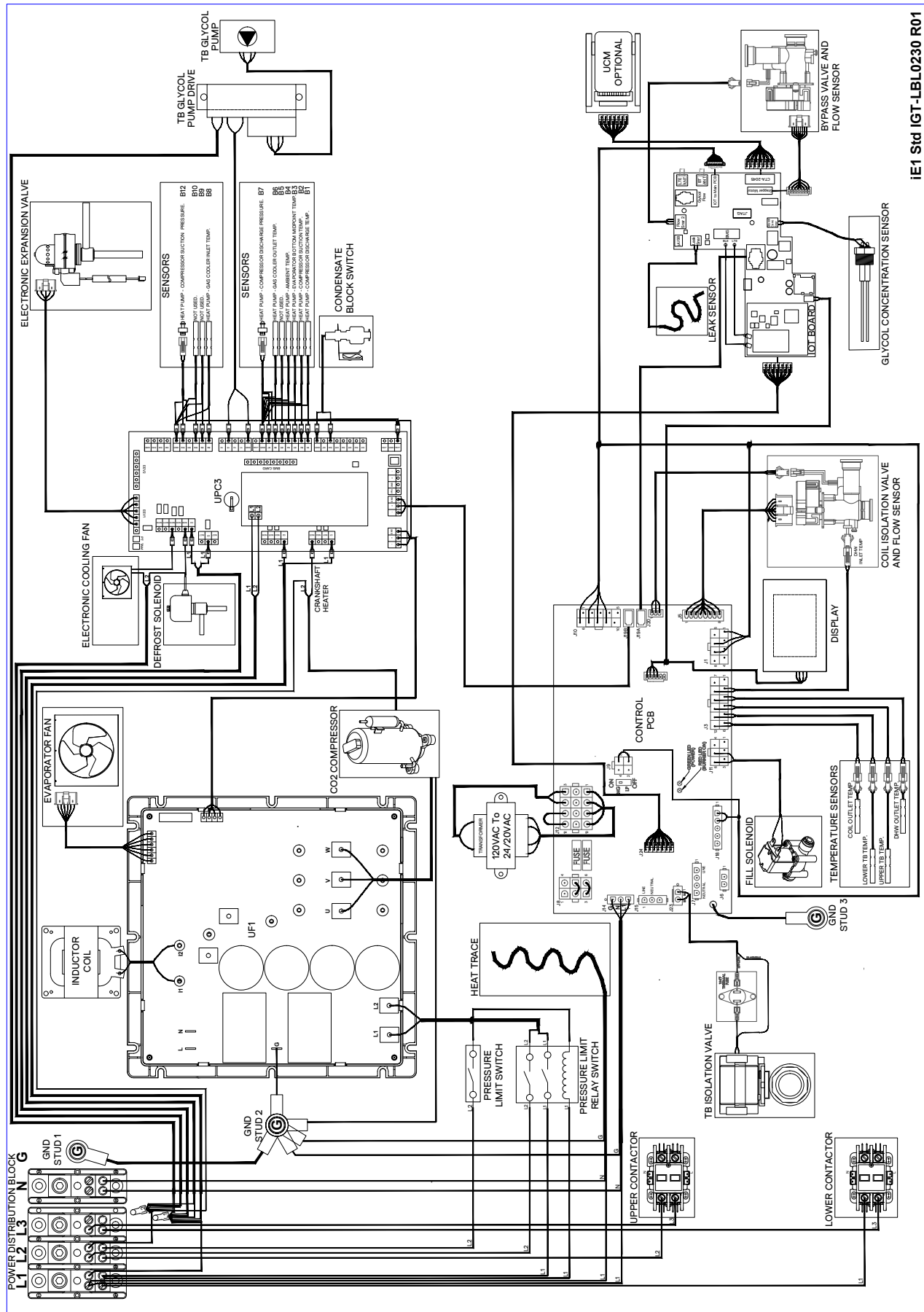
