HUSSMANN®

CoreLink[™]

Electronic Display Case Controller



CoreLink – E2 Integration Quick Start Manual

IMPORTANT

Keep with controller for

future reference!

MANUAL SUPPLIMENT - CORELINK CASE CONTROLLER

P/N 3128012_A July 2020

English

CoreLink™

SAFETY



BEFORE YOU BEGIN Read these instructions completely and carefully.



PERSONAL PROTECTION EQUIPMENT (PPE)

Personal Protection Equipment (PPE) is required whenever servicing refrigeration equipment. Always wear safety glasses, gloves, protective boots or shoes, long pants, and a long-sleeve shirt when working with this equipment.



Electrostatic discharge (ESD) is the sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown. Hussmann reserves the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.



Hussmann recommends industry workers use antistatic wrist straps, ESD wrist strap, or ground bracelet when working on electronic devices which can be damaged by ESD. Please consult chosen strap literature for best practices for usage.



It is strongly recommended to check all connections to the CoreLink Controller prior to applying power, especially power supply voltage and voltage analog inputs like the evaporator pressure transducer and electronic expansion valve (option). Failure to do so can result in electrical damage to the controller.

REVISION HISTORY

Rev. No	Revision Date	Notes
0	06-26-2020	Initial Published Release

ANSI Z535.5 DEFINITIONS

- DANGER Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury.
- **CAUTION** Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE** Not related to personal injury Indicates[s] situations, which if not avoided, could result in damage to equipment.

PROPOSITION 65 WARNING



This warning does not mean that Hussmann products will cause cancer or reproductive harm or is in violation of any product-safety standards or requirements. As clarified by the California State government, Proposition 65 can be considered more of a 'right to know' law than a pure product safety law. When used as designed, Hussmann believes that our products are not harmful. We provide the Proposition 65 warning to stay in compliance with California State law.

DISCLAIMER

THIS QUICK START MANUAL IS NOT A GENERIC MANUAL AND IS BASED ON LATEST LESSONS LEARNED AND BEST PRACTICES WHERE HUSSMANN PRODUCTS ARE USED. FURTHERMORE, IT IS APPLICABLE ONLY TO THE PRODUCTS FITTED WITH EMERSON DESIGNED AND OWNED CONTROLLERS: E2 RX REFRIGERATION CONTROLLERS AND HUSSMANN CORELINK CONTROLLERS. THE INTENT OF THIS MANUAL IS TO GIVE DETAILS ON CONTROLLER INTEGRATION AND QUICK START UP.

THIS DOCUMENT IS NOT AN OFFICIAL TECHNICAL SERVICE BULLETIN RELEASED BY THE ENGINEERING DEPARTMENT OF COMPUTER PROCESS CONTROLS/EMERSON/HUSSMANN. THE INFORMATION DOES NOT PERTAIN TO ALL FIRMWARE, SOFTWARE, AND/OR HARDWARE REVISIONS.

THESE TIPS ARE PROVIDED AS A FREE SERVICE BY HUSSMANN AND NO ASSUMPTION OF ACCURACY OR LIABILITY SHOULD BE IMPLIED OR ASSUMED.

TECHNICAL SUPPORT

FOR TECHNICAL SUPPORT WITH CORELINK CONTACT:

- EMAIL: CORELINK.SUPPORT@HUSSMANN.COM
- HUSSMANN CALL CENTER: 1-800-592-2060
- HUSSMANN PARTS: 1-855-478-7778

FOR EMERSON E2 TECHNICAL SUPPORT CONTACT:

- EMAIL: <u>SOLUTIONSTECHSUPPORT@EMERSONCLIMATE.COM</u>
- EMERSON TECHNICAL SUPPORT: 1-800-829-2724

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1. OVERVIEW & PREREQUISITES

The CoreLink Case Control System consists of Application Programming Modules (example: App Version 3.0.0 and 2.6.0) and physical Input/Output ("I/O") that work together to control the various functions in each case or walk in cooler/freezer. These programming modules control refrigeration, defrost, evaporator fan, case lighting, and electronic expansion valves. The refrigeration system control network includes the Emerson E2 RX controller and CoreLink controllers at each case and/or walk in cooler/freezer. In the E2 programming, each CoreLink controller can be added via UltraSite or via the front E2 panel. The E2 can then be used to monitor the status of each case alarm, scheduling, and any other circuit level control value.

Compatibility between the E2 and the CoreLink controller can be verified based on the following:

CoreLink Application	E2 Description Revision
Versions below 2.6.0	5270551 Revision 4
2.6.0 or above	5270551 Revision 5

The CoreLink application version is visible in the System Tab of the WebUI to confirm version

Note – All the screen shots in the document are captured using latest Revision of the description file.

Hussmann reserves the right to change or revise specifications and Product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacement for equipment previously sold or shipped

The CoreLink case controllers are already preloaded with configurations and setting as per case or walk-in product specifications. However installation guidelines of CoreLink can be downloaded from https://www.hussmann.com/ns/Technical-Documents/0557046 A Corelink IO EN.pdf

The installation guidelines of E2 RX refrigeration controller can be downloaded from <u>https://climate.emerson.com/documents/1621-quick-start-guide-for-rx-refrigeration-bx-hvac-cx-</u> <u>convenience-store-controllers-en-5375986.pdf</u>



CAUTION: IT IS STRONGLY RECOMMENDED TO CHECK ALL CONNECTIONS TO THE CORELINK CONTROLLER PRIOR TO APPLYING POWER, ESPECIALLY POWER SUPPLY VOLTAGE AND VOLTAGE ANALOG INPUTS LIKE THE EVAPORATOR PRESSURE TRANSDUCER AND ELECTRONIC EXPANSION VALVE (OPTION). FAILURE TO DO SO CAN RESULT IN ELECTRICAL DAMAGE TO THE CONTROLLER.

2. CoreLink – E2 Integration

This section details the integration between the Hussmann CoreLink case controller and the Emerson E2 controller. This includes power wiring, network wiring, software connections, E2 description files, and E2 license keys.

2.1 Power Wiring

In most cases it is the responsibility of the Electrical Contractor (EC) to install the power wiring for the cases and walk- ins as well as the Modbus and LAN communications cables. The Refrigeration Contractor terminates the communication cabling. Figures (1.1) & (1.2) shows a reference wiring diagram for Hussmann Insight cases. These diagrams are subject to change at any time without notice due to continuous development. For changes and for other cases, please contact Hussmann engineering.



Figure 1.1: Power Wiring



Figure 1.2: Sensors, Transducers, Valves

2.2 Network Wiring

This section details the recommended communication wiring and termination for the CoreLink controller and the E2.

NOTE: Figures (2.1) and (2.2) represent the connection of the Modbus communication loop from CoreLink to the E2 communication port. It is recommended that this be left disconnected until programming and controller addressing has been configured and validated.

As per the site requirements, connect the max allowed CoreLink controller (Refer E2 manual for max number of CoreLinks) to E2 through Daisy chain connection as shown below



Daisy chain connection of CoreLink controllers to E2:

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- The CoreLink E2 connection is reverse polarity. The CoreLink RS485 Data "+ " (Pin 64) connects to the red wire [Figure (2.1)]. This red wire connects to Data "-" at the E2 RS485 COM2A [Figure (2.2)].
- The CoreLink E2 connection is reverse polarity. The CoreLink RS485 Data "- " (Pin 63) connects to the black wire [Figure (2.1)]. This black wire connects to Data "+" at the E2 RS485 COM2A [Figure (2.2)].

CAUTION: TO AVOID INCORRECT OR INVALID PARAMETERS BEING PASSED BETWEEN THE E2 & THE CORELINK CASE CONTROLLERS, LEAVE THE MODBUS TERMINAL AT THE IN E2 RS485 COM2A (REF FIG(II)) UNPLUGGED UNTIL ALL THE PROGRAMMING IN THE E2 HAS BEEN VERIFIED. FAILURE TO DO SO CAN RESULT IN ELECTRICAL DAMAGE TO THE CONTROLLER.

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The daisy chain connection of RS485 network needs to be terminated properly for uninterrupted RS485 communication. Third-party devices which is integrated may or may not have onboard termination jumpers — consult the manufacturer's instructions for termination information.

If an end device does not have termination jumpers, Emerson / CPC offers a termination block that can be used to terminate MODBUS network endpoints (CPC P/N 535-2711). Connect this block just before the end device Fig(iii)and connect the shield to earth ground, keeping the exposed shield wire length as short as possible (3 inches ideal maximum length). Alternatively, the last CoreLink in Network can be terminated by connecting a RS485 termination resistor of Value 150 Ω across CoreLink Pin 63, 64.



MODBUS Termination Block (P/N 535-2711)



RS485 termination block (Option)



150Ω termination resistor

2.3 CoreLink to E2 Via UltraSite

Install Ultrasite 5.07F02 or above. Login using the Emerson provided username and password



UltraSite	Login		×
×	<u>U</u> ser Name: Password:		
[-	Cancel	

After connecting to the E2 via UltraSite, it may be necessary to create a Directory and add a Site in UltraSite. Configure the Site as necessary. Now the E2 is connected to UltraSite

2.4 How to Upload Hussmann Description file to E2 2.4.1 Steps for Uploading description file

- Select customer & expand E2 target
- Right click E2 name
- Select Upload Description File
- Select Browse
- Locate and highlight description file (5270551.dsc) provided.
- Select Open

- DE SIENSIN						
B- Childy	Receiptore	ule			K2. Description File Upload	2
8		*****	Serrinary Unit Logs Systems Logs and Databases Device Setup East Use Access (at Rectup Instance Transmission Rectup Get Logs Get Logs Get Logs	1 1	To debite yold, for address the tot.	
			Upland Description File		Children (detwildent top) 5270951_bland_text.fbc	-
			Service Actions			
			Terminal Mode View Unit Alarm		Upbat One	_

- Select Upload
- Confirmation screen will appear, select OK

UltraSite32	< To delete a file, first select from the list	
Description data for CoreLink version 4.98 was imported from 5270551_latest_test.dsc as English language.	Operation Status	×
OK	E2 File Upload	
FILE - Click Browse to select the file to upload Rrowse	Copying file sent 40960 Bytes of 64984 By	les
	ESPECTATION	
		_
	Cancel	

- Confirm description file (5270551.dsc) is in uploaded list or above
- Select close. The description file (5270551.dsc) or above is loaded



NOTE : ALL OPERATIONS AND INSTALLATION SHOULD ONLY BE CARRIED OUT BY QUALIFIED PERSONNEL.

