



Object Naming Conventions

The communicated points for the Symbio™ controllers are generally named according to their function. While many of the points are read-only, others include both read and write capability. The established naming convention helps to identify the capabilities of each point. For most points, the suffix identifies the capability according to the following definition. While there are some exceptions, the majority of the points have been defined according to these guidelines.

Suffix	Description
Status	Points with the Status suffix are defined as read-only. The status point reports the value being used by the controller.
Local	Points with the Local suffix are defined as read-only. The local point reports values associated with controller sensors, both wired and wireless. The local value may or may not be actively used by the controller, depending on the presence or absence of a communicated value (BAS). When both a local and communicated value exist, the communicated value is used.
Active	Points with the Active suffix are defined as read-only. Points designated as active are normally the result of the arbitration between a communicated value(BAS) and at least one value local to the equipment, such as a sensor or default setpoint. The active point reports the value being input to the controller.
Setpoint	Points with the Setpoint suffix are defined as either read-only or read/write. For BACnet®, the binary input, analog input and multi-state input points are all read-only. These setpoints report the value currently in use by the controller. The analog value, binary value and multi-state value points are all read/write. These points are provided for use by the building automation system (BAS). When used, these points are written internally to arbitration logic. This defines the interaction with hardwired points, editable software configuration points and the relinquish default value/state. Refer to the Appendix for additional information.
Input	Points with the Input suffix are defined as read-only. These points normally reflect the status of a sensor input, either hardwired or communicating wirelessly (Air-Fi®). However, the input point reflects the arbitrated result of the controller sensor input and a communicated value, if present. When both a controller sensor and communicated value exist, the controller will use and report the communicated value.
Arbitrator	Points with the "Arbitrator" suffix are to be used as read-only. The arbitrator prioritizes inputs from communicating points, hardwired points and stored defaults points. The priority array of the arbitration point displays each of the values provided, including the active status, indicating which of the input sources is being used. Refer to the Appendix for additional information.
BAS	Points with the BAS suffix are defined as read/write. These points are provided for use by the building automation system (BAS). When used, these points are written to arbitration logic. This defines the interaction with hardwired points, editable software configuration points and the relinquished default value/state. Refer to the Appendix for additional information.
Command	Points with the Command suffix are defined as read/write. These points are written to change the default behavior of the controller. Once written, these point values may be persisted.
Request	Points with the Request suffix are defined as read/write. These points are written to request a change the operating behavior of the controller.

Object Data Points and Diagnostic Data Points

The following tables are sorted as follows:

- Tables are listed by input/output type and sorted by object identifier. These tables provide the user with the unit's type for each object type.
- Tables are sorted by object name and provide a complete list of object 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.



BACnet Object Identifier	Object Name	Units	Configuration Dependency	Modbus Register Address
AI-10100	Active Chilled Water Setpoint	Temperature	Standard	30011
AI-10101	Active Demand Limit Setpoint	Percentage	Standard	30013
AI-10102	Actual Running Capacity	Percentage	Standard	30015
AI-10103	Evaporator Refrigerant Pressure Circuit 1	Pressure, Fluidic	Standard	30017
AI-10104	Evaporator Refrigerant Pressure Circuit 2	Pressure, Fluidic	Standard	30019
AI-10105	Evaporator Saturated Refrigerant Temperature Circuit 1	Temperature	Standard	30021
AI-10106	Evaporator Saturated Refrigerant Temperature Circuit 2	Temperature	Standard	30023
AI-10107	Condenser Refrigerant Pressure Circuit 1	Pressure, Fluidic	Standard	30025
AI-10108	Condenser Refrigerant Pressure Circuit 2	Pressure, Fluidic	Standard	30027
AI-10109	Condenser Saturated Refrigerant Temperature Circuit 1	Temperature	Standard	30029
AI-10110	Condenser Saturated Refrigerant Temperature Circuit 2	Temperature	Standard	30031
AI-10111	Local Atmospheric Pressure	Pressure, Fluidic	Standard	30033
AI-10112	Starts - Compressor 1A	No Units	Standard	30035
AI-10113	Run Time- Compressor 1A (in seconds)	No Units	Standard	30037
AI-10114	Starts- Compressor 1B	No Units	Compressor 1B	30039
AI-10115	Run Time- Compressor 1B (in seconds)	No Units	Compressor 1B	30041
AI-10116	Starts- Compressor 2A	No Units	Standard	30043
AI-10117	Run Time- Compressor 2A (in seconds)	No Units	Standard	30045
AI-10118	Starts - Compressor 2B	No Units	Compressor 2B	30047
AI-10119	Run Time- Compressor 2B (in seconds)	No Units	Compressor 2B	30049
AI-10120	Air Flow Percentage Circuit 1	Percentage	Standard	30051
AI-10121	Air Flow Percentage Circuit 2	Percentage	Standard	30053
AI-10122	Evaporator Entering Water Temperature	Temperature	Standard	30055
AI-10123	Evaporator Leaving Water Temperature	Temperature	Standard	30057
AI-10124	Oil Pressure - Compressor 1A	Pressure, Fluidic	Standard	30059
AI-10125	Oil Pressure - Compressor 1B	Pressure, Fluidic	Compressor 1B	30061
AI-10126	Oil Pressure - Compressor 2A	Pressure, Fluidic	Standard	30063
AI-10127	Oil Pressure - Compressor 2B	Pressure, Fluidic	Compressor 2B	30065



BACnet Object Identifier	Object Name	Units	Configuration Dependency	Modbus Register Address
AI-10128	Oil Temperature - Compressor 1A	Temperature	Common	30067
AI-10129	Oil Temperature - Compressor 1B	Temperature	Compressor 1B	30069
AI-10130	Oil Temperature - Compressor 2A	Temperature	Standard	30071
AI-10131	Oil Temperature - Compressor 2B	Temperature	Compressor 2B	30073
AI-10132	Outdoor Air Temperature	Temperature	Standard	30075
AI-10133	Phase AB Voltage - Compressor 1A	Voltage	EM Starter 1A	30077
AI-10134	Phase AB Voltage - Compressor 1B	Voltage	TR200 Modbus AFD 1A and Number of Compressors = 3 or 4	30079
AI-10135	Phase AB Voltage - Compressor 2A	Voltage	TR200 Modbus AFD 1A, EM Starter 2A and Number of Compressors = 2	30081
AI-10136	Line 1 Current - Compressor 1A	Current	EM Starter 1A	30083
AI-10137	Line 2 Current - Compressor 1A	Current	EM Starter 1A	30085
AI-10138	Line 3 Current - Compressor 1A	Current	EM Starter 1A	30087
AI-10139	Line 1 Current - Compressor 1B	Current	EM Starter 1B	30089
AI-10140	Line 2 Current - Compressor 1B	Current	EM Starter 1B	30091
AI-10141	Line 3 Current - Compressor 1B	Current	EM Starter 1B	30093
AI-10142	Line 1 Current - Compressor 2A	Current	EM Starter 2A	30095
AI-10143	Line 2 Current - Compressor 2A	Current	EM Starter 2A	30097
AI-10144	Line 3 Current - Compressor 2A	Current	EM Starter 2A	30099
AI-10145	Line 1 Current - Compressor 2B	Current	EM Starter 2B	30101
AI-10146	Line 2 Current - Compressor 2B	Current	EM Starter 2B	30103
AI-10147	Line 3 Current - Compressor 2B	Current	EM Starter 2B	30105
AI-10148	Line 1 Current RLA - Compressor 1A	Percentage	EM Starter 1A	30107
AI-10149	Line 2 Current RLA - Compressor 1A	Percentage	EM Starter 1A	30109
AI-10150	Line 3 Current RLA - Compressor 1A	Percentage	EM Starter 1A	30111
AI-10151	Line 1 Current RLA - Compressor 1B	Percentage	EM Starter 1B	30113
AI-10152	Line 2 Current RLA - Compressor 1B	Percentage	EM Starter 1B	30115
AI-10153	Line 3 Current RLA - Compressor 1B	Percentage	EM Starter 1B	30117

