Chiller Modules parameters table

BACNET MSTP/IP/ETH T	BACNET GATEWAY BV instance	MODBUS Coil	CAREL Digital	LON Name	LON Type	R/W	DESCRIPTION	VALUE RANGE
1	1	10002	1			R	Enter water temperature sensor enable	1=Enabled
2	2	10003	2			R	Enter water temperature sensor out of range	1=Failed
3	3	10004	3			R	Panel temperature sensor enable	1=Enabled
4	4	10005	4			R	Panel temperature sensor out of range	1=Failed
5	5	10006	5			R	Leaving water temperature sensor enable	1=Enabled
6	6	10007	6			R	Leaving water temperature sensor out of range	1=Failed
7	7	10008	7	nvoLwtHighAlm	95	R	Leaving water temperature high alarm	1=Alarm
8	8	10009	8	nvoLwtLowAlm	95	R	Leaving water temperature low alarm	1=Alarm
9	9	10010	9			R	Control type P or P+I	1=P+I
10	10	10011	10			R	Ambient temperature sensor enable	1=Enabled
11	11	10012	11			R	Ambient temperature sensor out of range	1=Alarm
12	12	10013	12			R	c1 low pressure sensor enable	1=Enabled
13	13	10014	13			R	C1 low pressure sensor out of range	1=Alarm
14	14	10015	14			R	c2 low pressure sensor enable	1=Enabled
15	15	10016	15			R	C2 low pressure sensor out of range	1=Alarm
16	16	10017	16			R	c1 high pressure sensor enable	1=Enabled
17	17	10018	17			R	C1 high pressure sensor out of range	1=Alarm
18	18	10019	18			R	c2 high pressure sensor enable	1=Enabled
19	19	10020	19			R	C2 high pressure sensor out of range	1=Alarm
20	20	10021	20	nvoGlobalAlm	95	R	Alarm Present	1=Alarm
21	21	10022	21			R	Display buzzer enable	1=Enabled
22	22	10023	22			R	C1 high pressure switch alarm	1=Alarm
23	23	10024	23			R	C1 low pressure switch alarm	1=Alarm
24	24	10025	24			R	C2 high pressure switch alarm	1=Alarm
25	25	10026	25			R	C2 low pressure switch alarm	1=Alarm
26	26	10027	26			R/W	Temperature units	1=degrees C
27	27	10028	27			R/W	Compressor rotation enable	1=Enabled
28	28	10029	28			R	Digital input 1 position	1=open
29	29	10030	29			R	Digital input 10 position	1=open
30	30	10031	30			R	Digital input 11 position	1=open
31	31	10032	31			R	Digital input 12 position	1=open
32	32	10033	32			R	Digital input 13 position	1=open
33	33	10034				R	Digital input 14 position	1=open
34	34	10035				R	Digital input 2 position	1=open
35	35	10036				R	Digital input 3 position	1=open
36	36	10037				R	Digital input 4 position	1=open
37	37	10038	37			R	Digital input 5 position	1=open
38	38	10039	38			R	Digital input 6 position	1=open
39	39	10040	39			R	Digital input 7 position	1=open
40	40	10041	40			R	Digital input 8 position	1=open
41	41	10042	41			R	Digital input 9 position	1=open
42	42	10043	42	nvoC1Out	95	R	Compressor 1 status	1=ON
43	43	10044	43	nvoC2Out	95	R	Compressor 2 status	1=ON
44	44	10045	44			R	Evap flow alarm	1=Alarm
45	45	10046	45			R	Not used	N/A
46	46	10047	46			R	phase alarm	1=alarm
47	47	10048	47			R	Not used	N/A
48	48	10049	48			R	Not used	N/A
49	49	10050	49			R	pump alarm	1=alarm
50	50	10051	50	nviAlarmRst		R/W	reset alarms	1=reset
51	51	10052	51			R/W	reset buzzer	1=reset
52	52	10053	52			R	Not used	N/A
53	53	10054	53			R	Not used	N/A
54	54	10055	54	nvo/nviSysOnOff	95	R/W	system on/off	1=Enabled
55	55	10056	55			R	Tank low alarm	1=alarm

Need compressor status for every module

Typical of each module

56	56	10057	56			R	Not used	N/A
57	57	10058	57			R	slave 1 alarm	1=alarm
58	58	10059	58			R	slave 2 alarm	1=alarm
59	59	10060	59			R	slave 3 alarm	1=alarm
60	60	10061	60			R	slave 4 alarm	1=alarm
61	61	10062	61			R	slave 5 alarm	1=alarm
62	62	10063	62			R	slave 6 alarm	1=alarm
63	63	10064	63			R	slave 7 alarm	1=alarm
64	64	10065	64			R	slave 8 alarm	1=alarm
65	65	10066	65			R	slave 9 alarm	1=alarm
66	66	10067	66			R	slave 10 alarm	1=alarm
67	67	10068	67			R	slave 11 alarm	1=alarm
68	68	10069	68			R	slave 12 alarm	1=alarm
69	69	10070	69			R	slave 13 alarm	1=alarm
70	70	10071	70			R	slave 14 alarm	1=alarm
71	71	10072	71			R	slave 15 alarm	1=alarm
72	72	10073	72			R	Not used	N/A
73	73	10074	73			R	Not used	N/A
74	74	10075	74			R	Not used	N/A
75	75	10076	75	nvoS1LwtLowAlm	95	R	Slave 1 leaving water temperature low alarm	N/A
76	76	10077	76	nvoS2LwtLowAlm	95	R	Slave 2 leaving water temperature low alarm	N/A
77	77	10078	77			R	Not used	N/A
78	78	10079	78			R	Not used	N/A
79	79	10080	79			R	Not used	N/A
80	80	10081	80			R	Not used	N/A
81	81	10082	81			R	Not used	N/A
82	82	10083	82			R	Not used	N/A
83	83	10084	83			R	Not used	N/A
84	84	10085	84			R	Not used	N/A
85	85	10086	85			R	Not used	N/A
86	86	10087	86			R	Not used	N/A
87	87	10088	87			R	Not used	N/A
88	88	10089	88			R	Not used	N/A
89	89	10090	89			R	Not used	N/A
90	90	10091	90			R	Not used	N/A
91	91	10092	91			R	Not used	N/A
92	92	10093	92			R	Not used	N/A
93	93	10094	93			R	Not used	N/A
94	94	10095	94			R	Not used	N/A
95	95	10096	95	nvoS3LwtLowAlm	95	R	Slave 3 leaving water temperature low alarm	N/A
96	96	10097	96	nvoS4LwtLowAlm	95	R	Slave 4 leaving water temperature low alarm	N/A
97	97	10098	97			R	Not used	N/A
98	98	10099	98			R	Not used	N/A
99	99	10100	99			R	Not used	N/A
100	100	10101	100			R	Not used	N/A
101	101	10102	101			R	Not used	N/A
102	102	10103	102			R	Not used	N/A
103	103	10104	103	nvoS5LwtLowAlm	95	R	Slave 5 leaving water temperature low alarm	N/A
104	104	10105	104	nvoS6LwtLowAlm	95	R	Slave 6 leaving water temperature low alarm	N/A
105	105	10106	105	nvoS7LwtLowAlm	95	R	Slave 7 leaving water temperature low alarm	N/A
106	106	10107	106			R	Not used	N/A
107	107	10108	107			R	Not used	N/A
108	108	10109	108			R	Not used	N/A
109	109	10110	109			R	Not used	N/A
110	110	10111	110			R	Not used	N/A
111	111	10112	111			R	Pump 1 status	1=on
112	112	10113	112			R	Pump 2 status	1=on
113	113	10114	113			R	Pumps switched alarm	1=alarm

