## Object Naming Conventions

The communicated points for the Symbio™ controllers are generally named according to their function. While many of the points are read-only, others include both read and write capability. The established naming convention helps to identify the capabilities of each point. For most points, the suffix identifies the capability according to the following definition. While there are some exceptions, the majority of the points have been defined according to these guidelines.

| Suffix | Description |
|---|---|
| Status | Points with the Status suffix are defined as read-only. The status point reports the value being used by the controller. |
| Local | Points with the Local suffix are defined as read-only. The local point reports values associated with controller sensors, both wired and wireless. The local value may or may not be actively used by the controller, depending on the presence or absence of a communicated value (BAS). When both a local and communicated value exist, the communicated value is used. |
| Active | Points with the Active suffix are defined as read-only. Points designated as active are normally the result of the arbitration between a communicated value(BAS) and at least one value local to the equipment, such as a sensor or default setpoint. The active point reports the value being input to the controller. |
| Setpoint | Points with the Setpoint suffix are defined as either read-only or read/write. For BACnet®, the binary input, analog input and multi-state input points are all read-only. These setpoints report the value currently in use by the controller. The analog value, binary value and multi-state value points are all read/write. These points are provided for use by the building automation system (BAS). When used, these points are written internally to arbitration logic. This defines the interaction with hardwired points, editable software configuration points and the relinquish default value/state. Refer to the Appendix for additional information. |
| Input | Points with the Input suffix are defined as read-only. These points normally reflect the status of a sensor input, either hardwired or communicating wirelessly (Air-Fi®). However, the input point reflects the arbitrated result of the controller sensor input and a communicated value, if present. When both a controller sensor and communicated value exist, the controller will use and report the communicated value. |
| Arbitrator | Points with the “Arbitrator” suffix are to be used as read-only. The arbitrator prioritizes inputs from communicating points, hardwired points and stored defaults points. The priority array of the arbitration point displays each of the values provided, including the active status, indicating which of the input sources is being used. Refer to the Appendix for additional information. |
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| Command | Points with the Command suffix are defined as read/write. These points are written to change the default behavior of the controller. Once written, these point values may be persisted. |
| Request | Points with the Request suffix are defined as read/write. These points are written to request a change the operating behavior of the controller. |

## Object Data Points and Diagnostic Data Points

The following tables are sorted as follows:

- Tables are listed by input/output type and sorted by object identifier. These tables provide the user with the unit's type for each object type.
- Tables are sorted by object name and provide a complete list of object names, types, values/ranges, and descriptions.

*Note: Not all points are available to the user. The available data points are defined during self-configuration and are dependent on the type of equipment.*

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| Register Type | Register Value | Byte Order | Invalid Values |
|---|---|---|---|
| Analog | Float, 32-bit | High Word/High Byte First | NaN |
| Binary | Int, 16-bit, unsigned | High Byte first | 0xffff |
| Multi-state | Int, 16-bit, unsigned | High Byte first | 0xffff |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10100 | 30011 | Active Chilled Water Setpoint | Temperature | Standard |
| AI-10101 | 30013 | Chilled Water Setpoint Status | Temperature | Standard |
| AI-10102 | 30015 | Active Base Loading Setpoint | Percent | Base Loading |
| AI-10103 | 30017 | Active Hot Water Setpoint | Temperature | Hot Water Control |
| AI-10104 | 30019 | Calculated Chiller Capacity | Power, Cooling | Evap Water Flow Sensing |
| AI-10105 | 30021 | Total Demand Distortion | Percent | Active Harmonic Dampening |
| AI-10106 | 30023 | Active Cool/Heat Setpoint Temperature | Temperature | Standard |
| AI-10107 | 30025 | Evaporator Leaving Water Temperature | Temperature | Standard |
| AI-10108 | 30027 | Evaporator Entering Water Temperature | Temperature | Standard |
| AI-10109 | 30029 | Condenser Entering Water Temperature | Temperature | Standard |
| AI-10110 | 30031 | Condenser Leaving Water Temperature | Temperature | Standard |
| AI-10111 | 30033 | Evaporator Water Flow Rate | Flow, water | Evap Water Flow Sensing |
| AI-10112 | 30035 | Evaporator Differential Water Pressure | Differential Pressure | Evap Water Flow Differential Pressure<br>or<br>Dual Pressure Sensors |
| AI-10113 | 30037 | Condenser Water Flow Rate | Flow, water | Cond Water Flow Sensing |
| AI-10114 | 30039 | Condenser Differential Water Pressure | Differential Pressure | Cond Water Flow Differential Pressure<br>or<br>Dual Pressure Sensors |
| AI-10115 | 30041 | Heat Recovery Entering Water Temperature | Temperature | Heat Recovery |
| AI-10116 | 30043 | Heat Recovery Leaving Water Temperature | Temperature | Heat Recovery |
| AI-10117 | 30045 | AFD Last Diagnostic Code Ckt1 | None | Unit Mount AFD w/o THD filter<br>Remote Mount Comm AFD (PF6000) |
| AI-10118 | 30047 | Unit Source ID (Last Diagnostic Code) | None | Standard |
| AI-10119 | 30049 | Drive Input Voltage Calculated | Voltage | TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755) |
| AI-10120 | 30051 | Number of Circuits | None | Standard |
| AI-10121 | 30053 | Number of Compressors Circuit 1 | None | Standard |
| AI-10122 | 30055 | Number of Compressors Circuit 2 | None | Standard |
| AI-10123 | 30057 | Refrigerant Monitor | Concentration | Refrigerant Monitor |
| AI-10124 | 30059 | Evaporator Refrigerant Pressure Circuit 1 | Pressure | Standard |
| AI-10125 | 30061 | Condenser Refrigerant Pressure Circuit 1 | Pressure | Standard |
| AI-10126 | 30063 | Differential Refrigerant Pressure Circuit 1 | Differential Pressure | Standard |
| AI-10127 | 30065 | Low Side Oil Pressure - Compressor 1A | Pressure | Not CVHS or CVGF<br>CVR w/Oil Pressure Transducers or Oil Lite |
| AI-10128 | 30067 | High Side Oil Pressure - Compressor 1A | Pressure | Not CVHS or CVGF<br>CVR w/Oil Pressure Transducers or Oil Lite |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10129 | 30069 | Oil Differential Pressure Circuit 1 | Differential Pressure | Not CVHS or CVGF<br>CVR w/Oil Pressure Transducers or Oil Lite |
| AI-10130 | 30071 | Oil Temperature - Compressor 1A | Temperature | Not CVHS |
| AI-10131 | 30073 | Evaporator Saturated Refrigerant Temperature Circuit 1 | Temperature | Standard |
| AI-10132 | 30075 | Condenser Saturated Refrigerant Temperature Circuit 1 | Temperature | Standard |
| AI-10133 | 30077 | Refrigerant Discharge Temperature - Compressor 1A | Temperature | Discharge Temperature Protection |
| AI-10134 | 30079 | Inlet Guide Vane 1 Percent Open Circuit 1 | Percent | Standard |
| AI-10135 | 30081 | Inlet Guide Vane 2 Percent Open Circuit 1 | Percent | Dual IGV2 |
| AI-10136 | 30083 | Purge Carbon Tank Temperature Circuit 1 | Temperature | Purge w/Carbon Tank |
| AI-10137 | 30085 | Purge Liquid Temperature Circuit 1 | Temperature | Purge |
| AI-10138 | 30087 | Purge Refrigerant Compressor Suction Temperature Circuit 1 | Temperature | Purge |
| AI-10139 | 30089 | Time Until Next Purge Run Circuit 1 (in seconds) | None | Purge |
| AI-10140 | 30091 | Purge Pumpout Chiller On % (7 Days) Circuit 1 | Percent | Purge |
| AI-10141 | 30093 | Purge Pumpout Chiller Off % (7 Days) Circuit 1 | Percent | Purge |
| AI-10142 | 30095 | Purge 24 Hour Pumpout Circuit 1 (in seconds) | None | Purge |
| AI-10143 | 30097 | Purge Pumpout - Life Circuit 1 (in seconds) | None | Purge |
| AI-10144 | 30099 | Refrigeration - Life Circuit 1 (in seconds) | None | Purge |
| AI-10145 | 30101 | Starts - Compressor 1A | None | Standard |
| AI-10146 | 30103 | Run Time - Compressor 1A (in seconds) | None | Standard |
| AI-10147 | 30105 | Phase AB Voltage - Compressor 1A | Voltage | EM Starters<br>Solid State Starters<br>Non-communicating AFD (TR200)<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Communicating AFD (PF755) |
| AI-10148 | 30107 | Phase BC Voltage - Compressor 1A | Voltage | EM Starters<br>Solid State Starters<br>Non-communicating AFD (TR200)<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Communicating AFD (PF755) |
| AI-10149 | 30109 | Phase CA Voltage - Compressor 1A | Voltage | EM Starters<br>Solid State Starters<br>Non-communicating AFD (TR200)<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Communicating AFD (PF755) |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10150 | 30111 | Starter Average Phase Volt Circuit 1 | Voltage | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-communicating AFD (TR200)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China)<br>Communicating AFD (PF755) |
| AI-10151 | 30113 | Line 1 Current - Compressor 1A | Current | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755) |
| AI-10152 | 30115 | Line 2 Current - Compressor 1A | Current | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755) |
| AI-10153 | 30117 | Line 3 Current - Compressor 1A | Current | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755) |
| AI-10154 | 30119 | Average Line Current Circuit 1 | Current | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755) |
| AI-10155 | 30121 | Line 1 Current RLA - Compressor 1A | Percent | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755) |
| AI-10156 | 30123 | Line 2 Current RLA - Compressor 1A | Percent | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755) |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10157 | 30125 | Line 3 Current RLA - Compressor 1A | Percent | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755) |
| AI-10158 | 30127 | Actual Running Capacity | Percent | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10159 | 30129 | Unit Power Consumption | Power, Electrical | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>Energy Meter |
| AI-10160 | 30131 | Starter Load Power Factor - Compressor 1A | None | EM Starters<br>Solid State Starters Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10161 | 30133 | Inboard Bearing Temperature Circuit 1 | Temperature | Bearing Temp Sensors (Not CVHM) |
| AI-10162 | 30135 | Outboard Bearing Temperature Circuit 1 | Temperature | Bearing Temp Sensors |
| AI-10163 | 30137 | Motor Winding Temperature 1 Circuit 1 | Temperature | Standard |
| AI-10164 | 30139 | Motor Winding Temperature 2 Circuit 1 | Temperature | Standard |
| AI-10165 | 30141 | Motor Winding Temperature 3 Circuit 1 | Temperature | Not CVHS and CVHM |
| AI-10166 | 30143 | AFD Frequency Circuit 1 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10167 | 30145 | AFD Transistor Temperature Circuit 1 | Temperature | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10168 | 30147 | Drive Average Line Current Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Communicating AFD (AFD3) |
| AI-10169 | 30149 | Drive Current Line 1 Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items |
| AI-10170 | 30151 | Drive Current Line 2 Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items |
| AI-10171 | 30153 | Drive Current Line 3 Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items |
| AI-10172 | 30155 | Drive Line Frequency Circuit 1 | None | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Communicating AFD (AFD3) |
| AI-10173 | 30157 | Drive Frequency Status | None | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000)<br>Non-Communicating AFD (TR200)<br>TR200 Modbus AFD<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10174 | 30159 | Drive Inverter Base Temperature Circuit 1 | Temperature | Unit Mount AFD (LF2) w/Line Side Items<br>Communicating AFD (AFD3) |
| AI-10175 | 30161 | Drive Rectifier Base Temperature Circuit 1 | Temperature | Unit Mount AFD (LF2) w/Line Side Items<br>Communicating AFD (AFD3) |
| AI-10176 | 30163 | Drive Output Power Circuit 1 | Current | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10177 | 30165 | Drive Motor Current U RLA Circuit 1 | Percent | Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10178 | 30167 | Drive Motor Current V RLA Circuit 1 | Percent | Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |

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|---|---|---|---|---|
| AI-10179 | 30169 | Drive Motor Current W RLA Circuit 1 | Percent | Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10180 | 30171 | Drive Motor Current U Circuit 1 | Current | Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10181 | 30173 | Drive Motor Current V Circuit 1 | Current | Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10182 | 30175 | Drive Motor Current W Circuit 1 | Current | Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10183 | 30177 | Drive Motor Voltage UV Circuit 1 | Voltage | Communicating AFD (AFD3) |
| AI-10184 | 30179 | Drive Motor Voltage VW Circuit 1 | Voltage | Communicating AFD (AFD3) |
| AI-10185 | 30181 | Drive Motor Voltage WU Circuit 1 | Voltage | Communicating AFD (AFD3) |
| AI-10186 | 30183 | Drive Motor Average Voltage Circuit 1 | Voltage | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755) |
| AI-10187 | 30185 | Drive Motor Average Current RLA Circuit 1 | Percent | EM Starters<br>Solid State Starters<br>Non-Communicating AFD (TR200)<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10188 | 30187 | Lube Differential Pressure | Differential Pressure | CVHS |
| AI-10189 | 30189 | Lube Pump Suction Pressure | Pressure | CVHS |
| AI-10190 | 30191 | Lube Pump Discharge Pressure | Pressure | CVHS |
| AI-10191 | 30193 | Motor Coolant Temperature | Temperature | MTC Temp Sensor |
| AI-10192 | 30195 | AFD % RLA Ripple | Percent | Communicating AFD (AFD3) |
| AI-10193 | 30197 | AFD Inverter Module Temperature U | Temperature | Communicating AFD (AFD3) |
| AI-10194 | 30199 | AFD Inverter Module Temperature V | Temperature | Communicating AFD (AFD3) |
| AI-10195 | 30201 | AFD Inverter Module Temperature W | Temperature | Communicating AFD (AFD3) |
| AI-10196 | 30203 | Outboard Bearing Pad Temperature #1 Ckt1 | Temperature | CVHH |

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|---|---|---|---|---|
| AI-10197 | 30205 | Outboard Bearing Pad Temperature #2 Ckt1 | Temperature | CVHH |
| AI-10198 | 30207 | Outboard Bearing Pad Temperature #3 Ckt1 | Temperature | CVHH |
| AI-10199 | 30209 | Condenser Control Output | Percent | Head Pressure Control |
| AI-10200 | 30211 | Restart Inhibit Time Remaining | None | Standard |
| AI-10201 | 30213 | Chiller Design Capacity | Power, Cooling | Standard |
| AI-10202 | 30215 | Entering Condenser Water Pressure | Pressure | Condenser Water Flow Differential Pressure Sensors |
| AI-10203 | 30217 | Entering Evaporator Water Pressure | Pressure | Evaporator Water Flow Differential Pressure Sensors |
| AI-10204 | 30219 | Leaving Condenser Water Pressure | Pressure | Condenser Water Flow Differential Pressure Sensors |
| AI-10205 | 30221 | Leaving Evaporator Water Pressure | Pressure | Evaporator Water Flow Differential Pressure Sensors |
| AI-10206 | 30223 | Condenser Approach Temperature Circuit 1 | Temperature, Delta | Standard |
| AI-10207 | 30225 | Evaporator Approach Temperature Circuit 1 | Temperature, Delta | Standard |
| AI-10208 | 30227 | Drive DC Bus Voltage Circuit 1 | Voltage | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755)<br>UM AFD w/o THD filter<br>MV Remote Mount Comm AFD (local drive for China) |
| AI-10209 | 30229 | Active Demand Limit Setpoint | Percent | Standard |
| AI-10210 | 30231 | Demand Limit Setpoint Status | Percent | Ice Building |
| AI-10211 | 30233 | Drive Heatsink Temperature Compressor 1A | Temperature | TR200 Modbus AFD |
| AI-10212 | 30235 | Heat Recovery Differential Water Pressure | Differential Pressure | Heat Recovery Water Flow Differential Pressure<br>or<br>Dual Pressure Sensors |
| AI-10213 | 30237 | Heat Recovery Water Flow Rate | Flow, water | Heat Recovery Water Flow Sensing |
| AI-10214 | 30239 | Heat Recovery Calculated Capacity | Power, Heating | Heat Recovery Water Flow Sensing |
| AI-10215 | 30241 | Heat Recovery Entering Water Pressure | Pressure | Heat Recovery Water Flow Differential Pressure Sensors |
| AI-10216 | 30243 | Heat Recovery Leaving Water Pressure | Pressure | Heat Recovery Water Flow Differential Pressure Sensors |
| AI-10217 | 30245 | Voltage L1-L2 | Voltage | Energy Meter |
| AI-10218 | 30247 | Voltage L2-L3 | Voltage | Energy Meter |
| AI-10219 | 30249 | Voltage L1-L3 | Voltage | Energy Meter |
| AI-10220 | 30251 | Chiller Average Line Voltage | Voltage | Energy Meter |
| AI-10221 | 30253 | Current L1 | Current | Energy Meter |
| AI-10222 | 30255 | Current L2 | Current | Energy Meter |
| AI-10223 | 30257 | Current L3 | Current | Energy Meter |
| AI-10224 | 30259 | Unit Average Line Current | Current | Energy Meter |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10225 | 30261 | Line Frequency | None | Energy Meter |
| AI-10226 | 30263 | Power Factor | None | Energy Meter |
| AI-10227 | 30265 | Unit Power Demand | None | Energy Meter |
| AI-10228 | 30267 | Energy Consumption | Energy, Electrical | Energy Meter<br>EM Starters w/Line Voltage Sensing<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755) |
| AI-10229 | 30269 | Energy Consumption Lifetime | Energy, Electrical | Energy Meter<br>EM Starters w/Line Voltage Sensing<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755) |
| AI-10230 | 30271 | Outdoor Air Temperature Local | Temperature | Outdoor Air Temperature |
| AI-10231 | 30273 | Heat Recovery Approach Temperature Circuit 1 | Temperature, Delta | Heat Recovery |
| AI-10232 | 30275 | High Side Oil Gauge Pressure - Compressor 1A | Pressure | Standard |
| AI-10233 | 30277 | Low Side Oil Gauge Pressure - Compressor 1A | Pressure | Standard |
| AI-10234 | 30279 | Condenser Refrigerant Gauge Pressure Circuit 1 | Pressure | Standard |
| AI-10235 | 30281 | Entering Condenser Water Gauge Pressure | Pressure | Condenser Water Flow Differential Pressure Sensors |
| AI-10236 | 30283 | Entering Evaporator Water Gauge Pressure | Pressure | Evaporator Water Flow Differential Pressure Sensors |
| AI-10237 | 30285 | Evaporator Refrigerant Gauge Pressure Circuit 1 | Pressure | Standard |
| AI-10238 | 30287 | Heat Recovery Entering Water Gauge Pressure | Pressure | Heat Recovery Water Flow Differential Pressure Sensors |
| AI-10239 | 30289 | Heat Recovery Leaving Water Gauge Pressure | Pressure | Heat Recovery Water Flow Differential Pressure Sensors |
| AI-10240 | 30291 | Leaving Condenser Water Gauge Pressure | Pressure | Condenser Water Flow Differential Pressure Sensors |
| AI-10241 | 30293 | Leaving Evaporator Water Gauge Pressure | Pressure | Evaporator Water Flow Differential Pressure Sensors |
| AI-10242 | 30295 | Lube Pump Suction Gauge Pressure | Pressure | CVHS |
| AI-10243 | 30297 | Lube Pump Discharge Gauge Pressure | Pressure | CVHS |
| AI-10244 | 30299 | Active Cooling Differential to Start | Temperature, Delta | Standard |
| AI-10245 | 30301 | Active Cooling Differential to Stop | Temperature, Delta | Standard |
| AI-10246 | 30303 | Active Heating Differential to Start | Temperature, Delta | Hot Water Control |
| AI-10247 | 30305 | Active Heating Differential to Stop | Temperature, Delta | Hot Water Control |
| AI-10248 | 30307 | Calculated Heating Capacity | Power, Heating | Cond Water Flow Sensing |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10249 | 30309 | Discharge Superheat Compressor 1A | Temperature, Delta | Discharge Temperature Protection |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AV-10100 | 40011 | Chilled Water Setpoint | Temperature | Standard |
| AV-10101 | 40013 | Demand Limit Setpoint | Percent | Standard |
| AV-10102 | 40015 | Hot Water Setpoint | Temperature | Hot Water Control |
| AV-10103 | 40017 | Base Loading Setpoint | Percent | Base Loading |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-10100 | 33011 | Base Loading Request Active | 0 = Off<br>1 = On | Base Loading |
| BI-10101 | 33012 | Emergency Stop | 0 = Auto<br>1 = Emergency Stop - Manual Reset Required | Standard |
| BI-10102 | 33013 | Manual Override Exists | 0 = Off<br>1 = On | Standard |
| BI-10103 | 33014 | Base Loading Active | 0 = Inactive<br>1 = Active | Base Loading |
| BI-10104 | 33015 | Run Enabled | 0 = Run Not Enabled<br>1 = Run Enabled | Standard |
| BI-10105 | 33016 | Local Setpoint Control | 0 = Remote Control<br>1 = Local Control | Standard |
| BI-10106 | 33017 | Maximum Capacity | 0 = Off<br>1 = On | Standard |
| BI-10107 | 33018 | Evaporator Leaving Water Temperature | 0 = Not Limited<br>1 = Limited | Standard |
| BI-10108 | 33019 | Head Relief Request | 0 = Off<br>1 = On | Standard |
| BI-10109 | 33020 | Hot Gas Bypass Active | 0 = Inactive<br>1 = Active | Hot Gas Bypass |
| BI-10110 | 33021 | Purge Compressor Relay Circuit 1 | 0 = Off<br>1 = On | Purge |
| BI-10111 | 33022 | Pump Out Relay Circuit 1 | 0 = Off<br>1 = On | Purge |
