

Amazon UFF

TABLE OF CONTENTS

Safety Instructions.....	2	7.1. How to Program a HOT-KEY from the Controller (UPLOAD TO OVERWRITE HOT-KEY) .	10
Safety Icon Explanation .....	2	7.2. How to Program the Controller Using a HOT-KEY (Download).....	10
Instructions Pertaining to Risk of Electrical Shock, Fire, or Injury to Persons .....	3	7.3. PROG TOOL .....	10
Introduction .....	4	7.3.1. Program from HOT KEY to HOT KEY .....	10
Emerson Scope of Work .....	4	7.3.2. Program from PC to HOT KEY .....	11
1. Device Interface .....	4	7.3.3. Program from PC to controller.....	12
1.1. E2 Enhanced.....	4	7.3.4. USB to RS485 Converter .....	12
1.2. Supervisor .....	4	7.3.5. Extract a map/BIN file from a device .....	13
1.3. XCM25D.....	5	7.3.6. Firmware/Software display at Startup ....	13
1.4. XM679K .....	5	8. XM679K Local User Guide.....	14
1.5. MRLDS 250 .....	5	9. MRLDS 250 Local User Guide .....	16
1.6. Cellular Modem .....	5	10. MRLDS 250 Zeroing .....	17
2. E2 Start-up Notes.....	6	11. Cellular Modem Setup.....	18
3. XCM25D Start-up Notes.....	8	12. General Guidelines and More Information.....	20
5. XM679K Start-up Notes .....	9		
6. MRLDS-250 Start-up Notes .....	9		
7. XCM25D Local User Guide.....	10		

TABLES

Table 1 XM679K Default Setpoints .....	20
Table 2 MRLDS 250 Setpoints .....	20
Table 3 XM679K Alarm Troubleshooting.....	20
Table 4 MRLDS 250 Alarm Troubleshooting.....	26
Table 5 XCM25D Related Parameters .....	26
Table 6 Part Numbers .....	32

FIGURES

Figure 1 XM679K I/O .....	33
Figure 2 XCM25D I/O.....	34
Figure 3 XCM25D Display.....	35
Figure 4 XCM25D LED Functions .....	35
Figure 5 XCM25D Buttons and Key Descriptions .	36
UFF System Generic Drawings.....	40

## Safety Instructions

Emerson devices are manufactured according to the latest U.S. and European Safety Standards. Emphasis has been placed on the user's safety. Safety icons are explained below and safety instructions applicable to the products in this bulletin are grouped on Page 3. These instructions should be retained throughout the lifetime of the device. **You are strongly advised to follow these safety instructions.**

## Safety Icon Explanation



**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION**, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



**NOTICE** is used to address practices not related to personal injury.





**CAUTION**, without the safety alert symbol, is used to address practices not related to personal injury.



**FLAMMABLE**, Fire hazard! Sparking in a potentially explosive atmosphere!  
Explosion hazard!

**Instructions Pertaining to Risk of Electrical Shock, Fire, or Injury to Persons**

 <b>WARNING</b>	<p><b>PLEASE READ BEFORE USING THIS MANUAL</b></p> <ul style="list-style-type: none"> <li>• This manual is part of the product and should be kept near the instrument for easy and quick reference.</li> <li>• The instruments shall not be used for purposes different from those described hereunder. It cannot be used as a safety device.</li> <li>• Check the application limits before proceeding.</li> <li>• Emerson reserves the right to change the composition of its products, even without notice, ensuring the same and unchanged functionality.</li> <li>• As the program and other files are regularly changed, please always check Emerson's OPI page for the latest AE bulletin prior to start-up to be guided.</li> </ul>
 <b>WARNING</b>	<p><b>SAFETY PRECAUTIONS</b></p> <ul style="list-style-type: none"> <li>• Verify that the supply voltage is correct before connecting the instruments.</li> <li>• Do not expose to water or moisture: use the devices only within the operating limits avoiding sudden temperature changes with high atmospheric humidity to prevent formation of condensation.</li> <li>• When using an external supply, it is necessary to separate the power of the device from the rest of the electrical devices connected inside the electrical panel.</li> <li>• Disconnect all electrical connections before any kind of maintenance is performed.</li> <li>• Fit the probe where it is not accessible by the End User. The instrument must not be opened.</li> <li>• In case of failure or faulty operation send the instruments back to the distributor or to "Emerson" (see address) with a detailed description of the fault.</li> <li>• Consider the maximum current which can be applied to each relay (see Technical Data).</li> <li>• A cleanout will erase all programmed parameters from memory. Do not follow the instructions indicated on this manual unless you are sure you wish to remove all applications and from memory.</li> </ul>

**Introduction**

This document is intended to provide guidelines for the Amazon UFF project. This bulletin will explain the following items:

- Roles of the involved parties (Emerson and Contractors)
- EMS visual overview of the site (Connect+)
- Programming instructions of the devices in the system
- Generic drawings of the system

**Emerson Scope of Work**

The information below is intended to provide guidelines regarding Emerson’s responsibilities for Amazon UFF projects:

- Emerson will pull back the existing setpoint file and program all additional applications and setpoints based on the Amazon Guidelines.
- Emerson will create a general set of drawings for both E2 and Site Supervisor systems to help support the GC and Contractors on each site.
- Emerson will create a BOM based on the Mechanical Drawings.
- Emerson will create a custom drawing of the floor plan to be installed on Connect plus.
- Emerson will test all hardware to insure the correct condensing unit and evaporators are mapped in the program.
- Emerson will provide one (1) week of start-up services for each site. If the jobsite is ready for startup, this can be three days onsite with 2 travel days. If the jobsite is not ready for start-up, this could be as long as 3 weeks depending on how much work still needs to be completed.
- Emerson will help support Refrigeration manufacturer and EMS contractor to insure all hardwired is wired correctly, Installed at communication correctly.
- Emerson will start all hardware to insure it is functioning properly. Hardware consist of XM679K, MRLDS250, XCM25D, and a E2.
- Emerson will provide one (1) day of Engineering Services to be done offsite; Additional Engineering Services will be charged accordingly.
- Emerson will provide one (1) day of Project Management to be done offsite; Additional Project Management will be charges accordingly.

- Emerson will complete an exit report while onsite.

**1. Device Interface**

All equipment listed below is controlled and/or monitored by Emerson for Amazon UFF sites.

**1.1. E2 Enhanced**

The E2 controller is a microprocessor-based control system designed to provide complete control of compressor groups, condensers, refrigerated cases, and other components related to refrigeration and building control. The E2 is the controlling component of various network setup (RS485 I/O, Echelon® LonWorks™, MODBus, BACNet, and Ethernet) that includes input and output communication boards, remote communication software, and a variety of sensors, probes, and transducers. The E2 efficiently operates all systems that support refrigeration (including compressor racks and condensers) and other components not directly related to refrigeration control, such as HVAC systems, anti-sweat heaters, and sensor control modules.

Refer to the E2 manual for guidelines regarding its installation, operation, and programming procedure.



**1.2. Supervisor**

The Supervisor (P/N 860-1200) is a system that combines energy management with the ability to monitor various facility systems and provide alerts when there are issues that need attention. This system provides HVAC control, Refrigeration System Monitoring and Control, as well as Lighting Control. In addition, the Site Supervisor can monitor and report energy consumption and act to reduce the energy

demand during peak periods. This can have a direct impact on utility bills by reducing total energy costs. Site Supervisor ensures that the HVAC and lighting systems are on and off at the appropriate times. This ability to monitor store conditions can potentially minimize energy consumption.

Refer to the Supervisor manual for guidelines regarding its installation, operation, and programming procedure.



### 1.3. XCM25D

The XCM25D is an integrated electronic control module which provides operation, protection, and diagnostic feature for condensing units. It is designed specifically for demanding refrigeration applications to ensure simple installation and precision operation. It is equipped with MODBus communication that can be used with supervisory controllers like the E2 controller.

**(This device is being supported by Hussmann)**



### 1.4. XM679K

The XM679K is a case controller suitable for medium and low temperature applications with pulsed electronic valves for temperature and superheat regulation. It can also control various loads such as fans, lights, and defrost.

Refer to the XM679K manual for guidelines regarding its installation, operation, and programming procedure.



### 1.5. MRLDS 250

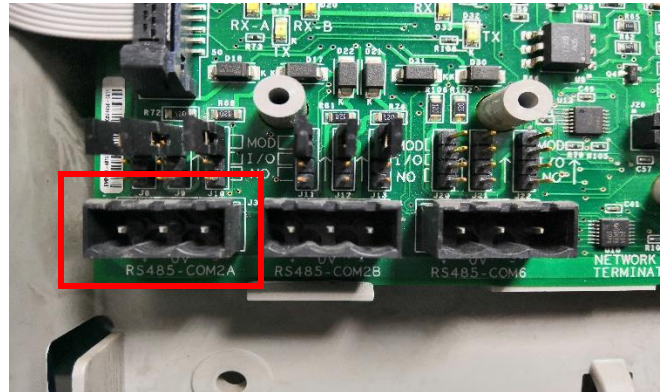
The MRLDS 250 is state-of-the-art fixed gas detector that can detect a wide range of refrigerant gases. It can be used on a stand-alone basis or integrated into controls or Building Management System (BMS). This device can be used in locations that require continuous monitoring and to add gas detection solutions to an existing system.

Refer to the XM679K manual for guidelines regarding its installation, operation, and programming procedure.



### 1.6. Cellular Modem

The cell modem optimized for M2M (machine-to-machine)/Internet of Things (IoT) applications, offer a robust Ethernet or serial network interface platform ready to deploy. The intuitive user interface and free cloud device management (no recurrent monthly fees) allows for quick configuration and over-the-air upgrades. Enhanced with features such as WAN Failover and Certificate Management, the MultiConnect rCell 100 Series creates an ideal environment for secure and redundant communications critical to the reliability of remote monitoring systems in a variety of industries.



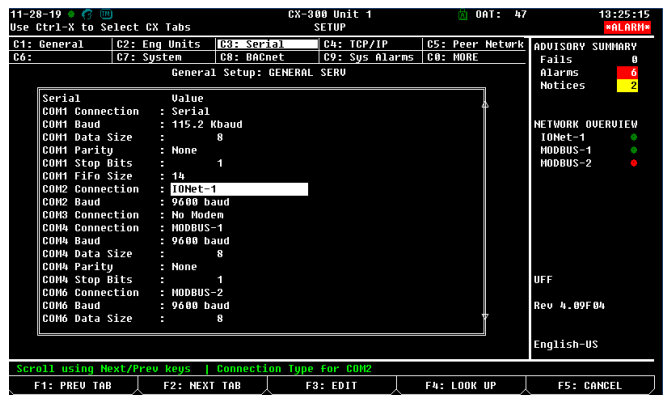
## 2. E2 Start-up Notes

**NOTICE** Secure a clean backup of the set point file from the E2 before doing anything. This can be done through Site Manager/Connect+ or Ultrasite and USB. Have a copy of the completed set points file/backup program as well as the addressing spreadsheet.

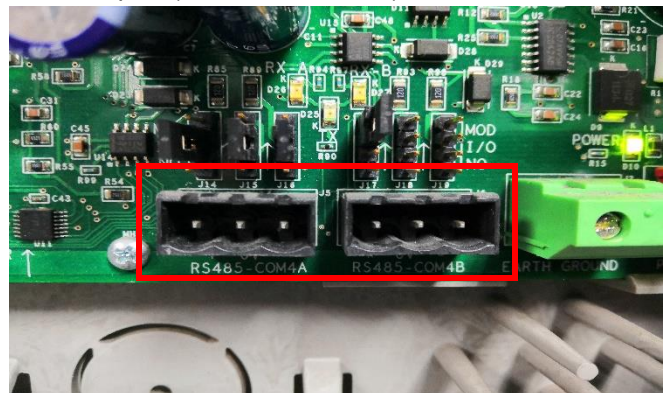
1. Address all communicating devices (XM679K, XCM25D, and MRLDS-250) per the spreadsheet.

Name	Type	Network Address	Rev	Status
UFF	CX300 C-Store	Ethernet:	1 4.09F04	This Controller
M1681M1	16AI	IONet-1:	1 0.00	Online
M1680M1	8AI	IONet-1:	1 0.00	Online
ASCO-SW001	ASCO-SW	HOBUS-2:	0 0.00	No Port
FREZER MRLDS	MRLDS-250	HOBUS-1:	14 0.00	Online
CHLDSTOR MRLDS	MRLDS-250	HOBUS-1:	15 0.00	Online
BaslerGen001	BaslerGen	HOBUS-2:	0 0.00	No Port
FREZER VI CU1	X25 AH2 1.3C	HOBUS-1:	17 0.00	Online
FREZER VI CU2	X25 AH2 1.3C	HOBUS-1:	18 0.00	Online
CHILLER VI CU4	X25 AH2 1.3C	HOBUS-1:	20 0.00	Online
CHILLER VI CU5	X25 AH2 1.3C	HOBUS-1:	21 0.00	Online
CHILLER VI CU6	X25 AH2 1.3C	HOBUS-1:	22 0.00	Online
CHILLER VI CU3	X25 AH2 1.3C	HOBUS-1:	19 0.00	Online
CHLDSTOR EUP4A	XMG79K_A2	HOBUS-1:	12 4.02-00	Online
FRZR VI EUP1C	XMG79K_A2	HOBUS-1:	3 4.02-00	Online
FRZR VI EUP1A	XMG79K_A2	HOBUS-1:	1 4.02-00	Online
FRZR VI EUP1B	XMG79K_A2	HOBUS-1:	2 4.02-00	Online
FRZR VI EUP2A	XMG79K_A2	HOBUS-1:	4 4.02-00	Online
FRZR VI EUP2B	XMG79K_A2	HOBUS-1:	5 4.02-00	Online
CHLDSTOR EUP4A	XMG79K_A2	HOBUS-1:	8 4.02-00	Online

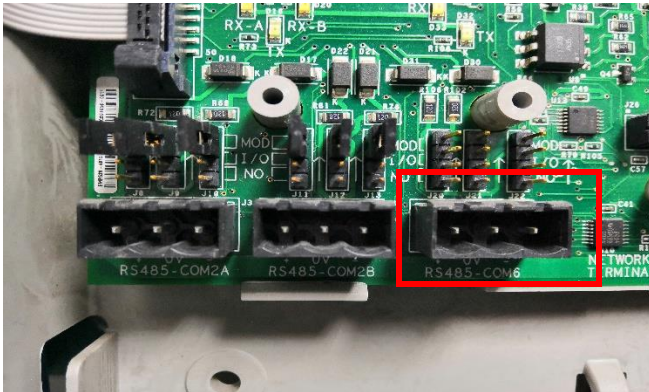
2. The IO-Net daisy chain should be connected to Comm 2A.



3. The condensing unit controller daisy chain should be connected to either Comm 4 ports. The XM679K daisy chain (along with the Generator and Asco switch if present) will be connected to the other remaining Comm 4 port (Baud rate of 9600).



4. The wireless gateway utilizes Comm 6 (baud rate of 19,200 Kbaud).



Operating parameters and feature settings can be adjusted without opening the enclosure door. The rugged construction and proven performance of the ASCO Series 300 assure the user of many years of complete reliability. The Series 300 is even designed to handle the extraordinary demands placed on the switch when switching stalled motors and high inrush loads. ASCO's Series 300 modular, compact design makes it easy to install, inspect and maintain. All parts are accessible from the front so switch contacts can be easily inspected.

