BACnet Protocol Implementation Conformance Statement

Date: May 8, 2018

Vendor Name: mikolab

Product Name: BLC

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

Firmware Revision: 1.4.3

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 -

☐ Able to receive segmented messages   Window Size –

Standard Object Types Supported

Device Object Type			
Property Identifier	Writable	Optional	Property Range Restriction
Object_Identifier	☑		
Object_Name	☑		1-64 characters
Location	☑	☑	0-32 characters
Description	☑	☑	0-256 characters
Local_Time		☑	
Local_Date		☑	
Max_Master	☑	☑	
Max_Info_Frames	☑	☑	
Configuration_Files		☑	
Backup_Failure_Timeout	☑	☑	
Backup_Preparation_Time		☑	
Restore_Preparation_Time		☑	

	Writable	Optional	
Restore_Completion_Time		☑	
Backup_And_Restore_State		☑	
Active_COV_Subscriptions		☑	

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

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

Property Identifier	Writable	Optional	Property Range Restriction
Inactive_Text	☑	☑	1-32 characters
Active_Text	☑	☑	1-32 characters
Polarity	☑		
Device_Type	☑	☑	0-32 characters
Reliability	☑	☑	
Time_Delay	☑	☑	
Notification_Class	☑	☑	
Alarm_Value	☑	☑	
Event_Enable	☑	☑	
Acked_Transitions		☑	
Notify_Type	☑	☑	
Event_Time_Stamps		☑	
Event_Message_Texts		☑	
Event_Message_Texts_Config	☑	☑	0-128 characters
Event_Detection_Enable	☑	☑	
Time_Delay_Normal	☑	☑	

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

Property Identifier	Writable	Optional	Property Range Restriction
Notify_Type	☑	☑	
Event_Time_Stamps		☑	
Event_Message_Texts		☑	
Event_Message_Texts_Config	☑	☑	0-128 characters
Event_Detection_Enable	☑	☑	
Time_Delay_Normal	☑	☑	

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

Notification Class Object Type

☑ Create ☑ Delete

Property Identifier	Writable	Optional	Property Range Restriction
Object_Name	☑		1-64 characters
Description	☑	☑	0-256 characters
Priority	☑		
Ack_Required	☑		
Recipient_List	☑		

Multistate Value Object Type

Property Identifier	Writable	Optional	Property Range Restriction
Object_Name	☑		1-64 characters
Description	☑	☑	0-256 characters
Present_Value	☑		
Out_Of_Service	☑		
State_Text		☑	

Program Object Type

Property Identifier	Writable	Optional	Property Range Restriction
Object_Name	☑		1-64 characters
Description	☑	☑	0-256 characters
Program_Change	☑		
Reason_For_Halt		☑	
Description_Of_Halt		☑	
Out_Of_Service	☑		

File Object Type

Property Identifier	Writable	Optional	Property Range Restriction
File_Size	☑		
Archive	☑		
File_Access_Method	☑		

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-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
     Does the BBMD support network address translation?   ☐ Yes ☑ No

Network Security Options

☑ Non-secure Device - is capable of operating without BACnet Network Security
☐ Secure Device - is capable of using BACnet Network Security (NS-SD BIBB)
     ☐ Multiple Application-Specific Keys:
     ☐ Supports encryption (NS-ED BIBB)
     ☐ Key Server (NS-KS BIBB)

Character Sets Supported

☑ ISO 10646 (UTF-8)