CoreLink[™]

E2 Description File Upload	×				
To delete a file, first select from the list					
5270551_latest_test.dsc					
,					
FILE - Click Browse to select the file to unload	Browse				
	DIOWSE				
C:\Users\ljohn\Desktop\5270551_latest_test.	dsc				
Upload Remove	Close				

2.5 Reboot E2

- Right click E2 name
- Click on Service Actions
- Select Reset Unit

```
- J UltraSite: Revision 5.07F02 - [Tree View]
```

🕼 File Tree Logs System View	Window Help		
+- 60 !0 80	Do Bo E ?		
C COC I Have Cite			
	er		
Bridgeton Control			
	00 1: E2 Unit01		
	Summary		
	Unit Logs	,	
 	onic Logs		
÷	System Logs and Statistics		
÷	Device Setup	>	
.	Edit User Access List		
	Backup		
	Validate Setpoints		
	validate Setpolitis		
	Restore		
	Get Logs		
	Get Unit Inventory		
	Add New Application		
	Upload Description File		
	Service Actions	>	Package Transfer
	Terminal Mode		Add Feature License
	View Unit Alarms		Reset Unit
	Setup Autopolling		

NOTE: AFTER LOADING DESCRIPTION FILE, E2 NEED TO BE RESTARTED AND ONCE THE E2 IS BACK TO OPERATION, CHECK THE UPLOADED DESCRIPTION FILE AS PER THE ABOVE SECTION.

- Warning screen will appear, select Yes
- E2 is disconnected and rebooting, select OK

UltraSite32

	Yes	No
UltraSite32	2	
UltraSite32	2	
Discon	nected from site.	

• Now, the E2 is loaded with latest description file and ready to load E2 license key.

2.6 How to Enter E2 License Key

• From the E2 device or UltraSite Terminal Mode

Right click E2 name & Select Terminal mode

🙆 Brideton		
÷ 🔳 📭	Summan/	
	Unit Logs	>
	Contrary Lange and Chatistics	
	System Logs and Statistics	
	Device Setup	>
	Edit User Access List	
	Backup	
	Validate Setpoints	
	Restore	
	Get Logs	
	Get Unit Inventory	
	Add New Application	
	Upload Description File	
	Service Actions	>
	Terminal Mode	
	View Unit Alarms	

• Select Terminal mode and then select Login/Out



• In E2, Enter Emerson provided Username and Password



- Select Menu [Press : F9]
- Select System Configuration [7]



• Select Licensing [9]



- 8. Global Data
- 9. Licensing



NOTE: PREVENT E2 OR CORELINK FROM BEING DROPPED , KNOCKED OR SHAKEN , AS THIS MAY CAUSE IRREPARABLE DAMAGE

• Select Add Feature [F1]

-Je UltraSite: Revision 5.07F02 - [Terminal Mode - E2	Unit01]	
■ File Tree Logs System View Window	Help	
	E ?	
96-19-29 🔹 🥐 📧	RX	-300 Unit CENSE REP
		GENSE NEI
Licensed Features- 06/19/2020 -	00:54:40 -	Rev: 4.0
For controller model type: RX-30 Feature	00 Maximum	In-Use
Time Schedule	64	7
Analog Combiner	128	2
Standard Circuit	48	1
Log Group	32	1
Area Controller	20	1
CoreLink	20	1
Digital Combiner	128	5
Heat/Cool Control	16	5
Holiday Schedule	64	5
HVAC Simulation	16	5
Analog Sensor Ctrl	64	5
Power Monitoring	16	5
Digital Sensor Ctrl	64	5
Conversion Cell	128	5
Pulse Accumulation	16	5
Digital Import Point	64	5
Analog Import Point	64	5
Rack Simulation	4	0
L <u>ines 1 to 22 of</u> 97		
F1: ADD FEATURE		

Enter License key (Send E2's MAC address to Emerson to get License key) •



NOTE: SEND E2'S MAC ADDRESS TO EMERSON TO GET LICENSE KEY. CONTACT HUSSMANN ENGINEERING FOR DETAILS

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3. How to add additional CoreLink to E2

- From the E2 device or UltraSite Terminal Mode add controllers in E2
- Select Menu [F9]
- In main menu F9 go to System Configuration [7]



• Go to Network Setup [7]



NOTE: DURING INTEGRATION, IF THE USER WANTS TO SAVE THE CHANGES AND REACH HOME SCREEN, USER MAY SELECT HOME BUTTON OR F8. IF THE USER WANTS TO SAVE THE CHANGES AND JUST WANTS TO MOVE BACKWARD, USER MAY USE • Move to Connected I/O Boards & Controllers [2]

	NETWORK SETUP
1.	Network Summary
2.	Connected I/O Boards & Controllers
3.	Router Setup
4.	Controller Associations

• Select Next Tab [F2] or Ctrl-X (Ex:Ctrl4) until Third Party [C4] is highlighted





CAUTION: FOR SAFETY PURPOSE, ALWAYS MAKE SURE THAT THE DEVICE IS SWITCHED OFF BEFORE TOUCHING ELECTRICAL CONNECTIONS

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- Enter the number of CoreLink controllers being addressed (Quantity = number of controllers)
- Select Home [F8] to save changes
- Now the E2 is ready for the CoreLink integration

4. How to address CoreLink on E2 device

- From the E2 device or UltraSite Terminal Mode
- Select Menu [F9] & then, System Configuration [7]



• Network Setup [7]



9. Licensing

• Network Summary [1]



- in Network Summary, E2 unit name, Type, Network Address, Revision, and Status is available to be added.
- From Network Summary screen, select one CoreLink controller and Select Commission [F4]

ex-28-17		HX-300 R Hetwork S	nît 1 unnary	-	13:01:5
Kame E2 Unit93 CoreLink092 CoreLink092 CoreLink093 CoreLink094 Coretink095	Type RX300-Rafrig Corelink Eorelink Eorelink Eorelink Eorelink	Hetwork Address Ethernet: MODBUS-1: MODBUS-1: MODBUS-1: MODBUS-1: MODBUS-1:	Reu 1 4,000F02 8 9,80 9 8,00 8 8,00 8 8,00 8 9,00 8 9,00	Status This Controller Ho Port Ho Port Ho Port Ho Port Ho Port	HDUISORY SUMMARY Fails W Alarms W Notices 2 HETWOAK OVERUIEW HODAUS-1 E2 United Rev 2.48F02 English-US
FT: DELETE	RCRD F2: 516	ITUS FO: HET !	STATUS	F4: CONVISSION	FS: SETUP

- Select MODBUS network device
- Enter designated MODBUS address for CoreLink controller and press Enter
- Select Back [F10], confirm controller is online
- Repeat steps 1 through 5 for all CoreLink controllers



NOTE: FOR NAVIGATION, PRESS F2 FOR NEXT TAB

• in Select Network Type, select MODBUS network

83-28-17 = 1	10	RX-300 U Network 5	nit 1 unnary	<u> </u>	13:02:13	0
Name E2 UnitU1 CorelinEUU1 CorelinE003 CorelinE003 CorelinE004 CorelinE005	lype RX300-Refrig Carelink Carelink Carelink Carelink Carelink	Botuacki Addease Select Hetwork 1- DOBUS-1 2: HooBUS-1: HooBUS-1:	Rey 1 4.08F62 8 5.00 8 5.00 8 5.00 8 5.00 8 5.00	Status This Controller Ho Port Ho Port Ho Port Ho Port No Port	ADUISORV SUHHARY Fails & Alarms D Notices 2 HETWORK DUERVIEW HODDUS-1 E2 Unit#1 Rev 4_0RF#2 Englisk-US	
Press-neou u	unber av scroll	to selection			F5: CAHCEL	

• Enter designated MODBUS address for CoreLink controller and press Enter

-28-17 + 17 10	RX-300 Network S	Unit 1 Summary	13:02:13	0
Name Type 2 Unit#1 RX300-Refri GoreLinkUUT GoreLink GoreLink002 CoreLink GoreLink003 CoreLink GoreLink005 CoreLink GoreLink005 CoreLink	Ratwork Oddroce Select Hetwork 1. [monus-1] 2. monus-1 H00BUS-1:	Rev Status 1 4.08f02 This Controller 0 8.00 Ho Port 0 8.00 Ho Port	ADDISBRY SUMMARY Fails 0 Alarns 0 Motices 2 HETWORK OVERVIEW HOODUS-1 E2 Unite1 Ney 4,08F02 English-US	
ress menu number ur scrol	l to selection	1	F5: CANCEL	

NOTE: DURING E2 NAVIGATION, PRESS MENU NUMBER OR SCROLL TO SELECTION

• Enter designated MODBUS address for CoreLink controller and press Enter



• Enter designated MODBUS address (eg:1) for CoreLink controller and press Enter

			RX-300 Un Network Su	it 1 mnary		13:03:15	
me	Туре	Matenate	Unknown D	evice Ø1 Rev	Status	ADVISORY SUMMARY Fails 0	0
Unit01 eLink001 eLink002 eLi eLi	RX300-Refri CoreLink CoreLink			4.08F02 0.00 0.00	This Controller No Port No Port	- Alarns 0 Notices 2 NETWORK OVERVIEW HODBUS-1	
ech	Setting Phys Specify Phys	ical Address	for: Un Of Contro	ıknown Devi oller	ce 01		45
	MODBUS Devic	ss: 1 Address is	set			5.45	1 2 FREV 0
						E2 Unit01 Rev 4.08F02	PAGE
						English-US	
						EE deuner	

3-28-17 💿 💼		RX-300 U Network S	nit 1 Sunnary		13:03:36 #BLARM#	0
Name 22 Beitor Borelink 881 Corelink 888 Corelink 888 Corelink 888 Corelink 885	Type RA3BB-Refrig CoreLink CoreLink CoreLink CoreLink	Network Address Ethernet: HODBUS-1: HODBUS-1: HODBUS-1: HODBUS-1: HODBUS-1:	Rev 1 4.007 0 00 0 0.00 0 0.00 0 0.00 0 0.00	Status Daline no Port No Port No Port No Port No Port	ADUISORV SUHMARV Fails D Alarms 1 Notices 5 NETWORK OVERVIEV NODBUS-1 E2 Unit81 Rev 4.08FM2 English-US	
F1: DELETE	RCRD F2: STI	ATUS F3: NET	STATUS .	F4: COMMISSION	F5: SETUP	

• Select Back [F10], to confirm specific CoreLink is online

• Repeat the steps for Making all the CoreLink Online

-28-17 = 👘	(F1)	RX-300 U Network S	nit 1 ummary	2	13:05:03 ALARN=	0
Hane 2 Unit01 oreLink001 oreLink002 oreLink004 oreLink004	Type RX300-Refrig Corelink Corelink Corelink Corelink Corelink	Network Address HobBUS-1: HODBUS-1: HODBUS-1: HODBUS-1: HODBUS-1:	Rev 1 4.08F02 1 8.08 3 0.08 4 9.08 5 0.08 6 9.90	Status This Controller Dnline Online Online Online Online	ADUISORV SUHMARY Fails 0 Alarms 3 Notices 7 NETWORK OVERVIEW HODBUS-1 E2 Unit01 Rev 4.08F02 English-US	
F1: DELETE I	RCRD F2: STA	TUS F3: NET	STATUS	F4: COMMISSION	F5: SETUP	

• Now the integration of CoreLink with E2 is completed.

