

## nanodac™

## Recorder / Controller



- High integrity graphical data recording aids statutory compliance across regulated industries
- World class PID control for greater performance and process reliability

## Protocol Implementation Conformance Statement

Date	September 12, 2017
Vendor name	Schneider Electric
Vendor ID	10
Website	www.eurotherm.com
Range name	nanodac™ Recorder/controller
Product name	nanodac™ Recorder/controller

Application Software Version:	V8.09
Firmware Revision:	v8.09
BACnet Protocol Revision:	14

## Product Description

We combined our in depth knowledge of stringent data security requirements of regulated industries with our control expertise in specialist applications such as cascade control, sterilization and carbon control to bring you world class recording and PID control in a space-saving, small box with a superb full colour display.

## Character Sets Supported

Character Sets	Supported
ANSI X3.4	X
ISO 8859-1	X
ISO 10646 (USC-2)	
ISO 10646 (USC-4)	
IBM™ Microsoft™ DBCS	
JIS C 6226	

## BACnet Interoperability Building Blocks (BIBBs) Support

### Data Sharing

BIBB	Description	B-ASC	Product Conformance
DS-RP-A	ReadProperty-A		
DS-RP-B	ReadProperty-B	X	
DS-RPM-A	ReadPropertyMultiple-A		
DS-RPM-B	ReadPropertyMultiple-B		
DS-RPC-A	ReadPropertyConditional-A		
DS-RPC-B	ReadPropertyConditional-B		
DS-WP-A	WriteProperty-A		
DS-WP-B	WriteProperty-B	X	
DS-WPM-A	WritePropertyMultiple-A		
DS-WPM-B	WritePropertyMultiple-B		
DS-COV-A	COV-A		
DS-COV-B	COV-B		
DS-COVP-A	COVP-A		
DS-COVP-B	COVP-B		
DS-COVU-A	COV-Unsolicited-A		
DS-COVU-B	COV-Unsolicited-B		
DS-V-A	View-A		
DS-M-A	Modify-A		
DS-AV-A	Advanced View-A		
DS-AM-A	Advanced Modify-A		

## BACnet Interoperability Building Blocks (BIBBs) Support (continued)

### Alarm and Events

BIBB	Description	B-ASC	Product Conformance
AE-N-A	Notification A		
AE-N-I-B	Notification Internal-B		
AE-N-E-B	Notification External-B		
AE-ACK-A	ACK-A		
AE-ACK-B	ACK-B		
AE-ASUM-A	Alarm Summary-A		
AE-ASUM-B	Alarm Summary-B		
AE-ESUM-A	Enrolment Summary-A		
AE-ESUM-B	Enrolment Summary-B		
AE-INFO-A	Information-A		
AE-INFO-B	Information-B		
AE-LS-A	LifeSaftey-A		
AE-LS-B	LifeSaftey-B		
AE-AS-A	Alarm Summary-A		
AE-VN-A	View Notification-A		
AE-VM-A	View Modify-A		
AE-AVM-A	Advanced View Modify-A		
AE-AVN-A	Advanced View Notification-A		
AE-ELVM-A	Event Log View and Modify-A		

## BACnet Interoperability Building Blocks (BIBBs) Support (continued)

### Schedules

BIBB	Description	B-ASC	Product Conformance
SCHED-I-B	Notification A		
SCHED-E-B	Notification Internal-B		
SCH-VM-A	Notification External-B		
SCH-AVM-A	ACK-A		
SCHED-WS-A	ACK-B		
SCHED-WS-I-B	Alarm Summary-A		
SCHED-R-B	Alarm Summary-B		

### Trends

BIBB	Description	B-ASC	Product Conformance
T-VMT-I-B	Viewing and Modifying Trends Internal-B		
T-VMT-E-B	Viewing and Modifying Trends External-B		
T-ATR-A	Automated Trend Retrieval-A		
T-ATR-B	Automated Trend Retrieval-B		
T-V-A	View-A		
T-A-A	Archiving-A		
T-AVM-A	Advanced View and Modify-A		

