

Lennox TCS Fault Code Quick Reference

Lennox - TCS fault codes | Model Type: Water-Cooled Screw Chiller

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E01	High pressure alarm	Critical	Condenser water flow insufficient; Condenser water temperature too high; Non-condensables in system	Verify condenser water flow rate
E02	Low pressure alarm	Warning	Low refrigerant charge; Expansion valve not feeding; Evaporator water flow low	Check refrigerant charge and superheat
E03	Compressor motor overload	Critical	Motor bearing failure; Voltage low or imbalanced; Liquid floodback	Measure motor current
E04	Discharge temperature high	Warning	High compression ratio; Low oil level; Condenser inefficiency	Check discharge temperature
E05	Evaporator water flow fault	Warning	Pump stopped or failed; Flow switch malfunction; Strainer clogged	Verify pump operation
E06	Condenser water flow fault	Warning	Condenser pump stopped; Flow switch fault; Tubes fouled	Verify pump operation
E07	Evaporator freeze protection	Critical	Water temperature near freezing; Flow too low; Setpoint too low	Check water temperature
E08	Sensor fault	Warning	Sensor element failure; Wiring open or shorted; Connector corrosion	Identify faulting sensor
E09	Communication fault	Warning	Network cable fault; Controller offline; Protocol mismatch	Check cable connections
E10	Phase fault	Warning	Phase loss; Incorrect phase sequence; Blown fuse	Check all phase voltages
E11	Oil pressure low	Critical	Oil pump wear; Filter clogged; Low oil level	Check oil level
E12	Oil level low	Critical	Refrigerant leak carrying oil; Oil separator malfunction; Bearing wear	Check oil sight glass
E13	Expansion valve fault	Warning	Valve motor failure; Controller communication lost; Valve mechanically stuck	Check valve wiring
E14	Power supply fault	Warning	Voltage outside specification; Phase imbalance; Transformer failure	Measure voltage
E15	Fan motor fault	Warning	Motor winding failure; Capacitor defective; Control relay fault	Check winding resistance
E16	Fan motor fault	Warning	Fan motor winding failure; Capacitor defective; Control relay fault	Check winding resistance
E17	Compressor 2 fault	Warning	Compressor 2 motor overload; Mechanical fault in compressor 2; Contactor 2 fault	Measure compressor 2 current

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E18	Compressor 2 high pressure	Critical	Condenser 2 fouled; Non-condensables on circuit 2; Refrigerant overcharge on circuit 2	Clean condenser 2
E19	Compressor 2 low pressure	Warning	Low refrigerant on circuit 2; Expansion valve 2 issue; Evaporator flow on circuit 2 low	Check charge on circuit 2
E20	Compressor 2 discharge temperature high	Warning	Compression ratio too high on circuit 2; Oil level low in compressor 2; Condenser 2 inefficiency	Check discharge temp on circuit 2
E21	Compressor 2 oil pressure low	Critical	Oil pump 2 failure; Oil filter 2 clogged; Low oil in compressor 2	Check compressor 2 oil level
E22	Crankcase heater fault	Warning	Crankcase heater element failure; Heater thermostat malfunction; Wiring to heater damaged	Check heater continuity
E23	Liquid line solenoid fault	Warning	Solenoid coil failure; Valve stuck; Wiring to solenoid damaged	Check solenoid coil resistance
E24	Hot gas bypass fault	Warning	Hot gas bypass valve actuator failure; Valve position sensor fault; Control circuit damaged	Check valve actuator operation
E25	Pumpdown sequence fault	Warning	Pumpdown solenoid not closing; System pressure not reaching pumpdown setpoint; Timer expired	Check pumpdown solenoid
E26	Compressor vibration alarm 2	Warning	Compressor 2 mounting bolts loose; Bearing wear in compressor 2; Foundation issue for compressor 2	Measure compressor 2 vibration
E27	Remote panel fault	Warning	Remote panel communication cable damaged; Remote panel power failure; Protocol mismatch	Check remote panel cable
E28	Surge detection 2	Warning	Compressor 2 operating near surge line; Condenser conditions too severe for circuit 2; Refrigerant charge incorrect on circuit 2	Check operating conditions vs performance map
E29	Subcooling low alarm 2	Warning	Refrigerant charge low on circuit 2; Condenser 2 not subcooling adequately; Expansion valve 2 overfeeding	Check subcooling on circuit 2
E30	Superheat alarm 2	Warning	Expansion valve 2 starving; Refrigerant charge low on circuit 2; Subcooling too low on circuit 2	Check superheat 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.