**ACSA (UC800)** 

# TRANE

#### **Object Naming Conventions**

The communicated points for the Symbio<sup>™</sup> 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.

Date: 12/6/2024

Reference Document: BAS-SVP083\*-EN

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.

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#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



#### **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
- 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.



#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



Object Identifier	Object Name	Description	Units	Configuration Dependency
1	Active Cool/Heat Water Setpoint Temperature		Real	
2	Front Panel Chilled Water Setpoint		Real	
3	Evaporator Entering Water Temperature		Real	
4	Evaporator Leaving Water Temperature		Real	
5	Active Demand Limit Setpoint		Real	
6	Front Panel Demand Limit Setpoint		Real	
7	Unit Power Consumption		Real	
8	Outdoor Air Temperature		Real	
9	External Chilled/Hot Water Setpoint		Real	
10	External Demand Limit Setpoint		Real	
11	Evaporator Refrigerant Pressure Ckt1		Real	
12	Condenser Refrigerant Pressure Ckt1		Real	
13	Differential Refrigerant Pressure Ckt1		Real	
14	Suction(Evaporator) Saturated Rfgt Temp Ckt1		Real	
15	Condenser Saturated Rfgt Temp Ckt1		Real	
16	Evaporator Refrigerant Pressure Ckt2		Real	
17	Condenser Refrigerant Pressure Ckt2		Real	
18	Differential Refrigerant Pressure Ckt2		Real	
19	Suction(Evaporator) Saturated Rfgt Temp Ckt2		Real	
20	Condenser Saturated Rfgt Temp Ckt2		Real	
21	Actual Running Capacity		Real	
22	Active Heat Recovery Setpoint		Real	
23	Front Panel Hot Water Setpoint		Real	
24	Active Hot Water Setpoint		Real	
25	Liquid Line Temperature Ckt1		Real	
26	Liquid Line Temperature Ckt2		Real	
27	Liquid Line Pressure Ckt1		Real	
28	Liquid Line Pressure Ckt2		Real	
30	Air Flow Ckt1		Real	
31	Air Flow Ckt2		Real	
35	Starts Cprsr1A		Real	
36	Run Time Cprsr1A		Real	



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Object Identifier	Object Name	Description	Units	Configuration Dependency
51	Starts Cprsr2A		Real	
52	Run Time Cprsr2A		Real	
69	Heat Recovery Entering Water Temp		Real	
70	Heat Recovery Leaving Water Temp		Real	
71	Chiller Design Capacity		Real	
128	Starts Cprsr1B		Real	
129	Run Time Cprsr1B		Real	
130	Starts Cprsr2B		Real	
131	Run Time Cprsr2B		Real	
132	Number of Circuits		Real	
133	Number of Compressors, Circuit 1		Real	
134	Number of Compressors, Circuit 2		Real	
136	Free Cooling Capacity		Real	
137	Free Cooling Entering Water Temperature		Real	
138	Free Cooling Entering Glycol Temperature		Real	
139	Free Cooling Leaving Glycol Temperature		Real	
141	Energy Consumption NonReset		Real	
142	Energy Consumption Resettable		Real	
143	Starts Cprsr1C		Real	
144	Run Time Cprsr1C		Real	
145	Starts Cprsr2C		Real	
146	Run Time Cprsr2C		Real	
147	Discharge Temperature Ckt1		Real	
148	Discharge Temperature Ckt2		Real	
149	Compressor Discharge Temperature Ckt1		Real	
150	Compressor Discharge Temperature Ckt2		Real	

#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



Object Identifier	Object Name	Description	Units	Relinquish Default	Valid Range
1	Chilled Water Setpoint		Real		
3	Demand Limit Setpoint		Real		
2	Hot Water Setpoint		Real		
4	BAS Heat Recovery Setpoint		Real		



