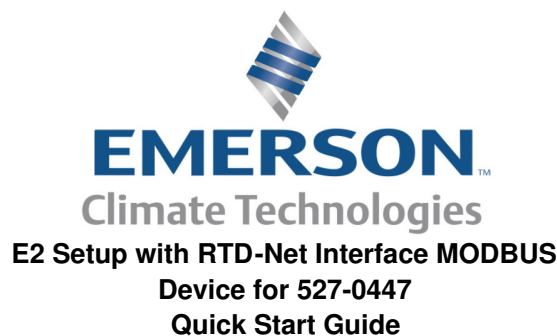




# EMERSON E2 Setup with RTD-Net Interface MODBUS Device for 527-0447 User Guide

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This document will guide you through setting up and commissioning the RTD-Net Interface MODBUS device in the E2 controller.

**Note:** Open MODBUS Description files require E2 firmware version 3.01F01 or higher.

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## E2 Setup with RTD-Net Interface MODBUS Device for 527-0447

### STEP 1: Upload the Description File to the E2 Controller

1. From UltraSite, connect to your E2 controller.
2. Right-click on the E2 icon and select **Description File Upload**.
3. Browse to the location of the description file and click **Upload**.
4. After uploading, reboot the E2 controller. (The button labeled “RESET” on the main board resets the controller.)

Pressing and holding this button for one second will cause the E2 to reset and retain all programmed applications, logs, and other data stored in memory.) For more information on rebooting the E2, refer to the E2 User Manual P/N 026-1614.

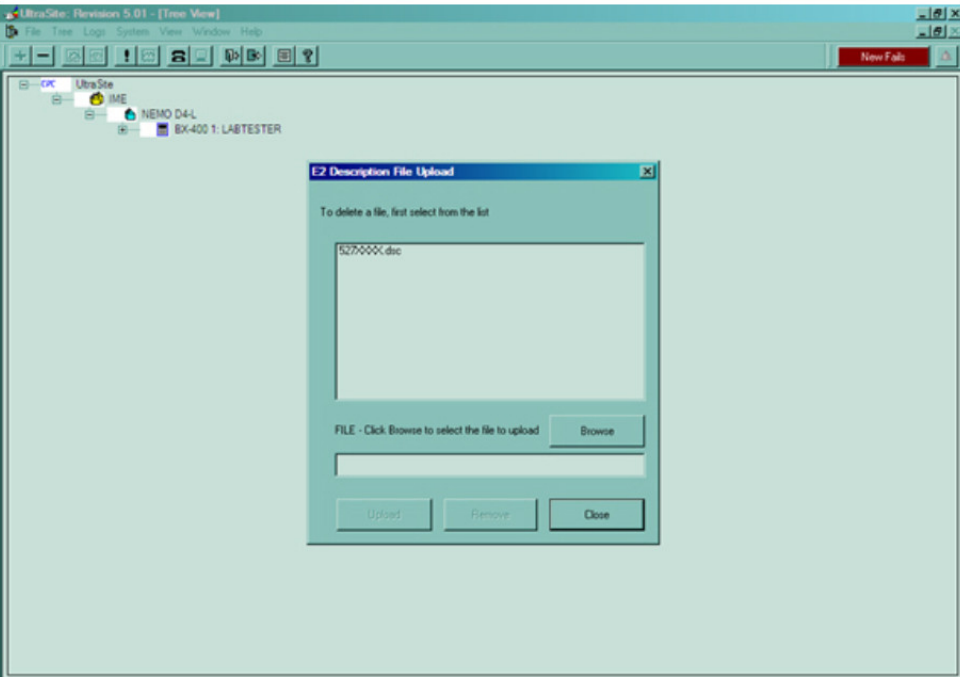


Figure 1 - E2 Description File Upload

STEP 2: Activate the License of the Device

- 1. From the E2 front panel (or via Terminal Mode), press **Menu**, **& 7** (System Configuration), and **( 9** (Licensing).
- 2. Press **F1** (ADD FEATURE) and enter your license key.