## BACnet Interoperability Building Blocks (BIBBs) Support (continued)

### Device Management

BIBB	Description	B-ASC	Product Conformance
DM-DDB-A	Dynamic Device Binding-A		
DM-DDB-B	Dynamic Device Binding-B	X	
DM-DOB-A	Dynamic Object Binding-A		
DM-DOB-B	Dynamic Object Binding-B	X	
DM-DCC-A	Device Communication Control-A		
DM-DCC-B	Device Communication Control-B	X	
DM-PT-A	Private Transfer-A		
DM-PT-B	Private Transfer-B		
DM-TM-A	Text Message-A		
DM-TM-B	Text Message-B		
DM-TS-A	Time Synchronization-A		
DM-TS-B	Time Synchronization-B		
DM-UTC-A	UTCTime Synchronization-A		
DM-UTC-B	UTCTime Synchronization-B		
DM-RD-A	Reinitialize Device-A		
DM-RD-B	Reinitialize Device-B		
DM-BR-A	Backup and Restore-A		
DM-BR-B	Backup and Restore-B		
DM-R-A	Restart-A		
DM-R-B	Restart-B		
DM-LM-A	List Manipulation-A		
DM-LM-B	List Manipulation-B		
DM-OCD-A	Object Creation and Deletion-A		
DM-OCD-B	Object Creation and Deletion-B		
DM-VT-A	Virtual Terminal-A		
DM-VT-B	Virtual Terminal-B		
DM-ANM-A	Automatic Network Mapping-A		
DM-ADM-A	Automatic Device Mapping-A		
DM-ATS-A	Automatic Time Synchronization		
DM-MTS-A	Manual Time Synchronization		

### Network Management

BIBB	Description	B-ASC	Product Conformance
NM-CE-A	Connection Establishment-A		
NM-CE-B	Connection Establishment-B		
NM-RC-A	Router Configuration-A		
NM-RC-B	Router Configuration-B		

## BACnet Standard Object Types Supported (continued)

nanodac specific

Binary Input Object Instance

**NOTE :** “Out of service” property is writable

Object Identifier	Object name	Description	Active/Inactive text	Access
Binary Input#1	DigitalIO.DI_LALC.Output	Indicates status of LALC output	ON/OFF	R
Binary Input#2	DigitalIO.DI_LBLC.Output	Indicates status of LBLC output	ON/OFF	R
Binary Input#3	DigitalIO.1A1B.Output	Indicates status of 1A1B output	ON/OFF	R
Binary Input#4	DigitalIO.2A2B.Output	Indicates status of 2A2B output	ON/OFF	R
Binary Input#5	DigitalIO.3A3B.Output	Indicates status of 3A3B output	ON/OFF	R
Binary Input#6	DigitalIO.RELAY_4AC.Output	Indicates status of 4AC output	ON/OFF	R
Binary Input#7	DigitalIO.RELAY_5AC.Output	Indicates status of 5AC output	ON/OFF	R