5. Initiate a clean out of the E2 by following the steps below:

- Press Menu-7-3-5-1
- Highlight the space next to Clean Out and Reboot then press F4.
- Choose the controller name and press Enter
- Press Y twice and the controller should reboot automatically

- Basler Generator (527-0648)

The DGC-2020 Digital Genset Controller provides integrated engine-genset control, protection, and metering in a single package. Microprocessor based technology allows for exact measurement, setpoint adjustment, and timing functions. Front panel controls and indicators enable quick and simple DGC-2020 operation. Basler Electric communication software (BESTCOMSP<sup>l</sup>us<sup>®</sup>) allows units to be easily customized for each application. Because of the low sensing burden in the DGC-2020, dedicated potential transformers (PTs) are not required. A wide temperature-range liquid crystal display (LCD) with backlighting can be viewed under a wide range of ambient light and temperature conditions.



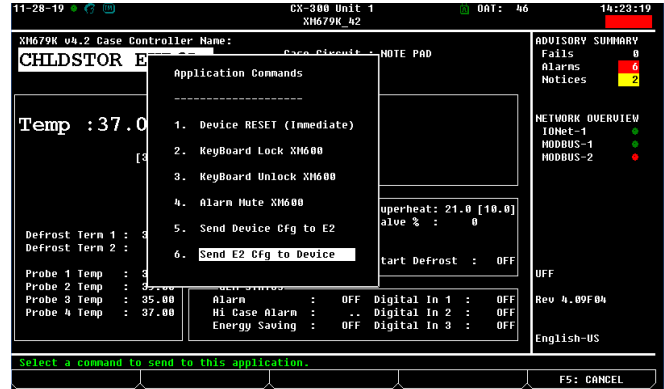
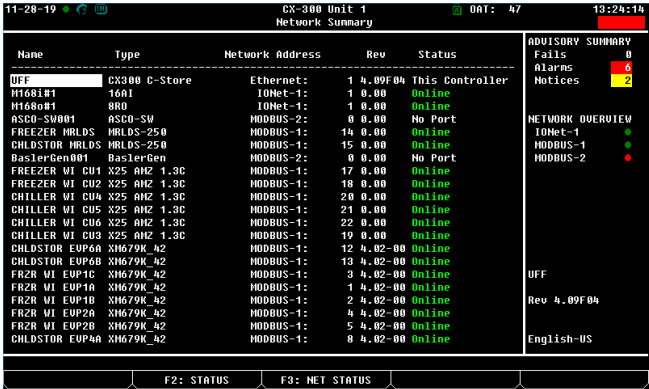
- MRLDS-250 (527-0476)
- XCM25D v1.3C (Hussmann) (527-0766)
- XCM25D v1.3K (Hussmann) (527-0765)

6. If a need arises to add licenses of communicating devices, the part numbers needed are below:

- Asco Switch (527-0649)

The ASCO Series 300 was designed for one purpose—to automatically transfer critical loads in the event of a power outage. Each and every standard component was designed by ASCO engineers for this purpose. The Series 300 incorporates the Group G controller with enhanced capabilities for dependable operation in any environment. A user-friendly control interface with a 128x64 graphical LCD display and intuitive symbols allow for ease of operation while visual LED indicators display the transfer switch status. Emerson Classification: **Internal**

7. If the program is correct, all devices should come online upon loading. Check the Network Summary to verify (Menu-7-7-1).

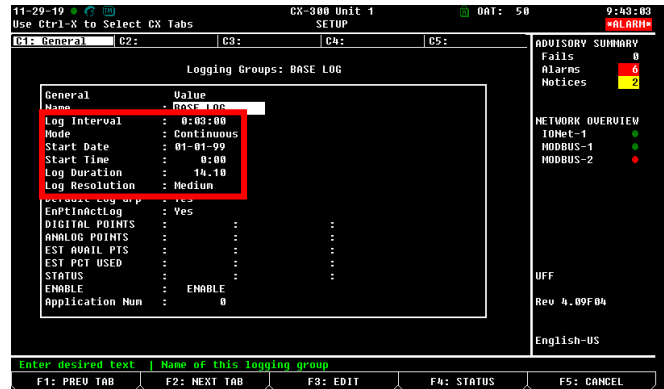
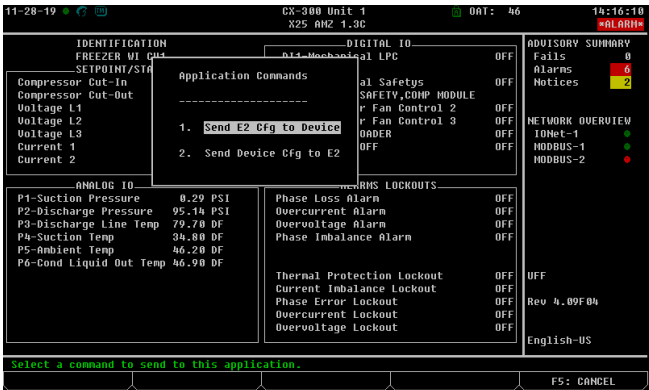


8. If you are missing any license, you will need to reach out to the Technical service team to generate what's needed. Please have the MAC address of the E2 ready before contacting Technical Support.

9. If all devices are online, pull back the configuration from the XCM25D to the E2. **DO NOT SEND THE E2 CONFIGURATION TO THE DEVICE.** Follow the steps below:

- Press Menu-7-7-1
- Highlight the XCM25D application and press Enter
- Highlight Application Commands and press Enter
- Highlight Send Device Cfg to E2 then press Enter

11. All your devices should now be addressed, programmed and operational.
12. Now verify that the Base Log duration is set to 14.1 days and its interval set to 3 minutes.

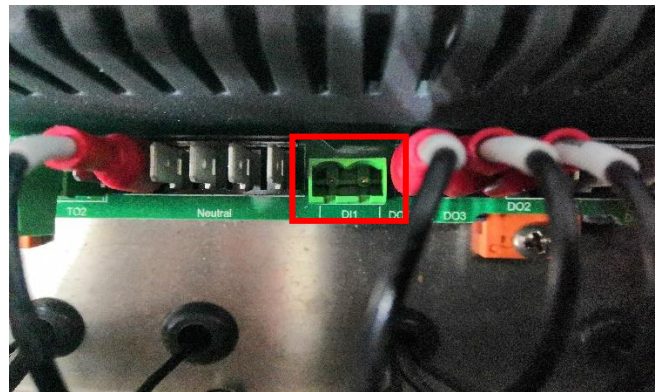


10. Send the XM Configuration from the E2 to the Device. Follow the steps below:

- Press Menu-7-7-1
- Highlight the XCM25D application and press Enter
- Highlight Application Commands and press Enter
- Highlight Send E2 Cfg to Device then press Enter

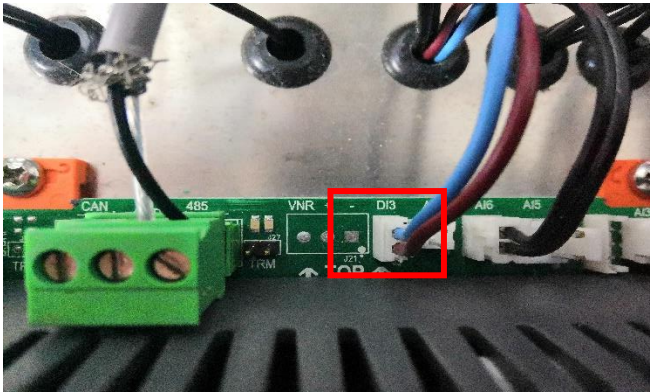
### 3. XCM25D Start-up Notes

1. Pull out the Molex plug connected to the XCM25D's D11 and a low-pressure alarm should be generated on the E2.



2. Pull out the D13 connection and you should get a Mechanical Safety alarm and the XM associated to the

XCM25D should be disabled.



3. If the XCM25D units are not responding to commands, you may need to load a new map. Refer to the **PROGTOOL map loading instructions** in this document.

### 5. XM679K Start-up Notes

1. Cycle each circuit and validate that all XM679K go into defrost mode, the fans shut off and the Defrost heaters are engaging. Do this by pressing and holding the Defrost icon on the CX660 keyboard below until the Defrost icons blinks and later stay solid on indicating that the device has just started the defrost cycle.



2. While the circuit is in defrost, the liquid line solenoid valve should de-energize and the condensing unit should pump down.
3. Refer to **Table 1** for the setpoint values of the XM679K application for Amazon UFF sites.

### 6. MRLDS-250 Start-up Notes

You are going to have to check the MRLDS250 to ensure that the refrigerant type is R448A (parameter 11 should be set at 2). Refer to the MRLDS 250 manual for the parameter navigation procedure.

Gas Groups / Specific Gas Selection	
<b>P-11</b>	Parameter that selects the gas group number for broadband operation or specific gas name for gas-specific mode. Select Group 2 for Amazon UFF:
	2. <b>R448a</b> , R449a, R422a, R422d HFO1234YF, and HFO1234Ze, R513a, R452a, R452b

## 7. XCM25D Local User Guide


### NOTICE

This may not be needed if the device is delivered pre-programmed. As the program and other files are regularly changed for improvements, please always check Emerson's OPI page for the latest AE bulletin prior to start-up to be guided.


### 7.1. How to Program a HOT-KEY from the Controller (UPLOAD TO OVERWRITE HOT-KEY)

#### CAUTION

This process overwrites the Hot-key.

1. When the controller is ON, insert the HOT-KEY into the 5-PIN receptacle (labeled H-K) and push the  button; the **UPL** message appears followed a by a flashing **End** label.
2. Push **SET** button and the End will stop flashing.
3. Turn OFF the controller, remove the HOT-KEY and then turn the controller ON again.

#### CAUTION

The Err message appears in case of a failed programming operation. In this case push the  again if you want to restart the upload again or remove the HOT-KEY to abort the operation.

### 7.2. How to Program the Controller Using a HOT-KEY (Download)

1. Remove power from the unit.
2. Insert a pre-programmed HOT-KEY into the 5-PIN receptacle (labeled H-K) and reapply power to the unit.
3. The parameter list of the HOT-KEY will be automatically downloaded into the controller memory. The doL message will blink followed by a flashing End label.
4. After 10 seconds the controller will restart and begin working with the new parameters.

5. Remove the HOT-KEY.

The message **Err** is displayed for failed programming. In this case turn the unit off and then on if you want to restart the download again or remove the HOT-KEY to abort the operation.

### 7.3. PROG TOOL

The PROG TOOL unit can be used for the creation of HOT-KEY programs and/or for interfacing Dixell controllers with a PC making changes done in the parameter maps possible aided by the EASY PROG software.



PROG TOOL Hardware

This tool is equipped with 3 LEDs:

- a. Power led  
GREEN indicates power supply is ON.
- b. Tx led  
YELLOW blinking indicates communication between PC and PROG TOOL.
- c. Copy led  
YELLOW indicates HOT KEY programming  
RED indicates HOT KEY programming error.  
GREEN indicates HOT KEY programming successful.

#### 7.3.1. Program from HOT KEY to HOT KEY

PROG TOOL allows the creation of copies of an existing HOT KEY program.

Follow the steps below to copy the parameter map of one HOT-KEY to another HOT-KEY:

1. Insert the source HOT KEY into the connector at the top of the PROG TOOL.
2. Insert the destination HOT KEY into the **Hot-Key Copy** connector on the face of the PROG TOOL.

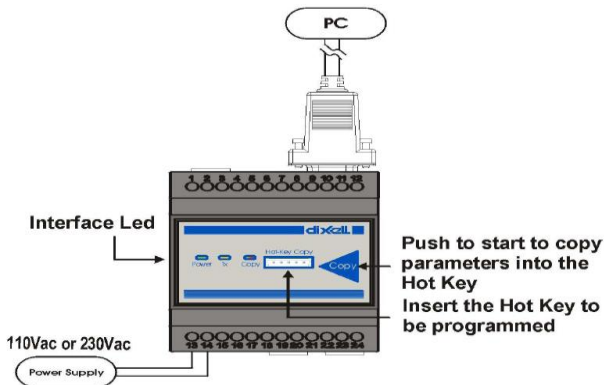
3. Push the **Copy** button to initiate the transfer. The Copy LED should blink during the transfer operation.
4. After a few seconds, the Copy LED will indicate the operation status:
  - RED – Failed
  - GREEN - Successful
5. Remove the HOT KEYS once done.


### 7.3.2. Program from PC to HOT KEY

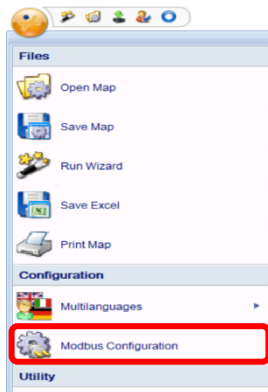
The WIZMATE software installed on a PC can be utilized to copy parameter maps to a HOT-KEY through the PROG TOOL.

Follow the steps below for the instructions on how to program a HOT KEY using the PROG TOOL:

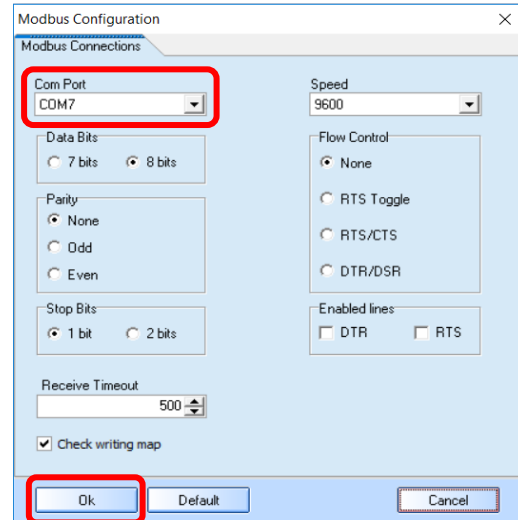
1. Connect the PROG TOOL to the PC using an RS232 serial cable.




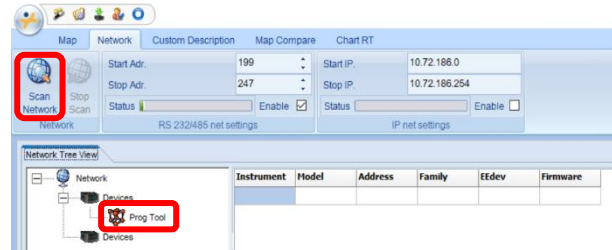
2. Open the WIZMATE software. Click on the Wizmate icon located at the top left corner (  ) and select MODBus Configuration as illustrated in the following picture:




3. As illustrated in the following picture, select the appropriate **Com Port** through the drop-down box and click **OK** button:



4. As illustrated in the image below, select the **Network** tab and click on this **Scan Network** (  ) button to detect the Prog Tool:




5. Either create a parameter map or open an existing parameter map and copy it into the PROG TOOL by selecting the **Download Hotkey** (  ) button.
6. Plug the HOT KEY to be programmed into the **Hot-Key Copy** connector located on the face of the PROG TOOL.
7. Push the **Copy** button to initiate the programming. The Copy LED should blink during the transfer operation.
8. After a few seconds, the Copy LED will indicate the operation status:
  - RED – Failed
  - GREEN – Successful
9. Remove the HOT KEY once done.