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Object Identifier	Object Name	Description	Object Status	Configuration Dependency
1	Run Enable		0=no; 1=yes	
2	Local Setpoint Control		0=no; 1=yes	
3	Limit Mode Relay Status		0=off; 1=on	
4	Chiller Running State		0=no (not running); 1= yes (running); Inactive; Active	
5	Maximum Capacity Relay		0=off; 1=on	
6	Evaporator Water Pump Command		0=off (pump off); 1=on (pump on); Inactive; Active	
7	Evaporator Water Flow Status		0=no flow; 1= flow; Inactive; Active	
8	Manual Override Exists		0=false; 1= true	
9	Emergency Stop Input		0=emergency shutdown; 1= auto	
10	Alarm Present		0=no; 1=yes	
11	Running Status Cprsr1A		1=off; 2=on;	
12	Running Status Cprsr2A		1=off; 2=on;	
13	Running Status Cprsr1B		1=off; 2=on;	
14	Running Status Cprsr2B		1=off; 2=on;	
15	Free Cooling Active		0=Active; 1= Inactive;	
16	Heat Recovery Active		0=Active; 1= Inactive;	
17	Active Heat Recovery Command		0=Active; 1= Inactive;	
18	Latching Alarm Present, Circuit 1		0=no; 1=yes	
19	Latching Alarm Present, Circuit 2		0=no; 1=yes	
20	Non-Latching Alarm Present, Circuit 1		0=no; 1=yes	
21	Non-Latching Alarm Present, Circuit 2		0=no; 1=yes	
22	Running Status Cprsr1C		1=off; 2=on;	
23	Running Status Cprsr2C		1=off; 2=on;	



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Object Identifier	Object Name	Description	Object Status	Configuration Dependency
24	Emergency Stop Unit Status		0=emergency shutdown; 1= auto	
25	Noise Reduction Active			
26	No assignment - reserved as obsolete		NA	



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Object Identifier	Object Name	Object Status
506	Comm Loss: Evaporator Anti-Freeze Heater	
869	Comm Loss: Heat Recovery Anti-Freeze Heater	
507	Comm Loss: Auxiliary Setpoint Command	
509	Comm Loss: Compressor Fault Input	
510	Comm Loss: Compressor Fault Input	
511	Comm Loss: Compressor Fault Input	
512	Comm Loss: Compressor Fault Input	
513	Comm Loss: Compressor Fault Input	
514	Comm Loss: Compressor Fault Input	
518	Comm Loss: Cond Fan Enbl Shared Ckt 1&2	
520	Comm Loss: Condenser Fan Enable	
521	Comm Loss: Condenser Fan Enable	
535	Comm Loss: Discharge Pressure Transducer	
536	Comm Loss: Discharge Pressure Transducer	
537	Comm Loss: Electronic Expansion Valve	
538	Comm Loss: Electronic Expansion Valve	
539	Comm Loss: Emergency Stop Feedback Input	
541	Comm Loss: Evap Entering Water Temp	
543	Comm Loss: Evap Leaving Water Temp	
545	Comm Loss: Evap Pump Inv1 Fault Input	
546	Comm Loss: Evap Pump Inv1 Freq Feedback	
547	Comm Loss: Evap Pump Inv1 Run Command	
867	Comm Loss: Evap Pump Inverter 1 Speed	
871	Comm Loss: Evaporator Pump 1 Fault Input	
872	Comm Loss: Evaporator Pump 2 Fault Input	
508	Comm Loss: Evaporator Water Flow Switch	
550	Comm Loss: Evaporator Water Pump 1 Relay	
551	Comm Loss: Evaporator Water Pump 2 Relay	
866	Comm Loss: Energy Meter Pulse Input	
556	Comm Loss: Ext Chilled Water Setpoint	
868	Comm Loss: Ext Demand Limit Stpt	
557	External Demand Limit Setpoint	
558	Comm Loss: Ext Noise Reduction Request	
559	Comm Loss: External Auto/Stop	
560	Comm Loss: External Ckt Lockout	
561	Comm Loss: External Ckt Lockout	
563	Comm Loss: External Ice Building Command	
564	Comm Loss: Fan Board 1 Relay 1	