## BACnet Standard Object Types Supported (continued)

nanodac specific

Analog Input Object Instance

**NOTE :** “Out of service” property is writable

Object Identifier	Object name	Description	Units	Access
Analog Input#1	Channel.1.Main.PV	Channel 1 PV	—	R
Analog Input#2	Channel.2.Main.PV	Channel 2 PV	—	R
Analog Input#3	Channel.3.Main.PV	Channel 3 PV	—	R
Analog Input#4	Channel.4.Main.PV	Channel 4 PV	—	R
Analog Input#5	Channel.5.Main.PV	Channel 5 PV	—	R
Analog Input#6	Channel.6.Main.PV	Channel 6 PV	—	R
Analog Input#7	Channel.7.Main.PV	Channel 7 PV	—	R
Analog Input#8	Channel.8.Main.PV	Channel 8 PV	—	R
Analog Input#9	Loop.1.Main.TargetSP	Loop 1 working setpoint	—	R
Analog Input#10	Loop.1.Main.ActiveOP	Loop 1 active output	—	R
Analog Input#11	Loop.2.Main.TargetSP	Loop 2 working setpoint	—	R
Analog Input#12	Loop.2.Main.ActiveOP	Loop 2 active output	—	R
Analog Input#13	Steam.1.HeatFlow	Steam 1 Heat Flow	—	R
Analog Input#14	Steam1.MassFlow	Steam 1 Mass Flow	—	R
Analog Input#15	Steam.1.HeatConsumed	Steam 1 heat consumed	—	R
Analog Input#16	Steam.2.WaterEnth	Steam 2 water enthalpy	—	R
Analog Input#17	Steam.2.SteamEnth	Steam 2 steam enthalpy	—	R
Analog Input#18	Steam.2.CalcValue	Steam 2 calculation value	—	R
Analog Input#19	DigitalIO.1A1B.PV	1A1B PV	—	R
Analog Input#20	DigitalIO.2A2B.PV	1A1B PV	—	R
Analog Input#21	DigitalIO.3A3B.PV	1A1B PV	—	R
Analog Input#22	VirtualChannel.1.Main.PV	Virtual channel 1 PV	—	R
Analog Input#23	VirtualChannel.2.Main.PV	Virtual channel 2 PV	—	R
Analog Input#24	VirtualChannel.3.Main.PV	Virtual channel 3 PV	—	R
Analog Input#25	VirtualChannel.4.Main.PV	Virtual channel 4 PV	—	R
Analog Input#26	VirtualChannel.5.Main.PV	Virtual channel 5 PV	—	R
Analog Input#27	VirtualChannel.6.Main.PV	Virtual channel 6 PV	—	R
Analog Input#28	VirtualChannel.7.Main.PV	Virtual channel 7 PV	—	R
Analog Input#29	VirtualChannel.8.Main.PV	Virtual channel 8 PV	—	R
Analog Input#30	VirtualChannel.9.Main.PV	Virtual channel 9 PV	—	R
Analog Input#31	VirtualChannel.10.Main.PV	Virtual channel 10 PV	—	R
Analog Input#32	VirtualChannel.11.Main.PV	Virtual channel 11 PV	—	R
Analog Input#33	VirtualChannel.12.Main.PV	Virtual channel 12 PV	—	R
Analog Input#34	VirtualChannel.13.Main.PV	Virtual channel 13 PV	—	R
Analog Input#35	VirtualChannel.14.Main.PV	Virtual channel 14 PV	—	R
Analog Input#36	VirtualChannel.15.Main.PV	Virtual channel 15 PV	—	R
Analog Input#37	VirtualChannel.16.Main.PV	Virtual channel 16 PV	—	R
Analog Input#38	VirtualChannel.17.Main.PV	Virtual channel 17 PV	—	R
Analog Input#39	VirtualChannel.18.Main.PV	Virtual channel 18 PV	—	R
Analog Input#40	VirtualChannel.19.Main.PV	Virtual channel 19 PV	—	R



## BACnet Standard Object Types Supported (continued)

Analog Input Object Instance (continued)

Object Identifier	Object name	Description	Units	Access
Analog Input#41	VirtualChannel.20.Main.PV	Virtual channel 20 PV	—	R
Analog Input#42	VirtualChannel.21.Main.PV	Virtual channel 21 PV	—	R
Analog Input#43	VirtualChannel.22.Main.PV	Virtual channel 22 PV	—	R
Analog Input#44	VirtualChannel.23.Main.PV	Virtual channel 23 PV	—	R
Analog Input#45	VirtualChannel.24.Main.PV	Virtual channel 24 PV	—	R
Analog Input#46	VirtualChannel.25.Main.PV	Virtual channel 25 PV	—	R
Analog Input#47	VirtualChannel.26.Main.PV	Virtual channel 26 PV	—	R
Analog Input#48	VirtualChannel.27.Main.PV	Virtual channel 27 PV	—	R
Analog Input#49	VirtualChannel.28.Main.PV	Virtual channel 28 PV	—	R
Analog Input#50	VirtualChannel.29.Main.PV	Virtual channel 29 PV	—	R
Analog Input#51	VirtualChannel.30.Main.PV	Virtual channel 30 PV	—	R

