

Systems Integration

LONWORKS® Solution for Trane ZN524 Heat Pump Controller, Application 9177

ZN524 Heat Pump Controller APOGEE Points, Application Number 9177, Program ID: 80:00:2A:55:03:03:04:05.				
Point	Type	Subpoint Name	Description	Range/Units a), b)
1	LAO	SpaceTmpCmd	Space Temp Command	°C °F
2	LAI	SpaceTempAct	Space Temp Actual	°C °F
3	LENUM	OpMode	Operating Mode	
4	LAI	HeatOutPri	Heat Out Primary	%
5	LAI	HeatOutSec	Heat Out Secondary	%
6	LAI	CoolOp	Cool Operation	%
7	LAI	EconOp	Econ Operation	%
8	LAI	FanOp	Fan Operation	%
9	LDI	InAlarm	In Alarm	Off/On
10	LAO	SetPointCmd	Setpoint Command	°C °F
11	LAO	SPOffsetCmd	Setpoint Offset Command	°C °F
18	LENUM	CrntStateCmd	Current State Command	
19	LENUM	NextStateCmd	Next State Command	
20	LAO	TimeToNextSt	Time To Next State	MIN
21	LENUM	OccManCmd	Occupied Manual Command	
22	LENUM	OccSensrCmd	Occupied Sensor Command	
23	LENUM	ApplicMode	Application Mode	
24	LENUM	HeatCoolCmd	Heat Cool Command	
25	LAO	FanSpdCmd_V	Fan Speed Command Value	%

**ZN524 Heat Pump Controller APOGEE Points,
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Point	Type	Subpoint Name	Description	Range/Units ^{a), b)}
26	LDO	FanSpdCmd_S	Fan Speed Command State	Off/On
27	LAO	CompEn_V	Comp Enabled Value	%
28	LDO	CompEn_S	Comp Enabled State	Off/On
29	LAO	AuxHeatEn_V	Auxiliary Heat Enabled Value	%
30	LDO	AuxHeatEn_S	Auxiliary Heat Enabled State	Off/On
31	LAO	EconEn_V	Economizer Enabled Value	%
32	LDO	EconEn_S	Economizer Enabled State	Off/On
41	LENUM	EmrgcyOvrde	Emergency Override	
42	LAO	SourceTmpCmd	Source Temp Command	°C °F
43	LAO	OAT_Cmd	Outside Air Temp Command	°C °F
44	LAO	SpaceRH_Cmd	Space Relative Humidity Command	%
50	LAI	EffctStptAct	Effective Setpoint Actual	°C °F
51	LENUM	EffectOccAct	Effect Occupancy Actual	
52	LENUM	HeatCoolAct	Heat Cool Actual	
53	LAI	SetpointAct	Setpoint Actual	°C °F
62	LAI	DischAirTmp	Discharge Air Temp	°C °F
64	LAI	LoadAbsK	Load AbsK	KW
65	LAI	TerminalLoad	Terminal Load	%
72	LAI	SpaceRHAct	Space Relative Humidity Actual	%
73	LAI	OAT_Act	Outside Air temp Actual	°C °F
74	LAI	SpaceCO2Act	Space CO2 Actual	PPM
90	LENUM	VlvOvrdsCmd	Valve Override State Command	
91	LAO	VlvOvrdsPCmd	Valve Override Percent Command	%
92	LAO	VlvOvrdsFCmd	Valve Override Flow Command	CFM LPS
93	LAI	OADamperAct	Outside Air Damper Actual	%
200	LAI	SP_OccCool	Setpoint Occupied Cool	°C °F

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Point	Type	Subpoint Name	Description	Range/Units ^{a), b)}
201	LAI	SP_StbyCool	Setpoint Standby Cool	°C °F
202	LAI	SP_UnoccCool	Setpoint Unoccupied Cool	°C °F
203	LAI	SP_OccHeat	Setpoint Occupied Heat	°C °F
204	LAI	SP_StbyHeat	Setpoint Standby Heat	°C °F
205	LAI	SP_UnoccHeat	Setpoint Unoccupied Heat	°C °F
206	LAI	CP_MaxRcvTme	Configuration Parameter Max Receive Time	SEC
207	LAI	CP_BypassT	Configuration Parameter Bypass Time	MIN
211	LAI	CP_SpcRHSp	Configuration Space Relative Humidity Setpoint	%

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.

