BACnet Protocol Implementation Conformance Statement

Date: February 14, 2020

Vendor Name: mikolab

Product Name: BLC

Product Model Number: BLC-24A, BLC-24B, BLC-24BL, BLC-230A, BLC-230B,

BLC-230M, BLC-230BM

Firmware Revision: 1.5.x

BACnet Protocol Revision: 12

Product Description:

BLC-24 and BLC-230 are freely programmable controllers designed to control and monitor circuits in the electrical switchgears, especially for lighting circuits. BLC-24 controllers are equipped with 24 universal channels, each one of them can be used as binary input or binary output. First three channels are adapted to count the pulses S0 of the electric meters according to EN IEC 62053-31 standard. BLC-230 controllers are equipped with 12 binary inputs and 6 binary outputs. Power supply, inputs and outputs in BLC-230 work directly with a line voltage of 230 V, 50 Hz.

BACnet Standardized Device Profile (Annex L)

BACnet Application Specific Controller (B-ASC)

List all BACnet Interoperability Building Blocks Supported (Annex K)

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

Device and Network Management				
DM-DDB-A Device Management-Dynamic Device Binding-A				
DM-DDB-B	Device Management-Dynamic Device Binding-B			
DM-DCC-B	Device Management-DeviceCommunicationControl-B			
DM-TS-B	Device Management-TimeSynchronization-B			
DM-RD-B	Device Management-ReinitializeDevice-B			
DM-BR-B	Device Management-Backup and Restore-B			
DM-OCD-B	Device Management-Object Creation and Deletion-B			

Alarm and Event Management				
AE-N-I-B	Alarm and Event Management-Notification-Internal-B			
AE-INFO-B	Alarm and Event Management-Information-B			
AE-ACK-B Alarm and Event Management-Acknowledge-B				
AE-ASUM-B	Alarm and Event Management-Alarm Summary-B			
AE-CRL-B	Alarm and Event Management-Configurable Recipient Lists-B			

Segmentation Capability

☐ Able to transmit segmented messages Window Size -

			,	A /* 1	c·
I I Able to	receive sec	imented m	nessages '	Window	\17P -
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Standard Object Types Supported

Device Object Type					
Property Identifier	Writable	Optional	Property Range Restriction		
Object_Identifier	\checkmark				
Object_Name			1-64 characters		
Location	\checkmark	\checkmark	0-32 characters		
Description	\checkmark	$\overline{\mathbf{V}}$	0-256 characters		
Local_Time		\checkmark			
Local_Date		\checkmark			
Max_Master	\checkmark	$\overline{\mathbf{V}}$			
Max_Info_Frames		\checkmark			
Configuration_Files		\checkmark			
Backup_Failure_Timeout	\checkmark	\checkmark			
Backup_Preparation_Time		V			

Restore_Preparation_Time	
Restore_Completion_Time	
Backup_And_Restore_State	
Active_COV_Subscriptions	

Accumulator Object Type						
	☑ Create ☑ Delete					
Property Identifier	Writable	Optional	Property Range Restriction			
Object_Name	\checkmark		1-64 characters			
Description	\checkmark	\checkmark	0-256 characters			
Present_Value	\checkmark					
Out_Of_Service	\checkmark					
Scale	\checkmark					
Units	\checkmark					
Prescale	\checkmark	\checkmark				
Max_Pres_Value						
Value_Change_Time		\checkmark				
Value_Before_Change		\checkmark				
Value_Set		\checkmark				

Analog Value Object Type					
Property Identifier Writable Optional Property Range Restriction					
Object_Name	\checkmark		1-64 characters		
Description		\checkmark	0-256 characters		
Present_Value	C				
Out_Of_Service					
Units					

C - Conditional

Binary Input Object Type					
☑ Create ☑ Delete					
Property Identifier Writable Optional Property Range Restriction					
Object_Name					
Description ☑ ☑ 0-256 characters					
Present_Value 🗹					

Out_Of_Service			
Inactive_Text		\checkmark	1-32 characters
Active_Text	\checkmark	\checkmark	1-32 characters
Polarity	\checkmark		
Device_Type	\checkmark	\overline{V}	0-32 characters
Reliability	\checkmark	\overline{V}	
Time_Delay		\checkmark	
Notification_Class	\checkmark	\checkmark	
Alarm_Value	\checkmark	\overline{V}	
Event_Enable	\checkmark	\checkmark	
Acked_Transitions		V	
Notify_Type	\checkmark	\overline{V}	
Event_Time_Stamps		\checkmark	
Event_Message_Texts		\overline{V}	
Event_Message_Texts_Config	\checkmark	V	0-128 characters
Event_Detection_Enable	\checkmark	V	
Time_Delay_Normal	\checkmark	\checkmark	