## BACnet Standard Object Types Supported (continued)

Analog value object instance

**NOTE :** Out of service property is writable

Object Identifier	Object name	Description	Units	Access
Analog value #1	Channel.1.Alarm1.Threshold	Channel 1 alarm 1 threshold	—	W
Analog value #2	Channel.1.Alarm2.Threshold	Channel 1 alarm 2 threshold	—	W
Analog value #3	Channel.2.Alarm1.Threshold	Channel 2 alarm 1 threshold	—	W
Analog value #4	Channel.2.Alarm2.Threshold	Channel 2 alarm 2 threshold	—	W
Analog value #5	Channel.3.Alarm1.Threshold	Channel 3 alarm 1 threshold	—	W
Analog value #6	Channel.3.Alarm2.Threshold	Channel 3 alarm 2 threshold	—	W
Analog value #7	Channel.4.Alarm1.Threshold	Channel 4 alarm 1 threshold	—	W
Analog value #8	Channel.4.Alarm2.Threshold	Channel 4 alarm 2 threshold	—	W
Analog value #9	Loop1.Main.PV	Loop 1 PV	—	W
Analog value #10	Loop.1.Main.TargetSP	Loop 1 target setpoint	—	W
Analog value #11	Loop.1.Main.AutoMan	Loop 1 auto/manual	—	W
Analog value #12	Loop.1.OP.ManualOutVal	Loop 1 manual output	—	W
Analog value #13	Loop.1.PID.ProportionalBand	Loop 1 proportional band	—	W
Analog value #14	Loop.1.PID.IntegralTime	Loop 1 integral time	—	W
Analog value #15	Loop.1.PID.DerivativeTime	Loop 1 derivative time	—	W
Analog value #16	Loop.2.Main.PV	Loop 1 PV	—	W
Analog value #17	Loop.2.Main.TargetSP	Loop 1 target setpoint	—	W
Analog value #18	Loop.2.Main.AutoMan	Loop 1 auto/manual	—	W
Analog value #19	Loop.2.OP.ManualOutVal	Loop 1 manual output	—	W
Analog value #20	Loop.2.PID.ProportionalBand	Loop 1 proportional band	—	W
Analog value #21	Loop.2.PID.IntegralTime	Loop 1 integral time	—	W
Analog value #22	Loop.2.PID.DerivativeTime	Loop 1 derivative time	—	W
Analog value #23	VirtualChannel.1.Alarm1.Threshold	Virtual channel 1 alarm 1 threshold	—	W
Analog value #24	VirtualChannel.1.Alarm2.Threshold	Virtual channel 1 alarm 2 threshold	—	W
Analog value #25	VirtualChannel.2.Alarm1.Threshold	Virtual channel 2 alarm 1 threshold	—	W
Analog value #26	VirtualChannel.2.Alarm2.Threshold	Virtual channel 2 alarm 2 threshold	—	W
Analog value #27	VirtualChannel.3.Alarm1.Threshold	Virtual channel 3 alarm 1 threshold	—	W
Analog value #28	VirtualChannel.3.Alarm2.Threshold	Virtual channel 3 alarm 2 threshold	—	W
Analog value #29	VirtualChannel.4.Alarm1.Threshold	Virtual channel 4 alarm 1 threshold	—	W
Analog value #30	VirtualChannel.4.Alarm2.Threshold	Virtual channel 4 alarm 2 threshold	—	W
Analog value #31	VirtualChannel.5.Alarm1.Threshold	Virtual channel 5 alarm 1 threshold	—	W
Analog value #32	VirtualChannel.5.Alarm2.Threshold	Virtual channel 5 alarm 2 threshold	—	W
Analog value #33	VirtualChannel.6.Alarm1.Threshold	Virtual channel 6 alarm 1 threshold	—	W
Analog value #34	VirtualChannel.6.Alarm2.Threshold	Virtual channel 6 alarm 2 threshold	—	W
Analog value #35	VirtualChannel.7.Alarm1.Threshold	Virtual channel 7 alarm 1 threshold	—	W
Analog value #36	VirtualChannel.7.Alarm2.Threshold	Virtual channel 7 alarm 2 threshold	—	W
Analog value #37	VirtualChannel.8.Alarm1.Threshold	Virtual channel 8 alarm 1 threshold	—	W
Analog value #38	VirtualChannel.8.Alarm2.Threshold	Virtual channel 8 alarm 2 threshold	—	W
Analog value #39	VirtualChannel.9.Alarm1.Threshold	Virtual channel 9 alarm 1 threshold	—	W
Analog value #40	VirtualChannel.9.Alarm2.Threshold	Virtual channel 9 alarm 2 threshold	—	W
Analog value #41	VirtualChannel.10.Alarm1.Threshold	Virtual channel 10 alarm 1 threshold	—	W
Analog value #42	VirtualChannel.10.Alarm2.Threshold	Virtual channel 10 alarm 2 threshold	—	W

