

ems75sz Troubleshooting – Quick Guide

User interface



LED indicators



Compressor. **On** when the compressor is running.



Fan. **On** when the evaporator fan is running.



Saving mode temperature disable. **On** if the saving mode temperature is disabled.



Motion. **On** when motion detected.

Buttons



Set



Up






Defrost
(Starts a manual defrost)



Down
(Also cancels alarms)

Power up sequence

- 1  Checks all the display elements are working.
- 2  Displays the firmware version. (Example)
- 3  Displays the checksum. (Example)

Normal operation

During normal operation the EMS will display one of the messages below. If one of the below messages is not displayed the EMS has registered an alarm or fault.



Ready mode
(Displays USE or temperature)




Saving mode



Defrost mode



Door open



Freeze up protection

If evaporator frozen, ensure appliance sensor is connected properly. Disconnect appliance sensor and ensure display shows **PF1**. Otherwise, replace the controller.

Alarms and troubleshooting

The EMS controller can display messages to aid fault diagnosis. If an alarm sounds and the EMS controller displays any of the alarms below, contact your service provider.



Refrigeration system failure



Condenser high temperature alarm (requires a condenser sensor)



Appliance sensor failure



Condenser sensor failure (if used)



Evaporator sensor failure (if used)



Door open alarm

Cooler lights do **not** switch on

If the EMS controller is in the ready mode, ensure that the light switch inside the cooler switched on.

Menu access

To access the menu:

1. Press and hold **Set** until PAS is displayed.
 - Press **Set** four times (x4).
 - Press **Down** twice (x2).
 - Press **Up** once (x1).
 - Press **Defrost** twice (x2).
2. Ensure that PS is displayed.

Half reset

To clear the self-learning matrix and to restart the learning:

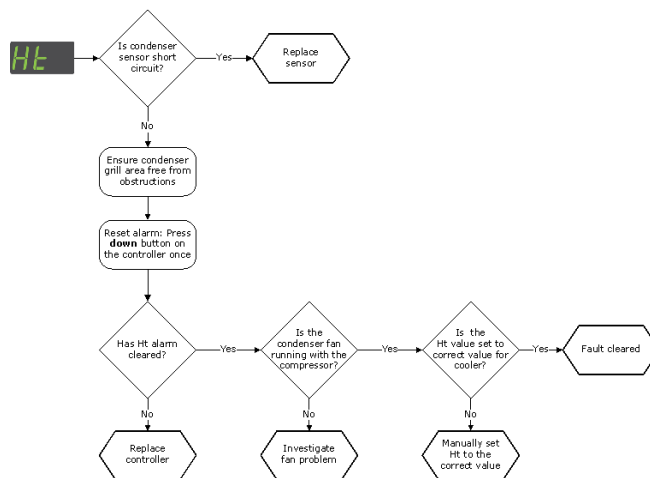
1. Access the menu and press **Down** to scroll to **Hr** menu.
2. Press **Set** and enter the button sequence of the password:
 - Press **Set** four times (x4).
 - Press **Down** twice (x2).
 - Press **Up** once (x1).
 - Press **Defrost** twice (x2).
3. Check the ems controller reboots.

Test routine

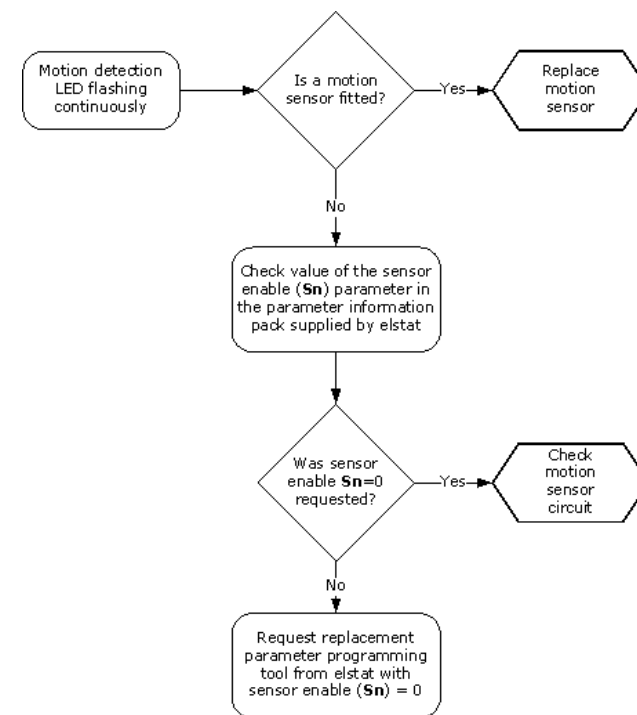
To test the relays, temperature sensors, and motion sensor:

1. Access the menu and press **Down** to scroll to tst menu.
2. Press the menu button to display 888.
3. Press **Set** and **Defrost** at the same time to start the relay test rel. Then:
 - Press **Down** to test the evaporator fan.
 - Press **Up** to test the lights.
 - Press **Set** to test the compressor.
 - Press **Defrost** to switch off the relays that are on.
4. Press **Set** and **defrost** at the same time to start the relay test rL2. Then, press **Down** to initiate the test:
 - Press **Up** to switch on the defrost heater relay.
 - Press **Defrost** to switch off the relay.
5. Press **Set** and **Defrost** at the same time to display AnA. Then:
 - Press **Up** to view the appliance temperature.
 - Press **Down** to test the door switch.
 - press **Defrost** to view the condenser temperature
6. Press **Set** and **Defrost** at the same time to test the motion detector Pir. Then, press **Defrost** and move your hand in front of the motion sensor. Check that the displayed number increases.
7. Press **Set** and **Defrost** at the same time to exit the test mode. The ems controller then displays USE or the appliance sensor temperature.