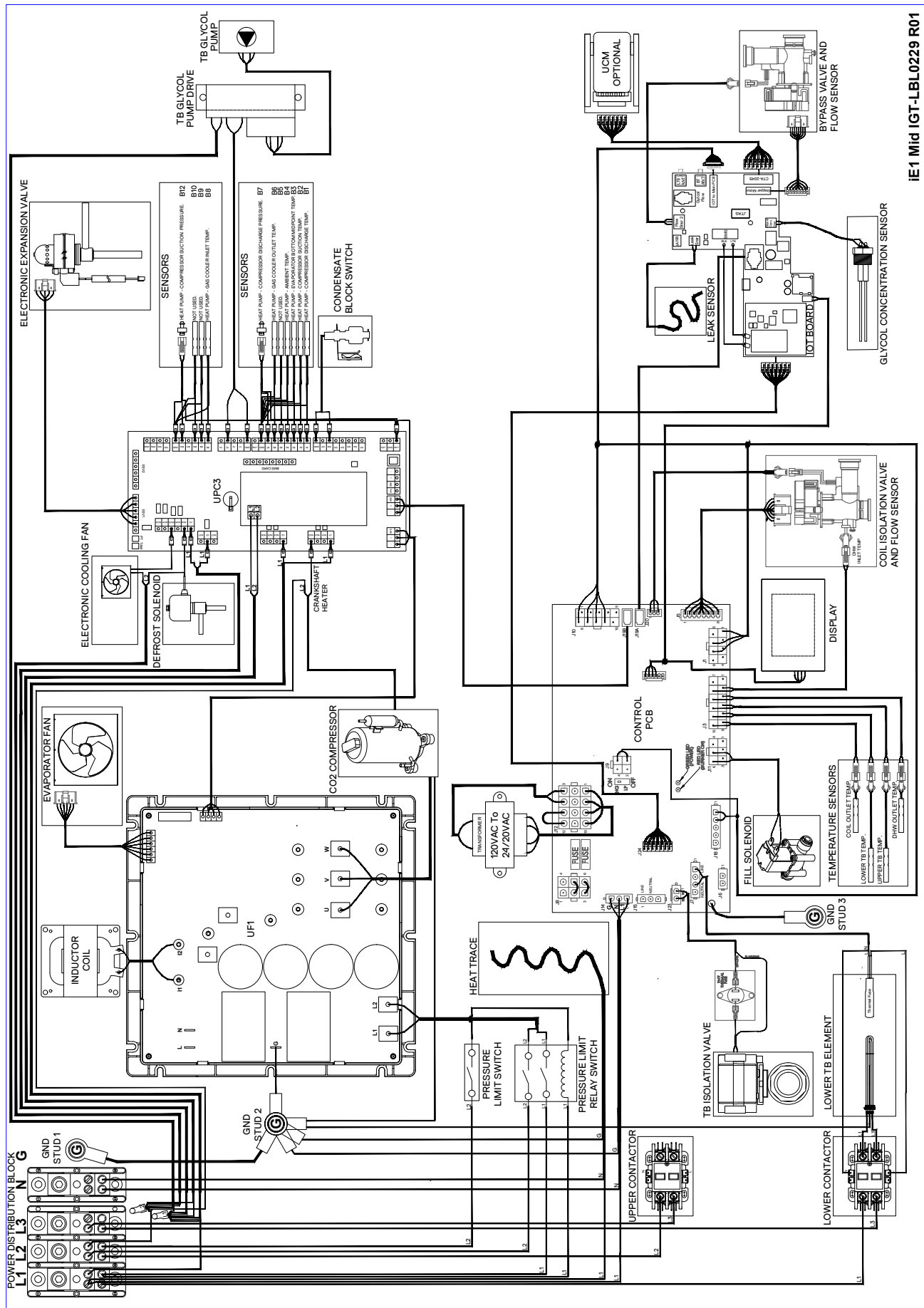


