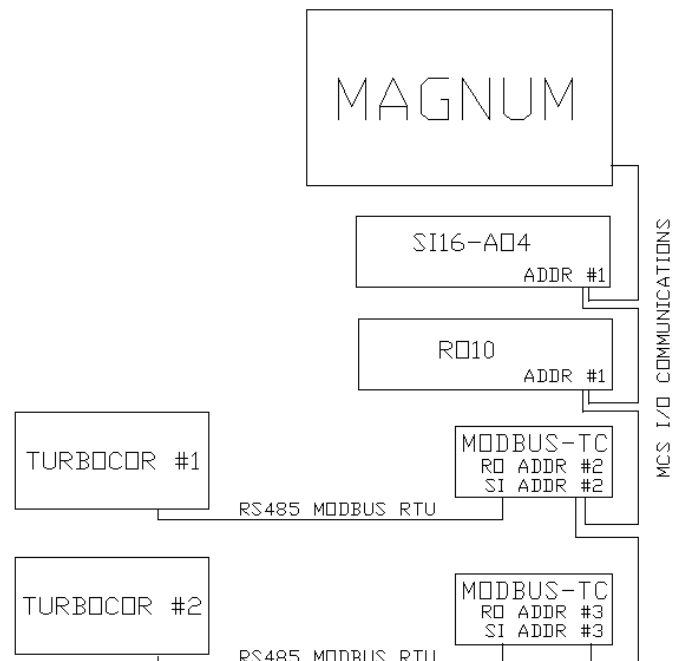1. DEMAND%x
2. START RPMx
3. IGVx OPEN%

Specifications

Dimensions	4.25"l, 4.00"w, 2.50"h
Mounting Holes	4 holes using #6 screws through nylon collars at corners of board
Operating Temperature	-40°F to +158°F (-40°C to +70°C)
Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Microprocessor	Microchip 16-bit PIC processor
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	38,400 baud
Modbus Comm Port	RS485 baud rate 38400
Other Settings	1 stop bit, 8 data bits, No Parity

Options

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

Typical Network: