Engineering Data

ED 19014

Group: **Controls**

Part Number: ED 19014

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MicroTech® III Generic I/O Panel Protocol Information

BACnet® Networks



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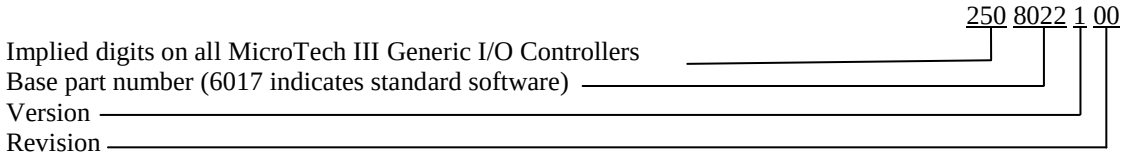
Revision History

ED19014 July 2011 Initial release.

Software Revision

Keypad Menu Path Main Screen\About This Unit\App Version=

The software part number is encoded in the controller's memory and is available for display on the keypad/display. The part number is available via BACnet® system integration tools. The software part number codification is as follows:



This edition documents Network Protocols for version 2508022100 of the standard MicroTech® III Generic I/O Panel application and all subsequent versions until otherwise indicated. However, if your software is of a later version, some of the information in this document may not completely describe your application.

You can determine the revision of the application software from the keypad/display. The path for this information from the main menu is *Main Screen\About This Unit\App Version=*.

Reference Documents

Company	Number	Title	Source
Daikin	OM 920	MicroTech III Unit Controls for Applied Rooftop and Self-Contained Systems Operation Manual	www.DaikinApplied.com
American Society of Heating, Refrigerating and Air-Conditioning Engineers	ANSI/ ASHRAE 135-2008	BACnet® A Data Communication Protocol for Building Automation and Control Networks	www.ashrae.org
Daikin	ED 19013	MicroTech III Generic I/O BACnet Protocol Implementation and Conformance Statement (PICS)	www.DaikinApplied.com

Notice

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Limited Warranty

Consult your local Daikin Representative for warranty details. Refer to Form 933-430285Y. To find your local Daikin Representative, go to www.DaikinApplied.com.

Introduction

This document contains the necessary information you need to incorporate a MicroTech III Generic I/O Panel from Daikin into a Delivered VAV System. It lists all BACnet® properties and corresponding MicroTech III Generic I/O Panel data points. It also contains the BACnet Protocol Implementation Conformance Statement (PICS). BACnet terms are not defined. Refer to the respective specifications for definitions and details.

Generic I/O Panel Data Points

The MicroTech III Generic I/O Panel contains data points or unit variables that are accessible from two user interfaces: the unit keypad or the Delivered VAV System Panel touch screen. Not all points are accessible from each interface. This manual lists all important data points and the corresponding path for each applicable interface. Refer to OM 1092 (available on www.DaikinApplied.com) for touch screen interface details. This document contains the network details necessary to incorporate the MicroTech III Generic I/O Panel into the Delivered VAV System.

Protocol Definitions

The MicroTech III Generic I/O Panel can be configured in an interoperable BACnet network. The controller must have the corresponding communication module installed for network integration (see Reference Document section for corresponding part numbers). There is one communication module: BACnet MS/TP (Master/Slave Token Passing).

BACnet Protocol

BACnet is a standard communication protocol for Building Automation and Control Networks developed by the American National Standards Institute (ANSI) and American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE) specified in ANSI/ASHRAE standard 135-2008. It addresses all aspects of the various systems that are applied to building control systems. BACnet provides the communication infrastructure needed to integrate products manufactured by different vendors and to integrate building services that are now independent.

Basic Protocol Information

Setting Communications Parameters

The MicroTech III Generic I/O Panel comes pre-configured for use in the Delivered VAV System. It has been given an appropriate and unique MSTP MAC Adress and Device Instance number. Changing these or any of the communication parameters should not be necessary and is not recommended unless instructed to do so by the factory. There are 12 communication parameters involved in the proper communication of the MicroTech III Generic I/O Panel over BACnet MS/TP.

Communication Setup Parameter Settings

Parameter Name	BACnet MS/TP
MSTP MAC Address[1]	120
MSTP Baud Rate	38400
Device Instance Number	3101120
Max APDU Length	480
Device Object Name	POL904_AD45EC28[2]
Max Master	127
Max Info Frames	1

Notes:
1. The MSTP MAC Address is set via the keypad/display. You must cycle power after changing it for the changes to take effect.
2. The last 8 digits are computed from the production number and date code.

BACnet Networks

Compatibility

The MicroTech III Generic I/O Panel is tested according to the BACnet Testing Laboratory (BTL) Test Plan. It is designed to meet the requirements of the BACnet Standard (ANSI/ASHRAE 135-2008) as stated in the Protocol Implementation and Conformance Statement (PICS). However, it is not BTL listed. The PICS is located at the end of this manual or the separate PICS document, ED 19013 (available on www.DaikinApplied.com.) .

BACnet Objects

MicroTech III Generic I/O Panels incorporate standard BACnet object types (i.e., object types defined in the BACnet Standard) that conform to the BACnet Standard. Each object has properties that control unit variables or data points. Some object types occur more than once in the MicroTech III controller; each occurrence or instance has different properties and controls different unit variables or data points. Each instance is designated with a unique instance index. Some properties can be adjusted (read/write properties, e.g., setpoints) from the network and others can only be interrogated (read-only properties, e.g., status information).

Each data point accessible from a BACnet network is described with a table that gives the Object Identifier, Property Identifier, Full BACnet Reference or path, and the Name enumeration of the property.

Example of BACnet Data Point

Keypad Menu Path Main Menu\IO Status\Digital Output Status\DO1=

Object Identifier			**Property**	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Output	4	1	Present_Value	85
Full Reference				
<Device Name>.BO1.Present_Value				

Enumeration
0 = Off 1 = On

Object Identifier

Object Identifiers are each designated with an Object type as defined in the BACnet specification. The first column of the data point definition gives the object type.

The object identifier is a property of the object that you can read from the object. The name of the property is "Object_Identifier" and the property identifier is 75.

Each object in the controller has a unique identifier. BACnet object identifiers are two-part numbers of BACnet Object Identifier data type. The first part identifies the object type (the first 10 bits of the 32-bit BACnet Object Identifier [See ANSI/ASHRAE 135-2008 BACnet A Data Communication Protocol for Building Automation and Control Networks]). The first column of the data point definition gives the object type. The second part identifies the instances of that particular object type (the last 22 bits of the 32-bit BACnet Object Identifier).

The object identifier is shown in the data points listing as two numbers. The first number is shown in the Type ID column and designates the Object type enumeration. The second number is shown in the Instance column and designates the instance of that particular object type.

The object identifier is a property of the object that you can read from the object code. The name of the property is "Object_Identifier" and the property identifier is 75. The ASHRAE BACnet specification reserves the first 128 numbers for ASHRAE defined objects. Manufacturers may define additional object types and assign a number above 127 as long as they conform to the requirements of the ASHRAE BACnet specification.

Each object also has a name. Object names are character strings. The object name is a property of the object that you can read from the object. The name of the property is "Object_Name" and the property identifier is 77.

Objects are sometimes referred to as an object type and instance number as they are in the BACnet specification. The example object above would be: Binary Output, Instance 1.

Property Identifier

Each object has a number of properties or attributes. Each property has a unique identifier of BACnet Property Identifier data type. Property identifiers are an enumerated set; a number identifies each member. The Property Identifier enumeration number is shown in the Property ID column. In the example above the property identifier is 85.

Property Name

Each property also has a unique name. Property names are character strings and shown in the Property Name column. In the example above the property name is Present Value.

Full Reference

The full reference is the path of the property within the network where the MicroTech III Generic I/O Panel resides. It is a character string equivalent to the object identifier and the property identifier. In the example above the full reference is <Device Name>.BO1.Present_Value.

Enumerated Values

Some properties are standard data types and some are enumerated sets. If the property value is an enumerated set, all enumerated values and corresponding meaning are given in the Enumeration column of the data point listing.

MicroTech III Generic I/O Panel Device Object

Each BACnet compatible device must have one and only one BACnet Device Object.

Device Object Identifier

The MicroTech III Generic I/O Panel Device Object Identifier uniquely specifies the unit within the network. The device object type for all devices is fixed by ASHRAE at 8. Therefore the device object instance number must be unique. The initial Device Object identifier is set at manufacturing. The device object identifier can be read from the controller. The name of the property is "Object_Identifier" and the property identifier is 75.

The initial device object instance number is 3101120. This number must be unique on the entire BACnet network. The object instance number can be changed via the keypad display. You must cycle power for the change to take effect.

NOTE

If another device in the network already has this object identifier (instance number), you must change the instance number of one device object, so that all devices in the network have a unique device identifier.

Device Object Name

The Device Object Name uniquely specifies a device in the network. It must be unique in the network. The device name for the MicroTech III Generic I/O Panel is to be determined. The device name is the "prefix" of all object names in the MicroTech III Generic I/O Panel. All objects include the device name and a period "." preceding the object name.

The Device Object name is also available to the network in the device. The property name is "Object_Name" and property identifier is 77. The default Object Name is POL904_######## where ######## is computed from the production number and date code.

Device Object Properties

The device object contains many other informative properties as shown in Table 1.

Table 1. MicroTech III Generic I/O Panel Device Object Properties

Property	Identifier	Default Value	Data Type
Object Identifier	75	Device, variable	BACnetObjectIdentifier
Object Name	77	POL904_FF2BEE[1]	Character String
Object Type	79	8	BACnetObjectType
System Status	112		BACnetDeviceStatus
Vendor Name	121	Daikin	Character String
Vendor Identifier	120	3	Unsigned 16
Model Name	70	McQ IO	Character String
Firmware Version	44	variable	Character String
Application Software Revision	12	variable	Character String
Location	58	MT III Generic IO	Character String
Description	28	McQ IO	Character String
Protocol Version	98	1	Unsigned
Protocol Revision	139	4	Unsigned
Protocol Services Supported	97		BACnetServicesSupported
Protocol Object Types Supported[2]	96	AI, AO, AV, BI, BO, BV, Cal, Device, MSI, MSO, NC, Sch, MSV	BACnetObjectTypesSupported
Object List	76		Sequence of BACnetObjectIdentifer
Max APDU Length Accepted	62	480	Unsigned 16
Segmentation Supported	107	None	BACnetSegmentation
Max Segments Accepted	167	16	Unsigned
Local Time[3]	57	variable	Time
Local Date[3]	56	variable	Date
UTC Offset	119	-120 (Range: –780 .. 780)	Integer
Daylight Savings Status	24	variable	Boolean
APDU Segment Timeout	10	2000	Unsigned
APDU Timeout	11	3000	Unsigned
Number of APDU Retries	73	3	Unsigned
Device Address Binding	30		Sequence of BACnetAddressBinding
Database Revision	115	1	Unsigned
Active COV Subscriptions	152		List of BACnetCOVSubsriptions

1. The last 8 digitS are computed from the production number printed on the bar code label affixed to the side of the module.

2. While the MicroTech III Generic I/O Panel supports the entire set of object types, not all object types are used. See the Object List for details.
3. The BACnet communication module and the MicroTech III Controller both have their own time clocks. The date and time read via BACnet could differ from the date and time in the controller the date or time is changed via the keypad display. The two time clocks resynchronize approximately every 60-68 minutes and after every power cycle of the controller or BACnet communication module.

Network Considerations

Access to Properties

Object properties are accessible from the network by specifying the device object identifier, object identifier, and the property identifier. To access a property, you must specify the object identifier including the device object identifier or the object name including the device object name and the property identifier.

Configuring the Controller

The MicroTech III Generic I/O Panel with attached BACnet communication module is ready to operate with the default values of the various parameters. Default values may be changed with the unit's keypad or via the network. See the MicroTech III Unit Controller Operation Manual (OM 920) available on www.DaikinApplied.com.

BACnet MS/TP Network Addressing

The BACnet MS/TP device address (Media Access Control [MAC] address) of the MicroTech III Generic I/O Controller in a BACnet Master Slave/Token Passing (MS/TP) Local Area Network (LAN) is set using the keypad/display. Navigate to the Advanced Menus\MSTP Setup menu to change this value. You must cycle power (turn the controller off and then on again) in order for the new address to take effect.

Comprehensive Data Point Table

These comprehensive data point table contains the significant parameters of specific data points.

BACnet Standard Objects

Network Control Property	Page	Read, Write, Commandable	Object Type	Instance	Description
Analog Inputs					
Analog Input 1	11	W[1]	AI	1	Status of hardware input AI1
Analog Input 2	11	W[1]	AI	2	Status of hardware input AI2
Analog Input 3	11	W[1]	AI	3	Status of hardware input AI3
Analog Input X6	11	W[1]	AI	4	Status of universal hardware input X6
Analog Input X7	11	W[1]	AI	5	Status of universal hardware input X7
Analog Input X8	12	W[1]	AI	6	Status of universal hardware input X8
Analog Outputs					
Analog Output X1	12	C	AO	1	Status of unitversal hardware output X1
Analog Output X2	12	C	AO	2	Status of unitversal hardware output X2
Analog Output X3	12	C	AO	3	Status of unitversal hardware output X3
Analog Output X4	12	C	AO	4	Status of unitversal hardware output X4
Analog Output X5	12	C	AO	5	Status of unitversal hardware output X5
Analog Values					
PID Derivative – X1	17	W[1]	AV	1	The derivative used for the PID loop that controls the X1 output.
PID Integral Time – X1	20	W[1]	AV	2	The integral time used for the PID loop that controls the X1 output.
PID Propband – X1	20	W[1]	AV	3	The propband used for the PID loop that controls the X1 output.
PID Deadband – X1	16	W[1]	AV	4	The deaband used for the PID loop that controls the X1 output.
PID Setpoint – X1	21	W[1]	AV	5	The setpoint used for the PID loop that controls the X1 output.
PID Derivative – X2	17	W[1]	AV	6	The derivative used for the PID loop that controls the X2 output.
PID Integral Time – X2	20	W[1]	AV	7	The integral time used for the PID loop that controls the X2 output.
PID Propband – X2	21	W[1]	AV	8	The propband used for the PID loop that controls the X2 output.
PID Deadband – X2	17	W[1]	AV	9	The deaband used for the PID loop that controls the X2 output.
PID Setpoint – X2	22	W[1]	AV	10	The setpoint used for the PID loop that controls the X2 output.
PID Derivative – X3	18	W[1]	AV	11	The derivative used for the PID loop that controls the X3 output.
PID Integral Time – X3	20	W[1]	AV	12	The integral time used for the PID loop that controls the X3 output.
PID Propband – X3	21	W[1]	AV	13	The propband used for the PID loop that controls the X3 output.
PID Deadband – X3	17	W[1]	AV	14	The deaband used for the PID loop that controls the X3 output.
PID Setpoint – X3	22	W[1]	AV	15	The setpoint used for the PID loop that controls the X3 output.
PID Derivative – X4	18	W[1]	AV	16	The derivative used for the PID loop that controls the X4 output.
PID Integral Time – X4	20	W[1]	AV	17	The integral time used for the PID loop that controls the X4 output.
PID Propband – X4	21	W[1]	AV	18	The propband used for the PID loop that controls the X4 output.
PID Deadband – X4	17	W[1]	AV	19	The deaband used for the PID loop that controls the X4 output.
PID Setpoint – X4	22	W[1]	AV	20	The setpoint used for the PID loop that controls the X4 output.
PID Derivative – X5	18	W[1]	AV	21	The derivative used for the PID loop that controls the X5 output.
PID Integral Time – X5	20	W[1]	AV	22	The integral time used for the PID loop that controls the X5 output.
PID Propband – X5	21	W[1]	AV	23	The propband used for the PID loop that controls the X5 output.
PID Deadband – X5	17	W[1]	AV	24	The deaband used for the PID loop that controls the X5 output.
PID Setpoint – X5	22	W[1]	AV	25	The setpoint used for the PID loop that controls the X5 output.
Binary Inputs					
Digital Input 1	13	W[1]	BI	1	Status of hardware digital input 1 (DI1)
Digital Input 2	13	W[1]	BI	2	Status of hardware digital input 2 (DI2)
Digital Input 3	13	W[1]	BI	3	Status of hardware digital input 3 (DI3)
Digital Input 4	13	W[1]	BI	4	Status of hardware digital input 4 (DI4)
Digital Input 5	13	W[1]	BI	5	Status of hardware digital input 5 (DI5)
Digital Input 6	14	W[1]	BI	6	Status of hardware digital input 6 (DI6)

Network Control Property	Page	Read, Write, Commandable	Object Type	Instance	Description
Binary Outputs					
Digital Output 1	14	C	BO	1	Status of hardware digital output 1 (DO1)
Digital Output 2	14	C	BO	2	Status of hardware digital output 2 (DO2)
Digital Output 3	14	C	BO	3	Status of hardware digital output 3 (DO3)
Digital Output 4	15	C	BO	4	Status of hardware digital output 4 (DO4)
Digital Output 5	15	C	BO	5	Status of hardware digital output 5 (DO5)
Digital Output 6	15	C	BO	6	Status of hardware digital output 6 (DO6)
Digital Output 7	15	C	BO	7	Status of hardware digital output 7 (DO7)
Digital Output 8	15	C	BO	8	Status of hardware digital output 8 (DO8)
Digital Output 9	16	C	BO	9	Status of hardware digital output 9 (DO9)
Digital Output 10	16	C	BO	10	Status of hardware digital output 10 (DO10)
Multistate Values					
Unit Support	22	W[1]	MSV	1	Units being sent between the controller and BACnet. (1=Metric, 2=English)
PID Input – X1	18	W[1]	MSV	2	The sensor used as the input for the PID loop that controls the X1 output. (1=None, 2=X6, 3=X7, 4=X8)
PID Input – X2	18	W[1]	MSV	3	The sensor used as the input for the PID loop that controls the X2 output. (1=None, 2=X6, 3=X7, 4=X8)
PID Input – X3	19	W[1]	MSV	4	The sensor used as the input for the PID loop that controls the X3 output. (1=None, 2=X6, 3=X7, 4=X8)
PID Input – X4	19	W[1]	MSV	5	The sensor used as the input for the PID loop that controls the X4 output. (1=None, 2=X6, 3=X7, 4=X8)
PID Input – X5	19	W[1]	MSV	6	The sensor used as the input for the PID loop that controls the X5 output. (1=None, 2=X6, 3=X7, 4=X8)

[1] Present_Value is writable only if Out_Of_Service is true. Otherwise Present_Value is read only.

Detailed Data Point Information

The data points or properties (attributes) defined in this section reference data that is generated in the MicroTech III Generic I/O Panel.

Analog Inputs

Keypad Menu Path Main Menu\IO Status\Analog Input Status\AI1 Result=
Main Menu\IO Status\Analog Input Status\AI2 Result=
Main Menu\IO Status\Analog Input Status\AI3 Result=
Main Menu\IO Status\Analog Input Status\X6 Result=
Main Menu\IO Status\Analog Input Status\X7 Result=
Main Menu\IO Status\Analog Input Status\X8 Result=

These six objects show the status of the hardware analog inputs 1 through 3 and the optional universal analog inputs X6 through X8.

Measurement	Units	Data Type	Valid Range	Default Value
Temperature	°C/°F	Real	-50.0–249.998°F -45.56°–121.11°C	N/A

Analog Input 1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Input	0	1	Present_Value	85
Full Reference				
<Device Name>.AI1.Present_Value				

Analog Input 2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Input	0	2	Present_Value	85
Full Reference				
<Device Name>.AI2.Present_Value				

Analog Input 3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Input	0	3	Present_Value	85
Full Reference				
<Device Name>.AI3.Present_Value				

Analog Input X6

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Input	0	4	Present_Value	85
Full Reference				
<Device Name>.X6.Present_Value				

Analog Input X7

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Input	0	5	Present_Value	85
Full Reference				
<Device Name>.X7.Present_Value				

Analog Input X8

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Input	0	6	Present_Value	85
Full Reference				
<Device Name>.X8.Present_Value				

Analog Outputs

Keypad Menu Path Main Menu\IO Status\Universal I/O Status\X1 Result=
Main Menu\IO Status\Universal I/O Status\X2 Result=
Main Menu\IO Status\Universal I/O Status\X3 Result=
Main Menu\IO Status\Universal I/O Status\X4 Result=
Main Menu\IO Status\Universal I/O Status\X5 Result=

These five commandable objects control the universal hardware analog outputs X1 through X5.

Measurement	Units	Data Type	Valid Range	Default Value
Percent	%	Real	0-100%	N/A

Analog Output X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Output	1	1	Present_Value	85
Full Reference				
<Device Name>.AI1.Present_Value				

Analog Output X2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Output	1	2	Present_Value	85
Full Reference				
<Device Name>.X2.Present_Value				

Analog Output X3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Output	1	3	Present_Value	85
Full Reference				
<Device Name>.X3.Present_Value				

Analog Output X4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Output	1	4	Present_Value	85
Full Reference				
<Device Name>.X4.Present_Value				

Analog Output X5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Output	1	5	Present_Value	85
Full Reference				
<Device Name>.X5.Present_Value				

Digital Inputs

Keypad Menu Path Main Menu\IO Status\Digital Input Status\DI 1 Result=
Main Menu\IO Status\Digital Input Status\ DI 2 Result =
Main Menu\IO Status\Digital Input Status\ DI 3 Result =
Main Menu\IO Status\Digital Input Status\ DI 4 Result =
Main Menu\IO Status\Digital Input Status\ DI 5 Result =
Main Menu\IO Status\Digital Input Status\ DI 6 Result =

These 6 object reflects the current status of the hardware digital inputs 1 through 6.