Symbio™ 800 Integration Points List
BACnet®/Modbus™
 RTAC

Date: 11/8/2024
 Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Units	Configuration Dependency	Modbus Register Address
AI-10154	Line 1 Current RLA - Compressor 2A	Percentage	EM Starter 2A	30119
AI-10155	Line 2 Current RLA - Compressor 2A	Percentage	EM Starter 2A	30121
AI-10156	Line 3 Current RLA - Compressor 2A	Percentage	EM Starter 2A	30123
AI-10157	Line 1 Current RLA - Compressor 2B	Percentage	EM Starter 2B	30125
AI-10158	Line 2 Current RLA - Compressor 2B	Percentage	EM Starter 2B	30127
AI-10159	Line 3 Current RLA - Compressor 2B	Percentage	EM Starter 2B	30129
AI-10160	Number of Circuits	No Units	Common	30131
AI-10161	Number of Compressors Circuit 1	No Units	Common	30133
AI-10162	Number of Compressors Circuit 2	No Units	Common	30135
AI-10163	Chiller Design Capacity	Power, Cooling	Common	30137
AI-10164	Drive Output Power Circuit 1	Power, Electrical	TR200 Modbus AFD 1A	30139
AI-10165	Drive Output Power Circuit 2	Power, Electrical	TR200 Modbus AFD 2A	30141
AI-10166	Refrigerant Discharge Temperature - Compressor 1A	Temperature	TR200 Modbus AFD 1A	30143
AI-10167	Refrigerant Discharge Temperature - Compressor 2A	Temperature	TR200 Modbus AFD 1A	30145
AI-10168	AFD Frequency Circuit 1	No Units	TR200 Modbus AFD 1A	30147
AI-10169	AFD Frequency Circuit 2	No Units	TR200 Modbus AFD 2A	30149
AI-10170	Drive Motor Average Current RLA Circuit 1	Percentage	TR200 Modbus AFD 1A	30151
AI-10171	Drive Motor Average Current RLA Circuit 2	Percentage	TR200 Modbus AFD 2A	30153
AI-10172	Evaporator Refrigerant Absolute Pressure Circuit 1	Pressure, Fluidic	Standard	30155
AI-10173	Evaporator Refrigerant Absolute Pressure Circuit 2	Pressure, Fluidic	Standard	30157
AI-10174	Condenser Refrigerant Absolute Pressure Circuit 1	Pressure, Fluidic	Standard	30159
AI-10175	Condenser Refrigerant Absolute Pressure Circuit 2	Pressure, Fluidic	Standard	30161
AI-10176	Oil Absolute Pressure - Compressor 1A	Pressure, Fluidic	Standard	30163
AI-10177	Oil Absolute Pressure - Compressor 1B	Pressure, Fluidic	Compressor 1B	30165
AI-10178	Oil Absolute Pressure - Compressor 2A	Pressure, Fluidic	Standard	30167
AI-10179	Oil Absolute Pressure - Compressor 2B	Pressure, Fluidic	Compressor 2B	30169
AI-10180	Average Line Current Circuit 1	Current	Two Energy Meters	30171
AI-10181	Average Line Current Circuit 2	Current	Two Energy Meters	30173



BACnet Object Identifier	Object Name	Units	Configuration Dependency	Modbus Register Address
AI-10182	Average Line Voltage Circuit 1	Voltage	Two Energy Meters	30175
AI-10183	Average Line Voltage Circuit 2	Voltage	Two Energy Meters	30177
AI-10184	Line Current L1 Circuit 1	Current	Two Energy Meters	30179
AI-10185	Line Current L2 Circuit 1	Current	Two Energy Meters	30181
AI-10186	Line Current L3 Circuit 1	Current	Two Energy Meters	30183
AI-10187	Line Current L1 Circuit 2	Current	Two Energy Meters	30185
AI-10188	Line Current L2 Circuit 2	Current	Two Energy Meters	30187
AI-10189	Line Current L3 Circuit 2	Current	Two Energy Meters	30189
AI-10190	Voltage L1-L2 Circuit 1	Voltage	Two Energy Meters	30191
AI-10191	Voltage L2-L3 Circuit 1	Voltage	Two Energy Meters	30193
AI-10192	Voltage L1-L3 Circuit 1	Voltage	Two Energy Meters	30195
AI-10193	Voltage L1-L2 Circuit 2	Voltage	Two Energy Meters	30197
AI-10194	Voltage L2-L1 Circuit 2	Voltage	Two Energy Meters	30199
AI-10195	Voltage L1-L3 Circuit 2	Voltage	Two Energy Meters	30201
AI-10196	Line Frequency Circuit 1	No Units	Two Energy Meters	30203
AI-10197	Line Frequency Circuit 2	No Units	Two Energy Meters	30205
AI-10198	Power Factor Circuit 1	No Units	Two Energy Meters	30207
AI-10199	Power Factor Circuit 2	No Units	Two Energy Meters	30209
AI-10200	Power Demand Circuit 1	Power, Electrical	Two Energy Meters	30211
AI-10201	Power Demand Circuit 2	Power, Electrical	Two Energy Meters	30213
AI-10202	Power Factor	No Units	One Energy Meter	30215
AI-10203	Current L1	Current	One Energy Meter	30217
AI-10204	Current L2	Current	One Energy Meter	30219
AI-10205	Current L3	Current	One Energy Meter	30221
AI-10206	Average Current	Current	One Energy Meter	30223
AI-10207	Voltage L1-L2	Voltage	One Energy Meter	30225
AI-10208	Voltage L2-L3	Voltage	One Energy Meter	30227
AI-10209	Voltage L1-L3	Voltage	One Energy Meter	30229

Symbio™ 800 Integration Points List
BACnet®/Modbus™
 RTAC

Date: 11/8/2024
 Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Units	Configuration Dependency	Modbus Register Address
AI-10210	Average Voltage L-L	Voltage	One Energy Meter	30231
AI-10211	Line Frequency	No Units	One Energy Meter	30233
AI-10212	Unit Power Demand	Power, Electrical	Energy Meter	30235
AI-10213	Unit Source ID	No Units	Standard	30237
AI-10214	Unit Power Consumption	Power, Electrical	Energy Meter	30239
AI-10215	Evaporator Approach Temperature Circuit 1	Temperature, Delta	Standard	30241
AI-10216	Evaporator Approach Temperature Circuit 2	Temperature, Delta	Standard	30243
AI-10217	Active Cool/Heat Setpoint Temperature	Temperature	Standard	30245

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Units	Configuration Dependency	Modbus Register Address
AV-10100	Chilled Water Setpoint	Temperature	Standard	40011
AV-10101	Demand Limit Setpoint	Percentage	Standard	40013



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-10100	Run Enabled	0 = Run Not Enabled 1 = Run Enabled	Standard	33011
BI-10101	Local Setpoint Control	0 = Remote Control 1 = Local Control	Standard	33012
BI-10102	Capacity Limited	0 = Not Limited 1 = Limited	Standard	33013
BI-10103	Chiller Running State	0 = Off 1 = On	Standard	33014
BI-10104	Maximum Capacity	0 = Off 1 = On	Standard	33015
BI-10105	Manual Override Exists	0 = Off 1 = On	Standard	33016
BI-10106	Emergency Stop	0 = Auto 1 = Emergency Stop - Manual Reset Required	Standard	33017
BI-10107	Compressor 1A Status	0 = Off 1 = Running	Standard	33018
BI-10108	Compressor 1B Status	0 = Off 1 = Running	Standard	33019
BI-10109	Compressor 2A Status	0 = Off 1 = Running	Standard	33020
BI-10110	Compressor 2B Status	0 = Off 1 = Running	Standard	33021
BI-10111	Evaporator Water Pump Request	0 = Off 1 = On	Standard	33022
BI-10112	Evaporator Water Flow Status	0 = No Flow 1 = Flow	Standard	33023