| BI-10112 | 33023 | Purge Regenerating Valve Solenoid Circuit 1 | 0 = Off<br>1 = On | Purge w/Carbon Tank |
| BI-10113 | 33024 | Chiller Running State | 0 = Off<br>1 = On | Standard |
| BI-10114 | 33025 | Evaporator Water Pump Request | 0 = Off<br>1 = On | Standard |
| BI-10115 | 33026 | Evaporator Water Flow Status | 0 = No Flow<br>1 = Flow | Standard |
| BI-10116 | 33027 | Condenser Water Pump Request | 0 = Off<br>1 = On | Standard |
| BI-10117 | 33028 | Condenser Water Flow Status | 0 = No Flow<br>1 = Flow | Standard |
| BI-10118 | 33029 | Diagnostic Present | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10119 | 33030 | Diagnostic Shutdown Present | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10120 | 33031 | Diagnostic: Manual Reset Required | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10121 | 33032 | Diagnostic: Local Manual Reset Required | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10122 | 33033 | Diagnostic Present: Information | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10123 | 33034 | Diagnostic Present: Advisory | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-10124 | 33035 | Diagnostic Present: Critical | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10125 | 33036 | Diagnostic Present: Service Required | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10126 | 33037 | Compressor 1A Status | 0 = Off<br>1 = Running | Standard |
| BI-10127 | 33038 | Front Panel Auto Stop | 0 = Stop<br>1 = Auto | Standard |
| BI-10128 | 33039 | External Auto Stop Input Status | 0 = Stop<br>1 = Auto | Standard |
| BI-10129 | 33040 | Heat Recovery Water Flow Status | 0 = No Flow<br>1 = Flow | Heat Recovery Water Flow Switch |
| BI-10130 | 33041 | AFD Shutdown Diagnostic Present Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11000 | 34001 | Diagnostic: AFD AD Calibration Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11001 | 34002 | Diagnostic: AFD AHD Frequency Out of Range Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11002 | 34003 | Diagnostic: AFD AHD Sync Signal Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11003 | 34004 | Diagnostic: AFD Bump Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11004 | 34005 | Diagnostic: AFD Bus Over Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount Comm AFD - AFDY (PF755)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11005 | 34006 | Diagnostic: AFD Bus Ripple Too High Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11006 | 34007 | Diagnostic: AFD Bus Under Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount Comm AFD - AFDY (PF755)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11007 | 34008 | Evaporator Leaving Water Temperature | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11008 | 34009 | Diagnostic: AFD Comm Loss: Main Processor Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount Comm AFD - AFDY (PF755)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11009 | 34010 | Diagnostic: AFD Control Board Memory Error Type 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11010 | 34011 | Diagnostic: AFD Current Sensor Self Test Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11011 | 34012 | Diagnostic: AFD Desaturation Detected Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11012 | 34013 | Diagnostic: AFD DPI Communication Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11013 | 34014 | Diagnostic: AFD Drive Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | MV Remote Mount Comm AFD |
| BI-11014 | 34015 | Diagnostic: AFD DSP Board ID Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11015 | 34016 | Diagnostic: AFD DSP Board Initialization Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11016 | 34017 | Diagnostic: AFD DSP Board Low Voltage Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11017 | 34018 | Diagnostic: AFD DSP Board Over Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11018 | 34019 | Diagnostic: AFD Emergency Stop Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>MV Remote Mount Comm AFD |
| BI-11019 | 34020 | Diagnostic: AFD Estimated Junction Over Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11020 | 34021 | Diagnostic: AFD Excessive AHD Inhibit Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11021 | 34022 | Diagnostic: AFD External Fault Input Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755) |
| BI-11022 | 34023 | Diagnostic: AFD Fatal Software Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11023 | 34024 | Diagnostic: AFD Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11024 | 34025 | Diagnostic: AFD Gate Drive Board Over Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11025 | 34026 | Diagnostic: AFD Gate Drive Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11026 | 34027 | Diagnostic: AFD Gate Drive Low Voltage Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11027 | 34028 | Diagnostic: AFD Gate Drive Module Comm Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11028 | 34029 | Diagnostic: AFD Gate Kill Active Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount Comm AFD - AFDY (PF755)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11029 | 34030 | Diagnostic: AFD General Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11030 | 34031 | Diagnostic: AFD General Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Unit Mount Comm AFD - AFDY (PF755)<br>Remote Mount Comm AFD - (PF7000)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11031 | 34032 | Diagnostic: AFD Ground Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11032 | 34033 | Diagnostic: AFD Ground Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Unit Mount Comm AFD - AFDY (PF755)<br>Remote Mount Comm AFD - (PF7000)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11033 | 34034 | Diagnostic: AFD High Bus Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11034 | 34035 | Diagnostic: AFD High Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11035 | 34036 | Diagnostic: AFD I/O Board Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11036 | 34037 | Diagnostic: AFD IGBT Self Test Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11037 | 34038 | Diagnostic: AFD IMC 24V Detection Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11038 | 34039 | Diagnostic: AFD Input Transformer or Filter High Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755) |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11039 | 34040 | Diagnostic: AFD Instantaneous Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11040 | 34041 | Diagnostic: AFD Interrupt Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Communicating AFD |
| BI-11041 | 34042 | Diagnostic: AFD Invalid Drive Command Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11042 | 34043 | Diagnostic: AFD Inverter Heatsink Over Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>MV Remote Mount Comm AFD |
| BI-11043 | 34044 | Diagnostic: AFD Loss of AHD Sync Signal Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11044 | 34045 | Diagnostic: AFD Low Rotor Flux Feedback Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount Comm AFD - AFDY (PF755) |
| BI-11045 | 34046 | Diagnostic: AFD Mains Phase Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11046 | 34047 | Diagnostic: AFD Motor Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11047 | 34048 | Diagnostic: AFD Motor Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3)<br>Unit Mount Comm AFD - AFDY (PF755)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>MV Remote Mount Comm AFD<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11048 | 34049 | Diagnostic: AFD Motor Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11049 | 34050 | Diagnostic: AFD Motor Short Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11050 | 34051 | Diagnostic: AFD Non-Volatile Memory Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11051 | 34052 | Diagnostic: AFD Output Phase Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11052 | 34053 | Diagnostic: AFD Over Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11053 | 34054 | Diagnostic: AFD Overspeed Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11054 | 34055 | Diagnostic: AFD Panel Interlock Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11055 | 34056 | Diagnostic: AFD Panel Interlock Warning Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11056 | 34057 | Diagnostic: AFD Power Intfc Controller Board Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11057 | 34058 | Diagnostic: AFD Power Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755)<br>Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11058 | 34059 | Diagnostic: AFD Power Structure Board Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11059 | 34060 | Diagnostic: AFD Precharge Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount Comm AFD - AFDY (PF755)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11060 | 34061 | Diagnostic: AFD Rectifier Heatsink Over Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11061 | 34062 | Diagnostic: AFD RS485 Board Memory Error Type 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11062 | 34063 | Diagnostic: AFD Safe Stop Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11063 | 34064 | Diagnostic: AFD Short Circuit Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11064 | 34065 | Diagnostic: AFD Speed Configuration Mismatch Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD (TR200) |
| BI-11065 | 34066 | Diagnostic: AFD Start Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11066 | 34067 | Diagnostic: AFD Temperature Sensor Warning Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11067 | 34068 | Diagnostic: AFD Watchdog Timer Overflow Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDN,P (AFD3) |
| BI-11068 | 34069 | Diagnostic: At Speed Input Opened Circuit 1 | 0 = Normal<br>1 = In Alarm | Non-comm AFD Solid State Starter |
| BI-11069 | 34070 | Diagnostic: At Speed Input Shorted Circuit 1 | 0 = Normal<br>1 = In Alarm | Non-comm AFD Solid State Starter |
| BI-11070 | 34071 | Diagnostic: Bearing Lube Flow First Stage Sensor Input | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11071 | 34072 | Diagnostic: Bearing Lube Flow Second Stage Sensor Input | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11072 | 34073 | Diagnostic: Brg Lube Flow Overdue First Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11073 | 34074 | Diagnostic: Brg Lube Flow Overdue Second Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11075 | 34076 | Diagnostic: Check Lube Filter Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11076 | 34077 | Diagnostic: Check Oil Filter Circuit 1 | 0 = Normal<br>1 = In Alarm | Oil Pump |
| BI-11077 | 34078 | Diagnostic: Check Oil Heater Circuit 1 | 0 = Normal<br>1 = In Alarm | Oil Heater |
| BI-11078 | 34079 | Comm Loss: Adaptive Frequency Drive Circuit 1 | 0 = Normal<br>1 = In Alarm | Communicating AFD |
| BI-11079 | 34080 | Comm Loss: AFD Speed Signal VDC Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Non-comm AFD |
| BI-11080 | 34081 | Comm Loss: Bearing Lube Flow First Stage | 0 = Normal<br>1 = In Alarm | CVHS |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11081 | 34082 | Comm Loss: Bearing Lube Flow Second Stage | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11082 | 34083 | Comm Loss: Compressor Motor % RLA Output Circuit 1 | 0 = Normal<br>1 = In Alarm | % RLA Output |
| BI-11083 | 34084 | Comm Loss: Cond Diff Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Differential Pressure Flow Measurement |
| BI-11084 | 34085 | Comm Loss: Cond Head Press Cntrl Output | 0 = Normal<br>1 = In Alarm | Head Pressure Control |
| BI-11085 | 34086 | Comm Loss: Cond High Pressure Cutout | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11086 | 34087 | Comm Loss: Cond Lubrication Source Valve | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11087 | 34088 | Comm Loss: Cond Refrigerant Pressure | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11088 | 34089 | Comm Loss: Cond Rfgt Pressure Output | 0 = Normal<br>1 = In Alarm | Cond Refrigerant Pressure Output |
| BI-11089 | 34090 | Comm Loss: Cond Saturated Rfgt Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11090 | 34091 | Comm Loss: Condenser Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensor |
| BI-11091 | 34092 | Comm Loss: Condenser Entering Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11092 | 34093 | Comm Loss: Condenser Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensor |
| BI-11093 | 34094 | Comm Loss: Condenser Leaving Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11094 | 34095 | Comm Loss: Condenser Liquid Level Sensor | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11096 | 34097 | Comm Loss: Condenser Water Flow Switch | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11097 | 34098 | Comm Loss: Condenser Water Pump Relay | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11098 | 34099 | Comm Loss: Cprsr Discharge Rfgt Temp | 0 = Normal<br>1 = In Alarm | Compressor Discharge Temp Sensor |
| BI-11099 | 34100 | Comm Loss: Economizer Bypass Valve | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11102 | 34103 | Comm Loss: Emergency Stop | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11103 | 34104 | Comm Loss: Energy Meter Circuit 1 | 0 = Normal<br>1 = In Alarm | Energy Meter |
| BI-11104 | 34105 | Comm Loss: Evap Diff Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Differential Pressure |
| BI-11105 | 34106 | Comm Loss: Evap Entering Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11106 | 34107 | Comm Loss: Evap Leaving Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11107 | 34108 | Comm Loss: Evap Lube Source Valve Relay | 0 = Normal<br>1 = In Alarm | CVHS |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11108 | 34109 | Comm Loss: Evap Saturated Rfgt Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11109 | 34110 | Comm Loss: Evaporator Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Dual Pressure Sensor |
| BI-11110 | 34111 | Comm Loss: Evaporator Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Dual Pressure Sensor |
| BI-11111 | 34112 | Comm Loss: Evaporator Water Flow Switch | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11112 | 34113 | Comm Loss: Evaporator Water Pump Relay | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11113 | 34114 | Comm Loss: Ext Base Loading Command | 0 = Normal<br>1 = In Alarm | Base Loading |
| BI-11114 | 34115 | Comm Loss: Ext Base Loading Setpoint | 0 = Normal<br>1 = In Alarm | Base Loading |
| BI-11115 | 34116 | Comm Loss: Ext Chilled/Hot Water Setpoint | 0 = Normal<br>1 = In Alarm | External Chilled Water Setpoint |
| BI-11116 | 34117 | Comm Loss: Ext Demand Limit Setpoint | 0 = Normal<br>1 = In Alarm | External Demand Limit |
| BI-11117 | 34118 | Comm Loss: External Auto/Stop | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11118 | 34119 | Comm Loss: External Free Cooling Command | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11119 | 34120 | Comm Loss: External Hot Water Command | 0 = Normal<br>1 = In Alarm | Hot Water Control |
| BI-11120 | 34121 | Comm Loss: External Ice Building Command | 0 = Normal<br>1 = In Alarm | Ice Building |
| BI-11121 | 34122 | Comm Loss: Free Cool Actrs Closed Input | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11122 | 34123 | Comm Loss: Free Cool Gas Line Actr Relay | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11123 | 34124 | Comm Loss: Free Cool Liq Line Actr Relay | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11124 | 34125 | Comm Loss: Free Cooling Auxiliary Relay | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11125 | 34126 | Comm Loss: Generator Fault Input | 0 = Normal<br>1 = In Alarm | Engine Generator Power Source |
| BI-11126 | 34127 | Comm Loss: Generator Speed Signal Output | 0 = Normal<br>1 = In Alarm | Engine Generator Power Source |
| BI-11127 | 34128 | Comm Loss: Generator Start/Stop Relay | 0 = Normal<br>1 = In Alarm | Engine Generator Power Source |
| BI-11128 | 34129 | Comm Loss: Generator Up To Speed Input | 0 = Normal<br>1 = In Alarm | Engine Generator Power Source |
| BI-11129 | 34130 | Comm Loss: Heat Recovery Differential Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Measurement - Differential Pressure |
| BI-11130 | 34131 | Comm Loss: Heat Recovery Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Measurement - Dual Pressure Sensor |
| BI-11131 | 34132 | Comm Loss: Heat Recovery Entering Water Temp | 0 = Normal<br>1 = In Alarm | Heat Recovery |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11132 | 34133 | Comm Loss: Heat Recovery Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Measurement - Dual Pressure Sensor |
| BI-11133 | 34134 | Comm Loss: Heat Recovery Leaving Water Temp | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11134 | 34135 | Comm Loss: Heat Recovery Water Flow Switch | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Switch |
| BI-11135 | 34136 | Comm Loss: High Lift Unload Valve Relay | 0 = Normal<br>1 = In Alarm | CVGF |
| BI-11136 | 34137 | Comm Loss: Hot Gas Bypass Actr Closed In | 0 = Normal<br>1 = In Alarm | Hot Gas Bypass |
| BI-11137 | 34138 | Comm Loss: Hot Gas Bypass Load Relay | 0 = Normal<br>1 = In Alarm | Hot Gas Bypass |
| BI-11138 | 34139 | Comm Loss: Hot Gas Bypass Unload Relay | 0 = Normal<br>1 = In Alarm | Hot Gas Bypass |
| BI-11139 | 34140 | Comm Loss: Ice Building Relay | 0 = Normal<br>1 = In Alarm | Ice Building |
| BI-11140 | 34141 | Comm Loss: IGV First Stage Actuator Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11141 | 34142 | Comm Loss: IGV Second Stage Actuator Circuit 1 | 0 = Normal<br>1 = In Alarm | Dual Actuators |
| BI-11142 | 34143 | Comm Loss: Inboard Bearing Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensor |
| BI-11143 | 34144 | Comm Loss: Lube Pump Discharge Pressure | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11144 | 34145 | Comm Loss: Lube Pump Suction Pressure | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11145 | 34146 | Comm Loss: Lube/Refrigerant Pump Relay | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11146 | 34147 | Comm Loss: Motor Coolant Temperature | 0 = Normal<br>1 = In Alarm | MTC Temperature Sensor |
| BI-11147 | 34148 | Comm Loss: Motor Temp/Overload | 0 = Normal<br>1 = In Alarm | "Lite" Motor Temp Protection |
| BI-11148 | 34149 | Comm Loss: Motor Temperature Cutout | 0 = Normal<br>1 = In Alarm | MTC Switch |
| BI-11149 | 34150 | Comm Loss: Motor Winding Temperature 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M,S CVGF |
| BI-11150 | 34151 | Comm Loss: Motor Winding Temperature 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M,S CVGF |
| BI-11151 | 34152 | Comm Loss: Motor Winding Temperature 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L CVGF |
| BI-11152 | 34153 | Comm Loss: Oil Cooler Solenoid Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH Oil Cooler Solenoid Valve |
| BI-11153 | 34154 | Comm Loss: Oil Diff Pressure Switch Circuit 1 | 0 = Normal<br>1 = In Alarm | CVGF |
| BI-11154 | 34155 | Comm Loss: Oil Pressure Status Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M |
| BI-11155 | 34156 | Comm Loss: Oil Pump Discharge Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11156 | 34157 | Comm Loss: Oil Tank Heater 4E1 Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH CVGF |
| BI-11157 | 34158 | Comm Loss: Oil Tank Heater 4E2 Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH CVGF |
| BI-11158 | 34159 | Comm Loss: Oil Tank Heater Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M |
| BI-11159 | 34160 | Comm Loss: Oil Tank Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M |
| BI-11160 | 34161 | Comm Loss: Oil Tank Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M CVGF |
| BI-11161 | 34162 | Comm Loss: Oil Vent Line Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11162 | 34163 | Comm Loss: Oil/Refrigerant Pump Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M CVGF |
| BI-11163 | 34164 | Comm Loss: Outboard Bearing Pad Temp 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11164 | 34165 | Comm Loss: Outboard Bearing Pad Temp 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11165 | 34166 | Comm Loss: Outboard Bearing Pad Temp 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11166 | 34167 | Comm Loss: Outboard Bearing Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensor |
| BI-11167 | 34168 | Comm Loss: Outdoor Air Temperature | 0 = Normal<br>1 = In Alarm | Outdoor Air Temp Sensor |
| BI-11168 | 34169 | Comm Loss: Programmable Relay Board 1 | 0 = Normal<br>1 = In Alarm | Programmable Status Relays |
| BI-11169 | 34170 | Comm Loss: Programmable Relay Board 2 | 0 = Normal<br>1 = In Alarm | Programmable Status Relays |
| BI-11170 | 34171 | Comm Loss: Purge Alarm Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11171 | 34172 | Comm Loss: Purge Carbon Tank Heater Rly Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |
| BI-11172 | 34173 | Comm Loss: Purge Carbon Tank Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |
| BI-11173 | 34174 | Comm Loss: Purge Condensing Unit Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11174 | 34175 | Comm Loss: Purge Cprsr Suction Rfgt Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11175 | 34176 | Comm Loss: Purge Exhaust Solenoid Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11176 | 34177 | Comm Loss: Purge Liquid Level Switch Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11177 | 34178 | Comm Loss: Purge Pumpout Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11178 | 34179 | Comm Loss: Purge Pumpout Solenoid Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11179 | 34180 | Comm Loss: Purge Regen Solenoid Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11180 | 34181 | Comm Loss: Refrigerant Monitor Input | 0 = Normal<br>1 = In Alarm | Refrigerant Monitor |