11.2 iE1 Std Wiring Diagram



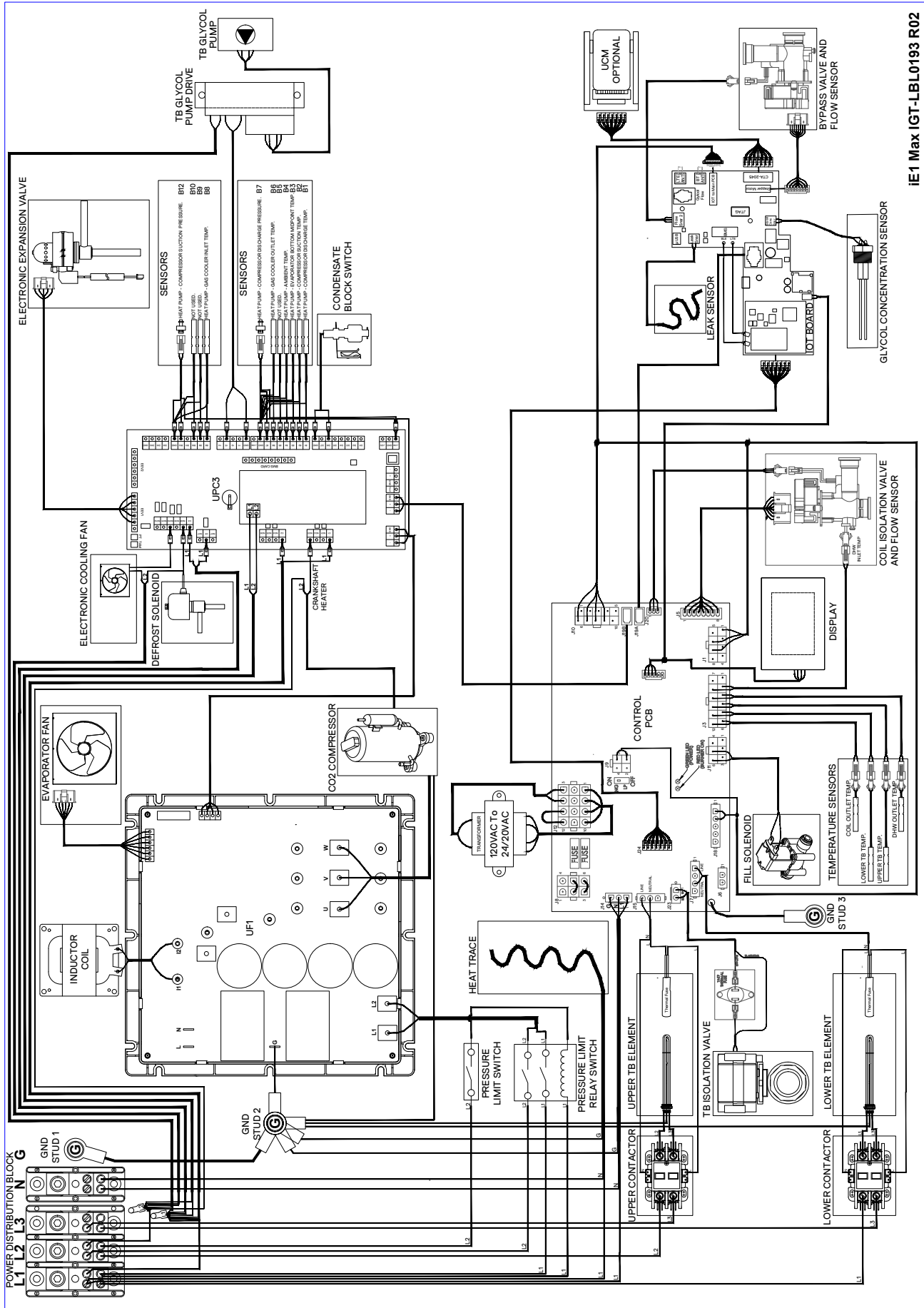
iE1 Std IGT-LBL0230 R01

11.3 iE1 Mid Wiring Diagram



IE1 Mid IGT-LBL0229 R01

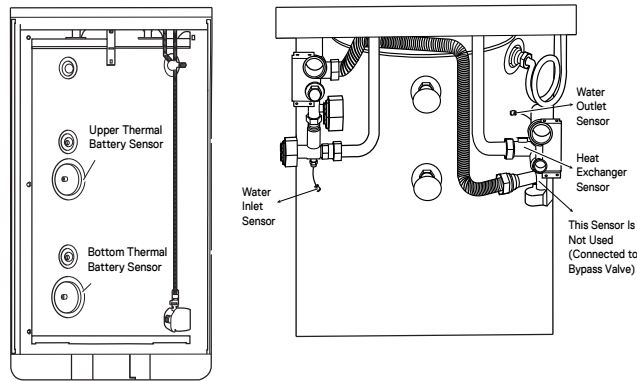
11.4 iE1 Max Wiring Diagram



iE1 Max IGT-LBL0193 R02

11.5 Troubleshooting Guide

Before troubleshooting the water heater for faults please see Section “2. Safety” on page 6 for safety instructions



Sections 11.4.1, 11.4.2, and 11.4.3 apply to all the above five sensors (Upper thermal Battery Sensor, Bottom Thermal Battery Sensor, Water Inlet Sensor, Water Outlet Sensor, and Heat Exchanger Sensor). For simplicity only, Water Inlet Sensor pictures are shown.