Measurement	Units	Data Type	Valid Range	Default Value
Present Value	N/A	Boolean	0-1	N/A

Digital Input 1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Input	3	1	Present_Value	85
Full Reference				
<Device Name>.DI1.Present_Value				

Enumeration
0=Open
1=Closed

Digital Input 2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Input	3	2	Present_Value	85
Full Reference				
<Device Name>.DI2.Present_Value				

Enumeration
0=Open
1=Closed

Digital Input 3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Input	3	3	Present_Value	85
Full Reference				
<Device Name>.DI3.Present_Value				

Enumeration
0=Open
1=Closed

Digital Input 4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Input	3	4	Present_Value	85
Full Reference				
<Device Name>.DI4.Present_Value				

Enumeration
0=Open
1=Closed

Digital Input 5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Input	3	5	Present_Value	85

Full Reference
<Device Name>.DI5.Present_Value

Enumeration
0=Open
1=Closed

Digital Input 6

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Input	3	6	Present_Value	85

Full Reference
<Device Name>.DI6.Present_Value

Enumeration
0=Open
1=Closed

Digital Outputs

Keypad Menu Path Main Menu\IO Status\Digital Output Status\DO 1=
Main Menu\IO Status\Digital Output Status\DO 2=
Main Menu\IO Status\Digital Output Status\DO 3=
Main Menu\IO Status\Digital Output Status\DO 4=
Main Menu\IO Status\Digital Output Status\DO 5=
Main Menu\IO Status\Digital Output Status\DO 6=
Main Menu\IO Status\Digital Output Status\DO 7=
Main Menu\IO Status\Digital Output Status\DO 8=
Main Menu\IO Status\Digital Output Status\DO 9=
Main Menu\IO Status\Digital Output Status\DO 10=

These 10 commandable object reflects the current status of the hardware digital outputs 1 through 10.

Measurement	Units	Data Type	Valid Range	Default Value
Present Value	N/A	Boolean	0-1	N/A

Digital Output 1

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	1	Present_Value	85

Full Reference
<Device Name>.DO1.Present_Value

Enumeration
0=Off
1=On

Digital Output 2

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	2	Present_Value	85

Full Reference
<Device Name>.DO2.Present_Value

Enumeration
0=Off
1=On

Digital Output 3

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	3	Present_Value	85

Full Reference
<Device Name>.DO3.Present_Value

Enumeration
0=Off
1=On

Digital Output 4

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	4	Present_Value	85
Full Reference				
<Device Name>.DO4.Present_Value				

Enumeration
0=Off
1=On

Digital Output 5

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	5	Present_Value	85
Full Reference				
<Device Name>.DO5.Present_Value				

Enumeration
0=Off
1=On

Digital Output 6

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	6	Present_Value	85
Full Reference				
<Device Name>.DO6.Present_Value				

Enumeration
0=Off
1=On

Digital Output 7

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	7	Present_Value	85
Full Reference				
<Device Name>.DO7.Present_Value				

Enumeration
0=Off
1=On

Digital Output 8

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Binary Output	4	8	Present_Value	85
Full Reference				
<Device Name>.DO8.Present_Value				

Enumeration
0=Off
1=On

Digital Output 9

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Output	4	9	Present_Value	85
Full Reference				
<Device Name>.DO9.Present_Value				

Enumeration
0=Off
1=On

Digital Output 10

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Binary Output	4	10	Present_Value	85
Full Reference				
<Device Name>.DO10.Present_Value				

Enumeration
0=Off
1=On

PID Deadbands

Keypad Menu Path Main Menu\Commission Unit\Config PID\X1 PID\Deadband=
Main Menu\Commission Unit\Config PID\X2 PID\Deadband=
Main Menu\Commission Unit\Config PID\X3 PID\Deadband=
Main Menu\Commission Unit\Config PID\X4 PID\Deadband=
Main Menu\Commission Unit\Config PID\X5 PID\Deadband=

These five writable objects are the deadband for the PID. There are 5 optional PID loops so there are 5 deadbands. Each PID loop controls one of the universal analog outputs (X1 through X5).

Measurement	Units	Data Type	Valid Range	Default Value
Temperature	°F or °C	Real	-58°F – 302°F(-50°C – 150°C)	1.8°F(1°C)
Percent	%	Real	0% - 100%	5%
Pressure	inWC or Pa	Real	-1.003658inWC – 20073.15 inWC (-250Pa – 5,000,000Pa)	0.2inWC(50Pa)
	psi or kPa	Real	-0.04psi - 725.1841psi (-0.25kPa – 5,000kPa)	0.01psi(0.05kPa)
Electrical	mA	Real	0mA – 20mA	2mA
	V	Real	0V – 10V	0.5V
Volumetric Flow	cfm or l/s	Real	0cfm – 105945cfm (0l/s – 50,000l/s)	50cfm (23.59l/s)
Other	N/A	Real	0-100,000	0
	ppm	Real	0ppm-10000ppm	50ppm

PID Deadband – X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	4	Present_Value	85
Full Reference				
<Device Name>.X1Deadband.Present_Value				

PID Deadband – X2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	9	Present_Value	85
Full Reference				
<Device Name>.X2Deadband.Present_Value				

PID Deadband – X3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	14	Present_Value	85
Full Reference				
<Device Name>.X3Deadband.Present_Value				

PID Deadband – X4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	19	Present_Value	85
Full Reference				
<Device Name>.X4Deadband.Present_Value				

PID Deadband – X5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	24	Present_Value	85
Full Reference				
<Device Name>.X5Deadband.Present_Value				

PID Derivatives

Keypad Menu Path Main Menu\Commission Unit\Config PID\X1 PID\Derivative=
Main Menu\Commission Unit\Config PID\X2 PID\Derivative=
Main Menu\Commission Unit\Config PID\X3 PID\Derivative=
Main Menu\Commission Unit\Config PID\X4 PID\Derivative=
Main Menu\Commission Unit\Config PID\X5 PID\Derivative=

These five writable objects are the derivative factor for the PID. There are 5 optional PID loops so there are 5 derivative factors. Each PID loop controls one of the universal analog outputs (X1 through X5).

