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

Quick Start Guide

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.

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.

Instant Store Revision 5 OI - [Tree Vers] File Tree Log System Ver Window Heig Instant Store Revision 5 OI - [Tree Vers] Instant Store Revision		La Carlo Car
Fig	ure 1 - E2 Description File Upload	,



Document Part # 026-4956 Rev 0 05-MAR-2015 ©2015 Emerson Climate Technologies Retail Solutions, Inc. This document may be photocopied for personal use.

Visit our website at http://www.emersonclimate.com/ for the latest technical documentation and updates.

Page 1 of 7

STEP 2: Activate the License of the Device

- 1. From the E2 front panel (or via Terminal Mode), press , f (System Configuration), and (Licensing).
- 2. Press [ADD FEATURE) and enter your license key.

-12-12 🗕 🕜 💷	BX-400 Unit 1 Add License	NAMES FULL	23:25:34
Licensed Features- 12/1 For controller model ty Feature	1/2012 - 23:25:26 - Rev: 4.03F01 pe: BX-400 Haximum In-Use License	_	ADUISORY SUHMARY Fails 0 Alarns 0 Notices <mark>2</mark>
Analog Combiner Flexible Combiner Log Group Time Schedule Air Handling Unit Heat/Cool Control Power Monitoring Area Controller Pulse Accumulation HUGE Simulation	Activate Feature Enter License key to activate a Feature:		NETWORK OVERVIEW Hodbus-1 O
Holiday Schedule Digital Sensor Ct Conversion Cell Lighting Control Digital Combiner Analog Import Point TD Control Anti-Sweat Control	48 0 128 0 64 0 28 0 48 0		THIS CONTROLLER Hodel: BX-400 Unit: 1 IP: 192.168.1.1 F/W Rev: 4.03F0
Enter desired text			F5: CANCEL
	Figure 2 License Key Se		

STEP 3: Add the Device to the E2 Controller

- 1. Press 🐨 , 🖻 (System Configuration), 🖻 (Network Setup), 🖻 (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 (1) to save changes.

