

**Compressor Alarm/Alert Circuit** — Each compressor is directly controlled by a CCP module. Compressor faults (T051, T052, T055, T056) are reported as alerts. The specific

fault condition for a compressor alert is included as part of the alert description displayed on the Navigator. Press  and  simultaneously to display description.

**Table 32 — Alarm and Alert Codes**

| ALARM/ALERT CODE | ALARM OR ALERT | DESCRIPTION                          | WHY WAS THIS ALARM GENERATED?   | ACTION TAKEN BY CONTROL  | RESET METHOD | PROBABLE CAUSE  |
|------------------|----------------|--------------------------------------|---|--------------------------|--------------|---|
| T026             | Alert          | Compressor A1 Low Oil Pressure – 1   | $P_{O-P_a} < \text{Oil Set Point 1}$ . See Note 1 and Fig. 20 on page 49. | Comp A1 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
|                  |                | Compressor A1 Low Oil Pressure – 2   | $P_{O-P_s} < \text{Oil Set Point 2}$ . See Note 1 and Fig. 20 on page 49. | Comp A1 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| T027             | Alert          | Compressor A2 Low Oil Pressure – 1   | $P_{O-P_a} < \text{Oil Set Point 1}$ . See Note 1 and Fig. 20 on page 49. | Comp A2 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
|                  |                | Compressor A2 Low Oil Pressure – 2   | $P_{O-P_s} < \text{Oil Set Point 2}$ . See Note 1 and Fig. 20 on page 49. | Comp A2 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| T028             | Alert          | Compressor B1 Low Oil Pressure – 1   | $P_{O-P_a} < \text{Oil Set Point 1}$ . See Note 1 and Fig. 20 on page 49. | Comp B1 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
|                  |                | Compressor B1 Low Oil Pressure – 2   | $P_{O-P_s} < \text{Oil Set Point 2}$ . See Note 1 and Fig. 20 on page 49. | Comp B1 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| T029             | Alert          | Compressor B2 Low Oil Pressure – 1   | $P_{O-P_a} < \text{Oil Set Point 1}$ . See Note 1 and Fig. 20 on page 49. | Comp B2 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
|                  |                | Compressor B2 Low Oil Pressure – 2   | $P_{O-P_s} < \text{Oil Set Point 2}$ . See Note 1 and Fig. 20 on page 49. | Comp B2 shut down        | Manual       | Low Water Temperature, low refrigerant charge, plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| A030             | Alarm          | Compressor A1 Pre-Start Oil Pressure | Oil Pump did not build sufficient pressure during pre-lube cycle.         | Compressor cannot start. | Manual       | Low oil, oil pump failure, oil solenoid failure, oil transducer failure, check valve failed open, oil shutoff valve closed.   |
| A031             | Alarm          | Compressor A2 Pre-Start Oil Pressure | Oil Pump did not build sufficient pressure during pre-lube cycle.         | Compressor cannot start. | Manual       | Low oil, oil pump failure, oil solenoid failure, oil transducer failure, check valve failed open, oil shutoff valve closed.   |
| A032             | Alarm          | Compressor B1 Pre-Start Oil Pressure | Oil Pump did not build sufficient pressure during pre-lube cycle.         | Compressor cannot start. | Manual       | Low oil, oil pump failure, oil solenoid failure, oil transducer failure, check valve failed open, oil shutoff valve closed.   |
| A033             | Alarm          | Compressor B2 Pre-Start Oil Pressure | Oil Pump did not build sufficient pressure during pre-lube cycle.         | Compressor cannot start. | Manual       | Low oil, oil pump failure, oil solenoid failure, oil transducer failure, check valve failed open, oil shutoff valve closed.   |

**Table 32 — 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   |
|------------------|----------------|---|--|-------------------------------|--------------|--|
| A034             | Alarm          | Comp. A1 Max. Oil Delta P, check oil line | (Discharge press – Oil press) > 100 PSI for more than 5 seconds                                | Comp. A1 shut down            | Manual       | Plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| A035             | Alarm          | Comp. A2 Max. Oil Delta P, check oil line | (Discharge press – Oil press) > 100 PSI for more than 5 seconds                                | Comp. A2 shut down            | Manual       | Plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| A036             | Alarm          | Comp. B1 Max. Oil Delta P, check oil line | (Discharge press – Oil press) > 100 PSI for more than 5 seconds                                | Comp. B1 shut down            | Manual       | Plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| A037             | Alarm          | Comp. B2 Max. Oil Delta P, check oil line | (Discharge press – Oil press) > 100 PSI for more than 5 seconds                                | Comp. B2 shut down            | Manual       | Plugged oil filter, closed oil valve, bad oil solenoid, compressor oil check valve stuck, oil line check valve stuck, plugged oil strainer |