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-10113	Diagnostic Present	0 = Normal 1 = In Alarm	Standard	33024
BI-10114	Diagnostic Shutdown Present	0 = Normal 1 = In Alarm	Standard	33025
BI-10115	Diagnostic: Manual Reset Required	0 = Normal 1 = In Alarm	Standard	33026
BI-10116	Diagnostic: Local Manual Reset Required	0 = Normal 1 = In Alarm	Standard	33027
BI-10117	Diagnostic Present: Information	0 = Normal 1 = In Alarm	Standard	33028
BI-10118	Diagnostic Present: Advisory	0 = Normal 1 = In Alarm	Standard	33029
BI-10119	Diagnostic Present: Critical	0 = Normal 1 = In Alarm	Standard	33030
BI-10120	Diagnostic Present: Service Required	0 = Normal 1 = In Alarm	Standard	33031
BI-10121	External Auto Stop Input Status	0 = Stop 1 = Auto	Standard	33032
BI-10122	Front Panel Auto Stop Status	0 = Stop 1 = Auto	Standard	33033
BI-10123	Limit Mode Relay Status	0 = Off 1 = On	Standard	33034
BI-11000	Diagnostic:MP: Invalid Configuration	0 = Normal 1 = In Alarm		34001
BI-11001	Diagnostic:MP: Non-Volatile Memory Reformatted	0 = Normal 1 = In Alarm		34002
BI-11002	Diagnostic:Check Clock	0 = Normal 1 = In Alarm		34003



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11003	Diagnostic:MP: Could not Store Starts and Hours	0 = Normal 1 = In Alarm		34004
BI-11004	Diagnostic:MP: Non-Volatile Block Test Error	0 = Normal 1 = In Alarm		34005
BI-11005	Diagnostic:MP: Reset Has Occurred	0 = Normal 1 = In Alarm		34006
BI-11006	Comm Loss: Electronic Expansion Valve 1	0 = Normal 1 = In Alarm		34007
BI-11007	Comm Loss: Electronic Expansion Valve 2	0 = Normal 1 = In Alarm		34008
BI-11008	Diagnostic:Low Evaporator Rfgt Temperature - Ckt1	0 = Normal 1 = In Alarm		34009
BI-11009	Diagnostic:Low Evaporator Liquid Level - Ckt1	0 = Normal 1 = In Alarm		34010
BI-11010	Diagnostic:Low Suction Rfgt Pressure - Ckt 1	0 = Normal 1 = In Alarm		34011
BI-11011	Diagnostic:High Evaporator Liquid Level - Ckt1	0 = Normal 1 = In Alarm		34012
BI-11012	Diagnostic:Evaporator Liquid Level Sensor - Ckt1	0 = Normal 1 = In Alarm		34013
BI-11013	Comm Loss: Evap Rfgt Liquid Level - Ckt1	0 = Normal 1 = In Alarm		34014
BI-11014	Diagnostic:Low Evaporator Temp (Unit Off) - Ckt1	0 = Normal 1 = In Alarm		34015
BI-11015	Diagnostic:Very Low Evaporator Rfgt Pressure - Ckt1	0 = Normal 1 = In Alarm		34016
BI-11016	Evaporator Water Flow (High Approach Temperature) - Circuit 1	0 = Normal 1 = In Alarm		34017



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11017	Diagnostic:Low Evaporator Rfgt Temperature - Ckt2	0 = Normal 1 = In Alarm		34018
BI-11018	Diagnostic:Low Evaporator Liquid Level - Ckt2	0 = Normal 1 = In Alarm		34019
BI-11019	Diagnostic:Low Suction Rfgt Pressure - Ckt 2	0 = Normal 1 = In Alarm		34020
BI-11020	Diagnostic:High Evaporator Liquid Level - Ckt2	0 = Normal 1 = In Alarm		34021
BI-11021	Diagnostic:Evaporator Liquid Level Sensor - Ckt2	0 = Normal 1 = In Alarm		34022
BI-11022	Comm Loss: Evap Rfgt Liquid Level - Ckt2	0 = Normal 1 = In Alarm		34023
BI-11023	Diagnostic:Low Evaporator Temp (Unit Off) - Ckt2	0 = Normal 1 = In Alarm		34024
BI-11024	Diagnostic:Very Low Evaporator Rfgt Pressure - Ckt2	0 = Normal 1 = In Alarm		34025
BI-11025	Evaporator Water Flow (High Approach Temperature) - Circuit 2	0 = Normal 1 = In Alarm		34026
BI-11026	Comm Loss: Slide Valve Unload - 1A	0 = Normal 1 = In Alarm		34027
BI-11027	Comm Loss: Step Load - 1A	0 = Normal 1 = In Alarm		34028
BI-11028	Comm Loss: Slide Valve Load - 1A	0 = Normal 1 = In Alarm		34029
BI-11029	Comm Loss: Suction Rfgt Pressure - 1A	0 = Normal 1 = In Alarm		34030
BI-11030	Diagnostic:Suction Refrigerant Pressure Sensor - 1A	0 = Normal 1 = In Alarm		34031



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11031	Diagnostic:AFD Fault - 1A	0 = Normal 1 = In Alarm		34032
BI-11032	Diagnostic:AFD Motor Current Overload - 1A	0 = Normal 1 = In Alarm		34033
BI-11033	Comm Loss: Slide Valve Unload - 2A	0 = Normal 1 = In Alarm		34034
BI-11034	Comm Loss: Step Load - 2A	0 = Normal 1 = In Alarm		34035
BI-11035	Comm Loss: Slide Valve Load - 2A	0 = Normal 1 = In Alarm		34036
BI-11036	Comm Loss: Suction Rfgt Pressure - 2A	0 = Normal 1 = In Alarm		34037
BI-11037	Diagnostic:Suction Refrigerant Pressure Sensor - 2A	0 = Normal 1 = In Alarm		34038
BI-11038	Diagnostic:AFD Fault - 2A	0 = Normal 1 = In Alarm		34039
BI-11039	Diagnostic:AFD Motor Current Overload - 2A	0 = Normal 1 = In Alarm		34040
BI-11040	Comm Loss: Slide Valve Unload - 1B	0 = Normal 1 = In Alarm		34041
BI-11041	Comm Loss: Step Load - 1B	0 = Normal 1 = In Alarm		34042
BI-11042	Comm Loss: Slide Valve Load - 1B	0 = Normal 1 = In Alarm		34043
BI-11043	Comm Loss: Suction Rfgt Pressure - 1B	0 = Normal 1 = In Alarm		34044
BI-11044	Diagnostic:Suction Refrigerant Pressure Sensor - 1B	0 = Normal 1 = In Alarm		34045



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11045	Comm Loss: Slide Valve Unload - 2B	0 = Normal 1 = In Alarm		34046
BI-11046	Comm Loss: Step Load - 2B	0 = Normal 1 = In Alarm		34047
BI-11047	Comm Loss: Slide Valve Load - 2B	0 = Normal 1 = In Alarm		34048
BI-11048	Comm Loss: Suction Rfgt Pressure - 2B	0 = Normal 1 = In Alarm		34049
BI-11049	Diagnostic:Suction Refrigerant Pressure Sensor - 2B	0 = Normal 1 = In Alarm		34050
BI-11050	Diagnostic:Emergency Stop	0 = Normal 1 = In Alarm		34051
BI-11051	Comm Loss: External Auto/Stop	0 = Normal 1 = In Alarm		34052
BI-11052	Comm Loss: Emergency Stop	0 = Normal 1 = In Alarm		34053
BI-11053	Comm Loss: Ext Chilled Water Setpoint	0 = Normal 1 = In Alarm		34054
BI-11054	Comm Loss: Ext Demand Limit Setpoint	0 = Normal 1 = In Alarm		34055
BI-11055	Diagnostic:External Chilled Water Setpoint	0 = Normal 1 = In Alarm		34056
BI-11056	Diagnostic:External Demand Limit Setpoint	0 = Normal 1 = In Alarm		34057
BI-11057	Comm Loss: Programmable Relay Board 1	0 = Normal 1 = In Alarm		34058
BI-11058	Diagnostic:Condenser Fan VFD Fault - Ckt1 Drive 1	0 = Normal 1 = In Alarm		34059