| BI-11181 | 34182 | Comm Loss: Starter Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11182 | 34183 | Comm Loss: Starter Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Non-comm AFD<br>Solid State Starter |
| BI-11183 | 34184 | Comm Loss: Vibration Sensor Input | 0 = Normal<br>1 = In Alarm | Vibration Sensor |
| BI-11184 | 34185 | Diagnostic: Compressor Did Not Accelerate: Shutdown Compressor 1A | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11185 | 34186 | Diagnostic: Cond Saturated Refrigerant Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11186 | 34187 | Diagnostic: Condenser Diff Water Pressure Xdcr | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Differential Pressure |
| BI-11187 | 34188 | Diagnostic: Condenser Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensor |
| BI-11188 | 34189 | Diagnostic: Condenser Entering Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11189 | 34190 | Diagnostic: Condenser High Pressure Cutout | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11190 | 34191 | Diagnostic: Condenser Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensor |
| BI-11191 | 34192 | Diagnostic: Condenser Leaving Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11192 | 34193 | Diagnostic: Condenser Liquid Level Sensor | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11193 | 34194 | Diagnostic: Condenser Refrigerant Pressure Xdcr | 0 = Normal<br>1 = In Alarm | Condenser Refrigerant Pressure Sensor |
| BI-11195 | 34196 | Diagnostic: Condenser Water Flow Lost | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11196 | 34197 | Diagnostic: Condenser Water Flow Overdue | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11197 | 34198 | Diagnostic: Cprsr Did Not Accelerate: Transition | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11198 | 34199 | Diagnostic: Cprsr Discharge Refrigerant Temp Sensor | 0 = Normal<br>1 = In Alarm | Compressor Discharge Temp Sensor |
| BI-11199 | 34200 | Diagnostic: Differential Lube Pressure Overdue Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11200 | 34201 | Diagnostic: Differential Oil Pressure Overdue Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M CVGF |
| BI-11202 | 34203 | Diagnostic: Emergency Stop | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11203 | 34204 | Diagnostic: Evap Rfgt Temp Deviate From Selection | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11204 | 34205 | Diagnostic: Evap Saturated Refrigerant Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11205 | 34206 | Diagnostic: Evaporator Diff Water Pressure Xdcr | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Differential Pressure |
| BI-11206 | 34207 | Diagnostic: Evaporator Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Flow Measurement - Dual Pressure Sensor |
| BI-11207 | 34208 | Diagnostic: Evaporator Entering Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11208 | 34209 | Diagnostic: Evaporator Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Flow Measurement - Dual Pressure Sensor |
| BI-11209 | 34210 | Diagnostic: Evaporator Leaving Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11210 | 34211 | Diagnostic: Evaporator Water Flow Lost | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11211 | 34212 | Diagnostic: Evaporator Water Flow Overdue | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11212 | 34213 | Diagnostic: Excessive Loss of Communication | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11213 | 34215 | Diagnostic: Extended Compressor Surge Compressor 1A | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11214 | 34216 | Diagnostic: External Base Loading Setpoint | 0 = Normal<br>1 = In Alarm | Base Loading |
| BI-11215 | 34217 | Diagnostic: External Chilled/Hot Water Setpoint | 0 = Normal<br>1 = In Alarm | External Chilled Water Setpoint |
| BI-11216 | 34218 | Diagnostic: External Demand Limit Setpoint | 0 = Normal<br>1 = In Alarm | External Demand Limit Setpoint |
| BI-11217 | 34219 | Diagnostic: Free Cooling Actrs Not Open During FC | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11218 | 34220 | Diagnostic: Free Cooling Actuators Not Closed | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11219 | 34221 | Diagnostic: Free Cooling Actuators Not Open | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11220 | 34222 | Diagnostic: Free Cooling Actuators Unexpectedly Open | 0 = Normal<br>1 = In Alarm | Free Cooling |
| BI-11221 | 34223 | Diagnostic: Generator Fault Relay Open | 0 = Normal<br>1 = In Alarm | Engine Generator Power Source |
| BI-11222 | 34224 | Diagnostic: Generator Ready Signal Overdue | 0 = Normal<br>1 = In Alarm | Engine Generator Power Source |
| BI-11223 | 34225 | Diagnostic: Heat Recovery Diff Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Measurement - Differential Pressure |
| BI-11224 | 34226 | Diagnostic: Heat Recovery Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Measurement - Dual Pressure Sensor |
| BI-11225 | 34227 | Diagnostic: Heat Recovery Entering Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11226 | 34228 | Diagnostic: Heat Recovery Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery Water Flow Measurement - Dual Pressure Sensor |
| BI-11227 | 34229 | Diagnostic: Heat Recovery Leaving Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Heat Recovery |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11228 | 34230 | Diagnostic: High Condenser Pressure | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11229 | 34231 | Diagnostic: High Cprsr Rfgt Discharge Temperature | 0 = Normal<br>1 = In Alarm | Compressor Discharge Temp Sensor |
| BI-11230 | 34232 | Diagnostic: High Differential Refrigerant Pressure | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L,M,S |
| BI-11231 | 34233 | Diagnostic: High Evaporator Refrigerant Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11232 | 34234 | Diagnostic: High Evaporator Water Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11233 | 34235 | Diagnostic: High Inboard Bearing Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensor |
| BI-11234 | 34236 | Diagnostic: High Motor Coolant Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | MTC Temperature Sensor |
| BI-11235 | 34237 | Diagnostic: High Motor Winding Temperature 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,S,M,L CVGF |
| BI-11236 | 34238 | Diagnostic: High Motor Winding Temperature 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,S,M,L CVGF |
| BI-11237 | 34239 | Diagnostic: High Motor Winding Temperature 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L CVGF |
| BI-11238 | 34240 | Diagnostic: High Oil Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11239 | 34241 | Diagnostic: High Outboard Bearing Pad Temperature 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11240 | 34242 | Diagnostic: High Outboard Bearing Pad Temperature 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11241 | 34243 | Diagnostic: High Outboard Bearing Pad Temperature 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11242 | 34244 | Diagnostic: High Outboard Bearing Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensor |
| BI-11243 | 34245 | Diagnostic: High Vacuum Lockout Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11244 | 34246 | Diagnostic: Hot Gas Bypass Valve Closure Overdue | 0 = Normal<br>1 = In Alarm | Hot Gas Bypass |
| BI-11245 | 34247 | Diagnostic: Hot Gas Bypass Valve Opening Overdue | 0 = Normal<br>1 = In Alarm | Hot Gas Bypass |
| BI-11246 | 34248 | Diagnostic: Hot Gas Bypass Valve Unexpectedly Open | 0 = Normal<br>1 = In Alarm | Hot Gas Bypass |
| BI-11247 | 34249 | Diagnostic: HPC/High AFD Heat Sink Water Pressure | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11248 | 34250 | Diagnostic: Inboard Bearing Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensor |
| BI-11249 | 34251 | Diagnostic: Inverted Condenser Approach Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11250 | 34252 | Diagnostic: Inverted Condenser Water Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11251 | 34253 | Diagnostic: Inverted Evaporator Approach Temperature | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11252 | 34254 | Diagnostic: Inverted Evaporator Water Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11253 | 34255 | Diagnostic: Loss of Economizer Bypass Valve Control | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11254 | 34256 | Diagnostic: Low Bearing Lube Flow First Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11255 | 34257 | Diagnostic: Low Bearing Lube Flow Second Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11256 | 34258 | Diagnostic: Low Brg Lube Flow Lockout First Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11257 | 34259 | Diagnostic: Low Brg Lube Flow Lockout Second Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11258 | 34260 | Diagnostic: Low Differential Lube Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11259 | 34261 | Diagnostic: Low Differential Oil Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M CVGF |
| BI-11260 | 34262 | Diagnostic: Low Evap Leaving Water Temp: Unit Off | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11261 | 34263 | Diagnostic: Low Evap Leaving Water Temp: Unit On | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11262 | 34264 | Diagnostic: Low Evaporator Refrigerant Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11263 | 34265 | Diagnostic: Low Evaporator Water Flow | 0 = Normal<br>1 = In Alarm | Water Flow Sensing |
| BI-11264 | 34266 | Diagnostic: Low Oil Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L CVGF |
| BI-11265 | 34267 | Diagnostic: Lube Pressure Sensor Calibration Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11266 | 34268 | Diagnostic: Lube Pump Disch Pressure Xdcr Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11267 | 34269 | Diagnostic: Lube Pump Override: Low Diff Press Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11268 | 34270 | Diagnostic: Lube Pump Override: Low Flow 1st Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11269 | 34271 | Diagnostic: Lube Pump Override: Low Flow 2nd Stage Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11270 | 34272 | Diagnostic: Lube Pump Suction Pressure Xdcr Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11271 | 34273 | Diagnostic: Momentary Power Loss | 0 = Normal<br>1 = In Alarm | Momentary Power Loss |
| BI-11272 | 34274 | Diagnostic: Motor Coolant Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | MTC Temperature Sensor |
| BI-11273 | 34275 | Diagnostic: Motor Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11274 | 34276 | Diagnostic: Motor Temperature Cutout Tripped Circuit 1 | 0 = Normal<br>1 = In Alarm | MTC Switch |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11275 | 34277 | Diagnostic: Motor Winding Temperature 1 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11276 | 34278 | Diagnostic: Motor Winding Temperature 2 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11277 | 34279 | Diagnostic: Motor Winding Temperature 3 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H, L CVGF |
| BI-11278 | 34280 | Diagnostic: MP: Invalid Configuration | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11279 | 34281 | Diagnostic: MP: Reset Has Occurred | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11280 | 34282 | Diagnostic: Oil Pressure Sensor Calibration Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M |
| BI-11281 | 34283 | Diagnostic: Oil Pump Discharge Pressure Transducer Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M |
| BI-11282 | 34284 | Diagnostic: Oil Tank Pressure Transducer Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M |
| BI-11283 | 34285 | Diagnostic: Oil Tank Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M CVGF |
| BI-11284 | 34286 | Diagnostic: Outboard Bearing Pad Temp 1 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11285 | 34287 | Diagnostic: Outboard Bearing Pad Temp 2 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11286 | 34288 | Diagnostic: Outboard Bearing Pad Temp 3 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHH |
| BI-11287 | 34289 | Diagnostic: Outboard Bearing Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensor |
| BI-11288 | 34290 | Diagnostic: Outdoor Air Temperature Sensor | 0 = Normal<br>1 = In Alarm | Outdoor Air Temp Sensor |
| BI-11289 | 34291 | Diagnostic: Over Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11290 | 34292 | Diagnostic: Phase Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11291 | 34293 | Diagnostic: Phase Reversal Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11292 | 34294 | Diagnostic: Power Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11293 | 34295 | Diagnostic: Purge Carbon Regen Temp Limit Exceeded Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |
| BI-11294 | 34296 | Diagnostic: Purge Carbon Regen Temp Not Satisfied Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |
| BI-11295 | 34297 | Diagnostic: Purge Carbon Regen Temperature Too Low Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |
| BI-11296 | 34298 | Diagnostic: Purge Carbon Tank Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11297 | 34299 | Diagnostic: Purge Cprsr Suction Rfgt Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11298 | 34300 | Diagnostic: Purge Daily Pumpout Limit Exceeded Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11299 | 34301 | Diagnostic: Purge Liquid Level Too High Continuously Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11300 | 34302 | Diagnostic: Purge Liquid Level Too High Warning Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11301 | 34303 | Diagnostic: Purge Regen Cooldown Temp Too High Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon Tank |
| BI-11302 | 34304 | Diagnostic: Refrigerant Monitor Input | 0 = Normal<br>1 = In Alarm | Refrigerant Monitor |
| BI-11303 | 34305 | Diagnostic: Restart Inhibit | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11304 | 34306 | Diagnostic: Severe Current Unbalance Circuit 1 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11305 | 34307 | Diagnostic: Software Error 1001: Call Trane Service | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11306 | 34308 | Diagnostic: Software Error 1004: Call Trane Service | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11307 | 34309 | Diagnostic: Starter Comm Loss: Main Processor Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11308 | 34310 | Diagnostic: Starter Contactor Interrupt Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11309 | 34311 | Diagnostic: Starter Did Not Fully Accelerate Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11310 | 34312 | Diagnostic: Starter Did Not Transition Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11311 | 34313 | Diagnostic: Starter Dry Run Test Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11312 | 34314 | Diagnostic: Starter Failed to Arm/Start Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11313 | 34315 | Diagnostic: Starter Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11314 | 34316 | Diagnostic: Starter Fault Type I Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11315 | 34317 | Diagnostic: Starter Fault Type II Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11316 | 34318 | Diagnostic: Starter Fault Type III Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11317 | 34319 | Diagnostic: Starter Module Memory Error Type 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11318 | 34320 | Diagnostic: Starter Module Memory Error Type 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11319 | 34321 | Diagnostic: Transition Complete Input Opened Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11320 | 34322 | Diagnostic: Transition Complete Input Shorted Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11321 | 34323 | Diagnostic: Under Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11322 | 34324 | Diagnostic: Unexpected Differential Lube Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHS |
| BI-11323 | 34325 | Diagnostic: Unexpected Differential Oil Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | CVHE,F,G,H,L,M CVGF |
| BI-11324 | 34326 | Diagnostic: Unexpected Starter Shutdown Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Non-comm AFDs |
| BI-11325 | 34327 | Diagnostic: Vibration Sensor Input | 0 = Normal<br>1 = In Alarm | Vibration Sensor |
| BI-11326 | 34328 | Comm Loss: Evap Refrigerant Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Evap Pressure Sensor |
| BI-11327 | 34329 | Diagnostic: Evaporator Refrigerant Pressure Xdcr Circuit 1 | 0 = Normal<br>1 = In Alarm | Evap Pressure Sensor |
| BI-11328 | 34330 | Diagnostic: Inverted Heat Recovery Approach Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11329 | 34331 | Comm Loss: Sporlan Automatic Econ Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Sporlan Automatic Valve |
| BI-11330 | 34332 | Comm Loss: Sporlan Automatic Cond Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Sporlan Automatic Valve |
| BI-11331 | 34333 | Comm Loss: Trane IGV Cond Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11332 | 34334 | Comm Loss: Trane IGV Econ Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11333 | 34335 | Diagnostic: External Hot Water Setpoint | 0 = Normal<br>1 = In Alarm | External Hot Water Setpoint |
| BI-11334 | 34336 | Diagnostic: External Chilled Water Setpoint | 0 = Normal<br>1 = In Alarm | External Chilled Water Setpoint |
| BI-11335 | 34337 | Comm Loss: External Hot Wtr Setpoint | 0 = Normal<br>1 = In Alarm | External Hot Water Setpoint |
| BI-11336 | 34338 | Comm Loss: External Chilled Wtr Setpoint | 0 = Normal<br>1 = In Alarm | External Chilled Water Setpoint |

| BACnet Object Identifier | Modbus Register | Diagnostic Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11337 | 34339 | Comm Loss: Motor Cooling Vent Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Booster Heat Pump |
| BI-11338 | 34340 | Diagnostic: Motor Cooling Vent Valve Position Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Booster Heat Pump |
| BI-11339 | 34341 | Comm Loss: Oil Heat Exchanger Vent Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Booster Heat Pump |
| BI-11340 | 34342 | Diagnostic: Oil Heat Exchanger Vent Valve Position Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Booster Heat Pump |
| BI-11341 | 34343 | Diagnostic: High Evaporator Refrigerant Temperature | 0 = Normal<br>1 = In Alarm | Booster Heat Pump |
| BI-11342 | 34344 | Diagnostic: Low Condenser Water Flow | 0 = Normal<br>1 = In Alarm | Hot Water Control |
| BI-11343 | 34345 | Diagnostic: Low Heat Recovery Water Flow | 0 = Normal<br>1 = In Alarm | Heat Recovery |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| BV-10100 | 43011 | Base Loading Request | 0 = Off<br>1 = On | Base Loading |
| BV-10101 | 43012 | Reset Diagnostic | 0 = Normal<br>1 = Reset | Standard |
| BV-10102 | 43013 | Evaporator Water Pump Request BAS | 0 = Auto<br>1 = On | Standard |
| BV-10103 | 43014 | Condenser Water Pump Request BAS | 0 = Auto<br>1 = On | Standard |
| BV-10104 | 43015 | Chiller Auto Stop Command BAS | 0 = Stop<br>1 = Auto | Standard |
| BV-10105 | 43016 | Energy Consumption Reset | 0 = Accumulating<br>1 = Reset | Energy Meter<br>EM Starters w/Line Voltage Sensing<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD<br>Communicating AFD (AFD3)<br>Communicating AFD (PF755) |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| MI-10100 | 32011 | Running Mode | 1 = Chiller Off<br>2 = Chiller In Start Mode<br>3 = Chiller In Run Mode<br>4 = Chiller In Pre-Shutdown Mode<br>5 = Chiller In Service Mode | Standard |
| MI-10101 | 32012 | Operating Mode | 1 = Cool<br>2 = Heat<br>3 = Ice Making<br>4 = Free Cooling | Standard |
| MI-10102 | 32013 | Chiller Setpoint Source | 1 = BAS<br>2 = External<br>3 = Front Panel | Standard |
| MI-10103 | 32014 | Model Information [GEN2] | 1 = CVHF<br>2 = CVGF<br>3 = CVHS<br>11 = CDHF<br>12 = CVR<br>13 = CVHH<br>14 = CDHH<br>20 = CVHM<br>38 = CVHE<br>39 = CVHG<br>40 = CVHL<br>43 = CDHG | Standard |
| MI-10104 | 32015 | Cooling Type | 1 = Water Cooled | Standard |
| MI-10105 | 32016 | Refrigerant Type | 1 = R-11<br>2 = R-12<br>3 = R-22<br>4 = R-123<br>5 = R-134a<br>8 = R-113<br>9 = R-114<br>10 = R-500<br>11 = R-502<br>13 = R-513A<br>14 = R-1233zd(E)<br>15 = R-514A | Standard |
| MI-10106 | 32017 | Manufacturing Location | 1 = Field Applied<br>2 = La Crosse<br>15 = Taicang | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Property Value | Configuration Dependency |
|---|---|---|---|---|
| MV-10100 | 42011 | Chiller Mode Command BAS | 1 = Cool<br>2 = Heat<br>3 = Ice Making<br>4 = Free Cooling | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10100 | 30011 | Active Chilled Water Setpoint | Temperature | Standard |
| AI-10101 | 30013 | Chilled Water Setpoint Status | Temperature | Standard |
| AI-10102 | 30015 | Active Base Loading Setpoint | Percentage | Base Loading |
| AI-10103 | 30017 | Hot Water Setpoint Active | Temperature | Hot Water Control |
| AI-10104 | 30019 | Calculated Chiller Capacity | Power, Cooling | Evap Water Flow Sensing |
| AI-10105 | 30021 | Active Cool/Heat Setpoint Temperature | Temperature | Standard |
| AI-10106 | 30023 | Evaporator Leaving Water Temperature | Temperature | Standard |
| AI-10107 | 30025 | Evaporator Entering Water Temperature | Temperature | Standard |
| AI-10108 | 30027 | Condenser Entering Water Temperature | Temperature | Standard |
| AI-10109 | 30029 | Condenser Leaving Water Temperature | Temperature | Standard |
| AI-10110 | 30031 | Evaporator Water Flow Rate | Flow, Water | Evap Water Flow Sensing |