| A038             | Alarm          | Comp. A1 Failed Oil Solenoid              | Diff. Oil Pressure > 2.5 PSI during period after oil pump starts and before oil solenoid opens | Comp. A1 not allowed to start | Manual       | Faulty oil solenoid valve  |
| A039             | Alarm          | Comp. A2 Failed Oil Solenoid              | Diff. Oil Pressure > 2.5 PSI during period after oil pump starts and before oil solenoid opens | Comp. A2 not allowed to start | Manual       | Faulty oil solenoid valve  |
| A040             | Alarm          | Comp. B1 Failed Oil Solenoid              | Diff. Oil Pressure > 2.5 PSI during period after oil pump starts and before oil solenoid opens | Comp. B1 not allowed to start | Manual       | Faulty oil solenoid valve  |
| A041             | Alarm          | Comp. B2 Failed Oil Solenoid              | Diff. Oil Pressure > 2.5 PSI during period after oil pump starts and before oil solenoid opens | Comp. B2 not allowed to start | Manual       | Faulty oil solenoid valve  |

Table 32 — 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  |
|------------------|----------------|---|--|---|--------------|---|
| T051             | Alert          | Compressor A1 Failure – (See below)         | See additional descriptions below.   |   |              |   |
| T052             | Alert          | Compressor A2 Failure – (See below)         |  |   |              |   |
| T055             | Alert          | Compressor B1 Failure – (See below)         |  |   |              |   |
| T056             | Alert          | Compressor B2 Failure – (See below)         |  |   |              |   |
|                  |                | High Pressure Switch Trip                   |  |   |              |   |
|                  |                | No Motor Current                            | CCP reads less than 10% of MTA on all legs for >3.0 seconds  | Comp. shut down   | Manual       | Power supply disconnected, blown fuse(s), wiring error, contactor not energized, faulty current toroid, check toroid wiring.  |
|                  |                | Current Unbalance                           | CCP measures current imbalance between phases must be above C.UNB for 25 minutes   | Circuit shut down   | Manual       | Loose terminals on power wires. Alert will be generated if measured imbalance exceeds set point.  |
|                  |                | Single Phase Current Loss                   | CCP measures current imbalance between phases greater than 50% (running current <50% of MTA) or 30% (running current ≥ 50% of MTA) for 1 second. | Circuit shut down   | Manual       | Blown fuse, wiring error, loose terminals   |
|                  |                | High Motor Current                          | CCP detects high current compared to MTA setting   | Comp. shut down   | Manual       | Operation beyond chiller capability, improperly punched configuration header, blown fuse  |
|                  |                | Ground Fault Trip                           | CCP detects ground current (4.0 ± 2.0 amps)  | Comp. shut down   | Manual       | Motor winding(s) gone to ground, wiring error, loose plug connector.  |
|                  |                | Contactors Failure                          | CCP detects min. 10% of MTA for 10 seconds after shutting off compressor contactor. Oil solenoid is energized.                                   | All remaining compressors shut down. All loaders deenergized. Min. load valve of affected circuit energized (if equipped) | Manual       | Faulty contactor, contactor welded, wiring error.   |
|                  |                | Current Phase Reversal                      | CCP detects phase reversal from toroid reading or from incoming power supply.  | Circuit shut down   | Manual       | Terminal block power supply leads not in correct phase. Toroid wire harness crossed. Check compressor contactor.  |
|                  |                | Motor Over Temperature                      | CCP detects motor winding temperature >245 F   | Comp. shut down   | Manual       | Motor cooling (all) or Economizer (2 comp. circuits) solenoid failure, low refrigerant charge. Faulty economizer TXV or poor bulb connection to motor cooling line. |
