

Dixell XR77CH Electronic Controller



Dixell XR77CH Electronic Controller
Controller Manual

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Contents

1 Overview	
2 Faceplate	
3 Procedures	
Real Time Clock	3
Manual Defrost	3
Temperature Records	3
Temperature Setpoint	3
Controller Lock	4
On/Off Function.	4
4 Alarms	

1 Overview

The cabinet is fitted with a Dixell XR77CH electronic controller, which is pre-programmed. SKOPE does not recommend changing the settings unless it is absolutely necessary. To ensure efficient operation, the controller automatically forces a defrost cycle when required.

The electronic controller controls and displays the internal cabinet temperature, and signals temperature and equipment alarms.

For general operation, if you have a cabinet with:

- a single refrigeration cartridge and electronic controller, you do not need to set anything up, or do any extra programming.
- twin refrigeration cartridges and two electronic controllers, you will need to set the real time clocks first.

For more detailed information see:

<https://climate.emerson.com/documents/xr77ch-gb-en-5220496.pdf>

2 Faceplate

Because the electronic controller plays such an important role, it's helpful to know the parts of the faceplate you may use.

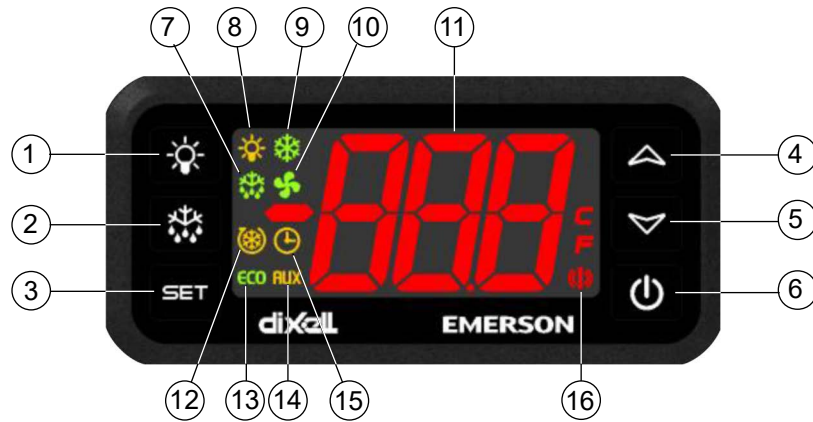


Table 1: Controller faceplate

Item	Function
1	Light button: To switch lights on and off.
2	Defrost button: To manually initiate a defrost cycle.
3	Set button: To display the temperature set point, reset the highest and lowest recorded temperatures and change the setpoint.
4	Up button: To view the highest temperature recorded inside the cabinet (since the last controller reset).
5	Down button: To view the lowest temperature recorded inside the cabinet (since the last controller reset).
6	On/Off button: Function disabled. Contact SKOPE to enable.
7	Defrost cycle indicator: On during defrost cycles. Flashes during drip time (e.g. after a defrost cycle).
8	Light indicator: On when the light is on.
9	Compressor indicator: On when the compressor is on. Flashes when compressor start is pending.
10	Fan indicator: On when the fans are enabled.
11	Display indicator: Displays temperature and messages.
12	Continuous cycle indicator: On during continuous cycle.
13	Eco indicator: Energy saving enabled.
14	Auxiliary indicator: On when the auxiliary relay is on.
15	Clock indicator: On when the real time clock is enabled.
16	Alarm indicator: On when an alarm is occurring.

3 Procedures

Real Time Clock If you have a cabinet with two refrigeration cartridges and a controller for each cartridge, these are kept in sync with a real time clock. You will need to set the real time clock for each controller.

Procedure 1: To set the real time clock

1. Enter the Pr1 programming menu by pushing both the **Set** and **Down** buttons for 3 seconds. The rtC parameter is displayed.
 2. Push the **Set** button to enter the real time clock menu. The Hur (hour) parameter is displayed.
 3. Push the **Set** button and then set current hour using the **Up** and **Down** buttons.
 4. Confirm the value by pushing **Set** button.
 5. Repeat the procedure to set the Min (minutes) and dAy (day) parameters.
 6. Exit by pushing the **Set** and **Up** buttons together.
-

Manual Defrost A manual defrost may be necessary if the door is left open for an extended period of time, or during abnormal environmental conditions.

