



Sales and Engineering Data Sheet

ED 15119-3

Group: **Controls**

Part Number: **ED 15119**

Date: **February 2016**

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

ED 15119	April 2010	Preliminary release.
ED 15119-1	January 2011	Added PICs text to title page.
ED 15119-2	October 2011	Updated application software version to 4.14.1
ED 15119-3	February 2016	Updated branding information.

Reference Documents

Company	Number	Title	Source
Daikin Applied	ED 15117	Magnitude Centrifugal Chiller Protocol Document	www.DaikinApplied.com
Daikin Applied	OM 1034	Magnitude Centrifugal Chiller Operation and Maintenance Manual	www.DaikinApplied.com
Daikin Applied	IOM 1209	Magnitude Frictionless Centrifugal Chiller Installation, Operation and Maintenance Manual 1000–1500 Tons	www.DaikinApplied.com
Daikin Applied	IM 963	Magnitude Centrifugal Chiller, BACnet Communication Module (MSTP, IP/Ethernet) Installation Manual	www.DaikinApplied.com
American Society of Heating, Refrigerating and Air-Conditioning Engineers	ANSI / ASHRAE 135-2004	BACnet A Data Communication Protocol for Building Automation and Control Networks	www.ashrae.org

Notice

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Limited Warranty

Consult your local Daikin Applied representative for warranty details. To find your local Daikin Applied representative, go to www.DaikinApplied.com.

This section contains the Protocol Implementation Conformance Statement (PICS) for the Magnitude Chiller Unit Controller of Daikin Applied as required by ANSI/ASHRAE Standard 135-2004, BACnet: A Data Communication Protocol for Building Automation and Control Networks.

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

BIBB Name	Designation
Data Sharing – ReadProperty – B	DS-RP-B
Data Sharing – ReadPropertyMultiple – B	DS-RPM-B ¹
Data Sharing – WriteProperty – B	DS-WP-B
Data Sharing – WritePropertyMultiple – B	DS-WPM-B ¹
Device Management – Dynamic Device Binding – B	DM-DDB-B
Device Management – Dynamic Object Binding – B	DM-DOB-B
Device Management – DeviceCommunicationControl – B	DM-DCC-B
Device Management – TimeSynchronization – B	DM-TS-B ²
Device Management – UTCTimeSynchronization – B	DM-UTC-B
Device Management – ReinitializeDevice – B	DM-RD-B ³

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

Object-Type ¹	Dynamically Creatable	Dynamically Deleteable	Optional Properties Supported	Writable Properties not Required to be Writable
Analog Input	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Min_Pres_Value Max_Pres_Value	
Analog Output	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Min_Pres_Value Max_Pres_Value	Relinquish Default
Analog Value	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Priority_Array Relinquish_Default	Present_Value ² Relinquish_Default
Binary Input	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Inactive_Text Active_Text	
Binary Output	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Inactive_Text Active_Text	Relinquish_Default
Binary Value	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability Inactive_Text Active_Text Priority_Array Relinquish_Default	Present_Value ² Relinquish_Default
Device	<input type="checkbox"/>	<input type="checkbox"/>	Description Location Local_Time Local_Date UTC_Offset Daylight_Savings_Status Max_Master Max_Info_Frames	Object_Identifier Object_Name Description Location UTC_Offset Max_Master Max_Info_Frames APDU_Timeout Number_of_APDU_Retries
Multi-state Input	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability State_Text	
Multi-state Output	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability State_Text	Relinquish_Default
Multi-state Value	<input type="checkbox"/>	<input type="checkbox"/>	Description Reliability State_Text Priority_Array Relinquish_Default	Present_Value ² Relinquish_Default

1. Though the BACnet communication module supports the following object types, not all objects 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 Window Size:
- Segmented responses supported Window Size:

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)
- Yes Registrations by Foreign Devices?
- No

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/network(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.

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to www.DaikinApplied.com.

Products manufactured in an ISO Certified Facility.