|                  |                | Open Thermistor                             | CCP detects open circuit in motor temp thermistor  | Comp. shut down   | Manual       | Wiring error or faulty thermistor*  |
|                  |                | MTA Header Fault                            | CCP finds error with MTA value punched out in header.  | Comp. shut down   | Manual       | Header pins on CCP board either all or none punched out, header not fully seated in CCP board.  |
|                  |                | MTA Value Error                             | MTA value stored in MBB does not agree with MTA header value from CCP.   | Comp. not allowed to start  | Manual       | Header pin(s) on CCP board not punched out correctly. See Appendix A. Incorrect size or voltage entered when MBB was downloaded.                                    |
|                  |                | Shorted Thermistor                          | CCP detects short circuit in motor temp thermistor   | Comp. shut down   | Manual       | Wiring error or faulty thermistor*  |
| A060             | Alarm          | Cooler Leaving Fluid Thermistor Failure – 1 | Thermistor outside range of –40 to 240° F (–40 to 116° C)  | Chiller shut down   | Automatic    | Thermistor failure, damaged cable/wire or wiring error.   |
|                  |                | Cooler Leaving Fluid Thermistor Failure – 2 | LWT > EWT + 5° F for 15 minutes  | Chiller shut down   | Manual       | Thermistor failure, damaged cable/wire, wiring error or water piping error.   |
| A061             | Alarm          | Cooler Entering Fluid Thermistor Failure    | Thermistor outside range of –40 to 240° F (–40 to 116° C)  | Uses 0.1×F/% Total Capacity as rise/ton   | Automatic    | Thermistor failure, damaged cable/wire or wiring error.   |
| T062             | Alert          | Condenser Leaving Fluid Thermistor Failure  | Thermistor outside range of –40 to 240° F (–40 to 116° C)  | None. Chiller continues to run.   | Automatic    | Thermistor failure, damaged cable/wire or wiring error.   |
| T063             | Alert          | Condenser Entering Fluid Thermistor Failure | Thermistor outside range of –40 to 240° F (–40 to 116° C)  | None. Chiller continues to run.   | Automatic    | Thermistor failure, damaged cable/wire or wiring error.   |
| T070             | Alert          | Cir. A Discharge Gas Thermistor Failure     | Average of compressor A1 and A2 (if installed) sensors > 210° F for 30 seconds.  | Circuit A shut down   | Manual       | Thermistor failure, damaged cable/wire, wiring error or motor cooling solenoid failure.   |

**Table 32 — Alarm and Alert Codes (cont)**

| ALARM/<br>ALERT CODE | ALARM OR<br>ALERT | DESCRIPTION   | WHY WAS THIS ALARM<br>GENERATED?  | ACTION TAKEN BY<br>CONTROL                                 | RESET<br>METHOD | PROBABLE CAUSE  |
|----------------------|-------------------|---|---|--|-----------------|---|
| T071                 | Alert             | Cir. B Discharge Gas Thermistor Failure               | Average of compressor B1 and B2 (if installed) sensors > 210° F for 30 seconds. | Circuit B shut down  | Manual          | Thermistor failure, damaged cable/wire, wiring error or motor cooling solenoid failure. |
| T073                 | Alert             | Outside Air Temperature Thermistor Failure            | Thermistor outside range of -40 to 240 F (-40 to 116 C)                         | Reset disabled. Runs under normal control/set points.      | Automatic       | Thermistor failure, damaged cable/wire, wiring error or sensor not installed.           |
| T074                 | Alert             | Space Temperature Thermistor Failure                  | Thermistor outside range of -40 to 240 F (-40 to 116 C)                         | Reset disabled. Runs under normal control/set points.      | Automatic       | Thermistor failure, damaged cable/wire, wiring error or sensor not installed.           |
| T075                 | Alert             | Compressor A1 Discharge Gas Thermistor Failure        | Thermistor outside range of -40 to 240° F (-40 to 116° C)                       | Comp A1 shut down  | Automatic       | Thermistor failure, damaged cable/wire, wiring error or motor cooling solenoid failure. |
| T076                 | Alert             | Compressor A2 Discharge Gas Thermistor Failure        | Thermistor outside range of -40 to 240° F (-40 to 116° C)                       | Comp A2 shut down  | Automatic       | Thermistor failure, damaged cable/wire, wiring error or motor cooling solenoid failure. |
