

Carrier 30HXC Fault Code Quick Reference

Carrier - 30HXC fault codes | Model Type: Scroll Compressor Chiller

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
1	Evaporator entering fluid thermistor failure	Warning	Thermistor sensor resistance drift; Sensor lead wire damaged; Control board input failure	Measure thermistor resistance and compare to chart
7	Outdoor temperature sensor fault	Warning	Sensor moisture ingress; Sensor cable UV damage; Sensor element failure	Check sensor resistance at ambient temperature
10	Compressor A2 discharge gas temperature sensor fault	Warning	Discharge temperature sensor failure; Sensor wire heat damage; High discharge temperature from system fault	Measure sensor resistance at discharge temperature
14	Discharge pressure transducer failure, circuit A	Warning	Transducer element failure; Transducer port blockage; Wiring fault	Compare transducer reading to mechanical gauge
16	Suction pressure transducer failure, circuit A	Warning	Transducer sensing port blocked; Transducer output drift; Connector corrosion	Compare transducer reading to suction gauge
30	Loss of communication with SCPM A1 board	Warning	CCN bus cable fault; SCPM board power failure; Address conflict on network	Check CCN cable continuity
41	Unit emergency stop	Critical	Emergency stop activated; Safety interlock open; Remote stop signal	Check E-stop button position
44	Discharge pressure circuit A too high	Warning	Condenser water flow low; Non-condensables in system; Refrigerant overcharge	Check condenser water flow rate
54	Oil level circuit A low	Warning	Oil loss through leak; Oil separator malfunction; Bearing wear consuming oil	Check oil sight glass level
56	Low saturated suction temperature, circuit A	Warning	Low refrigerant charge; Expansion valve problem; Low evaporator water flow	Check superheat and subcooling
68	Low oil pressure, compressor A1	Critical	Oil pump wear; Clogged oil filter; Low oil charge	Check oil sight glass level
72	Evaporator frost protection	Critical	Low water flow; Setpoint too low; Expansion valve floodback	Verify chilled water flow
3	Condenser entering fluid thermistor failure	Warning	Condenser water thermistor sensor failure; Sensor wiring damaged; Control board input fault	Measure thermistor resistance
4	Condenser leaving fluid thermistor failure	Warning	Condenser leaving water thermistor sensor failure; Wiring open circuit; Control board input fault	Check thermistor resistance
11	Compressor B1 discharge gas temperature sensor fault	Warning	Discharge temperature sensor failure on circuit B; Sensor wire heat damage; Connector loose at compressor B terminal box	Measure sensor resistance
15	Discharge pressure transducer failure, circuit B	Warning	Circuit B discharge transducer element failure; Transducer port blockage; Wiring fault on circuit B	Compare transducer reading to mechanical gauge

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
17	Suction pressure transducer failure, circuit B	Warning	Circuit B suction transducer port blocked; Transducer output drift; Connector corrosion	Compare reading to suction gauge on circuit B
20	Compressor motor overload, circuit A	Critical	Motor drawing excessive current; Voltage imbalance; Liquid floodback	Measure motor current
21	Compressor motor overload, circuit B	Critical	Circuit B compressor motor overload; Voltage issue on circuit B; Mechanical overload	Measure circuit B motor current
31	Loss of communication with SCPM B1 board	Warning	CCN cable to circuit B damaged; SCPM B1 power failure; Address conflict	Check CCN cable to B1
38	Power supply error	Warning	Phase voltage imbalance; Phase loss; Transformer failure	Measure three-phase voltage
45	Discharge pressure circuit B too high	Warning	Circuit B condenser fouling; Non-condensables in circuit B; Refrigerant overcharge on B	Check condenser B cleanliness
46	Suction pressure circuit A too low	Warning	Low refrigerant on circuit A; Expansion valve A issue; Low water flow	Check superheat and subcooling
55	Oil level circuit B low	Warning	Oil loss on circuit B; Oil separator B malfunction; Circuit B bearing wear	Check circuit B oil sight glass
69	Low oil pressure, compressor B1	Critical	Oil pump B1 wear; Oil filter B clogged; Low oil in compressor B1	Check compressor B1 oil level
73	Compressor A1 running but no current	Warning	Contactors A1 not pulling in; CT reading incorrect; Motor winding open	Check contactor A1
76	Condenser water temperature too high	Warning	Cooling tower issue; Condenser water flow low; High ambient	Check cooling tower operation
85	High compressor motor temperature A1	Warning	Motor cooling insufficient; Bearing failure; High ambient	Check motor cooling
88	Fault code memory error	Warning	Control board memory corruption; Battery backup failure; Board firmware issue	Check control board backup battery
89	Real time clock error	Warning	RTC battery depleted; Control board RTC circuit failure; Firmware issue	Replace RTC backup battery

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.