• if we need to delete any CoreLink controllers from the E2, select the controller and Press F1 to delete the CoreLink

3-28-17 - 🦷	9	RX-300 U Network S	init 1 Summary	1	13:05:03 =ALARH=	
Name E2 Unit01 Goretink001 Goretink002 Goretink003 Goretink005	Type RX300-Refrig Corelink Corelink Eorelink Forelink Forelink	Network Address Ethernet: HODBUS-1: HODBUS-1: HODBUS-1: HODBUS-1: HODBUS-1:	Rev 1 4.09F 92 1 0.08 2 0.00 4 0.00 5 0.00 6 0.00	Status Inis Controller Online Online Doline	ADUISORV SUMMARY Fails Alarms 2 Notices 7 Network overview MODBUS-1 E2 Unit01 Rev 4.08F02 English-US	
F1: DELETE R	CRD F2: STO	TUS F3: NET	STATUS	F4: CONNISSION	FS: SETUP	

Note: If deleting the CoreLink from the Connected I/O and Controllers before going to the Network Summary, the E2 will delete the newest/highest node address CoreLink rather than the device chosen. In other words, if you have (5) CoreLink devices currently programmed in the E2 and you only need 4, but want to delete the 2nd addressed controller, you must start from the network summary and delete the record of the # 2 CoreLink. Otherwise, simply going to the ECT tab and changing the quantity from 5 to 4 will delete CoreLink # 5.

5. Initial Setting confirmation for E2-CoreLink

5.1. C1 General

• Once logged in, Press F5 to select the SETUP

11-05-19 Use Ctrl-X to Select	CX Tabs	R	X-300 Unit 1 SETUP		-	9:23:57 *ALARN*
C1: General C2: C6: Inputs-NET C7:	Outputs-in Defrost	C3: Outputs C8: Fan	-out C4: AlarmS C9: Overri	etpts C5: des C0:	AntiSweat MORE	ADVISORY SUMMARY Fails 0
General Name Long Name Device Address Route Desc File Rev OFgSyn Action Initial Sync Zones VEAR HONTH nov	Corr Ualue : <u>Corelin</u> : : : HODBUS : 4.0 : Send Do : No :	Llink: CoreLi Ik981 1 1 2 2 2 2 3 3 3 2 2 2 2 2 2 2 2 2 2	nk001 E2 :			Alarms 2 Notices 9 NETWORK OVERVIEW MODBUS-1
HOUR MINUTE	Device Ma	IWE				E2 Unit01 Rev 4.09F01 English-US
F1: PREV TAB	F2: NEXT	TAB	F3: EDIT	F4:	STATUS	F5: CANCEL

- Navigate to C1 General tab and check for correct device address, Description file Rev, (4.09F01 or above), change CfgSyn Action: to "Send Device cfg to E2".
- Press F1 for Prev Tab, F2 for Next Tab , & F3 for edit, F4 for Status & F5 for Cancel.

5.2 Status page, F4: Status page

Check the status page of E2 by pressing F4: status page

Controller Name					App Ve	rsion	2.6. 0	ADVISORY SUMMARY
CoreLink0	01		System Sta	atus	14400			Fails 0
_CASE STATUS Control Temp Saturation Temp Suction PSIG	25.1 -40. 327	0 1 'F 7	CTRL Mode CTRL Status Def Countdo	C 5 F Dwn	ontinuous VMPD	1310		Notices 9
Dual Tenp DI Dual Tenp DI Dual Tenp Network Clean Sw Door Sw Defrost Start Defrost Term	OF OF OF OF OF	FFFFFF	_OUTPUTS Refrig 1 Refrig 2 Refrig 3 Evap Fan Cond Fan	0H 0N 0N 0N 0N	Defrost Light Alarm Curtain	OFF ON OFF ON		HODBUS-1
-ZONE 1		ZON	2		ZONE 3_			
SUPERHEAT SH Setpoint	65.50 8.00	SUPEI SH SI	RHEAT etpoint	65.50 8.00	SUPERHEA SH Setpo	T int	65-50 8-00	+
Valve % Coil Out	100	Valva Coil	e% Out	100 25.20	Valve % Coil Out		100 25.20	E2 Unit01
Return Temp Setpoint Discharge Temp	3277 32.00 25.20	Retu Setpo Disc	n Temp Dint Darge Temp	3277 32.00 25.10	Return T Setpoint Discharg	emp e Temp	3277 32.00 25.20	Rev 4.09F01
								English-US
ress enter for a	list of	actu	ins.	F3: CIR	CUITS			F5: SETUP

NOTE: BEFORE ENABLING COMMUNICATION TO CONTROLLERS CONFIRM, **CFGSYN ACTION** SET AS "SEND DEVICE CFG TO E2" AND **INITIAL SYNC** SET AS "NO" IN EACH CORELINK APPLICATION. FAILURE TO DO SO CAN RESULT IN LOST PROGRAMMING!

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- Navigate to F4: Status page to check for the following list of parameters of E2 and verify the following
 - ✓ App version
 - ✓ Refrigerant type
 - ✓ CTRL Mode
 - ✓ CTRL status
 - ✓ Control Temp data continuously updated as in the WebUI,
 - ✓ Output status
 - ✓ SH setpoint for Zone 1, Zone 2 & Zone 3 are matching
 - ✓ Other sensor data

IUSSMAnn s	itatus Config - Al	arms Commands I/O -	System Wire D	liagram Analysis			admin
ID5SM	Set	point: Distributed	Ca	ase Temp	Date: December 8, 2017	Time: 8:25:45 PM	
			30	35	Status: REFR	Defrost Countdowr	1:55
			25	40	Control Mode: Continuous	Alarm: oĸ	
			20	33.5 45 A	BAS Status: Offine		
	Zone 1	Zone 2	Zone 3	Refrigeration	1 0	Defrost-	1 07
Setpoint	34 °F	34 °F	34 °F	i tonigonation.	2 On 3 Do	Donoor.	2 Off
)ischarge Air	35.2 °F	30.2 °F	35.2 °F	Anti-sweat	On Da	Dimming	no c
leturn Air	16.9 °F	Error	Error	Lights	On	Dual-Temp Mode	ОЯ
iH Setpoint	8 °F	8 °F	8 °F	Evan Fan	Dn	Door Switch	Off
/alve Position	100 %	100 %	100 %	Cond Ean	On	Night Curtain	Open
Coil Out Temp	34.5 °F	34.5 °F	34.5 °F	Condition.	-	night Guitan.	
				Refrigerant	R449A	Saturation	11.2
				Dew Point	-0.1 °F	Pressure 1	34.6 P
			SI	uperheat			
High Alarm 25°		20°	15°	10°	5°	0°	Low Alam
Coil 1	23.4 °F					<u>1</u>	ОК
Coil 2	23.4 °F						ОК

NOTE: CHECK ALL THE PARAMETERS ARE GETTING UPDATED IN THE E2 ARE NOT. IF NOT CHECK THE POLARITY OF CONNECTION, CORRECT WIRING OR CORRECT MODBUS PARAMETERS

5.3 System Data : CO: More , System Data

To change Temperature, Pressure and Light units, Refrigerant & Case Type, use this tab

11-05-19 💿 Use Ctrl-X to Select CX Tabs	RX-300 Unit 1	10:19:09 *ALARM*
C1: General C2: Outputs-i C6: Inputs-NET C7: Defrost C0	C3: Dutputs-out C4: AlarmSetpts C5: AntiSwea C8: Fan C9: Overrides C0: MORE reLink: CoreLink001	t ADVISORY SUMMARY Fails 0 Alarms 2
System Value TEMP_UNITS : Fahre PRESS_UNITS : PSI REFRIG_TYPE : R4499A LIGHT_UNITS : FTC CASE_TYPE : Rem S	nheit	Notices 9 NETWORK OVERVIEW MODBUS-1 E2 Unit01 Rev 4.09F01
Scroll using West/Preu keus	i E/0)/E/1) /Hisporaph Oplu)	English-US
F1: PREU TAB	KT TAB F3: EDIT F4: LOOK UP	F5: CANCEL

Navigate to CO: More and then to System Data to check 5 Read/Write description of temp, pressure & Refrigerant and case type as below. Check for correct data. If not press F3 to edit parameter list

E2 Parameter	Description	Range
TEMP_UNITS	Temperature units	0, "Celsius", 1, "Fahrenheit"
PRESS_UNITS	Pressure units	0, "PSI", 1, "BAR"
		1, "R22", 2, "407C", 3, "R134A", 4, "R410A", 5, "404A", 6, "507C", 7, "C02", 8, "R407F", 10, "R407F", 11, "R449A", 12, "P513A" 13
REFRIG TYPE	GAS Type Selection	"R450A", 14, "R438A"
LIGHT_UNITS	Light measurement units	0, "FTC", 1, "LUX"
	-	0, "Rem Std", 1, "Rem Dist", 2, "Self Cont", 3,
CASE_TYPE	Case Type Selection	"Micro Dist"

5.4 Alarm setpoints, C4: AlarmSetpts

Navigate to alarm setpoints to change the Min and Max setpoints of various alarms

10-1 Use	6-18 Ctrl-X to Se	lect	CX T	abs		RX-	300 Un SETUP	it 1		3		13:18:03 *ALARM*
C1: C6:	General Inputs-NET	C2: C7:	Outpu Defro	its-in ist	C3: C8:	Outputs-o Fan	ut 64:	AlarmSetpts Overrides	C5: C0:	AntiSwea MORE	t ADVISOR Fails	Y SUMMARY Ø
Ser	AlarmSetpts AlarmOpt HiTemp LoTemp AlarmDelay Min_SHAlarm Min_SHAlarm Min_SHAlarm Min_SHAlarm Hax_SHAlarm Hax_SHAlarm SHAlarmOly3 SHAlarmOly3	11 12 13 11 12 13		Corr Value Relation 10.1 10.3 10.3 30.0 300.1 30	000 000 000 000 000 000 000 000 000 00	m peting (absolut	¢/B¤lative			Alarns Notice NETWORN HODBUS E2 Unit Rev 4.1 English	s 32 : overview 1 :01 :01 i0F01 i-US
	1: PREV TAB		Fa	2: NEXT	TAB		F3: ED	іт 🔶	F4:	LOOK UP	F5:	CANCEL