| T077                 | Alert             | Compressor B1 Discharge Gas Thermistor Failure        | Thermistor outside range of -40 to 240° F (-40 to 116° C)                       | Comp B1 shut down  | Automatic       | Thermistor failure, damaged cable/wire, wiring error or motor cooling solenoid failure. |
| T078                 | Alert             | Compressor B2 Discharge Gas Thermistor Failure        | Thermistor outside range of -40 to 240° F (-40 to 116° C)                       | Comp B2 shut down  | Automatic       | Thermistor failure, damaged cable/wire, wiring error or motor cooling solenoid failure. |
| T079                 | Alert             | Lead/Lag Leaving Fluid Temperature Thermistor Failure | Thermistor outside range of -40 to 240 F (-40 to 116 C)                         | Breaks Dual Chiller link if set up for Parallel operation. | Automatic       | Thermistor failure, damaged cable/wire, wiring error or sensor not installed.           |
| T090                 | Alert             | Circuit A Discharge Pressure Transducer Failure       | Voltage ratio more than 98.9% or less than 6%.                                  | 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 98.9% or less than 6%.                                  | 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 0.5% for 50 seconds.                 | Circuit A shut down  | Automatic       | Transducer failure, poor connection to MBB, or wiring damage/error.                     |
| T093                 | Alert             | Circuit B Suction Pressure Transducer Failure         | Voltage ratio more than 99.9% or less than 0.5% for 50 seconds.                 | Circuit B shut down  | Automatic       | Transducer failure, poor connection to MBB, or wiring damage/error.                     |
| T094                 | Alert             | Comp A1 Oil Pressure Transducer Failure               | Voltage ratio more than 98.9% or less than 6%.                                  | Comp A1 shut down  | Automatic       | Transducer failure, poor connection to SCB, or wiring damage/error.                     |
| T095                 | Alert             | Comp A2 Oil Pressure Transducer Failure               | Voltage ratio more than 98.9% or less than 6%.                                  | Comp A2 shut down  | Automatic       | Transducer failure, poor connection to SCB, or wiring damage/error.                     |
| T096                 | Alert             | Comp B1 Oil Pressure Transducer Failure               | Voltage ratio more than 98.9% or less than 6%.                                  | Comp B1 shut down  | Automatic       | Transducer failure, poor connection to SCB, or wiring damage/error.                     |
| T097                 | Alert             | Comp B2 Oil Pressure Transducer Failure               | Voltage ratio more than 98.9% or less than 6%.                                  | Comp B2 shut down  | Automatic       | Transducer failure, poor connection to SCB, or wiring damage/error.                     |
| T098                 | Alert             | Circuit A Economizer Pressure Transducer Failure - 1  | Voltage ratio more than 99.9% or less than 0.5% for 50 seconds.                 | Circuit A shut down  | Automatic       | Transducer failure, poor connection to SCB, or wiring damage/error.                     |
| T099                 | Alert             | Circuit A Economizer Pressure Transducer Failure - 2  | Economizer pressure is more than 12 psi (83 kPa) less than suction pressure.    | Circuit A shut down  | Manual          | Suction and Economizer pressure connectors/wiring are swapped.                          |
|                      | Alert             | Circuit B Economizer Pressure Transducer Failure - 1  | Voltage ratio more than 99.9% or less than 0.5% for 50 seconds.                 | Circuit B shut down  | Automatic       | Transducer failure, poor connection to SCB, or wiring damage/error.                     |
| T099                 | Alert             | Circuit B Economizer Pressure Transducer Failure - 2  | Economizer pressure is more than 12 psi (83 kPa) less than suction pressure.    | Circuit B shut down  | Manual          | Suction and Economizer pressure connectors/wiring are swapped.                          |
|                      | Alert             | Circuit A Loss of Charge                              | Discharge pressure reading < 10 psig for 30 seconds.                            | Circuit A shut down  | Manual          | Refrigerant leak or transducer failure.   |