Symbio™ 800 Integration Points List
BACnet®/Modbus™
 RTAC

Date: 11/8/2024
 Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11059	Diagnostic:Condenser Fan VFD Fault - Ckt1 Drive 2	0 = Normal 1 = In Alarm		34060
BI-11060	Comm Loss: Fan Control Ckt1, Stage 1	0 = Normal 1 = In Alarm		34061
BI-11061	Comm Loss: Fan Control Ckt1, Stage 2	0 = Normal 1 = In Alarm		34062
BI-11062	Comm Loss: Fan Control Ckt1, Stage 3	0 = Normal 1 = In Alarm		34063
BI-11063	Comm Loss: Fan Control Ckt1, Stage 4	0 = Normal 1 = In Alarm		34064
BI-11064	Comm Loss: Fan Inverter Power - Ckt1	0 = Normal 1 = In Alarm		34065
BI-11065	Comm Loss: Fan Inverter Speed Cmd - Ckt1	0 = Normal 1 = In Alarm		34066
BI-11066	Comm Loss: Fan Inv Fault, Ckt1, Dr 1	0 = Normal 1 = In Alarm		34067
BI-11067	Comm Loss: Fan Inv Fault, Ckt1, Dr 2	0 = Normal 1 = In Alarm		34068
BI-11068	Diagnostic:Condenser Fan VFD Fault - Ckt2 Drive 1	0 = Normal 1 = In Alarm		34069
BI-11069	Diagnostic:Condenser Fan VFD Fault - Ckt2 Drive 2	0 = Normal 1 = In Alarm		34070
BI-11070	Comm Loss: Fan Control Ckt2, Stage 1	0 = Normal 1 = In Alarm		34071
BI-11071	Comm Loss: Fan Control Ckt2, Stage 2	0 = Normal 1 = In Alarm		34072
BI-11072	Comm Loss: Fan Control Ckt2, Stage 3	0 = Normal 1 = In Alarm		34073



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11073	Comm Loss: Fan Control Ckt2, Stage 4	0 = Normal 1 = In Alarm		34074
BI-11074	Comm Loss: Fan Inverter Power - Ckt2	0 = Normal 1 = In Alarm		34075
BI-11075	Comm Loss: Fan Inverter Speed Cmd - Ckt2	0 = Normal 1 = In Alarm		34076
BI-11076	Comm Loss: Fan Inv Fault, Ckt2, Dr 1	0 = Normal 1 = In Alarm		34077
BI-11077	Comm Loss: Fan Inv Fault, Ckt2, Dr 2	0 = Normal 1 = In Alarm		34078
BI-11078	Comm Loss: Evap Leaving Water Temp	0 = Normal 1 = In Alarm		34079
BI-11079	Comm Loss: Evap Entering Water Temp	0 = Normal 1 = In Alarm		34080
BI-11080	Comm Loss: Outdoor Air Temperature	0 = Normal 1 = In Alarm		34081
BI-11081	Diagnostic:Excessive IPC Comm Loss	0 = Normal 1 = In Alarm		34082
BI-11082	Comm Loss: External Ckt Lockout - Ckt1	0 = Normal 1 = In Alarm		34083
BI-11083	Comm Loss: External Ckt Lockout - Ckt2	0 = Normal 1 = In Alarm		34084
BI-11084	Diagnostic:Low Evap Leaving Water Temp: Unit On	0 = Normal 1 = In Alarm		34085
BI-11085	Diagnostic:Evaporator Entering Water Temp Sensor	0 = Normal 1 = In Alarm		34086
BI-11086	Diagnostic:Evaporator Leaving Water Temp Sensor	0 = Normal 1 = In Alarm		34087



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11087	Diagnostic:Outdoor Air Temperature Sensor	0 = Normal 1 = In Alarm		34088
BI-11088	Diagnostic:Low Evaporator Water Temp (Unit Off)	0 = Normal 1 = In Alarm		34089
BI-11089	Diagnostic:Evap Water Flow (Entering Water Temp)	0 = Normal 1 = In Alarm		34090
BI-11090	Diagnostic:High Pressure Cutout - 1A	0 = Normal 1 = In Alarm		34091
BI-11091	Diagnostic:Low Oil Flow - Cprsr 1A	0 = Normal 1 = In Alarm		34092
BI-11092	Diagnostic:Intermediate Oil Press Xdcr - Cprsr 1A	0 = Normal 1 = In Alarm		34093
BI-11093	Diagnostic:High Oil Temperature - 1A	0 = Normal 1 = In Alarm		34094
BI-11094	Diagnostic:Oil Temperature Sensor - 1A	0 = Normal 1 = In Alarm		34095
BI-11095	Comm Loss: High Pressure Cutout Sw - 1A	0 = Normal 1 = In Alarm		34096
BI-11096	Comm Loss: Intermediate Oil Pressure - 1A	0 = Normal 1 = In Alarm		34097
BI-11097	Comm Loss: Oil Temperature - 1A	0 = Normal 1 = In Alarm		34098
BI-11098	Comm Loss: Oil Return Solenoid Valve - 1A	0 = Normal 1 = In Alarm		34099
BI-11099	Diagnostic:Oil Flow Protection Fault - 1A	0 = Normal 1 = In Alarm		34100
BI-11100	Comm Loss: Cprsr Disch Rfght Temp - 1A	0 = Normal 1 = In Alarm		34101



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11101	Diagnostic:Cprsr Disch Rfgt Temp Sensor -1A	0 = Normal 1 = In Alarm		34102
BI-11102	Diagnostic: Low Discharge Superheat - 1A	0 = Normal 1 = In Alarm		34103
BI-11103	Diagnostic:High Pressure Cutout - 2A	0 = Normal 1 = In Alarm		34104
BI-11104	Diagnostic:Low Oil Flow - Cprsr 2A	0 = Normal 1 = In Alarm		34105
BI-11105	Diagnostic:Intermediate Oil Press Xdcr - Cprsr 2A	0 = Normal 1 = In Alarm		34106
BI-11106	Diagnostic:High Oil Temperature - 2A	0 = Normal 1 = In Alarm		34107
BI-11107	Diagnostic:Oil Temperature Sensor - 2A	0 = Normal 1 = In Alarm		34108
BI-11108	Comm Loss: High Pressure Cutout Sw - 2A	0 = Normal 1 = In Alarm		34109
BI-11109	Comm Loss: Intermediate Oil Pressure - 2A	0 = Normal 1 = In Alarm		34110
BI-11110	Comm Loss: Oil Temperature - 2A	0 = Normal 1 = In Alarm		34111
BI-11111	Comm Loss: Oil Return Solenoid Valve - 2A	0 = Normal 1 = In Alarm		34112
BI-11112	Diagnostic:Oil Flow Protection Fault - 2A	0 = Normal 1 = In Alarm		34113
BI-11113	Comm Loss: Cprsr Disch Rfgt Temp - 2A	0 = Normal 1 = In Alarm		34114
BI-11114	Diagnostic:Cprsr Disch Rfgt Temp Sensor -2A	0 = Normal 1 = In Alarm		34115



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11115	Diagnostic: Low Discharge Superheat - 2A	0 = Normal 1 = In Alarm		34116
BI-11116	Diagnostic:High Pressure Cutout - 1B	0 = Normal 1 = In Alarm		34117
BI-11117	Diagnostic:Low Oil Flow - Cprsr 1B	0 = Normal 1 = In Alarm		34118
BI-11118	Diagnostic:Intermediate Oil Press Xdcr - Cprsr 1B	0 = Normal 1 = In Alarm		34119
BI-11119	Diagnostic:High Oil Temperature - 1B	0 = Normal 1 = In Alarm		34120
BI-11120	Diagnostic:Oil Temperature Sensor - 1B	0 = Normal 1 = In Alarm		34121
BI-11121	Comm Loss: High Pressure Cutout Sw - 1B	0 = Normal 1 = In Alarm		34122
BI-11122	Comm Loss: Intermediate Oil Pressure - 1B	0 = Normal 1 = In Alarm		34123
BI-11123	Comm Loss: Oil Temperature - 1B	0 = Normal 1 = In Alarm		34124
BI-11124	Comm Loss: Oil Return Solenoid Valve - 1B	0 = Normal 1 = In Alarm		34125
BI-11125	Diagnostic:Oil Flow Protection Fault - 1B	0 = Normal 1 = In Alarm		34126
BI-11126	Diagnostic:High Pressure Cutout - 2B	0 = Normal 1 = In Alarm		34127
BI-11127	Diagnostic:Low Oil Flow - Cprsr 2B	0 = Normal 1 = In Alarm		34128
BI-11128	Diagnostic:Intermediate Oil Press Xdcr - Cprsr 2B	0 = Normal 1 = In Alarm		34129



