

Trane RTHD Fault Code Quick Reference

Trane - RTHD fault codes | Model Type: Helical Rotary Chiller

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
398	BAS Communication Lost	Warning	BAS network cable fault; BAS controller offline; Protocol mismatch	Check network cable at chiller panel
390	Communication Lost - Main CCN to Starter	Warning	CCN cable between main board and starter damaged; Starter board power failure; Address conflict on CCN bus	Check CCN cable between main control and starter panel
2E6	High Condenser Refrigerant Temperature	Warning	Condenser water flow too low; Condenser water temperature too high; Condenser tubes fouled	Verify condenser water flow rate
5EF	System Watchdog	Warning	Control system software crash; Memory corruption in controller; Power supply instability to control board	Cycle power to control system
FD	Emergency Stop	Critical	E-stop button activated; Remote safety circuit open; Safety relay tripped	Check E-stop button
ED	Evaporator Water Flow Lost	Warning	Chilled water pump failure; Flow switch fault; Strainer clogged	Verify pump operation
C5	Low Chilled Water Temp: Unit Off	Warning	Setpoint too low; Evaporator flow low; Sensor inaccurate	Verify setpoint
C6	Low Chilled Water Temp: Unit On	Warning	Low flow during operation; Expansion valve overfeeding; Sensor drift	Verify flow rate
B5	Low Suction Refrigerant Pressure - Circuit 1	Warning	Low refrigerant charge; Expansion valve starving; Evaporator flow low	Check charge level
BA	Motor Current Overload - Compressor 1A	Warning	Bearing failure; Voltage imbalance; Liquid floodback	Measure motor current
F5	High Pressure Cutout - Compressor 1A	Critical	Condenser fouling; Non-condensables; Refrigerant overcharge	Clean condenser
198	Low Oil Flow - Compressor 1A	Critical	Oil filter clogged; Oil pump failure; Low oil level	Check oil level
1DE	High Oil Temperature - Compressor 1A	Warning	Oil cooler fouled; Bearing wear; High discharge temp	Check oil cooler
2E7	High Condenser Refrigerant Temperature - Circuit 2	Warning	Condenser water flow too low; Condenser water temperature too high; Condenser tubes fouled	Verify condenser water flow
390B	Communication Lost - Main CCN to Starter Circuit B	Warning	CCN cable to starter B damaged; Starter B board power failure; Address conflict on CCN bus	Check CCN cable to starter B
5EE	Watchdog - Circuit 2	Warning	Circuit 2 controller software crash; Memory corruption; Power supply instability	Cycle power to circuit 2 controller
B6	Low Suction Refrigerant Pressure - Circuit 2	Warning	Low refrigerant on circuit 2; Expansion valve 2 issue; Low evaporator flow	Check charge on circuit 2

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
F6	High Pressure Cutout - Compressor 2A	Critical	Condenser fouling; Non-condensables; Refrigerant overcharge	Clean condenser
199B	Low Oil Flow - Compressor 2A	Critical	Oil filter clogged on circuit 2; Oil pump 2 failure; Low oil level in compressor 2A	Check oil level in compressor 2A
1DF	High Oil Temperature - Compressor 2A	Warning	Oil cooler on circuit 2 fouled; Bearing wear in compressor 2A; High discharge temperature on circuit 2	Check oil cooler on circuit 2
392	Analog Input Out of Range	Warning	Analog sensor signal outside expected range; Wiring fault on analog input; Control board analog input channel damaged	Identify which analog input is out of range
393	Analog Output Failure	Warning	Analog output channel failure on control board; Output device not responding; Wiring fault on output circuit	Check analog output voltage or current signal
397	Frozen Condenser Water Sensor	Warning	Condenser water temperature sensor reading below freezing; Sensor fault or miscalibration; Actual condenser water near freezing	Verify actual condenser water temperature
399	Operator Interface Communication Lost	Warning	OIT communication cable disconnected; OIT hardware failure; Communication protocol mismatch	Check OIT cable connection at panel
3A0	Compressor Vibration Alarm	Warning	Compressor mounting bolts loose; Bearing wear causing vibration; Refrigerant liquid floodback causing compressor vibration	Measure compressor vibration with vibration meter
D1	Suction Pressure Sensor - Circuit 1	Warning	Sensor failure; Port blockage; Wiring fault	Compare to gauge
D2	Discharge Pressure Sensor - Circuit 1	Warning	Sensor failure; Wiring fault; Port blocked	Compare to gauge
D3	Suction Pressure Sensor - Circuit 2	Warning	Sensor failure; Port blocked; Wiring fault	Compare to gauge
D4	Discharge Pressure Sensor - Circuit 2	Warning	Sensor failure; Wiring fault; Port blocked	Compare to gauge
D5	Oil Pressure Sensor	Warning	Sensor failure; Port blocked; Wiring fault	Compare to mechanical gauge

Disclaimer: All fault code data is for reference only. Do not use this information to replace certified professional HVAC technician judgment. Always refer to original OEM official service manual.