



Profile Definition and Network Variables

The following tables are sorted as follows:

- Tables are listed by unit/profile type and sorted by network variable number.
- Tables are sorted by name and provide a complete list of names, types, values/ranges, and descriptions.

Note: Not all points are available to the user. The available data points are defined during self-configuration and are dependent on the type of equipment.

Symbio™ 800 Integration Points List
LonTalk®
Series R® Model RTWD

Date: 11/15/2024
Reference Document: BAS-SVP084*-EN



nv Index	Configuration Variable Name	Variable Description	Point Name
5	nciMfgLocation	Chiller Manufacturing Location	ManufLocation
6	nciNoiseRdcnReq	Default for Noise Reduction Auto/On Request	NoiseReductionRequest
7	nciRefrigerant	Chiller Refrigerant Type	RefrigType
8	nciCapacityLim	Capacity Limit	CurrentLimitStpt_CGAM
9	nciChillerEnable	Default Value for nviChillerEnable	ChillerAutoStopCmd
10	nciCoolsetpt	Relinquished Default Value for nviCoolSetpt	Chilled water Setpoint
11	nciDefaults	Default Values / Used to decide if configuration defaults should be used	Internal
12	nciDevMajVer	The major version number for the device	SoftwareMajorVersion
13	nciDevMinVer	The minor version number for the device	SoftwareMinorVersion
14	nciHeatSetpt	Default Value for nviHeatSetpt	HotWaterStpt
15	nciLocation	Location Label	Internal
16	nciMinOutTm	Minimum Send Time	Internal
17	nciMode	Default Value for nviMode	ChillerModeCmd
18	nciPwrup		N/A
19	nciRcvHrtBt	Receive Heartbeat Time	Internal
20	nciSndHrtBt	Send Heartbeat Time (nciMAXSendTime)	Internal
21	nciBuildNum		Internal
22	nciCRC	CRC Calculation Result	Internal
23	nciDeviceConfig		Internal

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nv Index	Network Variable Name	Variable Description	Recv HrtBt	Point Name
24	nviChillerEnable	Request Start/Stop Chiller	X	ChillerAutoStopCmd
25	nviCoolSetpt	Desired Temp of Lvg Chilled Wtr	X	ChilledWaterStpt
26	nviCapacityLim	Capacity Limit of Chiller	X	CurrentLimitStpt_CGAM
28	nviMode	Chiller Modes	X	ChillerModeCmd
29	nviHeatSetpt	Heating Setpoint	X	HotWaterStpt
32	nviNoiseRdcnReq	Noise Reduction Auto/On Request	X	NoiseReductionRequest
35	nviRequest	Status Request		Internal
36	nviTraneVar2	Comm5 Status		Internal



nv Index	Network Variable Name	Variable Description	Delta to Send (Notes)	Send HrdBt	Point Name
37	nvoOnOff	Chiller On / Off run state	0	X	Chiller Running State
38	nvoActiveSetpt	Active Cool or Heat Setpt	0.10 °C	X	Active Heat/Chilled Water Setpoint Temperature
39	nvoActualCapacity	Actual Running Capacity of Unit	3	X	Actual Running Capacity
40	nvoCapacityLim	Current Capacity Limit Setting of Chiller	1	X	Active Demand Limit Stpt
41	nvoLvgCHWTemp	Leaving Chilled Water Temp	0.10 °C	X	Evaporator Leaving Water Temperature
42	nvoEntCHWTemp	Entering Chilled Water Temp	0.10 °C	X	Evaporator Entering Water Temperature
43	nvoEntCndWTemp	Entering Condenser Water Temp	0.50 °C	X	Condenser Entering Water Temperature
44	nvoLvgCndWTemp	Leaving Condenser Water Temp	0.10 °C	X	Condenser Leaving Water Temperature
45	nvoAlarmDescr	Alarm annunciation text	0		UnitSourceID
46	nvoChillerstat	Chiller States , modes		X	Internal
			0		RunningMode
			0		OperatingMode
			-1		NotDefined
			-1		NotDefined
			0		CondenserWaterFlowStatus
			0		EvaporatorWaterFlowStatus
			0		LimitModeRelayStatus
			0		LocalSetpointControl
			0		RunEnabled
			0		UCMDiagnosticPresent
47	nvoStatusOutputs	Status Outputs		X	Internal
			-1		NotDefined
			0		HeatRecoveryControlActive
			0		InDefrost
			0		NoiseReductionRequestActive
			0		HotGasBypassActive
			0		BaseLoadingActive
			0		HeadReliefRequest
			0		MaximumCapacity
48	nvoCprsrRunning	Compressor Running Outputs		X	Internal
			0		Compressor2DRunning
			0		Compressor1DRunning