Typical of each Module

114	114	10115	114			R	Pump phase alarm	1=alarm
115	115	10116	115			R	Pump 1 overload alarm	1=alarm
116	116	10117	116			R	Pump 2 overload alarm	1=alarm
117	117	10118	117	nvoS1C1Out	95	R	slave 1 compressor 1 status	1=on
118	118	10119	118	nvoS1C2Out	95	R	slave 1 compressor 2 status	1=on
119	119	10120	119	nvoS2C1Out	95	R	slave 2 compressor 1 status	1=on
120	120	10121	120	nvoS2C2Out	95	R	slave 2 compressor 2 status	1=on
121	121	10122	121	nvoS3C1Out	95	R	slave 3 compressor 1 status	1=on
122	122	10123	122	nvoS3C2Out	95	R	slave 3 compressor 2 status	1=on
123	123	10124	123	nvoS4C1Out	95	R	slave 4 compressor 1 status	1=on
124	124	10125	124	nvoS4C2Out	95	R	slave 4 compressor 2 status	1=on
125	125	10126	125	nvoS5C1Out	95	R	slave 5 compressor 1 status	1=on
126	126	10127	126	nvoS5C2Out	95	R	slave 5 compressor 2 status	1=on
127	127	10128	127	nvoS6C1Out	95	R	slave 6 compressor 1 status	1=on
128	128	10129	128	nvoS6C2Out	95	R	slave 6 compressor 2 status	1=on
129	129	10130	129	nvoS7C1Out	95	R	slave 7 compressor 1 status	1=on
130	130	10131	130	nvoS7C2Out	95	R	slave 7 compressor 2 status	1=on
131	131	10132	131	nvoS8C1Out	95	R	slave 8 compressor 1 status	1=on
132	132	10133	132	nvoS8C2Out	95	R	slave 8 compressor 2 status	1=on
133	133	10134	133	nvoS9C1Out	95	R	slave 9 compressor 1 status	1=on
134	134	10135	134	nvoS9C2Out	95	R	slave 9 compressor 2 status	1=on
135	135	10136	135	nvoS10C1Out	95	R	slave 10 compressor 1 status	1=on
136	136	10137	136	nvoS10C2Out	95	R	slave 10 compressor 2 status	1=on
137	137	10138	137	nvoS11C1Out	95	R	slave 11 compressor 1 status	1=on
138	138	10139	138	nvoS11C2Out	95	R	slave 11 compressor 2 status	1=on
139	139	10140	139	nvoS12C1Out	95	R	slave 12 compressor 1 status	1=on
140	140	10141	140	nvoS12C2Out	95	R	slave 12 compressor 2 status	1=on
141	141	10142	141	nvoS13C1Out	95	R	slave 13 compressor 1 status	1=on
142	142	10143	142	nvoS13C2Out	95	R	slave 13 compressor 2 status	1=on
143	143	10144	143	nvoS14C1Out	95	R	slave 14 compressor 1 status	1=on
144	144	10145	144	nvoS14C2Out	95	R	slave 14 compressor 2 status	1=on
145	145	10146	145	nvoS15C1Out	95	R	slave 15 compressor 1 status	1=on
146	146	10147	146	nvoS15C2Out	95	R	slave 15 compressor 2 status	1=on
AV instance	**AV instance**	**ANALOG**	**ANALOG**					
1	1	40002			105	R	Entering water temperature	-450 to 1850
2	2	40003				R	Panel temperature	-450 to 1850
3	3	40004		nvoLwt	105	R	Leaving water temperature	-450 to 1850
4	4	40005	4			R	Ambient temperature	-450 to 1850
5	5	40006	5	nvo/nviLwtHighSet	105	R	Low pressure c1	psi
6	6	40007	6	nvo/nviLwtLowSet	105	R	Low pressure c2	psi
7	7	40008	7	nvo/nviControlSet	105	R	High pressure c1	psi
8	8	40009	8			R	High pressure c2	psi
9	9	40010	9	nvoClDemand	21	R	Cooling demand display	0 to 100
10	10	40011	10	nvoStatus	8	R	system status off, on, off cl, off clock, flow, c flow, Plan	0-6
11	11	40012	11			R	pump differential pressure 1	
12	12	40013	12			R	pump differential pressure 2	
13	13	40014	13			R	pump flow	
14	14	40015	14			R	pump suction pressure	
15	15	40016	15			R	pump discharge pressure	
AV instance	**AV instance**	**ANALOG**	**INTEGER**					
1001	129	40130	1			R/W	Panel temperature set point	N/A
1002	130	40131	2			R	Control band	
1003	131	40132	3			R/W	Leaving temperature high alarm set point	
1004	132	40133	4			R/W	Not used	
1005	133	40134	5			R/W	Control integration time	
1006	134	40135	6			R/W	Leaving temperature low alarm set point	
1007	135	40136	7			R/W	Control set point	
1008	136	40137	8			R/W	compressor minimum off	

