FlowCon international

A Griswold Controls LLC./FlowCon International Company

BACnet Protocol Implementation Conformance Statement

Date:	25-09-2025
Vendor Name:	FlowCon International
Product Name:	FlowCon FN Actuator with BACnet
Product Model Number:	FN.0.2-BUS
Software Version:	2.04
BACnet Protocol Revision:	1.22

Product Description:
Electrical modulating actuator with BUS communication (BACnet or Modbus) for PICV: FlowCon Green and FlowCon GreEQ.

BACnet Standardized Device Profile (Annex L):
☐ BACnet Operator Workstation (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)

List all BACnet Interoperability Building Blocks Supported (Annex K):
Data Sharing BIBBs:

DS-RP-B	Data Sharing - Read Property - B
DS-RPM-B	Data Sharing - Read Property Multiple - B
DS-WP-B	Data Sharing - Write Property - B
DS-WPM-B	Data Sharing - Write Property Multiple - B
DS-COV-B	Data Sharing - Change Of Value - B

Device Management BIBBs:

DM-DDB-B	Device Management - Dynamic Device Binding - B
DM-DOB-B	Device Management - Dynamic Object Binding - B
DM-DCC-B	Device Management - Device Communication Control - B
DM-TS-B	Device Management - Time Synchronization - B
DM-RD-B	Device Management - Reinitialize Device - B
DM-R-B	Device Management - Restart - B

Segmentation Capability: This device does not support segmentation.

Data Link Layer Options:
☐ BACnet IP, (Annex J)
☐ BACnet IP, (Annex J), Foreign Device
☐ ISO 8802-3, Ethernet (Clause 7)
☐ ASTM 878.1, 2.5 Mb. ARCNET (Clause 8)
☐ ASTM 878.1, RS-485 ARCNET (Clause 8) baud rate(s):
☑ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 57600 and 115200
☐ MS/TP slave (Clause 9), baud rate(s): 9600, 19200, 38400, 57600 and 115200
☐ Point-To-Point, EIA 232 (Clause 10), baud rate(s): max. EIA 232
☐ Point-To-Point, modem, (Clause 10), baud rate(s): max. modem
☐ LonTalk, (Clause 11), medium:
☐ Other:

Device Address Binding:
Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.)
☐ Yes ☑ No

Networking Options: This device has no special networking options.
☐ Router, Clause 6 - List all routing configurations
☐ Annex H, BACnet Tunneling Router over IP
☐ BACnet Broadcast Management Device (BBMD)
Does the BBMD support registrations by Foreign Devices? ☐ Yes ☐ No
Does the BBMD support network address translation? ☐ Yes ☐ No

Character Sets Supported:
Indicating support for multiple character sets does not imply that they can all be supported simultaneously.
☑ UFT-8
☐ IBM™/Microsoft™ DBCS
☐ ISO 8859-1
☐ ISO 10646 (UCS-2)
☐ ISO 10646 (UCS-4)
☐ JIS X 0208
☐ ISO 10646 (UTF-8)

List of Objects

Analog Input (AI):

#	Name	Description	R/W	Present-Value Options
2	Analog input P1	Measured input value at port 1	R	Unit depending on selected sensor type (°C, °K or %).
3	Analog input P2	Measured input value at port 2	R	Unit depending on selected sensor type (°C, °K or %).
6	Actual value control signal	Actual flow rate in percent og max. flow setting	R	0 to 100. Unit is %.
7	Actual volume flow rate	Actual flow rate calculated based on valve parameters	R	0 to 65535. Unit is l/hours.
8	Differential temperature	Actual water ΔT calculated based on measured supply and return temperatures	R	-200 to +200. Unit is °K.
16	Actual value of thermal power	Current calculated value of thermal power going through the valve. Calculated value only valid for PICVs	R	0 to 65535. Unit is kW.
18	Energy, 24 hours back	Current time and 24 hours back. Calculated value only valid for PICVs	R	0 to 65535. Unit is kWh.

Analog Value (AV):

#	Name	Description	R/W	Present-Value Options
1	External control signal	External Volume flow rate set point (actuating signal)	R/W	0 to 100 (-10 to 110). Unit is %.
4	Supply temperature	Supply water temperature	R/(W)	-50 to +150. Unit is °C. *Write-protected when source is Port 1 or Port 2.*
5	Return temperature	Return water temperature	R/(W)	-50 to +150. Unit is °C. *Write-protected when source is Port 1 or Port 2.*
12	Hydraulic balancing value for cooling	Range between minimum and maximum flow rate of selected valve in cooling mode	R/W	0 to 65535. Unit is l/hours.

Binary Input (BI):

#	Name	Description	R/W	Present-Value Options
3	Actuator is busy	Operating status: Actuator mode	R	0= Normal operation (no message shown) 1= Actuator is not available for control signal
4	Actuator in malfunction	Operating error status: Hardware fault	R	0= Normal operation (no message shown) 1= Hardware fault (Port 1 or Port 2 range exceeded or similar malfunction)
5	Error during valve adaption	Operating error status: Valve calibration error	R	0= Normal operation (no message shown) 1= Error during valve adaption
6	Error: valve blocking	Operating error status: Valve blocking error	R	0= Normal operation (no message shown) 1= Error, valve is blocked
7	Warning: leak detected	Operating error status: Leak detection warning	R	0= No warning 1= Leak detected (ΔT above 8°K when valve is closed for more than 6 hours)

Multi-State Value (MSV):

#	Name	Description	R/W	Present-Value Options
1	Service command	Service command	R/W	1= Normal operation mode 2= Calibration mode 3= Test run mode 4= Synchronize valve 5= Reset error messages 6= Reset BUS 7= Reset to factory settings

Multi-State Value (MSV), continued:

2	Sensor type P1	Port 1 sensor type	R/W	1= OFF 2= Binary input 3= 0-10V input 4= KP10 5= Ni1000-DIN 6= Ni1000-LG 7= PT1000 8= Potentiometer 10kΩ 9= Potentiometer 10kΩ +/-3kΩ 10= Potentiometer 10kΩ +/-5kΩ
3	Sensor/Output type P2	Port 2 sensor type / output	R/W	1= OFF 2= Binary input 3= 0-10V input 4= KP10 5= Ni1000-DIN 6= Ni1000-LG 7= PT1000 8= Potentiometer 10kΩ 9= 0-10V output 10= 0-10V Y position feedback (set in AI.6) 11= Changeover signal for 6-way valve
4	Operating mode	Operating mode	R/W	1= External control signal (set in AV.1) 2= Open ~ 100% 3= Closed ~ 0% 4= Minimum position 5= NOT ACTIVE 6= Maximum position 7= Room temperature 8= Control by thermal power 9= Return water temperature
5	Source of supply and return temperature	Water temperature source, supply and return	R/W	1= BUS (set in AV.4 and AV.5) 2= Port 1 supply, Port 2 return 3= Port 2 supply, Port 1 return 4= Port 1 supply, BUS return 5= Port 2 supply, BUS return 6= BUS supply, Port 1 return 7= BUS supply, Port 2 return
7	Select RS485 baud rate	RS-485 baud rate	R/W	1= Default (38400) 2= 9600 3= 19200 4= 38400 5= 57600 6= 76800 7= 115200 *Changes are only effective after restart of actuator*
8	Select valve type	Select valve type and control characteristics	R/W	1= Linear (generic) 2= Green.0 3= Green.1 4= Green.2 5= Green.1HF 6= GreEQ.0 7= GreEQ.1 8= GreEQ.2 9= EQ% (generic) 10= User-Valve