Phoenix Controls

Protocol Implementation Conformance Statement (PICS)

Date: November 10, 2010
Vendor Name: Phoenix Controls
Product Name: Theris® BACnet® Valves, Valve Designation prefixed HSV or HEV
Product Model Numbers: TX-RTN, TP, SO, and EO
Software/Firmware Version: 4.0
BACnet Protocol Revision: 3 (135-2001b)
Product Description: Theris valve-mounted controllers are application specific and network configurable for performing room-level airflow and comfort control functions. The controller maintains room ventilation and pressurization by modulating flow commands to supply, exhaust, and return air flow valves. The controller regulates spacial temperatures through a combination of volumetric override and reheat actuator control (either modulating or floating point). Configurations of the Theris controller determine the room-level control functionality.

BACnet Standardized Device Profile (Annex L)	
BACnet Operator Work Station (B-OWS)	☐
BACnet Building Controller (B-BC)	☐
BACnet Advanced Application Controller (B-AAC)	☐
BACnet Application Specific Controller (B-ASC)	☒
BACnet Smart Sensor (B-SS)	☐
BACnet Smart Actuator (B-SA)	☐

Supported BACnet Interoperability Building Blocks (BIBBs) (Annex K)			
DS-RP-B	DS-WP-B	DM-DDB-B	DM-TS-B
DS-RPM-B	DS-WPM-B	DM-DOB-B	DM-RD-B
		DM-DCC-B	

Standard Object Types Supported					
Object Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Analog Input [1]	☒	☐	☐	Description Reliability	N/A
Analog Output [2]	☒	☐	☐	Description	Present Value
Analog Value	☒	☐	☐	Description	Present Value
Binary Input	☒	☐	☐	Description	N/A
Binary Output	☒	☐	☐	Description	Present Value
Binary Value	☒	☐	☐	Description Priority Array [3] Relinquish Default [3]	Present Value

Standard Object Types Supported

Object Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Device [4.]	☒	☐	☐	Description Location Local Time Local Date Daylight Savings Status	Object Name Description Location Local Time Local Date Daylight Savings Status UTC Offset [.5]
File [5.]	☒	☐	☐	Description	Archive
Program [5.]	☒	☐	☐	Description	Program Change

Table Notes:

1. Analog Input range restricted: 0.0 to 4092.0, resolution = 1.0.

2. Range restricted to 0.0 to 511.875, resolution = 0.0625.

3. BV40 only.

4. Range restricted: Maximum Size = 38 octets including initial character set.

5. UTC Offset Range = -900 to +900.

Data Link Layer Options

BACnet IP (Annex J)	☐	MS/TP slave (Clause 9)	☐
BACnet IP (Annex J Foreign Device)	☐	Point-To-Point, EIA 232 (Clause 10)	☐
ISO8802-3 Ethernet (Clause 7)	☐	Point-To-Point, modem (Clause 10)	☐
ATA 878.1, 2.5Mb ARCNET (Clause 8)	☐	LonTalk (Clause 11), medium	☐
ATA 878.1, EIA-485 ARCNET (Clause 8)	☐	Other	☐
MS/TP master (Clause 9) baud rate: 9600, 19200, 38400, 76800 (AutoBaud)	☒		

Segmentation Capability

Segmented Requests Supported	☐ Yes	☒ No	Window Size	
Segmented Responses Supported	☐ Yes	☒ No	Window Size	

Networking Options

Router, Clause 6	☐ Yes	☒ No
Annex H, BACnet tunneling router over IP	☐ Yes	☒ No
BACnet/IP Broadcast Management Device (BBMD)	☐ Yes	☒ No
BBMDs support registrations by Foreign Devices	☐ Yes	☒ No

Character Sets Supported			
ANSI X3.4	☒	ISO 10646 (UCS-4)	☒
IBM™/Microsoft™ DBCS	☒	ISO 10646 (UCS-2)	☒
JIS C 6226	☒	ISO 8859-1	☒
Note: Indicating support for multiple character sets does not imply that they can all be supported simultaneously.			

If this product is a communication gateway, describe the types of non-BACnet equipment/networks supported: N/A