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## BACnet Testing Labs Product Listing

*This product has been tested at the BACnet Testing Labs and found to comply with all the necessary interoperability requirements in place on the published test date. This listing represents the tested capability of the Listed Product. For information on additional functionality that was not covered in the test process, refer to the Manufacturer's PICS statement on the BI website.*

### Listing Information (BTL-30071)

Vendor Johnson Controls Systems & Service GmbH Westendhof 8 45143 Essen Germany		Listing Status  Listed Product
Test Requirements Requirements as of November 2014	BACnet Protocol Revision Revision 12	Date Tested November 2015

Product Name	Model Number	Software Version
Network Automation Engine	MS-NAE35xx-xxx, MS-NAE45xx-xxx, MS-NAE551S-2, MS-NAE55xx-2, MS-NAE55xx-3	8.0.0.0401
Network Control Engine	MS-NCE25xx-xxx, MS-NCE2566-x, MS-NCE2517-x	8.0.0.0401
Network Integration Engine	MS-NIE29xx-xxx, MS-NIE39xx-xxx, MS-NIE49xx-2, MS-NIE59xx-2, MS-NIE59xx-3	8.0.0.0401

### Device Profiles

Profile	Model Numbers
BACnet Building Controller (B-BC)	All models

## BIBBs Supported

Data Sharing	ReadProperty-A	DS-RP-A
	ReadProperty-B	DS-RP-B
	ReadPropertyMultiple-A	DS-RPM-A
	ReadPropertyMultiple-B	DS-RPM-B
	WriteProperty-A	DS-WP-A
	WriteProperty-B	DS-WP-B
	WritePropertyMultiple-A	DS-WPM-A
	WritePropertyMultiple-B	DS-WPM-B
	COV-A	DS-COV-A
	COV-B	DS-COV-B
COV Unsubscribed-B	DS-COVU-B	

Alarm and Event Notification	Notification Internal-B	AE-N-I-B
	ACK-A	AE-ACK-A
	ACK-B	AE-ACK-B
	Alarm Summary-B	AE-ESUM-B
	Enrollment Summary-B	AE-ESUM-B
	Information-B	AE-INFO-B

Scheduling	Internal-B	SCHED-I-B
	External-B	SCHED-E-B
	Weekly Schedule-A	SCHED-WS-A

Trending	Viewing and Modifying Trends-Internal-B	T-VMT-I-B
	Viewing and Modifying Multiple Values-Internal-B	T-VMMV-I-B
	Automated Trend Retrieval-B	T-ATR-B

Device and Network Management	Dynamic Device Binding-A	DM-DDB-A
	Dynamic Device Binding-B	DM-DDB-B
	Dynamic Object Binding-A	DM-DOB-A
	Dynamic Object Binding-B	DM-DOB-B
	DeviceCommunicationControl-B	DM-DCC-B
	TimeSynchronization-A	DM-TS-A
	TimeSynchronization-B	DM-TS-B
	UTCTimeSynchronization-A	DM-UTC-A
	UTCTimeSynchronization-B	DM-UTC-B
	Manual TimeSynchronization-A	DM-MTS-A
	Automatic TimeSynchronization-A	DM-ATS-A
	ReinitializeDevice-B	DM-RD-B
	Backup and Restore-B	DM-BR-B
	Restart-A	DM-R-A
	Restart-B	DM-R-B
	List Manipulation-A	DM-LM-A
	List Manipulation-B	DM-LM-B
Object Creation and Deletion-B	DM-OCD-B	

## Object Type Support

Analog Input	Analog Output	Analog Value
Binary Input	Binary Output	Binary Value
Averaging	Calendar	Command
Device	Event Enrollment	File
Group	Loop	Notification Class
Multi-State Input	Multi-State Output	Multi-State Value
Schedule	Trend Log	Trend Log Multiple
Program	Integer Value	Positive Integer Value
	CharacterString Value	

## Data Link Layer Options

Media	Options
BACnet/IP	BBMD
MS/TP master	9600, 19200, 38400, 76800

## Networking Options

Networking Functionality	Media
Router	BACnet/IP (Annex J), MS/TP

## Character Set Support

ISO 10646 (UTF-8)
ISO 10646 (UCS-2)
Microsoft Double-Byte Character Set (DBCS)