SIEMENS

Systems Integration

LONWORKS® Solution for McQuay Microtech II Chiller Controller for General Purpose

Table 1. General Chiller Types APOGEE Points, Application Number: 9131, Program ID:80:00:25:50:28:0A:04:05.

Point	Type	Description	Range/Units[a b c]
1	LAO	Chiller Enable V	%
2	LDO	Chiller Enable S	Off/On
3	LAO	Cool Setpoint	°F *°C*
4	LAI	Chiller ON/OFF V	%
5	LDI	Chiller ON/OFF S	Off/On
6	LAI	Active Setpoint OP	°F *°C*
7	LAO	Capacity Limit IP	%
8	LAO	EntChilWaterTmp IP	°F *°C*
9	LENUM	Chiller Mode	See Table 2
10	LAO	Heating Setpoint	°F *°C*
11	LAI	ActualCapacityLvl	%
12	LAI	CapacityLimit	%
13	LAI	LvgChilWaterTemp	°F *°C*
14	LAI	EntChilWaterTemp	°F *°C*
15	LAI	LvgCondWaterTemp	°F *°C*
16	LAI	EntCondWaterTemp	°F *°C*
17	LENUM	Chiller Run Mode	0=Chlr_Off 1=Chlr_Start 2=Chlr_Run 3=Chlr_Preshutdn 4=Chlr_Service 255=Chlr_Nul

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Table 1. General Chiller Types APOGEE Points, Application Number: 9131, Program ID:80:00:25:50:28:0A:04:05. ***(continued)***

Point	Type	Description	Range/Units[a b c]
18	LENUM	Chiller Op Mode	See Table 2
19	LDI	Chiller Alarm	Normal/Alarm
20	LDI	Run Enable	Disabled/Enabled
21	LDI	Local	Remote/Local
22	LDI	Limited	Full/Limted
23	LDI	ChilledWaterFlow	Noflow/Flow
24	LDI	Cond Water Flow	Noflow/Flow
25	LAO	Ice Setpoint	°F *°C*
26	LAO	Pump Select V	%
27	LAO	Pump Select S	–
28	LAO	Compressor Select	–
29	LAO	Clear Alarm V	%
30	LDO	Clear Alarm S	Normal/Clear
31	LAI	EntHeatRecWTemp	°F *°C*
32	LAI	LvgHeatRecWTemp	°F *°C*
33	LAI	Outdoor Temp	°F *°C*
34	LAI	EvapFlowSwStat V	%
35	LDI	EvapFlowSwStat S	Off/On
36	LAI	CondFlowSwStat V	%
37	LDI	CondFlowSwStat S	Off/On
38	LAI	EvapWPumpStatV	%
39	LDI	EvapWPumpStatS	Off/On
40	LAI	CondWPumpStatV	%
41	LDI	CondWPumpStatS	Off/On
42	LAI	Compressor Starts	–
43	LAI	Compressor Run Hrs	–
44	LAI	EvapPumpRunHrs	–
45	LAI	CondPumpRunHrs	–
46	LAI	CompSuctionLineTmp	°F *°C*
47	LAI	EvapSatRefrigTemp	°F *°C*
48	LAI	EvapRefrigPressure	psi *kPa*

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Table 1. General Chiller Types APOGEE Points, Application Number: 9131, Program ID:80:00:25:50:28:0A:04:05. ***(continued)***

Point	Type	Description	Range/Units[a b c]
49	LAI	CompDischargeTmp	°F *°C*
50	LAI	CondSatRefrigTmp	°F *°C*
51	LAI	CondRefrigPress	psi *kPa*
52	LAI	CompPercRLA	%
53	LAI	Oil Feed Press	psi *kPa*
54	LAI	Oil Sump Press	psi *kPa*
55	LAI	Oil Feed Temp	°F *°C*
56	LAI	Oil Sump Temp	°F *°C*
57	LAI	LiquLnRefrigTmp	°F *°C*
58	LAI	LiquLnRefrigPres	psi *kPa*
59	LAI	Compressor Amps	A
60	LAI	Compressor Volts	Vac
61	LAI	Compressor Power	kW
62	LAI	CondensorFlowRate	cfm *Lps*
63	LAI	EvapFlowRate	cfm *Lps*
200	LAI	CP_RcvHrtBt	sec
201	LDO	CP_Defaults	Off/On
202	LENUM	CP_Mode	See Table 2

[a] Values noted for LDIs and LDOs are in the following format: OFF text/ON text.

