

York YK Fault Code Quick Reference

York - YK fault codes | Model Type: Centrifugal Chiller (Water-Cooled)

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E1	Compressor motor over-temperature	Warning	Motor bearing failure; Motor cooling insufficient; High load condition	Check motor temperature sensor
E2	Guide vane position fault	Warning	Guide vane actuator motor failure; Position sensor fault; Mechanical binding of guide vanes	Check actuator operation
E3	VSD communication fault	Warning	VSD communication cable damaged; VSD controller offline; Protocol mismatch	Check communication cable
E4	VSD over-temperature	Warning	VSD heatsink temperature high; Cooling fan failure; Ambient too high	Check VSD temperature
E5	Surge detection alarm	Warning	Operating near surge line; Condenser conditions too severe; Refrigerant charge incorrect	Check operating conditions
E6	Oil pressure low	Critical	Oil pump failure; Oil filter clogged; Low oil level	Check oil sight glass
E7	Oil temperature high	Warning	Oil cooler fouled; Bearing wear; High discharge temperature	Check oil cooler
E8	Condenser water flow fault	Warning	Condenser pump stopped; Flow switch fault; Tubes fouled	Verify pump
E9	Evaporator water flow fault	Warning	Chilled water pump stopped; Flow switch fault; Strainer clogged	Verify pump
EA	High condenser pressure	Warning	Condenser water temp too high; Non-condensables; Refrigerant overcharge	Check condenser water temp
EB	Low evaporator temperature	Warning	Low refrigerant charge; Expansion valve issue; Low water flow	Check charge
EC	Motor current overload	Warning	Bearing failure; Voltage imbalance; Floodback	Measure current
ED	Phase loss or reversal	Critical	Missing phase; Incorrect phase sequence; Blown fuse	Check all phases
EE	BAS communication fault	Warning	Network cable fault; Controller offline; Protocol mismatch	Check cable
EF	Oil leak detection	Warning	Oil leak detected in system; Oil level low; Leak detector sensor fault	Check oil level
F1	Compressor vibration alarm	Warning	Mounting bolts loose; Bearing wear; Foundation issue	Measure vibration
E10	Compressor motor bearing temperature high	Warning	Bearing lubrication inadequate; Bearing wear; Cooling oil flow insufficient	Check bearing temp sensors
E11	Low refrigerant charge detected	Warning	Refrigerant leak in system; Subcooling below expected; Level sensor indicating low charge	Check subcooling and superheat

Code	Alarm Description	Severity	Probable Causes	First Inspection Step
E12	High oil discharge temperature	Warning	Oil cooler inefficiency; Compressor bearing friction; High discharge temperature	Check oil cooler
E13	Variable geometry inlet fault	Warning	Inlet guide vane actuator failure; Position sensor fault; Mechanical binding of guide vanes	Check actuator motor
E14	Pumpdown sequence fault	Warning	Pumpdown solenoid valve not closing; System pressure not reaching threshold; Timer expired	Check pumpdown solenoid
E15	Compressor surge detection	Warning	Operating near surge line; Condenser conditions severe; Charge incorrect	Check conditions vs map
E16	Oil leak detection	Warning	Oil leak detected; Oil level low; Leak detector sensor fault	Check oil level
E17	VSD speed feedback fault	Warning	Speed feedback sensor failure; Feedback wiring damaged; Sensor alignment off	Check speed sensor
E18	VSD motor overload	Critical	Compressor motor excessive current; VSD parameters incorrect; Mechanical overload	Check motor current
E19	VSD DC bus overvoltage	Warning	Regenerative energy; Braking resistor fault; Input voltage too high	Check DC bus voltage
E20	VSD DC bus undervoltage	Warning	Input voltage sag; Capacitor degradation; Power supply issue	Check input voltage
E21	VSD output phase loss	Critical	Output terminal loose; Power module failure; Output cable damaged	Check output voltage all phases
E22	VSD ground fault	Warning	Ground fault on output; Motor winding insulation breakdown; Cable damaged	Check with megohmmeter
E23	VSD communication timeout	Warning	Communication timeout; VSD not responding; Network issue	Check timeout settings

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.