

Lennox SCA Fault Code Quick Reference

Lennox - SCA fault codes | Model Type: Air-Cooled Scroll Chiller

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E01	Supply air temperature sensor fault	Warning	Sensor element failure; Sensor wiring open or shorted; Control board input channel damaged	Identify faulting sensor from diagnostic code
E02	Return air temperature sensor fault	Warning	Sensor element drifted out of calibration; Wiring damaged by vibration or heat; Connector loose or corroded	Measure sensor resistance and compare to chart
E03	Outdoor air temperature sensor fault	Warning	Sensor moisture ingress; UV damage to sensor cable; Sensor element failure	Check sensor resistance vs temperature chart
E04	Coil temperature sensor fault	Warning	Sensor element failure; Sensor wiring open or shorted; Sensor physically damaged by frost or heat	Measure sensor resistance at coil temperature
E05	High pressure switch activated	Critical	Condenser coil fouled restricting airflow; Condenser fan motor not operating; Non-condensables in refrigerant system	Clean condenser coils and verify airflow
E06	Low pressure switch activated	Warning	Low refrigerant charge from leak; Expansion valve starving evaporator; Evaporator water flow insufficient	Check refrigerant subcooling and superheat
E07	Compressor overload	Warning	Compressor motor bearing wear; Supply voltage low or imbalanced; Liquid refrigerant floodback	Measure compressor motor current on all phases
E08	Freeze protection	Critical	Evaporator water temperature approaching freezing; Evaporator water flow too low; Chilled water setpoint set too low	Check evaporator water temperature and flow
E09	Overcurrent protection	Critical	Compressor motor overload; Short circuit in motor winding; Contactor contacts welded	Measure motor running current
E10	Phase monitor fault	Warning	Phase loss on one conductor; Phase voltage imbalance exceeding limits; Phase sequence incorrect	Measure voltage on all three phases
E11	Compressor motor protection	Warning	Internal motor protector tripped from high temperature; Motor winding insulation breakdown; Bearing failure causing motor overheating	Allow motor to cool and check internal protector
E12	Discharge temperature high	Warning	Compression ratio too high from high head pressure; Compressor oil level low; Condenser not rejecting heat properly	Check discharge pressure and temperature
E13	Oil pressure fault	Warning	Oil pump failure or wear; Oil filter element clogged; Low oil charge in compressor	Check compressor oil level sight glass
E14	Communication fault	Warning	Network cable damaged or disconnected; Controller offline or not responding; Protocol or baud rate mismatch	Check network cable connections

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E15	Expansion valve fault	Warning	Electronic expansion valve motor failure; Valve controller communication lost; Valve mechanically stuck	Check valve wiring connections
E16	Fan motor fault	Warning	Fan motor winding failure; Fan motor capacitor defective; Fan control relay or contactor fault	Check fan motor winding resistance
E17	Low pressure safety 2	Warning	Low refrigerant charge on circuit 2; Expansion valve 2 issue; Evaporator flow low on circuit 2	Check charge on circuit 2
E18	High pressure safety 2	Critical	Condenser 2 fouled; Non-condensables on circuit 2; Refrigerant overcharge on circuit 2	Clean condenser 2
E19	Compressor 2 overload	Warning	Compressor 2 motor bearing failure; Voltage imbalance on circuit 2; Liquid floodback to compressor 2	Measure compressor 2 current
E20	Compressor 2 motor protection	Warning	Internal motor protector tripped in compressor 2; Motor winding insulation breakdown; Bearing failure in compressor 2	Allow compressor 2 to cool
E21	Discharge temperature high 2	Warning	Compression ratio too high on circuit 2; Oil level low in compressor 2; Condenser 2 not rejecting heat	Check discharge temp on circuit 2
E22	Oil pressure fault 2	Warning	Oil pump 2 failure; Oil filter 2 clogged; Low oil in compressor 2	Check compressor 2 oil level
E23	Remote control fault	Warning	Remote control communication cable damaged; Remote controller offline; Protocol mismatch	Check remote control cable
E24	Alarm relay fault	Warning	Alarm relay coil failure; Relay contacts damaged; Wiring to relay fault	Check alarm relay coil resistance
E25	Compressor capacity staging fault	Warning	Compressor staging logic error; Capacity control relay fault; Staging timer fault	Check compressor staging configuration
E26	Cooling tower interlock fault	Warning	Cooling tower not running signal; Cooling tower interlock wiring damaged; Interlock relay fault	Verify cooling tower is operating
E27	Water flow proving 2	Warning	Water flow proving switch on circuit 2 not closing; Flow rate on circuit 2 insufficient; Flow switch 2 faulty	Verify water flow on circuit 2
E28	Surge protection activated	Warning	Voltage surge detected by surge protection device; Lightning strike nearby; Utility power transient	Check surge protection device status
E29	Condensate level high	Warning	Condensate drain blocked; Condensate pump failure; Condensate level switch fault	Check condensate drain for blockage
E30	Economizer fault	Warning	Economizer damper actuator failure; Economizer temperature sensor fault; Economizer control circuit failure	Check economizer damper operation

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.