GROUPE SCHNEIDER

Modicon Square D Telemecanique

Modicon
140 NOM 211 00
Modbus Plus Network Option Module, Single Cable

Publication # 043506539
Version 4.0

Specifications

Communication Ports		
NOM 211 00	1 Modbus Plus network (RS–485) port (9-pin connector) 1 Modbus (RS-232) serial port (9-pin connector) A bridge mode capability in the module permits a panel device connected to this port to access nodes on the Modbus Plus network or to access the local PLC directly without having to go out onto the network.	
Diagnostics	**Power Up** RAM RAM Address Executive Checksum Processor	**Runtime** RAM RAM Address Executive Checksum
Power Dissipation (Typical)	4 W	
Bus Current Required	780 mA	

Rear Panel Switches

Two rotary switches are located on the rear panel of the modules. They are used together to set the Modbus Plus node and Modbus port address for the unit.

Note: The highest address that may be set with these switches is 64.

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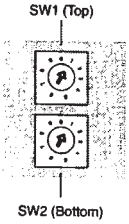
* 4 3 5 0 6 5 3 9 7 6 *

Printed in

Rotary SW1 (top switch) sets the upper digit (tens), and rotary SW2 (bottom switch) sets the lower digit (ones) of the Modbus Plus node address. The illustration below shows the setting for an example address of 11.



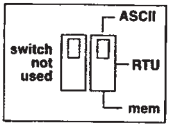
SW1 and SW2 Address Settings

Node Address	SW1	SW2
1 ... 9	0	1 ... 9
10 ... 19	1	0 ... 9
20 ... 29	2	0 ... 9
30 ... 39	3	0 ... 9
40 ... 49	4	0 ... 9
50 ... 59	5	0 ... 9
60 ... 64	6	0 ... 4

☞ **Note:** If "0" or an address greater than 64 is selected, the Modbus + LED will be "on" steady, to indicate the selection of an invalid address.

Front Panel Switches

Two three-position slide switches are located on the front of the unit. The switch on the left is not used. The three-position slide switch on the right is used to select the comm parameter settings for the Modbus (RS-232) port provided with the Modbus Plus option module. Three options are available:



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- Setting the slide switch to the top position assigns ASCII functionality to the port; the following comm parameters are set and cannot be changed:

ASCII Comm Port Parameters

Baud	2,400
Parity	Even
Data Bits	7
Stop Bits	1
Device Address	Rear panel rotary switch setting

- Setting the slide switch to the middle position assigns remote terminal unit (RTU) functionality to the port; the following comm parameters are set and cannot be changed:

RTU Comm Port Parameters

Baud	9,600
Parity	Even
Data Bits	8
Stop Bits	1
Device Address	Rear panel rotary switch setting

- Setting the slide switch to the bottom position gives you the ability to assign comm parameters to the port in software; the following parameters are valid:

Valid Comm Port Parameters

Baud	19,200	1,200
	9,600	600
	7,200	300
	4,800	150
	3,600	134.5
	2,400	110
	2,000	75
	1,800	50
Data Bits	7 / 8	
Stop Bits	1 / 2	
Parity	Enable/Disable Odd/Even	
Device Address	Rear panel rotary switch setting	

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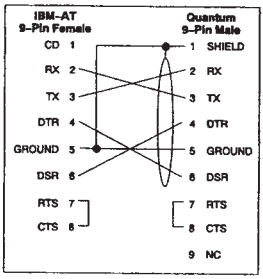
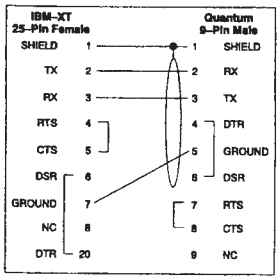
Modbus Connector Pinouts

The NOM modules are equipped with a nine–pin RS–232C connector that supports Modicon's proprietary Modbus communication protocol. The following is the Modbus port pinout connections for 9–pin and 25–pin connections.





TX: Transmitted Data **DTR:** Data Terminal Ready
RX: Received Data **CTS:** Clear to Send
RTS: Request to Send **N/C:** No Connection
DSR: Data Set Ready **CD:** Carrier Detect

For complete information concerning this and other modules, please obtain a copy of the ***Quantum Automation Series Hardware Reference Guide*** (840 USE 100 00) from your distributor or local Square D office.

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