

Alarms and Alerts — These are warnings of abnormal or fault conditions, and may cause either one circuit or the whole unit to shut down. They are assigned code numbers as described in Table 29.

Automatic alarms will reset without operator intervention if the condition corrects itself. The following method must be used to reset manual alarms:

Before resetting any alarm, first determine the cause of the alarm and correct it. Enter the Alarms mode indicated by the LED on the side of the Scrolling Marquee Display. Press **ENTER** and **▼** until the sub-menu item RCRN “RESET

ALL CURRENT ALARMS” is displayed. Press **ENTER**. The control will prompt the user for a password, by displaying PASS and WORD. Press **ENTER** to display the default password, 1111. Press **ENTER** for each character. If the password has been changed, use the arrow keys to change each individual character. Toggle the display to “YES” and press **ENTER**. The alarms will be reset.

Table 29 — Alarm and Alert Codes

ALARM/ALERT CODE	ALARM OR ALERT	DESCRIPTION	WHY WAS THIS ALARM GENERATED?	ACTION TAKEN BY CONTROL	RESET METHOD	PROBABLE CAUSE
T051	Alert	Circuit A, Compressor 1 Failure	Compressor feedback signal does not match relay state	Compressor A1 shut down.	Manual	High-pressure switch open, faulty auxiliary contacts, loss of condenser air, liquid valve closed, filter drier plugged, non-condensables, operation beyond capability.
T052	Alert	Circuit A, Compressor 2 Failure	Compressor feedback signal does not match relay state	Compressor A2 shut down.	Manual	High-pressure switch open, faulty auxiliary contacts, loss of condenser air, liquid valve closed, filter drier plugged, non-condensables, operation beyond capability.
T055	Alert	Circuit B, Compressor 1 Failure	Compressor feedback signal does not match relay state	Compressor B1 shut down.	Manual	High-pressure switch open, faulty auxiliary contacts, loss of condenser air, liquid valve closed, filter drier plugged, non-condensables, operation beyond capability.
T056	Alert	Circuit B, Compressor 2 Failure	Compressor feedback signal does not match relay state	Compressor B2 shut down.	Manual	High-pressure switch open, faulty auxiliary contacts, loss of condenser air, liquid valve closed, filter drier plugged, non-condensables, operation beyond capability.
A060	Alarm	Cooler Leaving Fluid Thermistor Failure (T1)	Thermistor outside range of -40 to 245 F (-40 to 118 C)	Chiller shutdown immediately	Automatic	Thermistor failure, damaged cable/wire or wiring error.
A061	Alarm	Cooler Entering Fluid Thermistor Failure (T2)	Thermistor outside range of -40 to 245 F (-40 to 118 C)	Chiller shutdown immediately	Automatic	Thermistor failure, damaged cable/wire or wiring error.
T068	None	Circuit A Return Gas Thermistor Failure	If return gas sensors are enabled (RG.EN) and thermistor is outside range of -40 to 245 F (-40 to 118 C)	None	Automatic	Thermistor failure, damaged cable/wire or wiring error.
T069	None	Circuit B Return Gas Thermistor Failure	If return gas sensors are enabled (RG.EN) and thermistor is outside range of -40 to 245 F (-40 to 118 C)	None	Automatic	Thermistor failure, damaged cable/wire or wiring error.
T073	Alert	Outside Air Thermistor Failure (T9)	Thermistor outside range of -40 to 245 F (-40 to 118 C)	Temperature reset disabled. Chiller runs under normal control/set points. When capacity reaches 0, cooler/pump heaters are energized.	Automatic	Thermistor failure, damaged cable/wire or wiring error.
T074	Alert	Space Temperature Thermistor Failure (T10)	Thermistor outside range of -40 to 245 F (-40 to 118 C)	Temperature reset disabled. Chiller runs under normal control/set points.	Automatic	Thermistor failure, damaged cable/wire or wiring error.
T077	Alert	Circuit A Saturated Suction Temperature exceeds Cooler Leaving Fluid Temperature	Faulty expansion valve, suction pressure transducer or leaving fluid thermistor (T1).	Circuit A shutdown after pumpdown complete.	Automatic	Faulty expansion valve or suction pressure transducer (T5) or leaving fluid thermistor (T1).
T078	Alert	Circuit B Saturated Suction Temperature exceeds Cooler Leaving Fluid Temperature	Faulty expansion valve, suction pressure transducer or leaving fluid thermistor (T1).	Circuit B shutdown after pumpdown complete	Automatic	Faulty expansion valve or suction pressure transducer (T6) or leaving fluid thermistor (T1).
T079	Alert	Lead/Lag LWT Thermistor Failure	Thermistor outside range of -40 to 245 F (-40 to 118 C)	Chiller runs as a stand alone machine	Automatic	Dual LWT thermistor failure, damaged cable/wire or wiring error.
T090	Alert	Circuit A Discharge Pressure Transducer Failure	Voltage ratio more than 99.9% or less than .5%.	Circuit A shut down	Automatic	Transducer failure, poor connection to MBB, or wiring damage/error.
T091	Alert	Circuit B Discharge Pressure Transducer Failure	Voltage ratio more than 99.9% or less than .5%.	Circuit B shut down	Automatic	Transducer failure, poor connection to MBB, or wiring damage/error.
T092	Alert	Circuit A Suction Pressure Transducer Failure	Voltage ratio more than 99.9% or less than .5%.	Circuit A shut down	Automatic	Transducer failure, poor connection to MBB, or wiring damage/error.