| AI-10111 | 30033 | Evaporator Differential Water Pressure | Differential Pressure | Evap Water Flow Differential Pressure or Dual Pressure Sensors |
| AI-10112 | 30035 | Condenser Water Flow Rate | Flow, Water | Cond Water Flow Sensing |
| AI-10113 | 30037 | Condenser Differential Water Pressure | Differential Pressure | Cond Water Flow Differential Pressure or Dual Pressure Sensors |
| AI-10114 | 30039 | AFD Last Diagnostic Code Ckt1 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000) |
| AI-10115 | 30041 | Unit Source ID (Last Diagnostic Code) | None | Standard |
| AI-10116 | 30043 | Refrigerant Monitor | Concentration | Refrigerant Monitor |
| AI-10117 | 30045 | Evaporator Refrigerant Pressure Circuit 1 | Pressure | Standard |
| AI-10118 | 30047 | Condenser Refrigerant Pressure Circuit 1 | Pressure | Standard |
| AI-10119 | 30049 | Differential Refrigerant Pressure Circuit 1 | Differential Pressure | Standard |
| AI-10120 | 30051 | Low Side Oil Pressure - Compressor 1A | Pressure | Standard |
| AI-10121 | 30053 | High Side Oil Pressure - Compressor 1A | Pressure | Standard |
| AI-10122 | 30055 | Oil Differential Pressure Circuit 1 | Differential Pressure | Standard |
| AI-10123 | 30057 | Oil Temperature - Compressor 1A | Temperature | Standard |
| AI-10124 | 30059 | Evaporator Saturated Refrigerant Temperature Circuit 1 | Temperature | Standard |
| AI-10125 | 30061 | Condenser Saturated Refrigerant Temperature Circuit 1 | Temperature | Standard |
| AI-10126 | 30063 | Refrigerant Discharge Temperature - Compressor 1A | Temperature | Compressor Refrigerant Discharge Temperature |
| AI-10127 | 30065 | Inlet Guide Vane 1 Percent Open Circuit 1 | Percentage | Standard |
| AI-10128 | 30067 | Inlet Guide Vane 2 Percent Open Circuit 1 | Percentage | Dual IGV |
| AI-10129 | 30069 | Purge Carbon Tank Temperature Circuit 1 | Temperature | Purge w/Carbon Tank |
| AI-10130 | 30071 | Purge Liquid Temperature Circuit 1 | Temperature | Purge |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10131 | 30073 | Purge Refrigerant Compressor Suction Temperature Circuit 1 | Temperature | Purge |
| AI-10132 | 30075 | Time Until Next Purge Run Circuit 1 (in seconds) | None | Purge |
| AI-10133 | 30077 | Purge Pumpout Chiller On % (7 Days) Circuit 1 | Percentage | Purge |
| AI-10134 | 30079 | Purge Pumpout Chiller Off % (7 Days) Circuit 1 | Percentage | Purge |
| AI-10135 | 30081 | Purge 24 Hour Pumpout Circuit 1 (in seconds) | None | Purge |
| AI-10136 | 30083 | Purge Pumpout - Life Circuit 1 (in seconds) | None | Purge |
| AI-10137 | 30085 | Refrigeration - Life Circuit 1 (in seconds) | None | Purge |
| AI-10138 | 30087 | Starts - Compressor 1A | None | Standard |
| AI-10139 | 30089 | Run Time - Compressor 1A (in seconds) | None | Standard |
| AI-10140 | 30091 | Phase AB Voltage - Compressor 1A | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10141 | 30093 | Phase BC Voltage - Compressor 1A | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10142 | 30095 | Phase CA Voltage - Compressor 1A | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10143 | 30097 | Starter Average Phase Volt Circuit 1 | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10144 | 30099 | Line 1 Current - Compressor 1A | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10145 | 30101 | Line 2 Current - Compressor 1A | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10146 | 30103 | Line 3 Current - Compressor 1A | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10147 | 30105 | Average Line Current Circuit 1 | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10148 | 30107 | Line 1 Current RLA - Compressor 1A | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10149 | 30109 | Line 2 Current RLA - Compressor 1A | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10150 | 30111 | Line 3 Current RLA - Compressor 1A | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10151 | 30113 | Actual Running Capacity | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Energy Meter |
| AI-10153 | 30117 | Starter Load Power Factor - Compressor 1A | None | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Non-Communicating AFD |
| AI-10154 | 30119 | Inboard Bearing Temperature Circuit 1 | Temperature | Bearing Temperature Sensor |
| AI-10155 | 30121 | Outboard Bearing Temperature Circuit 1 | Temperature | Bearing Temperature Sensor |
| AI-10156 | 30123 | Motor Winding Temperature 1 Circuit 1 | Temperature | Standard |
| AI-10157 | 30125 | Motor Winding Temperature 2 Circuit 1 | Temperature | Standard |
| AI-10158 | 30127 | Motor Winding Temperature 3 Circuit 1 | Temperature | Standard |
| AI-10159 | 30129 | AFD Frequency Circuit 1 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD |
| AI-10160 | 30131 | AFD Transistor Temperature Circuit 1 | Temperature | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000) |
| AI-10161 | 30133 | Drive Average Line Current Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Remote Mount Comm AFD (PF6000) |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10162 | 30135 | Drive Line Frequency Circuit 1 | None | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Remote Mount Comm AFD (PF6000) |
| AI-10163 | 30137 | Drive Motor Voltage Circuit 1 | Voltage | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Remote Mount Comm AFD (PF6000) |
| AI-10164 | 30139 | Drive Inverter Base Temperature Circuit 1 | Temperature | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10165 | 30141 | Drive Rectifier Base Temperature Circuit 1 | Temperature | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10166 | 30143 | Drive Output Power Circuit 1 | Power, Electrical | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD |
| AI-10167 | 30145 | Frequency Command Circuit 1 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD |
| AI-10168 | 30147 | Outboard Bearing Pad Temperature #1 Ckt1 | Temperature | CDHH |
| AI-10169 | 30149 | Outboard Bearing Pad Temperature #2 Ckt1 | Temperature | CDHH |
| AI-10170 | 30151 | Outboard Bearing Pad Temperature #3 Ckt1 | Temperature | CDHH |
| AI-10171 | 30153 | Restart Inhibit Time Remaining Circuit 1 | None | Standard |
| AI-10172 | 30155 | Chiller Design Capacity | Power, Cooling | Standard |
| AI-10173 | 30157 | Entering Condenser Water Pressure | Pressure | Condenser Water Flow Differential Pressure Sensors |
| AI-10174 | 30159 | Entering Evaporator Water Pressure | Pressure | Evaporator Water Flow Differential Pressure Sensors |
| AI-10175 | 30161 | Leaving Condenser Water Pressure | Pressure | Condenser Water Flow Differential Pressure Sensors |
| AI-10176 | 30163 | Leaving Evaporator Water Pressure | Pressure | Evaporator Water Flow Differential Pressure Sensors |
| AI-10177 | 30165 | Condenser Approach Temperature Circuit 1 | Temperature, Delta | Standard |
| AI-10178 | 30167 | Evaporator Approach Temperature Circuit 1 | Temperature, Delta | Standard |
| AI-10179 | 30169 | Drive DC Bus Voltage Circuit 1 | Voltage | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD |
| AI-10180 | 30171 | Drive Motor Average Current RLA Circuit 1 | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10182 | 30175 | Active Demand Limit Setpoint | Percentage | Ice Building |
| AI-10183 | 30177 | Active Demand Limit Setpoint | Percentage | Not Ice Building |
| AI-10184 | 30179 | Demand Limit Setpoint Status | Percentage | Ice Building |
| AI-10185 | 30181 | Number of Circuits | None | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10186 | 30183 | Number of Compressors Circuit 1 | None | Standard |
| AI-10187 | 30185 | Number of Compressors Circuit 2 | None | Standard |
| AI-10188 | 30187 | Low Side Oil Pressure - Compressor 2A | Pressure | Standard |
| AI-10189 | 30189 | High Side Oil Pressure - Compressor 2A | Pressure | Standard |
| AI-10190 | 30191 | Oil Differential Pressure Circuit 2 | Differential Pressure | Standard |
| AI-10191 | 30193 | Oil Temperature - Compressor 2A | Temperature | Standard |
| AI-10192 | 30195 | Evaporator Saturated Refrigerant Temperature Circuit 2 | Temperature | Standard |
| AI-10193 | 30197 | Condenser Saturated Refrigerant Temperature Circuit 2 | Temperature | Standard |
| AI-10194 | 30199 | Refrigerant Discharge Temperature - Compressor 2A | Temperature | Compressor Refrigerant Discharge Temperature |
| AI-10195 | 30201 | Inlet Guide Vane 1 Percent Open Circuit 2 | Percentage | Standard |
| AI-10196 | 30203 | Inlet Guide Vane 2 Percent Open Circuit 2 | Percentage | IGV2 |
| AI-10197 | 30205 | Purge Carbon Tank Temperature Circuit 2 | Temperature | Purge w/Carbon Tank |
| AI-10198 | 30207 | Purge Liquid Temperature Circuit 2 | Temperature | Purge |
| AI-10199 | 30209 | Purge Refrigerant Compressor Suction Temperature Circuit 2 | Temperature | Purge |
| AI-10200 | 30211 | Time Until Next Purge Run Circuit 2 (in seconds) | None | Purge |
| AI-10201 | 30213 | Refrigeration - Life Circuit 2 (in seconds) | None | Purge |
| AI-10202 | 30215 | Starts - Compressor 2A | None | Standard |
| AI-10203 | 30217 | Run Time - Compressor 2A (in seconds) | None | Standard |
| AI-10204 | 30219 | Starter Average Phase Volt Circuit 2 | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10205 | 30221 | Line 1 Current - Compressor 2A | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10206 | 30223 | Line 2 Current - Compressor 2A | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10207 | 30225 | Line 3 Current - Compressor 2A | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10208 | 30227 | Average Line Current Circuit 2 | Current | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10209 | 30229 | Drive Average Line Current Circuit 2 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Remote Mount Comm AFD (PF6000) |
| AI-10210 | 30231 | Starter Load Power Factor - Compressor 2A | None | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000) |
| AI-10211 | 30233 | Inboard Bearing Temperature Circuit 2 | Temperature | Bearing Temperature Sensor |
| AI-10212 | 30235 | Outboard Bearing Temperature Circuit 2 | Temperature | Bearing Temperature Sensor |
| AI-10213 | 30237 | Motor Winding Temperature 1 Circuit 2 | Temperature | Standard |
| AI-10214 | 30239 | Motor Winding Temperature 2 Circuit 2 | Temperature | Standard |
| AI-10215 | 30241 | Motor Winding Temperature 3 Circuit 2 | Temperature | Standard |
| AI-10216 | 30243 | AFD Transistor Temperature Circuit 2 | Temperature | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000) |
| AI-10217 | 30245 | Heat Recovery Entering Water Temp | Temperature | Heat Recovery |
| AI-10218 | 30247 | Heat Recovery Leaving Water Temp | Temperature | Heat Recovery |
| AI-10219 | 30249 | Purge Pumpout Chiller On % (7 Days) Circuit 2 | Percentage | Purge |
| AI-10220 | 30251 | Purge Pumpout Chiller Off % (7 Days) Circuit 2 | Percentage | Purge |
| AI-10221 | 30253 | Purge 24 Hour Pumpout Circuit 2 (in seconds) | None | Purge |
| AI-10222 | 30255 | Phase AB Voltage - Compressor 2A | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10223 | 30257 | Phase BC Voltage - Compressor 2A | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10224 | 30259 | Phase CA Voltage - Compressor 2A | Voltage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD |
| AI-10225 | 30261 | Purge Pumpout - Life Circuit 2 (in seconds) | None | Purge |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10226 | 30263 | Drive Motor Average Current RLA Circuit 2 | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10227 | 30265 | Drive Inverter Base Temperature Circuit 2 | Temperature | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10228 | 30267 | Drive Rectifier Base Temperature Circuit 2 | Temperature | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10229 | 30269 | Outboard Bearing Pad Temperature #1 Ckt2 | Temperature | CDHH |
| AI-10230 | 30271 | Outboard Bearing Pad Temperature #2 Ckt2 | Temperature | CDHH |
| AI-10231 | 30273 | Outboard Bearing Pad Temperature #3 Ckt2 | Temperature | CDHH |
| AI-10232 | 30275 | Evaporator Refrigerant Pressure Circuit 2 | Pressure | Standard |
| AI-10233 | 30277 | Condenser Refrigerant Pressure Circuit 2 | Pressure | Standard |
| AI-10234 | 30279 | Differential Refrigerant Pressure Circuit 2 | Differential Pressure | Standard |
| AI-10235 | 30281 | Restart Inhibit Time Remaining Circuit 2 | None | Standard |
| AI-10236 | 30283 | AFD Frequency Circuit 2 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD |
| AI-10237 | 30285 | Drive Line Frequency Circuit 2 | None | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Remote Mount Comm AFD (PF6000) |
| AI-10238 | 30287 | Frequency Command Circuit 2 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>TR200 Modbus AFD |
| AI-10239 | 30289 | Drive DC Bus Voltage Circuit 2 | Voltage | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD |
| AI-10240 | 30291 | Drive Output Power Circuit 2 | Power, Electrical | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000)<br>TR200 Modbus AFD |
| AI-10241 | 30293 | Line 1 Current RLA - Compressor 2A | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10242 | 30295 | Line 2 Current RLA - Compressor 2A | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10243 | 30297 | Line 3 Current RLA - Compressor 2A | Percentage | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Non-Communicating AFD<br>TR200 Modbus AFD |
| AI-10244 | 30299 | Drive Current Line 1 Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10245 | 30301 | Drive Current Line 2 Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10246 | 30303 | Drive Current Line 3 Circuit 1 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10247 | 30305 | Drive Current Line 1 Circuit 2 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10248 | 30307 | Drive Current Line 2 Circuit 2 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10249 | 30309 | Drive Current Line 3 Circuit 2 | Current | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items |
| AI-10250 | 30311 | Starter Input Power Consumption Ckt1 | Power, Electrical | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000) |
| AI-10251 | 30313 | Starter Input Power Consumption Ckt2 | Power, Electrical | EM Starter<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000) |
| AI-10252 | 30315 | Drive Motor Voltage Circuit 2 | Voltage | Unit Mount AFD (LF2) w/Line Side Items<br>Remote Mount Comm AFD (PF7000) w/Line Side Items<br>Remote Mount Comm AFD (PF6000) |
| AI-10253 | 30317 | Chiller Control Signal | Percentage | Standard |
| AI-10254 | 30319 | Head Pressure Control Status | Percentage | Head Pressure Control |
| AI-10255 | 30321 | AFD Last Diagnostic Code Ckt2 | None | Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF7000)<br>Remote Mount Comm AFD (PF6000) |
| AI-10256 | 30323 | Voltage L1-L2 Circuit 1 | Voltage | Energy Meter |
| AI-10257 | 30325 | Voltage L1-L3 Circuit 1 | Voltage | Energy Meter |
| AI-10258 | 30327 | Voltage L2-L3 Circuit 1 | Voltage | Energy Meter |
| AI-10259 | 30329 | Voltage L1-L2 Circuit 2 | Voltage | Energy Meter |
| AI-10260 | 30331 | Voltage L1-L3 Circuit 2 | Voltage | Energy Meter |
| AI-10261 | 30333 | Voltage L2-L3 Circuit 2 | Voltage | Energy Meter |
| AI-10262 | 30335 | Average Line Voltage Circuit 1 | Voltage | Energy Meter |
| AI-10263 | 30337 | Average Line Voltage Circuit 2 | Voltage | Energy Meter |
| AI-10264 | 30339 | Line Current L1 Circuit 1 | Current | Energy Meter |
| AI-10265 | 30341 | Line Current L2 Circuit 1 | Current | Energy Meter |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10266 | 30343 | Line Current L3 Circuit 1 | Current | Energy Meter |
| AI-10267 | 30345 | Line Current L1 Circuit 2 | Current | Energy Meter |
| AI-10268 | 30347 | Line Current L2 Circuit 2 | Current | Energy Meter |
| AI-10269 | 30349 | Line Current L3 Circuit 2 | Current | Energy Meter |
| AI-10270 | 30351 | Unit Average Line Current Circuit 1 | Current | Energy Meter |
| AI-10271 | 30353 | Unit Average Line Current Circuit 2 | Current | Energy Meter |
| AI-10272 | 30355 | Line Frequency Circuit 1 | None | Energy Meter |
| AI-10273 | 30357 | Line Frequency Circuit 2 | None | Energy Meter |
| AI-10274 | 30359 | Power Factor Circuit 1 | None | Energy Meter |
| AI-10275 | 30361 | Power Factor Circuit 2 | None | Energy Meter |
| AI-10276 | 30363 | Power Demand Circuit 1 | Power, Electrical | Energy Meter |
| AI-10277 | 30365 | Power Demand Circuit 2 | Power, Electrical | Energy Meter |
| AI-10278 | 30367 | Total Real Power | Power, Electrical | Energy Meter |
| AI-10279 | 30369 | Unit Power Consumption | Power, Electrical | Energy Meter |
| AI-10280 | 30371 | Energy Consumption | Energy, Electrical | Energy Meter |
| AI-10281 | 30373 | Energy Consumption Lifetime | Energy, Electrical | Energy Meter |
| AI-10282 | 30375 | Condenser Approach Temperature Circuit 2 | Temperature, Delta | Standard |
| AI-10283 | 30377 | Evaporator Approach Temperature Circuit 2 | Temperature, Delta | Standard |
| AI-10284 | 30379 | Drive Input Voltage Calculated 1A | Voltage | TR200 Modbus AFD |
| AI-10285 | 30381 | Drive Input Voltage Calculated 2A | Voltage | TR200 Modbus AFD |
| AI-10286 | 30383 | Drive Heatsink Temperature Compressor 1A | Temperature | TR200 Modbus AFD |
| AI-10287 | 30385 | Drive Heatsink Temperature Compressor 2A | Temperature | TR200 Modbus AFD |
| AI-10288 | 30387 | Outdoor Air Temperature Local | Temperature | Outdoor Air Temperature |
| AI-10289 | 30389 | Heat Recovery Differential Water Pressure | Pressure | Heat Recovery Water Flow Differential Pressure or Dual Pressure Sensors |
| AI-10290 | 30391 | Heat Recovery Water Flow Rate | Flow, Water | Heat Recovery Water Flow Sensing |
| AI-10291 | 30393 | Heat Recovery Calculated Capacity | Power, Heating | Heat Recovery Water Flow Sensing |
| AI-10292 | 30395 | Heat Recovery Entering Water Pressure | Pressure | Heat Recovery Water Flow Dual Pressure Sensors |
| AI-10293 | 30397 | Heat Recovery Leaving Water Pressure | Pressure | Heat Recovery Water Flow Dual Pressure Sensors |
| AI-10294 | 30399 | Heat Recovery Approach Temperature Circuit 1 | Temperature, Delta | Heat Recovery |
| AI-10295 | 30401 | Heat Recovery Approach Temperature Circuit 2 | Temperature, Delta | Heat Recovery |
| AI-10296 | 30403 | High Side Oil Gauge Pressure - Compressor 1A | Pressure | Standard |
| AI-10297 | 30405 | Low Side Oil Gauge Pressure - Compressor 1A | Pressure | Standard |
| AI-10298 | 30407 | High Side Oil Gauge Pressure - Compressor 2A | Pressure | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AI-10299 | 30409 | Low Side Oil Gauge Pressure - Compressor 2A | Pressure | Standard |
| AI-10300 | 30411 | Condenser Refrigerant Gauge Pressure Circuit 1 | Pressure | Standard |
| AI-10301 | 30413 | Condenser Refrigerant Gauge Pressure Circuit 2 | Pressure | Standard |
| AI-10302 | 30415 | Entering Condenser Water Gauge Pressure | Pressure | Cond Water Flow Differential Dual Pressure Sensors |
| AI-10303 | 30417 | Entering Evaporator Water Gauge Pressure | Pressure | Evap Water Flow Differential Dual Pressure Sensors |
| AI-10304 | 30419 | Evaporator Refrigerant Gauge Pressure Circuit 1 | Pressure | Standard |
| AI-10305 | 30421 | Evaporator Refrigerant Gauge Pressure Circuit 2 | Pressure | Standard |
| AI-10306 | 30423 | Heat Recovery Entering Water Gauge Pressure | Pressure | Heat Recovery Water Flow Dual Pressure Sensors |
| AI-10307 | 30425 | Heat Recovery Leaving Water Gauge Pressure | Pressure | Heat Recovery Water Flow Dual Pressure Sensors |
| AI-10308 | 30427 | Leaving Condenser Water Gauge Pressure | Pressure | Cond Water Flow Differential Dual Pressure Sensors |
| AI-10309 | 30429 | Leaving Evaporator Water Gauge Pressure | Pressure | Evap Water Flow Differential Dual Pressure Sensors |
| AI-10310 | 30431 | Compressor Discharge Superheat Circuit 1 | Temperature, Delta | Compressor Refrigerant Discharge Temperature |
| AI-10311 | 30433 | Compressor Discharge Superheat Circuit 2 | Temperature, Delta | Compressor Refrigerant Discharge Temperature |

| BACnet Object Identifier | Modbus Register | Object Name | Units | Configuration Dependency |
|---|---|---|---|---|
| AV-10100 | 40011 | Chilled Water Setpoint | Temperature | Standard |
| AV-10101 | 40013 | Demand Limit Setpoint | Percent | Standard |
| AV-10102 | 40015 | Hot Water Setpoint | Temperature | Hot Water Control |
| AV-10103 | 40017 | Base Loading Setpoint | Percent | Base Loading |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-10101 | 33011 | Manual Override Exists | 0 = Off<br>1 = On | Standard |
| BI-10102 | 33012 | Base Loading Request Active | 0 = Inactive<br>1 = Active | Base Loading |
| BI-10103 | 33013 | Run Enabled | 0 = Run Not Enabled<br>1 = Run Enabled | Standard |
| BI-10104 | 33014 | Local Setpoint Control | 0 = Remote Control<br>1 = Local Control | Standard |
| BI-10105 | 33015 | Maximum Capacity | 0 = Off<br>1 = On | Standard |
| BI-10106 | 33016 | Capacity Limited | 0 = Not Limited<br>1 = Limited | Standard |
| BI-10107 | 33017 | Head Relief Request | 0 = Off<br>1 = On | Standard |
| BI-10108 | 33018 | Purge Compressor Relay Circuit 1 | 0 = Off<br>1 = On | Purge |
| BI-10109 | 33019 | Pump Out Relay Circuit 1 | 0 = Off<br>1 = On | Purge |
| BI-10110 | 33020 | Purge Regenerating Valve Solenoid Circuit 1 | 0 = Off<br>1 = On | Purge w/Carbon Tank |
| BI-10111 | 33021 | Chiller Running State | 0 = Off<br>1 = On | Standard |
| BI-10112 | 33022 | Evaporator Water Pump Request | 0 = Off<br>1 = On | Standard |
| BI-10113 | 33023 | Evaporator Water Flow Status | 0 = No Flow<br>1 = Flow | Standard |
| BI-10114 | 33024 | Condenser Water Pump Request | 0 = Off<br>1 = On | Standard |
| BI-10115 | 33025 | Condenser Water Flow Status | 0 = No Flow<br>1 = Flow | Standard |