### 7.3.3. Program from PC to controller

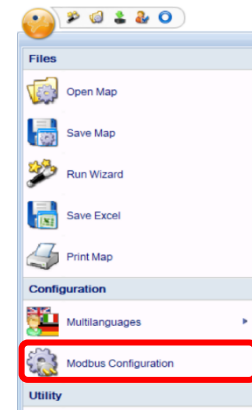
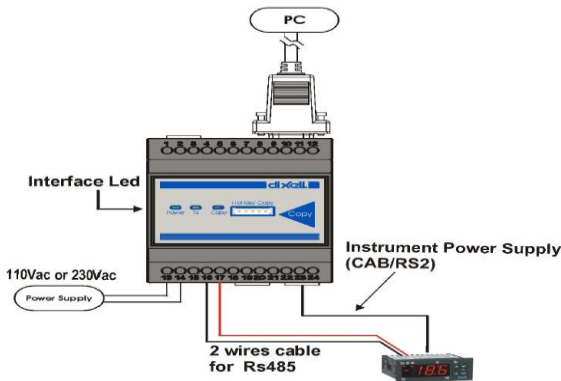
The controller can be interfaced to as PC through the PROG TOOL and program it directly from there.

Follow the steps below for the instructions on how to program a controller using PROG TOOL:

1. Using a 2-wire cable, connect the controller's RS 485 terminals to the RS 485 terminals of the PROG TOOL. The connection should be in straight polarity.
2. Supply power to the controller.
3. Connect the PROG TOOL to the PC using an RS232 serial cable.
4. Using WIZMATE, create a parameter map and copy it into the controller by selecting **Download Device** () button.



4. Open WIZMATE, click on the Wizmate icon located at the top left corner () and select MODBus Configuration as shown below:



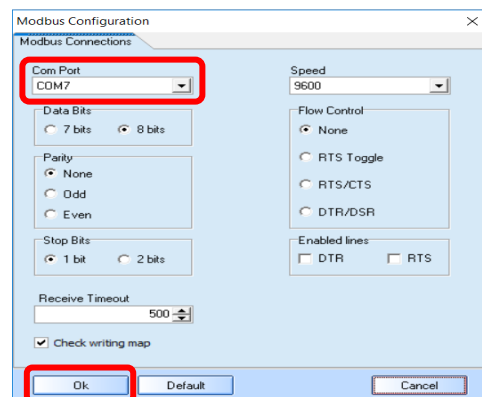
### 7.3.4. USB to RS485 Converter


The controller can be interfaced to a PC using a USB to RS485 converter and program it directly from there.

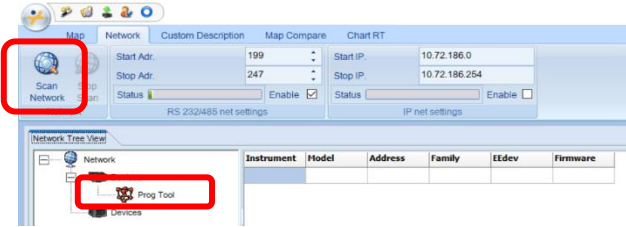
Follow the steps below on how to program a controller using WIZMATE:


1. Supply power to the controller.
2. Plug in the USB to RS485 converter to the PC.
3. Using a 2-wire cable, connect the controller's terminals RS485 to the RS485 terminals of USB to RS485 Converter. The connection should be straight polarity.

5. Select the appropriate **Com Port** through the drop-down box and click **OK** button:



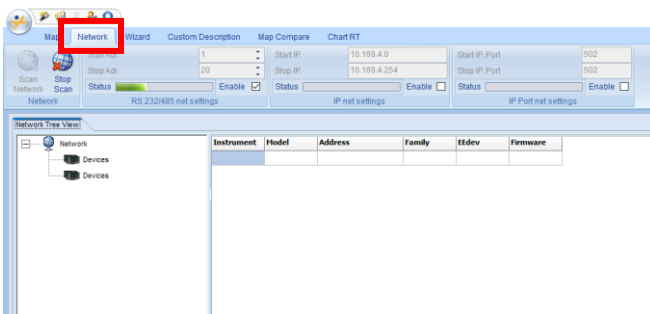
6. Select the **Network** tab and click on the **Scan Network** (  ) button to detect the Prog Tool:



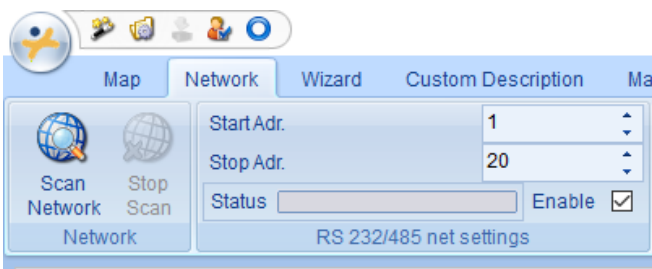
7. Either create a parameter map or open an existing parameter map and copy it into the controller by selecting **Download Device** (  ) button.

### 7.3.5. Extract a map/BIN file from a device

1. Connect the device to the computer.
2. Once connected, login to Wizmate and click the Network tab of the app.

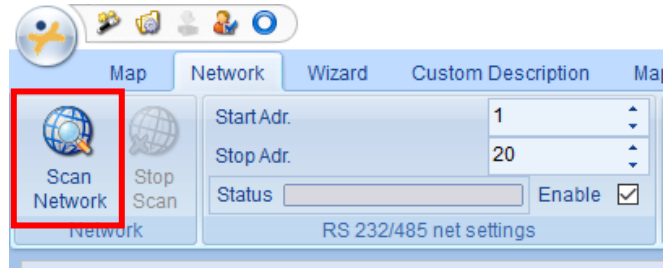


3. If the automatic scan starts, it should find the device connected to your computer. If not, initiate the search by first entering the start and end address to search for. Note that you will need to press the Enter key whenever you enter a value.

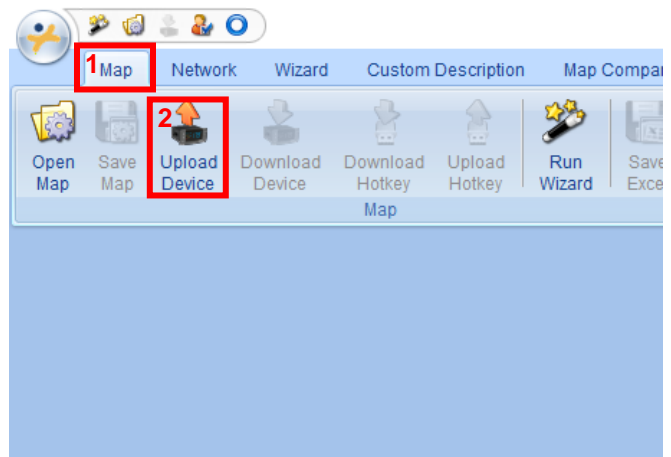


4. Click Scan Network to initiate the search.  
**Note:** Contact Emerson Cold Chain Technical Support if an error occurs during this process.

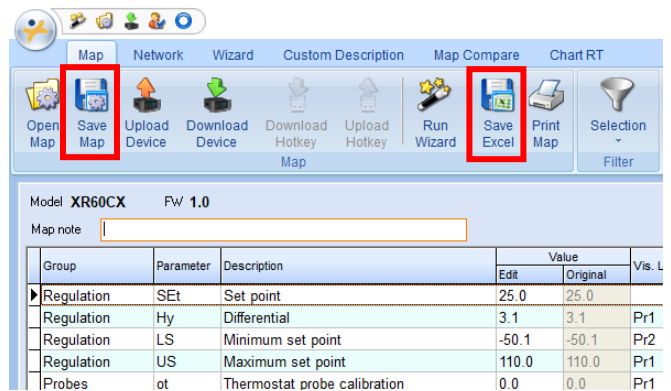
Emerson Classification: Internal



5. Once successful, click on the Map tab. Then click Upload Device.



6. The parameters and its values should all be reflected if successful and you can choose to save the configuration either as a BIN or CSV file. Just choose the location where you want to save the file and that is done.



### 7.3.6. Firmware/Software display at Startup

The following information describes the controller start up sequence:

1. At startup, all LEDs will light up to indicate that all is working properly.
2. The controller displays the firmware version for **Fmt** period.
3. The controller displays the program name (PND) for **Pnt** period.

## 8. XM679K Local User Guide

### NOTICE

This may not be needed if the device is delivered pre-

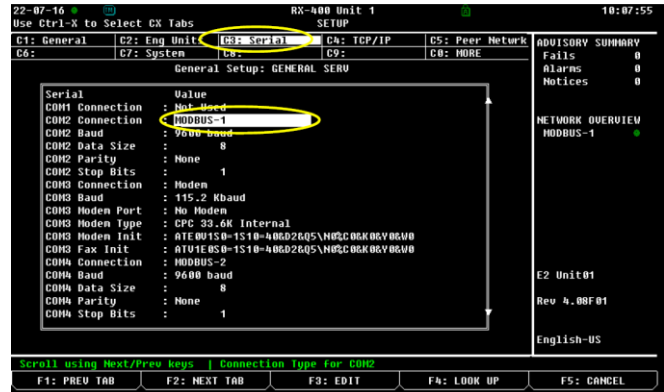
programmed. As the program and other files are regularly changed for improvements, please always check Emerson's OPI page for the latest AE bulletin prior to start-up to be guided.

1. For the wiring and network connections, refer to the UFF Amazon Drawing binder.
2. Set the address of the XM679K using the CX660 keyboard, as follows:

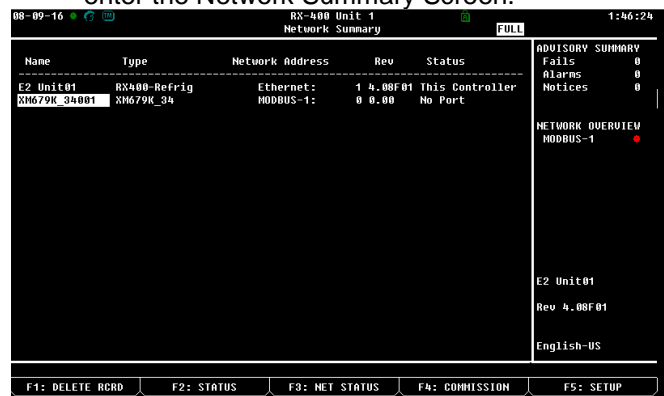


CX660 Keyboard

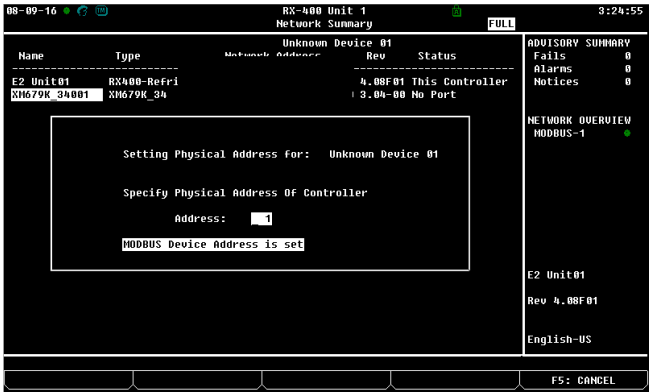
- a. Press **SET** + **↓** at the same time for five (5) seconds to enter Pr1 or level 1 programming. The temperature unit should remain blinking indicating that you are in programming mode.
  - b. Navigate through the parameters by pressing **↓** or **↑** until **Adr** appears on the screen.
  - c. Press **SET** and assign the desired address for the device by pressing **↓** or **↑**.
  - d. Press **SET** to save the change.
  - e. Press **SET** + **↑** to exit programming mode.
3. In the E2 controller, press **(731** (General controller info)
  4. Press **@** twice to move to the C3: Serial tab.



5. Keep pressing the **↑** key to highlight the COM4 Connection value.
6. Press **\$** (Look Up) and select MODBus-2.
7. Press **E** to set selection.
8. Leave all other values under this connection with their default values (Baud Rate, Data Size, Parity, and Stop Bits)
9. Press **)** to save the setup.
10. To add an instance of this application, press **(772** (Connected I/O Boards and Controllers)
11. Press **@** once to move to the C3: ECT Tab. Highlight the XM679K application and type in the desired number of devices under Quantity.
12. Press **)** to save the setup.
13. Press **\*** to return to the Home Screen.
14. To commission the XM679K, press **(771** to enter the Network Summary Screen.

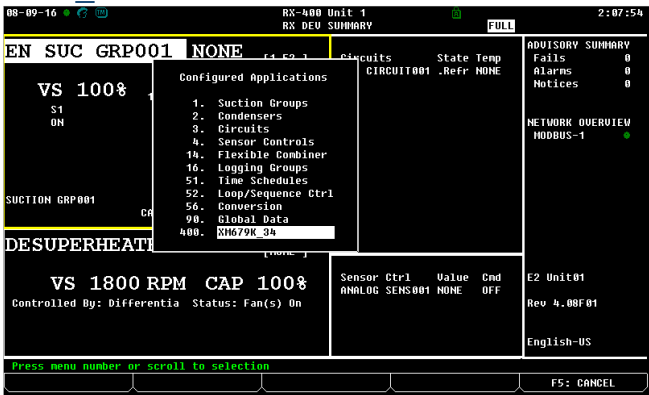
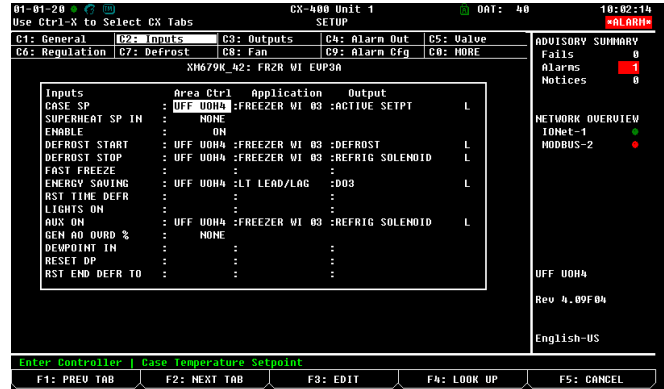


15. Highlight the relevant XM679K by pressing the **↑** then press **\$**.
16. A window reflecting all available address will be shown on the screen, select the desired address and press **E**.

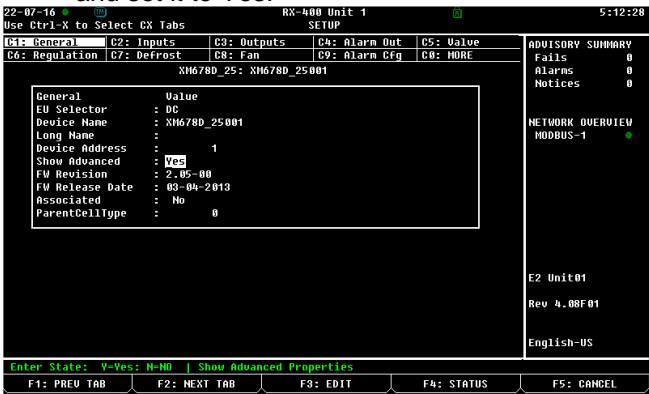


17. Press the **)** button once done.
18. To associate the XM679K to a standard circuit, press **(5**. Highlight the XM679K option and press **E**.

application are system specific and can change anytime without prior notice for Amazon UFF stores. Contact Technical Support for further details.



