E2 setup with LMC 340 Lodam condensing unit controller for 527-0437

This document contains information setting up, programming and commissioning the LMC 340 Lodam condensing unit device in the E2 controller.

Step 1: Upload the LMC 340 description file to the E2 controller

Note: UltraSite32 software should be installed before uploading the description file.

- 1. Connect to your E2 using UltraSite (refer to UltraSite32 user's guide P/N 026-1002).
- 2. Log on to UltraSite, enter "USER" in the Username field and "PASS" in the Password field.
- 3. Double-click the Directory Level to view the Site Level. (refer to Figure 1)
- 4. Right-click the Site Level and click Connect.
- 5. Double-click the Site Level and browse the E2 Unit location where LMC 340 will be installed.
- 6. Right-click on the unit and select Upload Description File.



Figure 1 - Upload Description File window



7. Click **Browse** button.

	e a nie, inst select from the list		
FILE	- Click Browse to select the file to upload	Browse	

Figure 2 - Description File upload

8. Browse and select the appropriate description (*.dsc) file for LMC 340.

	- ← 🗈 💣 =	
Name	Date modified	Т
🍌 Alarm test	2/19/2013 2:09 PM	Fi
All Files	2/20/2013 9:46 PM	Fi
퉬 Not Working	2/18/2013 10:02 PM	Fi
OpenDescFileSetup	2/18/2013 2:27 PM	Fi
LMC340.dsc	2/20/2013 1:34 PM	D
< III		F
< III III III III III III III III III I	Open	,

Figure 3 - Description File location

- 9. Click Open.
- 10. Click Upload. A window will appear confirming that the description file was imported click OK button.
- 11. The description (*dsc) file will appear inside the box.

To delete a f	le, first select fro	rom the list		
UltraSite32				×
A Descri	tion data for	LCM340i version 0	0 was imported	from
Descri LMC34	otion data for 10.dsc as Engli	LCM340i version 0 ish language.	.0 was imported	from
C:\Users	otion data for 10.dsc as Engli 10.dsc as Engli	LCM340i version 0 ish language. sktop\Lodam Project	.0 was imported	OK OK

Figure 4 - Description File window

To delete a file, first select from the list	
LMC340.dsc	
FILE - Click Browse to select the file to upload Browse	
C:\Users\pedominc\Desktop\Lodam Project\LMC340.dsc	

Figure 5 - Description File upload

12. Once the upload is complete, reboot the E2 controller.

Step 2: Licensing the LMC 340 device

- 1. Log into the E2 controller. Press Menu, 7, 9 (Licensing).
- 2. Press F1 (ADD FEATURE) and enter the 16-digit license key. Press



Figure 6 - Add License screen

Step 3: Setting up the device in the E2 Serial port

- 1. Log on to E2 controller by pressing Log Information
- 2. Enter USER in the Username field and PASS in the Password field.
- 3. Press (Menu), 7, 3, 1 (General Controller Info).
- 4. Select **F2** twice to go to the *C3: Serial* tab.

C1: General	C2: Eng Unit	s D3: Serial	C4: TCP/IP	C5: Peer Net	WPR ADVISORY SUMMARY
C6:	C7: System	C8:	C9:	CO: MORE	Fails 0
	Gen	eral Setup: GENER	AL SERV		Alarms 0
Serial	Val	le			Notices
COM1 Baud	: 115	2 Kbaud		+ + +	
COM2 Conn	ection : MOD	3US-3			NETWORK OVERVIEW
COM2 Baud	: 19.	2 Kbaud			MODBUS-2
COM2 Data	Size :	8			And the state of t
COM2 Pari	ty : Non	2			
COM2 Stop	Bits :	1			
COM3 Conn	ection : No	loden			
COM4 Conn	ection : MOD	3US-1			
COM4 Baud	: 19.	2 Kbaud			
COM4 Data	Size :	8			
COM4 Pari	ty : Eve	1			
COM4 Stop	Bits :	1			
COM6 Conn	ection : MOD	3US-2			
COM6 Baud	: 19.	2 Kbaud			THIS CONTROLLER
COM6 Data	Size :	8			Model: RX-100 00
COM6 Pari	ty : Eve	1			Unit: 1
COM6 Stop	Bits :	1		T T	IP: 10.161.200.20
					F/W Rev: 4.04F01
Scroll using	Next/Prev keys	Connection Typ	pe for COM6		
F1: PREU T	AB F2:1	IEXT TAB	F3: EDIT	F4: LOOK UP	F5: CANCEL