Table 29 — Alarm and Alert Codes (cont)

ALARM/ ALERT CODE	ALARM OR ALERT	DESCRIPTION	WHY WAS THIS ALARM GENERATED?	ACTION TAKEN BY CONTROL	RESET METHOD	PROBABLE CAUSE
T093	Alert	Circuit B Suction Pressure Transducer Failure	Voltage ratio more than 99.9% or less than .5%.	Circuit B shut down	Automatic	Transducer failure, poor connection to MBB, or wiring damage/error.
T110	Alert	Circuit A Loss of Charge	If the compressors are off and discharge pressure reading is < 10 psig for 30 sec.	Circuit not allowed to start.	Manual	Refrigerant leak or transducer failure
T111	Alert	Circuit B Loss of Charge	If the compressors are off and discharge pressure reading is < 10 psig for 30 sec.	Circuit not allowed to start.	Manual	Refrigerant leak or transducer failure
T112	Alert	Circuit A High Saturated Suction Temperature	Circuit saturated suction temperature pressure transducer > 60 F (15.6 C) for 5 minutes	Circuit shut down	Manual	Faulty Expansion valve, faulty suction pressure transducer or high entering fluid temperature.
T113	Alert	Circuit B High Saturated Suction Temperature	Circuit saturated suction temperature pressure transducer > 60 F (15.6 C) for 5 minutes	Circuit shut down	Manual	Faulty Expansion valve, faulty suction pressure transducer or high entering fluid temperature.
T114	Alert	Circuit A Low Suction Superheat	Return gas sensor enabled and suction superheat is more than 10° F (5.6 C) below the suction superheat set point for 5 minutes.	Circuit A shut down after pumpdown complete.	Automatic restart after first daily occurrence. Manual restart thereafter.	Faulty expansion valve, faulty suction pressure transducer, faulty suction gas thermistor, circuit overcharged
T115	Alert	Circuit B Low Suction Superheat	Return gas sensor enabled and suction superheat is more than 10° F (5.6 C) below the suction superheat set point for 5 minutes.	Circuit B shut down after pumpdown complete.	Automatic restart after first daily occurrence. Manual restart thereafter.	Faulty expansion valve, faulty suction pressure transducer, faulty suction gas thermistor, circuit overcharged
T116	Alert	Circuit A Low Cooler Suction Temperature	Mode 7 caused the compressor to unload 6 consecutive times with less than a 30-minute interval between each circuit shutdown.	Circuit shut down	Manual	Faulty expansion valve, low refrigerant charge, plugged filter drier, faulty suction pressure transducer, low cooler fluid flow
T117	Alert	Circuit B Low Cooler Suction Temperature	Mode 8 caused the compressor to unload 6 consecutive times with less than a 30-minute interval between each circuit shutdown.	Circuit shut down	Manual	Faulty expansion valve, low refrigerant charge, plugged filter drier, faulty suction pressure transducer, low cooler fluid flow
T126	Alert	Circuit A High Discharge Pressure	SCT >Maximum condensing temperature from operating envelope	Circuit shut down	Automatic, only after first 3 daily occurrences. Manual reset thereafter. Reading from OAT sensor (T9) must drop 5 F (2.8 C) before restart	Faulty transducer/high pressure switch, low/restricted condenser airflow
T127	Alert	Circuit B High Discharge Pressure	SCT >Maximum condensing temperature from operating envelope	Circuit shut down	Automatic, only after first 3 daily occurrences. Manual reset thereafter. Reading from OAT sensor (T9) must drop 5 F (2.8 C) before restart	Faulty transducer/high pressure switch, low/restricted condenser airflow
T133	Alert	Circuit A Low Suction Pressure	Suction pressure below 15 psig for 8 seconds or below 8 psig	Circuit shut down	Automatic restart after first daily occurrence. Manual restart thereafter.	Faulty or plugged TXV, low refrigerant charge, TXV out of adjustment, liquid line valve partially closed
T134	Alert	Circuit B Low Suction Pressure	Suction pressure below 15 psig for 8 seconds or below 8 psig	Circuit shut down	Automatic restart after first daily occurrence. Manual restart thereafter.	Faulty or plugged TXV, low refrigerant charge, TXV out of adjustment, liquid line valve partially closed