| BI-10116 | 33026 | Diagnostic Present | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10117 | 33027 | Diagnostic Shutdown Present | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10118 | 33028 | Diagnostic: Manual Reset Required | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10119 | 33029 | Diagnostic: Local Manual Reset Required | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10120 | 33030 | Diagnostic Present: Information | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10121 | 33031 | Diagnostic Present: Advisory | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10122 | 33032 | Diagnostic Present: Critical | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10123 | 33033 | Diagnostic Present: Service Required | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10124 | 33034 | Compressor 1A Status | 0 = Off<br>1 = Running | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-10125 | 33035 | Front Panel Auto Stop | 0 = Stop<br>1 = Auto | Standard |
| BI-10126 | 33036 | External Auto Stop Input Status | 0 = Stop<br>1 = Auto | Standard |
| BI-10127 | 33037 | Purge Compressor Relay Circuit 2 | 0 = Off<br>1 = On | Purge |
| BI-10128 | 33038 | Purge Regenerating Valve Solenoid Circuit 2 | 0 = Off<br>1 = On | Purge w/Carbon Tank |
| BI-10130 | 33039 | Pump Out Relay Circuit 2 | 0 = Off<br>1 = On | Purge |
| BI-10131 | 33040 | Compressor 2A Status | 0 = Off<br>1 = Running | Standard |
| BI-10132 | 33041 | Emergency Stop | 0 = Auto<br>1 = Emergency Stop - Manual Reset Required | Standard |
| BI-10133 | 33042 | Circuit 1 Cooling Available | 0 = No<br>1 = Yes | Standard |
| BI-10134 | 33043 | Circuit 2 Cooling Available | 0 = No<br>1 = Yes | Standard |
| BI-10135 | 33044 | Circuit 1 Lockout Front Panel | 0 = Normal<br>1 = Locked Out | Standard |
| BI-10136 | 33045 | Circuit 2 Lockout Front Panel | 0 = Normal<br>1 = Locked Out | Standard |
| BI-10137 | 33046 | Circuit 1 Lockout External | 0 = Normal<br>1 = Locked Out | Standard |
| BI-10138 | 33047 | Circuit 2 Lockout External | 0 = Normal<br>1 = Locked Out | Standard |
| BI-10139 | 33048 | Circuit 1 Lockout Active | 0 = Normal<br>1 = Locked Out | Standard |
| BI-10140 | 33049 | Circuit 2 Lockout Active | 0 = Normal<br>1 = Locked Out | Standard |
| BI-10141 | 33050 | Diagnostic Shutdown Present: AFD/Starter Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10142 | 33051 | Diagnostic Shutdown Present: AFD/Starter Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-10143 | 33052 | Heat Recovery Water Flow Status | 0 = No Flow<br>1 = Flow | Heat Recovery |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11000 | 34001 | Diagnostic: AFD Comm Loss: Main Processor Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11001 | 34002 | Diagnostic: AFD Comm Loss: Main Processor Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11002 | 34003 | Diagnostic: AFD Control Board Memory Error Type 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11003 | 34004 | Diagnostic: AFD Control Board Memory Error Type 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11004 | 34005 | Diagnostic: AFD DPI Communication Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11005 | 34006 | Diagnostic: AFD DPI Communication Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11006 | 34007 | Diagnostic: AFD Fatal Software Error Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11007 | 34008 | Diagnostic: AFD Fatal Software Error Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11008 | 34009 | Diagnostic: AFD General Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11009 | 34010 | Diagnostic: AFD General Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11010 | 34011 | Diagnostic: AFD Ground Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11011 | 34012 | Diagnostic: AFD Ground Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11012 | 34013 | Diagnostic: AFD High Bus Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11013 | 34014 | Diagnostic: AFD High Bus Voltage Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11014 | 34015 | Diagnostic: AFD High Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11015 | 34016 | Diagnostic: AFD High Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11016 | 34017 | Diagnostic: AFD I/O Board Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11017 | 34018 | Diagnostic: AFD I/O Board Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11018 | 34019 | Diagnostic: AFD Instantaneous Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11019 | 34020 | Diagnostic: AFD Instantaneous Current Overload Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11020 | 34021 | Diagnostic: AFD Interrupt Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11021 | 34022 | Diagnostic: AFD Interrupt Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11022 | 34023 | Diagnostic: AFD Motor Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11023 | 34024 | Diagnostic: AFD Motor Current Overload Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11024 | 34025 | Diagnostic: AFD Motor Short Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11025 | 34026 | Diagnostic: AFD Motor Short Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11026 | 34027 | Diagnostic: AFD Output Phase Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11027 | 34028 | Diagnostic: AFD Output Phase Loss Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11028 | 34029 | Diagnostic: AFD Power Intfc Controller Board Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11029 | 34030 | Diagnostic: AFD Power Intfc Controller Board Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11030 | 34031 | Diagnostic: AFD Power Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11031 | 34032 | Diagnostic: AFD Power Loss Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11032 | 34033 | Diagnostic: AFD Power Structure Board Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11033 | 34034 | Diagnostic: AFD Power Structure Board Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11034 | 34035 | Diagnostic: AFD RS485 Board Memory Error Type 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11035 | 34036 | Diagnostic: AFD RS485 Board Memory Error Type 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11038 | 34039 | Diagnostic: At Speed Input Opened Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Non-Comm AFD<br>Solid State Starter |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11039 | 34040 | Diagnostic: At Speed Input Opened Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Non-Comm AFD<br>Solid State Starter |
| BI-11040 | 34041 | Diagnostic: At Speed Input Shorted Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Non-Comm AFD<br>Solid State Starter |
| BI-11041 | 34042 | Diagnostic: At Speed Input Shorted Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Non-Comm AFD<br>Solid State Starter |
| BI-11042 | 34043 | Diagnostic: Check Clock | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11043 | 34044 | Diagnostic: Check Oil Filter Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11044 | 34045 | Diagnostic: Check Oil Filter Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11045 | 34046 | Diagnostic: Check Oil Heater Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11046 | 34047 | Diagnostic: Check Oil Heater Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11047 | 34048 | Comm Loss: Adaptive Frequency Drive Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11048 | 34049 | Comm Loss: Adaptive Frequency Drive Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000)<br>Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11049 | 34050 | Comm Loss: AFD Speed Signal VDC Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Non-Comm AFD |
| BI-11050 | 34051 | Comm Loss: AFD Speed Signal VDC Output Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Non-Comm AFD |
| BI-11051 | 34052 | Comm Loss: Compressor Motor % RLA Output Circuit 1 | 0 = Normal<br>1 = In Alarm | % RLA Output |
| BI-11052 | 34053 | Comm Loss: Compressor Motor % RLA Output Circuit 2 | 0 = Normal<br>1 = In Alarm | % RLA Output |
| BI-11053 | 34054 | Comm Loss: Cond Diff Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement |
| BI-11054 | 34055 | Comm Loss: Cond Head Press Cntrl Output | 0 = Normal<br>1 = In Alarm | Head Pressure Control |
| BI-11055 | 34056 | Comm Loss: Cond High Pressure Cutout Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11056 | 34057 | Comm Loss: Cond High Pressure Cutout Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11057 | 34058 | Comm Loss: Cond Refrigerant Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Condenser Pressure Sensor |
| BI-11058 | 34059 | Comm Loss: Cond Refrigerant Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Condenser Pressure Sensor |
| BI-11059 | 34060 | Comm Loss: Cond Rfgt Pressure Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Condenser Refrigerant Pressure Output |
| BI-11060 | 34061 | Comm Loss: Cond Rfgt Pressure Output Circuit 2 | 0 = Normal<br>1 = In Alarm | Condenser Refrigerant Pressure Output |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11061 | 34062 | Comm Loss: Cond Saturated Rfgt Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11062 | 34063 | Comm Loss: Cond Saturated Rfgt Temp Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11063 | 34064 | Comm Loss: Condenser Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensors |
| BI-11064 | 34065 | Comm Loss: Condenser Entering Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11065 | 34066 | Comm Loss: Condenser Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensors |
| BI-11066 | 34067 | Comm Loss: Condenser Leaving Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11067 | 34068 | Comm Loss: Condenser Liquid Level Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11068 | 34069 | Comm Loss: Condenser Liquid Level Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11069 | 34070 | Comm Loss: Condenser Water Flow Switch | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11070 | 34071 | Comm Loss: Condenser Water Pump Relay | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11071 | 34072 | Comm Loss: Cprsr Discharge Rfgt Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Compressor Refrigerant Discharge Temp Sensor |
| BI-11072 | 34073 | Comm Loss: Cprsr Discharge Rfgt Temp Circuit 2 | 0 = Normal<br>1 = In Alarm | Compressor Refrigerant Discharge Temp Sensor |
| BI-11073 | 34074 | Comm Loss: Economizer Bypass Valve Circuit 1 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11074 | 34075 | Comm Loss: Economizer Bypass Valve Circuit 2 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11075 | 34076 | Comm Loss: Emergency Stop | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11076 | 34077 | Comm Loss: Energy Meter 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | Energy Meter |
| BI-11077 | 34078 | Comm Loss: Energy Meter 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | Energy Meter |
| BI-11078 | 34079 | Comm Loss: Evap Diff Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement |
| BI-11079 | 34080 | Comm Loss: Evap Entering Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11080 | 34081 | Comm Loss: Evap Leaving Water Temp | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11081 | 34082 | Comm Loss: Evap Refrigerant Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11082 | 34083 | Comm Loss: Evap Refrigerant Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11083 | 34084 | Comm Loss: Evap Sat Refrig Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11084 | 34085 | Comm Loss: Evap Sat Refrig Temp Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11085 | 34086 | Comm Loss: Evaporator Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Dual Pressure Sensors |
| BI-11086 | 34087 | Comm Loss: Evaporator Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Dual Pressure Sensors |
| BI-11087 | 34088 | Comm Loss: Evaporator Water Flow Switch | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11088 | 34089 | Comm Loss: Evaporator Water Pump Relay | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11089 | 34090 | Comm Loss: Ext Base Loading Command | 0 = Normal<br>1 = In Alarm | Base Loading |
| BI-11090 | 34091 | Comm Loss: Ext Base Loading Setpoint | 0 = Normal<br>1 = In Alarm | Base Loading |
| BI-11091 | 34092 | Comm Loss: Ext Chilled/Hot Water Setpoint | 0 = Normal<br>1 = In Alarm | External Chilled Water Setpoint |
| BI-11092 | 34093 | Comm Loss: Ext Demand Limit Setpoint | 0 = Normal<br>1 = In Alarm | External Demand Limit Setpoint |
| BI-11093 | 34094 | Comm Loss: External Auto/Stop | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11094 | 34095 | Comm Loss: External Ckt Lockout Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11095 | 34096 | Comm Loss: External Ckt Lockout Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11097 | 34098 | Comm Loss: External Hot Water Command | 0 = Normal<br>1 = In Alarm | Hot Water Control |
| BI-11098 | 34099 | Comm Loss: External Ice Building Command | 0 = Normal<br>1 = In Alarm | Ice Building |
| BI-11099 | 34100 | Comm Loss: Generator Fault Input Circuit 1 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11100 | 34101 | Comm Loss: Generator Fault Input Circuit 2 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11101 | 34102 | Comm Loss: Generator Speed Signal Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11102 | 34103 | Comm Loss: Generator Speed Signal Output Circuit 2 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11103 | 34104 | Comm Loss: Generator Start/Stop Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11104 | 34105 | Comm Loss: Generator Start/Stop Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11105 | 34106 | Comm Loss: Generator Up To Speed Input Circuit 1 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11106 | 34107 | Comm Loss: Generator Up To Speed Input Circuit 2 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11107 | 34108 | Comm Loss: Heat Recovery Entering Water Temp | 0 = Normal<br>1 = In Alarm | Heat Recovery |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11108 | 34109 | Comm Loss: Heat Recovery Leaving Water Temp | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11112 | 34113 | Comm Loss: Ice Building Relay | 0 = Normal<br>1 = In Alarm | Ice Building |
| BI-11113 | 34114 | Comm Loss: IGV First Stage Actuator Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11114 | 34115 | Comm Loss: IGV First Stage Actuator Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11115 | 34116 | Comm Loss: IGV Second Stage Actuator Circuit 1 | 0 = Normal<br>1 = In Alarm | IGV Actuator - Dual |
| BI-11116 | 34117 | Comm Loss: IGV Second Stage Actuator Circuit 2 | 0 = Normal<br>1 = In Alarm | IGV Actuator - Dual |
| BI-11117 | 34118 | Comm Loss: Inboard Bearing Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11118 | 34119 | Comm Loss: Inboard Bearing Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11119 | 34120 | Comm Loss: Motor Winding Temperature 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11120 | 34121 | Comm Loss: Motor Winding Temperature 1 Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11121 | 34122 | Comm Loss: Motor Winding Temperature 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11122 | 34123 | Comm Loss: Motor Winding Temperature 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11123 | 34124 | Comm Loss: Motor Winding Temperature 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11124 | 34125 | Comm Loss: Motor Winding Temperature 3 Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11125 | 34126 | Comm Loss: Oil Cooler Solenoid Circuit 1 | 0 = Normal<br>1 = In Alarm | Oil Cooler Solenoid Valve |
| BI-11126 | 34127 | Comm Loss: Oil Cooler Solenoid Circuit 2 | 0 = Normal<br>1 = In Alarm | Oil Cooler Solenoid Valve |
| BI-11127 | 34128 | Comm Loss: Oil Pump Discharge Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11128 | 34129 | Comm Loss: Oil Pump Discharge Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11129 | 34130 | Comm Loss: Oil Tank Heater 4E1 Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11130 | 34131 | Comm Loss: Oil Tank Heater 4E1 Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11131 | 34132 | Comm Loss: Oil Tank Heater 4E2 Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11132 | 34133 | Comm Loss: Oil Tank Heater 4E2 Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11133 | 34134 | Comm Loss: Oil Tank Heater Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHF,G |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11134 | 34135 | Comm Loss: Oil Tank Heater Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHF,G |
| BI-11135 | 34136 | Comm Loss: Oil Tank Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11136 | 34137 | Comm Loss: Oil Tank Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11137 | 34138 | Comm Loss: Oil Tank Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11138 | 34139 | Comm Loss: Oil Tank Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11139 | 34140 | Comm Loss: Oil Vent Line Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11140 | 34141 | Comm Loss: Oil Vent Line Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11141 | 34142 | Comm Loss: Oil/Refrigerant Pump Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHF,G |
| BI-11142 | 34143 | Comm Loss: Oil/Refrigerant Pump Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHF,G |
| BI-11143 | 34144 | Comm Loss: Outboard Bearing Pad Temp 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11144 | 34145 | Comm Loss: Outboard Bearing Pad Temp 1 Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11145 | 34146 | Comm Loss: Outboard Bearing Pad Temp 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11146 | 34147 | Comm Loss: Outboard Bearing Pad Temp 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11147 | 34148 | Comm Loss: Outboard Bearing Pad Temp 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11148 | 34149 | Comm Loss: Outboard Bearing Pad Temp 3 Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11149 | 34150 | Comm Loss: Outboard Bearing Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11150 | 34151 | Comm Loss: Outboard Bearing Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11151 | 34152 | Comm Loss: Outdoor Air Temperature | 0 = Normal<br>1 = In Alarm | Outdoor Air Temp Sensor |
| BI-11152 | 34153 | Comm Loss: Programmable Relay Board 1 | 0 = Normal<br>1 = In Alarm | Operating Status Programmable Relays |
| BI-11153 | 34154 | Comm Loss: Programmable Relay Board 2 | 0 = Normal<br>1 = In Alarm | Operating Status Programmable Relays |
| BI-11154 | 34155 | Comm Loss: Purge Alarm Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11155 | 34156 | Comm Loss: Purge Alarm Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11156 | 34157 | Comm Loss: Purge Carbon Tank Heater Rly Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11157 | 34158 | Comm Loss: Purge Carbon Tank Heater Rly Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11158 | 34159 | Comm Loss: Purge Carbon Tank Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11159 | 34160 | Comm Loss: Purge Carbon Tank Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11160 | 34161 | Comm Loss: Purge Condensing Unit Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11161 | 34162 | Comm Loss: Purge Condensing Unit Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11162 | 34163 | Comm Loss: Purge Cprsr Suction Rfgt Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11163 | 34164 | Comm Loss: Purge Cprsr Suction Rfgt Temp Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11164 | 34165 | Comm Loss: Purge Exhaust Solenoid Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11165 | 34166 | Comm Loss: Purge Exhaust Solenoid Output Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11166 | 34167 | Comm Loss: Purge Liquid Level Switch Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11167 | 34168 | Comm Loss: Purge Liquid Level Switch Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11168 | 34169 | Comm Loss: Purge Liquid Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11169 | 34170 | Comm Loss: Purge Liquid Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11170 | 34171 | Comm Loss: Purge Pumpout Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11171 | 34172 | Comm Loss: Purge Pumpout Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11172 | 34173 | Comm Loss: Purge Pumpout Solenoid Output Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11173 | 34174 | Comm Loss: Purge Pumpout Solenoid Output Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11174 | 34175 | Comm Loss: Purge Regen Solenoid Relay Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11175 | 34176 | Comm Loss: Purge Regen Solenoid Relay Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11176 | 34177 | Comm Loss: Refrigerant Monitor Input | 0 = Normal<br>1 = In Alarm | Refrigerant Monitor |
| BI-11177 | 34178 | Comm Loss: Starter Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11178 | 34179 | Comm Loss: Starter Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11179 | 34180 | Comm Loss: Starter Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11180 | 34181 | Comm Loss: Starter Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11181 | 34182 | Comm Loss: Unit Purge Alarm Relay | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11182 | 34183 | Diagnostic: Compressor Did Not Accelerate: Shutdown Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11183 | 34184 | Diagnostic: Compressor Did Not Accelerate: Shutdown Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11184 | 34185 | Diagnostic: Cond Saturated Refrigerant Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11185 | 34186 | Diagnostic: Cond Saturated Refrigerant Temp Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11186 | 34187 | Diagnostic: Condenser Diff Water Pressure Xdcr | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Differential Pressure |