Figure 7 - Serial port set up

- 5. Press the down arrow key to highlight COM6 connection value:

 - a. Press **F4** (*LOOK UP*) and select **MODBUS-1** (if MODBUS-1 is being used, select **MODBUS-2** or **MODBUS-3** connection).
 - b. Press Enter to set configuration.
 - c. Set **MODBUS connection** as follows: (Press **F4** to select options and **Enter** to set configuration).
 - · COM6 baud: 19200
 - COM6 data size: 8
 - · COM6 parity: Even
 - · COM6 stop bits: 1
- Press to save changes. 6.
- Press D to go back to the Home Screen. 7.

Step 4: Modbus connection



Figure 8 - Modbus network

Note: The polarity of the Modbus connection of E2 controller and LMC 340 condensing unit is reversed.

Step 5: Adding the LMC 340 device on the E2 controller

- 1. Press (Men., 17, 17, 12) (Connected I/O Boards and Controllers).
- 2. Press **F2** twice to move to the *C4: Third Party* tab. Highlight the **LMC 340** device and enter the desired number of devices under **Quantity**.

C1: This Unit	C2: IN Network	C3: FCT	C4: Third Partu	65:	
C6:	C7:	C8:	C9:	C0:	Eaile 0
	Num Ne	twork Ctrls:	NetSetup		Alarms 0
	Third Party Boar	rd Type	Quantity Max]	Notices
	#1 : LGM	3401		J	NETWORK OVERVIEW
					Model: RX-100 00 Unit: 1
					F/W Rev: 4.04F01
Enton 0 to 4	Enter desired m	umber of the	se boards		
Encer a co i	inter acourca in				

Figure 9 - Adding the LMC 340 device

- 3. Press to save changes.
- 4. Press **()** to go back to the *Home* Screen.

Step 6: Commissioning the LMC 340 device

- 1. Press (March, 7, 7 to open the Network Summary screen.
- 2. Highlight the LMC 340 device to be commissioned by pressing the down arrow key and press **F4**.

2-21-13 🛛 🖪		RX-100 U Network S	lnit 1 Summary	阖	4:19:23 *ALARM*
Name	Туре	Network Address	Rev	Status	ADUISORY SUMMARY Fails
E2_Unit81 LCM346i661	RX100-Refrig	Ethernet: MODBUS-2:	1 4.04F01 1 0.00	This Controller Offline	Notices
	_				NETWORK OVERVIEW Modbus-2 🗣
					THIS CONTROLLER
					Model: RX-100 00 Unit: 1 IP: 10.161.200.20

Figure 10 - LMC 340 on the Network Summary

- 3. If a Select Network box appears, select the Modbus number where you configured the device and press
- 4. Select the address for the device and press .

Note: The MODBUS device address must be the same as the address assigned on the device.

02-21-13 🛛 🦪		RX-100 Network	Unit 1 Summary	ß	4:23:24 *ALARM
Name E2 Unit01	MODBUS-2 Devices	атылер Адделсс	Pou Sto	tus ontroller	ADUISORY SUMMARY Fails 1 Alarms 0 Notices 7
LCM3401001	1. LCH3401001	LCM3401		e	
	3. (Unused)				NETWORK OVERVIEW MODBUS-2
	5. (Unused)				1999 (1997) - 1997 (1997) (1997) 1997 (1997) - 1997 (1997) (1997)
	6. (Unused) 7. (Unused)				
	8. (Unused) 9. (Unused)				
	10. (Unused) 11. (Unused)				
	12. (Unused) 13. (Unused)				
	14. (Unused) 15. (Unused)				THIS CONTROLLER
	16. (Unused) 17. (Unused)				Model: RX-100 00 Unit: 1
	18. (Unused)			t	IP: 10.161.200.20 F/W Rev: 4.04F01
Press menu nu	moer or scroll to sel	ection			F5: CANCEL