Navigate to C4: AlrmSetpts. check for Range as per the below table

E2 Paramet	ter	CoreLink Parameter	Description	Range
			In an absolute alarm, the alarm parameter is the	
			threshold for the alarm. In a relative alarm, the	
Al		Alexan Oatlan	alarm setpoint is added to the parameters, and its	0, "Relative", 1,
AlarmOpt		Alarm Option	sum becomes the alarm threshold.	"Absolute"
HiTemp		High Temp	Highest temperature the case may reach before	(0 to 99) °F
memp		nigh remp	Lowest temperature the case may reach before	(0 (0 55)) 1
LoTemp		Low Temp	the alarm starts.	(-40 to 99) °F
· · · ·			Alarm Delay: Time delay before the alarm	
AlarmDelay		Alarm Delay	activated if there is a problem.	(0-255)min
			Temperature margin from alarm setpoint in which	
			the temperature must dropbefore the alarm	
AlarmHys		Alarm Hysteresis	shuts off.	(0 to 20)
			Lowest superheat temperature possible before	
			the alarm timer starts for coil one. After timer	
			delay, valve is closed 0% to protect compressor.	
			setpoint the timer resets and the valve position	
			will return to minimum position or current PID	
Min SHAlarm	1	Min SH Alarm 1	calculated position.	(-25 to 50) °F
			Lowest superheat temperature possible before	, ,
			the alarm timer starts for coil two. After timer	
			delay, valve is closed 0% to protect compressor.	
			Anytime superheat goes above min SH alarm	
			setpoint, the timer resets and the valve position	
			will return to minimum position or current PID	
Min_SHAlarm	2	Min SH Alarm 2	calculated position.	(-25 to 50) °F
			Lowest superheat temperature possible before	
			the alarm timer starts for coil three. After timer	
			delay, valve is closed 0% to protect compressor.	
			setpoint the timer resets and the valve position	
			will return to minimum position or current PID	
Min_SHAlarm	3	Min SH Alarm 3	calculated position.	(-25 to 50) °F
			Highest superheat temperature possible before	
			the alarm starts for coil one. After timer delay,	
			valve is opened 100%. Anytime superheat goes	
			below max SH alarm setpoint, the timer resets	
			and the valve position will return to current PID	(=
Max_SHAlarm	1	Max SH Alarm 1	calculated position.	(-5 to 90) "F
			Highest superheat temperature possible before	
			the alarm starts for coll two. After timer delay,	
			below max SH alarm setnoint the timer resets	
			and the valve position will return to current PID	
Max_SHAlarm	12	Max SH Alarm 2	calculated position.	(-5 to 90) °F
			Highest superheat temperature possible before	
			the alarm starts for coil three. After timer delay,	
			valve is opened 100%. Anytime superheat goes	
			below max SH alarm setpoint, the timer resets	
			and the valve position will return to current PID	(=
Max_SHAlarm	13	Max SH Alarm 3	calculated position.	(-5 to 90) ⁻ F
SHAlarmdut		SH Alarm Delay 1	Delay in seconds before the superheat alarm	(0 to 300) sec
SHAlathidiyi	•	Sit Alariti Delay 1	Delay in seconds before the superheat alarm	(0 10 300) sec
SHAlarmdlv2	2	SH Alarm Delay 2	becomes active for coil two.	(0 to 300) sec
		· · · · · · · · ·	Delay in seconds before the superheat alarm	,
SHAlarmdly3	3	SH Alarm Delay 3	becomes active for coil three.	(0 to 300) sec

5.5 Sensor connection, C2: Outputs-in

Ctrl-X to Sel	ect CX Tabs		SETUP		*ALAR
: General 🛛 🚺	2: Outputs-i	n C3: Outputs	-out C4: AlarmS	etpts C5: AntiSweat	ADVISORY SUMMARY
: Inputs-NET (7: Defrost	C8: Fan	C9: Overri	des CØ: MORE	Fails Ø
	Co	oreLink: CoreLi	nk 001		Alarms 2
Outputs-in	Area	Ctrl Applica	tion Input		NUCICES
DISCHARGETEM	P1 :	-	Contraction of the second		and the second sec
DISCHARGETEM	P2 :		12		NETWORK OVERVIEW
DISCHARGETEM	P3 :	1Ê)	13		MODBUS-1
COILOUT1	(C)	12°	13		
COILOUT2	13 C	(É)	12		
COILOUT3	16 C	10 M	1Ê		
PRESSURE1	13 C	2 H	1Ê		
PRESSURE2	(É)	(† 1997) 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	11 E C		
PRESSURE3					
DEFRTERMTEMP	1 🔅	(Ê) -	(Ê)		
DEFRTERMTEMP	2 :	i de la companya de l	1Ê		
DEFRTERMTEMP	3 :	10 M	1Ê		
RETURNTEMP1	1 (C)	8	12		the second second
RETURNTEMP2	18) -	(È)	1Ê		E2 Unit01
RETURNTEMP3	18) -	1 C	13		
FRAMETEMP	8	1	13		Rev 4.09F01
DOORDI	- 9 -	- 13			
					English-US
ter Controller	The discha	irge 1 temperat	ure		
F1: PREU TAB	F2: NE	XT TAB	E3. EDIT	F4: 100K UP	F5: CANCEL

Sheet#2

1-05-19 🔟 se Ctrl-X to Select CX Tabs			RX-300 Unit 1 SETUP			9:26:36 *ALARM*	
1: General 🛛 🖸	2: Outputs-in	C3: Outp	uts-out C4:	AlarmSetpts	C5: AntiSweat	ADVISORY SUMMARY	
6: Inputs-NET C	7: Defrost	C8: Fan	C9:	Overrides	CØ: MORE	Fails Ø	
	Cor	eLink: Com	eLink001			Alarms 2	
Outputs-in	Area (trl App]	ication	Input		MUCICES	
DOORDI			1	1.			
DUAL TEMPD I	8		12			NETWORK OVERVIEW	
ENABLEDI	CÊ.	÷.	12			MODBUS-1	
MOTIONDI	÷.	C.	12				
REFRIGDISABL	EDI :	(2)	123				
CLEANDI	ŝ.	÷.	12				
DEFROSTINITD	1	÷.	12				
DEFROSTTERMD	100 :	÷	(Ť.)				
COMP 1DCH TEMP	AI :	4:	÷.				
COMP2DCHTEMP	AI :	÷.	12				
COMP3DCHTEMP	AI :	÷	12				
COMP1DCHPRES	AI :	÷.	12				
COMP2DCHPRES	AI :	2	12				
COMP3DCHPRES	AI :	÷.	12			E2 Unit01	
COMP1PRESSAF	EDI :	÷	12				
COMP2PRESSAF	EDI :	1	1			Rev 4.09F01	
COMP3PRESSAF	EDI :	- 65	(\$				
						English-US	
inter Controller	The door D	1					
F1: PREU TAB	F2: NEX	T TAB	F3: E0	D1T	F4: LOOK UP	F5: CANCEL	

• Navigate to C2: Outputs In and check sensor connectivity & real time data update.

E2 Parameter	Description
COILOUT1	Coil out 1 temperature
COILOUT2	Coil out 2 temperature
COILOUT3	Coil out 3 temperature
DEFRTERMTEMP1	Defrost termination 1 temperature
DISCHARGETEMP1	Discharge 1 temperature
DISCHARGETEMP2	Discharge 2 temperature
DISCHARGETEMP3	Discharge 3 temperature
FRAMETEMP	Frame temperature
PRESSURE1	Pressure 1
RETURNTEMP1	Return 1 temperature
REFRIGDISABLEDI	Refrigeration Disable Input
RETURNTEMP2	Return 2 temperature
RETURNTEMP3	Return 3 temperature
CLEANDI	Clean switch digital input
DEFROSTINITDI	Defrost init DI
DEFROSTTERMDIOU	Defrost terminate digital input
DOORDI	Door digital input
DUALTEMPDI	Dual temperature setpoint digital input
ENABLEDI	Shut down diital input
MOTIONDI	Light motion digital input
COMP1DCHTEMPAI	
COMP2DCHTEMPAI	
COMP3DCHTEMPAI	
COMP1DCHPRESAI	
COMP2DCHPRESAI	
COMP3DCHPRESAI	
COMP1PRESSAFEDI	
COMP2PRESSAFEDI	
COMP3PRESSAFEDI	
CONDINLETTEMP	
CONDOUTLETTEMP	
HACCP	
SATURATIONTEMP	
CONDENSERFANOUT	
NIGHTCURTAINDO	
PRESSURE2	
PRESSURE3	
DEFRTERMTEMP2	
DEFRTERMTEMP3	

5.6 Refrigeration configuration, CO: More : Refrigeration

• Navigate to CO: More for refrigeration parameters to verify Setpoints, Dead Band, and control mode Refrigeration E2 Tab details

11-05-19 RX-300 Unit 1	12:43:16
C1: General C2: Outputs-in C3: Outputs-out C4: AlarmSetpts C5: A	ntiSweat ANUISORY SUMMARY
C6: Inputs-NET C7: Defrost C8: Fan C9: Overrides C0: M	DRE Fails A
CoreLink: CoreLink001	Alarms 3 Notices 12
Refrig Value	
SETPOINT_1 : 32.00	
SETPOINT_2 : 32.00	NETWORK OVERVIEW
SETPOINT_3 : 32.00	MODBUS-1
ACTIVESETPT_1 : : :	Y 104000 Y
ACTIVESETPT_2 : : :	
ACTIVESETPT_3 : : :	
DB : 2.90	
TempPB : 20.00	
TempRS : Ø	
Control_Mode : Continuous	
TempINC : 150.00	
TempDER : Ø	
TempDDER : Ø	and the second
DrAct : No	E2 Unit01
DrRefOn : 19	
DrAlrm : 120	Rev 4.09F01
CswAct : No	
	English-US
Enter -40.00 to 90.00 DF Case Temp Setpoint 1	
F1: PREV TAB F2: NEXT TAB F3: EDIT F4: S	TATUS F5: CANCEL

Page #2

11-05-19 🔤 Use Ctrl-X to Sele	ct CX Tabs	RX-3	00 Unit 1 SETUP	NAMES	12:43:35 *ALABN*
C1: General C C6: Inputs-NET C	2: Outputs-in 7: Defrost	C3: Outputs-out C8: Fan	C4: AlarmSetpts C9: Overrides	5 C5: AntiSweat C0: MORE	ADVISORY SUMMARY Fails 0
Refrig CswAct CswRefOn DT Offset CTMode Weight1 Weight2 Weight3 ControlMix DoorMode CleanMode	Cor Value : No : : Indivi : : : : : : : : : : : : : : : : : :	eLink: CoreLinkØ Ø Ø dual Ø Ø	91		Alarms 3 Notices 12 NETWORK OVERVIEW MODBUS-1
Scroll using Next	/Prev keus	Clean Switch Act	tive: Yes(1) -	No (9)	E2 Unit01 Rev 4.09F01 English-US
F1: PREV TAB	F2: NEXT	T TAB F3	B: EDIT	F4: LOOK UP	F5: CANCEL

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CoreLink[™] Case Controller

• Refrigeration setpoints of E2 parameter versus CoreLink parameters list to be verified. Check the following 28 Read/Write & 3 Write parameters.