Measurement	Units	Data Type	Valid Range	Default Value
Present Value	N/A	Real	0.0 – 100.0	0.0

PID Derivative – X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	1	Present_Value	85
Full Reference				
<Device Name>.X1Derivative.Present_Value				

PID Derivative – X2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	6	Present_Value	85
Full Reference				
<Device Name>.X2Derivative.Present_Value				

PID Derivative – X3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	11	Present_Value	85
Full Reference				
<Device Name>.X3Derivative.Present_Value				

PID Derivative – X4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	16	Present_Value	85
Full Reference				
<Device Name>.X4Derivative.Present_Value				

PID Derivative – X5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	21	Present_Value	85
Full Reference				
<Device Name>.X5Derivative.Present_Value				

PID Inputs

Keypad Menu Path Main Menu\Commission Unit\Config PID\PID1 Input=
Main Menu\Commission Unit\Config PID\PID2 Input=
Main Menu\Commission Unit\Config PID\PID3 Input=
Main Menu\Commission Unit\Config PID\PID4 Input=
Main Menu\Commission Unit\Config PID\PID5 Input=

These five writable objects are the setpoints for the PID. There are 5 optional PID loops so there are 5 setpoints. Each PID loop controls one of the universal analog outputs (X1 through X5).

Measurement	Units	Data Type	Valid Range	Default Value
Present Value	N/A	Unsigned	1-6	None (1)

PID Input – X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Multistate Value	19	2	Present_Value	85
Full Reference				
<Device Name>.X1PIDInput.Present_Value				

Enumeration
1=None
2=X6
3=X7
4=X8

PID Input – X2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Multistate Value	19	3	Present_Value	85
Full Reference				
<Device Name>.X2PIDInput.Present_Value				

Enumeration
1=None
2=X6
3=X7
4=X8

PID Input – X3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Multistate Value	19	4	Present_Value	85
Full Reference				
<Device Name>.X3PIDInput.Present_Value				

Enumeration
1=None
2=X6
3=X7
4=X8

PID Input – X4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Multistate Value	19	5	Present_Value	85
Full Reference				
<Device Name>.X4PIDInput.Present_Value				

Enumeration
1=None
2=X6
3=X7
4=X8

PID Input – X5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Multistate Value	19	6	Present_Value	85
Full Reference				
<Device Name>.X5PIDInput.Present_Value				

Enumeration
1=None
2=X6
3=X7
4=X8

PID Integral Times

Keypad Menu Path Main Menu\Commission Unit\Config PID\X1 PID\Integral Time=
Main Menu\Commission Unit\Config PID\X2 PID\Integral Time=
Main Menu\Commission Unit\Config PID\X3 PID\Integral Time=
Main Menu\Commission Unit\Config PID\X4 PID\Integral Time=
Main Menu\Commission Unit\Config PID\X5 PID\Integral Time=

These five writable objects are the integral times for the PID. There are 5 optional PID loops so there are 5 integral times. Each PID loop controls one of the universal analog outputs (X1 through X5).

Measurement	Units	Data Type	Valid Range	Default Value
Present Value	seconds	Real	0-999 seconds	60 seconds

PID Integral Time – X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	2	Present_Value	85
Full Reference				
<Device Name>.X1IntegralTime.Present_Value				

PID Integral Time – X2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	7	Present_Value	85
Full Reference				
<Device Name>.X2IntegralTime.Present_Value				

PID Integral Time – X3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	12	Present_Value	85
Full Reference				
<Device Name>.X3IntegralTime.Present_Value				

PID Integral Time – X4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	17	Present_Value	85
Full Reference				
<Device Name>.X4IntegralTime.Present_Value				

PID Integral Time – X5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	22	Present_Value	85
Full Reference				
<Device Name>.X5IntegralTime.Present_Value				

PID Propbands

Keypad Menu Path Main Menu\Commission Unit\Config PID\X1 PID\Propband=
Main Menu\Commission Unit\Config PID\X2 PID\Propband=
Main Menu\Commission Unit\Config PID\X3 PID\Propband=
Main Menu\Commission Unit\Config PID\X4 PID\Propband=
Main Menu\Commission Unit\Config PID\X5 PID\Propband=

These five writable objects are the derivative factor for the PID. There are 5 optional PID loops so there are 5 derivative factors. Each PID loop controls one of the universal analog outputs (X1 through X5).

Measurement	Units	Data Type	Valid Range	Default Value
Present Value	N/A	Real	0.0-100.0	2.0

PID Propband – X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	3	Present_Value	85
Full Reference				
<Device Name>.X1Propband.Present_Value				

PID Propband – X2

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	8	Present_Value	85
Full Reference				
<Device Name>.X2Propband.Present_Value				

PID Propband – X3

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	13	Present_Value	85
Full Reference				
<Device Name>.X3Propband.Present_Value				

PID Propband – X4

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	18	Present_Value	85
Full Reference				
<Device Name>.X4Propband.Present_Value				

PID Propband – X5

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	23	Present_Value	85
Full Reference				
<Device Name>.X5Propband.Present_Value				

PID Setpoints

Keypad Menu Path Main Menu\Commission Unit\Config PID\X1 PID\Setpoint=
Main Menu\Commission Unit\Config PID\X2 PID\Setpoint=
Main Menu\Commission Unit\Config PID\X3 PID\Setpoint=
Main Menu\Commission Unit\Config PID\X4 PID\Setpoint=
Main Menu\Commission Unit\Config PID\X5 PID\Setpoint=

These five writable objects are the setpoints for the PID. There are 5 optional PID loops so there are 5 setpoints. Each PID loop controls one of the universal analog outputs (X1 through X5).