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11129	Diagnostic:High Oil Temperature - 2B	0 = Normal 1 = In Alarm		34130
BI-11130	Diagnostic:Oil Temperature Sensor - 2B	0 = Normal 1 = In Alarm		34131
BI-11131	Comm Loss: High Pressure Cutout Sw - 2B	0 = Normal 1 = In Alarm		34132
BI-11132	Comm Loss: Intermediate Oil Pressure - 2B	0 = Normal 1 = In Alarm		34133
BI-11133	Comm Loss: Oil Temperature - 2B	0 = Normal 1 = In Alarm		34134
BI-11134	Comm Loss: Oil Return Solenoid Valve - 2B	0 = Normal 1 = In Alarm		34135
BI-11135	Diagnostic:Oil Flow Protection Fault - 2B	0 = Normal 1 = In Alarm		34136
BI-11136	Comm Loss: Condenser Rfgt Pressure - Ckt1	0 = Normal 1 = In Alarm		34137
BI-11137	Diagnostic:Condenser Rfgt Pressure Transducer - Ckt1	0 = Normal 1 = In Alarm		34138
BI-11138	Comm Loss: Condenser Rfgt Pressure - Ckt2	0 = Normal 1 = In Alarm		34139
BI-11139	Diagnostic:Condenser Rfgt Pressure Transducer - Ckt2	0 = Normal 1 = In Alarm		34140
BI-11140	Comm Loss: Starter 1A	0 = Normal 1 = In Alarm		34141
BI-11141	Diagnostic:Starter Failed to Arm/Start - 1A	0 = Normal 1 = In Alarm		34142
BI-11142	Diagnostic:AFD Interrupt Failure - 1A	0 = Normal 1 = In Alarm		34143



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11143	Comm Loss: AFD 1A	0 = Normal 1 = In Alarm		34144
BI-11144	Comm Loss: Starter 2A	0 = Normal 1 = In Alarm		34145
BI-11145	Diagnostic:Starter Failed to Arm/Start - 2A	0 = Normal 1 = In Alarm		34146
BI-11146	Diagnostic:AFD Interrupt Failure - 2A	0 = Normal 1 = In Alarm		34147
BI-11147	Comm Loss: AFD 2A	0 = Normal 1 = In Alarm		34148
BI-11148	Comm Loss: Starter 1B	0 = Normal 1 = In Alarm		34149
BI-11149	Diagnostic:Starter Failed to Arm/Start - 1B	0 = Normal 1 = In Alarm		34150
BI-11150	Comm Loss: Starter 2B	0 = Normal 1 = In Alarm		34151
BI-11151	Diagnostic:Starter Failed to Arm/Start - 2B	0 = Normal 1 = In Alarm		34152
BI-11152	Diagnostic:Starter 1A Loss of Comm with MP	0 = Normal 1 = In Alarm		34153
BI-11153	Diagnostic:Starter Fault Type I - 1A	0 = Normal 1 = In Alarm		34154
BI-11154	Diagnostic:Starter Fault Type II - 1A	0 = Normal 1 = In Alarm		34155
BI-11155	Diagnostic:Starter Fault Type III - 1A	0 = Normal 1 = In Alarm		34156
BI-11156	Diagnostic:Starter Contactor Interrupt Failure - 1A	0 = Normal 1 = In Alarm		34157



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11157	Diagnostic:Starter Did Not Transition - 1A	0 = Normal 1 = In Alarm		34158
BI-11158	Diagnostic:Transition Complete Input Shorted - 1A	0 = Normal 1 = In Alarm		34159
BI-11159	Diagnostic:Phase Loss - 1A	0 = Normal 1 = In Alarm		34160
BI-11160	Diagnostic:Phase Reversal - 1A	0 = Normal 1 = In Alarm		34161
BI-11161	Diagnostic:Severe Current Imbalance - 1A	0 = Normal 1 = In Alarm		34162
BI-11162	Diagnostic:Power Loss - 1A	0 = Normal 1 = In Alarm		34163
BI-11163	Diagnostic:Motor Current Overload - 1A	0 = Normal 1 = In Alarm		34164
BI-11164	Cprsr Did Not Accel: Shutdown - 1A	0 = Normal 1 = In Alarm		34165
BI-11165	Cprsr Did Not Accel: Transition - 1A	0 = Normal 1 = In Alarm		34166
BI-11166	Diagnostic:Transition Complete Input Opened - 1A	0 = Normal 1 = In Alarm		34167
BI-11167	Diagnostic:Starter Module Memory Error Type 1 - 1A	0 = Normal 1 = In Alarm		34168
BI-11168	Diagnostic:Starter Module Memory Error Type 2 - 1A	0 = Normal 1 = In Alarm		34169
BI-11169	Diagnostic:Starter Dry Run Test - 1A	0 = Normal 1 = In Alarm		34170
BI-11170	Diagnostic:Over Voltage	0 = Normal 1 = In Alarm		34171



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11171	Diagnostic:Under Voltage	0 = Normal 1 = In Alarm		34172
BI-11172	Diagnostic:Starter 2A Loss of Comm with MP	0 = Normal 1 = In Alarm		34173
BI-11173	Diagnostic:Starter Fault Type I - 2A	0 = Normal 1 = In Alarm		34174
BI-11174	Diagnostic:Starter Fault Type II - 2A	0 = Normal 1 = In Alarm		34175
BI-11175	Diagnostic:Starter Fault Type III - 2A	0 = Normal 1 = In Alarm		34176
BI-11176	Diagnostic:Starter Contactor Interrupt Failure - 2A	0 = Normal 1 = In Alarm		34177
BI-11177	Diagnostic:Starter Did Not Transition - 2A	0 = Normal 1 = In Alarm		34178
BI-11178	Diagnostic:Transition Complete Input Shorted - 2A	0 = Normal 1 = In Alarm		34179
BI-11179	Diagnostic:Phase Loss - 2A	0 = Normal 1 = In Alarm		34180
BI-11180	Diagnostic:Phase Reversal - 2A	0 = Normal 1 = In Alarm		34181
BI-11181	Diagnostic:Severe Current Imbalance - 2A	0 = Normal 1 = In Alarm		34182
BI-11182	Diagnostic:Power Loss - 2A	0 = Normal 1 = In Alarm		34183
BI-11183	Diagnostic:Motor Current Overload - 2A	0 = Normal 1 = In Alarm		34184
BI-11184	Cprsr Did Not Accel: Shutdown - 2A	0 = Normal 1 = In Alarm		34185



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11185	Cprsr Did Not Accel: Transition - 2A	0 = Normal 1 = In Alarm		34186
BI-11186	Diagnostic:Transition Complete Input Opened - 2A	0 = Normal 1 = In Alarm		34187
BI-11187	Diagnostic:Starter Module Memory Error Type 1 - 2A	0 = Normal 1 = In Alarm		34188
BI-11188	Diagnostic:Starter Module Memory Error Type 2 - 2A	0 = Normal 1 = In Alarm		34189
BI-11189	Diagnostic:Starter Dry Run Test - 2A	0 = Normal 1 = In Alarm		34190
BI-11190	Diagnostic:Starter Panel Thermostat Cutout - 2A	0 = Normal 1 = In Alarm		34191
BI-11191	Diagnostic:Starter Panel Thermostat Comm Loss 2A	0 = Normal 1 = In Alarm		34192
BI-11192	Diagnostic:Starter 1B Loss of Comm with MP	0 = Normal 1 = In Alarm		34193
BI-11193	Diagnostic:Starter Fault Type I - 1B	0 = Normal 1 = In Alarm		34194
BI-11194	Diagnostic:Starter Fault Type II - 1B	0 = Normal 1 = In Alarm		34195
BI-11195	Diagnostic:Starter Fault Type III - 1B	0 = Normal 1 = In Alarm		34196
BI-11196	Diagnostic:Starter Contactor Interrupt Failure - 1B	0 = Normal 1 = In Alarm		34197
BI-11197	Diagnostic:Starter Did Not Transition - 1B	0 = Normal 1 = In Alarm		34198
BI-11198	Diagnostic:Transition Complete Input Shorted - 1B	0 = Normal 1 = In Alarm		34199