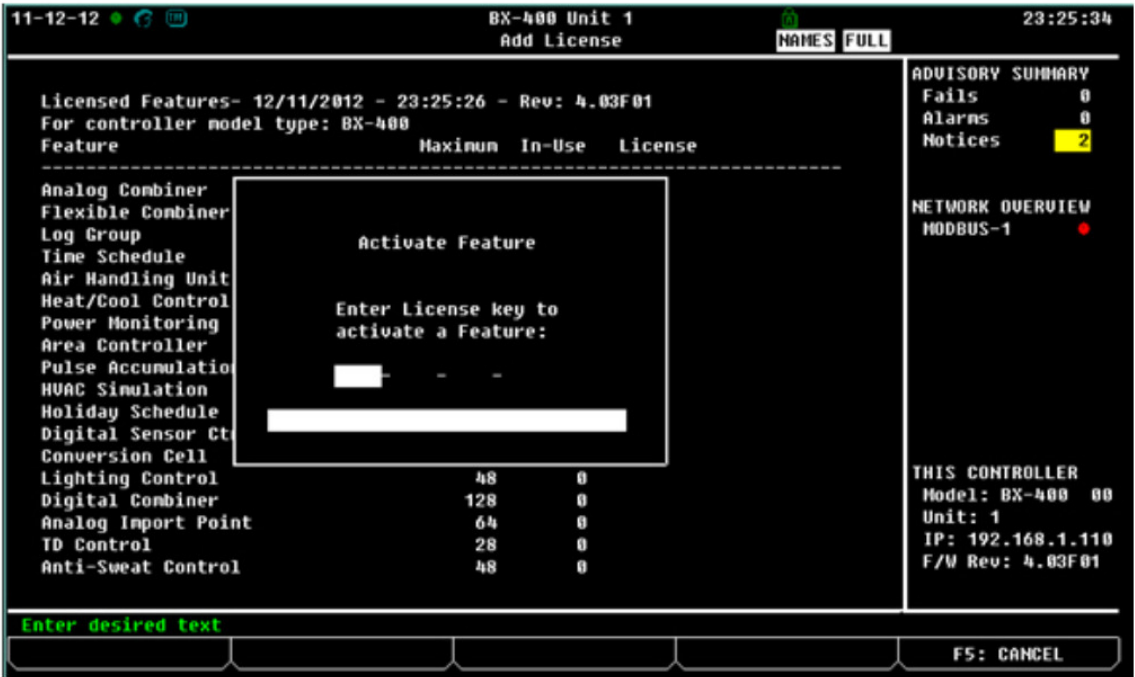




Figure 2 - License Key Screen

STEP 3: Add the Device to the E2 Controller

1. Press , **&7** (System Configuration), **&7** (Network Setup), **2** (Connected I/O Boards and Controllers).
2. Press **F2** (NEXT TAB) to go to the C4: Third Party tab. The name of the device should be displayed in the list. Enter the number of devices to add and press  to save changes.

#### STEP 4: Assign a MODBUS Port


1. Press , **&7** (System Configuration), **\$4** (Remote Communications), **#3** (TCP/IP Setup).
2. Select the COM port the device is connected to, press **F4** (LOOK UP) and select the appropriate MODBUS selection.



