



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International. BTL is a registered trademark of BACnet International.

BACnet Testing Laboratories Product Listing

BACnet functionality in each Listed product has been successfully tested at a Recognized BACnet Testing Organization utilizing the industry standard BTL test suite and test policies that were current at the time it was tested. For Listings with multiple products, some products may have less functionality than is indicated by the Listing document. The PICS document provides information on the specific functionality of each product. Note that PICS documents on the BTL Listings site are provided by the manufacturer and are not independently verified by BTL.

Listing Information (BTL-31185)

Vendor		Listing Status
Beckhoff Automation GmbH & Co. KG Hülshorstweg 20 33415 Verl		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of February 2024	Revision 14 (135-2012)	January 2019

Product Name	Model Numbers	Firmware version
TwinCAT BACnet	CX8191, CX9020, CX51x ¹ , where x ¹ is 20, 30 or 40 CX52x ² , where x ² is 30 or 40 C60x ³ -00x ⁴ , where x ³ is 15 or 17 x ⁴ is 10 or 20 C60x ⁵ -0060, where x ⁵ is 30 or 32 CP66x ⁶ , where x ⁶ is 00 or 06 CP67x ⁷ -0001-00x ⁸ , where x ⁷ is 00 or 06 x ⁸ is 50 or 60 CP22x ⁹ -00x ¹⁰ , where x ⁹ is 12, 13, 15, 16, 18, 19, 21 or 24 x ¹⁰ is 10 or 20	4.0.4

	CP27x ¹¹ -00x ¹² where x ¹¹ is 12, 13, 15, 16, 18, 19, 21 or 24 x ¹² is 10 or 20	
--	---	--

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-B	DS-WPM-B
	Change Of Value-A	DS-COV-A
	Change Of Value-B	DS-COV-B
	Change Of Value Property-A	DS-COVP-A
	Change Of Value Property-B	DS-COVP-B
	Change Of Value Unsubscribed-A	DS-COVU-A
Change Of Value Unsubscribed-B	DS-COVU-B	

Alarm and Event Notification	Notification Internal-B	AE-N-I-B
	Notification External-B	AE-N-E-B
	Acknowledge-B	AE-ACK-B
	Alarm Summary-B	AE-ASUM-B
	Enrollment Summary-B	AE-ESUM-B
	Information-B	AE-INFO-B
	Event Log-Internal-B	AE-EL-I-B
	Event Log-External-B	AE-EL-E-B
	Configurable Recipient Lists-B	AE-CRL-B

Scheduling	Internal-B	SCHED-I-B
	External-B	SCHED-E-B

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

Device Management	Dynamic Device Binding-A	DM-DDB-A
	Dynamic Device Binding-B	DM-DDB-B
	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
	ReinitializeDevice-B	DM-RD-B
	Backup and Restore-B	DM-BR-B
	Restart-B	DM-R-B
	List Manipulation-B	DM-LM-B
	Object Creation and Deletion-B	DM-OCB-B
	Automatic Time Synchronization-A	DM-ATS-A
	Router Configuration-B	NM-RC-B
	BBMD Configuration-B	NM-BBMD-B
	Foreign Device Registration-A	NM-FDR-A
	Embedded Objects-B	GW-EO-B

Object Type Support

Accumulator	Analog Input	Analog Output
Analog Value	Averaging	Binary Input
Binary Output	Binary Value	Bitstring Value
Calendar	Characterstring Value	Command
Date Pattern Value	Date Value	Datetime Pattern Value
Datetime Value	Device	Event Enrollment
Event Log	File	Group
Integer Value	Large Analog Value	Loop
Multi-State Input	Multi-State Output	Multi-State Value
Notification Class	Octetstring Value	Positive Integer Value
Program	Pulse Converter	Schedule
Structured View	Time Pattern Value	Time Value
Trend Log	Trend Log Multiple	

Data Link Layer Options

Media	Options
BACnet/IP (Annex J)	BBMD Register as Foreign Device BACnet/IP, 'DIX' Ethernet
MS/TP Master	9600, 19200, 38400, 57600, 76800, 115200

Character Set Support

ISO 10646 (UTF-8) IBM/Microsoft DBCS JIS X 0208 ISO 10646 (UCS-4) ISO 10646 (UCS-2) ISO 8859-1