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11199	Diagnostic:Transition Complete Input Shorted - 2B	0 = Normal 1 = In Alarm		34200
BI-11200	Diagnostic:Phase Loss - 1B	0 = Normal 1 = In Alarm		34201
BI-11201	Diagnostic:Phase Reversal - 1B	0 = Normal 1 = In Alarm		34202
BI-11202	Diagnostic:Severe Current Imbalance - 1B	0 = Normal 1 = In Alarm		34203
BI-11203	Diagnostic:Power Loss - 1B	0 = Normal 1 = In Alarm		34204
BI-11204	Diagnostic:Motor Current Overload - 1B	0 = Normal 1 = In Alarm		34205
BI-11205	Cprsr Did Not Accel: Shutdown - 1B	0 = Normal 1 = In Alarm		34206
BI-11206	Cprsr Did Not Accel: Transition - 1B	0 = Normal 1 = In Alarm		34207
BI-11207	Diagnostic:Transition Complete Input Opened - 1B	0 = Normal 1 = In Alarm		34208
BI-11208	Diagnostic:Starter Module Memory Error Type 1 - 1B	0 = Normal 1 = In Alarm		34209
BI-11209	Diagnostic:Starter Module Memory Error Type 2 - 1B	0 = Normal 1 = In Alarm		34210
BI-11210	Diagnostic:Starter Dry Run Test - 1B	0 = Normal 1 = In Alarm		34211
BI-11211	Diagnostic:Starter Panel Thermostat Cutout - 1B	0 = Normal 1 = In Alarm		34212
BI-11212	Diagnostic:Starter Panel Thermostat Comm Loss 1B	0 = Normal 1 = In Alarm		34213



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11213	Diagnostic:Starter 2B Loss of Comm with MP	0 = Normal 1 = In Alarm		34214
BI-11214	Diagnostic:Starter Fault Type I - 2B	0 = Normal 1 = In Alarm		34215
BI-11215	Diagnostic:Starter Fault Type II - 2B	0 = Normal 1 = In Alarm		34216
BI-11216	Diagnostic:Starter Fault Type III - 2B	0 = Normal 1 = In Alarm		34217
BI-11217	Diagnostic:Starter Contactor Interrupt Failure - 2B	0 = Normal 1 = In Alarm		34218
BI-11218	Diagnostic:Starter Did Not Transition - 2B	0 = Normal 1 = In Alarm		34219
BI-11219	Diagnostic:Phase Loss - 2B	0 = Normal 1 = In Alarm		34220
BI-11220	Diagnostic:Phase Reversal - 2B	0 = Normal 1 = In Alarm		34221
BI-11221	Diagnostic:Severe Current Imbalance - 2B	0 = Normal 1 = In Alarm		34222
BI-11222	Diagnostic:Power Loss - 2B	0 = Normal 1 = In Alarm		34223
BI-11223	Diagnostic:Motor Current Overload - 2B	0 = Normal 1 = In Alarm		34224
BI-11224	Cprsr Did Not Accel: Shutdown - 2B	0 = Normal 1 = In Alarm		34225
BI-11225	Cprsr Did Not Accel: Transition - 2B	0 = Normal 1 = In Alarm		34226
BI-11226	Diagnostic:Transition Complete Input Opened - 2B	0 = Normal 1 = In Alarm		34227



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11227	Diagnostic:Starter Module Memory Error Type 1 - 2B	0 = Normal 1 = In Alarm		34228
BI-11228	Diagnostic:Starter Module Memory Error Type 2 - 2B	0 = Normal 1 = In Alarm		34229
BI-11229	Diagnostic:Starter Dry Run Test - 2B	0 = Normal 1 = In Alarm		34230
BI-11230	Diagnostic:Starter Panel Thermostat Cutout - 2B	0 = Normal 1 = In Alarm		34231
BI-11231	Diagnostic:Starter Panel Thermostat Comm Loss 2B	0 = Normal 1 = In Alarm		34232
BI-11232	Diagnostic:Low Differential Rfgt Pressure - Ckt1	0 = Normal 1 = In Alarm		34233
BI-11233	Diagnostic:High Differential Rfgt Pressure - Ckt1	0 = Normal 1 = In Alarm		34234
BI-11234	Diagnostic:Pumpdown Terminated - Ckt1	0 = Normal 1 = In Alarm		34235
BI-11235	Comm Loss: Evap Rfgt Drain Valve - Ckt1	0 = Normal 1 = In Alarm		34236
BI-11236	Diagnostic:Evaporator Rfgt Drain - Circuit 1	0 = Normal 1 = In Alarm		34237
BI-11237	Diagnostic:Low Differential Rfgt Pressure - Ckt2	0 = Normal 1 = In Alarm		34238
BI-11238	Diagnostic:High Differential Rfgt Pressure - Ckt2	0 = Normal 1 = In Alarm		34239
BI-11239	Diagnostic:Pumpdown Terminated - Ckt2	0 = Normal 1 = In Alarm		34240
BI-11240	Comm Loss: Evap Rfgt Drain Valve - Ckt2	0 = Normal 1 = In Alarm		34241



BACnet Object Identifier	Object Name	Description	Configuration Dependency	Modbus Register Address
BI-11241	Diagnostic:Evaporator Rfgt Drain - Circuit 2	0 = Normal 1 = In Alarm		34242
BI-11242	Comm Loss: Evaporator Water Pump Relay	0 = Normal 1 = In Alarm		34243
BI-11243	Comm Loss: Evaporator Water Flow Switch	0 = Normal 1 = In Alarm		34244
BI-11244	Diagnostic:Evaporator Water Flow Overdue	0 = Normal 1 = In Alarm		34245
BI-11245	Diagnostic:Evaporator Water Flow Lost	0 = Normal 1 = In Alarm		34246
BI-11246	Diagnostic:High Evaporator Pressure	0 = Normal 1 = In Alarm		34247
BI-11247	Diagnostic:High Evaporator Water Temperature	0 = Normal 1 = In Alarm		34248
BI-11248	Diagnostic:Software Error 1001: Call Trane Service	0 = Normal 1 = In Alarm		34249
BI-11249	Diagnostic:Software Error 1002: Call Trane Service	0 = Normal 1 = In Alarm		34250
BI-11250	Diagnostic:Software Error 1003: Call Trane Service	0 = Normal 1 = In Alarm		34251
BI-11251	Comm Loss: External Ice Building Command	0 = Normal 1 = In Alarm		34252
BI-11252	Comm Loss: Ice Building Status Relay	0 = Normal 1 = In Alarm		34253
BI-11253	Comm Loss: Local BAS Interface	0 = Normal 1 = In Alarm		34254

Symbio™ 800 Integration Points List
BACnet®/Modbus™
 RTAC

Date: 11/8/2024
 Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Object States	Configuration Dependency	Modbus Register Address
BV-10100	Reset Diagnostic	0 = Normal 1 = Reset	Standard	43011
BV-10101	Chiller Auto Stop Command BAS	0 = Stop 1 = Auto	Standard	43012
BV-10102	Circuit 1 Lockout BAS	0 = Normal 1 = Locked Out	Standard	43013
BV-10103	Circuit 2 Lockout BAS	0 = Normal 1 = Locked Out	Standard	43014
BV-10104	Energy Consumption Reset	0 = Accumulating 1 = Reset	Power Monitor	43015

Symbio™ 800 Integration Points List
BACnet®/Modbus™
 RTAC

Date: 11/8/2024
 Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Object States	Configuration Dependency	Modbus Register Address
MI-10100	Running Mode	1 = Chiller Off 2 = Chiller In Start Mode 3 = Chiller In Run Mode 4 = Chiller In Pre-Shutdown Mode 5 = Chiller In Service Mode	Standard	32011
MI-10101	Operating Mode	1 = Cool 2 = Heat 3 = Ice Making 4 = Free Cooling	Standard	32012

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



BACnet Object Identifier	Object Name	Object States	Configuration Dependency	Modbus Register Address
MV-10100	Chiller Mode Command BAS	1 = Cool 2 = Heat 3 = Ice Making 4 = Free Cooling	Standard	42011