19. Upon highlighting the specific XM679K, press **E** then press **%**.
20. Highlight the value of the Show Advanced option and set it to Yes.


















21. Input and Output associations of the XM679K

Emerson Classification: Internal

## 9. MRLDS 250 Local User Guide

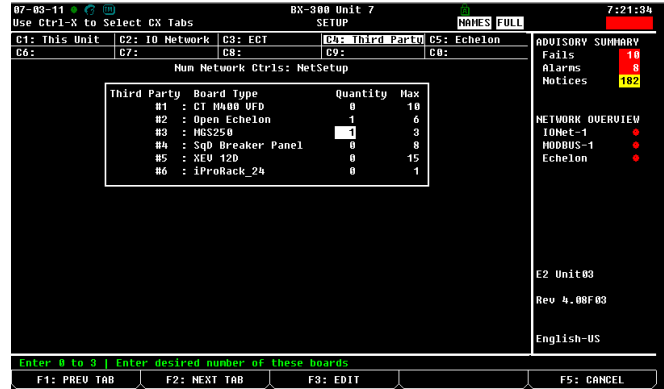
### NOTICE

This may not be needed if the E2 controller is delivered pre-programmed. As the program and other files are regularly changed for improvements, please always check Emerson's OPI page for the latest AE bulletin prior to start-up to be guided.

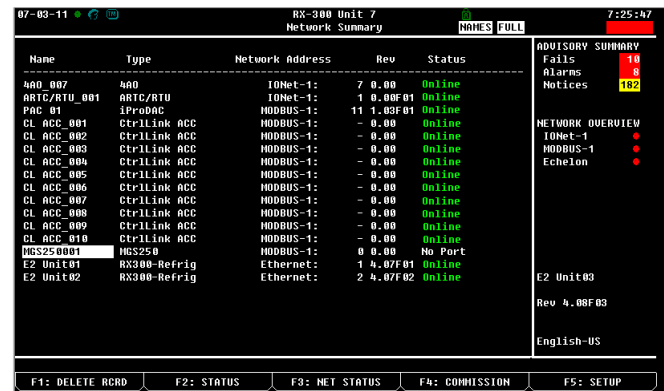
1. To enter programming mode, press and hold the  information button for five seconds.
2. Each parameter is shown in turn by using the UP  or DOWN  button. The parameter is shown as **P.-XX**, with **XX** being the parameter value. Pressing Enter  while a parameter is displayed allows the attributes of the parameter to be set. Each Parameter has its own attributes, as shown in the following table. Set the attributes as desired, and then press Enter  to save the setting.
3. To change the address of the device, look for **P.-10** on the parameter list then press the Enter  button. Set the desired address by pressing Up  or Down  .
  1. Press Enter  to Save.
  2. For the baud rate, Look for **P.-13** parameter then press Enter  button.
  3. **00** is for 9,600 Baud and **01** is for 19,200 Baud.
  4. Press Enter  button to Save.
  5. For the scaling, look for **P.-16** on the parameter list then press Enter  button.
  6. This will allow the user to select the full-scale PPM value that represents the maximum analog output (for example 1000PPM = 5V when 1-5V was selected on **P.-03**). Use the Up  or Down  to adjust the value and set it to **1000PPM**.
  7. Press Enter  to save the setting.
  8. The latest E2 firmware already has the MRLDS

250 application native. Add the MRLDS – 250 to E2 by Pressing ( 772 to enter Connected I/O Board & Controllers.

9. Press @ twice to go to C4: Third Party tab.
10. Scroll down to MGS250 and enter the quantity of MRLDS 250.



11. Press ) button to save.
12. Press ( 771 to enter Network Summary
13. Scroll down to the MRLDS 250 then press \$ to Commission.



14. Select the address the MRLDS 250 is set to then press E to confirm.



## 11. Cellular Modem Setup

### NOTICE

As the program and other files are regularly changed for improvements, please always check Emerson's OPI page for the latest AE bulletin prior to start-up to be guided.

1. Unpack the modem and connect the antennae.



2. Unpack the network switch (if needed) and power up.



3. Connect the modem to the network switch on port 1 (if switch is being used) with the provided network cable.



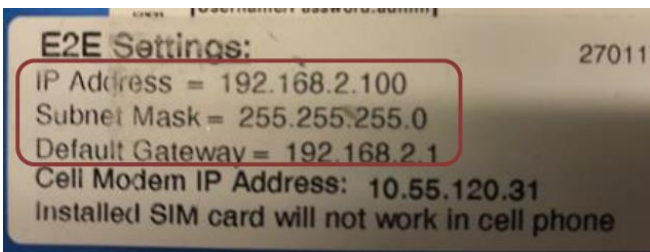
4. Power up the modem and wait for the lights to stop blinking.
5. Confirm that there is enough cell signal (signal strength lights – 1, 2, or 3 bars). Adjust the antennae and/or location of the cell modem to improve signal strength if needed.



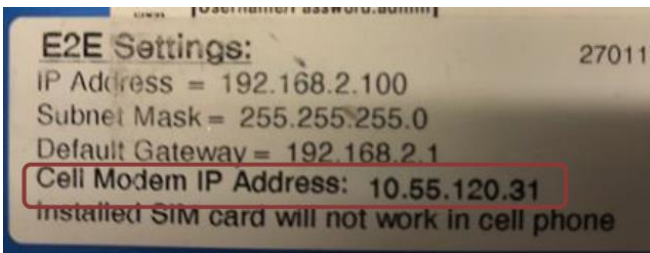
6. Connect the E2/Supervisor to one of the network switch ports (2 to 8) making sure that the Ethernet cable is secured.



- Enter the Network information indicated on the sticker at the bottom of the modem into the E2/Supervisor. This includes the IP address, Subnet Mask, and Default Gateway.



- The IP address to access the site via Connect+ is the Cell Modem IP address indicated on the same sticker.



- Power cycle both the modem and connecting device once done with the setup.

## 12. Amazon Connect+ Access

**CAUTION**

Remote connection to sites requires highly technical knowledge about the Connect+. Only access store

Emerson Classification: Internal

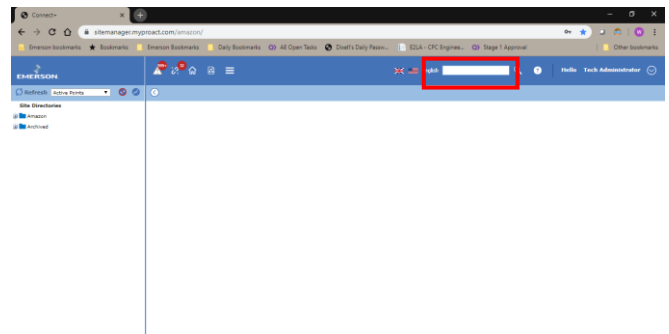
19

controllers if adept with Amazon control parameters or if guided by a qualified technician.

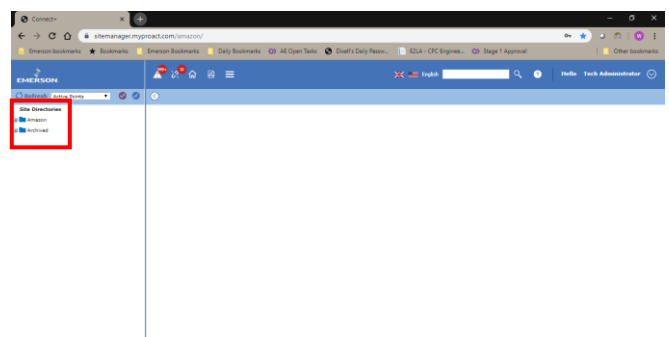
- Access the Amazon Connect+ instance using the link below:

<https://sitemanager.myproact.com/amazon/>

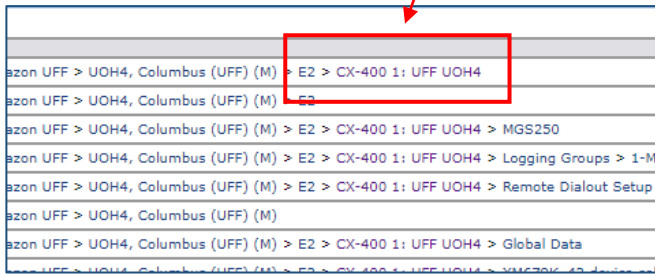
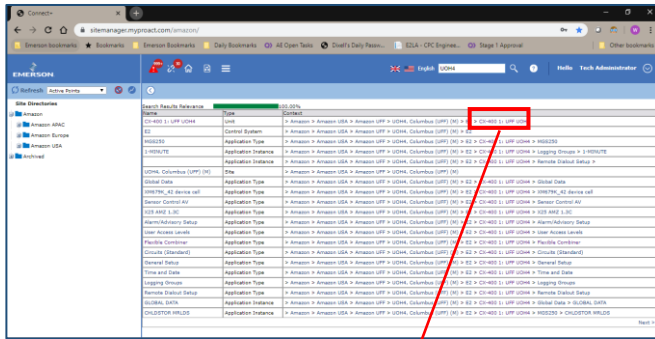
- Connect+ requires a person to login to be able to view or program store controllers. Enter your valid credentials upon access to the site.
- Once logged in, you may search for the store you want to access by entering the store number inside the Search box available at the top right of the screen as shown below:



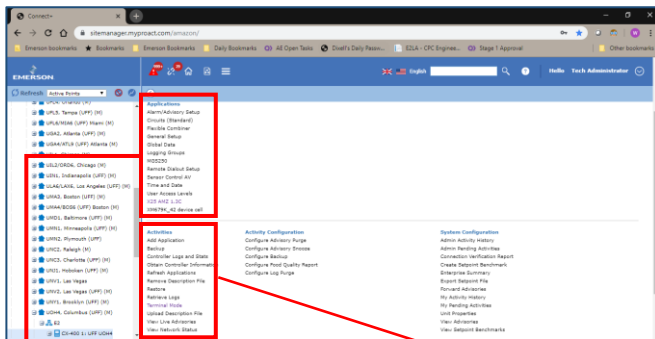
- You may also check out all available sites by browsing through the Tree view at the right side of the screen.



- Once the search results are shown, click on the controller model of the site.



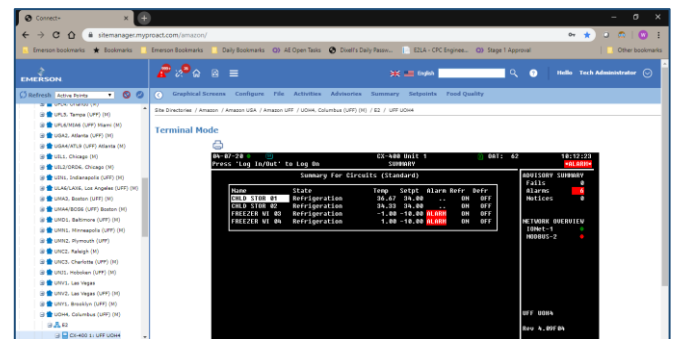
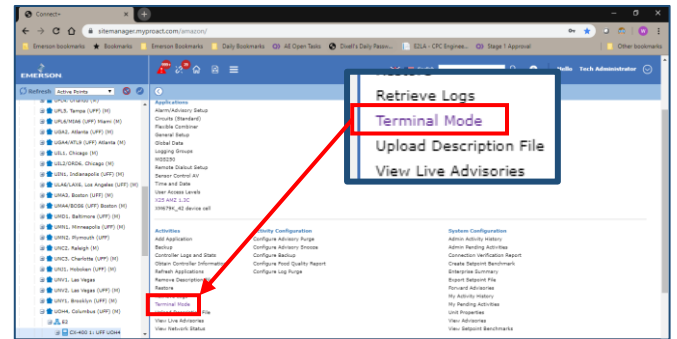
6. Clicking on the controller model provides the user access to various commands like Add Application, (Program) Backup, and (Program) Restore. The next screen also shows the current active applications of the controller.



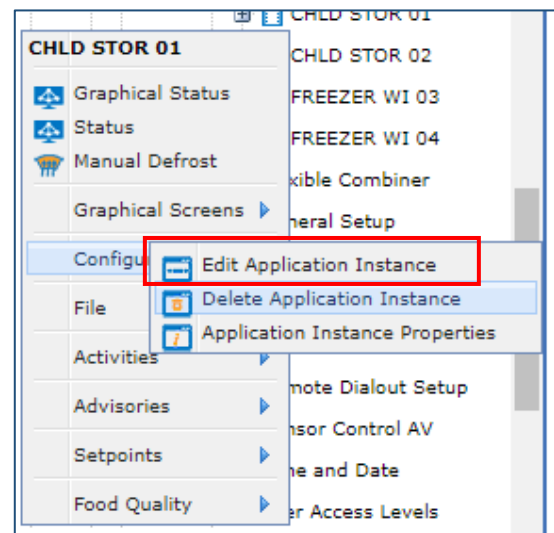
- Applications**
- Alarm/Advisory Setup
  - Circuits (Standard)
  - Flexible Combiner
  - General Setup
  - Global Data
  - Logging Groups
  - MGS250
  - Remote Dialout Setup
  - Sensor Control AV
  - Time and Date
  - User Access Levels
  - X25 AM2 1.3C
  - XM679K\_42 device cell

- Activities**
- Add Application
  - Backup
  - Controller Logs and Stats
  - Obtain Controller Information
  - Refresh Applications
  - Remove Description File
  - Restore
  - Retrieve Logs
  - Terminal Mode
  - Upload Description File
  - View Live Advisories
  - View Network Status

7. Users can access the controller Terminal mode by clicking on the assigned Terminal Mode link and be able to navigate the E2 screen itself for status checking and programming. Accessing this view still requires an E2 Login credential.



Programming may still be done through the Connect+ interface by right-clicking on the specific application from the Tree view. Highlight Configure then choose Edit Application Instance.



### 13. General Guidelines and More Information

For more information about the devices, you may access the [Emerson](#) website, refer to the manuals listed below, or contact your Application Engineer.