Typical for each module

1009	137	40138	9			R/W	compressor minimum on	
1010	138	40139	10			R/W	hot gas 1 off set point	0 to 999
1011	139	40140	11			R/W	hot gas 1 on set point	N/A
1012	140	40141	12			R/W	hot gas 2 off set point	0 to 999
1013	141	40142	13			R/W	hot gas 2 on set point	N/A
1014	142	40143	14			R/W	Initial delay	0 to 999
1015	143	40144	15			R/W	Not used	N/A
1016	144	40145	16			R/W	Not used	0 to 999
1017	145	40146	17			R/W	Not used	N/A
1018	146	40147	18			R/W	Not used	0 to 999
1019	147	40148	19			R/W	Entering water temperature sensor offset	N/A
1020	148	40149	20			R/W	Panel temperature sensor offset	0 to 999
1021	149	40150	21			R/W	Leaving water temperature sensor offset	N/A
1022	150	40151	22			R/W	Ambient temperature sensor offset	0 to 999
1023	151	40152	23			R/W	Low pressure c1 sensor offset	N/A
1024	152	40153	24			R/W	Low pressure c2 sensor offset	0 to 999
1025	153	40154	25			R/W	High pressure c1 sensor offset	N/A
1026	154	40155	26			R/W	High pressure c2 sensor offset	0 to 999
1027	155	40156	27			R	Not used	N/A
1028	156	40157	28			R	Not used	N/A
1029	157	40158	29			R	Not used	N/A
1030	158	40159	30			R	Not used	N/A
1031	159	40160	31			R/W	password 1	0-9999
1032	160	40161	32			R/W	password 2	0-9999
1033	161	40162				R/W	rotation time set point	0-32767
1034	162	40163				R	Lead status	N/A
1035	163	40164				R	Not used	N/A
1036	164	40165	36			R/W	Time between compressors	0-999
1037	165	40166	37	nvoC1Hours	8	R	compressor 1 run hours	0-32767
1038	166	40167	38	nvoC2Hours	8	R	compressor 2 run hours	0-32767
1039	167	40168	39			R	pump 1 run hours	0-32767
1040	168	40169	40			R	pump 2 run hours	0-32767
1041	169	40170	41			R	software version day	
1042	170	40171	42			R	software version month	
1043	171	40172				R	not used	
1044	172	40173				R	Not used	
1045	173	40174				R	Not used	
1046	174	40175	46			R	Not used	
1047	175	40176	47			R	master compressor 1 low pressure	0-435
1048	176	40177	48			R	master compressor 1 high pressure	0-435
1049	177	40178	49			R	master compressor 2 low pressure	0-435
1050	178	40179	50			R	master compressor 2 high pressure	0-435
1051	179	40180	51			R	slave 1 compressor 1 low pressure	0-435
1052	180	40181	52			R	slave 1 compressor 1 high pressure	0-435
1053	181	40182	53			R	slave 1 compressor 2 low pressure	0-435
1054	182	40183	54			R	slave 1 compressor 2 high pressure	0-435
1055	183	40184	55			R	slave 2 compressor 1 low pressure	0-435
1056	184	40185	56			R	slave 2 compressor 1 high pressure	0-435
1057	185	40186	57			R	slave 2 compressor 2 low pressure	0-435
1058	186	40187	58			R	slave 2 compressor 2 high pressure	0-435
1059	187	40188	59			R	slave 3 compressor 1 low pressure	0-435
1060	188	40189	60			R	slave 3 compressor 1 high pressure	0-435
1061	189	40190	61			R	slave 3 compressor 2 low pressure	0-435
1062	190	40191	62			R	slave 3 compressor 2 high pressure	0-435
1063	191	40192	63			R	slave 4 compressor 1 low pressure	0-435
1064	192	40193	64			R	slave 4 compressor 1 high pressure	0-435
1065	193	40194	65			R	slave 4 compressor 2 low pressure	0-435
1066	194	40195	66			R	slave 4 compressor 2 high pressure	0-435