Table 29 — Alarm and Alert Codes (cont)

ALARM/ ALERT CODE	ALARM OR ALERT	DESCRIPTION	WHY WAS THIS ALARM GENERATED?	ACTION TAKEN BY CONTROL	RESET METHOD	PROBABLE CAUSE
A140	Alert	Reverse Rotation Detected	Incoming chiller power leads not phased correctly	Chiller not allowed to start.	Manual	Reverse any two incoming power leads to correct. Check for correct fan rotation first.
A150	Alarm	Emergency Stop	CCN emergency stop command received	Chiller shutdown without going through pumpdown.	Automatic once CCN command for EMSTOP returns to normal	CCN Network command.
A151	Alarm	Illegal Configuration	One or more illegal configurations exists.	Chiller is not allowed to start.	Manual once configuration errors are corrected	Configuration error. Check unit settings.
A152	Alarm	Unit Down Due to Failure	Both circuits are down due to alarms/alerts.	Chiller is unable to run.	Automatic once alarms/alerts are cleared that prevent the chiller from starting.	Alarm notifies user that chiller is 100% down.
T153	Alert	Real Time Clock Hardware Failure	Internal clock on MBB fails	Occupancy schedule will not be used. Chiller defaults to Local On mode.	Automatic when correct clock control restarts.	Time/Date/Month/Day/Year not properly set.
A154	Alarm	Serial EEPROM Hardware Failure	Hardware failure with MBB	Chiller is unable to run.	Manual	Main Base Board failure.
T155	Alert	Serial EEPROM Storage Failure	Configuration/storage failure with MBB	No Action	Manual	Potential failure of MBB. Download current operating software. Replace MBB if error occurs again.
A156	Alarm	Critical Serial EEPROM Storage Failure	Configuration/storage failure with MBB	Chiller is not allowed to run.	Manual	Main Base Board failure.
A157	Alarm	A/D Hardware Failure	Hardware failure with peripheral device	Chiller is not allowed to run.	Manual	Main Base Board failure.
A189	Alarm	Cooler pump auxiliary contact inputs miswired	Pump 1 (2) aux contacts closed when pump 2 (1) energized.	Both pump outputs are turned off.	Manual	Wiring error, faulty pump contactor auxiliary contacts.
T173	Alert	Loss of Communication with EMM	MBB loses communication with EMM	4 to 20 mA temperature reset disabled. Demand Limit set to 100%. 4 to 20 mA set point disabled.	Automatic	Wiring error, faulty wiring or failed Energy Management Module (EMM).
T174	Alert	4 to 20 mA Cooling Set Point Input Failure	If configured with EMM and input less than 2 mA or greater than 22 mA	Set point function disabled. Chiller controls to CSP1.	Automatic	Faulty signal generator, wiring error, or faulty EMM.
T176	Alert	4 to 20 mA Temperature Reset Input Failure	If configured with EMM and input less than 2 mA or greater than 22 mA	Reset function disabled. Chiller returns to normal set point control.	Automatic	Faulty signal generator, wiring error, or faulty EMM.
T177	Alert	4 to 20 mA Demand Limit Input Failure	If configured with EMM and input less than 2 mA or greater than 22 mA	Demand limit function disabled. Chiller returns to 100% demand limit control.	Automatic	Faulty signal generator, wiring error, or faulty EMM.
T189	Alarm	Cooler pump 2 and Aux Contact Input miswired	Alarm is generated when the pump's aux contacts close when a pump is called for	Chiller not allowed to start	Manual	Wiring error
T190	Alert	Cooler pump 1 Aux Contacts Failed to Close at Start-Up	Pump 1 Auxiliary Contacts did not close within 26 seconds after pump was started	Pump 1 turned off. Pump 2 will be started if available.	Manual	Wiring error, faulty contacts on pump contactor
T191	Alert	Cooler pump 2 Aux Contacts Failed to Close at Start-Up	Pump 2 Auxiliary Contacts did not close within 26 seconds after pump was started	Pump 2 turned off. Pump 1 will be started if available.	Manual	Wiring error, faulty contacts on pump contactor
T192	Alert	Cooler pump 1 Failed to Provide Flow at Start-Up	Pump 1 did not provide flow to close flow switch within 60 seconds	Pump 1 turned off. Pump 2 will be started if available.	Manual	Wiring error, pump circuit breaker tripped, contactor failure
T193	Alert	Cooler pump 2 Failed to Provide Flow at Start-Up	Pump 2 did not provide flow to close flow switch within 60 seconds	Pump 1 turned off. Pump 2 will be started if available.	Manual	Wiring error, pump circuit breaker tripped, contactor failure
T194	Alert	Cooler pump 1 Aux Contacts Opened During Normal Operation	Pump 1 Auxiliary Contacts open for 26 seconds after initially made. All compressors shut down. Pump 1 turned off.	Pump 2 will be started if available. Chiller allowed to run if Pump 2 successfully starts.	Manual	Wiring error, faulty contacts on pump contactor
T195	Alert	Cooler pump 2 Aux Contacts Opened During Normal Operation	Pump 2 Auxiliary Contacts open for 26 seconds after initially made. All compressors shut down. Pump 2 turned off.	Pump 1 will be started if available. Chiller allowed to run if Pump 1 successfully starts.	Manual	Wiring error, faulty contacts on pump contactor