- [026-1614 E2 Installation and Operation Manual](#)
- [026-1800 Supervisor User Guide](#)
- [026-4144 Supervisor Quick Start Guide](#)
- [026-1218 XM670-679K Manual](#)
- [Dixell PROG TOOL](#)
- [Emerson Online Product Information](#)

**Table 1 XM679K Default Setpoints**

Standard Circuit	Freezer	Cooler	Notes
<b>C1: General Tab</b>			
Case Type	CTBX	CTBX	
Control Method	Monitor/Defrost	Monitor/Defrost	
Prod Comb Meth	MAX	MAX	
Fan During Defr	OFF	OFF	
Fan During PmDn	ON	ON	
Fan During Idle	ON	ON	
<b>C3: Setpoints</b>			
Target Setpoint	-10	34	
<b>C4: Defrost</b>			
Defrost Type	Electric	Electric	
Pump Down Delay	0:00	0:00	
Defrost Duration	0:40	0:40	
Drip Time	0:03	0:03	
Term Type	TERM TEMP INPUT (s)	TERM TEMP INPUT (s)	
Term Temp SP	55	55	
AV Term Comb	Average	Average	
<b>C5: Defr Times</b>			
Defr Start Mon	Numbered	Numbered	
Num Defrosts	4	4	
Refrence Time	0:00 / 3:00	1:30 / 4:30	<b>2 circuit examples for each</b>
<b>C8: Alarms</b>			
Case Alarm Hi	-5	41	
Case Alarm Lo	NONE	26	
Case Alarm Delay	0:40	0:40	
Case Alm Hyst	1	1	
Product Alm Hi	-5	41	
Product Alm Lo	NONE	26	
Product Alm Delay	0:10	0:10	
Prod Alm Hyst	1	1	

**Table 2 MRLDS 250 Setpoints**

Leak Detection Rates	Slow	Fast	Horn Strobe
Alarm PPM	100	250	350
Time Delay	3 Hours	1 hour	1 minute
Notice PPM	100	250	350
Time Delay	90 Minutes	30 Minutes	1 minute

**Table 3 XM679K Alarm Codes and Troubleshooting Tips**

Message	Cause	Definition	Suggested Solution
<b>CA</b>	Serious external alarm ( <b>i1F = bAL</b> )	This indicates that the digital input assigned for the Serious External Alarm ( <b>i1F = bAL</b> ) has exceeded the allowed amount of time in the ON state ( <b>d1d</b> ).	<p>Check the peripherals connected to the digital input to verify the cause of the alarm.</p> <p>Check parameter <b>i1p</b> (or <b>i2p</b>, depending on where the digital input is setup) and change the parameter to required setting:</p> <ul style="list-style-type: none"> <li>• If <b>CL</b>, it must be closed to activate the alarm</li> <li>• If <b>OP</b>, it must be opened to activate the alarm</li> </ul> <p>Check parameter <b>d1d</b> (or <b>d2d</b>, depending on where the digital input is setup); if time interval is too short before activation, adjust <b>d1d</b> to required value, if necessary.</p> <p>System will resume normal operation as soon as the digital input is deactivated.</p>
<b>dA</b>	Door Open	This indicates that the digital input assigned for the door's state monitoring has exceeded the allowed amount of time in the ON state ( <b>doA</b> ).	<p>Check door if open or closed.</p> <p>Check parameter <b>i1p</b> (or <b>i2p</b>, depending on where the door sensor is setup); if <b>CL</b>, change it to <b>OP</b> so that it will activate when door is opened.</p> <p>Check parameter <b>d1d</b> (or <b>d2d</b>, depending on where the door sensor is setup); if time interval is too short before activation, adjust <b>d1d</b> to required value, if necessary.</p> <p>System will resume normal operation as soon as the digital input is deactivated.</p>

Message	Cause	Definition	Suggested Solution
<b>EA</b>	External Alarm	This indicates that the digital input assigned for the Generic Alarm has exceeded the allowed amount of time in the ON state ( <b>did</b> ).	<p>Check the peripherals connected to the digital input to verify the cause of the alarm.</p> <p>Check parameter <b>i1p</b> (or <b>i2p</b>, depending on where the digital input is setup) and change the parameter to required setting:</p> <ul style="list-style-type: none"> <li>• If <b>CL</b>, it must be closed to activate the alarm</li> <li>• If <b>OP</b>, it must be open to activate the alarm</li> </ul> <p>Check parameter <b>d1d</b> (or <b>d2d</b>, depending on where the digital input is set up); if the time interval is too short before activation, adjust <b>d1d</b> to the required value, if necessary.</p> <p>System will resume normal operation as soon as the digital input is deactivated.</p>
<b>EE</b>	EEPROM Failure	Failure in the memory data.	Replace the unit.
<b>HAd</b>	Defrost High Temperature Alarm	This alarm indicates that the controller is detecting a high defrost temperature.	<p>For electric defrost, check the actual temperature using a temperature measuring device and compare it to the probe reading (<b>P1</b> to <b>P4</b>).</p> <p>Check temperature probe condition and positioning; it may give an incorrect reading. If temperature has reached the setpoint and has exceeded the <b>ddA</b> time interval, check the state of contactor; it may have a welded contact or a short.</p> <p>Check system operation and defrost operations.</p>
<b>HAf</b>	Fan high temperature	This indicates that the controller is detecting a high temperature reading on the defrost probe.	<p>Check parameter <b>ALC</b> for temperature configuration if configured to <b>rE</b>, which is relative to setpoint or <b>Ab</b>, which is absolute temperature; this affects the reading of the <b>FLU</b> parameter.</p> <p>Check parameter <b>FLU</b> setpoint if the value is below the required setpoint.</p> <p>Check the <b>Fad</b> time interval; there may be a short amount of time before the system recovers.</p> <p>Check system operation.</p>

Message	Cause	Definition	Suggested Solution
<b>LAd</b>	Defrost low temperature alarm	This alarm indicates that the controller is detecting a low defrost temperature.	<p>Check electric heater voltage supply and if heater is functioning.</p> <p>Check voltages in contactor coil when energized.</p> <p>For electric defrost, check the actual temperature using a temperature measuring device and compare it to the probe reading (<b>P1</b> to <b>P4</b>).</p> <p>Check temperature probe condition and positioning; it may give an incorrect reading.</p> <p>If temperature has reached the setpoint and has exceeded the <b>ddA</b> time interval, check the terminals 13 and 14 if voltage is present (refer to local voltage).</p> <p>Check defrost operation.</p>
<b>LAf</b>	Fan low temperature	This indicates that the controller is detecting a low temperature reading on the defrost probe.	<p>Check parameter <b>ALC</b> for temperature configuration if configured to <b>rE</b>, which relative to setpoint or <b>Ab</b>, which is absolute temperature; this affects the reading of the <b>FLL</b> parameter.</p> <p>Check parameter <b>FLL</b> setpoint if the value is below the required setpoint.</p> <p>Check the <b>Fad</b> time interval; there may be a short amount of time before the system recovers.</p>
<b>P1</b>	Room probe failure	This alarm indicates that the device could not get a valid reading from a sensor due to a possible hardware problem in the sensor, wiring, input terminal, or controller.	<p>Check probe condition; it may give an inaccurate reading.</p> <p>Check probe wire connection to terminals if cut or loose; secure loose wire to terminals.</p> <p>Check if the type of sensor <b>P1C</b> configured in the controller is correct.</p> <p>Alarm automatically stops a few seconds after the probe restarts normal operation.</p>
<b>P2</b>	Evaporator probe failure	This alarm indicates that the device could not get a valid reading from a sensor due to a	<p>Check probe condition; it may give an inaccurate reading.</p> <p>Check probe wire connection to terminals if</p>

Emerson Classification: Internal

Message	Cause	Definition	Suggested Solution
		possible hardware problem in the sensor, wiring, input terminal, or controller.	<p>cut or loose; secure loose wire to terminals.</p> <p>Check if type of sensor <b>P2C</b> configured in the controller is correct.</p> <p>Alarm automatically stops a few seconds after the probe restarts normal operation.</p>
<b>P3</b>	Third probe failure	This alarm indicates that the device could not get a valid reading from a sensor due to a possible hardware problem in the sensor, wiring, input terminal, or controller.	<p>Check probe condition; it may give an inaccurate reading.</p> <p>Check probe wire connection to terminals if cut or loose; secure loose wire to terminals.</p> <p>Check if type of sensor <b>P3C</b> configured in the controller is correct.</p> <p>Alarm automatically stops a few seconds after the probe restarts normal operation.</p>
<b>P4</b>	Fourth probe failure	This alarm indicates that the device could not get a valid reading from a sensor due to a possible hardware problem in the sensor, wiring, input terminal, or controller.	<p>Check probe condition; it may give an inaccurate reading.</p> <p>Check probe wire connection to terminals if cut or loose; secure loose wire to terminals.</p> <p>Check if type of sensor <b>P4C</b> configured in the controller is correct.</p> <p>Alarm automatically stops a few seconds after the probe restarts normal operation.</p>
<b>rtc</b>	Real time clock alarm	Current time and date need to be set.	Set current time and date.
<b>rtF</b>	Real time clock board failure	Real time clock board failure.	Replace the unit.

**Table 4 MRLDS 250 Fault Codes and Troubleshooting Tips**

Fault Code	Fault Hex Code	Cause	Corrective Action	Associated Parameters
F-01	0001	Chassis temperature outside operating range less than -35C or greater than +55degC will cause this fault.	Change ambient temperature or relocate unit to an area with appropriate ambient temp	A-08 Chassis Temperature

F-02	0002	Temperature changing too fast (Rate>0.5 ~1degC/min) for more than 15minutes. This can occur in a freezer installation during defrost or refreeze or on initial install if unit was frozen then installed in a heated area.	This fault will clear on its own once the temperature stabilizes and the rate drops below 0.1	A.-09 Chassis temp rate
F-03	0004	Communications buffer full. Can be a result of mismatch of comm parameters or improperly formatted MODBus queries.	Verify communication parameters and physical connections. Normally RS485 lines are A-A and B-B but on some equipment A-B and B-A is required.	P.-13 Baud Rate (0=9600, 1=19200) P.-14 Stop Bits (1 or 2) P.-15 Parity (0=None, 1=Odd, 2=Even)
F-04	0008	CRC error in received MODBus query, can be a result of mismatch of comm parameters or miswiring of physical connections.	Same verification as F.-03, also verify shielded twisted pair is being used and grounded only on the BMS side.	P.-13 Baud Rate (0=9600, 1=19200) P.-14 Stop Bits (1 or 2) P.-15 Parity (0=None, 1=Odd, 2=Even)
F-05	0010	Analog output type (P.-03) set to 4-20ma (4) and the current loop is open (no connection made on terminal block or on receiving device.	Fault will clear when loop is closed or output type is changed to a voltage type. If analog output is not being used simply change the output type (P.-03) to 0-5V (0). If current loop function is being used check physical connections at both ends. If receiving device measures voltage, a precision 250ohm resistor should be used across the input terminals to convert the 4-20ma to a 1-5V signal.	P.-03 Analog output type (0=0-5V, 1=1-5V, 2=0-10V, 3=2-10V,4=4-20ma)

F-06	0020	MODBus query timed out, or an incomplete message was received.	This can be a result of communication parameter miss-match so verify as with F.-03	P.-13 Baud Rate (0=9600, 1=19200) P.-14 Stop Bits (1 or 2) P.-15 Parity (0=None, 1=Odd, 2=Even)
F-07	0040	Gas concentration too high, measuring limit of 9999ppm exceeded.	This can occur if unit is located near a large leak or if concentration has built up in an area with poor air circulation. The area should be ventilated before entering since this condition can be extremely dangerous or life threatening. Always assume the area is hazardous until proven otherwise. The fault will clear when the concentration drops below 9999ppm. A bump test with pure refrigerant can also produce this fault and can take several minutes to clear.	A.-07 PPM
F-08	0080	Power supply voltage is out of range, less than 17V or greater than 40V as measured after the full wave rectifier, will cause this fault.	Check supply voltage, and for AC supplies verify transformer phasing where multiple MGS-250's are run on the same transformer	A.-10 Power supply voltage
F-09	0100	Microcontroller clock error, the crystal clock on the PCB is in fault.	No corrective action, replace unit.	
F-10	0200	Temp sensor fault, the onboard temp sensor in not working correctly.	No corrective action, replace unit.	A.-08 Chassis temperature
F-11	0400	EEPROM fault, boot test of EEPROM failed.	Cycle power by separating chassis from terminal block. If fault does not clear replace unit.	

F-12	0800	Emitter control fault, operating power could not be reached.	No corrective action, replace unit.	A.-13 Emitter mW (Nominally 700mw, can be as low as 400mW)
F-13	1000	Emitter filament resistance too high or OPEN.	No corrective action, replace unit.	A.-14 Emitter ohms (Nominally 1.1ohms can range 0.5-1.5)
F-14	2000	Emitter power too high.	No corrective action, replace unit.	A.-13 Emitter mW (Nominally 700mw, can be as low as 400mW)
F-15	4000	Sensor voltage out of range 0.6-3.8V or Negative PPM limit reached due to drift (-75ppm)	Check the sensor voltage at A.-05 and the PPM concentration at A.-07. If the voltage is out of range , replace unit. If negative ppm limit reached due to drift you can have the user manually re-zero by holding the UP and DOWN keys together for 5 seconds according to the procedure in the manual. For a manual zero to PASS there should be no refrigerant present, the unit should have been running for at least 1 hour and the temperature must be stable otherwise the procedure will report "FAIL". A successful re-zero will report "ZERO"	A.-05 Sensor output voltage A.-07 PPM
F-16	8000	Clipping fault, Peak or valley of IR sensor voltage exceeds limits.	No corrective action, replace unit.	

**Table 5 XCM25D Related Parameters**

**NOTE:** Parameter visibility may vary per store. Contact Technical Support for assistance and clarification when needed.

Group	Parameter	Description	Visibility
Probe Configuration	P1C	Probe P1 configuration	Pr2
Probe Configuration	P1i	Start of scaling for probe 1 (0-5V)	Pr2

Emerson Classification: Internal

Probe Configuration	P1E	End of scaling for probe 1 (0-5V)	Pr2
Probe Configuration	P1F	Probe P1 calibration	Pr2
Probe Configuration	P1d	Probe P1 reading error delay (P1C=0-5V)	Pr2
Probe Configuration	P2C	Probe P2 configuration	Pr2
Probe Configuration	P2i	Start of scaling for probe 2	Pr2
Probe Configuration	P2E	End of scaling for probe 2	Pr2
Probe Configuration	P2F	Probe P2 calibration	Pr2
Probe Configuration	P2d	Probe P2 reading error delay (P2C=0-5V)	Pr2
Probe Configuration	P3C	Probe P3 configuration	Pr2
Probe Configuration	P3F	Probe P3 calibration	Pr2
Probe Configuration	P4C	Probe P4 configuration	Pr2
Probe Configuration	P4F	Probe P4 calibration	Pr2
Probe Configuration	P5C	Probe P5 configuration	Pr2
Probe Configuration	P5F	Probe P5 calibration	Pr2
Probe Configuration	P6C	Probe P6 configuration	Pr2
Probe Configuration	P6F	Probe P6 calibration	Pr2
Probe Configuration	P7C	Probe P7 configuration	Pr2
Probe Configuration	P7F	Probe P7 calibration	Pr2
Probe Configuration	dPE	Delay before activating probe error	Pr2
Compressor Regulation	Cin	Compressor cut in pressure set point	Pr1
Compressor Regulation	CoU	Compressor cut out pressure set point	Pr1
Compressor Regulation	rEF	Refrigerant Selection for Regulation	Pr2
Compressor Regulation	SPo	Set point offset	Pr2
Compressor Regulation	LAI	Ambient temperature operation set point	Pr2
Compressor Regulation	LAO	Pressure/Temperature operation for ambient differential	Pr2
Compressor Regulation	LAd	Ambient temperature Recover differential	Pr2
Compressor Regulation	LAS	Ambient temperature threshold for low ambient operation	Pr2