| BI-11187 | 34188 | Diagnostic: Condenser Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensors |
| BI-11188 | 34189 | Diagnostic: Condenser Entering Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11189 | 34190 | Diagnostic: Condenser High Pressure Cutout Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11190 | 34191 | Diagnostic: Condenser High Pressure Cutout Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11191 | 34192 | Diagnostic: Condenser Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Cond Water Flow Measurement - Dual Pressure Sensors |
| BI-11192 | 34193 | Diagnostic: Condenser Leaving Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11193 | 34194 | Diagnostic: Condenser Liquid Level Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11194 | 34195 | Diagnostic: Condenser Liquid Level Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11195 | 34196 | Diagnostic: Condenser Refrigerant Pressure Xdcr Circuit 1 | 0 = Normal<br>1 = In Alarm | Cond Pressure Sensor |
| BI-11196 | 34197 | Diagnostic: Condenser Refrigerant Pressure Xdcr Circuit 2 | 0 = Normal<br>1 = In Alarm | Cond Pressure Sensor |
| BI-11197 | 34198 | Diagnostic: Condenser Water Flow Lost | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11198 | 34199 | Diagnostic: Condenser Water Flow Overdue | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11199 | 34200 | Diagnostic: Cprsr Did Not Accelerate: Transition Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11200 | 34201 | Diagnostic: Cprsr Did Not Accelerate: Transition Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11201 | 34202 | Diagnostic: Cprsr Discharge Refrigerant Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Compressor Refrigerant Discharge Temp Sensor |
| BI-11202 | 34203 | Diagnostic: Cprsr Discharge Refrigerant Temp Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Compressor Refrigerant Discharge Temp Sensor |
| BI-11203 | 34204 | Diagnostic: Differential Oil Pressure Overdue Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11204 | 34205 | Diagnostic: Differential Oil Pressure Overdue Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11206 | 34207 | Diagnostic: Emergency Stop | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11207 | 34208 | Diagnostic: Evap Saturated Refrigerant Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11208 | 34209 | Diagnostic: Evap Saturated Refrigerant Temp Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11209 | 34210 | Diagnostic: Evaporator Diff Water Pressure Xdcr | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Differential Pressure |
| BI-11210 | 34211 | Diagnostic: Evaporator Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Dual Pressure Sensors |
| BI-11211 | 34212 | Diagnostic: Evaporator Entering Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11212 | 34213 | Diagnostic: Evaporator Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement - Dual Pressure Sensors |
| BI-11213 | 34214 | Diagnostic: Evaporator Leaving Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11214 | 34215 | Diagnostic: Evaporator Refrigerant Pressure Xdcr Circuit 1 | 0 = Normal<br>1 = In Alarm | Evap Pressure Sensor |
| BI-11215 | 34216 | Diagnostic: Evaporator Refrigerant Pressure Xdcr Circuit 2 | 0 = Normal<br>1 = In Alarm | Evap Pressure Sensor |
| BI-11216 | 34217 | Diagnostic: Evaporator Water Flow Lost | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11217 | 34218 | Diagnostic: Evaporator Water Flow Overdue | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11218 | 34219 | Diagnostic: Excessive Loss of Communication | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11221 | 34222 | Diagnostic: Extended Compressor Surge Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11222 | 34223 | Diagnostic: Extended Compressor Surge Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11223 | 34224 | Diagnostic: External Base Loading Setpoint | 0 = Normal<br>1 = In Alarm | Base Loading |
| BI-11224 | 34225 | Diagnostic: External Chilled/Hot Water Setpoint | 0 = Normal<br>1 = In Alarm | External Chilled Water Setpoint |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11225 | 34226 | Diagnostic: External Demand Limit Setpoint | 0 = Normal<br>1 = In Alarm | External Demand Limit Setpoint |
| BI-11230 | 34231 | Diagnostic: Generator Fault Relay Open Circuit 1 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11231 | 34232 | Diagnostic: Generator Fault Relay Open Circuit 2 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11232 | 34233 | Diagnostic: Generator Ready Signal Overdue Circuit 1 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11233 | 34234 | Diagnostic: Generator Ready Signal Overdue Circuit 2 | 0 = Normal<br>1 = In Alarm | Engine/Generator |
| BI-11234 | 34235 | Diagnostic: Heat Recovery Entering Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11235 | 34236 | Diagnostic: Heat Recovery Leaving Water Temp Sensor | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11236 | 34237 | Diagnostic: High Cprsr Rfgt Discharge Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Compressor Refrigerant Discharge Temp Sensor |
| BI-11237 | 34238 | Diagnostic: High Cprsr Rfgt Discharge Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Compressor Refrigerant Discharge Temp Sensor |
| BI-11238 | 34239 | Diagnostic: High Differential Refrigerant Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11239 | 34240 | Diagnostic: High Differential Refrigerant Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11240 | 34241 | Diagnostic: High Evaporator Refrigerant Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11241 | 34242 | Diagnostic: High Evaporator Refrigerant Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11242 | 34243 | Diagnostic: High Evaporator Water Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11243 | 34244 | Diagnostic: High Inboard Bearing Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11244 | 34245 | Diagnostic: High Inboard Bearing Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11245 | 34246 | Diagnostic: High Motor Winding Temperature 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11246 | 34247 | Diagnostic: High Motor Winding Temperature 1 Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11247 | 34248 | Diagnostic: High Motor Winding Temperature 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11248 | 34249 | Diagnostic: High Motor Winding Temperature 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11249 | 34250 | Diagnostic: High Motor Winding Temperature 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11250 | 34251 | Diagnostic: High Motor Winding Temperature 3 Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11251 | 34252 | Diagnostic: High Oil Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11252 | 34253 | Diagnostic: High Oil Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11253 | 34254 | Diagnostic: High Outboard Bearing Pad Temperature 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11254 | 34255 | Diagnostic: High Outboard Bearing Pad Temperature 1 Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11255 | 34256 | Diagnostic: High Outboard Bearing Pad Temperature 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11256 | 34257 | Diagnostic: High Outboard Bearing Pad Temperature 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11257 | 34258 | Diagnostic: High Outboard Bearing Pad Temperature 3 Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11258 | 34259 | Diagnostic: High Outboard Bearing Pad Temperature 3 Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11259 | 34260 | Diagnostic: High Outboard Bearing Temp Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11260 | 34261 | Diagnostic: High Outboard Bearing Temp Circuit 2 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11261 | 34262 | Diagnostic: High Vacuum Lockout Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11262 | 34263 | Diagnostic: High Vacuum Lockout Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11266 | 34267 | Diagnostic: HPC/High AFD Heat Sink Water Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11267 | 34268 | Diagnostic: HPC/High AFD Heat Sink Water Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Unit Mount AFD - AFDD,E,F (LF2)<br>Remote Mount Comm AFD - (PF7000) |
| BI-11268 | 34269 | Diagnostic: Inboard Bearing Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11269 | 34270 | Diagnostic: Inboard Bearing Temp Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Bearing Temp Sensors |
| BI-11270 | 34271 | Diagnostic: Inverted Condenser Water Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11271 | 34272 | Diagnostic: Inverted Evaporator Water Temperature | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11272 | 34273 | Diagnostic: Loss of Economizer Bypass Valve Control Circuit 1 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11273 | 34274 | Diagnostic: Loss of Economizer Bypass Valve Control Circuit 2 | 0 = Normal<br>1 = In Alarm | Economizer Bypass |
| BI-11274 | 34275 | Diagnostic: Low Differential Oil Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11275 | 34276 | Diagnostic: Low Differential Oil Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11276 | 34277 | Diagnostic: Low Evap Leaving Water Temp: Unit Off | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11277 | 34278 | Diagnostic: Low Evap Leaving Water Temp: Unit On | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11278 | 34279 | Diagnostic: Low Evaporator Refrigerant Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11279 | 34280 | Diagnostic: Low Evaporator Refrigerant Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11280 | 34281 | Diagnostic: Low Evaporator Water Flow | 0 = Normal<br>1 = In Alarm | Evap Water Flow Measurement |
| BI-11281 | 34282 | Diagnostic: Low Oil Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11282 | 34283 | Diagnostic: Low Oil Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11283 | 34284 | Diagnostic: Momentary Power Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | Momentary Power Loss |
| BI-11284 | 34285 | Diagnostic: Momentary Power Loss Circuit 2 | 0 = Normal<br>1 = In Alarm | Momentary Power Loss |
| BI-11285 | 34286 | Diagnostic: Motor Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11286 | 34287 | Diagnostic: Motor Current Overload Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11287 | 34288 | Diagnostic: Motor Winding Temperature 1 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11288 | 34289 | Diagnostic: Motor Winding Temperature 1 Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11289 | 34290 | Diagnostic: Motor Winding Temperature 2 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11290 | 34291 | Diagnostic: Motor Winding Temperature 2 Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11291 | 34292 | Diagnostic: Motor Winding Temperature 3 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11292 | 34293 | Diagnostic: Motor Winding Temperature 3 Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11293 | 34294 | Diagnostic: MP: Invalid Configuration | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11294 | 34295 | Diagnostic: MP: Reset Has Occurred | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11295 | 34296 | Diagnostic: Oil Pressure Sensor Calibration Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11296 | 34297 | Diagnostic: Oil Pressure Sensor Calibration Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11297 | 34298 | Diagnostic: Oil Pump Discharge Pressure Transducer Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11298 | 34299 | Diagnostic: Oil Pump Discharge Pressure Transducer Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11299 | 34300 | Diagnostic: Oil Tank Pressure Transducer Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11300 | 34301 | Diagnostic: Oil Tank Pressure Transducer Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11301 | 34302 | Diagnostic: Oil Tank Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11302 | 34303 | Diagnostic: Oil Tank Temperature Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11303 | 34304 | Diagnostic: Outboard Bearing Pad Temp 1 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11304 | 34305 | Diagnostic: Outboard Bearing Pad Temp 1 Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11305 | 34306 | Diagnostic: Outboard Bearing Pad Temp 2 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11306 | 34307 | Diagnostic: Outboard Bearing Pad Temp 2 Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11307 | 34308 | Diagnostic: Outboard Bearing Pad Temp 3 Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11308 | 34309 | Diagnostic: Outboard Bearing Pad Temp 3 Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11309 | 34310 | Diagnostic: Outboard Bearing Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11310 | 34311 | Diagnostic: Outboard Bearing Temperature Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | CDHH |
| BI-11311 | 34312 | Diagnostic: Outdoor Air Temperature Sensor | 0 = Normal<br>1 = In Alarm | Outdoor Air Temp Sensor |
| BI-11312 | 34313 | Diagnostic: Over Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11313 | 34314 | Diagnostic: Over Voltage Circuit 2 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11314 | 34315 | Diagnostic: Phase Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11315 | 34316 | Diagnostic: Phase Loss Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11316 | 34317 | Diagnostic: Phase Reversal Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11317 | 34318 | Diagnostic: Phase Reversal Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11318 | 34319 | Diagnostic: Power Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11319 | 34320 | Diagnostic: Power Loss Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11320 | 34321 | Diagnostic: Purge Carbon Regen Temp Limit Exceeded Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11321 | 34322 | Diagnostic: Purge Carbon Regen Temp Limit Exceeded Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11322 | 34323 | Diagnostic: Purge Carbon Regen Temp Not Satisfied Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11323 | 34324 | Diagnostic: Purge Carbon Regen Temp Not Satisfied Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11324 | 34325 | Diagnostic: Purge Carbon Regen Temperature Too Low Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11325 | 34326 | Diagnostic: Purge Carbon Regen Temperature Too Low Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11326 | 34327 | Diagnostic: Purge Carbon Tank Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11327 | 34328 | Diagnostic: Purge Carbon Tank Temperature Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11328 | 34329 | Diagnostic: Purge Cprsr Suction Rfgt Temp Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11329 | 34330 | Diagnostic: Purge Cprsr Suction Rfgt Temp Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11330 | 34331 | Diagnostic: Purge Daily Pumpout Limit Exceeded Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11331 | 34332 | Diagnostic: Purge Daily Pumpout Limit Exceeded Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11332 | 34333 | Diagnostic: Purge Liquid Level Too High Continuously Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11333 | 34334 | Diagnostic: Purge Liquid Level Too High Continuously Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11334 | 34335 | Diagnostic: Purge Liquid Level Too High Warning Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11335 | 34336 | Diagnostic: Purge Liquid Level Too High Warning Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11336 | 34337 | Diagnostic: Purge Liquid Temperature Sensor Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11337 | 34338 | Diagnostic: Purge Liquid Temperature Sensor Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge |
| BI-11338 | 34339 | Diagnostic: Purge Regen Cooldown Temp Too High Circuit 1 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11339 | 34340 | Diagnostic: Purge Regen Cooldown Temp Too High Circuit 2 | 0 = Normal<br>1 = In Alarm | Purge w/Carbon tank |
| BI-11341 | 34342 | Diagnostic: Refrigerant Monitor Input | 0 = Normal<br>1 = In Alarm | Refrigerant Monitor |
| BI-11342 | 34343 | Diagnostic: Restart Inhibit Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11343 | 34344 | Diagnostic: Restart Inhibit Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11344 | 34345 | Diagnostic: Severe Current Unbalance Circuit 1 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11345 | 34346 | Diagnostic: Severe Current Unbalance Circuit 2 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11346 | 34347 | Diagnostic: Software Error 1001: Call Trane Service | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11347 | 34348 | Diagnostic: Software Error 1004: Call Trane Service | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11348 | 34349 | Diagnostic: Starter Comm Loss: Main Processor Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11349 | 34350 | Diagnostic: Starter Comm Loss: Main Processor Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11350 | 34351 | Diagnostic: Starter Contactor Interrupt Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11351 | 34352 | Diagnostic: Starter Contactor Interrupt Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11352 | 34353 | Diagnostic: Starter Did Not Fully Accelerate Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11353 | 34354 | Diagnostic: Starter Did Not Fully Accelerate Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11354 | 34355 | Diagnostic: Starter Did Not Transition Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11355 | 34356 | Diagnostic: Starter Did Not Transition Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11356 | 34357 | Diagnostic: Starter Dry Run Test Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11357 | 34358 | Diagnostic: Starter Dry Run Test Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11358 | 34359 | Diagnostic: Starter Failed to Arm/ Start Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11359 | 34360 | Diagnostic: Starter Failed to Arm/ Start Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11360 | 34361 | Diagnostic: Starter Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11361 | 34362 | Diagnostic: Starter Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11362 | 34363 | Diagnostic: Starter Fault Type I Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11363 | 34364 | Diagnostic: Starter Fault Type I Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11364 | 34365 | Diagnostic: Starter Fault Type II Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11365 | 34366 | Diagnostic: Starter Fault Type II Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11366 | 34367 | Diagnostic: Starter Fault Type III Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11367 | 34368 | Diagnostic: Starter Fault Type III Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11368 | 34369 | Diagnostic: Starter Module Memory Error Type 1 Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11369 | 34370 | Diagnostic: Starter Module Memory Error Type 1 Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11370 | 34371 | Diagnostic: Starter Module Memory Error Type 2 Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11371 | 34372 | Diagnostic: Starter Module Memory Error Type 2 Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11372 | 34373 | Diagnostic: Transition Complete Input Opened Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11373 | 34374 | Diagnostic: Transition Complete Input Opened Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11374 | 34375 | Diagnostic: Transition Complete Input Shorted Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11375 | 34376 | Diagnostic: Transition Complete Input Shorted Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11376 | 34377 | Diagnostic: Under Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11377 | 34378 | Diagnostic: Under Voltage Circuit 2 | 0 = Normal<br>1 = In Alarm | Line Voltage Sensing |
| BI-11378 | 34379 | Diagnostic: Unexpected Differential Oil Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11379 | 34380 | Diagnostic: Unexpected Differential Oil Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Standard |
| BI-11380 | 34381 | Diagnostic: Unexpected Starter Shutdown Circuit 1 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11381 | 34382 | Diagnostic: Unexpected Starter Shutdown Circuit 2 | 0 = Normal<br>1 = In Alarm | EM Starters<br>Solid State Starters<br>Remote Mount Non-Comm AFD |
| BI-11382 | 34383 | Diagnostic: AFD Bus Over Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11383 | 34384 | Diagnostic: AFD Bus Over Voltage Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11384 | 34385 | Diagnostic: AFD Bus Under Voltage Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11385 | 34386 | Diagnostic: AFD Bus Under Voltage Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11386 | 34387 | Diagnostic: AFD Motor Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11387 | 34388 | Diagnostic: AFD Motor Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11388 | 34389 | Diagnostic: AFD Precharge Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11389 | 34390 | Diagnostic: AFD Precharge Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11390 | 34391 | Diagnostic: AFD Over Temperature Circuit 1 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11391 | 34392 | Diagnostic: AFD Over Temperature Circuit 2 | 0 = Normal<br>1 = In Alarm | Remote Mount Comm AFD - VFDB (PF6000) |
