# E2 Setup with Schneider PM3250 MODBUS Device

#### P/N 527-0394

This document will guide you through setting up and commissioning the SCHNEIDER PM3250 Network Analyser with MODBUS RTU Interface in the E2 controller.

Note that 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. Once upload is complete, reboot the E2 controller.

UltraSite: Revision 5.01 - [Tree View]		X
🕻 File Tree Logs System View Window Help		_iei×
		New Falls 📣
Den Ste ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME B ME ME B ME ME ME ME ME ME ME ME ME ME	Description File Upload   Description File Upload IX   delete a file, first select from the list IX   S2750000 disc IX   FLE - Click Browse to select the file to upload Browse   Upload Remove Close	

Figure 1 - E2 Description File Upload Window



#### STEP 2: Activate the License of the Device

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

11-12-12 🗕 🀬 🕮	BX-400 Unit 1 Add License	NAMES FULL	23:25:34
Licensed Features- 1 For controller model Feature	2/11/2012 – 23:25:26 – Rev: 4.03F01 type: BX-400 Maximum In-Use Licer	ise	ADUISORY SUMMARY Fails 0 Alarms 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 HUAC Simulation HUAC Simulation HOIday Schedule Digital Sensor Ct Conversion Cell Lighting Control Digital Combiner	Activate Feature Enter License key to activate a Feature:  48 0 128 0		NETWORK OVERVIEW MODBUS-1 THIS CONTROLLER Model: BX-400 00
Analog Import Point TD Control Anti-Sweat Control	04 8 28 8 48 8		IP: 192.168.1.110 F/W Rev: 4.03F01
Enter desired text			F5: CANCEL

Figure 2 - Add License Screen

#### STEP 3: Add the Device in the E2 Controller

- 1. Press (System Configuration), 🕇 (Network Setup), 🗳 (Connected I/O Boards & Controllers).
- 2. Press **F2** (NEXT TAB) to shift over to the C4: Third Party tab. The name of the device will display in the list. Highlight the device name and enter the number of devices and press **CD** to save changes.

#### STEP 4: Assign a MODBUS Port

- 1. Press (System Configuration), (Remote Communications), (TCP/IP Setup).
- 2. Select the COM Port the device is connected to, press **F4** (LOOK UP) and select the appropriate MODBUS selection.

11-1 Use	2-12 • Ctrl-X	to Se	) elect	CX Tabs	B	X-400 Unit 1 SETUP		NAME	SFULL		23:41:22
C1: C6:	Genera	əl	C2: C7:	Eng Units System General	C3: Serial C8: BACnet L Setup: GENE	C4: TCP/IP C9: RAL SERU	C5: C0:	Peer MORE	Netwrk	ADVISORY Fails Alarms	SUMMARY 8 0
	Seria COM1 COM1 COM2 COM2 COM3 COM4 COM6	1 Connec Baud Connec Baud Connec Connec	tion: tion: tion: tion:	Value : Serial : 115.21 : IONet : 9600 b: : No Modu : Not Usu : Not Usu	Kbaud aud en ed ed					NETWORK ( Modbus-1	DVERVIE <del>N</del> I O
										THIS CON Model: F Unit: 1 IP: 192 F/W Rev:	TROLLER 3X-400 00 .168.1.110 : 4.03F01
SCr	F1: PR	EV TAB	xc/P	F2: NEX1	TAB	F3: EDIT	F4:	LOOK	UP	F5: 0	ANCEL

Figure 3 - Assign COM Port

11-12-12 🔍 🥱 💷 BX-400 Unit		BX-400 Unit 1	啟	23:51:47
		OPTION LOOKUP	NAMES FULL	
C1: General C2	: Eng Units C3: Ser : Susten C8: BAC	ial C4: TCP/IP	C5: Peer Netwrk	ADVISORY SUMMARY
Serial COM1 Connectio COM1 Baud COM2 Connectio COM2 Baud COM3 Connectio COM6 Connectio	Option List Sele Description Not Used ISD1.0 Lennox WODBUS-1 HODBUS-2 HODBUS-3 CHTL BACnet HSTP-1 BACnet HSTP-3	Selection ct: Select 0 13 16 19 22 23 24 33 24 33 34 35 36		THIS ONTROLLER Model: BX-400 Unit: 1 HP2-168.1.110 F/W Rev: 4.03F01
Use Up-Down Arrow	keys or function key	s to select entry. Pr	ess BACK.	
F1: SELECT		F3: BEGINNING	F4: END	F5: CANCEL