Compressor Regulation	LAT	Temperature/Pressure to end low ambient timer and resume normal operation	Pr2
Compressor Regulation	LMO	compressor minimum on time in low ambient operation	Pr2
Compressor Regulation	LAP	Pressure to end low ambient timer and shut off the compressor	Pr2
Compressor Protection	CS1	Current sensing 1	Pr2
Compressor Protection	CS2	Current sensing 2	Pr2
Compressor Protection	US1	Voltage sensing 1	Pr2
Compressor Protection	US2	Voltage sensing 2	Pr2
Compressor Protection	US3	Voltage sensing 3	Pr2
Compressor Protection	CSE	Voltage and Current protection enabled	Pr2
Compressor Protection	MCC	Maximum Continuous Current limit	Pr2
Compressor Protection	dMC	Voltage/Current sensing trip minimum off time	Pr2
Compressor Protection	MC2	Adjustable current limit before trip	Pr2
Compressor Protection	diC	Ignore current sensing duration at startup duration	Pr2
Compressor Protection	oCn	Number of Over Current Trips before lock	Pr2
Compressor Protection	PEn	Number of loss of phase trips before lock	Pr2
Compressor Protection	LUo	Minimum voltage to trip compressor	Pr2
Compressor Protection	HUo	Maximum voltage to trip compressor	Pr2
Compressor Protection	dUA	over or under voltage minimum time	Pr2
Compressor Protection	Uot	compressor minimum off time because of voltage error	Pr2
Compressor Protection	Utn	Number of compressor trips before lockout because of voltage	Pr2
Compressor Protection	PiP	Adjustable under average voltage percentage	Pr2

Compressor Protection	PiC	Generate warning or shut down compressor when phase imbalance	Pr2
Compressor Protection	CMd	Missing current duration before warning	Pr2
Compressor Protection	iMb	Upper limit value of imbalance current	Pr2
Compressor Safety	odS	Output delay at start up	Pr2
Compressor Safety	Con	Compressor On time with faulty probe	Pr2
Compressor Safety	CoF	Compressor OFF time with faulty probe	Pr2
Compressor Safety	2on	Minimum time between two starts (same compressor)	Pr2
Compressor Safety	2oF	Delay between compressor switch-off and start-up (same compressor)	Pr2
Compressor Safety	LPd	Low suction pressure alarm delay	Pr2
Compressor Safety	LPE	Low suction pressure error signal enabling	Pr2
Compressor Safety	dLt	DLT alarm temperature to stop compressor	Pr2
Compressor Safety	dLr	DLT alarm recover temperature to turn on compressor	Pr2
Compressor Safety	dLd	DLT alarm activation delay	Pr2
Compressor Safety	dCt	Compressor minimum off time for DLT Alarm	Pr2
Compressor Safety	dLn	Number of DLT alarm activation before compressor lock	Pr2
Compressor Safety	dLi	Time to ignore Low DLT sensor error at startup	Pr2
Compressor Safety	LPF	Compressor minimum off time for low pressure switch protection	Pr2
Compressor Safety	LPA	Low pressure alarm value	Pr2
Condenser Fan	FCM	Condenser Fan Motor Modulation Type	Pr2
Condenser Fan	LT7	Low set point for condenser fan map 7(For R448A)	Pr2

Emerson Classification: [Internal](#)

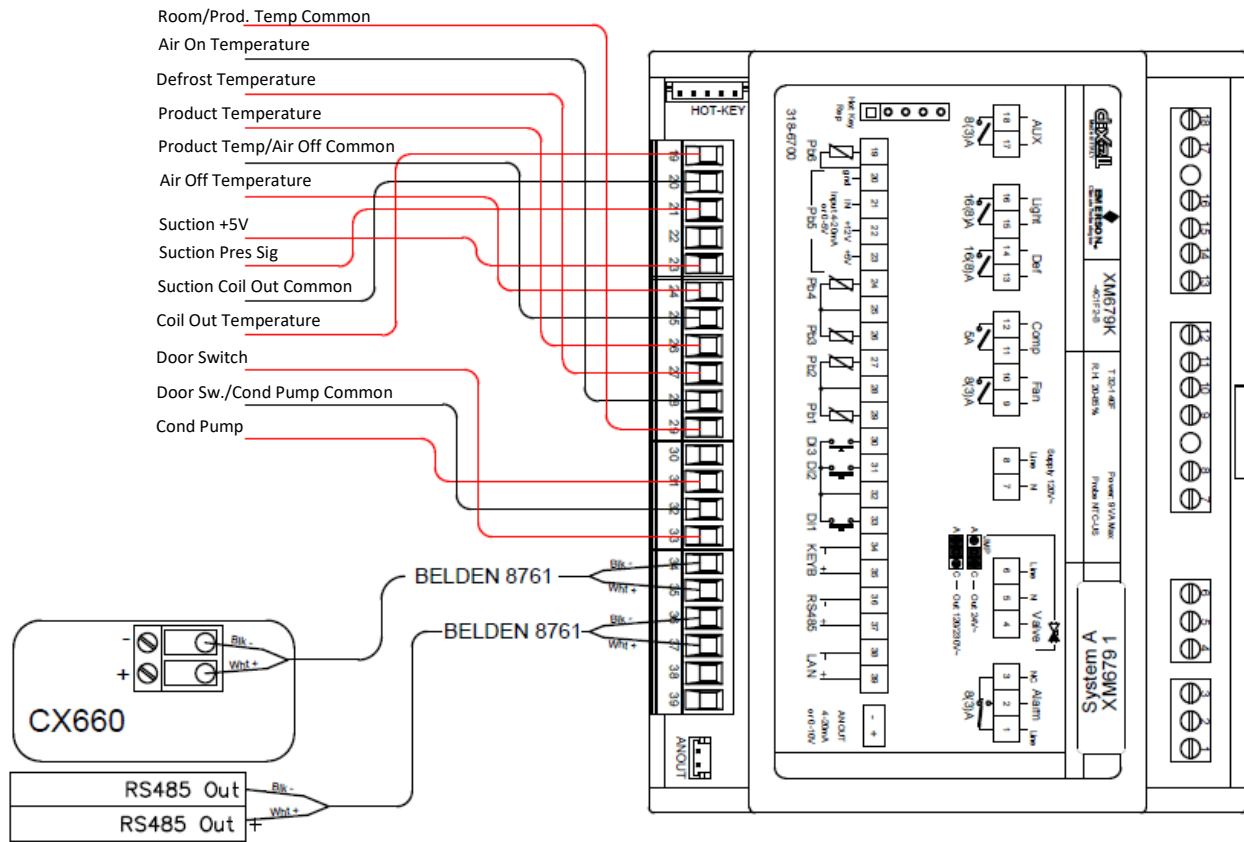
Condenser Fan	LP7	Low suction pressure point for condenser fan map 7(For R448A)	Pr2
Condenser Fan	HT7	High set point for condenser fan map 7(For R448A)	Pr2
Condenser Fan	HP7	High suction pressure point for condenser fan map 7(For R448A)	Pr2
Condenser Fan	FSM	Fan Set Point Modulation Enabling	Pr2
Condenser Fan	FSP	Condenser temperature set point when Fan set point modulation is disable	Pr2
Condenser Fan	MCS	Minimum Condenser temperature set point	Pr2
Condenser Fan	FAE	High Ambient Fan motor override enabled	Pr2
Condenser Fan	FAd	High Ambient Fan motor override differential	Pr2
Condenser Fan	FdE	High DLT Fan motor override enabled	Pr2
Condenser Fan	FdS	High DLT Fan motor override differential	Pr2
Condenser Fan	SF1	Fixed condenser fan set point	Pr2
Condenser Fan	HF1	Fan 1 differential	Pr2
Condenser Fan	SFD	Fan 1 to Fan 2 differential	Pr2
Condenser Fan	HF2	Fan 2 differential	Pr2
Condenser Fan	FoL	Fan control with ambient sensor - Min ambient	Pr2
Condenser Fan	FoH	Fan control with ambient sensor - Max ambient	Pr2
Condenser Fan	FoM	Fan speed control with ambient sensor	Pr2
Condenser Fan	AU2	Condenser Temperature/Pressure threshold for high alarm	Pr2
Condenser Fan	Ad2	High condenser temperature alarm delay	Pr2
Condenser Fan	Ab2	High condenser temperature alarm with compressor off	Pr2

Condenser Fan	AH2	Condenser temperature/Pressure threshold for alarm recovery	Pr2
Digital Input	i1F	Digital input 1 function	Pr2
Digital Input	i1P	Digital input 1 polarity	Pr2
Digital Input	d1d	Activation delay for digital input 1	Pr2
Digital Input	i2F	Digital input 2 function	Pr2
Digital Input	i2P	Digital input 2 polarity	Pr2
Digital Input	d2d	Activation delay for digital input 2	Pr2
Digital Input	i3F	Digital input 3 function	Pr2
Digital Input	i3P	Digital input 3 polarity	Pr2
Digital Input	d3d	Activation delay for digital input 3	Pr2
Display	Lod	Remote Display visualization	Pr2
Display	FiL	Filter enabling for probe reading	Pr2
Display	FiC	Coefficient for probe reading filter(0=max, 100=disable)	Pr2
Others	Adr	Serial address	Pr2
Others	rSC	Reset key configuration	Pr2
Others	PAS	Enter into PR2 level	Pr1
Outputs	ALC	Alarm contact activation in a warning, alarm, lockout	Pr2
Outputs	tbA	Alarm relay deactivation	Pr2
Outputs	bEn	Buzzer enabled	Pr2
Outputs	oA1	Relay output 1 configuration	Pr2
Outputs	oA2	Relay output 2 configuration	Pr2
Outputs	oA3	Relay output 3 configuration	Pr2
Outputs	oA4	Relay output 4 configuration	Pr2
Outputs	oA5	Relay output 5 configuration	Pr2
Outputs	oA6	Triac output 1 configuration	Pr2
Outputs	oA7	Triac output 2 configuration	Pr2
Outputs	o1P	Output 1 Polarity	Pr2
Outputs	o2P	Output 2 polarity	Pr2
RTC	Min	Current minute	Pr1
RTC	Hr	Current hour	Pr1
RTC	MdY	day of month	Pr1
RTC	Mon	month	Pr1
RTC	YEr	year	Pr1

**Table 6 Part Numbers**

Part Number	Description
851-4449	Panel, Three Evaporator, XM679K, Disconnect, Defrost Cont Evap Con
851-4448	Panel, Two Evaporator, XM679K, Disconnect, Defrost Cont Evap Fan
118-4140	Remote Silence Panel - Mfr by EMC
118-5120	Leak Detector Horn Strobe - Mfr by EMC
118-4150	Door Learn (Yellow 12V/24V/120V)
203-5753	Transducer Humidity Space 2% 12VDC in
201-2007	Space Temperature Sensor w/o slider
201-2112	12 INCH TEMP PROBE DUCT MOUNT / WALK IN
508-9100	Mini Product Simulator
809-0030	MRLDS 250 Broad Spectrum Refrig Leak Sensor - 0-3500 ppm
800-2200	200 PSI REFRIGERANT PRESSURE SENSOR
851-4458	Refrigerant Leak Alarm/Strobe Panel
851-4373	Panel CX300 with 168 pwr-com 14x14x6 (Multiflex)
118-4102	General Purpose Door Switch
896-3000	Cell Modem Kit w/ Switch and Sim Card
814-3550	Wireless Gateway
814-3600	Wireless Module
814-3560	Wireless Repeater

Figure 1 XM679K I/O



**Figure 2 XCM25D I/O**

**NOTICE**

Connections may vary per store. Contact Amazon for the provision of the respective location's drawing prints.