E2 Parameter	CoreLink Parameter	Description	Range
SETPOINT1	Temp Setpoint 1	Case Temp Setpoint 1	(-40 to 90) °F
DB	Deadband	Deadband	(1 to 45) °F
SETPOINT2	Temp Setpoint 2	Case Temp Setpoint 2	(-40 to 90) °F
			0, "Standard", 1,
			"Continuous", 2,
			"Suction", 3, "SH
Control_Mode	Control Mode	Control Type Strategy	Only"
SETPOINT3	Temp Setpoint 3	Case Temp Setpoint 3	(-40 to 90) °F
TempPB	Р	Proportional Band	(1 to 30) °F
TempRS	Band Offset	Band Offset	(-50 to 50) °F
TempINC	I	Integral (0 to 255 sec)	(0 to 255 sec)
TempDER	D	Derivative Sampling Time (0 to 255 sec)	(0 to 255 sec)
TempDDER	Derivative Time	Derivative Time	(0 to 255 sec)
DrAct	Door Switch Active	Door Switch Active	1, "Yes", 0, "No"
DrRefOn	Door Alarm Timer	Door Refrigeration Timer	(0 to 120)x 10 sec
DrAlrm	Door Alarm Delay	Door Alarm Active Delay	(0 to 120)x 10 sec
CswAct	Clean Switch Active	Clean Switch Active	1, "Yes", 0, "No"
CswRefOn	Clean Alarm Delay	Clean Switch-Refrigeration ON Delay	(0 to 360)x 10 sec
			4, "Individual",
			3, "Mix", 2,
			"Average", 1,
			"Minimum", 0,
CTMode	Control Temp Mode	Control Mode	"Maximum"
Weight1	Weight1	Discharge 1 weight, (0~100)	0-100%
Weight2	Weight2	Discharge 2 weight, (0~100)	0-100%
Weight3	Weight3	Discharge 3 weight, (0~100)	0-100%
			2, "Coil3", 1,
			"Coil2", 0,
ControlMix	Control Mix	Control Mix	"Coil1"
			0, "Alarm", 1,
DoorMode	Door Mode	Door Mode	"Shutdown"
			1, "BackOn", 0,
CleanMode	Clean Mode	Clean Mode	"Normal"

5.7 Defrost configuration setting, C7: Defrost

• Navigate to C7 for the Defrost SETUP

11-05-19 🔟 Use Ctrl-X to Select CX Tabs	RX-300 Se	Unit 1 TUP	LU .	9:58:59
C1: General C2: Outputs-in C6: Inputs-NET C7: Defrost	C3: Outputs-out C C8: Fan C	:4: AlarmSetpts :9: Overrides	C5: AntiSweat C0: MORE	ADVISORY SUMMARY
Cor Defrost Value DefrType : Electr DefrDuration : 50. DefrDelay : TermTempSelect : Coil 0 TermTempSelont : 40. DripTime : HaxWait : DefrFreq : 24. TermType : Digita DefrHim : 20. DefrHime : Interv	eLink: CoreLink001 ic 00 0 0 0 0 0 0 0 0 0 0 0 0			Alarms 2 Notices 9 NETWORK OVERVIEW HODBUS-1
DefrInterval : DEF COUNTDOWN :	24	:		E2 Unit01 Rev 4.09F01 English-US
F1: PREU TAB F2: NEX	TAB F3:		F4: LOOK UP	F5: CANCEL

• Verify the E2 settings for Defrost Parameters, Defrost Durations, Input Selection, and Defrost Mode of E2 parameter versus CoreLink parameters list to be verified.

E2 Parameter	CoreLink Parameter	Description	Range
			3, "Elec Def - Indiv Coils", 2, "Modular
		Electric mode for cases with installed electric	Defrost", 1, "Hot
		heaters. Hot gas mode for cases with hot gas	Gas", 0, "Electric",
DefrType	Defrost Mode	defrosts system.	4, "Off Time"
		Maximum time in minutes for active defrost	
		mode. Prevents continuous defrost due to faulty	
DefrDuration	Max Defrost Duration	termination temperature sensor failing to	(1 to 60) min
Demburation	Wax Demost Duration	After switching from refrigeration to defrect the	(1 to 00) min
DefrDelay	Defrost Delay	delay until defrost starts.	(0 to 30) min
,		Use analog input coil out [BLUE] temperature	1. "Coil Out
	Termination Temperature	sensor or analog input defrost [ORANGE]	Temp", 0, "Defr
TermTempSelect	Sensor	temperature termination sensor.	Term Temp"
		Maximum: Uses the highest value between all	
		available/enabled coil-out temperature sensors	
		or defrost-termination sensors.	
		Minimum: Uses the lowest value between all	
		available/enabled coil-out temperature sensors	
		or defrost-termination sensors.	
		Average: Uses the average value between all	
		available/enabled coil-out temperature sensors	2, "Min", 1,
TermTempComb	Temperature Combination	or defrost-termination sensors.	"Max", 0, "Avg"
TermSetpoint	Termination Temperature Setpoint	Temperature setpoint at which defrost ends.	(0 to 99) °F
DripTime	Drip Time	Amount of time after defrost for the coil to drip.	(0 to 30) min
		Refrigeration starts if in wait period and the end-	
		wait input is active. If no supervisory controller is	
		available (offline), the application ignores the	
		end wait-input and will not use it for the start	
MaxWait	Max Wait	refrigeration logic.	(1 to 60) min
DetrFreq	Detrost Interval	I ime between defrost cycles in hours.	(1 to 255) hours
TermType	Defrost Termination Mode	Use termination temperature sensor or digital/network input.	1, "Digital", 0, "Temp"
		Minimum time in minutes for active defrost	
		mode. Prevents early defrost termination due to	
DefrMin	Min Defrost Duration	faulty termination temperature sensor.	(1 to 40) min

5.7.1 How to Schedule A Defrost in connected CoreLink

Using E2 Standard Circuit

- Start with an E2 that has a Standard Circuit application added
- Setup Standard Circuit defrost schedule (tabs C5, C6)

06-24-20 Use Ctrl-X to :	Select CX Tabs	RX-S	300 Unit 1 SETUP	FULL	11:26:57
C1: General C6: Inputs	C2: C7: Outputs	C3: Setpoints C8: Alarms	C4: Defrost C9: Notices	C5: Defr Times C0: MORE	ADUISORY SUMMARY Fails D
Defrost Defrost Ty Pulsed De Punp Down Defr Dura Defrost De Drip Time Term Type Demand Dfu Defrost S	Circuits (Ualue ype : Electro frost : Ho Delay : 0: tion : 8: elay : 8: : 0: : 11HE r Enab : No tart % : 20	(Standard): STD 310 202 210 200 205 205	21RCUIT001		AIAPMS 0 Notices 0 METWORK OVERVIEW HODOUS-1
Seculi aslan	Next Prov Long	Select time of	different for IN	is circuit	E2 Unit01 Rev 4.09F04 English-US
F1: PREV TO	AB F2: NEX	T TAB	3: ED1T	F4: LOOK UP	F5: CANCEL

- Navigate to CoreLink (Press Menu, F8 and select 1)
- Enter Setup mode F5
- Navigate to Inputs-NET tab (C6)
- Point the CoreLink's DEFROSTINIT_NET parameter to E2: Standard Circuit name: Defrost

06-24-20 Use Ctrl-X to Select	CX Tabs	RX-300 Unit 1 SETUP	FULL	11:23:08
C1: General C2: C6: Outputs-in C7:	Refrig C3: AlarmDuts D8 Corelin	Outputs-out C4: AlarmSet; Inputs-HET C9: AntiSweal k: Corelink001	ots C5: Overrides C0: MORE	ADUISDRY SUMMARY Fails 0 Alarms 0
Inputs-HET AMBLIGHTNETWORK DEFROSTINIT_NET ENDWAITCHD DEWPOINTNETWORK DUALTEMPNETWORK PRESSURENETWORK REFRIGDISBLNET LIGHTCONTROLMET	Area Ctri U E2 Uniton: E2 Uniton: E DFF DFF DN E DFF DFF DFF DFF DFF DFF DN	Application Dutput STD CIRCUIT001= <mark>DEFRUST</mark>		NOTICES B HETWORK OVERVIEW Hodous-1
Sectors Date of Altraneous In	- Mount Marke	or D. Possister		E2 UnitØ1 Rev 4.09f84 English-US
F1: PREV TAB	F2: HEXT TAE	B F3: EDIT	FA: LOOK UP	F5: CANCEL

- Exit and Save changes to application
- CoreLink should be visible in Standard Circuit Outputs tab

6-24-20 🕜 📃 se Gtrl-X to Se	lect C	X Tabs	RX-:	SOU Unit 1 SETUP	3	FULL	11:27:2
1: General	C2:		C3: Setpoints	C4: Defrost	C5: Defr	Times	ADVISORY SUMMARY
6: Inputs	C7: 0	itputs	C8: Alarms	C9: Notices	CO: MORE		Fails 0
	C	ircuits	(Standard): STD (1RC017001			Alarms B
Outputs			Board	Point		1	Notices W
REFRIC SOLE	NOID		the second s	:	1		
DEFROST		: E2 U	nit01:CoreLink001	:DEFROSTINIT	HET L		NETWORK OVERVIEW
FAN							MODBUS-1
ALARH OUT			:				
CONTROL TEN	P	2			1.6		
CIRCUIT STA	TE.						
ACTIVE SET	T						
PEAK DEF TE	MP						
BYPASS STAT	E						
CASE ALM OU	T T						
DEFR ACTIVE							
ALG STATUS							
CASE ALM HI	SP						to at a fair
CASE ALI LO	SP 1						E2 Unit01
COMB ALM HI	SP						
COMP ALM LO	SP						Rev 4.09F84
-						1	
							10. 11 × 1. 110
							English-05
nfer Board/Opp	licati	on Re	Frigeration ontput	solenoid			
F1: PREU TAB		F2: N	EXT TAB	3: EOIT	FA: LOOK	UP	F5: CANCEL
		-				-	

• Repeat steps for other controllers

5.8 Super Heat setting, CO: More: Superheat:

• Navigate to CO: More and then to Super heat to check SH setpoints, Min valve Position, Max valve position, MOP & LOP

11-05-19 Use Ctrl-X to Select CX T	abs	RX-300 Unit 1 SETUP	1	10:10:56
C1: General C2: Outpu	uts-in C3: Outputs	-out C4: AlarmSetpts	C5: AntiSweat	ADVISORY SUMMARY
Co: Inputs-NET C7: Defri	CoreLink: CoreL	109: 00errides ink901	CO: NUKE	Fails 0 Alarms <mark>2</mark>
SH	Value			Notices 9
SH Setpoint1 :	8.00			
SH_Setpoint2 :	8.00			NETWORK OVERVIEW
SH Setpoint3 :	8.00			MODBUS-1
MAX OpPress1(T) :	90.00			C 10710 0 2 2
MAX OpPress2(T) :	90.00			
MAX OpPress3(T) :	90.00			
MIN UALVEPOST :	15.00			
MIN VALVEPOS2 :	15.00			
MIN VALVEPOS3 :	15.00			
MIN OpPresS1(T) :	-90.00			
MIN OpPress2(T) :	-98.88			
MIN OpPress3(T) :	-90.00			
MAX VALVEPOS1 :	100.00			
MAX VALVEPOS2 :	100.00			E2 Unit01
MAX VALVEPOS3 :	100.00			
				Rev 4, 89F 81
				1 4 M M
				English-US
				Engrish 05
Enter DDF Superheat E	VAP 1 setpoint			
F1: PREV TAB	2: NEXT TAB	F3: EDIT	F4: STATUS	F5: CANCEL

• Superheat Parameters verification:

Navigate to CO: More and then to Super heat setpoints to verify following 15R/W parameters

F2 Daramator	Carolink Daramatar	Description	Danga
EZ Parameter	CoreLink Parameter	Description	Range
SH_Setpoint1	SH1	Superheat EVAP 1 setpoint	(1 to 40) °F
SH_Setpoint2	SH2	Superheat EVAP 2 setpoint	(1 to 40) °F
SH_Setpoint3	SH3	Superheat EVAP 3 setpoint	(1 to 40) °F
MAX_OpPress1(T)	Max Operating Pressure 1	Max EVAP 1 Operating Pressure Threshold	(-90 to 90) °F
MAX_OpPress2(T)	Max Operating Pressure 2	Max EVAP 2 Operating Pressure Threshold	(-90 to 90) °F
MAX_OpPress3(T)	Max Operating Pressure 3	Max EVAP 3 Operating Pressure Threshold	(-90 to 90) °F
MIN_VALVEPOS1	Min valve Position 1	MIN Valve Pos for Section 1	(0-100) %
MIN_VALVEPOS2	Min Valve Position 2	MIN Valve Pos for Section 2	(0-100) %
MIN_VALVEPOS3	Min valve Position 3	MIN Valve Pos for Section 3	(0-100) %
MIN_OpPresS1(T)	Low Operating Pressure 1	Min EVAP 1 Operating Pressure Threshold	(-90 to 90) °F
MIN_OpPress2(T)	Low Operating Pressure 2	Min EVAP 2 Operating Pressure Threshold	(-90 to 90) °F
MIN_OpPress3(T)	Low Operating Pressure 3	Min EVAP 3 Operating Pressure Threshold	(-90 to 90) °F
MAX_VALVEPOS1	Max Valve Position 1	Max Valve Pos for Section 1	(0-100) %
MAX_VALVEPOS2	Max Valve Position 2	Max Valve Pos for Section 2	(0-100) %
MAX_VALVEPOS3	Max Valve Position 3	Max Valve Pos for Section 3	(0-100) %

5.9 Valve Parameter, C0: More : Valve



Sheet #2

11-05-19 Use Ctrl-X to Se	elect	CX Tabs		RX-3	IOO UI Setui	nit 1	in and the second se	10:07:08 *ALARM*
C1: General C6: Inputs-NET	C2:	Outputs-in Defrost	C3: C8:	Outputs-ou Fan	t C4: C9:	AlarmSetpts Overrides	C5: AntiSweat	ADVISORY SUMMARY
		Corr	Link	: CoreLink	901			Alarms 2 Notices 9
Valve RELAXSTEPS_	Ų2	Value :	1				4	and the subsection
RELAXSTEPS_ PEAKCURR_1	U3		1					NETWORK OVERVIEW MODBUS-1
PEAKCURR_2 PEAKCURR_3			2					
								E2 Unit01
								Rev 4.09F01
								English-US
Enter 0 to 500	Re	lax steps V	2 8-5	500			Lin and the second	
F1: PREV TAB		F2: NEXI	TAB	F	3: ED		F4: STATUS	F5: CANCEL

Valve Parameters setpoints of E2 parameter versus CoreLink

• Navigate to CO: More, then to Valve Parameters to verify 21 Read Write parameters as below

E2 Parameter	CoreLink	Description	Range
	Parameter		
VALVETYP1	Valve Type 1	Predefined valve selection for valve one. This will overwrite valve parameters with the controller defaults for the selected valve. Use manual for custom applications.	13, "SporlSEH(1)175", 12, "SporlSEH(1)100", 11, "SporlSEI50", 10, "SporlSER(1)GIK", 9, "SporlSEI30", 8, "SporlSEI1.5to20", 7, "SporlSEI.5to11", 6, "DanfETS-250/400", 5, "DanfETS-100", 4, "DanfETS-25/50", 3, "AlcoEX8-500st/s", 2, "AlcoEX7", 1, "AlcoEX4-5-6", 0, "Manual"
VALVETYP2	Valve Type 2	Predefined valve selection for valve two. This will overwrite valve parameters with the controller defaults for the selected valve. Use manual for custom applications.	13, "SporlSEH(I)175", 12, "SporlSEH(I)100", 11, "SporlSEISO", 10, "SporlSER(I)6JK", 9, "SporlSEI30", 8, "SporlSER1.5to20", 7, "SporlSEI.5to11", 6, "DanfET5-250/400", 5, "DanfET5-100", 4, "DanfET5-25/50", 3, "AlcoEX8-500st/s", 2, "AlcoEX7", 1, "AlcoEX4-5-6", 0, "Manual"
VALVETYP3	Valve Type 3	Predefined valve selection for valve three. This will overwrite valve parameters with the controller defaults for the selected valve. Use manual for custom applications.	13, "SportSEH(I)175", 12, "SportSEH(I)100", 11, "SportSEI50", 10, "SportSER(I)151K", 9, "SportSE10", 8, "SportSER1.5to20", 7, "SportSE1.5to11", 6, "DanfET5-250/400", 5, "DanfET5-100", 4, "DanfET5-25/50", 3, "AlcoEX8-500st/s", 2, "AlcoEX7", 1, "AlcoEX4-56", 0, "Manual"
MINSTEPS_V1	Min Steps 1	Below this number of steps, valve one has to be considered closed. In case of alarms or no consensus from the thermostat, the valve moves to this number of steps. This is the valve manufacturer recommended lower valve opening limit.	(0 to 50)x 10 Steps
MINSTEPS_V2	Min Steps 2	Below this number of steps, valve two has to be considered closed. In case of alarms or no consensus from the thermostat, the valve moves to this number of steps. This is the valve manufacturer recommended lower valve opening limit.	(0 to 50)x 10 Steps
MINSTEPS_V3	Min Steps 3	Below this number of steps, valve three has to be considered closed. In case of alarms or no consensus from the thermostat, the valve moves to this number of steps. This is the valve manufacturer recommended lower valve opening limit.	(0 to 50)x 10 Steps
MAXSTEPS_V1	Max Steps 1	Above this number of steps, valve one has to be considered open. This is the valve manufacturer recommended higher valve opening limit.	(0 to 800)x 10 steps
MAXSTEPS_V2	Max Steps 2	Above this number of steps, valve two has to be considered open. This is the valve manufacturer recommended higher valve opening limit.	(0 to 800)× 10 steps
MAXSTEPS_V3	Max Steps 3	Above this number of steps, valve three has to be considered open. This is the valve manufacturer recommended higher valve opening limit.	(0 to 800)x 10 steps
INITSTEPS_V1	Initial Step Regulation 1	When the valve regulation starts, valve one moves to this position. As soon as the valve is in position the compressor can start.	(0 to 800)x 10 steps
INITSTEPS_V2	Initial Step Regulation 2	When the valve regulation starts, valve two moves to this position. As soon as the valve is in position the compressor can start.	(0 to 800)x 10 steps
INITSTEPS_V3	Initial Step Regulation 3	When the valve regulation starts, valve three moves to this position. As soon as the valve is in position the compressor can start.	(0 to 800)× 10 steps
EXTRASTEPS_V1	Extra Step 1	When valve one is at its min number of step (From Min Steps), the valve adds this many extra close steps to recover possible lost steps. Valve Overrun.	(0 to 500) steps
EXTRASTEPS_V2	Extra Step 2	When valve two is at its min number of step (From Min Steps), the valve adds this many extra close steps to recover possible lost steps. Valve Overrun.	(0 to 500) steps
EXTRASTEPS_V3	Extra Step 3	When valve three is at its min number of step (From Min Steps), the valve adds this many extra close steps to recover possible lost steps. Valve Overrun.	(0 to 500) steps
RELAXSTEPS_V1	Relax Step 1	After any extra steps, if any, valve one is forced open for the number of steps specified here.	(0 to 500) steps
RELAXSTEPS_V2	Relax Step 2	After any extra steps, if any, valve two is forced open for the number of steps specified here.	(0 to 500) steps
RELAXSTEPS_V3	Relax Step 3	After any extra steps, if any, valve three is forced open for the number of steps specified here.	(0 to 500) steps
PEAKCURR_1			
DEAKCURD 2			
. LANCOAN_3	1	1	

5.10 System parameters, CO: More: Output – SysD

E2 system parameters can be accessed in this Tab.

11-06-19 🔟 Use Ctrl-X to Sele	ect CX Tabs	RX-31	00 Unit 1 SETUP		9:36:02 *ALARM*
C1: General C	2: Outputs-in	C3: Outputs-out	C4: AlarmSetpts	C5: AntiSweat	ADVISORY SUMMARY
C6: Inputs-NET C	7: Defrost	C8: Fan	C9: Overrides	CO: MORE	Fails 0
	Core	eLink: CoreLinkØ	91		Alarms 2
Output-SysD	Value				HUCICES
CTRL STATUS	BEFR				A Calebrard Altractive and
CONTROLTEMP			1.5		NETWORK OVERVIEW
DEFROSTTERMTE	EMP :	19 I.	- C - C - C - C - C - C - C - C - C - C		MODBUS-1
NUM_OF_VALVES	s :		- CE		
SH_SECTION1			100		
SH_SECTION2	6		- CE		
SH_SECTION3	(1) (1)		100		
VALVEOUTPUT1	(C)		12		
VALVEOUTPUT2		8	100		
VALVEOUTPUT3	(C)	12	- CE		
HSVD30_ONLINE		Et al.	- CC		
HSUD20 1 ONL	INE :	(C)			
HSUD20 2 ONL	INE :	Et	- CE		A CONTRACTOR OF A
GLB MAJ BLD		E	- CC		E2 Unit01
GLB_MIN_BLD	(#C	Et			
GLB_REV_INFO	(a)	Et			Rev 4.09F01
CL_STATUS	=	14 - C	(†		
					English-US
Scroll using Next	/Prev Reys	Bontroller State	15		
F1: PREV TAB	F2: NEXT	TAB F3	EDIT	F4: STATUS	F5: CANCEL

• Navigate to CO: More and to Output – SysD 1Read/Write,16 Read variables of Valve num, SH temp, Valve output, and other E2 parameters as given below.