Symbio™ 800 Integration Points List
BACnet®/Modbus™
RTAC

Date: 11/8/2024
Reference Document: BAS-SVP083*-EN



Register Type	Register Value	Byte Order	Invalid Values
Analog	Float, 32-bit	High Word/High Byte First	NaN
Binary	Int, 16-bit, unsigned	High Byte First	0xffff
Multi-state	Int, 16-bit, unsigned	High Byte First	0xffff

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
1001	MP: Invalid Configuration
1002	MP: Non-Volatile Memory Reformatted
1003	Check Clock
1004	MP: Could not Store Starts and Hours
1005	MP: Non-Volatile Block Test Error
1006	MP: Reset Has Occurred
1007	RTC Mismatch, Call Trane Service
21001	Comm Loss: Electronic Expansion Valve Circuit 1
22001	Comm Loss: Electronic Expansion Valve Circuit 2
41001	Low Refrigerant Temperature Circuit 1
41002	Low Suction Refrigerant Pressure Circuit 1
41003	Low Evaporator Liquid Level Circuit 1
41004	High Evaporator Liquid Level Circuit 1
41005	Evap Liquid Level Sensor Circuit 1
41008	Comm Loss: Evap Rfgt Liquid Level Circuit 1
41009	Low Evaporator Temp: Unit Off Circuit 1
41010	Very Low Evap Rfgt Press Circuit 1
41011	Evaporator Water Flow (High Approach Temperature) Circuit 1
42001	Low Refrigerant Temperature Circuit 2
42002	Low Suction Refrigerant Pressure Circuit 2
42003	Low Evaporator Liquid Level Circuit 2
42004	High Evaporator Liquid Level Circuit 2
42005	Evap Liquid Level Sensor Circuit 2
42008	Comm Loss: Evap Rfgt Liquid Level Circuit 2
42009	Low Evaporator Temp: Unit Off Circuit 2
42010	Very Low Evap Rfgt Press Circuit 2
42011	Evaporator Water Flow (High Approach Temperature) Circuit 2
61001	Comm Loss: Slide Valve Unload Compressor 1A
61002	Comm Loss: Step Load Compressor 1A
61003	Comm Loss: Slide Valve Load Compressor 1A
61004	Comm Loss: Suction Pressure Compressor 1A
61005	Suction Pressure Transducer Compressor 1A

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
61007	AFD Fault Compressor 1A
61008	AFD Motor Current Overload Compressor 1A
62001	Comm Loss: Slide Valve Unload Compressor 2A
62002	Comm Loss: Step Load Compressor 2A
62003	Comm Loss: Slide Valve Load Compressor 2A
62004	Comm Loss: Suction Pressure Compressor 2A
62005	Suction Pressure Transducer Compressor 2A
62007	AFD Fault Compressor 2A
62008	AFD Motor Current Overload Compressor 2A
63001	Comm Loss: Slide Valve Unload Compressor 1B
63002	Comm Loss: Step Load Compressor 1B
63003	Comm Loss: Slide Valve Load Compressor 1B
63004	Comm Loss: Suction Pressure Compressor 1B
63005	Suction Pressure Transducer Compressor 1B
64001	Comm Loss: Slide Valve Unload Compressor 2B
64002	Comm Loss: Step Load Compressor 2B
64003	Comm Loss: Slide Valve Load Compressor 2B
64004	Comm Loss: Suction Pressure Compressor 2B
64005	Suction Pressure Transducer Compressor 2B
81001	Emergency Stop
81002	Comm Loss: External Auto/Stop
81003	Comm Loss: Emergency Stop
81004	Comm Loss: Ext Chilled Water Setpoint
81005	Comm Loss: Ext Demand Limit Setpoint
81009	External Chilled/Hot Water Setpoint
81010	External Demand Limit Setpoint
81011	Comm Loss: Programmable Relay Board 1
101001	Fan Inverter Fault Driver 1 Circuit 1
101002	Fan Inverter Fault Driver 2 Circuit 1
101003	Comm Loss: Fan Control Stage 1 Circuit 1
101004	Comm Loss: Fan Control Stage 2 Circuit 1
101005	Comm Loss: Fan Control Stage 3 Circuit 1

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
101006	Comm Loss: Fan Control Stage 4 Circuit 1
101007	Comm Loss: Fan Inverter Power Circuit 1
101008	Comm Loss: Fan Inverter Speed Cmd Circuit 1
101009	Comm Loss: Fan Inverter Fault Driver 1 Circuit 1
101010	Comm Loss: Fan Inverter Fault Driver 2 Circuit 1
102001	Fan Inverter Fault Driver 1 Circuit 2
102002	Fan Inverter Fault Driver 2 Circuit 2
102003	Comm Loss: Fan Control Stage 1 Circuit 2
102004	Comm Loss: Fan Control Stage 2 Circuit 2
102005	Comm Loss: Fan Control Stage 3 Circuit 2
102006	Comm Loss: Fan Control Stage 4 Circuit 2
102007	Comm Loss: Fan Inverter Power Circuit 2
102008	Comm Loss: Fan Inverter Speed Cmd Circuit 2
102009	Comm Loss: Fan Inverter Fault Driver 1 Circuit 2
102010	Comm Loss: Fan Inverter Fault Driver 2 Circuit 2
111001	Evaporator Water Flow Overdue
111002	Evaporator Water Flow Lost
111003	Comm Loss: Evap Leaving Water Temp
111004	Comm Loss: Evap Entering Water Temp
111005	Comm Loss: Outdoor Air Temperature
111006	Excessive IPC Comm Loss
111007	Comm Loss: Energy Meter 1
111008	Comm Loss: Energy Meter 2
121001	Comm Loss: External Ckt Lockout Circuit 1
122001	Comm Loss: External Ckt Lockout Circuit 2
131001	Low Evap Water Temp: Unit On
131002	Evaporator Entering Water Temp Sensor
131003	Evaporator Leaving Water Temp Sensor
131004	Outdoor Air Temp Sensor
131005	Low Evap Water Temp: Unit off
131006	Evaporator Water Flow (Entering Water Temperature)
141001	High Pressure Cutout Compressor 1A

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
141002	Low Oil Flow Compressor 1A
141003	Intermediate Oil Press Xdcr Compressor 1A
141004	High Oil Temperature Compressor 1A
141005	Oil Temp Sensor Compressor 1A
141006	Comm Loss: High Pressure Cutout Switch Compressor 1A
141007	Comm Loss: Intermediate Oil Press Compressor 1A
141008	Comm Loss: Suction Pressure Compressor 1A
141009	Comm Loss: Oil Temp Compressor 1A
141010	Comm Loss: Oil Return Line Solenoid Valve Compressor 1A
141011	Suction Pressure Transducer Compressor 1A
141012	Oil Pressure System Fault Compressor 1A
141013	Comm Loss: Cprsr Discharge Rfgt Temp Compressor 1A
141014	Compressor Discharge Rfgt Temperature Sensor Compressor 1A
141015	Low Discharge Superheat Compressor 1A
142001	High Pressure Cutout Compressor 2A
142002	Low Oil Flow Compressor 2A
142003	Intermediate Oil Press Xdcr Compressor 2A
142004	High Oil Temperature Compressor 2A
142005	Oil Temp Sensor Compressor 2A
142006	Comm Loss: High Press Cutout Compressor 2A
142007	Comm Loss: Intermediate Oil Press Compressor 2A
142008	Comm Loss: Suction Pressure Compressor 2A
142009	Comm Loss: Oil Temp Compressor 2A
142010	Comm Loss: Oil Return Line Solenoid Valve Compressor 2A
142011	Suction Pressure Transducer Compressor 2A
142012	Oil Pressure System Fault Compressor 2A
142013	Comm Loss: Cprsr Discharge Rfgt Temp Compressor 2A
142014	Compressor Discharge Rfgt Temperature Sensor Compressor 2A
142015	Low Discharge Superheat Compressor 2A
143001	High Pressure Cutout Compressor 1B
143002	Low Oil Flow Compressor 1B
143003	Intermediate Oil Press Xdcr Compressor 1B