## BACnet Standard Object Types Supported (continued)

Analog value object instance (continued)

Object Identifier	Object name	Description	Units	Access
Analog value #43	VirtualChannel.11.Alarm1.Threshold	Virtual channel 11 alarm 1 threshold	—	W
Analog value #44	VirtualChannel.11.Alarm2.Threshold	Virtual channel 11 alarm 2 threshold	—	W
Analog value #45	VirtualChannel.12.Alarm1.Threshold	Virtual channel 12 alarm 1 threshold	—	W
Analog value #46	VirtualChannel.12.Alarm2.Threshold	Virtual channel 12 alarm 2 threshold	—	W
Analog value #47	VirtualChannel.13.Alarm1.Threshold	Virtual channel 13 alarm 1 threshold	—	W
Analog value #48	VirtualChannel.13.Alarm2.Threshold	Virtual channel 13 alarm 2 threshold	—	W
Analog value #49	VirtualChannel.14.Alarm1.Threshold	Virtual channel 14 alarm 1 threshold	—	W
Analog value #50	VirtualChannel.14.Alarm2.Threshold	Virtual channel 14 alarm 2 threshold	—	W
Analog value #51	VirtualChannel.15.Alarm1.Threshold	Virtual channel 15 alarm 1 threshold	—	W
Analog value #52	VirtualChannel.15.Alarm2.Threshold	Virtual channel 15 alarm 2 threshold	—	W
Analog value #53	UserParameter.1.Address	User parameter 1 address	—	W
Analog value #54	UserParameter.1.Value	User parameter 1 value	—	W
Analog value #55	UserParameter.2.Address	User parameter 2 address	—	W
Analog value #56	UserParameter.2.Value	User parameter 2 value	—	W
Analog value #57	UserParameter.3.Address	User parameter 3 address	—	W
Analog value #58	UserParameter.3.Value	User parameter 3 value	—	W
Analog value #59	UserParameter.4.Address	User parameter 4 address	—	W
Analog value #60	UserParameter.4.Value	User parameter 4 value	—	W
Analog value #61	UserParameter.5.Address	User parameter 5 address	—	W
Analog value #62	UserParameter.5.Value	User parameter 5 value	—	W
Analog value #63	UserParameter.6.Address	User parameter 6 address	—	W
Analog value #64	UserParameter.6.Value	User parameter 6 value	—	W
Analog value #65	UserParameter.7.Address	User parameter 7 address	—	W
Analog value #66	UserParameter.7.Value	User parameter 7 value	—	W
Analog value #67	UserParameter.8.Address	User parameter 8 address	—	W
Analog value #68	UserParameter.8.Value	User parameter 8 value	—	W
Analog value #69	UserParameter.9.Address	User parameter 9 address	—	W
Analog value #70	UserParameter.9.Value	User parameter 9 value	—	W
Analog value #71	UserParameter.10.Address	User parameter 10 address	—	W
Analog value #72	UserParameter.10.Value	User parameter 10 value	—	W
Analog value #73	UserParameter.11.Address	User parameter 11 address	—	W
Analog value #74	UserParameter.11.Value	User parameter 11 value	—	W
Analog value #75	UserParameter.12.Address	User parameter 12 address	—	W
Analog value #76	UserParameter.12.Value	User parameter 12 value	—	W
Analog value #77	UserParameter.13.Address	User parameter 13 address	—	W
Analog value #78	UserParameter.13.Value	User parameter 13 value	—	W
Analog value #79	UserParameter.14.Address	User parameter 14 address	—	W
Analog value #80	UserParameter.14.Value	User parameter 14 value	—	W
Analog value #81	UserParameter.15.Address	User parameter 15 address	—	W
Analog value #82	UserParameter.15.Value	User parameter 15 value	—	W
Analog value #83	UserParameter.16.Address	User parameter 16 address	—	W
Analog value #84	UserParameter.16.Value	User parameter 16 value	—	W