E2 Parameter	Description
CONTROLTEMP	Control temperature for refrigeration
DEFROSTTERMTEMP	Defrost termination temperature
NUM_OF_VALVES	Number of valves preset in the case
SH_SECTION1	Superheat temperature coil 1
SH_SECTION2	Superheat temperature coil 2
SH_SECTION3	Superheat temperature coil 3
VALVEOUTPUT1	Direct output EEV driver valve 1
VALVEOUTPUT2	Direct output EEV driver valve 2
VALVEOUTPUT3	Direct output EEV driver valve 3
HSVD30_ONLINE	XEV30K Online
HSVD20_1_ONLINE	XEV20Online_1
HSVD20_2_ONLINE	XEV20Online_2
GLB_MAJ_BLD	Major Build code
GLB_MIN_BLD	Minor Build Code
GLB_REV_INFO	Revision information
CTRL STATUS	
CL_STATUS	

5.11 Alarm List & Priority, CO: More, Alarms Outs:

• Navigate to CO: More and then to Alarm outs to check for all the Alarm outs per the list given below and check the assigned priority

General (2: Outputs-in	C3:	Outputs-out	34: AlarmSetpts	C5: AntiSweat	ADVISORY SUMMAR
Inputs-NET (7: Defrost	C8:	Fan	39: Overrides	CO: MORE	Fails
	Cor	eLink	: CoreLink001			Alarms
AlarmOuts	Area C	trl	Application	Input		NOTICES
CASETEMP_HI	÷	-			1	
CASETEMP_HIT	ype : Alarm					NETWORK OVERVIE
CASETEMP_HIP	rio :	20				MODBUS-1
CASETEMP_LO		- C		8		
CASETEMP_LOT	ype : Alarm					
CASETEMP_LOP	rio :	20				
SH1_HI_ALM	4	æ.				
SH1_HI_ALMTy	pe : None					
SH1_HI_ALMPr	io :	20				
SH2_HI_ALM	4			8		
SH2_HI_ALMTy	pe : None					
SH2_HI_ALMPr	io :	20				
SH3_HI_ALM		а. С		8		and a substantian
SH3_HI_ALMTy	pe : None	2.04				E2 Unit01
SH3_HI_ALMPr	10 :	20				
SH1_LU_ALM				8		Rev 4.09F01
SHT_LU_ALMIY	pe : None					
						English-US
ter Controller	Case Contro	1 Tem	perature High	Alarm		1
E1. PREIL TAR	E2: NEX	T TAB	F3-	EDIT	EA. LOOK HP	ES . CONCEL

Page#2, Alarms Outs

11-05-19 🔤 Use Ctrl-X to Select	CX Tabs		RX-30 Si	0 Unit 1 ETUP	-	10:20:32
C1: General C2:	Outputs-in	C3:	Outputs-out	C4: AlarmSetp	ts C5: AntiSwe	at ADVISORY SUMMARY
Có: Inputs-NET C7:	Defrost	C8:	Fan	C9: Overrides	CO: MORE	Fails 0
	Core	Link	: CoreLink00	1		Alarms
AlarmOuts	Value					NOTICES 2
SH1 LO ALMType	None					
SH1_LO_ALMPrio		20				NETWORK OVERVIEW
SH2_L0_ALM	E	1		£3:		MODBUS-1
SH2_L0_ALMType	: None					
SH2_L0_ALMPrio		20				
SH3_LO_ALM				6		
SH3_L0_ALMType	: None					
SH3_L0_ALMPrio		20				
SECT1_HI_ALM	14	120		121		
SECT1_HI_ALType	: Notice					
SECT1_HI_ALPrio		20				
SECT2_HI_ALM	12:			(B)		
SECT2_HI_ALType	: Notice					
SECT2_HI_ALPrio		20				E2 Unit01
SECT3_HI_ALM	R8:					
SECT3_HI_ALType	: Notice					Rev 4.09F01
SECT3_HI_ALPrio	: 2	20				
						English-US
Scroll using Next/P	ev keys	Super	P Heat 1 Low	Alarm Alarm 1	Type	
F1: PREV TAB	F2: NEXT	TAB	F3:	EDIT	F4: LOOK UP	F5: CANCEL

Page#3, Alarms Outs

11-05-19 RX-300 Unit 1 Use Ctrl-X to Select CX Tabs SETUP	<i>1</i>	10:20:52
C1: General C2: Outputs-in C3: Outputs-out C4: AlarmSet	tpts C5: AntiSweat	ADVISORY SUMMARY
C6: Inputs-NET C7: Defrost C8: Fan C9: Override	es CO: MORE	Fails 0
CoreLink: CoreLink001		Alarms 2
AlarmOuts Value		HOLICES 7
SECT3_HI_ALPrio :20		
SECT1_LO_ALM : : :		NETWORK OVERVIEW
SECT1_LO_ALType : Notice		MODBUS-1
SECT1_LO_ALPrio : 20		
SECT2_LO_ALM : : :		
SECT2_LO_ALType : Notice		
SECT2_LO_ALPrio : 20		
SECT3_LO_ALM : : :		
SECT3_L0_ALType : Notice		
SECT3_L0_ALPrio : 20		
		E2 Unit01
		Rev 4.09F01
		English-US
Enter Discharge Air 3 High Alarm Alarm Priority		
F1: PREV TAB 🗼 F2: NEXT TAB 🔶 F3: EDIT	F4: STATUS	F5: CANCEL

• Navigate to CO: More. Check all the Alarm Outs setpoints in the E2 parameters of the 28 Read/Write, 14 Read description, and Range to be verified for Alarms Outs (Check both ON/OFF) and assign priority (20- High)

E2 Parameter	Description	Range
CASETEMP_HI	Case Control Temperature High Alarm	ON-OFF
CASETEMP_LO	Case Control Temperature Low Alarm	ON-OFF
SECT1_HI_ALM	Discharge Air 1 High Alarm	ON-OFF
SECT1_LO_ALM	Discharge Air 1 Low Alarm	ON-OFF
SECT2_HI_ALM	Discharge Air 2 High Alarm	ON-OFF
SECT2_LO_ALM	Discharge Air 2 Low Alarm	ON-OFF
SECT3_HI_ALM	Discharge Air 3 High Alarm	ON-OFF
SECT3_LO_ALM	Discharge Air 3 Low Alarm	ON-OFF
SH1_HI_ALM	Super Heat 1 High Alarm	ON-OFF
SH1_LO_ALM	Super Heat 1 Low Alarm	ON-OFF
SH2_HI_ALM	Super Heat 2 High Alarm	ON-OFF
SH2_LO_ALM	Super Heat 2 Low Alarm	ON-OFF
SH3_HI_ALM	Super Heat 3 High Alarm	ON-OFF
SH3_LO_ALM	Super Heat 3 Low Alarm	ON-OFF

5.12 Override Selection, C9: Overrides:

Override menu is used to force override any controlled output that is connected to CoreLink. This forced state will only last for 15 minutes and CoreLink reverts to automatic control mode when the output is left overrideen. Override options can be selected Off(0), ON(1), Auto(101) & Not in Over ride,

11-05-19 To RX-300 Unit 1	10:01:38 <mark>*Alarm*</mark>
C1: General C2: Outputs-in C3: Outputs-out C4: AlarmSetpts C5: AntiSweat C6: Inputs-NET C7: Defrost C8: Fan C9: Overrides C0: MORE Corelink: Corelink001	ADVISORY SUMMARY Fails 0 Alarms 2
OverridesValueFANOVERRIDE:NOT IN OVERRIDELIGHTOVERRIDE:NOT IN OVERRIDEREFRIGOVERRIDE:NOT IN OVERRIDEDEFROSTOVERRIDE:NOT IN OVERRIDEALARMOVERRIDE:NOT IN OVERRIDEVALUE10VERRIDE:101VALUE20VERRIDE:101VALUE30VERRIDE:101SYSREBOOT_BYE2:0FFRIFRIG20VERRIDE:NOT IN OVERRIDERIFRIG30VERRIDE:NOT IN OVERRIDERIFRIG30VERRIDE:NOT IN OVERRIDECondFanOverride:NOT IN OVERRIDECondFanOverride:NOT IN OVERRIDE	Notices Notices NETWORK OVERVIEW MODBUS-1 E2 Unit01 Rev 4.09F01 English-US
Scroll using Next/Prev keys 101 means not override , 1=DN, 0=DFF F1: PREV TAB F2: NEXT TAB F3: EDIT F4: LOOK UP	F5: CANCEL

• Navigate to C9: Override to verify 14 Read/Write Variables, on Fan, Light, Refrig, Defrost, Alarm, Valve & Cond fan override.

E2 Parameter	Description	Range
		0, "OFF", 1, "ON",
		101, "NOT IN
FANOVERRIDE	Fan digital override	OVERRIDE"
		0, "OFF", 1, "ON",
		101 <i>,</i> "NOT IN
LIGHTOVERRIDE	Light digital override	OVERRIDE"
		0, "OFF", 1, "ON",
		101 <i>,</i> "NOT IN
REFRIGOVERRIDE	Refrigeration digital output override	OVERRIDE"
		0, "OFF", 1, "ON",
		101 <i>,</i> "NOT IN
DEFROSTOVERRIDE	Defrost digital output override	OVERRIDE"
		0, "OFF", 1, "ON",
		101, "NOT IN
ALARMOVERRIDE	Alarm digital output override	OVERRIDE"
VALVE10VERRIDE	Valve 1 position override	0-100%
VALVE2OVERRIDE	Valve 2 position override	0-100%
VALVE3OVERRIDE	Valve 2 position override	0-100%
DIMMINGLIGHTOVERRIDE	Dim analog output override	0-100%
ASOVERRIDE	Anti-Sweat analog output override	0-100%
SYSREBOOT_BYE2	Controller reboot	
REFRIG2OVERRIDE		
REFRIG3OVERRIDE		
CondFanOverride		

5.13 Fan setting, C8: Fans:

Page#1

11-05-19 🚳 Use Ctrl-X to Select CX	Tabs	RX-300 Unit 1 SETUP		LU	12:32:11
C1: General C2: Out C6: Inputs-NET C7: Det	tputs-in C3: Outp Frost C8: Fan CoreLink: Cor	uts-out C4: Alarm C9: Overr eLink001	Setpts C5: ides C0:	AntiSweat MORE	_ ADVISORY SUMMARY _ Fails 0 Alarms3
Fan FanCtrlMode FanAfterDefrost FanSetpoint FanHys FanTimeDelay Fan_Duel_Temp	Value : OnCnt-OnDef : NU : 70.00 : 1.00 : 0 : 0nCnt-OnDef				Notices 12 NETWORK OVERVIEW MODBUS-1 E2 Unit01
					Rev 4.09F01 English-US
Scroll using Next/Prev	keys Fan Node	Operation			
F1: PREV TAB	F2: NEXT TAB	F3: EDIT	F4:	LOOK UP	F5: CANCEL

• Navigate to C8: Fans setpoints to verify following 6 read/write parameters

E2 Parameter	CoreLink Parameter	Description	Range
			0, "OnRef-
			OfDef", 1,
			"OnCnt-
			OfDef", 2,
			"OnRef-
			OnDef", 3,
FanCtrlMode	Fan Mode	4 selectable fan control modes.	"OnCnt-OnDef"
		Not Used:	
		By temperature: In refrigeration mode if	
		selected termination temperature sensor is above	
		the fan setpoint, the fan output is OFF.	
		By time: After defrost and switching into	
		refrigeration mode, the fan starts the delay timer	2, "Time", 1,
		for a user-defined time before the output is	"Temperature"
FanAfterDefrost	Fan Operation after Defrost	active.	, 0, "NU"
		Temperature setpoint in which case fans will	
FanSetpoint	Fan Setpoint	start. (Temperature Mode)	(-10 to 70) °F
		Temperature margin from the fan setpoint in	
FanHys	Fan Hysteresis	which the fan will not be active.	(1 to 30)
		After defrost and switching into refrigeration	(0 to 30)x 10
FanTimeDelay	Fan Delay	mode, time before fans start. (Time Mode)	sec
Fan_Dual_Temp			