Table 29 — Alarm and Alert Codes (cont)

ALARM/ ALERT CODE	ALARM OR ALERT	DESCRIPTION	WHY WAS THIS ALARM GENERATED?	ACTION TAKEN BY CONTROL	RESET METHOD	PROBABLE CAUSE
T196	Alert	Flow Lost While Pump 1 Running	Cooler flow switch contacts open for 3 seconds after initially made	All compressors shut down. Pump 1 turned off. Pump 2 will be started if available. Chiller allowed to run if Pump 2 successfully starts and flow switch is closed.	Manual	Wiring error, pump circuit breaker tripped, contactor failure
T197	Alert	Flow Lost While Pump 2 Running	Cooler flow switch contacts open for 3 seconds after initially made	All compressors shut down. Pump 2 turned off. Pump 1 will be started if available. Chiller allowed to run if Pump 1 successfully starts and flow switch is closed.	Manual	Wiring error, pump circuit breaker tripped, contactor failure
T198	Alert	Cooler pump 1 Aux Contacts Closed While Pump Off	Pump 1 Auxiliary Contacts closed for 26 seconds when pump state is off	Chiller not allowed to start	Automatic when aux contacts open	Wiring error, faulty pump contactor (welded contacts)
T199	Alert	Cooler pump 2 Aux Contacts Closed While Pump Off	Pump 2 Auxiliary Contacts closed for 26 seconds when pump state is off	Chiller not allowed to start	Automatic when aux contacts open	Wiring error, faulty pump contactor (welded contacts)
T200	Alert	Cooler Flow/Interlock Contacts failed to Close at start-up	Cooler flow switch contacts failed to close within 1 minute (if cooler pump control is enabled) or within 5 minutes (if cooler pump control is not enabled) after start-up	Chiller not allowed to start. For models with dual pumps, the second pump will be started if available	Manual	Wiring error, pump circuit breaker tripped, contactor failure, faulty flow switch or interlock
A201	Alarm	Cooler Flow/Interlock Contacts Opened During Normal Operation	Flow switch opens for at least 3 seconds after being initially closed	All compressors shut down. For models with dual pumps, the second pump will be started if available	Manual	Cooler pump failure, faulty flow switch or interlock, pump circuit breaker tripped
A202	Alarm	Cooler Pump Interlock Closed When Pump is Off	If configured for cooler pump control and flow switch input is closed for 5 minutes while pump output(s) are off	Chiller shut down	Automatic when aux contacts open	Wiring error, faulty pump contactor (welded contacts)
T203	Alert	Loss of Communication with slave chiller	Master chiller MBB loses communication with slave chiller MBB	Dual chiller control disabled. Chiller runs as a stand-alone machine.	Automatic	Wiring error, faulty wiring, failed Slave chiller MBB module, power loss at slave chiller, wrong slave address.
T204	Alert	Loss of Communication with master chiller	Slave chiller MBB loses communication with master chiller MBB	Dual chiller control disabled. Chiller runs as a stand-alone machine	Automatic	Wiring error, faulty wiring, failed master chiller MBB module, power loss at Master chiller.
T205	Alert	Master and slave chiller with same address	Master and slave chiller have the same CCN address (CCN.A)	Dual chiller routine disabled. Master/slave run as stand-alone chillers.	Automatic	CCN Address for both chillers is the same. Must be different. Check CCN.A under the OPT2 sub-mode in Configuration at both chillers.
T206	Alert	High Leaving Chilled Water Temperature	LWT read is greater than LCW Alert Limit, Total capacity is 100% and LWT is greater than LWT reading one minute ago	Alert only. No action taken.	Automatic	Building load greater than unit capacity, low water/brine flow or compressor fault. Check for other alarms/alerts.
A207	Alarm	Cooler Freeze Protection	Cooler EWT or LWT is less than Brine Freeze (BR.FZ)	Chiller shutdown without going through pumpdown. Cooler pump continues to run a minimum of 5 minutes (if control enabled).	Both EWT and LWT must be at least 6 F (3.3 C) above Brine Freeze point (BR.FZ). Automatic for first, Manual reset thereafter.	Faulty thermistor (T1/T2), low water flow.
A208	Alarm	EWT or LWT Thermistor failure	Cooler EWT is less than LWT by 3° F (1.7° C) for 1 minute after a circuit is started	Chiller shutdown. Cooler pump shut off (if control enabled).	Manual	Faulty cooler pump, low water flow, plugged fluid strainer.
T300	Alert	Cooler Pump 1 Scheduled Maintenance Due	Pump 1 Service Countdown (P.1.DN) expired. Complete pump 1 maintenance and enter 'YES' for Pump 1 Maintenance Done (P.1.MN) item.	None	Automatic	Routine pump maintenance required