## BACnet Standard Object Types Supported (continued)

Analog value object instance (continued)

Object Identifier	Object name	Description	Units	Access
Analog value #85	UserParameter.17.Address	User parameter 17 address	—	W
Analog value #86	UserParameter.17.Value	User parameter 17 value	—	W
Analog value #87	UserParameter.18.Address	User parameter 18 address	—	W
Analog value #88	UserParameter.18.Value	User parameter 18 value	—	W
Analog value #89	UserParameter.19.Address	User parameter 19 address	—	W
Analog value #90	UserParameter.19.Value	User parameter 19 value	—	W
Analog value #91	UserParameter.20.Address	User parameter 20 address	—	W
Analog value #92	UserParameter.20.Value	User parameter 20 value	—	W
Analog value #93	UserParameter.21.Address	User parameter 21 address	—	W
Analog value #94	UserParameter.21.Value	User parameter 21 value	—	W
Analog value #95	UserParameter.22.Address	User parameter 22 address	—	W
Analog value #96	UserParameter.22.Value	User parameter 22 value	—	W
Analog value #97	UserParameter.23.Address	User parameter 23 address	—	W
Analog value #98	UserParameter.23.Value	User parameter 23 value	—	W
Analog value #99	UserParameter.24.Address	User parameter 24 address	—	W
Analog value #100	UserParameter.24.Value	User parameter 24 value	—	W
Analog value #101	UserParameter.25.Address	User parameter 25 address	—	W
Analog value #102	UserParameter.25.Value	User parameter 25 value	—	W
Analog value #103	UserParameter.26.Address	User parameter 26 address	—	W
Analog value #104	UserParameter.26.Value	User parameter 26 value	—	W
Analog value #105	UserParameter.27.Address	User parameter 27 address	—	W
Analog value #106	UserParameter.27.Value	User parameter 27 value	—	W
Analog value #107	UserParameter.28.Address	User parameter 28 address	—	W
Analog value #108	UserParameter.28.Value	User parameter 28 value	—	W
Analog value #109	UserParameter.29.Address	User parameter 29 address	—	W
Analog value #110	UserParameter.29.Value	User parameter 29 value	—	W
Analog value #111	UserParameter.30.Address	User parameter 30 address	—	W
Analog value #112	UserParameter.30.Value	User parameter 30 value	—	W