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Object Identifier	Object Name	Object Status
565	Comm Loss: Fan Board 1 Relay 1	
566	Comm Loss: Fan Board 1 Relay 2	
567	Comm Loss: Fan Board 1 Relay 2	
568	Comm Loss: Fan Board 1 Relay 3	
569	Comm Loss: Fan Board 1 Relay 3	
570	Comm Loss: Fan Board 1 Relay 4	
571	Comm Loss: Fan Board 1 Relay 4	
572	Comm Loss: Fan Speed Select Board Relay 1	
574	Comm Loss: Fan Speed Select Board Relay 2	
577	Comm Loss: Fan Speed Select Board Relay 3	
579	Comm Loss: Fan Speed Select Board Relay 4	
582	Comm Loss: Fan Inv Spd Cmd, Shrd Ckt1&2	
585	Comm Loss: Fan Inverter Speed Command	
586	Comm Loss: Fan Inverter Speed Command	
590	Comm Loss: High Pressure Cutout Switch	
591	Comm Loss: High Pressure Cutout Switch	
596	Comm Loss: HR Entering Water Temp Sensor	
597	Comm Loss: HR Leaving Water Temp Sensor	
598	Comm Loss: HR Three Way Valve	
562	Comm Loss: External Heat Recovery Command	
893	Comm Loss: External Heat Recovery Setpoint	
600	Comm Loss: Local BAS Interface	
603	Comm Loss: Outdoor Air Temperature	
604	Comm Loss: Percent Capacity Output	
605	Comm Loss: Phase Protection Fault Input	
602	Comm Loss: Programmable Relay Board 1	
606	Comm Loss: Programmable Relay Board 2	
617	Comm Loss: Run Command Compressor A	
618	Comm Loss: Run Command Compressor A	
619	Comm Loss: Run Command Compressor B	
620	Comm Loss: Run Command Compressor B	
621	Comm Loss: Run Command Compressor C	
622	Comm Loss: Run Command Compressor C	
628	Comm Loss: Suction Rfgt Pressure	
629	Comm Loss: Suction Rfgt Pressure	
630	Comm Loss: Suction Temperature	
631	Comm Loss: Suction Temperature	
636	Compressor A Fault	



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Object Identifier	Object Name	Object Status
637	Compressor A Fault	
638	Compressor B Fault	
639	Compressor B Fault	
640	Compressor C Fault	
641	Compressor C Fault	
642	Compressor Fault Lockout	
643	Compressor Fault Lockout	
644	Compressor Fault Lockout	
645	Compressor Fault Lockout	
646	Compressor Fault Lockout	
647	Compressor Fault Lockout	
669	Emergency Stop	
691	Evap Pump 1 Starts/Hours Modified	
692	Evap Pump 2 Starts/Hours Modified	
694	Evaporator Entering Water Temp Sensor	
696	Evaporator Leaving Water Temp Sensor	
700	Evaporator Water Flow Lost	
701	Evaporator Water Flow Lost Lockout	
702	Evaporator Water Flow Lost - Pump1	
703	Evaporator Water Flow Lost - Pump2	
704	Evaporator Water Flow Overdue	
705	Evaporator Water Flow Overdue - Pump1	
706	Evaporator Water Flow Overdue - Pump2	
707	Evaporator Water Flow Too Low	
708	External Chilled/Hot Water Setpoint	
698	Evaporator Pump 1 Fault	
699	Evaporator Pump 2 Fault	
711	Heat Recovery Entering Water Temp Sensor	
712	Heat Recovery Leaving Water Temp Sensor	
713	High Compressor Pressure Differential	
714	High Compressor Pressure Differential	
715	High Discharge Refrigerant Pressure	
716	High Discharge Refrigerant Pressure	
717	High Discharge Temperature	
718	High Discharge Temperature	
731	High Discharge Temperature Lockout	
732	High Discharge Temperature Lockout	
733	High Evaporator Water Temperature	