11.5.1 Temperature Sensor Open

Temperature Sensor Open - Inlet

Check For

- Corroded Wiring/Connectors
- Faulty Sensor
- Unplugged Connector

CONTACT US

Possible Causes	Remedy
Temperature Sensor is disconnected	Make sure that the temperature sensor connectors are correctly attached.
Unplugged connectors	Make sure that the temperature sensor connectors are correctly attached.
Faulty temperature sensor	Replace the temperature sensor.
Nicked or Broken wire.	Replace nicked or broken wires.
Incorrect temperature sensor wiring	
Too much heat in the water outlet or water inlet	Allow the water outlet temperature to decrease and make sure the resistance of the temperature sensor at the connector is 18 kΩ at 50°F, 10 kΩ at 77°F, 3 kΩ at 140°F.
Faulty temperature sensor controller	Replace the Control Board.

11.5.2 Temperature Sensor Shorted

Temperature Sensor Shorted - Inlet

Check For

- Corroded Wiring/Connectors
- Faulty Sensor

CONTACT US

Possible Causes	Remedy
Temperature Sensor is disconnected	Make sure that the temperature sensor connectors are correctly attached.
Nipped or Broken wire	Replace nicked or broken wires.
Faulty temperature sensor	Replace the temperature sensor.

11.5.3 Temperature Sensor Fault

Temperature Sensor Fault - Inlet

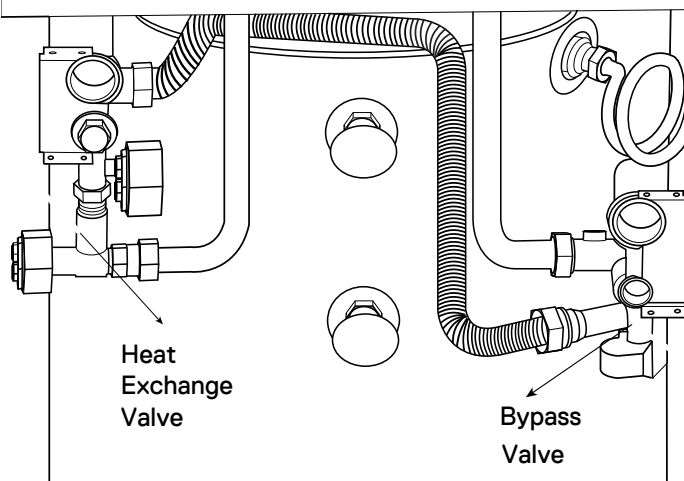
Check For

- Corroded Wiring/Connectors
- Faulty Sensor

CONTACT US

Possible Causes	Remedy
Faulty temperature sensor	Replace the temperature sensor.
Sensor value is outside the range	
Temperature Sensor is disconnected	Make sure that the temperature sensor connectors are correctly attached.
Nipped or Broken wire	Make sure the connectors are dry and free of corrosion.

11.5.4 Heat Exchanger Valve Fault



Heat Exchanger Valve Fault

Check for

- Faulty Valve Wiring
- Debris in Valve

CONTACT US

Possible Causes	Remedy
8 PIN wire disconnected	Make sure the connectors and wiring harness are dry and free of corrosion.
Nicked or broken connector	
Faulty temperature sensor wiring	Replace nicked or broken wires and make sure the wire are correctly connected.
Water valve clogged or damaged	Replace the water valve

11.5.5 Bypass Valve Fault

Bypass Valve Fault

Check for

- Faulty Valve Wiring
- Debris in Valve

CONTACT US

Possible Causes	Remedy
8 PIN wire disconnected	Make sure the connectors and wiring harness are dry and free of corrosion.
Incorrect or broken wiring	
Nicked or broken connector	Make sure that the temperature sensor connectors are correctly attached.
Faulty temperature sensor wiring	
Water valve clogged or damaged	Replace the water valve
Faulty IoT interface board	Replace IoT interface board

11.5.6 Unable to fill Thermal Battery

Unable to fill Thermal Battery

Check for

- Faulty Fill Solenoid wiring
- Stuck Fill Solenoid
- Debris in Fill Solenoid

CONTACT US

Possible Causes	Remedy
Faulty thermal battery drain port	Replace thermal battery drain port.
Faulty thermal battery inlet port	Replace thermal battery inlet port.
Fill solenoid assembly failed or clogged	Replace fill solenoid assembly
Faulty Glycol Concentration sensor	Replace Glycol Concentration sensor

11.5.7 Outlet Temperature Overheat



Outlet Temperature Overheat

Check For

- High Flow Rate Changes
- Faulty Outlet Sensor
- Corroded Sensor Wiring



Possible Causes	Remedy
Faulty temperature sensor wiring	Make sure that the temperature sensor connectors are correctly attached.
Unplugged connectors	Make sure that the temperature sensor connectors are correctly attached.
Faulty temperature sensor	Replace the temperature sensor.
Too much heat in the water outlet or water inlet	Allow the water outlet temperature to decrease and make sure the resistance of the temperature sensor at the connector is 18 kΩ at 50°F, 10 kΩ at 77°F, 3 kΩ at 140°F.