To start a manual defrost, push and hold the **Defrost** button for more than two seconds.

Temperature Records The electronic controller records the highest and lowest internal temperatures of the cabinet.

Procedure 2: To view the highest temperature recorded

1. Press and release the **Up** button. The highest temperature is displayed.
-

Procedure 3: To view the lowest temperature recorded

1. Press and release the **Down** button. The lowest temperature is displayed.
-

Procedure 4: To reset the temperature records

1. Press and release the **Up** or **Down** button to display the highest or lowest temperature recorded.
 2. While the highest or lowest recorded temperature is displayed, press and hold the **Set** button for more than three seconds. rSt is displayed, then starts blinking, and the temperature records are reset.
-

Temperature Setpoint The cabinet temperature setpoint is set at the factory and can be adjusted if necessary. SKOPE does not recommend changing the setpoint unless it is absolutely necessary, and then only by small increments at a time.

Procedure 5: To view the temperature setpoint

1. Press and release the **Set** button. The setpoint is displayed.
-

Procedure 6: To adjust the temperature setpoint

1. Push the **Set** button for more than 2 seconds to change the setpoint. The setpoint will be displayed, and the "°C" or "°F" LED will start blinking.
 2. Use the **Up** and **Down** buttons within 10 seconds to adjust the setpoint.
 3. Press and release the **Set** button or wait ten seconds to confirm the new setpoint value.
-

Controller Lock The electronic controller buttons can be locked to prevent access to the controller settings. It is still possible to view the setpoint and temperature records when the electronic controller is locked.

Procedure 7: To lock the electronic controller

1. Press the **Up** and **Down** buttons simultaneously for more than three seconds. The controller displays PoF and the controller is locked.
-

Procedure 8: To unlock the electronic controller

1. Press the **Up** and **Down** buttons simultaneously for more than three seconds. The controller displays Pon and the controller is unlocked.
-

On/Off Function When the on/off function is enabled, the cabinet can be switched off and on by pressing and holding the **On/Off** button on the controller faceplate for 1 second. Contact a SKOPE service agent if this function is required.

When switched off, the electronic controller enters standby mode and turns off the refrigeration system. The faceplate displays OFF.

Ensure compliance with all food safety requirements. If perishable product is being stored in the cabinet, don't turn it off.

4 Alarms

The following table explains messages that the electronic controller displays and related alarms. Alarms signal unexpected operational changes in the cabinet and stop when action is taken to resolve the problem.

Note that cabinets with twin refrigeration cartridges have two electronic controllers, and an alarm might be coming from the unseen controller.

Table 2: Controller alarms

Code	Alarm	Action
P1	Probe alarm	Press any button on the electronic controller to reset the alarm.
P2		
P3		If the alarm persists, arrange a service call.
P4		
HA	Maximum temperature alarm	Press any button on the controller to mute the audible alarm. The alarm will stop once the temperature has reached an acceptable level.
LA	Minimum temperature alarm	Check that the installation meets specification. Ensure there are no blockages in front or behind the cabinet, and that the cabinet is installed within the operating temperature range. If the alarm persists, arrange a service call.
HA2	Condenser high temperature alarm	Press any button on the controller to mute the audible alarm. The alarm will stop once the condenser temperature has reached an acceptable level. Clean the condenser coil. Check the installation meets specification. Ensure there are no blockages in front or behind the cabinet, and that the cabinet is installed within the operating temperature range. If the alarm persists, arrange a service call.
LA2	Condenser low temperature alarm	Press any button on the controller to mute the audible alarm. The alarm will stop once the condenser temperature has reached an acceptable level. Clean the condenser coil. Check the installation meets the guidelines. Ensure there are no blockages in front or behind the cabinet, and that the cabinet is installed within the operating temperature range. If the alarm persists, arrange a service call.
dA	Door open	Close the door.
EA	External alarm	Press any button on the electronic controller to reset the alarm. If the alarm persists, arrange a service call.
CA	External alarm or pressure switch alarm	Press any button on the electronic controller to reset the alarm. If the alarm persists, arrange a service call.
rtC	Real time clock alarm	Only applicable when the real time clock is enabled.
rtF	Real time clock board alarm	Press any button on the electronic controller to reset the alarm. If the alarm persists, arrange a service call.

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