

# BACnet protocol implementation conformance statement

RCF fan-coil controller/thermostat series





#### **Company Information**

Ever since its foundation in 1947, AB Regin has developed products and systems for creation of indoor comfort. Today, Regin is an important player with one of the market's broadest ranges of building automation and the knowledge, experience and resources to provide first-class support and guidance. Often considered the challenger in building automation, Regin continues to stand out through its undivided commitment and motivation to provide the best for customers and partners.

Further information on AB Regin can be found online at www.regincontrols.com.

#### **Product description**

RCF is a complete, pre-programmed series of fan-coil controllers and thermostats. The units are capable of communicating with a SCADA system via different protocols.

Date	December 3, 2014
Vendor name	AB Regin
Vendor ID	264
Product name	RCF
Product model number	RCF-230CD, RCF-230CAD, RCF-230CTD, RCF-230CTD-EC
Application software version	1.3
Firmware revision	3.0.4
BACnet protocol version	1
BACnet protocol revision	9

#### **BACnet Standardized Device Profile (Annex L)**

- BACnet Operator Workstation (B-OWS)
- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Display (B-OD)
- 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 of all BACnet Interoperability Building Blocks Supported (Annex K)

	Data Sharing – ReadProperty-B	DS-RP-B
Data sharing	Data Sharing – ReadPropertyMultiple-B	DS-RPM-B
	Data Sharing – WriteProperty-B	DS-WP-B
	Device Management – Dynamic Device Binding-B	DM-DDB-B
Device Management	Device Management – Dynamic Object Binding-B	DM-DOB-B
management	Device Management – DeviceCommunicationControl-B	DM-DCC-B

#### **Segmentation Capability**

Able to transmit segmented messages

□ Able to receive segmented messages

Window Size: 1 Window Size:

### Standard Object Types Supported

Object type	Supported	Creatable	Deleteable
Analog Input	•		
Analog Output			
Analog Value	٠		
Binary Input	•		
Binary Output			
Binary Value	•		
Calendar			
Command			
Device	•		
Event Enrollment			
File			
Group			
Loop	•		
Multi-State Input	•		
Multi-State Output			
Multi-State Value	•		
Notification Class			
Program			
Schedule			
Averaging			
Trend Log			
Life Safety Point			
Life Safety Zone			
Accumulator			
Pulse Converter			

Object type	Optional properties supported	Writeable properties (not otherwise required by the standard)	Range restrictions
Analog Input	Description		
	Reliability		
Analog Value	Present_Value	Writeable	
	Description		
	Description		
Binary Input	Reliability		
Binary input	Inactive_Text		
	Active_Text		
	Present_Value	Writeable	
	Description		
Binary Value	Inactive_Text		
	Active_Text		
	Location	Writeable	33 characters (8-bit), supports any character set
	Description	Writeable	17 characters (8-bit), supports any character set
	Max_Segments_Accepted		
Device	APDU_Segment_Timeout		
	Max_Master	Writeable	
	Max_Info_Frames	Writeable	
		Object_Name	42 characters (8-bit), supports any character set
		Object_Identifier	
	Description		
	Reliability		
	Proportional_Constant		
Loop	Proportional_Constant_Units		
	Integral_Constant		
	Integral_Constant_Units		
Multistate Input	Description		
	Reliability		
mput	State_Text		
Multistate Value	Present_Value	Writeable	
	Description		
	Reliability		
	State_Text		

#### **Data Link Layer Options**

BACnet IP, (Annex J)
BACnet IP, (Annex J), Foreign Device
ISO 8802-3, Ethernet (Clause 7)
ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
ATA 878.1, EIA-485 ARCNET (Clause 8), baud rate(s)
MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800
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:
BACnet/ZigBee (ANNEX O)
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.)

#### **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**

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

☑ ISO 10646 (UTF-8)	☑ IBM <sup>™</sup> /Microsoft <sup>™</sup> DBCS	☑ ISO 8859-1
☑ ISO 10646 (UCS-2)	☑ ISO 10646 (UCS-4)	⊠ JIS X 0208

## If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

N/a

REGIN - THE CHALLENGER IN BUILDING AUTOMATION

AB Regin

**Head office** Box 116, S-428 22 Kållered, Sweden

Phone: +46 31 720 02 00 Fax: +46 31 720 02 50 info@regin.se www.regincontrols.com