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Object Identifier	Object Name	Object Status
746	High Pressure Cutout	
747	High Pressure Cutout	
748	High Suction Rfgt Pressure	
768	Inverted Evaporator Water Temperature	
769	Inverted Water Temp (Heating)	
770	LCI-C Software Mismatch: Use BAS Tool	
771	Loss of Charge	
772	Loss of Charge	
775	Low Discharge Saturated Temperature	
776	Low Discharge Saturated Temperature	
777	Low Evaporator Water Temp (Unit Off)	
778	Low Evaporator Water Temp (Unit On)	
779	Low Suction Refrigerant Temperature	
780	Low Suction Refrigerant Temperature	
783	Low Refrigerant Pressure Ratio	
784	Low Refrigerant Pressure Ratio	
785	Low Suction Refrigerant Pressure	
782	Low Suction Refrigerant Pressure	
786	Low Suction Superheat	
787	Low Suction Superheat	
827	MP: Invalid Configuration	
829	MP: Reset Has Occurred	
832	Pumpdown Terminated By Time	
865	Pumpdown Terminated By Time	
833	Outdoor Air Temperature Sensor	
834	Phase Protection Fault	
838	Restart Inhibit Invoked - 1A	
839	Restart Inhibit Invoked - 2A	
840	Restart Inhibit Invoked - 1B	
841	Restart Inhibit Invoked - 2B	
842	Restart Inhibit Invoked - 1C	
843	Restart Inhibit Invoked - 2C	
848	Starts/Hours Modified 1C	
849	Starts/Hours Modified 2A	
850	Starts/Hours Modified 1B	
851	Starts/Hours Modified 1A	
852	Starts/Hours Modified 2B	
853	Starts/Hours Modified 2C	



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Object Identifier	Object Name	Object Status
856	Suction Pressure Transducer	
857	Suction Pressure Transducer	
858	Suction Temperature Sensor	
859	Suction Temperature Sensor	
860	Suction Temperature Too High	
861	Suction Temperature Too High	
862	Very Low Suction Pressure - Circuit 1	
863	Very Low Suction Pressure - Circuit 2	
864	Chiller Service Recommended	
881	BAS Communication Lost	
882	BAS Failed to Establish Communication	
873	Evap Water Pump 1 Svc Recommended	
874	Evap Water Pump 2 Svc Recommended	
875	Mfr Maintenance Recommended - 1A	
876	Mfr Maintenance Recommended - 1B	
877	Mfr Maintenance Recommended - 1C	
878	Mfr Maintenance Recommended - 2A	
879	Mfr Maintenance Recommended - 2B	
880	Mfr Maintenance Recommended - 2C	
650	Discharge Pressure Transducer	
651	Discharge Pressure Transducer	
902	External Heat Recovery Setpoint	
835	No Total Heat Recovery	
889	Free Cooling Entering Water Temperature	
888	Free Cooling Entering Glycol Temperature	
891	Free Cooling Leaving Glycol Temperature	
895	Comm Loss: Fan Board 2 Relay 1	
894	Comm Loss: Fan Board 2 Relay 1	
897	Comm Loss: Fan Board 2 Relay 2	
896	Comm Loss: Fan Board 2 Relay 2	
898	Comm Loss: Fan Board 2 Relay 3	
899	Comm Loss: Fan Board 2 Relay 3	
901	Comm Loss: Fan Board 2 Relay 4	
900	Comm Loss: Fan Board 2 Relay 4	
533	Comm Loss: Discharge Temperature Sensor	
534	Comm Loss: Discharge Temperature Sensor	
903	Comm Loss: HR Refrigerant Bypass Valve	
904	Comm Loss: HR Refrigerant Bypass Valve	