| BI-11392 | 34393 | Diagnostic: AFD Mains Phase Loss Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11393 | 34394 | Diagnostic: AFD Mains Phase Loss Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11394 | 34395 | Diagnostic: AFD Motor Current Overload Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11395 | 34396 | Diagnostic: AFD Motor Current Overload Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11396 | 34397 | Diagnostic: AFD Ground Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11397 | 34398 | Diagnostic: AFD Ground Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11398 | 34399 | Diagnostic: AFD Short Circuit Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11399 | 34400 | Diagnostic: AFD Short Circuit Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11400 | 34401 | Diagnostic: AFD Safe Stop Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11401 | 34402 | Diagnostic: AFD Safe Stop Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11402 | 34403 | Diagnostic: AFD Fault Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11403 | 34404 | Diagnostic: AFD Fault Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11404 | 34405 | Diagnostic: AFD Speed Configuration Mismatch Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11405 | 34406 | Diagnostic: AFD Speed Configuration Mismatch Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11406 | 34407 | Diagnostic: AFD General Failure Circuit 1 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11407 | 34408 | Diagnostic: AFD General Failure Circuit 2 | 0 = Normal<br>1 = In Alarm | TR200 Modbus AFD |
| BI-11408 | 34409 | Comm Loss: Heat Recovery Differential Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11409 | 34410 | Comm Loss: Heat Recovery Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11410 | 34411 | Comm Loss: Heat Recovery Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11411 | 34412 | Comm Loss: Heat Recovery Water Flow Switch | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11412 | 34413 | Comm Loss: External Diagnostic Reset | 0 = Normal<br>1 = In Alarm | External Diagnostic Reset |
| BI-11413 | 34414 | Diagnostic: Heat Recovery Diff Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11414 | 34415 | Diagnostic: Heat Recovery Entering Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11415 | 34416 | Diagnostic: Heat Recovery Leaving Water Pressure | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11416 | 34417 | Diagnostic: Inverted Heat Recovery Water Temperature | 0 = Normal<br>1 = In Alarm | Heat Recovery |
| BI-11417 | 34418 | Comm Loss: Condenser Rfgt Valve Feedback Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11418 | 34419 | Comm Loss: Condenser Rfgt Valve Feedback Circuit 2 | 0 = Normal<br>1 = In Alarm | Variable Orifice |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BI-11419 | 34420 | Comm Loss: Economizer Rfgt Valve Feedback Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11420 | 34421 | Comm Loss: Economizer Rfgt Valve Feedback Circuit 2 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11421 | 34422 | Comm Loss: Economizer Intermediate Pressure Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11422 | 34423 | Comm Loss: Economizer Intermediate Pressure Circuit 2 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11423 | 34424 | Diagnostic: Economizer Rfgt Valve Loss of Control Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11424 | 34425 | Diagnostic: Economizer Rfgt Valve Loss of Control Circuit 2 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11425 | 34426 | Diagnostic: Condenser Rfgt Valve Loss of Control Circuit 1 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11426 | 34427 | Diagnostic: Condenser Rfgt Valve Loss of Control Circuit 2 | 0 = Normal<br>1 = In Alarm | Variable Orifice |
| BI-11427 | 34428 | Diagnostic: Low Condenser Water Flow | 0 = Normal<br>1 = In Alarm | Hot Water Control |
| BI-11428 | 34429 | Diagnostic: Low Heat Recovery Water Flow | 0 = Normal<br>1 = In Alarm | Heat Recovery |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| BV-10100 | 43011 | Base Loading Request | 0 = Off<br>1 = On | Base Loading |
| BV-10101 | 43012 | Reset Diagnostic | 0 = Normal<br>1 = Reset | Standard |
| BV-10102 | 43013 | Evaporator Water Pump Request BAS | 0 = Auto<br>1 = On | Standard |
| BV-10103 | 43014 | Condenser Water Pump Request BAS | 0 = Auto<br>1 = On | Standard |
| BV-10104 | 43015 | Chiller Auto Stop Command BAS | 0 = Stop<br>1 = Auto | Standard |
| BV-10105 | 43016 | Circuit 1 Lockout BAS | 0 = Normal<br>1 = Locked Out | Standard |
| BV-10106 | 43017 | Circuit 2 Lockout BAS | 0 = Normal<br>1 = Locked Out | Standard |
| BV-10107 | 43018 | Energy Consumption Reset | 0 = Accumulating<br>1 = Reset | Energy Meter<br>EM Starters w/Line Voltage Sensing<br>Unit Mount AFD (LF2)<br>Remote Mount Comm AFD (PF6000)<br>Remote Mount Comm AFD (PF7000) |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| MI-10100 | 32011 | Running Mode | 1 = Chiller Off<br>2 = Chiller In Start Mode<br>3 = Chiller In Run Mode<br>4 = Chiller In Pre-Shutdown Mode<br>5 = Chiller In Service Mode | Standard |
| MI-10101 | 32012 | Operating Mode | 1 = Cool<br>2 = Heat<br>3 = Ice Making<br>4 = Free Cooling | Standard |
| MI-10102 | 32013 | Chiller Setpoint Source | 1 = BAS<br>2 = External<br>3 = Front Panel | Standard |
| MI-10103 | 32014 | Cooling Type | 1 = Water Cooled | Standard |
| MI-10104 | 32015 | Refrigerant Type | 1 = R-11<br>2 = R-12<br>3 = R-22<br>4 = R-123<br>5 = R-134a<br>8 = R-113<br>9 = R-114<br>10 = R-500<br>11 = R-502<br>13 = R-513A<br>14 = R-1233zd(E)<br>15 = R-514A | Standard |
| MI-10105 | 32016 | Manufacturing Location | 1 = Field Applied<br>2 = La Crosse<br>15 = Taicang | Standard |
| MI-10106 | 32017 | Model Information [GEN2] | 1 = CVHF<br>2 = CVGF<br>3 = CVHS<br>11 = CDHF<br>12 = CVR<br>13 = CVHH<br>14 = CDHH<br>20 = CVHM<br>38 = CVHE<br>39 = CVHG<br>40 = CVHL<br>43 = CDHG | Standard |

| BACnet Object Identifier | Modbus Register | Object Name | Object States | Configuration Dependency |
|---|---|---|---|---|
| MV-10100 | 42011 | Chiller Mode Command BAS | 1 = Cool<br>2 = Heat<br>3 = Ice Making<br>4 = Free Cooling | Standard |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 1001 | MP: Invalid Configuration |
| 1003 | Check Clock |
| 1006 | MP: Reset Has Occurred |
| 11001 | Comm Loss: Evap Entering Water Temp |
| 11002 | Comm Loss: Evap Leaving Water Temp |
| 11005 | Comm Loss: Evap Diff Water Pressure |
| 11006 | Evaporator Entering Water Temp Sensor |
| 11007 | Evaporator Leaving Water Temp Sensor |
| 11008 | Evaporator Diff Water Pressure Xdcr |
| 11009 | Evaporator Inverted Water Temperature |
| 11012 | Evaporator Entering Water Pressure |
| 11013 | Evaporator Leaving Water Pressure |
| 11014 | Comm Loss: Evaporator Entering Water Pressure |
| 11015 | Comm Loss: Evaporator Leaving Water Pressure |
| 21001 | Comm Loss: Condenser Entering Water Temp |
| 21002 | Comm Loss: Condenser Leaving Water Temp |
| 21003 | Comm Loss: Heat Recovery Entering Water Temp |
| 21004 | Comm Loss: Heat Recovery Leaving Water Temp |
| 21005 | Comm Loss: Cond Diff Water Pressure |
| 21006 | Condenser Entering Water Temp Sensor |
| 21007 | Condenser Leaving Water Temp Sensor |
| 21008 | Heat Recovery Entering Water Temp Sensor |
| 21009 | Heat Recovery Leaving Water Temp Sensor |
| 21010 | Condenser Diff Water Pressure Xdcr |
| 21011 | Condenser Inverted Water Temp |
| 21012 | Condenser Entering Water Pressure |
| 21013 | Condenser Leaving Water Pressure |
| 21014 | Comm Loss: Condenser Entering Water Pressure |
| 21015 | Comm Loss: Condenser Leaving Water Pressure |
| 21016 | Comm Loss: Heat Recovery Entering Water Pressure |
| 21017 | Heat Recovery Entering Water Pressure |
| 21018 | Comm Loss: Heat Recovery Leaving Water Pressure |
| 21019 | Heat Recovery Leaving Water Pressure |
| 21020 | Heat Recovery Differential Water Pressure |
| 21021 | Comm Loss: Heat Recovery Differential Water Pressure |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 31001 | Evaporator Water Flow Overdue |
| 31002 | Evaporator Water Flow Lost |
| 31003 | Comm Loss: Evaporator Water Flow Switch |
| 31004 | Comm Loss: Evaporator Water Pump Relay |
| 31005 | Low Evaporator Water Flow |
| 31006 | High Evaporator Water Temperature |
| 41001 | Condenser Water Flow Overdue |
| 41002 | Condenser Water Flow Lost |
| 41003 | Comm Loss: Condenser Water Flow Switch |
| 41004 | Comm Loss: Condenser Water Pump Relay |
| 41005 | Comm Loss: Heat Recovery Water Flow Switch |
| 61001 | Comm Loss: High Lift Unload Valve Relay |
| 71001 | Emergency Stop |
| 71002 | Comm Loss: External Auto/Stop |
| 71003 | Comm Loss: Emergency Stop |
| 71004 | Comm Loss: Ext Chilled/Hot Wtr Setpoint |
| 71005 | Comm Loss: Ext Demand Limit Setpoint |
| 71009 | External Chilled/Hot Water Setpoint |
| 71010 | External Demand Limit Setpoint |
| 71012 | Comm Loss: Cond Rfgt Pressure Output |
| 71014 | Comm Loss: Refrigerant Monitor Input |
| 71021 | Comm Loss: External Hot Water Command |
| 71022 | Comm Loss: Compressor Motor % RLA Output |
| 71023 | Refrigerant Monitor Input |
| 71026 | Comm Loss: Programmable Relay Board 1 |
| 71027 | Comm Loss: Programmable Relay Board 2 |
| 71028 | Comm Loss: Cond Head Pressure Control Output |
| 81001 | Comm Loss: External Free Cooling Command |
| 81002 | Comm Loss: Free Cool Actrs Closed Input |
| 81003 | Comm Loss: Free Cool Liq Line Actr Relay |
| 81004 | Comm Loss: Free Cool Gas Line Actr Relay |
| 81005 | Comm Loss: Free Cooling Auxiliary Relay |
| 81006 | Free Cooling Actuators Not Open |
| 81007 | Free Cooling Actrs Not Open During FC |
| 81008 | Free Cooling Actuators Not Closed |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 81009 | Free Cooling Actuators Unexpectedly Open |
| 101001 | Comm Loss: Purge Liquid Temperature |
| 101002 | Comm Loss: Purge Cprsr Suction Rfgt Temp |
| 101003 | Comm Loss: Purge Carbon Tank Temperature |
| 101004 | Comm Loss: Purge Liquid Level Switch |
| 101006 | Comm Loss: Purge Pumpout Relay |
| 101007 | Comm Loss: Purge Carbon Tank Heater Rly |
| 101008 | Comm Loss: Purge Regen Solenoid Relay |
| 101009 | Comm Loss: Purge Alarm Relay |
| 101010 | Comm Loss: Purge Pumpout Solenoid Output |
| 101011 | Comm Loss: Purge Exhaust Solenoid Output |
| 101012 | Comm Loss: Purge Condensing Unit Relay |
| 101013 | Purge Liquid Temperature Sensor |
| 101014 | Purge Cprsr Suction Rfgt Temp Sensor |
| 101015 | Purge Carbon Tank Temperature Sensor |
| 101016 | Purge Liquid Level Too High Warning |
| 101017 | Purge Liquid Level Too High Continuously |
| 101018 | Purge Carbon Regen Temperature Too Low |
| 101019 | Purge Carbon Regen Temp Limit Exceeded |
| 101020 | Purge Regen Cooldown Temp Too High |
| 101021 | Purge Daily Pumpout Limit Exceeded |
| 101022 | Purge Carbon Regen Temp Not Satisfied |
| 111001 | Comm Loss: Evap Saturated Rfgt Temp |
| 111002 | Comm Loss: Cond Saturated Rfgt Temp |
| 111003 | Comm Loss: Cond Refrigerant Pressure |
| 111004 | Evap Saturated Refrigerant Temp Sensor |
| 111005 | Cond Saturated Refrigerant Temp Sensor |
| 111006 | Condenser Refrigerant Pressure Xdcr |
| 111007 | Evaporator Approach Temp Inverted |
| 111008 | Condenser Approach Temp Inverted |
| 121001 | Starter Failed to Arm/Start |
| 121003 | Comm Loss: EM Starter |
| 121004 | Comm Loss: Adaptive Frequency Drive |
| 121005 | Starter Fault |
| 121006 | Comm Loss: Starter Fault |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 121008 | Unexpected Starter Shutdown |
| 121017 | AFD Interrupt Failure |
| 121018 | AFD Drive Fault |
| 121019 | AFD Mains Phase Loss |
| 121020 | AFD Motor Current Overload |
| 121021 | AFD Ground Current |
| 121022 | AFD Short Circuit |
| 121023 | AFD Safe Stop |
| 121024 | AFD Fault |
| 121025 | AFD Comm Loss: Main Processor |
| 121026 | AFD Speed Mismatch |
| 121027 | AFD General Diagnostic |
| 131005 | Comm Loss: Energy Meter |
| 131006 | Comm Loss: Outdoor Air Temperature |
| 131007 | Outdoor Air Temp Sensor |
| 131008 | Excessive Loss of Communication |
| 131009 | Comm Loss: Generator Start/Stop Relay |
| 131010 | Comm Loss: Generator Speed Signal Output |
| 131011 | Comm Loss: Generator Up To Speed Input |
| 131012 | Generator Fault Relay Open |
| 131013 | Generator Ready Signal Overdue |
| 131014 | Comm Loss: Generator Fault Input |
| 131015 | AFD Speed Signal Comm Loss |
| 131018 | Software Error 1001 |
| 131019 | Software Error 1004 |
| 141001 | Comm Loss: IGV First Stage Actuator |
| 141001 | External Base Loading Setpoint |
| 141002 | Comm Loss: IGV Second Stage Actuator |
| 141002 | Comm Loss: Ext Base Loading Setpoint |
| 141003 | Comm Loss: Ext Base Loading Command |
| 161001 | Low Evap Leaving Water Temp: Unit Off |
| 161002 | Low Evap Leaving Water Temp: Unit On |
| 161003 | Evap Rfgt Temp Deviate From Selection |
| 171001 | Low Differential Oil Pressure |
| 171002 | Check Oil Filter |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 171003 | Oil Pressure Sensor Calibration |
| 171004 | High Vacuum Lockout |
| 171005 | Unexpected Differential Oil Pressure |
| 171006 | Low Oil Temperature |
| 171007 | High Oil Temperature |
| 171008 | Differential Oil Pressure Overdue |
| 171009 | Comm Loss: Oil Pump Discharge Pressure |
| 171010 | Comm Loss: Oil Tank Pressure |
| 171011 | Comm Loss: Oil Diff Pressure Switch |
| 171012 | Comm Loss: Oil Tank Temperature |
| 171013 | Comm Loss: Oil/Refrigerant Pump Relay |
| 171014 | Comm Loss: Oil Tank Heater Relay |
| 171015 | Oil Pump Discharge Pressure Transducer |
| 171016 | Oil Tank Pressure Transducer |
| 171017 | Oil Tank Temperature Sensor |
| 171018 | Comm Loss: Oil Lite Status |
| 171019 | Comm Loss: Oil Tank Heater Relay 1 |
| 171020 | Comm Loss: Oil Tank Heater Relay 2 |
| 171021 | Check Oil Heater |
| 171022 | Comm Loss: Evap Lubrication Source Valve |
| 171024 | Comm Loss: Bearing Lube Flow First Stage |
| 171025 | Comm Loss: Bearing Lube Flow Second Stage |
| 171026 | Low Bearing Lube Flow First Stage |
| 171027 | Low Bearing Lube Flow Second Stage |
| 171028 | Comm Loss: Lube Pump Discharge Pressure |
| 171029 | Comm Loss: Lube Pump Suction Pressure |
| 171030 | Comm Loss: Lube/Refrigerant Pump Relay |
| 171031 | Differential Lube Pressure Overdue |
| 171032 | Low Differential Lube Pressure |
| 171033 | Lube Pressure Sensor Calibration |
| 171034 | Lube Pump Discharge Pressure Transducer |
| 171035 | Lube Pump Suction Pressure Transducer |
| 171036 | Unexpected Differential Lube Pressure |
| 171037 | Check Lube Filter |
| 171038 | Comm Loss: Cond Lubrication Source Valve |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 171039 | Bearing Lube Flow First Stage Sensor Input |
| 171040 | Bearing Lube Flow Second Stage Sensor Input |
| 171041 | Comm Loss: Cooler Solenoid |
| 171042 | Comm Loss: Oil Vent Line Actuator Signal Output |
| 171043 | Low Bearing Lube Flow Lockout First Stage |
| 171044 | Low Bearing Lube Flow Lockout Second Stage |
| 171045 | Lube Pump Override Low Diff Pressure |
| 171046 | Lube Pump Override Low Flow First Stage |
| 171047 | Lube Pump Override Low Flow Second Stage |
| 171048 | Bearing Flow Overdue First Stage |
| 171049 | Bearing Flow Overdue Second Stage |
| 201001 | Low Evaporator Refrigerant Temperature |
| 201002 | Condenser High Pressure Cutout |
| 201003 | Comm Loss: Cond High Pressure Cutout |
| 201004 | High Evaporator Refrigerant Temperature |
| 201005 | High Differential Refrigerant Pressure |
| 201006 | Software High Pressure Cutout |
| 211004 | Bypass SCR Pole 1,2, or 3 not closed |
| 211005 | Extended Compressor Surge |
| 211013 | RAM Failure in IPC3 Starter Micro |
| 211014 | EEPROM Failure in IPC3 Starter Micro |
| 211015 | EEPROM Failure in IT Starter Micro |
| 211016 | EEPROM Failure in IT SSS Starter Micro |
| 211028 | Thermal Overload Trip |
| 211031 | Compressor did Accelerate: Forced Full voltage Ramp |
| 211032 | Compressor did Accelerate: Shutdown |
| 211033 | Zero Voltage Cross |
| 211035 | Starter: Watchdog |
| 211036 | Starter Phase Lock Loop |
| 211037 | Starter Illegal Address |
| 211038 | At Speed Input Shorted |
| 211039 | Starter Did Not Fully Accelerate |
| 211040 | At Speed Input Opened |
| 211080 | Starter Comm Loss: Main Processor |
| 211081 | Starter Fault Type I |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 211082 | Starter Fault Type II |
| 211083 | Starter Fault Type III |
| 211084 | EM Starter Contactor Interrupt Failure |
| 211085 | Starter Did Not Transition |
| 211086 | Transition Complete Input Shorted |
| 211087 | EM Phase Loss |
| 211088 | EM Phase Reversal |
| 211089 | EM Severe Current Unbalance |
| 211090 | EM Power Loss |
| 211091 | EM Momentary Power Loss |
| 211092 | EM Motor Current Overload |
| 211093 | Compressor Did Not Accelerate: Shutdown |
| 211095 | Cprsr Did Not Accelerate: Transition |
| 211096 | Transition Complete Input Opened |
| 211097 | Starter Module Memory Error Type 1 |
| 211098 | Starter Module Memory Error Type 2 |
| 211099 | EM Starter Dry Run Test |
| 211120 | AFD Power Loss |
| 211121 | AFD Start Inhibited |
| 211122 | AFD Motor Current Overload |
| 211123 | AFD Motor Short |
| 211124 | AFD Instantaneous Current Overload |
| 211125 | AFD High Temperature |
| 211126 | AFD Output Phase Loss |
| 211127 | AFD Ground Fault |
| 211128 | HPC/High AFD Heat Sink Water Pressure |
| 211129 | AFD Comm Loss: Main Processor |
| 211130 | AFD High Bus Voltage |
| 211131 | AFD Control Board Memory Error Type 2 |
| 211132 | AFD General Failure |
| 211133 | AFD Fatal Software Error |
| 211134 | AFD I/O Board Failure |
| 211135 | AFD Power Intfc Controller Board Failure |
| 211136 | AFD Power Structure Board Failure |
| 211137 | AFD DPI Device Failure |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 211138 | AFD DPI Communication Failure |
| 211139 | AFD RS485 Board Memory Error Type 2 |
| 211144 | High Outboard Bearing Pad Temperature 1 |
| 211145 | High Outboard Bearing Pad Temperature 2 |
| 211146 | High Outboard Bearing Pad Temperature 3 |
| 211147 | Outboard Bearing Pad Temperature Sensor 1 |
| 211148 | Outboard Bearing Pad Temperature Sensor 2 |
| 211149 | Outboard Bearing Pad Temperature Sensor 3 |
| 211150 | Comm Loss: Outboard Bearing Pad Temperature 1 |
| 211151 | Comm Loss: Outboard Bearing Pad Temperature 2 |
| 211152 | Comm Loss: Outboard Bearing Pad Temperature 3 |
| 211160 | High Motor Winding Temperature 1 |
| 211161 | High Motor Winding Temperature 2 |
| 211162 | High Motor Winding Temperature 3 |
| 211163 | Comm Loss: Motor Winding Temperature 1 |
| 211164 | Comm Loss: Motor Winding Temperature 2 |
| 211165 | Comm Loss: Motor Winding Temperature 3 |
| 211166 | High Inboard Bearing Temperature |
| 211167 | High Outboard Bearing Temperature |
| 211168 | Comm Loss: Inboard Bearing Temperature |
| 211169 | Comm Loss: Outboard Bearing Temperature |
| 211170 | High Cprsr Rfgt Discharge Temperature |
| 211171 | Comm Loss: Cprsr Discharge Rfgt Temp |
| 211172 | Under Voltage |
| 211173 | Over Voltage |
| 211174 | Motor Winding Temperature 1 Sensor |
| 211175 | Motor Winding Temperature 2 Sensor |
| 211176 | Motor Winding Temperature 3 Sensor |
| 211177 | Inboard Bearing Temperature Sensor |
| 211178 | Outboard Bearing Temperature Sensor |
| 211179 | Cprsr Discharge Refrigerant Temp Sensor |
| 211183 | Comm Loss: MTC Input |
| 211184 | MTC Sensor |
| 211185 | Comm Loss: Winding Temp Lite |
| 211186 | Restart Inhibit |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 211187 | Motor Coolant Temp Comm Loss |
| 211188 | Motor Coolant Temperature Sensor |
| 211189 | High Motor Coolant Temperature |
| 211192 | AFD DSP Board Over Temp |
| 211193 | AFD DSP Board Initialization Failure |
| 211194 | AFD DSP Board ID Error |
| 211195 | AFD Non-Volatile Memory Failure |
| 211196 | AFD AD Calibration Error |
| 211197 | AFD Watchdog Timer Overflow |
| 211198 | AFD Overspeed |
| 211199 | AFD Low Rotor Flux Feedback |
| 211200 | AFD Bump Failure |
| 211201 | AFD Start Failure |
| 211202 | AFD IGBT Self Test Failure |
| 211203 | AFD Gate Kill Active |
| 211204 | AFD Inverter Heatsink Over Temp |
| 211205 | AFD Rectifier Heatsink Over Temp |
| 211206 | AFD Gate Drive Board Over Temp |
| 211207 | AFD Bus Ripple Too High |
| 211208 | AFD DSP Board Low Voltage Failure |
| 211209 | AFD Bus Under Voltage |
| 211210 | AFD Current Sensor Self Test Failure |
| 211211 | AFD Gate Drive Fault |
| 211212 | AFD Panel Interlock Fault |
| 211213 | AFD Panel Interlock Warning |
| 211214 | AFD Gate Drive Module Comm Loss |
| 211215 | AFD Emergency Stop |
| 211216 | AFD Desaturation Detected |
| 211217 | AFD Estimated Junction Over Temp |
| 211218 | AFD Invalid Drive Command |
| 211219 | AFD IMC 24V Low Voltage Failure |
| 211220 | AFD AHD Frequency Out Of Range |
| 211221 | AFD Loss Of AHD Sync Signal |
| 211222 | AFD AHD Sync Signal Error |
| 211223 | AFD Excessive AHD Inhibit |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 211224 | AFD Gate Drive Low Voltage Failure |
| 211225 | AFD Temperature Sensor Warning |
| 211226 | AFD Bus Over Voltage |
| 211227 | Vibration Level Sensor Comm Loss |
| 211228 | Vibration Level Sensor |
| 211230 | AFD Precharge Fault |
| 211231 | AFD Over Temperature |
| 211232 | AFD Motor Fault |
| 211233 | AFD External Fault Input |
| 211234 | AFD Input Transformer or Filter High Temp |
| 241001 | Comm Loss: External Ice Building Command |
| 241002 | Comm Loss: Ice Building Relay |
| 261001 | Extended Compressor Surge |
| 281001 | Comm Loss: Hot Gas Bypass Load Relay |
| 281002 | Comm Loss: Hot Gas Bypass Actr Closed In |
| 281003 | Comm Loss: Hot Gas Bypass Unload Relay |