Binary Output Object Type					
☑ Create ☑ Delete					
Property Identifier	Writable	Optional	Property Range Restriction		
Object_Name	\checkmark		1-64 characters		
Description	\checkmark	\checkmark	0-256 characters		
Present_Value	\checkmark				
Out_Of_Service	\checkmark				
Inactive_Text	\checkmark	\checkmark	1-32 characters		
Active_Text	\checkmark	\checkmark	1-32 characters		
Relinquish_Default	\checkmark				
Polarity	\checkmark				
Device_Type	\checkmark	\checkmark	0-32 characters		
Feedback_Value		\checkmark			
Reliability	\checkmark	\checkmark			
Time_Delay	\checkmark	\checkmark			
Notification_Class		\checkmark			
Alarm_Value		V			
Event_Enable	\checkmark	\checkmark			

Acked_Transitions			
Notify_Type	\checkmark	\checkmark	
Event_Time_Stamps		\checkmark	
Event_Message_Texts		\checkmark	
Event_Message_Texts_Config	\checkmark	\checkmark	0-128 characters
Event_Detection_Enable	\checkmark		
Time_Delay_Normal		\checkmark	

Binary Value Object Type				
☑ Create ☑ Delete				
Property Identifier	Writable	Optional	Property Range Restriction	
Object_Name	V		1-64 characters	
Description	V	V	0-256 characters	
Present_Value	V			
Out_Of_Service	V			
Inactive_Text	V	V	1-32 characters	
Active_Text	V	V	1-32 characters	
Priority_Array		V		
Relinquish_Default		V		
Reliability	V	V		
Time_Delay	V	V		
Notification_Class	V	V		
Alarm_Value	V	V		
Event_Enable	V	V		
Acked_Transitions		V		
Notify_Type	V	V		
Event_Time_Stamps		\checkmark		
Event_Message_Texts		V		
Event_Message_Texts_Config	V	V	0-128 characters	
Event_Detection_Enable	V	V		
Time_Delay_Normal	V	\checkmark		

Notification Class Object Type			
☑ Create ☑ Delete			
Property Identifier	Writable	Optional	Property Range Restriction
Object_Name	\checkmark		1-64 characters
Description	\checkmark	\checkmark	0-256 characters
Priority			
Ack_Required			
Recipient_List	\checkmark		

Multistate Value Object Type			
Property Identifier	Writable	Optional	Property Range Restriction
Object_Name	\checkmark		1-64 characters
Description		\checkmark	0-256 characters
Present_Value			
Out_Of_Service			
State_Text		\checkmark	

Program Object Type			
Property Identifier	Writable	Optional	Property Range Restriction
Object_Name	V		1-64 characters
Description	V	V	0-256 characters
Program_Change	V		
Reason_For_Halt		V	
Description_Of_Halt		V	
Out_Of_Service	V		

File Object Type			
Property Identifier	Writable	Optional	Property Range Restriction
File_Size	\checkmark		
Archive			
File_Access_Method	\checkmark		

Data Link Layer Options

☑ MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 57600, 76800, 115200

Device Address Binding	
Is static device binding supported? (This is currently necessary for two-communication with MS/TP slaves and certain other devices.) \square Yes	way ☑ No
Networking Options	
 □ Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ether MS/TP, etc. □ Annex H, BACnet Tunneling Router over IP □ BACnet/IP Broadcast Management Device (BBMD) □ Does the BBMD support registrations by Foreign Devices? □ Does the BBMD support network address translation? 	rnet, Ethernet- □ Yes ☑ No □ Yes ☑ No
Network Security Options	
 ✓ Non-secure Device - is capable of operating without BACnet Netwo ☐ Secure Device - is capable of using BACnet Network Security (NS-SE ☐ Multiple Application-Specific Keys: ☐ Supports encryption (NS-ED BIBB) ☐ Key Server (NS-KS BIBB) 	
Character Sets Supported	
☑ ISO 10646 (UTF-8)	