#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



Object Identifier	Object Name	Object Status
884	Comm Loss: FC Entering Water Temp	
883	Comm Loss: FC Entering Glycol Temp	
885	Comm Loss: FC Leaving Glycol Temp	
887	Comm Loss: Free Cooling Valve	
886	Comm Loss: Free Cooling Pump	
892	Low Glycol Temperature Free Cooling	
890	Free Cooling Glycol Temp Equalization Overdue	
905	Comm Loss: Reversing Valve	
906	Comm Loss: Reversing Valve	
907	Comm Loss: Hot Gas Bypass Valve	
908	Comm Loss: Dynamic Receiver Fill Valve	
909	Comm Loss: Hot Gas Bypass Valve	
910	Comm Loss: Dynamic Receiver Fill Valve	
912	Comm Loss: External Hot Water Command	
913	Comm Loss: Supplemental Heater Relay 1	
915	Comm Loss: Supplemental Heater Relay 2	
916	Comm Loss: Supplemental Heater Relay 3	
917	Comm Loss: Supplemental Heater Relay 4	
918	Comm Loss: Liquid Line Temperature	
919	Comm Loss: Liquid Line Pressure	
920	Liquid Line Temp Sensor	
921	Liquid Line Pressure Transducer	
922	Comm Loss: Liquid Line Temperature	
923	Comm Loss: Liquid Line Pressure	
924	Liquid Line Temp Sensor	
925	Liquid Line Pressure Transducer	
926	Comm Loss: Shared V Coil Isolation Valve	
927	Comm Loss: Shared V Coil Isolation Valve	
928	Free Cooling Glycol Flow Overdue	
929	Comm Loss: Free Cooling Glycol Flow Switch	
930	Comm Loss: Free Cooling Glycol Pressure	
931	Free Cooling Glycol Pressure	
932	Low Glycol Pressure Free Cooling	
933	Comm Loss: Free Cooling Glycol Pump Fault	
934	Free Cooling Glycol Pump Fault	
935	Free Cooling Glycol Flow Lost	
936	SLHX Entering Temp Sensor - Ckt1	
937	Comm Loss: SLHX Valve - Ckt1	



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Object Identifier	Object Name	Object Status
938	Comm Loss: SLHX Entering Refrigerant Temp - Ckt1	
939	SLHX Entering Temp Sensor - Ckt2	
940	Comm Loss: SLHX Valve - Ckt2	
941	Comm Loss: SLHX Entering Refrigerant Temp - Ckt2	
942	Comm Loss: Sump Heater - Ckt1	
943	Comm Loss: Sump Heater - Ckt2	



#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



<b>Object Identifier</b>	Object Name	Description	Property Values	Relinquish Default	Valid Range
2	Reset Diagnostic		0=false (no reset); 1=true (can reset)		
3	BAS Noise Reduction Command		0 = Auto, 1 = On		
4	BAS Heat Recovery Command		0 = Auto, 1 = On		
5	Clear Energy Consumption		0=Normal; 1= Reset		
6	BAS Circuit 1 Lockout		0=false (not locked); 1= true (locked)		
7	BAS Circuit 2 Lockout		0=false (not locked); 1= true (locked)		



#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



Object Identifier	Object Name	Description	Object States	When Exists	Read/Write
1	Chiller Running Status		1=not running; 2=starting; 3= running; 4= stopping		
2	Operating Mode		1=cool; 2= heat; 3=ice; 4=free cooling		
3	Front Panel Chiller Mode		1=cool; 2= heat; 3=ice; 4=free cooling		
4	Setpoint Source		1=BAS/Ext/ FP; 2=Ext/FP; 3=front panel		
5	Active Chilled Water Setpoint Source		1=front panel; 2=external; 3= ice machine; 4=BAS		
6	Active Demand Limit Setpoint Source		1=front panel; 2=external; 3= ice machine; 4=BAS		
7	External Auto Stop		1=stop; 2= auto		
8	Front Panel Auto/Stop		1=stop; 2= auto		
9	Active Hot Water Setpoint Source		1=front panel; 2=external; 3= BAS		
10	Capacity Control Mode Status Ckt1		i-available, s-cooling, 4=heating; 5=defrost; 6=not i-available, 5=cooling,		
11	Capacity Control Mode Status Ckt2		4=heating; 5=defrost; 6=not		



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<b>Object Identifier</b>	Object Name	Description	Property Values	Relinquish Default	Valid Range
4	BAS Chiller Auto Stop Command		1=stop; 2=		
I			auto		
2	2 BAS Chiller Mode Command		1=cool; 2= heat;		
Z			3=ice		
2	BAS Free Cooling Auto Stop		1=stop; 2=		
3	Command		auto		



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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.

