## **BACnet Protocol Implementation Conformance Statement**

Date:	September 20, 2011
Vendor Name:	ITT Bell & Gossett
Vendor ID:	84
Product Name:	Technologic Constant Speed Pump Controller

#### **Product Description:**

Technologic Constant Speed Pump Controller is a pumping system designed for HVAC and industrial process control. It operates as either a stand-alone controller or as part of a building-wide integrated system. The BACnet communication interface will provide communication between the Technologic Constant Speed Pump Controller and the BACnet system on EIA-485 media

BACnet Standardized Device Profile (Annex L): BACnet Application Specific Controller

### **BACnet Standard Objects Supported:**

Analog Input		<b>Binary Output</b>	
Dynamically Creatable:	No	Dynamically Creatable:	No
Dynamically Deletable: Optional Properties	No	Dynamically Deletable: Optional Properties	No
Supported:	None	Supported:	None
Writeable Properties:	Present Value	Writeable Properties:	Present Value
······	Out-of-Service	Proprietary Properties:	None
Proprietary Properties:	None	Property Range	
Property Range		Restrictions:	None
Restrictions:	None		
		Device	
Analog Output		Dynamically Creatable:	No
Dynamically Creatable:	No	Dynamically Deletable:	No
Dynamically Deletable:	No	<b>Optional Properties</b>	Local_Time
Optional Properties		Supported:	Local_Date
Supported:	None	Writeable Properties:	
Writeable Properties:	Present Value	<b>Proprietary Properties:</b>	None
*	Out-of-Service	Property Range	
Proprietary Properties:	None	Restrictions:	None
Property Range			
Restrictions:	None	BACnet Services Supp	oorted
		Readproperty – execut	te
Binary Input		Writeproperty – execu	te
Dynamically Creatable:	No	DeviceCommunication	nControl – execute
Dynamically Deletable:	No	timeSynchronization –	- execute
<b>Optional Properties</b>		Who-Has – initiate	choodio
Supported:	None	Who-Is _ initiate	
Writeable Properties:	Present Value	Who-is - initiate	
Proprietary Properties:	None		
Property Range			
Restrictions:	None		

### **BACnet Interoperability Blocks Supported**: DS-RP-B, DS-WP-B, DM-DOM-B, DM-DDB-B, DM-DCC-B

## Segmentation Capability: Not Supported

## **BACnet Object List**

Analog Inputs			
Number	Object Name	Range/Value Units	
1	Pump1 State	0=Disabled, 1=Run, 2=Ready, 3=Failed no-unit	
2	Pump2 State	0=Disabled, 1=Run, 2=Ready, 3=Failed	no-units
3	Pump3 State	0=Disabled, 1=Run, 2=Ready, 3=Failed	no-units
4	Pump4 State	0=Disabled, 1=Run, 2=Ready, 3=Failed	no-units
5	Pump5 State	0=Disabled, 1=Run, 2=Ready, 3=Failed	no-units
6	Pump6 State	0=Disabled, 1=Run, 2=Ready, 3=Failed no-units	
7	Suc/Ret Press	0 to Span (in Technologic User Setup Menu) PSI	
8	Sys/Sup Press	0 to Span (in Technologic User Setup Menu) PSI	
9	Flow	0 to Span (in Technologic User Setup Menu)	GPM
10	Temperature	0 to Span (in Technologic User Setup Menu)	°F
11	Pressure	0 to Span (in Technologic User Setup Menu)	PSI
12	Diff Temp	0 to Span (in Technologic User Setup Menu)	°F
13	Suc/Ret Temp	Actual °F	°F
14	Sys/Sup Temp	Actual °F	°F
15	Amps	Actual Amps	no-units
16	Horsepower	Actual Horsepower	no-units

#### **Analog Outputs**

Number	Object Name	Range/Value	Units
1	Suc/Ret Press Cmd	0 to 65535	PSI
2	Sys/Sup Press Cmd	0 to 65535	PSI
3	Flow Command	0 to 65535	PSI
4	Temp Command	0 to 65535	PSI
5	Pressure Command	0 to 65535	PSI
6	Diff Temp Command	0 to 65535	PSI

#### **Binary Inputs**

Number	Object Name	Range/Value	
1	Sys Strt/Stp Stat	1 = Start $0 = $ S	top
2	Sys Auto/Man Stat	1 = Auto $0 = N$	Aanual
3	General Alarm	1 = Failure $0 = 0$	D.K.
4	Reset Required	1 = Reset is Required	0 = 0.K.
5	AI 1 Fail	$1 = Failure \qquad 0 = 0$	D.K.
6	AI 2 Fail	$1 = Failure \qquad 0 = 0$	D.K.
7	AI 3 Fail	1 = Failure $0 = 0$	D.K.

Binary inp	uis Continuea		
8	AI 4 Fail	1 = Failure	0 = 0.K.
9	RTD 1 Fail	1 = Failure	0 = O.K.
10	RTD 2 Fail	1 = Failure	0 = O.K.
11	Battery Fail	1 = Failure	0 = O.K.
12	Low Suction AI	1 = Failure	0 = 0.K.
13	Low Suction Sw	1 = Failure	0 = O.K.
14	High Suction	1 = Failure	0 = O.K.
15	Low System	1 = Failure	0 = O.K.
16	High System	1 = Failure	0 = O.K.
17	NFSD DT	1 = Failure	0 = O.K.
18	NFSD FS	1 = Failure	0 = O.K.
19	Low Level	1 = Failure	0 = O.K.
20	High Temp	1 = Failure	0 = O.K.
21	Pump1 DP Fail	1 = Failure	0 = 0.K.
22	Pump2 DP Fail	1 = Failure	0 = 0.K.
23	Pump3 DP Fail	1 = Failure	0 = 0.K.
24	Pump4 DP Fail	1 = Failure	0 = 0.K.
25	Pump5 DP Fail	1 = Failure	0 = 0.K.
26	Pump6 DP Fail	1 = Failure	0 = 0.K.
27	Pump1 OL Fail	1 = Failure	0 = O.K.
28	Pump2 OL Fail	1 = Failure	0 = O.K.
29	Pump3 OL Fail	1 = Failure	0 = 0.K.
30	Pump4 OL Fail	1 = Failure	0 = 0.K.
31	Pump5 OL Fail	1 = Failure	0 = 0.K.
32	Pump6 OL Fail	1 = Failure	0 = 0.K.
33	CAN Fail	1 = Failure	0 = O.K.
34	Voltage Tol	1 = Failure	0 = 0.K.
35	Voltage Fail	1 = Failure	0 = 0.K.

#### **Binary Inputs Continued**

## **Binary Outputs**

Number	Object Name	Range/Value
1	System Start/Stop	1 = Start $0 = $ Stop
2	System Reset	Positive Edge = Reset/Silence
3	Pump Alternation	Positive Edge = Alternate

## Data Link Layer Options:

MS/TP Master (Clause 9) Baud Rates, 9600, 19200, 38400

# **Device Address Binding:**

N/A

## Character Sets Supported: ANSI X3