STEP 4: Assign a MODBUS Port

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







3. 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

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

NameTypeNatureAddressRevStatus	94-02-15 🔍 👩 🛄		Network	Sunn	ary	NAMES FULL	UH: 48	17:20:11
NORBEGNOBX300-BldgSelect Network14.01F01 This ControllerAlarns0NG.Q.PIANO -116AI1.MODBUS-220.00OnlineNotices0ING.Q.PIANO -116AI1.MODBUS-220.00OnlineNotices0ING.Q.P.TERRA16AI1.MODBUS-120.00OnlineNETWORK OUERUIEWING.Q.P.TERRA16AIIONet:10.00OnlineNETWORK OUERUIEWING.Q.P.TERRA16AIIONet:10.00OnlineNETWORK OUERUIEWUSC.Q.PIANO -116AIIONet:10.00OnlineNETWORK OUERUIEWUSC.Q.VCARR -18R0IONet:10.00OnlineNODBUS-1NODBUS-2USC.Q.VCARR -18R0IONet:30.00OnlineNODBUS-20USC.Q.P.TERRA8R0IONet:30.00OnlineNODBUS-20USC.Q.P.TERRA8R0IONet:10.00OnlineNODBUS-20USC.Q.P.TERRA8R0IONet:10.00OnlineNODBUS-20ULU.Q.MEZZANI.AAOIONet:10.00OnlineNODBUS-20ULU.Q.MEZZANI.NETHO 96HD+NODBUS-2:10.00OnlineNODBUS-2CLIMATIX1Clivet ClntxMODBUS-2:10.00OnlineNodel: BX-300UINATIX2Clivet ClntxNODBUS-2:30.00OnlineNodel: BX-300	Nane	Туре	Notwork Adde	ess	Rev	Status	ADVISORY Fails	SUMMARY 0
CLIMATIX2 Clivet Clntx MODBUS-2: 2 0.00 Online THIS CONTROLLER CLIMATIX3 Clivet Clntx MODBUS-2: 3 0.00 Online Model: BX-300 Unit: 1 IP: 192.168.197 F/W Rev: 4.01F0	HORBEGNO ING.Q.PIANO -1 ING.Q.UCARR -1 ING.Q.HEZZANIN ING2.Q.PIANO -1 USC.Q.PIANO -1 USC.Q.PIANO -1 USC.Q.HEZZANIN USC1.Q.P.TERRA USC2.Q.P.TERRA ULU.Q.HEZZAN. MP.GENERALE CLIMATIX1 RTD-NELSB1	BX308-Bldg 16AI 16AI 16AI 16AI 16AI 8R0 8R0 8R0 8R0 8R0 8R0 8R0 8R0 8R0 8R0	Select Network 1. MODBUS=2 2. MODBUS=1 IONet: IONet: IONet: IONet: IONet: IONet: IONet: IONet: IONet: HODBUS=2: MODBUS=2: HODBUS=2: HODBUS=1:		4.01F01 0.00 0.00 0.00 0.00 0.00 0.00 0.0	This Controller Online Online Online Online Online Online Online Online Online Online Online Online Online Online Online No Port	Alarns Notices NETWORK O IONet HODBUS-1 HODBUS-2	0 0 VERVIEW
Press menu number or scroll to selection F5: CANCEL	CLIMATIX2 CLIMATIX3 Press menu numb	clivet Clntx Clivet Clntx er or scroll to	HODBUS-2: HODBUS-2: selection	2 3	0.00	Online Online	THIS CONT Hodel: B Unit: 1 IP: 192. F/W Rev: F5: C	ROLLER X-300 00 168.197.1 4.01F01 ANCEL



04-02-15 🔍 🕜 🛄		BX-300 Unit 1 Network Summary	NAMES FULL	OH: 48	17:21:39
		Unknown Device 04		ADVISORY	SUMMARY
Nane	Tuno	Notwork Addroce Don State		Fails	0
				Alarns	0
MORBEGNO			ntroller	Notices	0
ING.Q.PIAN					
ING.Q.UCAH			_	NETHODY /	
ING.Q.				NETWORK U	DEROIEN
146.0.				HODDUS	
INGZ.Q	Setting Physica	1 Address for: Unknown Device 04		HODBUS-	
1150.0				100003-2	
use n					
11501.0	Specify Physica	1 Address Of Controller			
USC2.0					
ULU.0.	Address	4			
HP.GEN					
CLIMAT					
RTD-Ne					
CLINATIX2			<u> </u>	THIS CONT	ROLLER
CLIMATIX3				Model: E	X-300 00
				Unit: 1	
				IP: 192.	168.197.18
				F/W Rev:	4.01F01
Enter value and	Press ENTER to Se	et Address			
				F5: C	ANCEL
	Figure 9	Spacify Dhysical Address	Cereen		
	riguie a	- Specify Filysical Adaless	JURGH		

04-02-15 🔍 🥱		BX-300 Unit 1 Network Summary	NAMES FULL	6 OH: 48	17:22:05
10.22	T	Unknown Device 84		ADUISORY	SUMMARY
Nane	THEA	MATURED HARVATT DAIL		Fails	0
MORBEGNO			ntroller	Natices	6
ING.Q.PIAN					
ING.Q.VCAR					
ING.Q.				NETWORK (IVERVIEW
ING.Q.				IONet	
ING2.Q	Setting Phus	ical Address for: Unknown Devic	e 64	MODBUS-1	
USC.Q.	occeang mys			MODBUS-2	. •
USC.Q.					
USC1.0	Specify Phys	ical Address Of Controller			
USC2.0					
VLU.Q.	Addr	ess: 4			
HP.GEN		Add			
CLIMAT	MODBUS Devic	e Address 1s set			
RTD-Ne					
CLIMATIX2				THIS CONT	ROLLER
CLIMATIX3				Model: E	X-300 00
				Unit: 1	420 407 40
				E/H Ren.	h 01E01
				i ya nev.	1.011 01
				F5: C	ANCEL
	Fiaure S) - Settina The MODBUS De	vice 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.