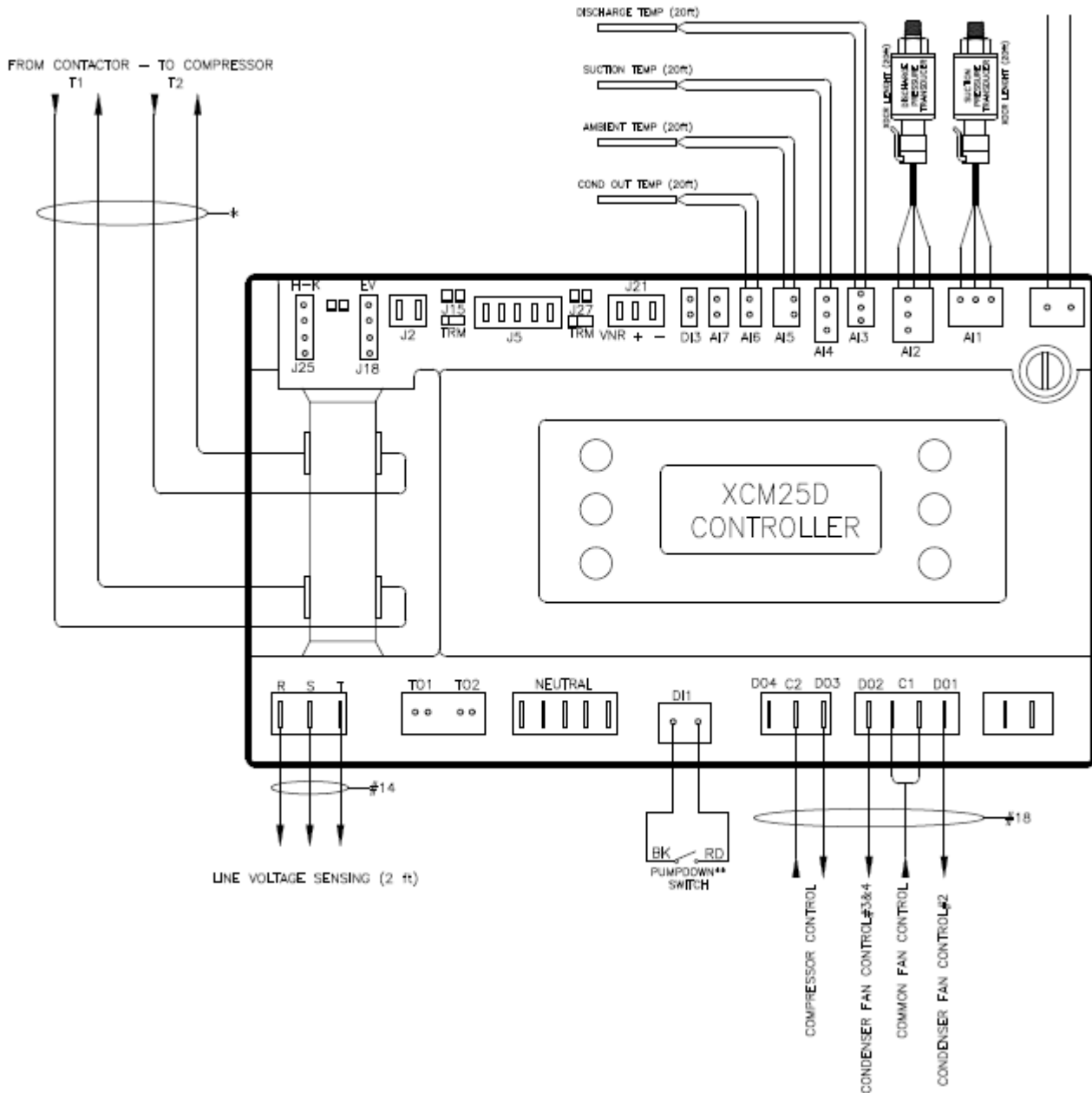




















Figure 3 XCM25D Display



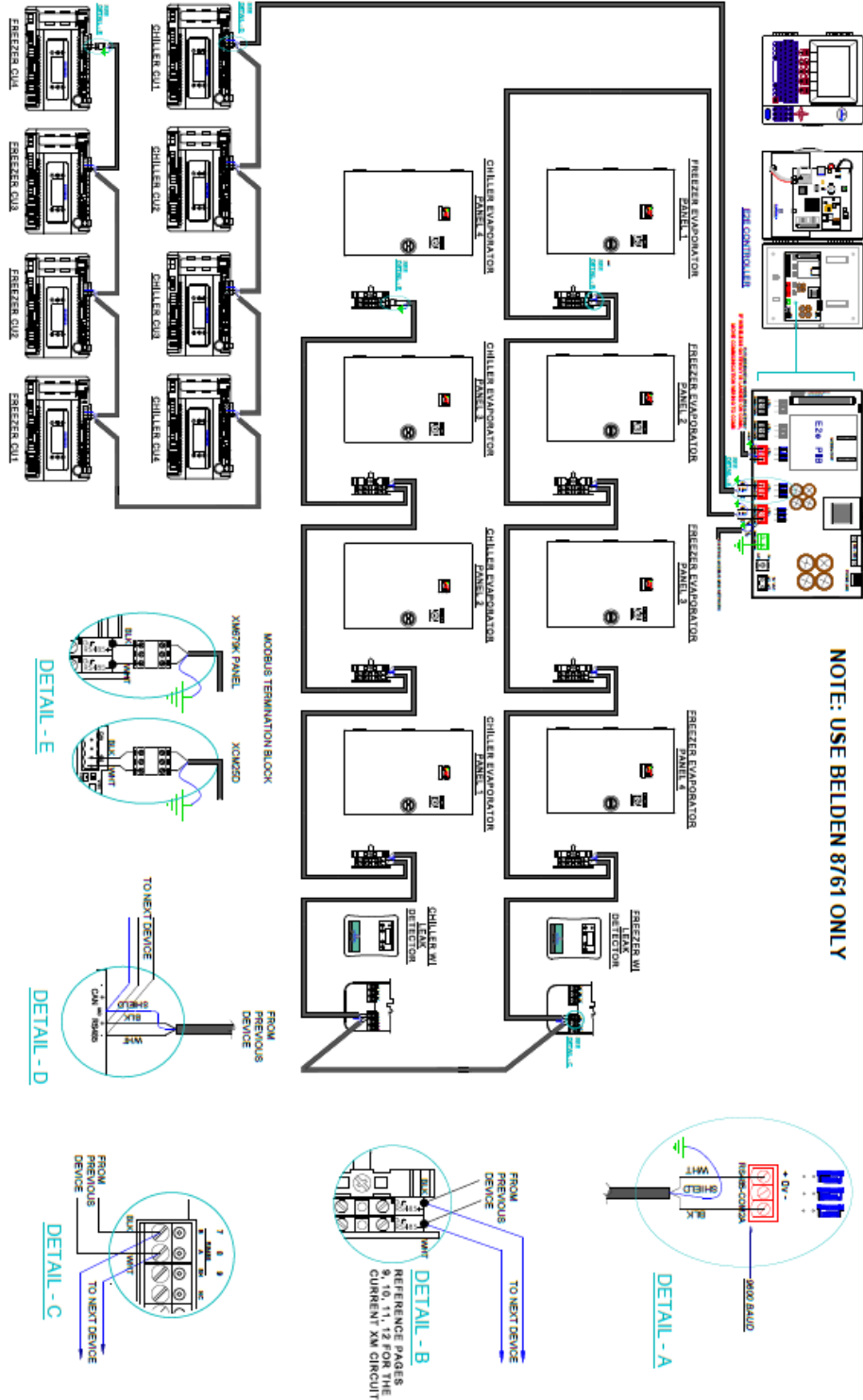
Figure 4 XCM25D LED Functions

LED	MODE	FUNCTION
	ON	Compressor enabled
	Flashing	Anti-short cycle delay enabled
	ON	Condensing fans enabled
	ON	Display temperature value in degrees F
	Flashing	Programming mode
	ON	Display pressure value in PSI
	ON	Browsing service menu
	Flashing	Fast access menu (Viewing set points and measured values)
	ON	Browsing the alarm menu
	Flashing	New alarm occurred
	ON	An alarm is occurring
	ON	In defrost or evap fan drip time when ON
	ON	Evaporator fans enabled

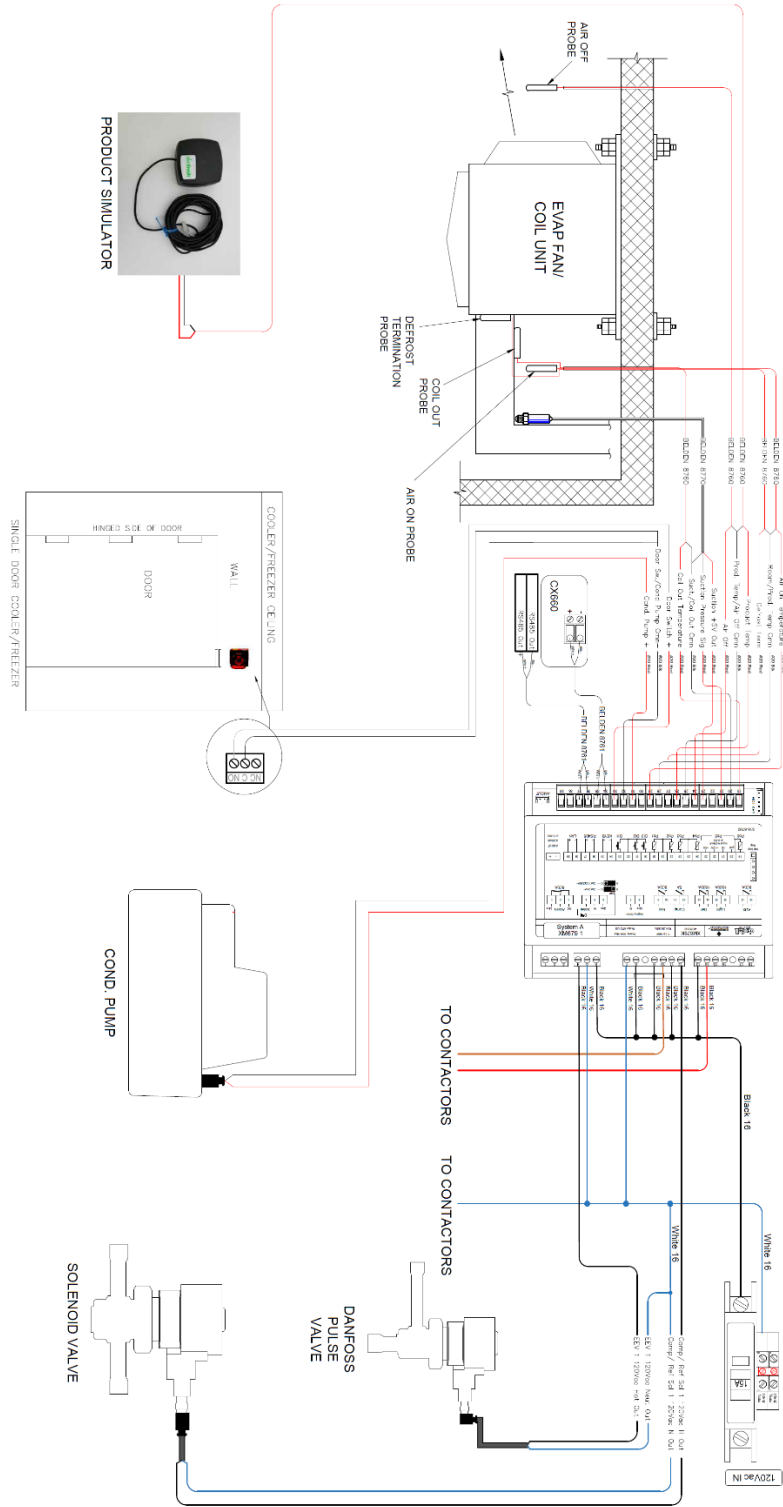
**Figure 5 XCM25D Buttons and Key Descriptions**

	(SET) Select a parameter or confirm an operation when in programming mode.
	(RESTART) Hold for 5 seconds to reset any lockouts if the current state of the controller allows for reset. Allows a manual restart and a “dead band reset”.
	(UP) View current measured values (Fast Access Menu); in programming mode or any menu to browse the parameter codes or increase the displayed value.
	(DOWN) in programming mode or any menu to browse the parameter codes or decrease the displayed value.
	(SERVICE) To enter the service and alarm menu.
	<b>Hold for 3 seconds to start a manual defrost</b>
	Press and hold for about 3 sec to lock ( <b>Pon</b> ) or unlock ( <b>PoF</b> ) the keyboard.
	Press together to exit from programming mode or from menu; on submenus to return to previous level.
	Press together for 3 sec to access to first level of programming mode.