| T111                 | Alert             | Circuit B Loss of Charge                              | Discharge pressure reading < 10 psig for 30 seconds.                            | Circuit B shut down  | Manual          | Refrigerant leak or transducer failure.   |

**Table 32 — Alarm and Alert Codes (cont)**

| ALARM/<br>ALERT CODE | ALARM OR<br>ALERT | DESCRIPTION  | WHY WAS THIS<br>ALARM GENERATED?   | ACTION TAKEN BY<br>CONTROL                                    | RESET<br>METHOD | PROBABLE CAUSE   |
|----------------------|-------------------|--|--|---|-----------------|--|
| <b>T120</b>          | Alert             | Circuit A Low Saturated Suction Temperature                              | SST reads 6° F (3.3° C) or more below the brine freeze point for 3 minutes or 28° F below brine freeze point for 2 minutes.                              | Circuit A shut down   | Manual†         | Low refrigerant charge, plugged strainer, faulty expansion valve, or low water flow.               |
| <b>T121</b>          | Alert             | Circuit B Low Saturated Suction Temperature                              | SST reads 6° F (3.3° C) or more below the brine freeze point for 3 minutes or 28° F below brine freeze point for 2 minutes.                              | Circuit B shut down   | Manual†         | Low refrigerant charge, plugged strainer, faulty expansion valve, or low water flow.               |
| <b>T122</b>          | Alert             | Circuit A High Saturated Suction Temperature                             | After first 90 seconds, SST > 55 F (12.8 C) and EXV < 1% for 5 minutes.  | Circuit A shut down   | Manual          | Faulty expansion valve or transducer.  |
| <b>T123</b>          | Alert             | Circuit B High Saturated Suction Temperature                             | After first 90 seconds, SST > 55 F (12.8 C) and EXV < 1% for 5 minutes.  | Circuit B shut down   | Manual          | Faulty expansion valve or transducer.  |
| <b>T124</b>          | Alert             | Circuit A Low Oil Level/Flow   | Level switch input open.   | Circuit A shut down after 4th failure in 18 hours.            | Manual          | Low oil level, failed switch, wiring error, failed control module.                                 |
| <b>T125</b>          | Alert             | Circuit B Low Oil Level/Flow   | Level switch input open.   | Circuit B shut down after 4th failure in 18 hours.            | Manual          | Low oil level, failed switch, wiring error, failed control module.                                 |
| <b>T126</b>          | Alert             | Circuit A High Discharge Pressure  | SCT > MCT_SP + 5° F (2.8° C)   | Circuit A shut down.  | Automatic**     | Faulty transducer/high pressure switch, low/restricted condenser air/water flow††                  |
| <b>T127</b>          | Alert             | Circuit B High Discharge Pressure  | SCT > MCT_SP + 5° F (2.8° C)   | Circuit B shut down.  | Automatic**     | Faulty transducer/high pressure switch, low/restricted condenser air/water flow††                  |
| <b>A128</b>          | Alarm             | Circuit A Condenser Freeze Protection (alarm ignored for brine chillers) | For water cooled chillers only, if SCT < 34 F (1.1° C)   | Chiller shut down. Turns condenser pump On if Chiller is Off. | Automatic       | Failed/bad discharge pressure transducer, refrigerant leak, configured for water-cooled condenser. |
| <b>A129</b>          | Alarm             | Circuit B Condenser Freeze Protection (alarm ignored for brine chillers) | For water cooled chillers only, if SCT < 34 F (1.1° C)   | Chiller shut down. Turns condenser pump On if Chiller is Off. | Automatic       | Failed/bad discharge pressure transducer, refrigerant leak, configured for water-cooled condenser. |
| <b>T135</b>          | Alert             | Circuit A Failure to Pump Out  | With EXV closed, SST did not drop 10° F (5.6° C) in 6 minutes, or SST is not 6° F (3.3° C) less than Brine Freeze, or SST is not less than 10 F (-12 C). | None  | Manual          | Faulty transducer or EXV.  |
| <b>T136</b>          | Alert             | Circuit B Failure to Pump Out  | With EXV closed, SST did not drop 10° F (5.6° C) in 6 minutes, or SST is not 6° F (3.3° C) less than Brine Freeze, or SST is not less than 10 F (-12 C). | None  | Manual          | Faulty transducer or EXV   |
| <b>T137</b>          | Alert             | Circuit A Low Discharge Superheat  | Superheat < 5° F (2.8° C) for 10 minutes.  | Circuit A shut down   | Manual          | Faulty thermistor, transducer, EXV, or Economizer TXV. Motor cooling solenoid stuck open.          |