nv Index	Network Variable Name	Variable Description	Delta to Send (Notes)	Send HrdBt	Point Name
			0		Compressor2CRunning
			0		Compressor2BRunning
			0		Compressor2ARunning
			0		Compressor1CRunning
			0		Compressor1BRunning
			0		Compressor1ARunning
49	nvoEvapWtrPump	Evaporator Water Pump Request	0	X	EvapWaterPumpRequest
50	nvoEvapWtrFlow	Evaporator Water Flow Status	0	X	EvaporatorWaterFlowStatus
51	nvoCondWtrPump	Condenser Water Pump Request	0	X	CondenserWaterPumpRequest
52	nvoCondWtrFlow	Condenser Water Flow Status	0	X	CondenserWaterFlowStatus
53	nvoOutdoorTemp	Outdoor Air Temperature	1	X	OutdoorAirTemp
57	nvoCondControl	Condenser Control Output	0	X	CondControlOutput
58	nvoEvapAprchTmp	Evaporator Approach Temperature	0.5	X	EvapApproachTempCkt1
59	nvoCondAprchTmp	Condenser Approach Temperature	0.5	X	CondApproachTempCkt1
64	nvoEvapRfgtPrsC1	Evaporator Refrigerant Pressure - Circuit 1	20	X	EvapRefrigPressCkt1
65	nvoEvapRfgtPrsC2	Evaporator Refrigerant Pressure - Circuit 2	20	X	EvapRefrigPressCkt2
66	nvoEvapRfgtTmpC1	Evaporator Refrigerant Temperature - Circuit 1	0.50°C	X	EvapSatRefrigTempCkt1
67	nvoEvapRfgtTmpC2	Evaporator Refrigerant Temperature - Circuit 2	0.5	X	EvapSatRefrigTempCkt2
68	nvoCondRfgtPrsC1	Condenser Refrigerant Pressure - Circuit 1	20	X	CondRefrigPressCkt1
69	nvoCondRfgtPrsC2	Condenser Refrigerant Pressure - Circuit 2	20	X	CondRefrigPressCkt2
70	nvoCondRfgtTmpC1	Condenser Refrigerant Temperature - Circuit 1	2.00°C	X	CondSatRefrigTempCkt1
71	nvoCondRfgtTmpC2	Condenser Refrigerant Temperature - Circuit 2	2.00°C	X	CondSatRefrigTempCkt2
72	nvoAirFlowPctC1	Air Flow Percent – Circuit 1	5	X	Circuit1AirFlowPercent
73	nvoAirFlowPctC2	Air Flow Percent – Circuit 2	5	X	Circuit2AirFlowPercent
76	nvoHiSideOilPrsA	High Side Oil Pressure - Compressor 1A	20	X	Compr1AHighSideOilPress
77	nvoHiSideOilPrsB	High Side Oil Pressure - Compressor 1B	20	X	Compr1BHighSideOilPress
79	nvoHiSideOilPrsD	High Side Oil Pressure - Compressor 2A	20	X	Compr2AHighSideOilPress
80	nvoHiSideOilPrsE	High Side Oil Pressure - Compressor 2B	20	X	Compr2BHighSideOilPress
88	nvoOilTempA	Oil Temperature - Compressor 1A	1	X	Compr1AOilTemp
91	nvoOilTempD	Oil Temperature - Compressor 2A	1	X	Compr2AOilTemp
94	nvoRfgtDischTmpA	Refrigerant Discharge Temperature - Compressor 1A	0.50°C	X	Compr1ARefrigDischTemp
95	nvoRfgtDischTmpB	Refrigerant Discharge Temperature - Compressor 1B	0.50°C	X	Compr1BRefrigDischTemp



