

L-COM to Eurotherm RS232 to RS485 Multi-Drop Wiring & Settings 2-Wire Configuration

Warning: if prompted by RSLogix to upgrade the firmware NEVER answer yes. The equipment will likely be rendered into an unusable state and require some time to restore.

Observe proper safety precautions. If working on a production line at a very minimum the line should be halted. Use caution when restarting a line.

The L-COM must have all 4 jumpers installed as shown below.



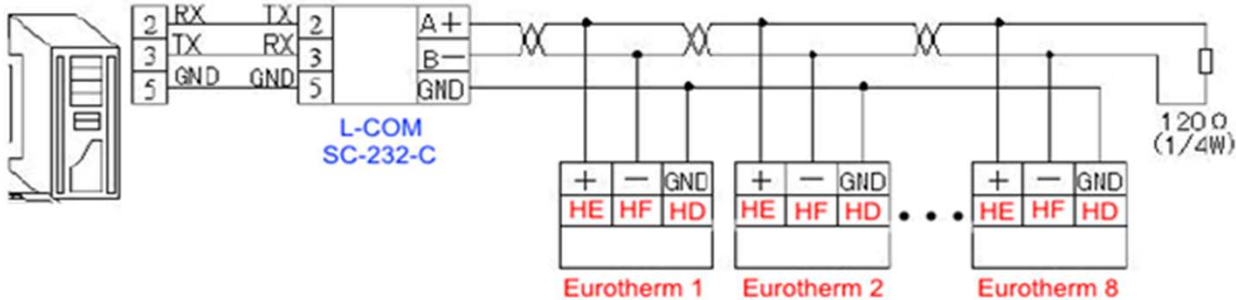
Do NOT connect any voltage to the 5 V pin, test only in this config.

With the 4 jumpers installed the pins are set up as shown below.

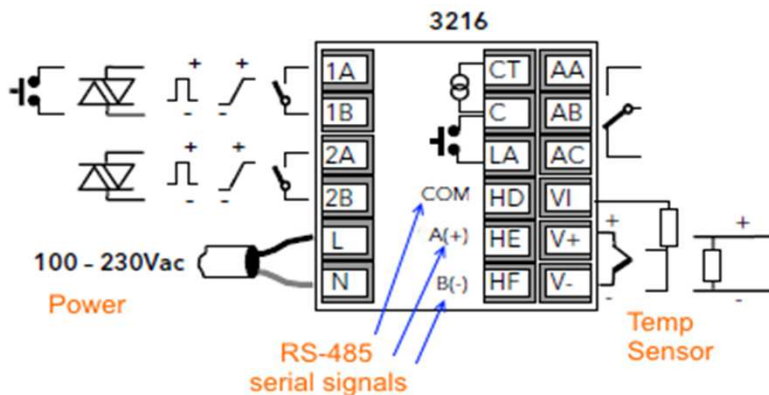
PIN	1	2	3	4	5	6	7	8	4
RS-485	A+(J2 ON)		B-(J3 ON)		GND				Add 120 ohm termination

This is saying TX+ & RX+ = A+, TX- & RX- = B-

The 120 ohm terminating resistor is built in to the L-COM.












You **MUST** add the 120 ohm resistor to the **LAST** drop in chain.



Connections to the Eurotherm 3216 temperature controller.
Faceplate: 1, alarm, output 1, output 2, alternate setpoint, Manual, RUN. 2, Units. 3, measured temperature. 4, Setpoint temperature. 5, operator buttons.