| <b>T138</b>          | Alert             | Circuit B Low Discharge Superheat  | Superheat < 5° F (2.8° C) for 10 minutes.  | Circuit B shut down   | Manual          | Faulty thermistor, transducer, EXV, or Economizer TXV. Motor cooling solenoid stuck open.          |
| <b>T140</b>          | Alert             | Compressor A1 – High Oil Filter Pressure Drop                            | Oil filter pressure drop (FD.A1) exceeds 25 psig (172 kPa) for water-cooled units or 30 psig (207 kPa) for air-cooled and split system units.            | None  | Manual          | Filter change needed to prevent machine from shutting down.  |
| <b>T141</b>          | Alert             | Compressor A2 – High Oil Filter Pressure Drop                            | Oil filter pressure drop (FD.A2) exceeds 25 psig (172 kPa) for water-cooled units or 30 psig (207 kPa) for air-cooled and split system units.            | None  | Manual          | Filter change needed to prevent machine from shutting down.  |

Table 32 — 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   |
|------------------|----------------|---|---|---|-------------------|--|
| T142             | Alert          | Compressor B1 – High Oil Filter Pressure Drop             | Oil filter pressure drop (FD.B1) exceeds 25 psig (172 kPa) for water-cooled units or 30 psig (207 kPa) for air-cooled and split system units. | None  | Manual            | Filter change needed to prevent machine from shutting down.  |
| T143             | Alert          | Compressor B2 – High Oil Filter Pressure Drop             | Oil filter pressure drop (FD.B2) exceeds 25 psig (172 kPa) for water-cooled units or 30 psig (207 kPa) for air-cooled and split system units. | None  | Manual            | Filter change needed to prevent machine from shutting down.  |
| A150             | Alarm          | Unit is in Emergency Stop                                 | CCN command received to shut unit down  | Chiller shut down                               | CCN/<br>Automatic | Network command  |
| A151             | Alarm          | Illegal Configuration-x                                   | Illegal Configuration has been entered. Correction needed.  | Chiller cannot start.                           | Manual            | Configuration error. See Table 33.   |
| A152             | Alarm          | Circuit A&B Off for Alerts. Unit down.                    | Control has shut down both circuits due to alerts.  | None  | Automatic         | Check individual alarms.   |
| T153             | Alert          | Real Time Clock Hardware Failure                          | Time not advancing on board,  | Defaults to occupied                            | Automatic         | Time clock not initialized or board fail   |
| A154             | Alarm          | Serial EEPROM Hardware Failure                            | Internal failure of the EEPROM.   | Machine shuts down                              | Manual            | Replace Main Base Board.   |
| A155             | Alarm          | Serial EEPROM Storage Failure Error                       | Internal diagnostic has found an error on critical data.  | Machine shuts down                              | Manual            | Re-download the software of consider replacement of the Main Base Board.                             |
| A156             | Alarm          | Critical Serial EEPROM Storage Failure Error              | Internal diagnostic has found an error on critical data.  | Machine shuts down                              | Manual            | Replace Main Base Board.   |
| A157             | Alarm          | A/D Hardware Failure                                      | A/D converter on the MBB has failed.  | Machine shuts down                              | Manual            | Replace Main Base Board.   |
| A159             | Alarm          | Loss of Condenser Flow                                    | Flow switch not closed within 1 minute after pump is started or if flow switch opens during normal operation for > 10 sec.                    | Chiller shut down.                              | Manual            | Low condenser water flow, failed condenser pump.   |
| A172             | Alarm          | Loss of Communication with EXV Module                     | MBB has lost communication with the EXV Module  | Chiller shut down.                              | Automatic         | Failed EXV Module, wiring error, loose connections, failed transformer, wrong address.               |