Typical for each module

Typical for each module

1067	195	40196	67			R	slave 5 compressor 1 low pressure	0-435
1068	196	40197	68			R	slave 5 compressor 1 high pressure	0-435
1069	197	40198	69			R	slave 5 compressor 2 low pressure	0-435
1070	198	40199	70			R	slave 5 compressor 2 high pressure	0-435
1071	199	40200	71			R	slave 6 compressor 1 low pressure	0-435
1072	200	40201	72			R	slave 6 compressor 1 high pressure	0-435
1073	201	40202	73			R	slave 6 compressor 2 low pressure	0-435
1074	202	40203	74			R	slave 6 compressor 2 high pressure	0-435
1075	203	40204	75			R	slave7 compressor 1 low pressure	0-435
1076	204	40205	76			R	slave 7 compressor 1 high pressure	0-435
1077	205	40206	77			R	slave 7 compressor 2 low pressure	0-435
1078	206	40207	78			R	slave 7 compressor 2 high pressure	0-435
1079	207	40208	79			R	slave 8 compressor 1 low pressure	0-435
1080	208	40209	80			R	slave 8 compressor 1 high pressure	0-435
1081	209	40210	81			R	slave 8 compressor 2 low pressure	0-435
1082	210	40211	82			R	slave 8 compressor 2 high pressure	0-435
1083	211	40212	83			R	slave 9 compressor 1 low pressure	0-435
1084	212	40213	84			R	slave 9 compressor 1 high pressure	0-435
1085	213	40214	85			R	slave 9 compressor 2 low pressure	0-435
1086	214	40215	86			R	slave 9 compressor 2 high pressure	0-435
1087	215	40216	87			R	slave 10 compressor 1 low pressure	0-435
1088	216	40217	88			R	slave 10 compressor 1 high pressure	0-435
1089	217	40218	89			R	slave 10 compressor 2 low pressure	0-435
1090	218	40219	90			R	slave 10 compressor 2 high pressure	0-435
1091	219	40220	91			R	slave 11 compressor 1 low pressure	0-435
1092	220	40221	92			R	slave 11 compressor 1 high pressure	0-435
1092	221	40222	93			R	slave 11 compressor 2 low pressure	0-435
1092	222	40223	94			R	slave 11 compressor 2 high pressure	0-435
1092	223	40224	95			R	slave 12 compressor 1 low pressure	0-435
1092	224	40225	96			R	slave 12 compressor 1 high pressure	0-435
1092	225	40226	97			R	slave 12 compressor 2 low pressure	0-435
1092	226	40227	98			R	slave 12 compressor 2 high pressure	0-435
1092	227	40228	99			R	slave 13 compressor 1 low pressure	0-435
1092	228	40229	100			R	slave 13 compressor 1 high pressure	0-435
1092	229	40230	101			R	slave 13 compressor 2 low pressure	0-435
1092	230	40231	102			R	slave 13 compressor 2 high pressure	0-435
1092	231	40232	103			R	slave 14 compressor 1 low pressure	0-435
1092	232	40233	104			R	slave 14 compressor 1 high pressure	0-435
1092	233	40234	105			R	slave 14 compressor 2 low pressure	0-435
1092	234	40235	106			R	slave 14 compressor 2 high pressure	0-435
1092	235	40236	107			R	slave 15 compressor 1 low pressure	0-435
1092	236	40237	108			R	slave 15 compressor 1 high pressure	0-435
1092	237	40238	109			R	slave 15 compressor 2 low pressure	0-435
1092	238	40239	110			R	slave 15 compressor 2 high pressure	0-435

