Daikin Magnitude® Chiller
Unit Controller

Protocol Implementation Conformance Statement (PICS)
ANSI/ASHRAE 135-2004, BACnet®

Model WME Magnetic Bearing Centrifugal Chiller
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# Revision History

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<th>Date</th>
<th>Description</th>
</tr>
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<tr>
<td>ED 15119</td>
<td>April 2010</td>
<td>Preliminary release.</td>
</tr>
<tr>
<td>ED 15119-1</td>
<td>January 2011</td>
<td>Added PICs text to title page.</td>
</tr>
<tr>
<td>ED 15119-2</td>
<td>October 2011</td>
<td>Updated application software version to 4.14.1</td>
</tr>
<tr>
<td>ED 15119-3</td>
<td>February 2016</td>
<td>Updated branding information.</td>
</tr>
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</table>

# Reference Documents

<table>
<thead>
<tr>
<th>Company</th>
<th>Number</th>
<th>Title</th>
<th>Source</th>
</tr>
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# Notice

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# Limited Warranty


BACnet Protocol Implementation Conformance Statement

Date: February 2016
Vendor Name: Daikin Applied
Product Name: Magnitude Chiller Unit Controller
Product Model Number: WME
Application Software Version: 4.14.1
Firmware Revision: 2.05
BACnet Protocol Revision: Version 1 Revision 4

Product Description

The Magnitude Chiller Unit Controller with optional BACnet Communication Module is a microprocessor-based controller designed to operate Daikin Applied chillers and be integrated into BACnet building automation systems.

BACnet Standardized Device Profile

- BACnet Operator Workstation (B-OWS)
- BACnet Building Controller (B-BC)
- BACnet Advanced Application Specific Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)

BACnet Interoperability Building Blocks (BIBBs) Supported

<table>
<thead>
<tr>
<th>BIBB Name</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sharing – ReadProperty – B</td>
<td>DS-RP-B</td>
</tr>
<tr>
<td>Data Sharing – ReadPropertyMultiple – B</td>
<td>DS-RPM-B1</td>
</tr>
<tr>
<td>Data Sharing – WriteProperty – B</td>
<td>DS-WP-B</td>
</tr>
<tr>
<td>Data Sharing – WritePropertyMultiple – B</td>
<td>DS-WPM-B1</td>
</tr>
<tr>
<td>Device Management – Dynamic Device Binding – B</td>
<td>DM-DDB-B</td>
</tr>
<tr>
<td>Device Management – Dynamic Object Binding – B</td>
<td>DM-DOB-B</td>
</tr>
<tr>
<td>Device Management – DeviceCommunicationControl – B</td>
<td>DM-DCC-B</td>
</tr>
<tr>
<td>Device Management – TimeSynchronization – B</td>
<td>DM-TS-B1</td>
</tr>
<tr>
<td>Device Management – UTCTimeSynchronization – B</td>
<td>DM-UTC-B</td>
</tr>
<tr>
<td>Device Management – ReinitializeDevice – B</td>
<td>DM-RD-B3</td>
</tr>
</tbody>
</table>

1. This BIB is not required for B-ASC but is highly desirable for optimum performance on the network.
2. DM-TS-B is not required for B-ASC.
3. DB-RD-B will be implemented such that the BACnet card is reset without resetting the chiller controller. The chiller controller can never be reset via the BACnet network. Reinitialize Device will be implemented with a non-changeable password of 1234.
### Standard Object Types Supported

<table>
<thead>
<tr>
<th>Object-Type</th>
<th>Dynamically Creatable</th>
<th>Dynamically Deleteable</th>
<th>Optional Properties Supported</th>
<th>Writable Properties not Required to be Writable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Input</td>
<td>□</td>
<td>□</td>
<td>Description Reliability Min_Pres_Value Max_Pres_Value</td>
<td></td>
</tr>
<tr>
<td>Analog Output</td>
<td>□</td>
<td>□</td>
<td>Description Reliability Min_Pres_Value Max_Pres_Value</td>
<td>Relinquish Default</td>
</tr>
<tr>
<td>Analog Value</td>
<td>□</td>
<td>□</td>
<td>Description Reliability Priority_Array Relinquish_Default</td>
<td>Present_Value&lt;sup&gt;2&lt;/sup&gt; Relinquish_Default</td>
</tr>
<tr>
<td>Binary Input</td>
<td>□</td>
<td>□</td>
<td>Description Reliability Inactive_Text Active_Text</td>
<td></td>
</tr>
<tr>
<td>Binary Output</td>
<td>□</td>
<td>□</td>
<td>Description Reliability Inactive_Text Active_Text</td>
<td>Relinquish Default</td>
</tr>
<tr>
<td>Binary Value</td>
<td>□</td>
<td>□</td>
<td>Description Reliability Inactive_Text Active_Text Priority_Array Relinquish_Default</td>
<td>Present_Value&lt;sup&gt;2&lt;/sup&gt; Relinquish_Default</td>
</tr>
<tr>
<td>Device</td>
<td>□</td>
<td>□</td>
<td>Description Location Local_Time Local_Date UTC_Offset Daylight_Savings_Status Max_Master Max_Info_Frames</td>
<td>Object_Identifier Object_Name Description Location UTC_Offset Max_Master Max_Info_Frames APDU_Timeout Number_of_APDU_Retries</td>
</tr>
<tr>
<td>Multi-state Input</td>
<td>□</td>
<td>□</td>
<td>Description Reliability State_Text</td>
<td></td>
</tr>
<tr>
<td>Multi-state Output</td>
<td>□</td>
<td>□</td>
<td>Description Reliability State_Text</td>
<td>Relinquish Default</td>
</tr>
<tr>
<td>Multi-state Value</td>
<td>□</td>
<td>□</td>
<td>Description Reliability State_Text Priority_Array Relinquish_Default</td>
<td>Present_Value&lt;sup&gt;2&lt;/sup&gt; Relinquish_Default</td>
</tr>
</tbody>
</table>

1. Though the BACnet communication module supports the following object types, not all object types are currently used.
2. This property will be writable only if defined writable in the CSV file which is downloaded into the unit controller.
Data Link Layer Options
- BACnet IP, (Annex J)
- ISO 8802-2, Ethernet (Clause 7)
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400 & 76800

Segmentation Capability
- Segmented requests supported
- Segmented responses supported

Device Address Binding
- Yes Static Device Binding
- No

Networking Options
- Router, Clause 6

Routing Configurations:
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)

Character Sets Supported
- ANSI X3.4
- IBM®/Microsoft® DBCS
- ISO 8859-1
- ISO 10646 (UCS-2)
- ISO 10646 (UCS-4)
- JIS C 6226

NOTE: Support for multiple character sets does not imply they can be supported simultaneously.

Non-BACnet Equipment/Network(s) Support
- Communication Gateway

Non-BACnet equipment/networks(s):
Daikin Applied Training and Development

Now that you have made an investment in modern, efficient Daikin equipment, its care should be a high priority. For training information on all Daikin HVAC products, please visit us at www.DaikinApplied.com and click on Training, or call 540-248-9646 and ask for the Training Department.

Warranty

All Daikin equipment is sold pursuant to its standard terms and conditions of sale, including Limited Product Warranty. Consult your local Daikin Applied representative for warranty details. To find your local Daikin Applied representative, go to www.DaikinApplied.com.

Aftermarket Services

To find your local parts office, visit www.DaikinApplied.com or call 800-37PARTS (800-377-2787). To find your local service office, visit www.DaikinApplied.com or call 800-432-1342.

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