Figure 11 - Select Modbus Device Address

5. A window for setting the physical address appears. Press **Ener** to continue.

32-21-13 🕈 🖪 🗉)	RX-1 Netwo	100 Unit 1 ork Summary	ه	4:25:28 *ALARM*
Name E2 Unit01 LCN840100	Типа	LCM: Notwork Addre	3401001 Dec Dou	Status ontroller e	ADUISORY SUMMARY Fails 1 Alarms 0 Notices 7
	Setting Phys	ical Address for	: LCM340i001		NETWORK OVERVIEW Modbus-2 🌩
	Specify Phys Addr	ical Address Of a	Controller		
					THIS CONTROLLER Model: RX-100 00 Unit: 1 IP: 10.161.200.20 F/W Rev: 4.04F01
Enter value an	d Press ENTER t	o Set Address			l
	L		L		F5: CANCEL

Figure 12 - Physical Address window

- 6. Press to save the assigned address.
- 7. Press D button to return to the Home Screen.
- 8. Press Mer, ^{*}, ^{*}, ^{*}, ^{*} to open the Network Summary screen.
- 9. Wait for a few seconds then the LMC 340 should appear online.

Name Type Network Address Rev Status ADUISORY SUMMARY E2 Unit01 RX100-Refrig Ethernet: 1 4.04F01 This Controller Notices Image: Control in the control	2-21-13 • 🖪	•	RX-100 Network	Unit 1 Summary	卤	4:11:44
E2 Unit01 RX100-Refrig Ethernet: 1 4.04F01 This Controller IGN32401001 LCM340i HODBUS-2: 1 0.00 Online Notices Z HIPPS 0 Notices Z NETWORK OUERUIEW HODBUS-2 • THIS CONTROLLER Model: RX-100 00 Unit: 1 IP: 10.161.200.20 F/W Rev: 4.04F01	Name	Туре	Network Address	Rev	Status	ADVISORY SUMMARY Fails 0
NETWORK OUERUIEW NODBUS-2 ♥ THIS CONTROLLER Model: RX-100 Ø/ Unit: 1 IP: 10.101.200.20 F/W Rev: 4.04F01	E2 Unit01 LCM340i001	RX100-Refrig LCM340i	Ethernet: MODBUS-2:	1 4.04F01 1 0.00	This Controller Online	Notices 7
THIS CONTROLLER Model: RX-100 & Unit: 1 IP: 10.161.200.20 F/W Rev: 4.04F01						NETWORK DUERUIEW Modbus-2 ∳
						THIS CONTROLLER Model: RX-100 00 Unit: 1 IP: 10.161.200.20 F/W Rev: 4.04F01

Figure 13 - Device Appears Online

Step 7: Viewing the status

1. Press (Menu), 🖞 , 👸 , 👸 + 🏹 or use the down arrow key to highlight LMC 340 and press 🗜

12-21-13 ♥ 100 'ress 'Log In/Out' to Log On	RX-100 Unit 1 LCM340i	A	4:35:48
Controller Name LCM340i001			ADVISORY SUMMARY Fails 0 Alarms 0 Notices 7
SETPOINTS	STATUS		
Active Setpoint 4.00	RE1-Contactor K1	ON	
Primary Setpoint 4.00	RE2-Valve LLV/Oil	ON	NETWORK OVERVIEW
Secondary Setpoint 0	RE3-Crankcase Htr	ON	MODBUS-2
Condenser Setpoint 36.00	RE4-OLC-K/SE-B	ON	17 26 26 26 26 26 26 26 26 26 26 26 26 26
energies new resolutions - Annald and - Experimental - Annald	RE5-Alarm Relay	ON	
_ INPUTS	RE6-Fan 01	ON	
Room Temperature 11.06	RE7-Fan 02	ON	
Outside Temperature 27.26	RE8-Comp.Run Signal	ON	
Sat Suctn Temperature 22.46	RE9-Spare	ON	
Sat Dis Temperature 63.82			a. (S
Suction Pressure 11.61	ALARMS.		
Discharge Pressure 30.79	ALARM COUNT	3	
-MODE	HIGH ALARM LVL 5	5	THIS CONTROLLER
Unit Mode ON		RIC	Model: RX-100 00
Fan Mode ECO			Unit: 1
Control Mode ROOM TEMP			IP: 10.161.200.20
2nd Setpoint Active OFF			F/W Rev: 4.04F01
Press enter for a list of actions.			
F2: CONDENSER	↓ F3: CIRCUITS ↓		↓ F5: SETUP

Figure 14 - Device Status screen



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