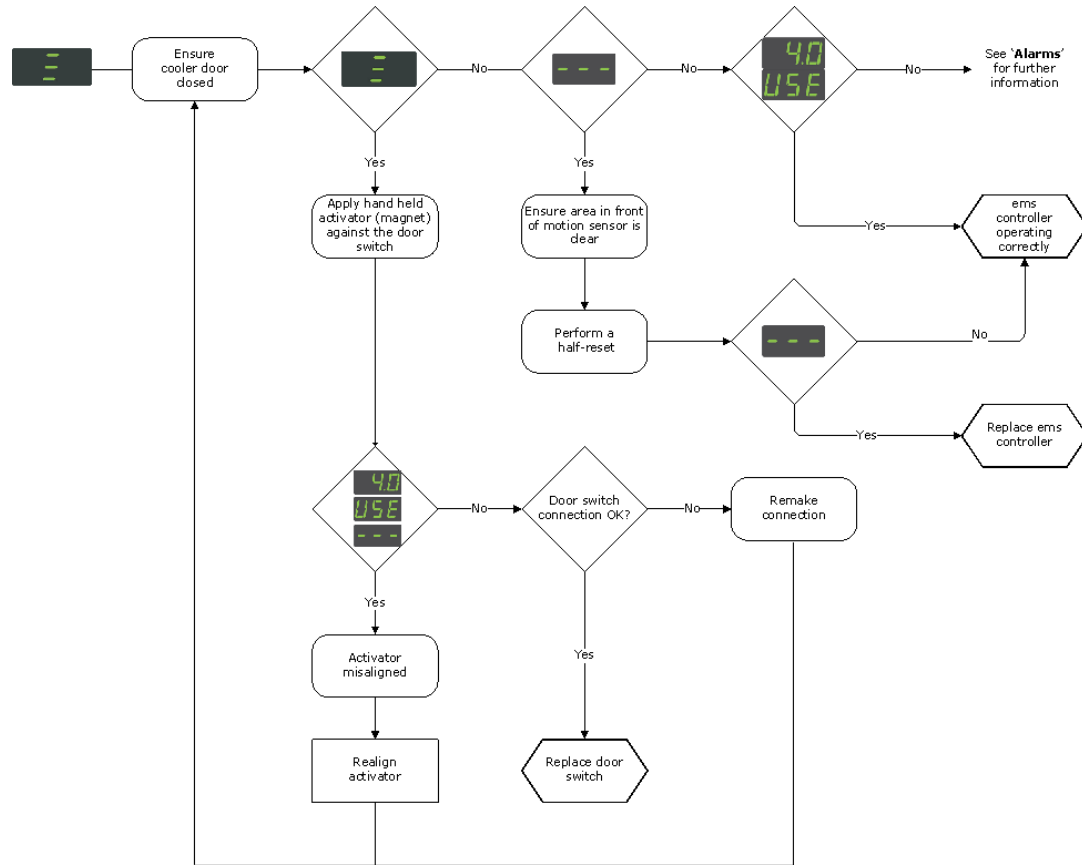
Condenser high temperature



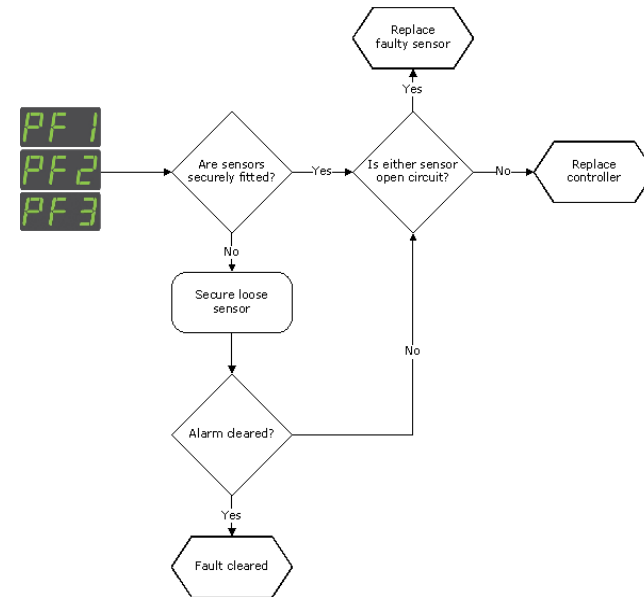
Motion sensor



Door switch



Temperature sensor



Freeze up protect

