Deployment Guide

Somfy Connect BMS Data Points

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Contents

Introduction

Somfy Connect BMS provides control and feedback from a Somfy Stand-alone SDN or animeo IP system. The Somfy Connect BMS is configurable to be part of BACnet/IP, BACnet MS/TP, Modbus, or Modbus IP networks. It operates as a conduit into the Somfy systems, it can not preform any logic actions or seek information from any other BMS device on the network. The Somfy Connect BMS can support up to 1500 data points, the number of devices each unit can support will depend on the type of devices configured.

Systems

1. Stand-alone SDN

Only a single Somfy Connect BMS can be connected to a Stand-alone SDN system.

1.1. Devices

1. Motor
2. Group

1.2. Data Points

For both Group and Motor devices.

Name	Description	BACnet Object Type	BACnet Object ID	Modbus Register
Position (Percent)	0-100% scale 0 = Fully Open, 100 = Fully Closed Read current position* Write to move to a specific position	AV	1	40001
Position (Absolute)	Upper to lower limit in pulse scale 0 = Fully Open, Lower Limit = Fully Closed Read current position* Write to move to a specific position	AV	2	40002
Intermediate Position	Recallable stop locations within the motors limits 16 locations can be setup within the motor Position 0-15 Write to move to saved location	AO	3	40003
Go to Down Limit	Binary Write true to send motor to lower limit	BO	4	00001
Go to Up Limit	Binary Write true to send motor to upper limit	BO	5	00002
Stop	Binary Write true to stop motor during movement	BO	6	00003

* Read not available for Group devices

2. animeo IP

Any number of Somfy Connect BMS can be connect to an animeo IP system.

2.1. Devices

1. Motor
2. Group
3. Virtual Keypad
4. Sensor

2.2. Data Points

Motor Device

Name	Description	BACnet Object Type	BACnet Object ID	Modbus Register
Position (Percent)	0-100% scale 0 =Fully Open, 100 = Fully Closed Read current position	AI	1	30001
Angle	Lower tilt to upper tilt 0 to 90 or -90 to 90 depending on system configuration Write to move to position	AI	2	30002
Type	Type of control currently imposed on motor Read current Type	MI	3	30003
Owner	Who is currently controlling motor Read Current Owner	MI	4	30004
Function Priority	12500 - 32000 range Lower number = higher priority See Appendix 1 Read current priority of motor or group	AI	5	30005
Up	Binary Write true to move motor to upper limit	BV	6	00001
Down	Binary Write true to move motor to lower limit	BV	7	00002
Stop	Binary Write true to stop motor during movement	BV	8	00003
Move	1 - # range Recallable stop locations within the motors limits Set within Somfy Connect BMS interface Write to move to saved location	MV	9	40001
Write Position	0-100% scale 0 =Fully Open, 100 = Fully Closed Write to move to a specific position	AV	10	40002
Write Angle	Lower tilt to upper tilt 0 to 90 or -90 to 90 depending on system configuration Write to move to a specific position	AV	11	40003
Write Priority	-1, 12500-32000 range See appendix 1 write 12500-32000 to get priority of future commands for motor write -1 to clear blocks and reset priority to 12500	AV	12	40004

Group Device

Name	Description	BACnet Object Type	BACnet Object ID	Modbus Register
Up	Binary Write true to move motor to upper limit	BV	1	00001
Down	Binary Write true to move motor to lower limit	BV	2	00002
Stop	Binary Write true to stop motor during movement	BV	3	00003
Move	1 - # range Recallable stop locations within the motors limits Set within Somfy Connect BMS interface Write to move to saved location	MV	4	40001
Write Position	0-100% scale 0 =Fully Open, 100 = Fully Closed Write to move to a specific position	AV	5	00004
Write Angle	Binary Write true to move motor or group to upper limit	AV	6	00005
Write Priority	-1, 12500-32000 range See appendix 1 Write 12500-32000 to get priority of future commands for motor Write -1 to clear blocks and reset priority to 12500	AV	7	40002

Virtual Keypad

Name	Description	BACnet Object Type	BACnet Object ID	Modbus Register
Position	0-100% scale 0 =Fully Open, 100 = Fully Closed Read current position	AI	1	30001
Angle	Lower tilt to upper tilt 0 to 90 or -90 to 90 depending on system configuration Write to move to position	AI	2	30002
Function	Who is currently controlling motor Read current function	MI	3	30003
Function Priority	12500 - 32000 range See appendix 1 Lower number = higher priority See animeo IP priority table for system function priorities Read current priority of motor or group	AI	4	30004
UP	Binary Write true to move motor to upper limit	BV	5	00001
Down	Binary Write true to move motor to lower limit	BV	6	00002
Stop	Binary Write true to stop motor during movement	BV	7	00003
Move	1 - # range Recallable stop locations within the motors limits Set within Somfy Connect BMS interface Write to move to saved location	MV	8	40001
Write Position	0-100% scale 0 =Fully Open, 100 = Fully Closed Write to move to a specific position	AV	9	40002
Write Angle	Lower tilt to upper tilt 0 to 90 or -90 to 90 depending on system configuration Write to move to a specific position	AV	10	40003
Reset	Binary Write true to release control of group	BV	11	00004

Sensor

Name	Description	BACnet Object Type	BACnet Object ID	Modbus Register
Value	Current Sensor Value Light - Lux 0-65000 Wind Speed - km/hr Wind Direction - Precipitation - True/False Temperature - Celsius	AI	1	30001

Appendix

1. animeo IP Priorities

1.1. Description

animeo IP operates with a priority scale of 0 (highest) - 32000 (Lowest). Using the Somfy Connect BMS commands can be sent at a priority level between 12500 and 32000. A device's priority level can be set individually. By default, the Somfy Connect BMS applies a priority of 12500 to all devices in the system. Changing a priority level of a device will only effect future commands, it will not effect already sent commands. Once a command is sent to a device it will remain locked at that priority level until it is unlocked by adjusting the devices priority to -1; the shade will not be able to be moved unless a command with a higher priority is sent to the device

A Virtual Keypad's priority is not able to be managed. When a command is sent to a Virtual Keypad the lock will timeout based on configuration of the shading system.

1.2. Priority Values

ANIMEO IP SECURITY : 0−12500
SOMFY CONNECT BMS (LIMIT) : 12500
LOCAL PC COMMAND = 13000
LOCAL COMMAND TIMER = 14000
LOCAL COMMAND = 15000
TIMER = 19000
GET HEAT = 20000
PRESERVE HEAT = 21000
SUN = 22000
DEFAULT = 32000
CUSTOM DEFAULT = 32000