#### Date: 12/6/2024 Reference Document: BAS-SVP083\*-EN



Register Address	Object Name Description	Description	Register Type	Register Value	Valid Range
40001	BAS Chiller Auto Stop Command		Binary	0 = Stop 1= Auto	0, 1
40002	BAS Chiller Mode Command		Enumeration	0= Cool 1= Heat 2= Ice 3= Free Cool	0 to 3
40003	Chilled Water Setpoint		Temperature		10°F to 68°F (-12.22°C to 20°C) (a)
40004	Demand Limit Setpoint		Percent_1		40 – 120
40005	BAS Noise Reduction Command		Binary	0 = Auto 1 = On	0,1
40006	Hot Water Setpoint		Temperature		68°F to 140°F (20°C to 60°C)
40008	Reset Diagnostic		Binary	0 = False (no reset) 1 = True (can reset)	0,1
40009	BAS Free Cooling Auto Stop Command		Binary	0 = Stop 1 = Auto	
40010	BAS Heat Recovery Command		Binary	0 = Auto 1 = On	0,1
40011	BAS Heat Recovery Setpoint				
40012	Energy Consumption Reset		Binary	0 = No 1 = clear	0,1
40013	BAS Circuit 1 Lockout		Binary	0 = False (not locked) 1 = True (locked)	0,1
40014	BAS Circuit 2 Lockout		Binary	0 = False (not locked) 1 = True (locked)	0,1

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Register Address	Object name	Description	Register Type	Register Value	Valid Range
30001	Software Type		NA		
30002	Software Revision		NA		
30003	Active Cool/Heat Water Setpoint Temperature		Temp		
30004	Front Panel Chilled Water Setpoint		Temp		
30005	Evaporator Entering Water Temperature		Temp		
30006	Evaporator Leaving Water Temperature		Temp		
30007	Active Demand Limit Setpoint		Percent_1		
30008	Front Panel Demand Limit Setpoint		Percent_1		
30009	Unit Power Consumption		Power		
30010	Outdoor Air Temperature		Temp		
30011	External Chilled/Hot Water Setpoint		Temp		
30012	External Demand Limit Setpoint		Percent_1		
30013	Evaporator Refrigerant Pressure Ckt1		Pressure		
30014	Condenser Refrigerant Pressure Ckt1		Pressure		
30015	Differential Refrigerant Pressure Ckt1		Pressure		
30016	Suction(Evaporator) Saturated Rfgt Temp Ckt1		Temp		
30017	Condenser Saturated Rfgt Temp Ckt1		Temp		
30018	Evaporator Refrigerant Pressure Ckt2		Pressure		
30019	Condenser Refrigerant Pressure Ckt2		Pressure		
30020	Differential Refrigerant Pressure Ckt2		Pressure		
30021	Suction(Evaporator) Saturated Rfgt Temp Ckt2		Temp		
30022	Condenser Saturated Rfgt Temp Ckt2		Temp		
30023	Actual Running Capacity		Percent_1		
30024	Discharge Temperature Ckt1		Temp		
30025	Discharge Temperature Ckt2		Temp		
30026	Active Heat Recovery Setpoint		Temp		
30032	Air Flow Ckt1		Percent		
30033	Air Flow Ckt2		Percent		
30035/36	Starts Cprsr1A		Count		
30037/38	Run Time Cprsr1A		Time		
30051/52	Starts Cprsr2A		Count		
30053/54	Run Time Cprsr2A		Time		
30071	Heat Recovery Entering Water Temp		Temp		