nv Index	Network Variable Name	Variable Description	Delta to Send (Notes)	Send HrdBt	Point Name
97	nvoRfgtDischTmpD	Refrigerant Discharge Temperature - Compressor 2A	0.50°C	X	Compr2ARefrigDischTemp
98	nvoRfgtDischTmpE	Refrigerant Discharge Temperature - Compressor 2B	0.50°C	X	Compr2BRefrigDischTemp
100	nvoVoltageA	Voltage Per Phase – Compressor 1A	defined at element	X	Internal
		Compressor 1A Phase AB voltage	20		Compr1APhaseABVolt
		Compressor 1A Phase BC voltage	20		Compr1APhaseBCVolt
		Compressor 1A Phase CA voltage	20		Compr1APhaseCAVolt
101	nvoVoltageB	Voltage Per Phase – Compressor 1B	defined at element	X	Internal
		Compressor 1B Phase AB voltage	20		Compr1BPhaseABVolt
		Compressor 1B Phase BC voltage	20		Compr1BPhaseBCVolt
		Compressor 1B Phase CA voltage	20		Compr1BPhaseCAVolt
102	nvoVoltageD	Voltage Per Phase – Compressor 2A	defined at element	X	Internal
		Compressor 2A Phase AB voltage	20		Compr2APhaseABVolt
		Compressor 2A Phase BC voltage	20		Compr2APhaseBCVolt
		Compressor 2A Phase CA voltage	20		Compr2APhaseCAVolt
103	nvoVoltageE	Voltage Per Phase – Compressor 2B	defined at element	X	Internal
		Compressor 2B Phase AB voltage	20		Compr2BPhaseABVolt
		Compressor 2B Phase BC voltage	20		Compr2BPhaseBCVolt
		Compressor 2B Phase CA voltage	20		Compr2BPhaseCAVolt
106	nvoCurrentA	Current Per Line – Compressor 1A	defined at element	X	Internal
		Compressor 1A Phase L1 amps	15		Compr1ALine1CurrentAmp
		Compressor 1A Phase L2 amps	15		Compr1ALine2CurrentAmp
		Compressor 1A Phase L3 amps	15		Compr1ALine3CurrentAmp
		Compressor 1A Phase L1 %RLA	-0.01		Compr1ALine1CurrentRLA
		Compressor 1A Phase L2 %RLA	-0.01		Compr1ALine2CurrentRLA
		Compressor 1A Phase L3 %RLA	-0.01		Compr1ALine3CurrentRLA
107	nvoCurrentB	Current Per Line – Compressor 1B	defined at element	X	Internal
		Compressor 1B Phase L1 amps	15		Compr1BLine1CurrentAmp
		Compressor 1B Phase L2 amps	15		Compr1BLine2CurrentAmp
		Compressor 1B Phase L3 amps	15		Compr1BLine3CurrentAmp
		Compressor 1B Phase L1 %RLA	-0.01		Compr1BLine1CurrentRLA
		Compressor 1B Phase L2 %RLA	-0.01		Compr1BLine2CurrentRLA
		Compressor 1B Phase L3 %RLA	-0.01		Compr1BLine3CurrentRLA



nv Index	Network Variable Name	Variable Description	Delta to Send (Notes)	Send HrdBt	Point Name
109	nvoCurrentD	Current Per Line – Compressor 2A	defined at element		Internal
		Compressor 2A Phase L1 amps	15	X	Compr2ALine1CurrentAmp
		Compressor 2A Phase L2 amps	15		Compr2ALine2CurrentAmp
		Compressor 2A Phase L3 amps	15		Compr2ALine3CurrentAmp
		Compressor 2A Phase L1 %RLA	-0.01		Compr2ALine1CurrentRLA
		Compressor 2A Phase L2 %RLA	-0.01		Compr2ALine2CurrentRLA
		Compressor 2A Phase L3 %RLA	-0.01		Compr2ALine3CurrentRLA
110	nvoCurrentE	Current Per Line – Compressor 2B	defined at element	X	Internal
		Compressor 2B Phase L1 amps	15		Compr2BLine1CurrentAmp
		Compressor 2B Phase L2 amps	15		Compr2BLine2CurrentAmp
		Compressor 2B Phase L3 amps	15		Compr2BLine3CurrentAmp
		Compressor 2B Phase L1 %RLA	-0.01		Compr2BLine1CurrentRLA
		Compressor 2B Phase L2 %RLA	-0.01		Compr2BLine2CurrentRLA
		Compressor 2B Phase L3 %RLA	-0.01		Compr2BLine3CurrentRLA
112	nvoStartsRunTmA	Starts and Run Time – Compressor 1A	defined at element	X	Internal
		Compressor 1A Starts	1		Compr1AStarts
		Compressor 1A Run Time	360 sec		Compr1ARunTime
113	nvoStartsRunTmB	Starts and Run Time – Compressor 1B	defined at element	X	Internal
		Compressor 1B Starts	1		Compr1BStarts
		Compressor 1B Run Time	360 sec		Compr1BRunTime
115	nvoStartsRunTmD	Starts and Run Time – Compressor 2A	defined at element	X	Internal
		Compressor 2A Starts	1		Compr2AStarts
		Compressor 2A Run Time	360 sec		Compr2ARunTime
116	nvoStartsRunTmE	Starts and Run Time – Compressor 2B	defined at element	X	Internal
		Compressor 2B Starts	1		Compr2BStarts
		Compressor 2B Run Time	360 sec		Compr2BRunTime
118	nvoUnitPower	Unit Power Consumption	2	X	UnitPowerConsump
133	nvoStatus	Status Response		X	Internal
			-1		Internal
			-1		Internal
			-1		Internal
			-1		Internal

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			-1		Internal
			-1		Internal
			-1		Internal
			-1		Internal
			-1		Internal
			-1		Internal
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			-1		Internal
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			-1		Internal
			-1		Internal
			-1		Internal
			-1		Internal
134	nvoTraneVar9	Comm5 Status	-1		Internal