Figure 3 - MODBUS Selection

11-12-12 🗕 🌈 💷	1-12-12 • 🕝 💷 BX-400 Unit 1		0 Unit 1	<u>ه</u>	23:47:51
		OPTIO	N LOOKUP	NAMES FULL	
C1: General C2:	Eng Units	C3: Serial	C4: TCP/IP	C5: Peer Netwrk	ADVISORY SUMMARY
<u>C6:</u> C7:	System	C8: BACnet	C9:	C0: MORE	Fails Ø
					Alarms 0
Serial COM1 Connectio COM2 Connectio COM2 Baud COM3 Connectio COM4 Connectio COM6 Connectio COM6 Baud COM6 Data Size COM6 Parity COM6 Stan Size	0pt Descript 1200 bau 2400 bau 9600 bau 9600 bau 9600 bau 38_4 Kba	ion List Selectio Select: Ion I I I I I I I I I I I I I I I I I I	on Select 5 1 8 8 2 3 3 4		NETWORK OVERVIEW NODBUS-1
Use Up-Down Arrow	57.6 Kbat 76.8 Kbat 115.2 Kba 115.2 Kba	nd nd aud	6 9 7 ct entry. Press	s BACK.	THIS CONTROLLER Model: BX-400 00 Unit: 1 IP: 192.168.1.110 F/W Rev: 4.03F01
F1: SELECT		F3: E		F4: END	F5: CANCEL

Figure 4 - Configure Baud Rate

3. Set the Data Size, Parity and Stop Bits. Press **F4** (LOOK UP) to select the appropriate values. The baud rate and other communication parameters must also be configured on the MODBUS device.



4

For any further information please refer to the document: PM3200 Series User's Manual - DOCA0006EN-01.pdf.

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

- 1. Press (System Configuration), 🕇 (Network Setup), 🚹 (Network Summary).
- 2. On the **Network Summary** screen, highlight the device name, press **F4** (**COMMISSION**). Select the preferred MODBUS port where you will assign the device, then assign the MODBUS address of the device.

11-03-13 🍬 🦪		BX-400 L Network S	lnit 1 Summary	NAMES FULL	16:22:45
Name LABTESTER PM3250001	Type BX400-B1dg ₽N3250	Network S Notwork Addescr Select Network 1. HODBUS-2 2. MODBUS-1	unnary Rev 1 4.03F01 0 0.00	NAMES FULL Status This Controller No Port	ADUISORY SUMMARY Fails 0 Alarms 0 Notices 1 NETWORK OUERUIEW MODBUS-1 0 THIS CONTROLLER Model: BX-400 00 Unit: 1 IP: 192, 168, 1, 110
Press menu m	umber or scroll	to selection			F/W Rev: 4.03F01 F5: CANCEL

Figure 5 - Select Physical MODBUS Route

11-03-13 🔹 🥂 📖		BX-400 Unit Network Summ	t 1 hary B	names Full	28:42
11-03-13 • 7	Type BX400-BJdg PH3250	BX-400 Unit Network Summ Notwork Addrace HODBUS-1 Devices 1. (Unused) 2. (Unused) 3. (Unused) 4. (Unused) 5. (Unused) 6. (Unused) 7. (Unused) 8. (Unused) 10. (Unused) 11. (Unused) 11. (Unused) 12. (Unused) 13. (Unused) 13. (Unused)	Rev Statu A.03F01 This Co 0.00 No Port	AMMES FULL ADUISORY SUMM Fails Alarms Notices Network oueru MODBUS-1	28:42 ARY 0 1 IEW
Buoss poor o		14. (Unused) 15. (Unused) 16. (Unused) 17. (Unused) 18. (Unused) ▼		THIS CONTROLL Model: BX-44 Unit: 1 IP: 192.168. F/W Rev: 4.0	ER 1000 1.110 13F01
				F5: CANCE	L