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Register Address	Object name	Description	Register Type	Register Value	Valid Range
30072	Heat Recovery Leaving Water Temp		Temp		
30073	Chiller Design Capacity		Kw		
30074	Free Cooling Capacity		Percent		
30075	Free Cooling Entering Water Temperature		Temp		
30076	Free Cooling Active		Binary		
30077	Free Cooling Entering Glycol Temperature		Temp		
30078	Free Cooling Leaving Glycol Temperature		Temp		
30094	Run Enable		Binary		
30095	Local Setpoint Control		Binary		
30096	Limit Mode Relay Status		Binary		
30097	Chiller Running State		Binary		
30098	Maximum Capacity Relay		Binary		
30099	Alarm Present		Binary		
30100	Chiller Running Status		Enum (0=not running;1=starting; 2= running; 3=stopping		
30101	Operating Mode		Enum(0=cool; 1=heat; 2=ice; 3=free cooling)		
30102	Front Panel Chiller Mode		Enum(0=cool; 1=heat; 2=ice; 3=free cooling)		
30103	Front Panel Auto/Stop		Binary		
30105	Setpoint Source		Enum(0=BAS/Ext/FP; 1=Ext/FP; 2=front panel)		
30104	Active Chilled Water Setpoint Source		Enum (0=front panel; 1=external; 2=ice machine; 3=BAS)		
30106	Active Demand Limit Setpoint Source		Enum (0=front panel; 1=external; 2=ice machine; 3=BAS)		
30107	Manual Override Exists				
30108	Running Status Cprsr1A		Binary		
30109	Running Status Cprsr2A		Binary		
30110	External Auto Stop		Binary (0 = Stop,1 = Auto)		



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Register Address	Object name	Description	Register Type	Register Value	Valid Range
30111	Emergency Stop Input		Binary		
30112	Evaporator Water Pump Command		Binary		
30113	Evaporator Water Flow Status		Binary		
30115	Running Status Cprsr1B		Binary		
30116	Running Status Cprsr2B		Binary		
30117	Running Status Cprsr1C		Binary		
30118	Running Status Cprsr2C		Binary		
30119	Emergency Stop Unit Status		Binary		
30127/28	Starts Cprsr1B		Count		
30129/30	Run Time Cprsr1B		Time		
30131/32	Starts Cprsr2B		Count		
30133/34	Run Time Cprsr2B		Time		
30135	Number of Circuits		Count		
30136	Number of Compressors, Circuit 1		Count		
30137	Number of Compressors, Circuit 2		Count		
30138/139	Starts Cprsr1C		Count		
30140/141	Run Time Cprsr1C		Time		
30142/143	Starts Cprsr2C		Count		
30144/145	Run Time Cprsr2C		Time		
30146/47	Last Diagnostic		Enum ( see RTAE Diagnostic Hex Codes doc)		
30148	Energy Consumption NonReset		kWh		
30149	Energy Consumption Resettable		kWh		
30150	Non-Latching Alarm Present, Circuit 1		Binary		
30151	Non-Latching Alarm Present, Circuit 2		Binary		
30152	Latching Alarm Present, Circuit 1		Binary		
30153	Latching Alarm Present, Circuit 2		Binary		
30154	Noise Reduction Active				
30155	No assignment - reserved as obsolete		NA		
30156	Heat Recovery Active		Binary		
30157	Active Heat Recovery Command				
30158	Active Hot Water Setpoint		Temp		



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Register Address	Object name	Description	Register Type	Register Value	Valid Range
30159	Front Panel Hot Water Setpoint		Temp		
30160	Active Hot Water Setpoint Source		Enum (0=front panel; 1=external; 2=BAS)		
30161	Liquid Line Temperature Ckt1		Temp		
30162	Liquid Line Pressure Ckt1		Pressure		
30163	Liquid Line Temperature Ckt2		Temp		
30164	Liquid Line Pressure Ckt2		Pressure		
30165	Capacity Control Mode Status Ckt1		Enum (0=Available; 2=Cooling; 3=Heating; 4=Defrost; 5=Not Available		
30166	Capacity Control Mode Status Ckt2		Enum (0=Available; 2=Cooling; 3=Heating; 4=Defrost; 5=Not Available		
30167	Free Cooling Glycol Pressure		Pressure		