Figure 3 - COM Port Selection

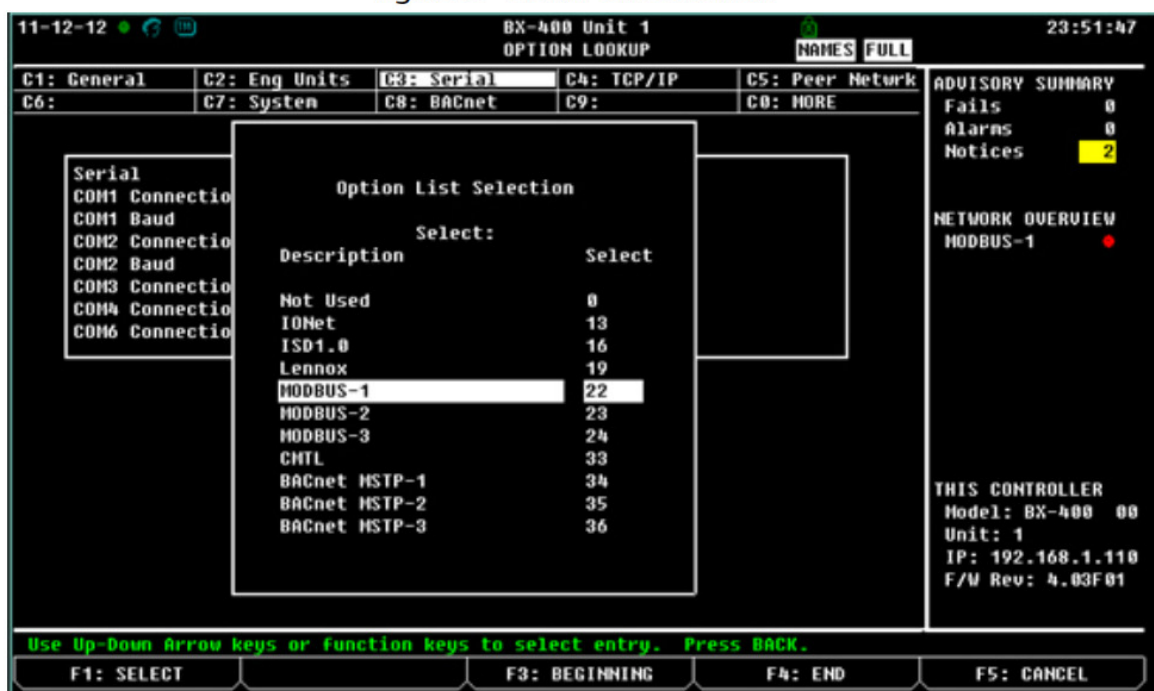


Figure 4 - MODBUS Port Setup

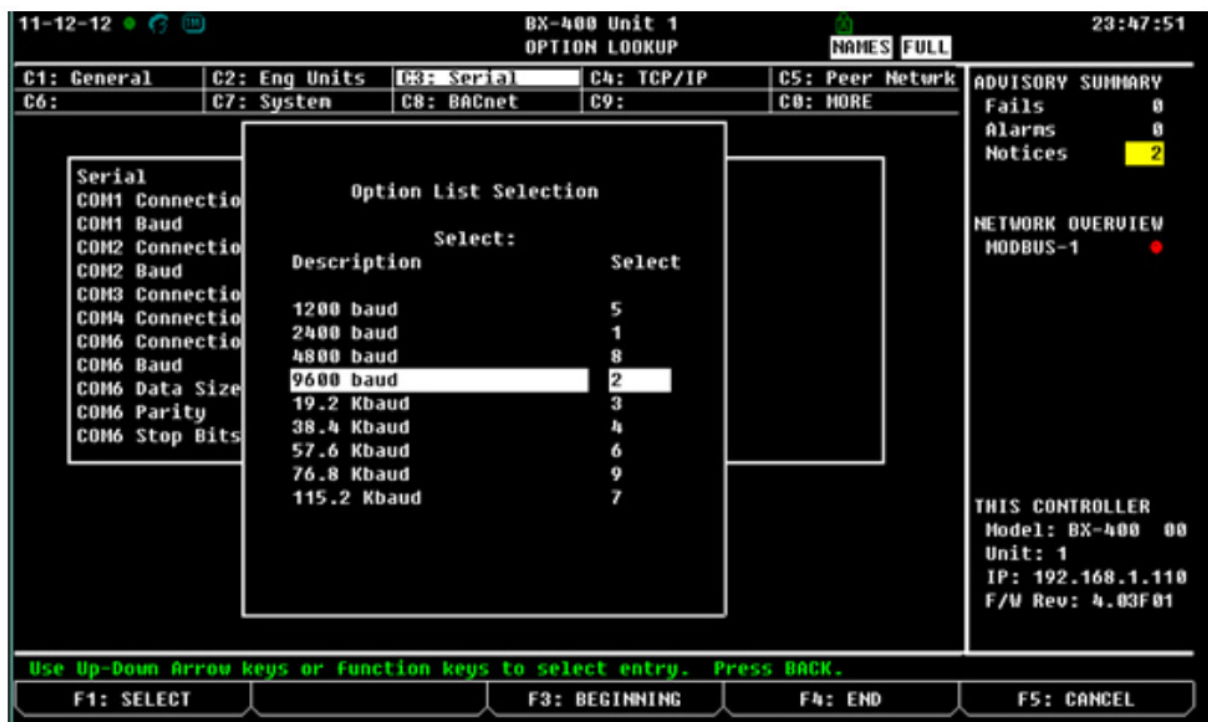


Figure 5 - Baud Rate Configuration

- Set Data Size, Parity, and Stop Bits. Press **F4** (LOOK UP) to select the appropriate values.

**Note:** RTD-Net has a factory standard setting of 9600, 8, N, 1. The MODBUS Address range 0 to 63 is set using SW1. For more information, refer to the manufacturer's installation instructions.

#### STEP 5: Commission the Device onto the E2 Controller

- Press **Menu**, **&7** (System Configuration), **&7** (Network Setup), **!1** (Network Summary).
- Highlight the device and press **F4** (COMMISSION). Select the MODBUS port where you will assign the device, then select the MODBUS device address.