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
143004	High Oil Temperature Compressor 1B
143005	Oil Temp Sensor Compressor 1B
143006	Comm Loss: High Press Cutout Compressor 1B
143007	Comm Loss: Intermediate Oil Press Compressor 1B
143008	Comm Loss: Suction Pressure Compressor 1B
143009	Comm Loss: Oil Temp Compressor 1B
143010	Comm Loss: Oil Return Line Solenoid Valve Compressor 1B
143011	Suction Pressure Transducer Compressor 1B
143012	Oil Pressure System Fault Compressor 1B
144001	High Pressure Cutout Compressor 2B
144002	Low Oil Flow Compressor 2B
144003	Intermediate Oil Press Xdcr Compressor 2B
144004	High Oil Temperature Compressor 2B
144005	Oil Temp Sensor Compressor 2B
144006	Comm Loss: High Press Cutout Compressor 2B
144007	Comm Loss: Intermediate Oil Press Compressor 2B
144008	Comm Loss: Suction Pressure Compressor 2B
144009	Comm Loss: Oil Temp Compressor 2B
144010	Comm Loss: Oil Return Line Solenoid Valve Compressor 2B
144011	Suction Pressure Transducer Compressor 2B
144012	Oil Pressure System Fault Compressor 2B
151001	Comm Loss: Cond Rfgt Pressure Circuit 1
151002	Condenser Rfgt Pressure Transducer Circuit 1
152001	Comm Loss: Cond Rfgt Pressure Circuit 2
152002	Condenser Rfgt Pressure Transducer Circuit 2
161001	Comm Loss: Starter Compressor 1A
161002	Starter Failed to Arm/Start Compressor 1A
161006	AFD Interrupt Failure Compressor 1A
161007	Comm Loss: AFD Compressor 1A
162001	Comm Loss: Starter Compressor 2A
162002	Starter Failed to Arm/Start Compressor 2A
162006	AFD Interrupt Failure Compressor 2A

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
162007	Comm Loss: AFD Compressor 2A
163001	Comm Loss: Starter Compressor 1B
163002	Starter Failed to Arm/Start Compressor 1B
163007	Comm Loss: AFD Compressor 1B
164001	Comm Loss: Starter Compressor 2B
164002	Starter Failed to Arm/Start Compressor 2B
164007	Comm Loss: AFD Compressor 2B
171003	Starter Loss of Comm with MP Compressor 1A
171004	Starter Fault Type I Compressor 1A
171005	Starter Fault Type II Compressor 1A
171006	Starter Fault Type III Compressor 1A
171007	Starter Contactor Interrupt Failure Compressor 1A
171008	Starter Did Not Transition Compressor 1A
171009	Transition Complete Input Shorted Compressor 1A
171010	Phase Loss Compressor 1A
171011	Phase Reversal Compressor 1A
171012	Severe Phase Unbalance Compressor 1A
171013	Power Loss Compressor 1A
171015	Overload Trip Compressor 1A
171016	Compressor Did Not Accelerate: Shutdown Compressor 1A
171018	Compressor Did Not Accel Transition Compressor 1A
171019	Transition Complete Input Opened Compressor 1A
171020	Starter Memory Error Type 1 Compressor 1A
171021	Starter Memory Error Type 2 Compressor 1A
171022	Starter Dry Run Test Compressor 1A
171023	Over Voltage Compressor 1A
171024	Under Voltage Compressor 1A
172003	Starter Loss of Comm with MP Compressor 2A
172004	Starter Fault Type I Compressor 2A
172005	Starter Fault Type II Compressor 2A
172006	Starter Fault Type III Compressor 2A
172007	Starter Contactor Interrupt Failure Compressor 2A

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
172008	Starter Did Not Transition Compressor 2A
172009	Transition Complete Input Shorted Compressor 2A
172010	Phase Loss Compressor 2A
172011	Phase Reversal Compressor 2A
172012	Severe Phase Unbalance Compressor 2A
172013	Power Loss Compressor 2A
172015	Overload Trip Compressor 2A
172016	Compressor Did Not Accelerate: Shutdown Compressor 2A
172018	Compressor Did Not Accel Transition Compressor 2A
172019	Transition Complete Input Opened Compressor 2A
172020	Starter Memory Error Type 1 Compressor 2A
172021	Starter Memory Error Type 2 Compressor 2A
172022	Starter Dry Run Test Compressor 2A
172023	Over Voltage Compressor 2A
172024	Under Voltage Compressor 2A
172025	Starter Panel Thermostat cutout Compressor 2A
172026	Starter Panel Thermostat Comm Loss Compressor 2A
173003	Starter Loss of Comm with MP Compressor 1B
173004	Starter Fault Type I Compressor 1B
173005	Starter Fault Type II Compressor 1B
173006	Starter Fault Type III Compressor 1B
173007	Starter Contactor Interrupt Failure Compressor 1B
173008	Starter Did Not Transition Compressor 1B
173009	Transition Complete Input Shorted Compressor 1B
173010	Phase Loss Compressor 1B
173011	Phase Reversal Compressor 1B
173012	Severe Phase Unbalance Compressor 1B
173013	Power Loss Compressor 1B
173015	Overload Trip Compressor 1B
173016	Compressor Did Not Accelerate: Shutdown Compressor 1B
173018	Compressor Did Not Accel Transition Compressor 1B
173019	Transition Complete Input Opened Compressor 1B

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
173020	Starter Memory Error Type 1 Compressor 1B
173021	Starter Memory Error Type 2 Compressor 1B
173022	Starter Dry Run Test Compressor 1B
173023	Over Voltage Compressor 1B
173024	Under Voltage Compressor 1B
173025	Starter Panel Thermostat cutout Compressor 1B
173026	Starter Panel Thermostat Comm Loss Compressor 1B
174003	Starter Loss of Comm with MP Compressor 2B
174004	Starter Fault Type I Compressor 2B
174005	Starter Fault Type II Compressor 2B
174006	Starter Fault Type III Compressor 2B
174007	Starter Contactor Interrupt Failure Compressor 2B
174008	Starter Did Not Transition Compressor 2B
174009	Transition Complete Input Shorted Compressor 2B
174010	Phase Loss Compressor 2B
174011	Phase Reversal Compressor 2B
174012	Severe Phase Unbalance Compressor 2B
174013	Power Loss Compressor 2B
174015	Overload Trip Compressor 2B
174016	Compressor Did Not Accelerate: Shutdown Compressor 2B
174018	Compressor Did Not Accel Transition Compressor 2B
174019	Transition Complete Input Opened Compressor 2B
174020	Starter Memory Error Type 1 Compressor 2B
174021	Starter Memory Error Type 2 Compressor 2B
174022	Starter Dry Run Test Compressor 2B
174025	Starter Panel Thermostat cutout Compressor 2B
174026	Starter Panel Thermostat Comm Loss Compressor 2B
201001	Low Differential Rfgt Pressure Circuit 1
201002	High Differential Rfgt Pressure Circuit 1
201005	Pumpdown Terminated By Time Circuit 1
201006	Comm Loss: Evap Rfgt Drain Valve Circuit 1
201007	Evaporator Rfgt Drain Circuit 1

Symbio™ 800 Integration Points List

BACnet®/Modbus™

RTAC

Date: 11/8/2024

Reference Document: BAS-SVP083*-EN



Diagnostic Code (decimal)	Diagnostic Name
202001	Low Differential Rfgt Pressure Circuit 2
202002	High Differential Rfgt Pressure Circuit 2
202005	Pumpdown Terminated By Time Circuit 2
202006	Comm Loss: Evap Rfgt Drain Valve Circuit 2
202007	Evaporator Rfgt Drain Circuit 2
211001	Comm Loss: Evaporator Water Pump Relay
211002	Comm Loss: Evaporator Water Flow Switch
211003	Evaporator Water Flow Overdue
211004	Evaporator Water Flow Lost
211005	High Evaporator Pressure
211006	High Evaporator Water Temperature
231001	Software Error 1001: Call Trane Service
231002	Software Error 1002: Call Trane Service
231003	Software Error 1003: Call Trane Service
241001	Comm Loss: External Ice Building Command
241002	Comm Loss: Ice Building Status Relay
251001	Tracer Communications Lost
251002	Tracer failed to Establish Communication
251003	Comm Loss: Local BAS Interface
261001	BAS Communication Lost
261002	BAS Failed to Establish Communication
261003	Comm Loss: Local BAS Interface
261004	LCI-C Software Mismatch: Use BAS Tool