UFF System Generic Drawings

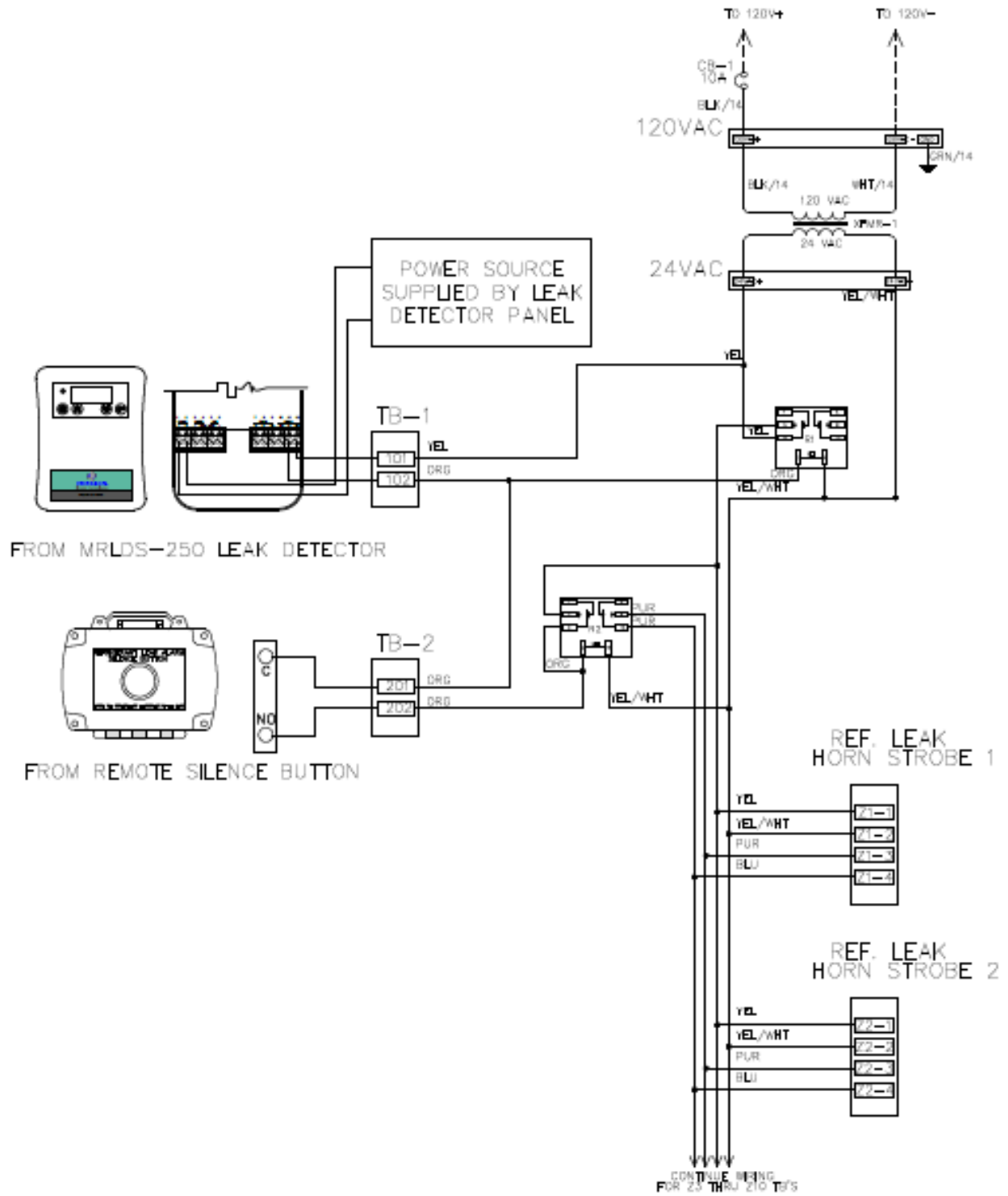


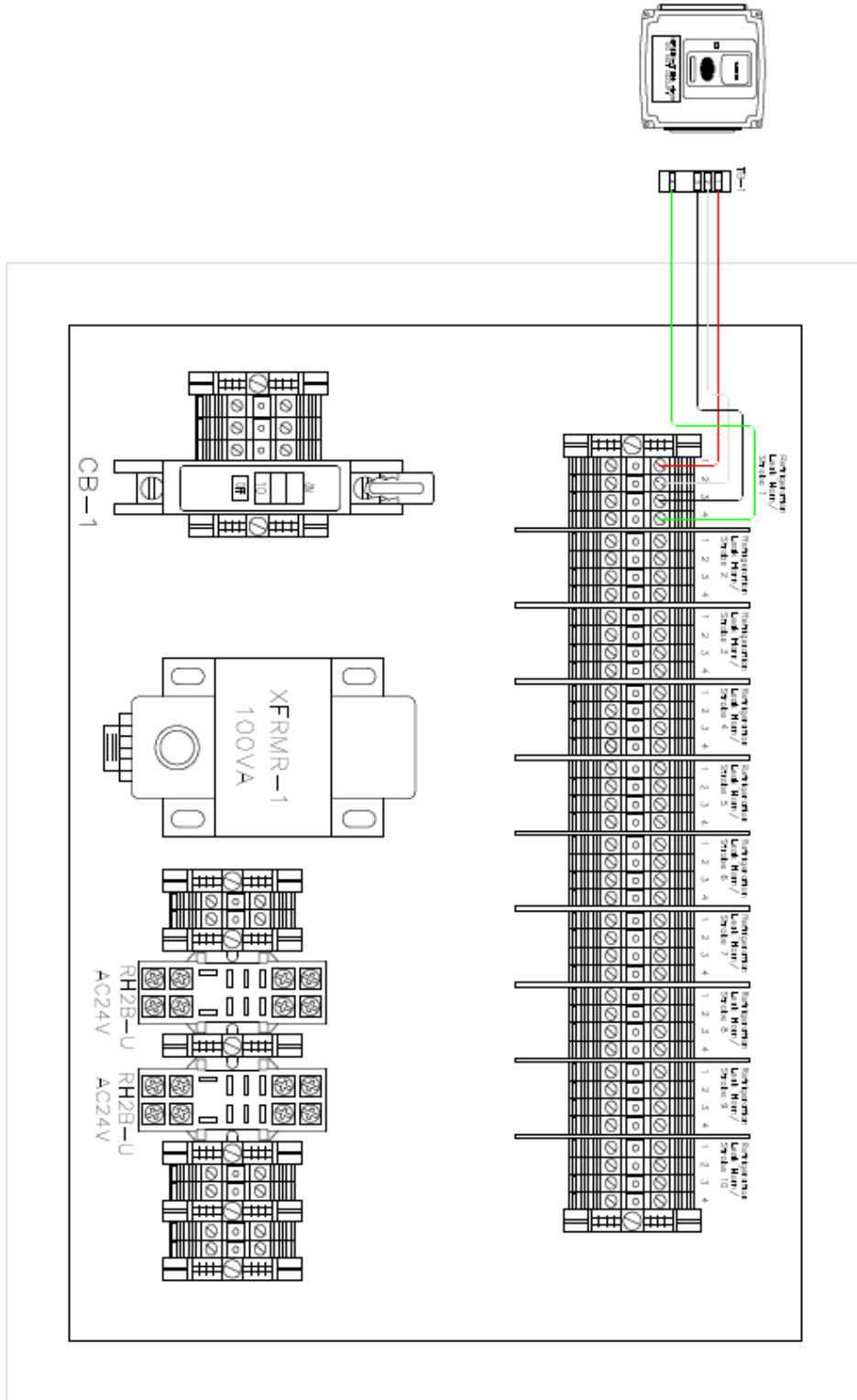
NOTE: USE BELDEN 8761 ONLY





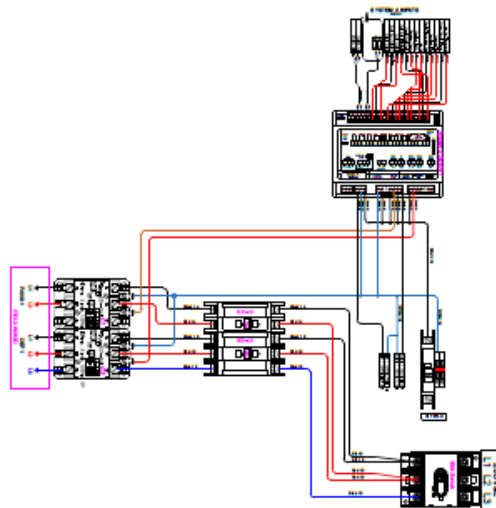
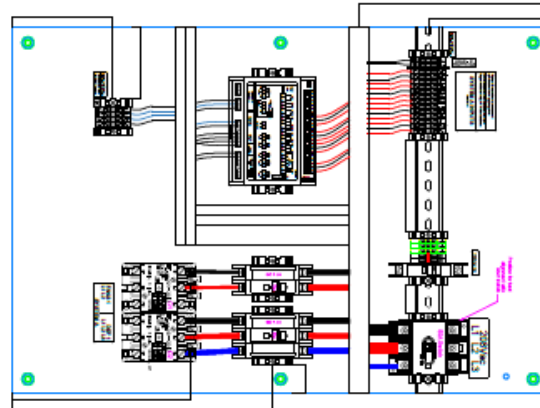
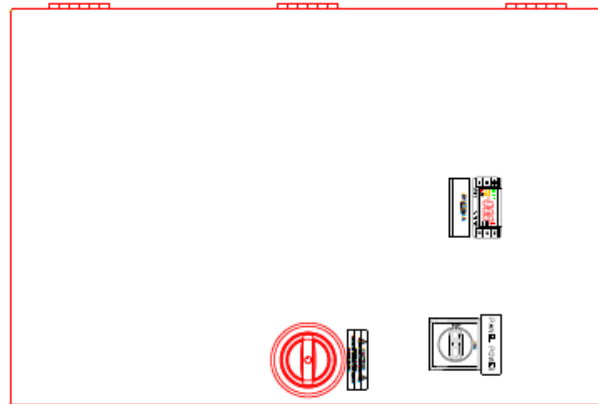


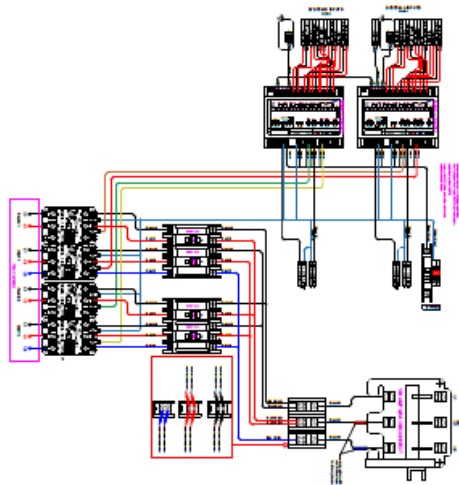
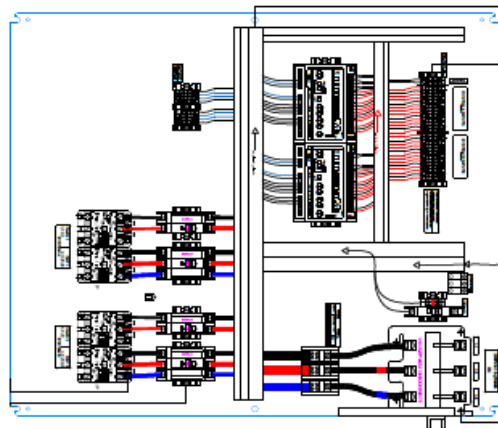
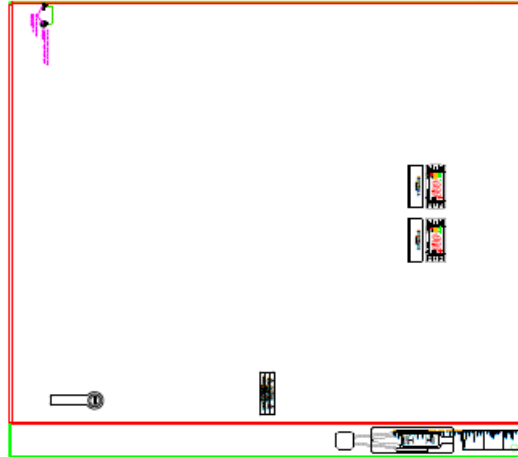


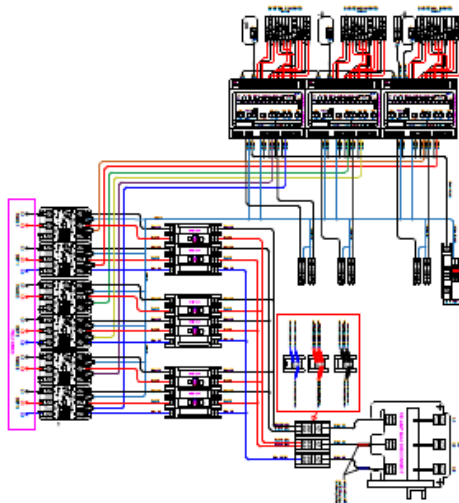
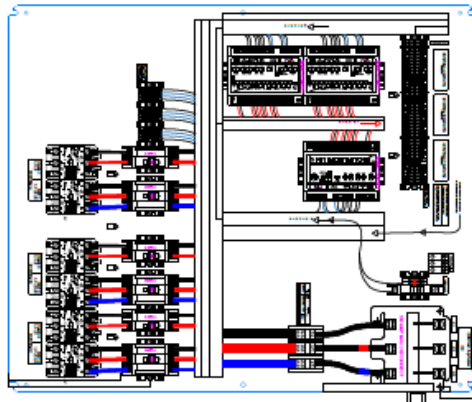
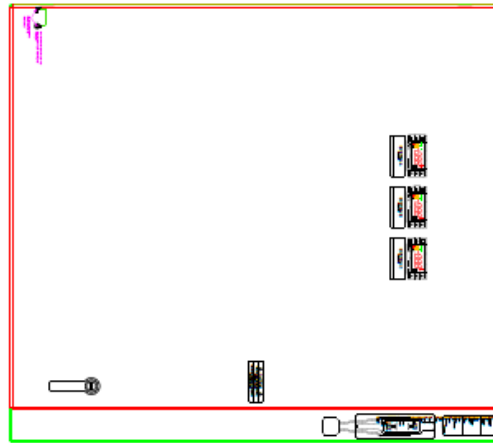


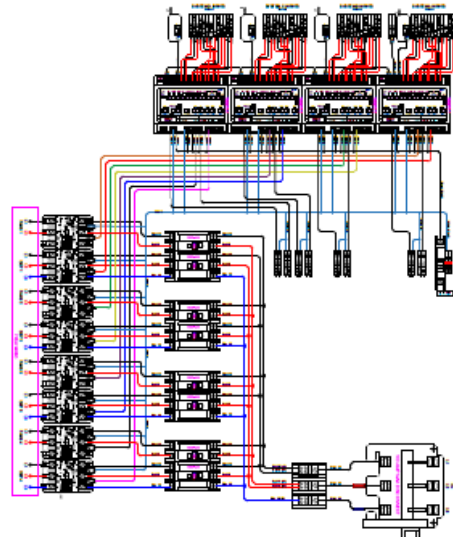
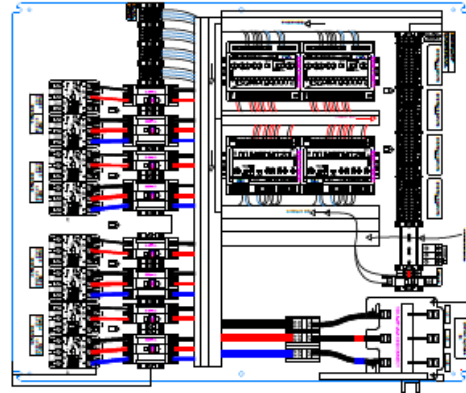
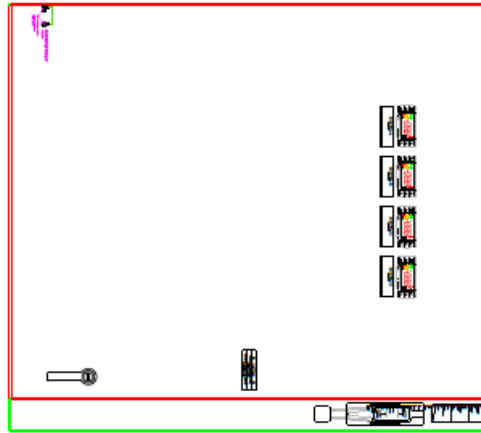
RU 10 16X12 BOX

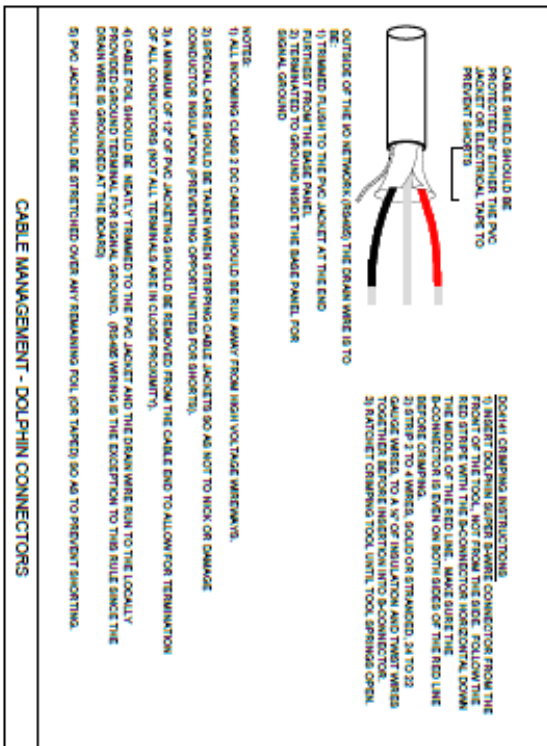
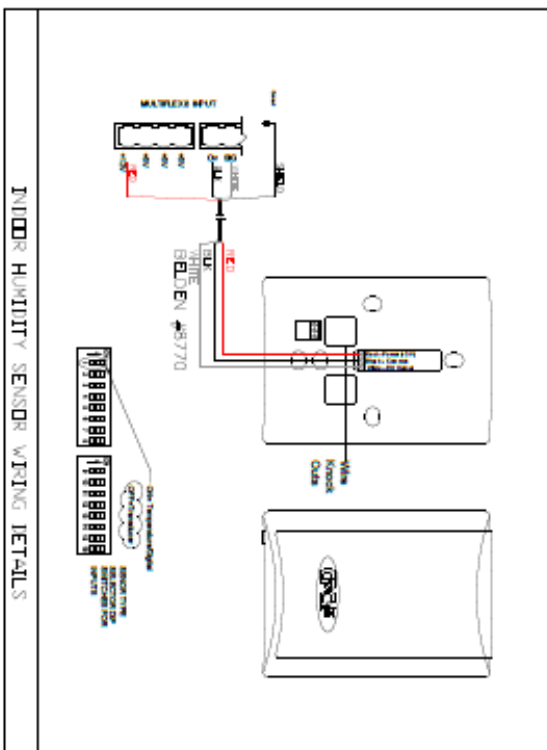
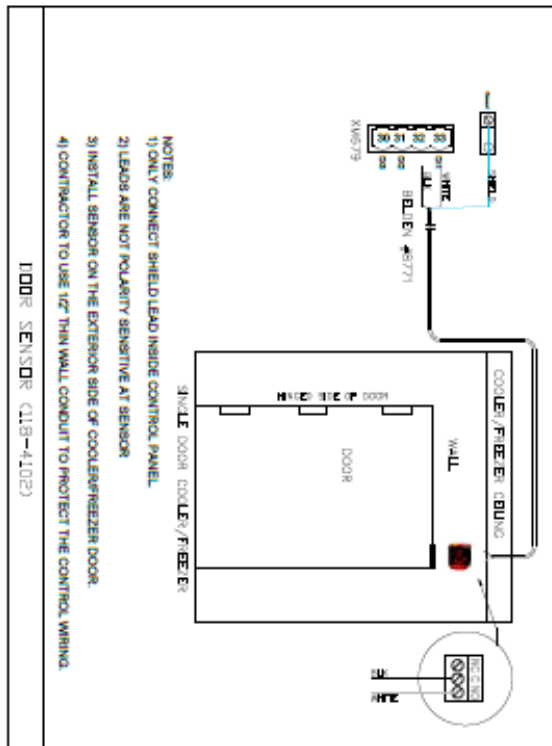
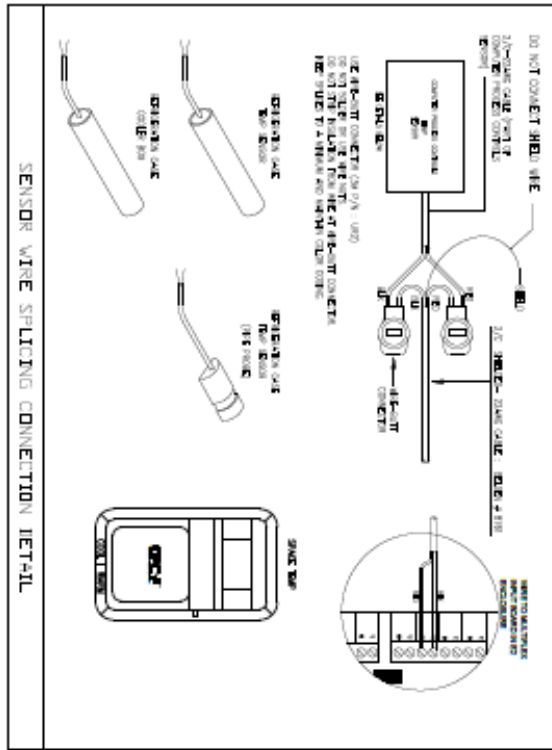
RU 10 14.25X10.25 INSERT











The contents of this publication are presented for informational purposes only and 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 and/or its affiliates (collectively "Emerson"), as applicable, reserve the right to modify the design 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 Emerson product remains solely with the purchaser or end user.

Emerson Classification: [Internal](#)