[b] This column indicates the value/range or engineering units or both if known.

[c] The default English value is not italicized. An italicized entry indicates an SI value.

Table 2. HVAC Mode/Status (hvac_t).

Value	Description
0	Hvac_Auto
1	Hvac_Heat
2	Hvac_Mrng_Wrmup
3	Hvac_Cool
4	Hvac_Night_Purge

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Table 2. HVAC Mode/Status (hvac_t). ***(continued)***

Value	Description
5	Hvac_Pre_Cool
6	Hvac_Off
7	Hvac_Test
8	Hvac_Emerg_Heat
9	Hvac_Fan_Only
10	Hvac_Free_Cool
11	Hvac_Ice
255	Hvac_Nul

Table 3. General Chiller Types LONWORKS Network Variables, Program ID: 80:00:25:50:28:0A:04:05.

Point	NVO Name	NVI Name	CP Name
1		nviChillerEnable.value	nciChillerEnable.value
2		nviChillerEnable.state	nciChillerEnable.state
3		nviCoolSetpt	nciCoolSetpt
4	nvoOnOff.value		
5	nvoOnOff.state		
6	nvoActiveSetpt		
7		nviCapacityLim	nciCapacityLim
8		nviEntChWTemp	nviEntChWTemp
9		nviMode	
10		nviHeatSetpt	nciHeatSetpt
11	nvoActCapacity		
12	nvoCapacityLim		
13	nvoLvgChWTemp		
14	nvoEntChWTemp		
15	nvoLvgCndWTemp		
16	nvoEntCndWTemp		
17	nvoChillerStat.chlr_run_mode		
18	nvoChillerStat.chlr_op_mode		
19	nvoChillerStat.chlr_state.in_alarm		
20	nvoChillerStat.chlr_state.run_enabled		
21	nvoChillerStat.chlr_state.local		
22	nvoChillerStat.chlr_state.limited		
23	nvoChillerStat.chlr_state.chw_flow		
24	nvoChillerStat.chlr_state.condw_flow		
25		nviIceSpt	nviIceSpt
26		nviPumpSelect.value	nviPumpSelect.value
27		nviPumpSelect.state	nviPumpSelect.state
28		nviCompSelect	nviCompSelect
29		nviClearAlarm.value	nviClearAlarm.value
30		nviClearAlarm.state	nviClearAlarm.state

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Table 3. General Chiller Types LONWORKS Network Variables, Program ID: 80:00:25:50:28:0A:04:05. ***(continued)***

Point	NVO Name	NVI Name	CP Name
31	nvoEntHRWTemp		
32	nvoLvgHRWTemp		
33	nvoOutdoorTemp		
34	nvoChWFlow.value		
35	nvoChWFlow.state		
36	nvoCndWFlow.value		
37	nvoCndWFlow.state		
38	nvoChWPump.value		
39	nvoChWPump.state		
40	nvoCndWPump.value		
41	nvoCndWPump.state		
42	nvoCompStarts		
43	nvoCompHrs		
44	nvoEvapPumpHrs		
45	nvoCondPumpHrs		
46	nvoSuctionTemp		
47	nvoSatEvpRefTemp		
48	nvoEvapRefPress		
49	nvoCompDisTemp		
50	nvoSatCndRefTemp		
51	nvoCondRefPress		
52	nvoCompPercRLA		
53	nvoOilFeedPress		
54	nvoOilSumpPress		
55	nvoOilFeedTemp		
56	nvoOilSumpTemp		
57	nvoLiquLineTemp		
58	nvoLiquLinePress		
59	nvoCurrent		
60	nvoVoltage		

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Table 3. General Chiller Types LONWORKS Network Variables, Program ID: 80:00:25:50:28:0A:04:05. ***(continued)***

Point	NVO Name	NVI Name	CP Name
61	nvoKilowatts		
62	nvoCondFlowRate		
63	nvoEvapFlowRate		
200			nciRCvHrtBt
201			nciDefaults.state
202			nciMode

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