How to change the setting in the Eurotherm 32165

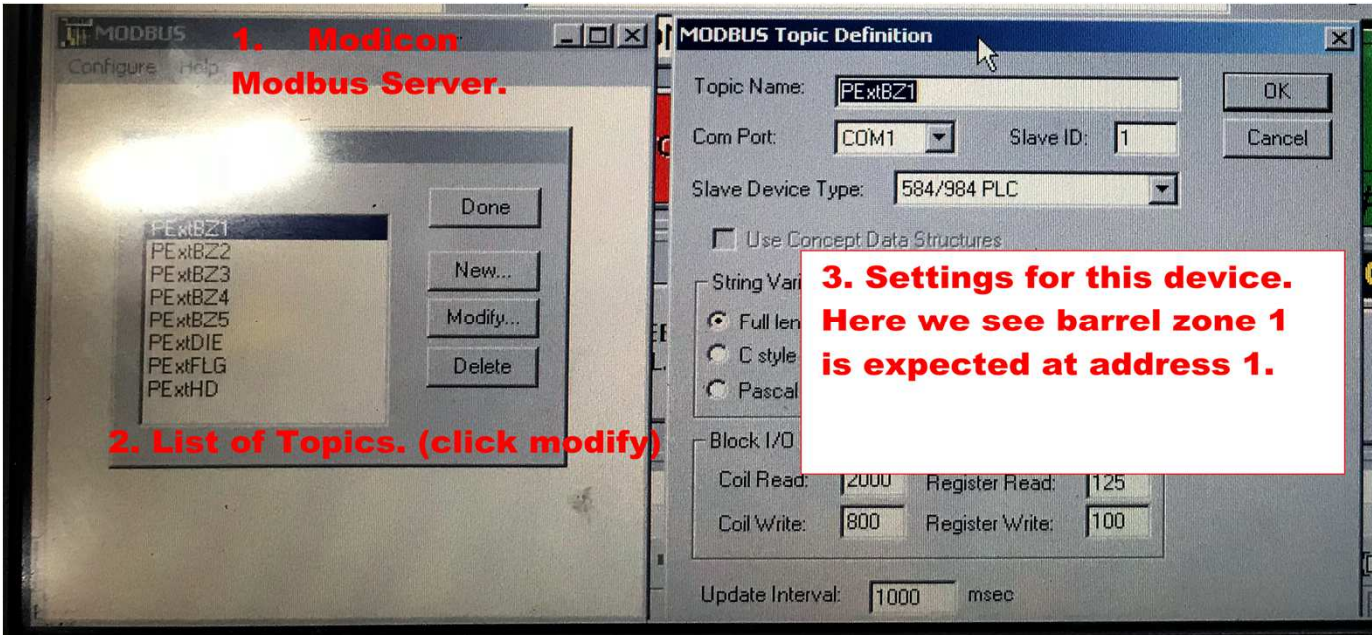
1. Press and hold  until the screen displays "LEu3 GOTO" (user level 3).
2. Press  until the unit displays "ID". Then use the arrow keys,  , to display "3".
3. Now press the menu key, , which causes the unit to accept the password.
4. Now press the menu key, , repeatedly until the unit displays "comms".
5. Press the  key to cycle through the comm parameter settings. Pause when "ADDR" is displayed.
6. Use the arrow keys,  , to set the ADDR value to the address for this unit.
7. In a few minutes the unit will time out and go back to displaying the temperature and setpoint.

How do I find the address values I need?

Depends on the age of the unit and the versions of software. On 78, 79, and 80 you will want to look into the Modicon server. You will check the TOPIC name of each item in the list and set the controller for that address value. The photographs below are met to act as a guide. Never change the value in the server, only change the setting in the Eurotherm controller.



Wonderware I/O Server for Modicon MODBUS



1. Modicon Modbus Server.

2. List of Topics. (click modify)

3. Settings for this device. Here we see barrel zone 1 is expected at address 1.

The screenshot shows the 'MODBUS Topic Definition' dialog box with the following fields: Topic Name: PExtBZ1, Com Port: COM1, Slave ID: 1, Slave Device Type: 584/984 PLC. The 'Full length' radio button is selected under 'String Vari'. The 'Coil Read' is 2000, 'Register Read' is 125, 'Coil Write' is 800, and 'Register Write' is 100. The 'Update Interval' is 1000 msec.