5.14 Network Input control, C6: Inputs-NET

Page#1

11-05-19 🔤 Use Ctrl-X to Select	CX Tabs		RX-300 Ur Setur	nit 1 P	1	9:47:26 *ALARM*
C1: General C2:	Outputs-in	C3: Outpu	ts-out C4:	AlarmSetpts	C5: AntiSweat	ADVISORY SUMMARY
C6: Inputs-NET 07:	Defrost	C8: Fan	C9:	Overrides	CO: MORE	_ Fails 0
	Cor	eLink: Core	Link001			Alarms 2
Inputs-NET	Area C	trl Appli	cation	Output		HOLLOCS Y
AMBLIGHTNETWORK	2 Turner					and the second se
DEFROSTINIT_NET		-	1.0			NETWORK OVERVIEW
DEFRTERM_NET	=	14				MODBUS-1
ENDWAITCMD	(B)	1. C	1			
DEWPOINTNETWORK		2 G	1.2			
DUALTEMPNETWORK	: 0	RF .				
ENABLENETWORK	÷.	DN				
PRESSURENETWORK		1	1.1			
REFRIGDISABLNET	: 0	FIF .				
LIGHTCONTROLNET		ON				
						Country .
						E2 Unit01
						Rev 4.09F01
-						English-US
Enter Controller	the network	light				
F1: PREV TAB	F2: NEXT	TAB	F3: ED		F4: LOOK UP	F5: CANCEL

• Navigate to C6: Inputs- NET to verify Light control, and Other network data as given in below table (4 Read/write, 6 Read Variables)

E2 Parameter	Description
AMBLIGHTNETWORK	Network light
DEFROSTINIT_NET	Manual defrost command
DEFRTERM_NET	Network input of defrost termination
ENDWAITCMD	Network input of end wait CMD
DEWPOINTNETWORK	Network dewpoint
DUALTEMPNETWORK	Network dual temp
ENABLENETWORK	Network system enable
PRESSURENETWORK1	Network pressure from E2
REFRIGDISABLNET	Refrig disable network command if set to 1
LIGHTCONTROLNET	Light control from system manager

5.15 Antisweat config, C5: Antisweat:

11-05-19 📃 Use Ctrl-X to Select CX T	RX-300 Un abs SETUP	it 1 🦷	9:48:44 <mark>*ALARM</mark> *
C1: General C2: Outp	uts-in C3: Outputs-out C4:	AlarmSetpts C5: AntiSwea	at ADVISORY SUMMARY
C6: Inputs-NET C7: Defr	ost C8: Fan C9:	Overrides C0: MORE	Fails 0
	CoreLink: CoreLink001		Alarms 2
AntiSweat	Value		HUCICES
DewSet :	32.00		and the second states and the
DewPB :	9		NETWORK OVERVIEW
ASWMax :	9		MODBUS-1
ASWMin :	ß		
			E2 Unit01
			Rev 4.09F01
			English-US
Enter DF Dewpoint Set	point		

• Navigate to C5: Antisweat to verify 4 read/write parameters including Dew setpoints Max min output of Antisweat heater output , check range as well.

E2 Parameter	CoreLink Parameter	Description	Range
		If no network dewpoint value is available, the	
		frame temperature maintains a user-adjusted	
DewSet	Dew Setpoint	band above the dewpoint setpoint.	(0 to 100) °F
		${\sf User defined range from which the temperature}$	
DewPB	Dew Proportional Band	can drift from the Dew Setpoint.	(0 to 20) °F
ASWMax	Max Output	Maximum anti-sweat power output.	(0 to 100) %
ASWMin	Min Output	Minimum anti-sweat power output.	(0 to 100) %

5.16 Digital output, C3: Outputs – Out:

Details of digital output configuration

11-05-19 💮 Use Ctrl-X to Select I	CX Tabs		RX-300 Ur Setur	nit 1	(3)	9:31:55 *ALARM*
C1: General C2: C	utputs-in	C3: Outpu	ts-out C4:	AlarmSetpts	C5: AntiSweat	ADVISORY SUMMARY
C6: Inputs-NET C7: D	efrost	C8: Fan	C9:	Overrides	CØ: MORE	Fails 0
	Cor	eLink: Core	Link001			Alarms 2
Qutnuts-out	Area C	trl Annli	cation	Innut		NOTICES
REFRIGDO		-	:	Inpac	+	
FANDO			rê.			NETWORK OVERVIEW
LIGHTDO	12.	10	12			MODBUS-1
DEFRDO	Fê:	10	12			V 12000 0 - 5
ASAU	16	12	18			
ALABM	FÊ:	12	F2			
DIMAO	14.	12	12			
AUX1A0	12	12 C	1 E			
AUX2A0	10	10	10			
AUX1D0	PÊC	EÊ.	1 E			
AUX2D0	FB:	18 -	18			
DEFR2 DO	190	18 -	18			
DEFR3 DO	FÊC	18 -	1 E			A State of the second sec
REFRIG2 DO	192	18 -	1 Č.			E2 Unit01
REFRIG3 DO	192	FÊ	1 E Č.			
NIGHTCURTAIN	192	5Ê	1 E			Rev 4.09F01
NIGHTCRTNANDLGT	13 - C	14 m	14			
						English-US
Enter Controller T	he refrige	ration digi	tal output	1/0		
F1: PREV TAB	F2: NEXT	TAB	F3: ED	IT L	F4: LOOK UP	F5: CANCEL

Page#2

11-05-19 🔤 Use Ctrl-X to Select CX Tabs	RX-300 Unit 1 SETUP	đ	9:33:09
C1: General C2: Outputs-in C6: Inputs-NET C7: Defrost C0	1 C3: Outputs-out C4: AlarmSetpts C8: Fan C9: Overrides reLink: CoreLink001	C5: AntiSweat	_ ADVISORY SUMMARY - Fails 0 Alarms <mark>2</mark>
Outputs-out Area NIGHTCRTNANDLGT : AUX3DO :	Ctrl Application Input : : : :		Notices 9 NETWORK OVERVIEW MODBUS-1
			E2 Unit01 Rev 4.09F01
Enter Controller Wight Curt	ain and Light DN/DEE Command		English-US
F1: PREU TAB F2: NE	TTAB F3: EDIT	F4: LOOK UP	F5: CANCEL

• In E2, Navigate to C3: outputs out to check for all the Digital Output's (18 Read Variables)

Parameter	Description
REFRIGDO	Refrigeration 1 digital output
FANDO	Fan digital output
LIGHTDO	Light digital output
DEFRDO	Defrost 1 digital output
ASAO	Anti-sweat analog output
ALARM	Alarm status
DIMAO	Dimming analog output
AUX1AO	Auxiliary 1 analog output
AUX2AO	Auxiliary 2 analog output
AUX1DO	Auxiliary 1 digital output
AUX2DO	Auxiliary 2 digital output
DEFR2_DO	Defrost 2 digital output
DEFR3_DO	Defrost 3 digital output
REFRIG2_DO	Refrigeration 2 digital output
REFRIG3_DO	Refrigeration 3 digital output
NIGHTCURTAIN	
NIGHTCRTNANDLGT	
AUX3DO	

5.17 How to create CASE LIGHTS time schedule:

- Select Menu F9, in main menu, select 6, followed by 1 then F4: Lookup
- Press 6



• Press 1



• Press F4 and select 27 for Time schedule

	ADD APPLICATI	ION	NAMES
	Add Application		
Sele	ct Application Type		n er".
10. 11.	Digital Sensor Ctrl Enhanced Suction	•	
12. 13. 14.	Flexible Combiner HVAC Simulation Heat/Cool Control		
15. 16.	Holiday Schedule Impulse		ded
17.	Log Group Loop/Sequence Ctrl		
19.	Modular Chiller Ctrl		
20.	Onboard IO		
21.	Power Monitoring		
22-	Pulse Accumulation Rock Simulation		
20.	Standard Circuit		
25	Suction Control		
26.	TD Control		
27.	Time Schedule	- v I	
roll to	selection		
F2	F 3		F4

• Highlight the *How Many?* field and select "1", press enter



• Select "Y" to edit the application now

	Select an application type to add, then enter the number to add and press "Enter".		
+ Type	: Time Schedule		
+ How many ? <mark>1</mark>			
	Do you wish to edit new applications now?		
Results	Press Y=Yes or N=No		
- Control application(s) added: 1			

$CoreLink^{\mathsf{TM}}$

• General Tab (C1) – Change Name to "CASE LIGHTS" and Num Std Events to "1"

- 🔄 UltraSite: Revision 5.07F02 - [Terminal Mode - E2 Unit01]								
📧 File Tree Logs System View Window Help								
06-15-20 🔹 🥐 💷 Use Ctrl-X to Select CX Tabs			RX-300 Unit 1 SETUP	names fu				
C1: General C	2: Inputs	C3: Outpu	its C4: Std Even	ts C5:				
C6: Maint Ovr C	7:	C8:	C9:	C0:				
Time Schedules: CASE LIGHTS								
General	Value							
Name	CASE	LIGHTS						
Long Name	:							
Schedule Type	Schedule Type : MASTER							
Sched Method : Normal		1						
Num Std Event	s :	1						
Num Date Rang	es :	5						
Emerg Out	: OF	F						
KW Load	:	6						

Note: Use ctrl – x (give the number instead of X to move to C1, C2 etc.... Ex: ctrl+4 to move to 4)

- Std Events Tab (C4) Set lights to come on at desired times.
- For *Event 1*, type "ON", then arrow over 1 space and type the on time.
- For Event 2, type "OFF", then arrow over 1 space and type off time
- Schedule for days can be set by Arrow over to SMTWRFA1234
- Press the Next Key under S, then arrow over and repeat for M,T,W,R,F,A,



6. Troubleshooting E2-CoreLink Integration:

Issue		_ Trouble shooting Steps		
1.	Communication error with E2	-	Verify wiring of Daisy chain Loop back to E2. The last CoreLink in Network need to be terminated by connecting a resistor of Value 150Ω across Pin 63, 64 Verify the correct MODbus address of CoreLink Controller. reboot controller, A reboot is required when modifying the controller MoDBUS address Verify the correct Baud rate of CoreLink and	
2.	E2 Missing information from CoreLink controller	-	System Manager Verify primary/secondary configuration of CoreLinks Verify CoreLink IP addresses	
3.	Fans Are Staying on and Not deactivating during defrost	-	Verify E2 primary is set to YES on WebUI systems tab. Note : Only partial information will show up if primary set to NO.	
		-	There is a setting in CORELINK WebUI that controls whether evaporator fans are on or off in defrost.	

- Go to CoreLink WebUI -> Config -> Fans-> set correct fan configuration

Applicable versions

CoreLink App Ver	: 3.0.0 & 2.6.0
WebUI Ver	: 2.0.0, 1.10.0 & 1.08.0
E2 description file	: 5270551.dsc
BIOS : 2020022900, .	2020052000