11.5.8 Thermal Battery Overheat



Thermal Battery Overheat

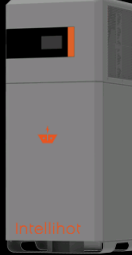
Check for

- Electrical elements connection
- Stuck Relay
- Faulty Thermal Fuse



Possible Causes	Remedy
Electrical elements connection	Check Electrical elements wiring connections.
Stuck Relay	Check the two relays next the main Intellihot Control Board. Replace the relay (s).
Faulty Thermal Fuse	Check the thermal fuses connected to the heating elements. Either the thermal fuse is faulty or it's open

11.5.9 Leak Sensor Fault



Leak Sensor Fault

Check for

- Faulty leak sensor wiring
- Broken or corroded Sensor



Possible Causes	Remedy
Nicked or broken connector	Replace nicked or broken wires and make sure the wire are correctly connected.
Faulty temperature sensor wiring	
Broken or corroded Sensor	Replace the temperature sensor.

11.5.10 Leak detected inside the Cabinet



Leak detected inside the Cabinet

Check for

- Leaks
- Contact Intellihot Product support



Possible Causes	Remedy
Leaks	Water leaks detected inside the Cabinet. Find the source of the leak and resolve it.
Contact Intellihot Product support.	

11.5.11 Glycol Concentration Sensor Fault

Gylcol Concentration Sensor Fault



Check for

- Faulty Sensor wiring
- Broken or corroded Sensor



Possible Causes	Remedy
Nicked or broken connector	Replace nicked or broken wires and make sure the wire are correctly connected.
Faulty temperature sensor wiring	
Broken or corroded Sensor	Replace the temperature sensor.

11.5.12 Heat Pump - Communication Fault

Heat Pump - Communication Fault



Check for

- Power to the Heat Pump
- Faulty or disconnected communication cable



Possible Causes	Remedy
Power to the Heat Pump	Check the power and power connections
Faulty or disconnected communication cable	If faulty, replace the communication cable

11.5.13 Heat Pump - Unable to heat

Please contact the Intellihot technical support for the following heat pump faults.

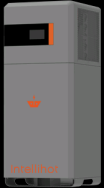
Heat Pump - Unable to heat



Contact Intellihot Product Support



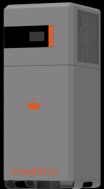
Heat Pump - Blocked Condensate Fault



Contact Intellihot Product Support



Heat Pump - Compressor Discharge Temperature Fault



Contact Intellihot Product Support



Heat Pump - Compressor Suction Temperature Fault



Contact Intellihot Product Support



Heat Pump - Evaporator Bottom Midpoint Temperature Fault



Contact Intellihot Product Support

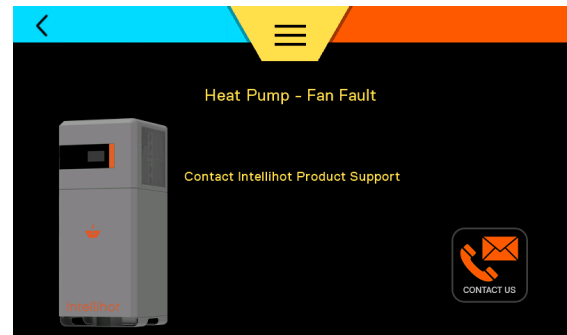
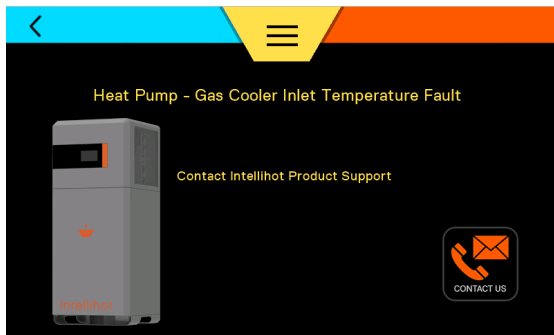


Heat Pump - Ambient Temperature Fault



Contact Intellihot Product Support





Contact Intellihot Product Support

