

Trane RTAC Fault Code Quick Reference

Trane - RTAC fault codes | Model Type: Screw Compressor Chiller

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
ED	Evaporator Water Flow Lost	Warning	Chilled water pump stopped or failed; Flow switch malfunction; Strainer clogged in water line	Verify chilled water pump is running
FD	Emergency Stop	Critical	Emergency stop button pressed; Remote E-stop circuit open; Safety relay tripped	Check E-stop button at unit panel
8E	Evaporator Entering Water Temperature Sensor	Warning	Sensor element failure; Wiring open or shorted; Connector corrosion	Measure sensor resistance at current temperature
AB	Evaporator Leaving Water Temperature Sensor	Warning	Sensor degradation; Wire damage from vibration; Control board input failure	Compare sensor reading to calibrated thermometer
A1	Outdoor Air Temperature Sensor	Warning	Sensor moisture ingress; UV damage to sensor cable; Sensor element drift	Check sensor resistance vs temperature chart
D7	Over Voltage	Warning	Utility voltage surge; Transformer tap set incorrectly; Voltage regulator failure	Measure incoming line voltage on all phases
D8	Under Voltage	Warning	Utility brownout or sag; Undersized power conductors; Loose electrical connections	Measure line voltage at unit disconnect
F5	High Pressure Cutout - Compressor 1A	Critical	Condenser coil fouled or airflow blocked; Non-condensables in refrigerant; Overcharge of refrigerant	Clean condenser coils and verify airflow
BA	Motor Current Overload - Compressor 1A	Warning	Compressor motor bearing failure; Low supply voltage or phase imbalance; Liquid floodback causing high current	Measure motor current on all three phases
C5	Low Chilled Water Temperature: Unit Off	Warning	Chilled water setpoint too low; Evaporator water flow too low; Sensor reading incorrect	Verify chilled water setpoint is appropriate
C6	Low Chilled Water Temperature: Unit On	Warning	Evaporator flow too low while running; Expansion valve overfeeding; Temperature sensor drift	Verify evaporator water flow is adequate
B5	Low Suction Refrigerant Pressure - Circuit 1	Warning	Low refrigerant charge; Expansion valve starving; Evaporator water flow low	Check refrigerant subcooling and superheat
198	Low Oil Flow - Compressor 1A	Critical	Oil filter clogged; Oil pump failure; Low oil level	Check compressor oil level sight glass
1C6	High Differential Refrigerant Pressure - Circuit 1	Critical	Condenser water temperature too high; Non-condensables in system; Refrigerant overcharge	Check condenser water temperature and flow
1DE	High Oil Temperature - Compressor 1A	Warning	Oil cooler fouled or bypassed; Compressor bearing wear; Discharge temperature too high	Check oil cooler operation and flow
398	BAS Communication Lost	Warning	BAS network cable disconnected; BAS controller offline; Communication protocol mismatch	Check network cable connection at chiller panel

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
A2	Condenser Air Temperature Sensor	Warning	Sensor element failure; Sensor wiring damage; Connector corrosion	Measure sensor resistance at ambient
A3	Economizer Leaving Water Temperature Sensor	Warning	Economizer sensor failure; Wiring open or shorted; Control board input fault	Measure sensor resistance
A4	Chilled Water Entering Temperature Sensor	Warning	Sensor drift or failure; Wiring damage; Connector corrosion	Compare sensor to calibrated thermometer
AC	Chilled Water Leaving Temperature Sensor	Warning	Sensor element failure; Wire damage from vibration; Board input failure	Compare reading to calibrated thermometer
D1	Suction Pressure Sensor - Circuit 1	Warning	Pressure sensor element failure; Sensor port blockage; Wiring fault	Compare sensor reading to manifold gauge
D2	Discharge Pressure Sensor - Circuit 1	Warning	Discharge pressure sensor failure; Sensor wiring fault; Port blockage	Compare to mechanical discharge gauge
D3	Suction Pressure Sensor - Circuit 2	Warning	Circuit 2 suction sensor failure; Port blockage on circuit 2; Wiring fault	Compare reading to circuit 2 manifold gauge
D4	Discharge Pressure Sensor - Circuit 2	Warning	Circuit 2 discharge sensor failure; Wiring fault; Port blockage	Compare to mechanical gauge on circuit 2
D5	Oil Pressure Sensor	Warning	Oil pressure sensor element failure; Sensor port blocked; Wiring fault	Compare to mechanical oil pressure gauge
D6	Oil Temperature Sensor	Warning	Oil temperature sensor failure; Wiring damaged; Connector loose	Measure sensor resistance at oil temperature
D9	Compressor Motor Temperature Sensor	Warning	Motor winding temperature sensor failure; Wiring from motor to board damaged; Connector at motor terminal box loose	Measure sensor resistance
B6	Low Suction Refrigerant Pressure - Circuit 2	Warning	Low refrigerant charge on circuit 2; Expansion valve 2 starving; Evaporator flow low on circuit 2	Check superheat on circuit 2
F6	High Pressure Cutout - Compressor 2A	Critical	Condenser coil fouled; Non-condensables; Refrigerant overcharge	Clean condenser coils
BB	Motor Current Overload - Compressor 2A	Warning	Compressor 2A motor bearing failure; Voltage imbalance on circuit 2; Liquid floodback to compressor 2A	Measure motor current on compressor 2A
199	Low Oil Flow - Compressor 2A	Critical	Oil filter clogged on circuit 2; Oil pump 2 failure; Low oil level in compressor 2A	Check compressor 2A oil sight glass
1C7	High Differential Refrigerant Pressure - Circuit 2	Critical	Condenser water temp too high on circuit 2; Non-condensables in circuit 2; Refrigerant overcharge on circuit 2	Check condenser water temp on circuit 2
1DF	High Oil Temperature - Compressor 2A	Warning	Oil cooler on circuit 2 fouled; Compressor 2A bearing wear; High discharge temp on circuit 2	Check oil cooler on circuit 2

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
2E7	High Condenser Refrigerant Temperature - Circuit 2	Warning	Condenser water flow too low on circuit 2; Condenser water temperature too high; Condenser tubes fouled on circuit 2	Verify condenser water flow on circuit 2

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.