| T173             | Alert          | Loss of Communication with Energy Management Module       | MBB has lost communication with the Energy Management Module when this option is installed.   | EMM options are disabled.                       | Automatic         | Failed EMM, wiring error, loose connections, failed transformer, wrong address, wrong configuration. |
| T174             | Alert          | 4-20 mA Cool Setpoint Input Failure                       | If configured and input signal to EMM less than 2 mA or greater than 22 mA.   | Function disabled. Normal set point used.       | Automatic         | Faulty signal generator, wiring error, loss of signal  |
| T175             | Alert          | 4-20 mA Heat Setpoint Input Failure                       | If configured and input signal to EMM less than 2 mA or greater than 22 mA.   | Function disabled. Normal set point used.       | Automatic         | Faulty signal generator, wiring error, loss of signal  |
| T176             | Alert          | 4-20 mA Reset Input Out of Range                          | If configured and input signal to EMM less than 2 mA or greater than 22 mA.   | Reset function disabled. Normal set point used. | Automatic         | Faulty signal generator, wiring error loss of signal   |
| T177             | Alert          | 4-20 mA Demand Limit Input Out of Range                   | If configured and input signal to EMM less than 2 mA or greater than 22 mA.   | Reset function disabled. Normal set point used. | Automatic         | Faulty signal generator, wiring error, loss of signal  |
| A178             | Alarm          | Loss of Communication with Screw Chiller Module           | MBB has lost communication with the Screw Chiller Module  | Chiller shut down.                              | Automatic         | Failed SCB Module, wiring error, loose connections, failed transformer, wrong address.               |
| A180             | Alarm          | Loss of Communication with Compressor Protection Module 1 | MBB has lost communication with the Compressor Protection Module 1  | Chiller shut down.                              | Automatic         | Failed CCP Module, wiring error, loose connections, failed transformer, wrong address.               |
| A181             | Alarm          | Loss of Communication with Compressor Protection Module 2 | MBB has lost communication with the Compressor Protection Module 2  | Chiller shut down.                              | Automatic         | Failed CCP Module, wiring error, loose connections, failed transformer, wrong address.               |

Table 32 — 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   |
|------------------|----------------|--|---|---|-----------------------|--|
| T182             | Alert          | Compressor Protection Module 1 Internal Diagnostic           | The <i>ComfortLink™</i> Compressor Protection Module has generated an internal diagnostic alert.                                    | Affected compressors are shut down.   | Manual on CCP and MBB | Eliminate EMI sources around the module, consider replacement of the CCP module if alerts continue.  |
| T183             | Alert          | Compressor Protection Module 2 Internal Diagnostic           | The <i>ComfortLink™</i> Compressor Protection Module has generated an internal diagnostic alert.                                    | Affected compressors are shut down.   | Manual on CCP and MBB | Eliminate EMI sources around the module, consider replacement of the CCP module if alerts continue.  |
| T184             | Alarm          | Compressor Protection Module 1                               | CCP has experienced too many power cycles***  | Chiller shut down   | Manual                | Loose connections, frequent power interruptions.   |
| T185             | Alarm          | Compressor Protection Module 2                               | CCP has experienced too many power cycles**   | Chiller shut down   | Manual                | Loose connections, frequent power interruptions.   |
| A200             | Alarm          | Cooler Pump Interlock Failed at Start-Up                     | Interlock did not close within 5 minutes after chiller was enabled  | Chiller shut down. Pump turned off.   | Manual                | Failure of cooler pump, cooler pump interlock, or flow switch  |
| A201             | Alarm          | Cooler Pump Interlock Opened Unexpectedly                    | Interlock opened for at least 10 seconds during operation and does not close within 5 min.  | Chiller shut down. Pump turned off.   | Manual                | Failure of cooler pump, cooler pump interlock, or flow switch  |