4-02-15 🔹 🦪 🖮		BX-300 Uni Network Sur	it nma	1 ry	NAMES FULL	6 OH: 49 17:	22:41
				-		ADVISORY SUM	IARY
Nane	Туре	Network Address	5	Rev	Status	Fails	0
		F44			Th.2 - 0 1 1 1	Alaras	0
HURBEGNU	87388-B198	Ethernet:	1	4.01101	This Controller	Notices	8
ING.Q.PIANU -1	1081	IUNEC:	1	0.00	Unline		
ING.Q.UCHKK -1	1081	IUNEC:	2	0.00	Unline		
ING.Q. REZZHNIN	10H1	IUNEC:	3	0.00	Unline	NETWORK UVERU	TEW
ING.Q.P.IEKKH	1011	IUNEL: A	4	0.00	Unline	TUNEL A	
1N62.U.PINN0-1	1041	TONEC	2	0.00	Online	NODBUS-1	
USC.Q.PIHNU -1	880	IONet:		0.00	Unline	NUDBUS-2	
USC.Q.VCHKK -1	860	TONEC: 2	2	0.00	Online		
USC4 O D TEDDA	0NU 0D0	IONet:		0.00	Online		
USCI.U.P.IERKH	880	TONet:	-	0.00	Unline		
ULU O MEZZON	6n0 600	TONet:		0.00	Online		
ND CENEDALE	NEMO OGUDA	MODDUS_1		0.00	Online		
CLIMATIX4	Clinet Claty	MODBUS-2		0.00	Online		
PTD-Not 881	DID-Not	MODBUS-2-		0.00	Online		
CI THOTIX2	Clinet Claty	MODBUS-2:		0.00	Online	THIS CONTROLL	ED
CI IMATIX2	Clivet Claty	MODBUS-2-	2	0.00	Online	Model - BY-20	8 88
GEIMMIING	GIIVEL GINEX	100003-2.		0.00	UIIXXIIE	Unit: 1	0 00
						TP: 102 168	107 18
						E/U Reus h G	1581
F1: DELETE RCF	RD F2: STATU	21			F4: COMMISSION	F5: SETU	,
						^	
	Г!-	una 10 Oulina I	10	י וחחר			

RTD-Net is a trademark and/or registered trademark of RealTime Control Systems Ltd. in the United States and other countries.

This document is not intended as an official Technical/Service Bulletin of Emerson Climate Technologies. It is a helpful advisory on field service issues and resolutions. It does not pertain to all firmware, software and/or hardware revisions of our products. All information contained is intended as an advisory and no assumption on warranty or liability should be assumed. We reserve the right to make modifications to the products described herein as part of our continuous improvement process to achieve customer goals.

Document Part # 026-4956 Rev 0 05-MAR-2015

Page 7 of 7

This document may be photocopied for personal use. Visit our website at http://www.emersonclimate.com/ for the latest technical documentation and updates. Join Emerson Retail Solutions Technical Support on Facebook. http://on.fb.me/WUQRnt

The contents of this publication are presented for informational purposes only and they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. Emerson Climate Technologies Retail Solutions, Inc. and/or its affiliates (collectively "Emerson"), reserves the right to modify the designs or specifications of such products at any time without notice. Emerson does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any product remains solely with the purchaser and end-user.

026-4956 05-MAR-2015 Emerson is a trademark of Emerson Electric Co. ©2015 Emerson Climate Technologies Retail Solutions, Inc. All rights reserved.

EMERSON. CONSIDER IT SOLVED".