ZN524 Heat Pump Controller LONWORS Network Variables, Program ID: 80:00:2A:55:03:03:04:05.

Point	Subpoint Name	NVO Name	NVI Name	CP Name
1	SpaceTmpCmd		nviSpaceTemp	
2	SpaceTempAct	nvoSpaceTemp		
3	OpMode	nvoUnitStatus.mode		
4	HeatOutPri	nvoUnitStatus.heat_output_p primary		
5	HeatOutSec	nvoUnitStatus.heat_output_s econdary		
6	CoolOp	nvoUnitStatus.cool_output		
7	EconOp	nvoUnitStatus.econ_output		
8	FanOp	nvoUnitStatus.fan_output		
9	InAlarm	nvoUnitStatus.in_alarm		
10	SetPointCmd		nviSetpoint	
11	SPOffsetCmd		nviSetptOffset	
18	CrntStateCmd		nviOccSchedule.current_state	
19	NextStateCmd		nviOccSchedule.next_state	
20	TimeToNextSt		nviOccSchedule.time_to_next _state	

ZN524 Heat Pump Controller LONWORS Network Variables, Program ID: 80:00:2A:55:03:03:04:05.				
Point	Subpoint Name	NVO Name	NVI Name	CP Name
21	OccManCmd		nviOccManCmd	
22	OccSensrCmd		nviOccSensor	
23	ApplicMode		nviApplicMode	
24	HeatCoolCmd		nviHeatCool	
25	FanSpdCmd_V		nviFanSpeedCmd.value	
26	FanSpdCmd_S		nviFanSpeedCmd.state	
27	CompEn_V		nviComprEnable.value	
28	CompEn_S		nviComprEnable.state	
29	AuxHeatEn_V		nviAuxHeatEnable.value	
30	AuxHeatEn_S		nviAuxHeatEnable.state	
31	EconEn_V		nviEconEnable.value	
32	EconEn_S		nviEconEnable.state	
41	EmrgcyOvrde		nviEmergOverride	
42	SourceTmpCmd		nviSourceTemp	
43	OAT_Cmd		nviOutdoorTemp	
44	SpaceRH_Cmd		nviSpaceRH	
50	EffctStptAct	nvoEffectSetpt		
51	EffectOccAct	nvoEffectOccup		
52	HeatCoolAct	nvoHeatCool		
53	SetpointAct	nvoSetpoint		
62	DischAirTmp	nvoDischAirTemp		
64	LoadAbsK	nvoLoadAbsK		
65	TerminalLoad	nvoTerminalLoad		
72	SpaceRHAct	nvoSpaceRH		
73	OAT_Act	nvoOutdoorTemp		
74	SpaceCO2Act	nvoSpaceCO2		
90	VlvOvrdsCmd		nviValveOverride.state	
91	VlvOvrdsPCmd		nviValveOverride.percent	
92	VlvOvrdsFCmd		nviValveOverride.flow	

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Point	Subpoint Name	NVO Name	NVI Name	CP Name
93	OADamperAct	nvoOADamper		
200	SP_OccCool			nciSetpoints.occupied_cool
201	SP_StbyCool			nciSetpoints.standby_cool
202	SP_UnoccCool			nciSetpoints.unoccupied_cool
203	SP_OccHeat			nciSetpoints.occupied_heat
204	SP_StbyHeat			nciSetpoints.standby_heat
205	SP_UnoccHeat			nciSetpoints.unoccupied_heat
206	CP_MaxRcvTme			SCPTmaxRcvTime
207	CP_BypassT			SCPTbypassTime
211	CP_SpcRHSp			SCPTHumSetpt

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Siemens Industry, Inc.
Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, IL 60089-4513
USA
Tel. 1 + 847-215-1000

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