

Lennox LCA Fault Code Quick Reference

Lennox - LCA fault codes | Model Type: Air-Cooled Chiller

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E01	High pressure alarm	Critical	Condenser coil fouled; Condenser fan failure; Non-condensables	Clean condenser coils
E02	Low pressure alarm	Warning	Low refrigerant charge; Expansion valve issue; Evaporator water flow low	Check charge
E03	Compressor overload	Warning	Motor bearing failure; Voltage imbalance; Liquid floodback	Measure current
E04	Discharge temperature high	Warning	High compression ratio; Oil level low; Condenser inefficiency	Check discharge temp
E05	Evaporator water flow fault	Warning	Pump stopped; Flow switch fault; Strainer clogged	Verify pump
E06	Sensor fault	Warning	Sensor element failure; Wiring fault; Connector corrosion	Measure resistance
E07	Freeze protection	Critical	Evaporator temp near freezing; Flow too low; Setpoint too low	Check temp
E08	Communication fault	Warning	Network cable fault; Controller offline; Protocol mismatch	Check cable
E09	Phase fault	Warning	Phase loss; Incorrect sequence; Blown fuse	Check phases
E10	Overcurrent protection	Critical	Motor overload; Short circuit; Contactor welded	Measure current
E11	Oil pressure low	Critical	Oil pump wear; Filter clogged; Low oil level	Check oil level
E12	Oil level low	Critical	Oil leak; Separator malfunction; Bearing wear	Check sight glass
E13	Expansion valve fault	Warning	Valve motor failure; Controller communication lost; Valve stuck	Check wiring
E14	Power supply fault	Warning	Voltage outside spec; Phase imbalance; Transformer failure	Measure voltage
E15	Fan motor fault	Warning	Motor winding failure; Capacitor defective; Relay fault	Check winding resistance
E16	Compressor 2 fault	Warning	Compressor 2 overload; Mechanical fault; Contactor fault	Measure compressor 2 current
E17	Condenser fan 2 fault	Warning	Fan 2 motor failure; Capacitor defective; Relay fault	Check winding
E18	Compressor vibration alarm	Warning	Mounting loose; Bearing wear; Foundation issue	Measure vibration
E19	Pumpdown failure	Warning	Solenoid not closing; Pressure not reaching setpoint; Timer expired	Check solenoid
E20	Compressor surge alarm	Warning	Near surge line; Condenser conditions severe; Charge incorrect	Check conditions

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E21	High bearing temperature	Warning	Lubrication inadequate; Bearing wear; Oil flow insufficient	Check bearing sensors
E22	Low subcooling alarm	Warning	Charge low; Condenser not subcooling; Valve overfeeding	Check subcooling
E23	High superheat alarm	Warning	Valve starving; Charge low; Subcooling low	Check superheat
E24	Compressor start inhibit	Warning	Safety interlock; Anti-recycle timer; Oil heater	Check interlocks
E25	Evaporator approach temperature high	Warning	Fouled tubes; Low charge; Distribution issue	Calculate approach
E26	Condenser approach temperature high	Warning	Fouled condenser; Non-condensables; Overcharge	Calculate approach
E27	Chiller staging error	Warning	Staging logic error; Capacity mismatch; Lead/lag fault	Check staging config
E28	Energy efficiency alarm	Warning	Below expected efficiency; Approach temps high; Charge incorrect	Check kW/ton
E29	Compressor runtime exceeded	Warning	Exceeded max runtime; Maintenance interval; Inspection required	Check runtime log
E30	Refrigerant level alarm	Warning	Level sensor low; Refrigerant leak; Subcooling low	Check level sensor

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.