Figure 6 - Assign MODBUS Address

		Network Su	nmary	NAMES FULL	10:29:10
Туре	Notwork	Unknown D	evice Ø1 Rev	Status	ADVISORY SUMMARY Fails 0
BX400-B1dg PM3250			4.03F01 0.00	This Controller No Port	Notices 1
Setting F Specify F	Physical Address Physical Address Address: 1	s for: Un s Of Contro	known Devi 11er	ice 01	NETWORK OUERUIEW MODBUS-1 • THIS CONTROLLER Model: BX-400 00
					Unit: 1 IP: 192.168.1.110 F/W Rev: 4.03F01
nd Press ENTE	R to Set Addres	SS			
	Type BX400-Bldg PH3250 Setting H Specify H of Press ENTE	Type Nature BX400-Bldg PH3250 Setting Physical Address Specify Physical Address Address: 1	Unknown D Naturuk Address BX400-Bldg PH3250 Setting Physical Address for: Un Specify Physical Address Of Contro Address: 1 nd Press ENTER to Set Address	Unknown Device 01 Type Mathematic Address BX400-Bldg 4.03F01 PH3250 5000 Setting Physical Address for: Unknown Devi Specify Physical Address Of Controller Address: 1 nd Press ENTER to Set Address	Unknown Device 01 Type Notwerk Address BX400-Bldg 4.03F01 This Controller PH3250 1 0.00 No Port Setting Physical Address for: Unknown Device 01 Specify Physical Address Of Controller Address: 1 nd Press ENTER to Set Address

Figure 7 - Choose Physical Address of Controller

11-03-13 🔹 🥝 🛛			BX-400 L Network S	Init 1 Summary	NAMES FULL	16:29:34
Name	Туре	Notwork	Unknown	Device Ø1 Rev	Status	ADVISORY SUMMARY Fails 0
LABTESTER PM3250001	BX400-B1dg PN3250			4.03F01 0.00	This Controller No Port	Notices 1
	Setting I Specify I MODBUS Do	Physical Addres Physical Addres Address: 1 evice Address i	s for: I s Of Conti l s set	Unknown Devi roller	.ce 01	NETWORK OVERVIEW Hodbus-1 .
						THIS CONTROLLER Model: BX-400 00 Unit: 1 IP: 192.168.1.110 F/W Rev: 4.03F01
						F5: CANCEL

Figure 8 - Set Commissioning Address

6

3. After assigning the MODBUS address and verifying that the device wired properly, the device should come online on E2 **Network Summary** screen.

**NOTE**: Make sure the polarity is reversed on the E2.

11-03-13 🔶 🦿		BX-400 Network	Unit 1 Summary	NAMES FULL	16:30:10
Name	Туре	Network Address	Rev	Status	ADVISORY SUMMARY Fails 0
LABTESTER PM3250001	8X400-81dg PH3250	Ethernet: MODBUS-1:	1 4.03F01 1 0.00	This Controller Online	HIATMS U Notices <u>1</u> NETWORK OVERVIEW MODBUS-1 O
					THIS CONTROLLER Model: BX-400 00 Unit: 1 IP: 192.168.1.110 F/W Rev: 4.03F01
F1: DELETE	RCRD F2:	STATUS F3: NE	T STATUS	F4: COMMISSION	F5: SETUP

Figure 9 - Device Should Appear Online

Schneider is a trademark and/or registered trademark of Schneider Electric Co. in the United States and other countries

Visit our website at copeland.com/en-us/products/controls-monitoring-systems for the latest technical documentation and updates. For Technical Support call 833-409-7505 or email ColdChain.TechnicalServices@Copeland.com



026-4946 R1

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. Copeland reserves the right to modify the designs or specifications of such products at any time without notice. Responsibility for proper selection, use and maintenance of any product remains solely with the purchaser and end-user. ©2024 Copeland is a trademark of Copeland LP.