Table 29 — Alarm and Alert Codes (cont)

ALARM/ ALERT CODE	ALARM OR ALERT	DESCRIPTION	WHY WAS THIS ALARM GENERATED?	ACTION TAKEN BY CONTROL	RESET METHOD	PROBABLE CAUSE
T301	Alert	Cooler Pump 2 Scheduled Maintenance Due	Pump 2 Service Countdown (P.2.DN) expired. Complete pump 2 maintenance and enter 'YES' for Pump 1 Maintenance Done (P.2.MN) item.	None	Automatic	Routine pump maintenance required
T302	Alert	Strainer Blowdown Scheduled Maintenance Due	Strainer Service Countdown (S.T.DN) expired. Complete strainer blowdown and enter 'YES' for Strainer Maintenance Done (S.T.MN) item.	None	Automatic	Routine strainer maintenance required
T303	Alert	Condenser Coil Maintenance Due	Coil Service Countdown (C.L.DN) expired. Complete condenser coil cleaning and enter 'YES' for Coil Maintenance Done (C.L.MN) item.	None	Automatic	Routine condenser coil maintenance required
T950	Alert	Loss of Communication with Water System Manager	No communications have been received by the MBB within 5 minutes of last transmission	WSM forces removed. Chiller runs under own control	Automatic	Failed module, wiring error, failed transformer, loose connection plug, wrong address
T951	Alert	Loss of Communication with Flotronic™ System Manager	No communications have been received by the MBB within 5 minutes of last transmission	FSM forces removed. Chiller runs under own control	Automatic	Failed module, wiring error, failed transformer, loose connection plug, wrong address
T952	Alert	Loss of Communication with Hydronic System Manager	No communications have been received by the MBB within 5 minutes of last transmission	HSM forces removed. Chiller runs under own control	Automatic	Failed module, wiring error, failed transformer, loose connection plug, wrong address

LEGEND

CCN	— Carrier Comfort Network
EMM	— Energy Management Module
EWT	— Entering Fluid Temperature
FSM	— Flotronic™ System Manager
HSM	— Hydronic System Manager
LCW	— Leaving Chilled Water
LWT	— Leaving Fluid Temperature
MBB	— Main Base Board
OAT	— Outdoor-Air Temperature
SCT	— Saturated Condensing Temperature
TXV	— Thermostatic Expansion Valve
WSM	— Water System Manager