## BACnet Standard Object Types Supported (continued)

Multi State input Object instance

**NOTE :** “Out of service” property is writable

Object Identifier	Object name	Description	Units	Access
MSI #1	Channel.1.Alarm1.Status	Channel 1 alarm 1 status	—	R
MSI #2	Channel.1.Alarm2.Status	Channel 1 alarm 2 status	—	R
MSI #3	Channel.2.Alarm1.Status	Channel 2 alarm 1 status	—	R
MSI #4	Channel.2.Alarm2.Status	Channel 2 alarm 2 status	—	R
MSI #5	Channel.3.Alarm1.Status	Channel 3 alarm 1 status	—	R
MSI #6	Channel.3.Alarm2.Status	Channel 3 alarm 2 status	—	R
MSI #7	Channel.4.Alarm1.Status	Channel 4 alarm 1 status	—	R
MSI #8	Channel.4.Alarm2.Status	Channel 4 alarm 2 status	—	R
MSI #9	VirtualChannel.1.Alarm1.Status	Virtual channel 1 alarm 1 status	—	R
MSI #10	VirtualChannel.1.Alarm2.Status	Virtual channel 1 alarm 2 status	—	R
MSI #11	VirtualChannel.2.Alarm1.Status	Virtual channel 2 alarm 1 status	—	R
MSI #12	VirtualChannel.2.Alarm2.Status	Virtual channel 2 alarm 2 status	—	R
MSI #13	VirtualChannel.3.Alarm1.Status	Virtual channel 3 alarm 1 status	—	R
MSI #14	VirtualChannel.3.Alarm2.Status	Virtual channel 3 alarm 2 status	—	R
MSI #15	VirtualChannel.4.Alarm1.Status	Virtual channel 4 alarm 1 status	—	R
MSI #16	VirtualChannel.4.Alarm2.Status	Virtual channel 4 alarm 2 status	—	R
MSI #17	VirtualChannel.5.Alarm1.Status	Virtual channel 5 alarm 1 status	—	R
MSI #18	VirtualChannel.5.Alarm2.Status	Virtual channel 5 alarm 2 status	—	R
MSI #19	VirtualChannel.6.Alarm1.Status	Virtual channel 6 alarm 1 status	—	R
MSI #20	VirtualChannel.6.Alarm2.Status	Virtual channel 6 alarm 2 status	—	R
MSI #21	VirtualChannel.7.Alarm1.Status	Virtual channel 7 alarm 1 status	—	R
MSI #22	VirtualChannel.7.Alarm2.Status	Virtual channel 7 alarm 2 status	—	R
MSI #23	VirtualChannel.8.Alarm1.Status	Virtual channel 8 alarm 1 status	—	R
MSI #24	VirtualChannel.8.Alarm2.Status	Virtual channel 8 alarm 2 status	—	R
MSI #25	VirtualChannel.9.Alarm1.Status	Virtual channel 9 alarm 1 status	—	R
MSI #26	VirtualChannel.9.Alarm2.Status	Virtual channel 9 alarm 2 status	—	R
MSI #27	VirtualChannel.10.Alarm1.Status	Virtual channel 10 alarm 1 status	—	R
MSI #28	VirtualChannel.10.Alarm2.Status	Virtual channel 10 alarm 2 status	—	R
MSI #29	VirtualChannel.11.Alarm1.Status	Virtual channel 11 alarm 1 status	—	R
MSI #30	VirtualChannel.11.Alarm2.Status	Virtual channel 11 alarm 2 status	—	R
MSI #31	VirtualChannel.12.Alarm1.Status	Virtual channel 12 alarm 1 status	—	R
MSI #32	VirtualChannel.12.Alarm2.Status	Virtual channel 12 alarm 2 status	—	R
MSI #33	VirtualChannel.13.Alarm1.Status	Virtual channel 13 alarm 1 status	—	R
MSI #34	VirtualChannel.13.Alarm2.Status	Virtual channel 13 alarm 2 status	—	R
MSI #35	VirtualChannel.14.Alarm1.Status	Virtual channel 14 alarm 1 status	—	R
MSI #36	VirtualChannel.14.Alarm2.Status	Virtual channel 14 alarm 2 status	—	R
MSI #37	VirtualChannel.15.Alarm1.Status	Virtual channel 15 alarm 1 status	—	R
MSI #38	VirtualChannel.15.Alarm2.Status	Virtual channel 15 alarm 2 status	—	R

## BACnet Standard Object Types Supported (continued)

Character String object instance

Object Identifier	Object name	Description	Units	Access
Char string #1	Loop.1.Setup.LoopName	Loop 1 name	—	R
Char string #2	Loop.2.Setup.LoopName	Loop 2 name	—	R

**NOTE :** For Present Value Access Types, R = Read-only, W = Writeable, C = Commandable

### Additional functions

Besides the services of “datasharing” the nanodac provides the following functions.

### Full numeric parameters access.

By the use of indirect access, it is possible to read or write any of the internal numeric parameters of the nanodac, except 32 bit integer values. Integer values that can be accessed will have a resolution of “1.0”.

This functionality is assured by the user parameter objects:

UserParameter.n.Address, UserParameter.n.Value.(n = 1 to 30)

### Reading:

Write the modbus address of the parameter to the present value property of the address object.

The current value of the parameter can be read in the present value property of value object.

### Writing a parameter:

Write the modbus address of the parameter to the present value property of the address object.

Write the new value in the present value property of the value object.