Measurement	Units	Data Type	Valid Range	Default Value
Temperature	°F or °C	Real	-58°F – 302°F(-50°C – 150°C)	(20°C)
Percent	%	Real	0% - 100%	0%
Pressure	inWC or Pa	Real	-1.003658inWC – 20073.15 inWC (-250Pa – 5,000,000Pa)	1.0inWC(250Pa)
	psi or kPa	Real	-0.04psi - 725.1841psi (-0.25kPa – 5,000kPa)	0.04psi(0.25kPa)
Electrical	mA	Real	0mA – 20mA	0mA
	V	Real	0V – 10V	0V
Volumetric Flow	cfm or l/s	Real	0cfm – 105945cfm (0l/s – 50,000l/s)	0cfm (0l/s)
Other	N/A	Real	0-100,000	0
	ppm	Real	0ppm-10000ppm	1000ppm

PID Setpoint – X1

Object Identifier			Property	
Object Type	**Type ID**	**Instance**	**Name**	**ID**
Analog Value	2	5	Present_Value	85

Full Reference
<Device Name>.X1Setpoint.Present_Value

PID Setpoint – X2

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Analog Value	2	10	Present_Value	85
Full Reference				
<Device Name>.X2Setpoint.Present_Value				

PID Setpoint – X3

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Analog Value	2	15	Present_Value	85
Full Reference				
<Device Name>.X3Setpoint.Present_Value				

PID Setpoint – X4

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Analog Value	2	20	Present_Value	85
Full Reference				
<Device Name>.X4Setpoint.Present_Value				

PID Setpoint – X5

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Analog Value	2	25	Present_Value	85
Full Reference				
<Device Name>.X5Setpoint.Present_Value				

Unit Support

Keypad Menu Path Main Menu\BMS Communications\BACnet MSTP Set-Up\Unit Support=

This variable sets the units that are sent from the main controller to the BACnet network. If the value is Metric, the units are always Metric. If the value is English, the units are sent in Imperial units. The power must be cycled on the controller for this change to take effect.

Measurement	Units	Data Type	Valid Range	Default Value
Unit Support	N/A	Unsigned	1-2	English (2)

Object Identifier			Property	
Object Type	Type ID	Instance	Name	ID
Multistate Value	19	1	Present_Value	85
Full Reference				
<Device Name>.UnitSupport.Present_Value				

Enumeration
1=Metric
2=English

BACnet Device Management

The following functions are specific to the BACnet device. These functions are used for maintenance and testing. A network management tool such as VTS is typically used to issue the network commands.

DeviceCommunicationControl - Disable

The purpose of this command is to reduce network traffic for diagnostic testing of the BACnet network. When the BACnet Communication module receives a network command to Disable communications it stops communicating information to the network. An optional time may be specified for how long to suspend communications. The unit continues to operate during the Disabled state.

DeviceCommunicationControl - Enable

When the BACnet Communication module receives a network command to Enable communications, MicroTech III Generic I/O Panel's communications to BACnet is restored.

ReinitializeDevice (Reset)

The BACnet Communication module is capable of receiving a network ReinitializeDevice command to reboot itself (cold start or warm start). The funcationality of a cold and warm start are the same and simple reboot the BACnet Communication module. No password is required.

Appendix A: Protocol Implementation Conformance Statement (PICS)

This section contains the Protocol Implementation Conformance Statement (PICS) for the MicroTech III Generic I/O Panel from Daikin as required by ANSI/ASHRAE (American National Standards Institute/American Society of Heating, Refrigeration, and Air Conditioning Engineers) Standard 135-2008, BACnet; A Data Communication Protocol for Building Automation and Control Networks.

BACnet Protocol Implementation Conformance Statement

Date:	July 2011
Vendor Name:	Daikin MicroTech III Generic I/
Product Name:	O Panel McQ IO
Product Model Number:	
Applications Software Version:	2508022100
Firmware Revision:	8.14
BACnet Protocol Revision:	Version 1 Revision 4

Product Description

The Daikin MicroTech III Generic I/O Controller is used when additional I/O is needed on the network.

The Daikin Generic I/O Controller offers the following features:

- Power supply AC 24 V or DC 24 V
- 8 configurable analog I/Os
    - 4 analog outputs 10V or 25ma
    - 1 analog output 10V
    - 3 analog inputs 10V, 25ma, NI1000, PT1000, I-R2500, I-NTC10K, or I-NTC100K
- 3 analog inputs NTC 10k or NTC 100k
- DC 24 V and DC 5 V power supply for active sensors on board
- 2 digital inputs for potential-free contacts
- 2 digital inputs galvanically isolated AC 24 V
- 8 relay outputs (6 NO contacts, 2 relays switching type)
- 2 triac outputs (AC 24 V)
- SD card interface for application and operating system upgrade
- Operating temperature -20…60 °C

This controller acts as a master node on the VAV System MS/TP network.

