

Interface Modules

IF-Modul BACnet & IF-Modul Stratos BACnet





BACnet Protocol Implementation Conformance Statement

Document Revision: 1.01
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Vendor Name: WILO SE
Product Name: IF-Modul BACnet, IF-Modul BACnet Stratos
Product Model Number: IF-RS485
Hardware Revision: B1
Applications Software Version
Firmware Revision: 1.002
BACnet Protocol Revision: 4

Product Description:

The Interface modules IF-Modul BACnet and IF-Modul BACnet Stratos have been designed to provide a BACnet interface to all WILO pumps equipped with the CAN bus interface. The modules are to be plugged into the enclosure of the pump inverter.

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):

The product meets all requirements for designation as an Application Specific Controller (B-ASC). The product supports the following BACnet Interoperability Building Blocks (BIBBs).

Application Service	Designation	BACnet Service
Data Sharing	DS-RP-B	Read Property
Data Sharing	DS-WP-B	Write Property
Device Management	DM-DDB-B	Receive Who-Is, respond I-Am
Device Management	DM-DOB-B	Receive Who-Has, respond I-Have
Device Management	DM-DCC-B	DeviceCommunicationControl

NOTE: The I-Am and I-Have service is a response on a unicast only (MS/TP slave device).

Segmentation Capability:

- Segmented requests supported Window Size _____
- Segmented responses supported Window Size _____

NOTE: The product does not support segmented requests or responses



Standard Object Types Supported:

An object type is supported if it may be present in the device. For each standard Object Type supported provide the following data:

Object type	Supported Objects	Dynamically Creatable	Dynamically Deletable	Optional Property Supported	Writable Properties
Analog Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	device-type	
Analog Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	device-type	
Binary Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	device-type	
Binary Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	device-type	
Multistate Input	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	device-type	
Multistate Output	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	device-type	
Device	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	location, description	

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) _____
- MS/TP master (Clause 9), baud rate(s): _____
- MS/TP slave (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
- Point-To-Point, modem, (Clause 10), baud rate(s): _____
- 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:

- 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)
 - Does the BBMD support registrations by Foreign Devices? Yes No

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- ANSI X3.4
- ISO 10646 (UCS-2)
- IBM™/Microsoft™ DBCS
- ISO 10646 (UCS-4)
- ISO 8859-1
- JIS C 6226

Object List - preliminary -

Section	BACnet Object_Name	BACnet unit code	BACnet unit	BACnet object type code	BACnet object type	instance	Remark
MEASUREMENT	Speed	104	REVOLUTIONS-PER-MINUTE	0	analog-input	0	
MEASUREMENT	Estimated Flow	135	CUBIC-METERS-PER-HOUR	0	analog-input	1	
MEASUREMENT	(Estimated) Pressure	55	BARS	0	analog-input	2	
MEASUREMENT	Power Rating	47	WATTS	0	analog-input	3	
MEASUREMENT	Medium Temperature	62	DEGREES-CELSIUS	0	analog-input	4	
STATISTIC	Operation Time Resetable	72	MINUTES	0	analog-input	5	
MEASUREMENT	Consumption (System)	19	KILOWATT-HOURS	0	analog-input	6	
CONSTANTS	Min Speed (System, CONST_SPEED)	104	REVOLUTIONS-PER-MINUTE	0	analog-input	7	
CONSTANTS	Max Speed (System, CONST_SPEED)	104	REVOLUTIONS-PER-MINUTE	0	analog-input	8	
CONSTANTS	Min pressure dp-v (VAR_DIFFPRESS)	55	BARS	0	analog-input	9	
CONSTANTS	Max pressure dp-v (VAR_DIFFPRESS)	55	BARS	0	analog-input	10	
CONSTANTS	Max Flow	135	CUBIC-METERS-PER-HOUR	0	analog-input	11	
CONSTANTS	Min pressure dp-c	55	BARS	0	analog-input	12	
CONSTANTS	Max pressure dp-v	55	BARS	0	analog-input	13	
CONSTANTS	Max Power	47	WATTS	0	analog-input	14	
STATUS	System Actual Capacity	98	PERCENT	0	analog-input	15	
CONTROL	Bus Setpoint	98	PERCENT	1	analog-output	0	
CONFIGURATION	dp-c = f(T) Regulation Tmin	62	DEGREES-CELSIUS	1	analog-output	1	
CONFIGURATION	dp-c = f(T) Regulation Tmax	62	DEGREES-CELSIUS	1	analog-output	2	
CONFIGURATION	dp-c = f(T) Regulation Pmin	55	BARS	1	analog-output	3	
CONFIGURATION	dp-c = f(T) Regulation Pmax	55	BARS	1	analog-output	4	
STATUS	System Command Pump on	-	#NV	3	binary-input	0	
STATUS	System Command off override	-	#NV	3	binary-input	1	
STATUS	System Command max override	-	#NV	3	binary-input	2	
STATUS	System Command min override	-	#NV	3	binary-input	3	
STATUS	Status Lower Regulation Limit	-	#NV	3	binary-input	4	
STATUS	Status Upper Regulation Limit	-	#NV	3	binary-input	5	
STATUS	Status Setpoint out of Range	-	#NV	3	binary-input	6	
STATUS	Status Setpoint Difference > 10%	-	#NV	3	binary-input	7	
STATUS	Status Auto Night Active	-	#NV	3	binary-input	8	
STATUS	Status Ready for Operation	-	#NV	3	binary-input	9	
STATUS	Status Pump is Operating	-	#NV	3	binary-input	10	
STATUS	Status Service Required	-	#NV	3	binary-input	11	
STATUS	Status Warning Present	-	#NV	3	binary-input	12	
STATUS	Status Error Present	-	#NV	3	binary-input	13	
STATUS	Status Final Error Present	-	#NV	3	binary-input	14	
STATUS	Status Local Operation Active	-	#NV	3	binary-input	15	
CONTROL	Bus Command Pump on	-	#NV	4	binary-output	0	
CONTROL	Bus Command off override	-	#NV	4	binary-output	1	
CONTROL	Bus Command max override	-	#NV	4	binary-output	2	
CONTROL	Bus Command min override	-	#NV	4	binary-output	3	
CAN_CONFIG	Menue Settings Lock	-	#NV	4	binary-output	4	
CONTROL	Current Warning/Error Acknowledge	-	#NV	4	binary-output	5	
CANOPEN	<Manufacturer Device Name>	-	#NV	8	device	n/a	Property Object_Name
CONSTANTS	This Pump Location/Name	-	#NV	8	device	n/a	Property Location
STATUS	System Control Mode	-	#NV	13	multi-state-input	0	
MESSAGE	Current Warning/Error	-	#NV	13	multi-state-input	1	
CONTROL	Bus Control Mode	-	#NV	14	multi-state-output	0	