Figure 6 - Device Commissioning



Figure 7 - MODBUS Device Address Selection

04-02-15

BX-300 Unit 1

OAT: 6 OH: 48 17:21:39

Network Summary

NAMES FULL

Name	Type	Network Address	Bus	Status
MORBEGNO				ntroller
ING.Q.PIAT				
ING.Q.UCAR				
ING.Q.				
ING.Q.				
ING2.Q.				
USC.Q.				
USC.Q.				
USC1.Q.				
USC2.Q.				
ULU.Q.				
HP.GEN				
CLIMAT				
RTD-Ne				
CLIMATIX2				
CLIMATIX3				

Setting Physical Address for: Unknown Device 04

Specify Physical Address Of Controller

Address: 4

ADVISORY SUMMARY

Fails 0

Alarms 0

Notices 0

NETWORK OVERVIEW

IONet

MODBUS-1

MODBUS-2

THIS CONTROLLER

Model: BX-300 00

Unit: 1

IP: 192.168.197.18

F/W Rev: 4.01F01

Enter value and Press ENTER to Set Address

F5: CANCEL

Figure 8 - Specify Physical Address Screen

04-02-15

BX-300 Unit 1

OAT: 6 OH: 48 17:22:05

Network Summary

NAMES FULL

Name	Type	Network Address	Bus	Status
MORBEGNO				ntroller
ING.Q.PIAT				
ING.Q.UCAR				
ING.Q.				
ING.Q.				
ING2.Q.				
USC.Q.				
USC.Q.				
USC1.Q.				
USC2.Q.				
ULU.Q.				
HP.GEN				
CLIMAT				
RTD-Ne				
CLIMATIX2				
CLIMATIX3				

Setting Physical Address for: Unknown Device 04

Specify Physical Address Of Controller

Address: 4

MODBUS Device Address is set

ADVISORY SUMMARY

Fails 0

Alarms 0

Notices 0

NETWORK OVERVIEW

IONet

MODBUS-1

MODBUS-2

THIS CONTROLLER

Model: BX-300 00

Unit: 1

IP: 192.168.197.18

F/W Rev: 4.01F01

F5: CANCEL

Figure 9 - Setting The MODBUS Device Address

**STEP 6:** After Assigning the MODBUS Address of the Device and Verifying that the Connections are Wired Properly, the Device Should Appear Online Make sure that the polarity is reversed on the E2 Controller.



04-02-15		BX-300 Unit 1		OAT: 6 OH: 49		17:22:41	
Network Summary				NAMES FULL			
						ADVISORY SUMMARY	
Name				Type		Network Address	
Rev				Status		Fails 0	
MORBEGNO				BX300-Bldg		Ethernet: 1 4.01F01 This Controller	
ING.Q.PIANO -1				16AI		IONet: 1 0.00 Online	
ING.Q.UCARR -1				16AI		IONet: 2 0.00 Online	
ING.Q.MEZZANIN				16AI		IONet: 3 0.00 Online	
ING.Q.P.TERRA				16AI		IONet: 4 0.00 Online	
ING2.Q.PIANO-1				16AI		IONet: 5 0.00 Online	
USC.Q.PIANO -1				8RO		IONet: 1 0.00 Online	
USC.Q.UCARR -1				8RO		IONet: 2 0.00 Online	
USC.Q.MEZZANIN				8RO		IONet: 3 0.00 Online	
USC1.Q.P.TERRA				8RO		IONet: 4 0.00 Online	
USC2.Q.P.TERRA				8RO		IONet: 5 0.00 Online	
ULV.Q.MEZZAN.				4AO		IONet: 1 0.00 Online	
HP.GENERALE				NEMO 96HD+		MODBUS-1: 1 0.00 Online	
CLIMATIX1				Clivet Clntx		MODBUS-2: 1 0.00 Online	
RTD-Net001				RTD-Net		MODBUS-2: 4 0.00 Online	
CLIMATIX2				Clivet Clntx		MODBUS-2: 2 0.00 Online	
CLIMATIX3				Clivet Clntx		MODBUS-2: 3 0.00 Online	
						NETWORK OVERVIEW	
						IONet	
						MODBUS-1	
						MODBUS-2	
						THIS CONTROLLER	
						Model: BX-300 00	
						Unit: 1	
						IP: 192.168.197.18	
						F/W Rev: 4.01F01	
F1: DELETE RCRD		F2: STATUS		F4: COMMISSION		F5: SETUP	

Figure 10 - Online MODBUS Device

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