| 281004 | Hot Gas Bypass Valve Closure Overdue |
| 281005 | Hot Gas Bypass Valve Opening Overdue |
| 281006 | Hot Gas Bypass Valve Unexpectedly Open |
| 381001 | Condenser Liquid Level Sensor |
| 381002 | Comm Loss: Condenser Liquid Level Sensor |
| 381003 | Economizer Liquid Level Sensor |
| 381004 | Comm Loss: Economizer Liquid Level Sensor |
| 381005 | Comm Loss: Economizer Bypass Valve Feedback |
| 381006 | Economizer Bypass Valve Loss of Control |
| 381007 | Condenser Rfgt Valve Loss of Control |
| 381008 | Comm Loss: Condenser Rfgt Valve Feedback |
| 381009 | Economizer Rfgt Valve Loss of Control |
| 381010 | Comm Loss: Economizer Rfgt Valve Feedback |
| 381011 | Comm Loss: Economizer Intermediate Pressure |
| 381012 | Economizer Intermediate Pressure |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 1001 | MP: Invalid Configuration |
| 1003 | Check Clock |
| 1006 | MP: Reset Has Occurred |
| 11001 | Comm Loss: Evap Entering Water Temp |
| 11002 | Comm Loss: Evap Leaving Water Temp |
| 11005 | Comm Loss: Evap Diff Water Pressure |
| 11006 | Evaporator Entering Water Temp Sensor |
| 11007 | Evaporator Leaving Water Temp Sensor |
| 11008 | Evaporator Diff Water Pressure Xdcr |
| 11009 | Evaporator Inverted Water Temperature |
| 11012 | Evaporator Entering Water Pressure |
| 11013 | Evaporator Leaving Water Pressure |
| 11014 | Comm Loss: Evaporator Entering Water Pressure |
| 11015 | Comm Loss: Evaporator Leaving Water Pressure |
| 21001 | Comm Loss: Condenser Entering Water Temp |
| 21002 | Comm Loss: Condenser Leaving Water Temp |
| 21003 | Comm Loss: Heat Recovery Entering Water Temp |
| 21004 | Comm Loss: Heat Recovery Leaving Water Temp |
| 21005 | Comm Loss: Cond Diff Water Pressure |
| 21006 | Condenser Entering Water Temp Sensor |
| 21007 | Condenser Leaving Water Temp Sensor |
| 21008 | Heat Recovery Entering Water Temp Sensor |
| 21009 | Heat Recovery Leaving Water Temp Sensor |
| 21010 | Condenser Diff Water Pressure Xdcr |
| 21011 | Inverted Condenser Water Temperature |
| 21012 | Condenser Entering Water Pressure |
| 21013 | Condenser Leaving Water Pressure |
| 21014 | Comm Loss: Condenser Entering Water Pressure |
| 21015 | Comm Loss: Condenser Leaving Water Pressure |
| 31001 | Evaporator Water Flow Overdue |
| 31002 | Evaporator Water Flow Lost |
| 31003 | Comm Loss: Evaporator Water Flow Switch |
| 31004 | Comm Loss: Evaporator Water Pump Relay |
| 31005 | Low Evaporator Water Flow |
| 31006 | High Evaporator Water Temperature |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 41001 | Condenser Water Flow Overdue |
| 41002 | Condenser Water Flow Lost |
| 41003 | Comm Loss: Condenser Water Flow Switch |
| 41004 | Comm Loss: Condenser Water Pump Relay |
| 71001 | Emergency Stop |
| 71002 | Comm Loss: External Auto/Stop |
| 71003 | Comm Loss: Emergency Stop |
| 71004 | Comm Loss: Ext Chilled/Hot Water Setpoint |
| 71005 | Comm Loss: Ext Demand Limit Setpoint |
| 71009 | External Chilled/Hot Water Setpoint |
| 71010 | External Demand Limit Setpoint |
| 71011 | Comm Loss: Programmable Relay Board 1 - ckt 1 |
| 71012 | Comm Loss: Cond Rfgt Pressure Output - ckt 1 |
| 71013 | Comm Loss: Compressor Running Relay |
| 71014 | Comm Loss: Refrigerant Monitor Input |
| 71015 | Comm Loss: Non-Wrn Latching Alarm Relay |
| 71016 | Comm Loss: Non-Wrn Nonlatching Alm Relay |
| 71017 | Comm Loss: Unit Purge Alarm Relay |
| 71018 | Comm Loss: Limit Warning Relay |
| 71019 | Comm Loss: Maximum Capacity Relay |
| 71020 | Comm Loss: Head Relief Request Relay |
| 71021 | Comm Loss: External Hot Water Command |
| 71022 | Comm Loss: Compressor Motor % RLA Output - ckt 1 |
| 71023 | Refrigerant Monitor Input |
| 71024 | Comm Loss: Programmable Relay Board 2 - ckt 2 |
| 71025 | Comm Loss: Cond Head Press Cntrl Output |
| 72012 | Comm Loss: Cond Rfgt Pressure Output - ckt 2 |
| 72022 | Comm Loss: Compressor Motor % RLA Output - ckt 2 |
| 81001 | Comm Loss: External Free Cooling Command |
| 81006 | Free Cooling Actuators Not Open |
| 81007 | Free Cooling Actrs Not Open During FC |
| 81008 | Free Cooling Actuators Not Closed |
| 81009 | Free Cooling Actuators Unexpectedly Open |
| 91001 | Comm Loss: Energy Meter 1 |
| 92001 | Comm Loss: Energy Meter 2 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 101001 | Comm Loss: Purge Liquid Temperature - ckt 1 |
| 101002 | Comm Loss: Purge Cprsr Suction Rfgt Temp - ckt 1 |
| 101003 | Comm Loss: Purge Carbon Tank Temperature - ckt 1 |
| 101004 | Comm Loss: Purge Liquid Level Switch - ckt 1 |
| 101006 | Comm Loss: Purge Pumpout Relay - ckt 1 |
| 101007 | Comm Loss: Purge Carbon Tank Heater Rly - ckt 1 |
| 101008 | Comm Loss: Purge Regen Solenoid Relay - ckt 1 |
| 101009 | Comm Loss: Purge Alarm Relay - ckt 1 |
| 101010 | Comm Loss: Purge Pumpout Solenoid Output - ckt 1 |
| 101011 | Comm Loss: Purge Exhaust Solenoid Output - ckt 1 |
| 101012 | Comm Loss: Purge Condensing Unit Relay - ckt 1 |
| 101013 | Purge Liquid Temperature Sensor - ckt 1 |
| 101014 | Purge Cprsr Suction Rfgt Temp Sensor - ckt 1 |
| 101015 | Purge Carbon Tank Temperature Sensor - ckt 1 |
| 101016 | Purge Liquid Level Too High Warning - ckt 1 |
| 101017 | Purge Liquid Level Too High Continuously - ckt 1 |
| 101018 | Purge Carbon Regen Temperature Too Low - ckt 1 |
| 101019 | Purge Carbon Regen Temp Limit Exceeded - ckt 1 |
| 101020 | Purge Regen Cooldown Temp Too High - ckt 1 |
| 101021 | Purge Daily Pumpout Limit Exceeded - ckt 1 |
| 101022 | Purge Carbon Regen Temp Not Satisfied - ckt 1 |
| 102001 | Comm Loss: Purge Liquid Temperature - ckt 2 |
| 102002 | Comm Loss: Purge Cprsr Suction Rfgt Temp - ckt 2 |
| 102003 | Comm Loss: Purge Carbon Tank Temperature - ckt 2 |
| 102004 | Comm Loss: Purge Liquid Level Switch - ckt 2 |
| 102006 | Comm Loss: Purge Pumpout Relay - ckt 2 |
| 102007 | Comm Loss: Purge Carbon Tank Heater Rly - ckt 2 |
| 102008 | Comm Loss: Purge Regen Solenoid Relay - ckt 2 |
| 102009 | Comm Loss: Purge Alarm Relay - ckt 2 |
| 102010 | Comm Loss: Purge Pumpout Solenoid Output - ckt 2 |
| 102011 | Comm Loss: Purge Exhaust Solenoid Output - ckt 2 |
| 102012 | Comm Loss: Purge Condensing Unit Relay - ckt 2 |
| 102013 | Purge Liquid Temperature Sensor - ckt 2 |
| 102014 | Purge Cprsr Suction Rfgt Temp Sensor - ckt 2 |
| 102015 | Purge Carbon Tank Temperature Sensor - ckt 2 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 102016 | Purge Liquid Level Too High Warning - ckt 2 |
| 102017 | Purge Liquid Level Too High Continuously - ckt 2 |
| 102018 | Purge Carbon Regen Temperature Too Low - ckt 2 |
| 102019 | Purge Carbon Regen Temp Limit Exceeded - ckt 2 |
| 102020 | Purge Regen Cooldown Temp Too High - ckt 2 |
| 102021 | Purge Daily Pumpout Limit Exceeded - ckt 2 |
| 102022 | Purge Carbon Regen Temp Not Satisfied - ckt 2 |
| 111001 | Comm Loss: Evap Sat Refrig Temp - ckt 1 |
| 111002 | Comm Loss: Cond Saturated Rfgt Temp - ckt 1 |
| 111003 | Comm Loss: Cond Refrigerant Pressure - ckt 1 |
| 111004 | Evap Saturated Refrigerant Temp Sensor - ckt 1 |
| 111005 | Cond Saturated Refrigerant Temp Sensor - ckt 1 |
| 111006 | Condenser Refrigerant Pressure Xdcr - ckt 1 |
| 111007 | Comm Loss: External Ckt Lockout - ckt 1 |
| 111008 | Comm Loss: Generator Start/Stop Relay - ckt 1 |
| 111009 | Comm Loss: Generator Speed Signal Output - ckt 1 |
| 111010 | Comm Loss: Generator Up To Speed Input - ckt 1 |
| 111011 | Generator Fault Relay Open - ckt 1 |
| 111012 | Generator Ready Signal Overdue - ckt 1 |
| 111013 | Comm Loss: Generator Fault Input - ckt 1 |
| 111015 | Comm Loss: AFD Speed Signal VDC Output - ckt 1 |
| 111016 | Comm Loss: Evap Refrigerant Pressure - ckt 1 |
| 111017 | Evaporator Refrigerant Pressure Xdcr - ckt 1 |
| 112001 | Comm Loss: Evap Sat Refrig Temp - ckt 2 |
| 112002 | Comm Loss: Cond Saturated Rfgt Temp - ckt 2 |
| 112003 | Comm Loss: Cond Refrigerant Pressure - ckt 2 |
| 112004 | Evap Saturated Refrigerant Temp Sensor - ckt 2 |
| 112005 | Cond Saturated Refrigerant Temp Sensor - ckt 2 |
| 112006 | Condenser Refrigerant Pressure Xdcr - ckt 2 |
| 112007 | Comm Loss: External Ckt Lockout - ckt 2 |
| 112008 | Comm Loss: Generator Start/Stop Relay - ckt 2 |
| 112009 | Comm Loss: Generator Speed Signal Output - ckt 2 |
| 112010 | Comm Loss: Generator Up To Speed Input - ckt 2 |
| 112011 | Generator Fault Relay Open - ckt 2 |
| 112012 | Generator Ready Signal Overdue - ckt 2 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 112013 | Comm Loss: Generator Fault Input - ckt 2 |
| 112015 | Comm Loss: AFD Speed Signal VDC Output - ckt 2 |
| 112016 | Comm Loss: Evap Refrigerant Pressure - ckt 2 |
| 112017 | Evaporator Refrigerant Pressure Xdcr - ckt 2 |
| 121001 | Starter Failed to Arm/Start - ckt 1 |
| 121003 | Comm Loss: Starter - ckt 1 |
| 121004 | Comm Loss: Adaptive Frequency Drive - ckt 1 |
| 121005 | Starter Fault - ckt 1 |
| 121006 | Comm Loss: Starter Fault - ckt 1 |
| 121007 | AFD Interrupt Failure - ckt 1 |
| 121008 | Unexpected Starter Shutdown - ckt 1 |
| 122001 | Starter Failed to Arm/Start - ckt 2 |
| 122003 | Comm Loss: Starter - ckt 2 |
| 122004 | Comm Loss: Adaptive Frequency Drive - ckt 2 |
| 122005 | Starter Fault - ckt 2 |
| 122006 | Comm Loss: Starter Fault - ckt 2 |
| 122007 | AFD Interrupt Failure - ckt 2 |
| 122008 | Unexpected Starter Shutdown - ckt 2 |
| 131006 | Comm Loss: Outdoor Air Temperature |
| 131007 | Outdoor Air Temperature Sensor |
| 131008 | Excessive Loss of Communication |
| 131022 | Software Error 1001: Call Trane Service |
| 131023 | Software Error 1004: Call Trane Service |
| 141001 | Comm Loss: IGV First Stage Actuator - ckt 1 |
| 141001 | External Base Loading Setpoint |
| 141002 | Comm Loss: Ext Base Loading Setpoint |
| 141002 | Comm Loss: IGV Second Stage Actuator - ckt 1 |
| 141003 | Comm Loss: Ext Base Loading Command |
| 142001 | Comm Loss: IGV First Stage Actuator - ckt 2 |
| 142002 | Comm Loss: IGV Second Stage Actuator - ckt 2 |
| 161001 | Low Evap Leaving Water Temp: Unit Off |
| 161002 | Low Evap Leaving Water Temp: Unit On |
| 171001 | Low Differential Oil Pressure - ckt 1 |
| 171002 | Check Oil Filter - ckt 1 |
| 171003 | Oil Pressure Sensor Calibration - ckt 1 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 171004 | High Vacuum Lockout - ckt 1 |
| 171005 | Unexpected Differential Oil Pressure - ckt 1 |
| 171006 | Low Oil Temperature - ckt 1 |
| 171007 | High Oil Temperature - ckt 1 |
| 171008 | Differential Oil Pressure Overdue - ckt 1 |
| 171009 | Comm Loss: Oil Pump Discharge Pressure - ckt 1 |
| 171010 | Comm Loss: Oil Tank Pressure - ckt 1 |
| 171012 | Comm Loss: Oil Tank Temperature - ckt 1 |
| 171013 | Comm Loss: Oil/Refrigerant Pump Relay - ckt 1 |
| 171014 | Comm Loss: Oil Tank Heater Relay - ckt 1 |
| 171015 | Oil Pump Discharge Pressure Transducer - ckt 1 |
| 171016 | Oil Tank Pressure Transducer - ckt 1 |
| 171017 | Oil Tank Temperature Sensor - ckt 1 |
| 171018 | Check Oil Heater - ckt 1 |
| 171019 | Comm Loss: Oil Tank Heater 4E1 Relay - ckt 1 |
| 171020 | Comm Loss: Oil Tank Heater 4E2 Relay - ckt 1 |
| 171021 | Comm Loss: Oil Vent Line - ckt 1 |
| 171022 | Comm Loss: Oil Cooler Solenoid - ckt 1 |
| 172001 | Low Differential Oil Pressure - ckt 2 |
| 172002 | Check Oil Filter - ckt 2 |
| 172003 | Oil Pressure Sensor Calibration - ckt 2 |
| 172004 | High Vacuum Lockout - ckt 2 |
| 172005 | Unexpected Differential Oil Pressure - ckt 2 |
| 172006 | Low Oil Temperature - ckt 2 |
| 172007 | High Oil Temperature - ckt 2 |
| 172008 | Differential Oil Pressure Overdue - ckt 2 |
| 172009 | Comm Loss: Oil Pump Discharge Pressure - ckt 2 |
| 172010 | Comm Loss: Oil Tank Pressure - ckt 2 |
| 172012 | Comm Loss: Oil Tank Temperature - ckt 2 |
| 172013 | Comm Loss: Oil/Refrigerant Pump Relay - ckt 2 |
| 172014 | Comm Loss: Oil Tank Heater Relay - ckt 2 |
| 172015 | Oil Pump Discharge Pressure Transducer - ckt 2 |
| 172016 | Oil Tank Pressure Transducer - ckt 2 |
| 172017 | Oil Tank Temperature Sensor - ckt 2 |
| 172018 | Check Oil Heater - ckt 2 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 172019 | Comm Loss: Oil Tank Heater 4E1 Relay - ckt 2 |
| 172020 | Comm Loss: Oil Tank Heater 4E2 Relay - ckt 2 |
| 172021 | Comm Loss: Oil Vent Line - ckt 2 |
| 172022 | Comm Loss: Oil Cooler Solenoid - ckt 2 |
| 201001 | Low Evaporator Refrigerant Temperature - ckt 1 |
| 201002 | Condenser High Pressure Cutout - ckt 1 |
| 201003 | Comm Loss: Cond High Pressure Cutout - ckt 1 |
| 201004 | High Evaporator Refrigerant Temperature - ckt 1 |
| 201005 | High Differential Refrigerant Pressure - ckt 1 |
| 202001 | Low Evaporator Refrigerant Temperature - ckt 2 |
| 202002 | Condenser High Pressure Cutout - ckt 2 |
| 202003 | Comm Loss: Cond High Pressure Cutout - ckt 2 |
| 202004 | High Evaporator Refrigerant Temperature - ckt 2 |
| 202005 | High Differential Refrigerant Pressure - ckt 2 |
| 211005 | Extended Compressor Surge - ckt 1 |
| 211013 | RAM Failure in IPC3 Starter Micro |
| 211014 | EEPROM Failure in IPC3 Starter Micro |
| 211038 | At Speed Input Shorted - ckt 1 |
| 211039 | Starter Did Not Fully Accelerate - ckt 1 |
| 211040 | At Speed Input Opened - ckt 1 |
| 211080 | Starter Comm Loss: Main Processor - ckt 1 |
| 211081 | Starter Fault Type I - ckt 1 |
| 211082 | Starter Fault Type II - ckt 1 |
| 211083 | Starter Fault Type III - ckt 1 |
| 211084 | Starter Contactor Interrupt Failure - ckt 1 |
| 211085 | Starter Did Not Transition - ckt 1 |
| 211086 | Transition Complete Input Shorted - ckt 1 |
| 211087 | Phase Loss - ckt 1 |
| 211088 | Phase Reversal - ckt 1 |
| 211089 | Severe Current Unbalance - ckt 1 |
| 211090 | Power Loss - ckt 1 |
| 211091 | Momentary Power Loss - ckt 1 |
| 211092 | Motor Current Overload - ckt 1 |
| 211093 | Compressor Did Not Accelerate: Shutdown - ckt 1 |
| 211095 | Cprsr Did Not Accelerate: Transition - ckt 1 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 211096 | Transition Complete Input Opened - ckt 1 |
| 211097 | Starter Module Memory Error Type 1 - ckt 1 |
| 211098 | Starter Module Memory Error Type 2 - ckt 1 |
| 211099 | Starter Dry Run Test - ckt 1 |
| 211120 | AFD Power Loss - ckt 1 |
| 211121 | AFD Start Inhibited - ckt 1 |
| 211122 | AFD Motor Current Overload - ckt 1 |
| 211123 | AFD Motor Short - ckt 1 |
| 211124 | AFD Instantaneous Current Overload - ckt 1 |
| 211125 | AFD High Temperature - ckt 1 |
| 211126 | AFD Output Phase Loss - ckt 1 |
| 211127 | AFD Ground Fault - ckt 1 |
| 211128 | HPC/High AFD Heat Sink Water Pressure - ckt 1 |
| 211129 | AFD Comm Loss: Main Processor - ckt 1 |
| 211130 | AFD High Bus Voltage - ckt 1 |
| 211131 | AFD Control Board Memory Error Type 2 - ckt 1 |
| 211132 | AFD General Failure - ckt 1 |
| 211133 | AFD Fatal Software Error - ckt 1 |
| 211134 | AFD I/O Board Failure - ckt 1 |
| 211135 | AFD Power Intfc Controller Board Failure - ckt 1 |
| 211136 | AFD Power Structure Board Failure - ckt 1 |
| 211138 | AFD DPI Communication Failure - ckt 1 |
| 211139 | AFD RS485 Board Memory Error Type 2 - ckt 1 |
| 211144 | High Outboard Bearing Pad Temperature 1 - ckt 1 |
| 211145 | High Outboard Bearing Pad Temperature 2 - ckt 1 |
| 211146 | High Outboard Bearing Pad Temperature 3 - ckt 1 |
| 211147 | Outboard Bearing Pad Temp 1 Sensor - ckt 1 |
| 211148 | Outboard Bearing Pad Temp 2 Sensor - ckt 1 |
| 211149 | Outboard Bearing Pad Temp 3 Sensor - ckt 1 |
| 211150 | Comm Loss: Outboard Bearing Pad Temp 1 - ckt 1 |
| 211151 | Comm Loss: Outboard Bearing Pad Temp 2 - ckt 1 |
| 211152 | Comm Loss: Outboard Bearing Pad Temp 3 - ckt 1 |
| 211160 | High Motor Winding Temperature 1 - ckt 1 |
| 211161 | High Motor Winding Temperature 2 - ckt 1 |
| 211162 | High Motor Winding Temperature 3 - ckt 1 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 211163 | Comm Loss: Motor Winding Temperature 1 - ckt 1 |
| 211164 | Comm Loss: Motor Winding Temperature 2 - ckt 1 |
| 211165 | Comm Loss: Motor Winding Temperature 3 - ckt 1 |
| 211166 | High Inboard Bearing Temperature - ckt 1 |
| 211167 | High Outboard Bearing Temp - ckt 1 |
| 211168 | Comm Loss: Inboard Bearing Temperature - ckt 1 |
| 211169 | Comm Loss: Outboard Bearing Temperature - ckt 1 |
| 211170 | High Cprsr Rfgt Discharge Temperature - ckt 1 |
| 211171 | Comm Loss: Cprsr Discharge Rfgt Temp - ckt 1 |
| 211172 | Under Voltage - ckt 1 |
| 211173 | Over Voltage - ckt 1 |
| 211174 | Motor Winding Temperature 1 Sensor - ckt 1 |
| 211175 | Motor Winding Temperature 2 Sensor - ckt 1 |
| 211176 | Motor Winding Temperature 3 Sensor - ckt 1 |
| 211177 | Inboard Bearing Temp Sensor - ckt 1 |
| 211178 | Outboard Bearing Temperature Sensor - ckt 1 |
| 211179 | Cprsr Discharge Refrigerant Temp Sensor - ckt 1 |
| 211186 | Restart Inhibit - ckt 1 |
| 211209 | AFD Bus Under Voltage - ckt 1 |
| 211226 | AFD Bus Over Voltage - ckt 1 |
| 211230 | AFD Precharge Fault - ckt 1 |
| 211231 | AFD Over Temperature - ckt 1 |
| 211232 | AFD Motor Fault - ckt 1 |
| 212005 | Extended Compressor Surge - ckt 2 |
| 212038 | At Speed Input Shorted - ckt 2 |
| 212039 | Starter Did Not Fully Accelerate - ckt 2 |
| 212040 | At Speed Input Opened - ckt 2 |
| 212080 | Starter Comm Loss: Main Processor - ckt 2 |
| 212081 | Starter Fault Type I - ckt 2 |
| 212082 | Starter Fault Type II - ckt 2 |
| 212083 | Starter Fault Type III - ckt 2 |
| 212084 | Starter Contactor Interrupt Failure - ckt 2 |
| 212085 | Starter Did Not Transition - ckt 2 |
| 212086 | Transition Complete Input Shorted - ckt 2 |
| 212087 | Phase Loss - ckt 2 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 212088 | Phase Reversal - ckt 2 |
| 212089 | Severe Current Unbalance - ckt 2 |
| 212090 | Power Loss - ckt 2 |
| 212091 | Momentary Power Loss - ckt 2 |
| 212092 | Motor Current Overload - ckt 2 |
| 212093 | Compressor Did Not Accelerate: Shutdown - ckt 2 |
| 212095 | Cprsr Did Not Accelerate: Transition - ckt 2 |
| 212096 | Transition Complete Input Opened - ckt 2 |
| 212097 | Starter Module Memory Error Type 1 - ckt 2 |
| 212098 | Starter Module Memory Error Type 2 - ckt 2 |
| 212099 | Starter Dry Run Test - ckt 2 |
| 212120 | AFD Power Loss - ckt 2 |
| 212121 | AFD Start Inhibited - ckt 2 |
| 212122 | AFD Motor Current Overload - ckt 2 |
| 212123 | AFD Motor Short - ckt 2 |
| 212124 | AFD Instantaneous Current Overload - ckt 2 |
| 212125 | AFD High Temperature - ckt 2 |
| 212126 | AFD Output Phase Loss - ckt 2 |
| 212127 | AFD Ground Fault - ckt 2 |
| 212128 | HPC/High AFD Heat Sink Water Pressure - ckt 2 |
| 212129 | AFD Comm Loss: Main Processor - ckt 2 |
| 212130 | AFD High Bus Voltage - ckt 2 |
| 212131 | AFD Control Board Memory Error Type 2 - ckt 2 |
| 212132 | AFD General Failure - ckt 2 |
| 212133 | AFD Fatal Software Error - ckt 2 |
| 212134 | AFD I/O Board Failure - ckt 2 |
| 212135 | AFD Power Intfc Controller Board Failure - ckt 2 |
| 212136 | AFD Power Structure Board Failure - ckt 2 |
| 212138 | AFD DPI Communication Failure - ckt 2 |
| 212139 | AFD RS485 Board Memory Error Type 2 - ckt 2 |
| 212144 | High Outboard Bearing Pad Temperature 1 - ckt 2 |
| 212145 | High Outboard Bearing Pad Temperature 2 - ckt 2 |
| 212146 | High Outboard Bearing Pad Temperature 3 - ckt 2 |
| 212147 | Outboard Bearing Pad Temp 1 Sensor - ckt 2 |
| 212148 | Outboard Bearing Pad Temp 2 Sensor - ckt 2 |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 212149 | Outboard Bearing Pad Temp 3 Sensor - ckt 2 |
| 212150 | Comm Loss: Outboard Bearing Pad Temp 1 - ckt 2 |
| 212151 | Comm Loss: Outboard Bearing Pad Temp 2 - ckt 2 |
| 212152 | Comm Loss: Outboard Bearing Pad Temp 3 - ckt 2 |
| 212160 | High Motor Winding Temperature 1 - ckt 2 |
| 212161 | High Motor Winding Temperature 2 - ckt 2 |
| 212162 | High Motor Winding Temperature 3 - ckt 2 |
| 212163 | Comm Loss: Motor Winding Temperature 1 - ckt 2 |
| 212164 | Comm Loss: Motor Winding Temperature 2 - ckt 2 |
| 212165 | Comm Loss: Motor Winding Temperature 3 - ckt 2 |
| 212166 | High Inboard Bearing Temperature - ckt 2 |
| 212167 | High Outboard Bearing Temp - ckt 2 |
| 212168 | Comm Loss: Inboard Bearing Temperature - ckt 2 |
| 212169 | Comm Loss: Outboard Bearing Temperature - ckt 2 |
| 212170 | High Cprsr Rfgt Discharge Temperature - ckt 2 |
| 212171 | Comm Loss: Cprsr Discharge Rfgt Temp - ckt 2 |
| 212172 | Under Voltage - ckt 2 |
| 212173 | Over Voltage - ckt 2 |
| 212174 | Motor Winding Temperature 1 Sensor - ckt 2 |
| 212175 | Motor Winding Temperature 2 Sensor - ckt 2 |
| 212176 | Motor Winding Temperature 3 Sensor - ckt 2 |
| 212177 | Inboard Bearing Temp Sensor - ckt 2 |
| 212178 | Outboard Bearing Temperature Sensor - ckt 2 |
| 212179 | Cprsr Discharge Refrigerant Temp Sensor - ckt 2 |
| 212186 | Restart Inhibit - ckt 2 |
| 212209 | AFD Bus Under Voltage - ckt 2 |
| 212226 | AFD Bus Over Voltage - ckt 2 |
| 212230 | AFD Precharge Fault - ckt 2 |
| 212231 | AFD Over Temperature - ckt 2 |
| 212232 | AFD Motor Fault - ckt 2 |
| 241001 | Comm Loss: External Ice Building Command |
| 241002 | Comm Loss: Ice Building Relay |
| 261001 | Extended Compressor Surge - ckt 1 |
| 262001 | Extended Compressor Surge - ckt 2 |
| 281001 | Comm Loss: Hot Gas Bypass Load Relay |

| Diagnostic Code (Dec) | Diagnostic Name |
|---|---|
| 281002 | Comm Loss: Hot Gas Bypass Actr Closed In |
| 281003 | Comm Loss: Hot Gas Bypass Unload Relay |
| 281004 | Hot Gas Bypass Valve Closure Overdue |
| 281005 | Hot Gas Bypass Valve Opening Overdue |
| 281006 | Hot Gas Bypass Valve Unexpectedly Open |
| 381001 | Condenser Liquid Level Sensor - ckt 1 |
| 381002 | Comm Loss: Condenser Liquid Level Sensor - ckt 1 |
| 381005 | Comm Loss: Economizer Bypass Valve - ckt 1 |
| 381006 | Loss of Economizer Bypass Valve Control - ckt 1 |
| 382001 | Condenser Liquid Level Sensor - ckt 2 |
| 382002 | Comm Loss: Condenser Liquid Level Sensor - ckt 2 |
| 382005 | Comm Loss: Economizer Bypass Valve - ckt 2 |
| 382006 | Loss of Economizer Bypass Valve Control - ckt 2 |