| A202             | Alarm          | Cooler Pump Interlock Closed When Pump OFF                   | Interlock closed when pump relay is off   | Cooler pump remains off. Unit prevented from starting.                          | Manual                | Failure of cooler pump relay or interlock, welded contacts. Cooler pump enabled but not controlling pump   |
| T203             | Alert          | Loss of Communication with the Slave Chiller                 | The master chiller (when configured) has lost communication with the slave chiller for 3 minutes.                                   | Master chiller runs as a stand-alone chiller.                                   | Automatic             | Failed Slave MBB Module, wiring error, loose connections, wrong address, loss of control power on slave chiller.   |
| T204             | Alert          | Loss of Communication with the Master Chiller                | The slave chiller (when configured) has lost communication with the master chiller for 3 minutes.                                   | Slave chiller runs as a stand-alone chiller.                                    | Automatic             | Failed Master MBB Module, wiring error, loose connections, wrong address, loss of control power on master chiller.   |
| T205             | Alert          | Master and Slave Chiller with Same Address                   | The master chiller (when configured) has determined that its address is the same as the slave address.                              | Dual chiller control disabled.  | Automatic             | Master and Slave chiller must have different addresses.  |
| T206             | Alert          | High Leaving Chilled Water Temperature                       | LCW read > LCW Delta Alarm limit and total capacity is 100% and current LCW > LCW reading 1 minute ago                              | None.   | Automatic             | Building load greater than unit capacity, low water/brine flow, or compressor fault. Check for other alarms or alerts.   |
| A207             | Alarm          | Cooler Freeze Protection                                     | Cooler EWT or LWT less than freeze point. Freeze point is the brine freeze setpoint +2 F (1.1 C).                                   | Chiller shut down. Leave Cooler pump on. Turn Cooler pump on if Chiller is off. | Automatic             | Faulty thermistor, low water flow  |
| T210             | Alert          | Winterization Required                                       | SCT < 32 F in either circuit  | None  | Manual                | Winterization must be performed to avoid cooler freeze-up. After winterization has been completed, configure W.D.NE <i>Winterization Performed</i> (Configuration Mode, Sub-mode SERV) to YES to reset alert.                  |
| T950             | Alert          | Loss of Communication with WSM                               | No communications have been received by the MBB within 5 minutes of transmission.   | WSM forces removed. Runs under own control.                                     | Automatic             | Failed module, wiring error, failed transformer, loose connection plug, wrong address  |
| A951             | Alarm          | Loss of Communication with Chillervisor System Manager (CSM) | No communications have been received by the MBB within 5 minutes of last transmission.  | CSM forces removed. Runs under own control.                                     | Automatic             | Wiring faulty or module failure  |
| T998             | Alert          | Loss of Refrigerant Flow in Circuit A.                       | Between 40 and 90 seconds of runtime, SST is less than 0° F (-18 C) and the rate of change is negative (in 5 second increments).    | Circuit A compressor is shut down.  | Manual                | Refrigerant restriction such as closed suction service valve, closed liquid line service valve, faulty liquid line solenoid valve, faulty EXV/Economizer operation, plugged refrigerant strainer, closed discharge line valve. |
| T999             | Alert          | Loss of Refrigerant Flow in Circuit B.                       | Between 40 and 90 seconds of runtime, if SST is less than 0° F (-18 C) and the rate of change is negative (in 5 second increments). | Circuit B compressor is shut down.  | Manual                | Refrigerant restriction such as closed suction service valve, closed liquid line service valve, faulty liquid line solenoid valve, faulty EXV/Economizer operation, plugged refrigerant strainer, closed discharge line valve. |