Pump Module parameters table

BACNET MSTP/IP/ETH T	BACNET GATEWAY BV instance	MODBUS Coil	CAREL Digital	LON Name	LON Type	R/W	DESCRIPTION	VALUE RANGE
1	1	10002	1			R	di5 Pump switchover reset	1=Closed
2	2	10003	2			R	di6 Pump 1 Local switch	1=Closed
3	3	10004	3			R	di7 Pump 2 Local switch	1=Closed
4	4	10005	4			R	di8 Flow switch	1=Closed
5	5	10006	5			R	di9 Tank level switch	1=Closed
6	6	10007	6			R	di10 Phase monitor	1=Closed
7	7	10008	7			R	di11 Pump 1 overload	1=Closed
8	8	10009	8			R	di12 Pump 2 overload	1=Closed
9	9	10010	9			R	do13 Pumps have switched	1=Closed
10	10	10011	10			R	do7 Pump 1 status	1=ON
11	11	10012	11			R	do12 Pump 2 status	1=ON
12	12	10013	12			R	do9 Panel heater	1=ON
13	13	10014	13			R	do8 alarm present	1=ON
14	14	10015	14					
15	15	10016	15			R	Both pumps failed	1=Alarm
16	16	10017	16			R	Tank low alarm	1=Alarm
17	17	10018	17			R	phase alarm	1=Alarm
18	18	10019	18			R	pump 1 overload alarm	1=Alarm
19	19	10020	19			R	pump 2 overload alarm	1=Alarm
20	20	10021	20			R	panel temperature sensor failed	1=Alarm
21	21	10022	21			R	Differential pressure sensor 1 failed	1=Alarm
22	22	10023	22			R	Differential pressure sensor 2 failed	1=Alarm
23	23	10024	23			R	Pump suction pressure sensor failed	1=Alarm
24	24	10025	24			R	Pump discharge pressure sensor failed	1=Alarm
25	25	10026	25			R	Pump flow sensor failed	1=Alarm
26	26	10027	26			R/W	System ON/OFF	1=ON
27	27	10028	27			R/W	Alarm reset	1=Enabled
AV instance	**AV instance**	**ANALOG**	**ANALOG**					
1	1	40002	1			R	Panel temperature	"-45.0 to 185.0"
2	2	40003	2			R	ao1 Differential pressure	0-100.0
AV instance	**AV instance**	**ANALOG**	**INTEGER**					
1001	129	40130	1			R	Differential pressure 1	N/A
1002	130	40131	2			R	Differential pressure 2	
1003	131	40132	3			R	Pump suction pressure	
1004	132	40133	4			R	Pump discharge pressure	
1005	133	40134	5			R	Pump flow	
1006	134	40135	6			R	Pump 1 run hours	
1007	135	40136	7			R	Pump 2 run hours	
1008	136	40137	8			R/W	Differential pressure set point	
1009	137	40138	9			R/W	Differential pressure band	