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
Data Sharing – WriteProperty – B	DS-WP-B
Data Sharing – WritePropertyMultiple – B	DS-WPM-B
Data Sharing – COV – B	DS-COV-B
Data Sharing – ReadProperty – A	DS-RP-A
Data Sharing – WriteProperty – A	DS-WP-A
Data Sharing – COV – A	DS-COV-A
Alarm & Event – Notification Internal - B	AE-N-I-B
Alarm & Event – ACK –B	AE-ACK-B
Alarm & Event – Information - B	AE-INFO-B
Alarm & Event – Alarm Summary - B	AE-ASUM-B
Scheduling – Internal - B	SCHED-I-B
Device Management – Dynamic Device Binding – A	DM-DDB-A
Device Management – Dynamic Device Binding – B	DM-DDB-B
Device Management – Dynamic Object Binding – B	DM-DOB-B
Device Management – Device Communication Control – B	DM-DCC-B
Device Management – TimeSynchronization – B	DM-TS-B
Device Management – UTCTimeSynchronization – B	DM-UTS-B
Device Management – Reinitialize Device – B	DM-RD-B
Device Management – List Manipulation – B	DM-LM-B

Standard Object Types Supported

Object-Type	Creatable	Deleteable	Optional Properties Supported	Writeable Properties Not Required To Be Writeable
Analog Input	☐	☐	Description Reliability COV_Increment High_Limit Low_Limit Notification_Class Min_Pres_Value Max_Pres_Value Deadband Acked_Transitions Event_Enable Notify_Type Limit_Enable Time_Delay Event_Time_Stamps	Present_Value[1] COV_Increment[2] Event_Enable Limit_Enable High_Limit[3] Low_Limit[3] Deadband Out_Of_Service Reliability[1]
Analog Output	☐	☐	Description Reliability Min_Pres_Value Max_Pres_Value COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transistions Notify_Type Event_Time_Stamps	COV_Increment[2] High_Limit[3] Low_Limit[3] Event_Enable Limit_Enable Out_Of_Service Relinquish_Default Reliability[1] Deadband
Analog Value	☐	☐	Description Reliability Priority_Array Relinquish_Default COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transistions Notify_Type Event_Time_Stamps	Present_Value[1] COV_Increment[2] Out_Of_Service Limit_Enable Event_Enable Reliability[1] Relinquish_Default High_Limit[3] Low_Limit[3]

Object-Type	Creatable	Deleteable	Optional Properties Supported	Writeable Properties Not Required To Be Writeable
Binary Input	☐	☐	Description Reliability Inactive_Text Active_Text Notification_Class Acked_Transitions Event_Enable Alarm_Value Notify_Type Time_Delay Event_Time_Stamps	Present_Value[1] Out_Of_Service Polarity Reliability[1] Event_Enable Alarm_Value
Binary Output	☐	☐	Description Reliability Inactive_Text Active_Text Notification_Class Feedback_Value Acked_Transitions Event_Enable Notify_Type Time_Delay Event_Time_Stamps	Out_Of_Service Reliability[1] Polarity Relinquish_Default Event_Enable
Binary Value	☐	☐	Description Reliability Inactive_Text Active_Text Priority_Array Relinquish_Default Notification_Class Acked_Transitions Event_Enable Alarm_Value Notify_Type Time_Delay Event_Time_Stamps	Present_Value[1] Out_Of_Service Reliability[1] Event_Enable Alarm_Value Relinquish_Default
Device	☐	☐	Description Location Active_Cov_Subsription Local_Time Local_Date UTC_Offset ADPU_Segment_Timeout Daylight_Savings_Status Max_Segments_Accepted Max_Master Max_Info_Frames	Description Location Max_ADPU_Length_Accepted (1476>=x>=50) UTC_Offset Max_Segments_Accepted ADPU_Segment_Timeout (>100) APDU_Timeout (>100) Number_Of_APDU_Retries Segmentation_Supported Max_Master (1<=X<=127) Max_Info_Frames (1<=X<=32)
Multi-State Input	☐	☐	Description State_Text Notification_Class Acked_Transitions Event_Enable Notify_Type Time_Delay Alarm_Values Fault_Values Reliability Event_Time_Stamps	Present_Value[1] Event_Enable Out_Of_Service Reliability[1] Alarm_Values Fault_Values

Object-Type	Creatable	Deleteable	Optional Properties Supported	Writeable Properties Not Required To Be Writeable
Multi-State Output	☐	☐	Description Reliability State_Text Notification_Class Acked_Transitions Event_Enable Notify_Type Time_Delay Event_Time_Stamps Feedback_Value	Event_Enable Out_Of_Service Relinquish_Default Reliability[1]
Multistate Value	☐	☐	Description Priority_Array Relinquish_Default Notification_Class Reliability Acked_Transitions Event_Enable Alarm_Values Fault_Values Notify_Type Time_Delay Event_Time_Stamps State_Text	Present_Value[1] Event_Enable Out_Of_Service Relinquish_Default Reliability[1] Alarm_Values Fault_Values
Notification Class	☐	☐	Description	Recipient_List (Max 20) Priority Ack_Required
Calendar	☐	☐	Description	Date_List (Max 10)
Schedule	☐	☐	Description Weekly_Schedule Exception_Schedule	Effective_Period Weekly_Schedule Exception_Schedule Present_Value Schedule_Default Priority_For_Writing Out_Of_Service

[1] This property is writable only if Out of Service is true. Otherwise it is read only.

[2] Changes to this property do not take effect until the power is cycled on the controller. After changing COV_Increment, you must wait at least one minute before cycling power. Otherwise, this change will not be saved.

[3] Min_Pres_Value >= X <= Max_Pres_Value

[4] The application writes at priority 15.

Data Link Layer Options

☐ BACnet IP, (Annex J)

☐ BACnet IP, (Annex J), Foreign Device

☒ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800

☐ MS/TP slave (Clause 9), baud rate(s):

Segmentation Capability

☒ Segmented requests supported Window Size: 4

☒ Segmented responses supported Window Size: 4

Device Address Binding

Static Device Binding ☐ Yes

☐ No

Networking Options

☐ Router, Clause 6 – List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.

☐ Annex H, BACnet Tunneling Router over IP

☐ BACnet/IP Broadcast Management Device (BBMD)

Number of BDT entries: 10

Does the BBMD Support registration by Foreign Devices? ☐ Yes ☐ 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

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