Document Name

MODBUS POINTS LIST

Unit Type

LW For Program Version 2.0.6

*Holding Register Address	Description	Input Registers 3X	Data Format	Comments
00001 LSW 00002 MSW	Suction Pressure	Read Only	32-bit Float	In Tenths, linear from 0.0 to 250.0 psig.
00003 LSW 00004 MSW	Discharge Pressure	Read Only	32-bit Float	In Tenths, linear from 0.0 to 650.0 psig.
00005 LSW 00006 MSW	Liquid Pressure	Read Only	32-bit Float	In Tenths, linear from 0.0 to 650.0 psig.
00007 LSW 00008 MSW	Zone Air Relative Humidity	Read Only	32-bit Float	In Tenths, linear from 0.0 to 100.0%.
00009 LSW 00010 MSW	Zone Air Temperature	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00011 LSW 00012 MSW	Zone Air Dewpoint	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00013 LSW 00014 MSW	Suction Line Temperature	Read Only	32-bit Float	In Tenths, linear from -58.0 to 212.0 °F.
00015 LSW 00016 MSW	Liquid Temperature	Read Only	32-bit Float	In Tenths, linear from -58.0 to 212.0 °F.
00017 LSW 00018 MSW	Return Air Temperature	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00019 LSW 00020 MSW	Reheat Condenser Differential Air Pressure	Read Only	32-bit Float	In Thousandths, linear from 0.000”wc to 2.000”wc.
00021 LSW 00022 MSW	Refrigerant Superheat	Read Only	32-bit Float	In Tenths, linear from -58.0 to 212.0 °F.
00023 LSW 00024 MSW	Refrigerant Subcooling	Read Only	32-bit Float	In Tenths, linear from -58.0 to 212.0 °F.
00025 LSW 00026 MSW	Unit Airflow	Read Only	32-bit Float	In Tenths, linear from 0 to 10,000cfm?
00027 LSW 00028 MSW	Air Heating Command	Read Only	32-bit Float	In Tenths, linear from 0.0 to 100.0%.
00029 LSW 00030 MSW	Evaporator Bypass Damper Command	Read Only	32-bit Float	In Tenths, linear from 0.0 to 100.0%.
00031 LSW 00032 MSW	Outdoor Air Damper Command	Read Only	32-bit Float	In Tenths, linear from 0.0 to 100.0%.
00033 LSW 00034 MSW	Evaporator Differential Air Pressure	Read Only	32-bit Float	In Thousandths, linear from 0.000”wc to 2.000”wc.
00035 LSW 00036 MSW	Surface Temperature 1	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00037 LSW 00038 MSW	Surface Temperature 2	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00039 LSW 00040 MSW	Surface Temperature 3	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00041 LSW 00042 MSW	Surface Temperature 4	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.
00043 LSW 00044 MSW	Electronic Expansion Valve Position	Read Only	32-bit Float	In Tenths, linear from 0.0 to 100.0%.
00045	Unit Status	Read Only	16-bit Integer	For code definitions, see table below.
00046 LSW 00047 MSW	Active Zone RH Setpoint	Read Only	32-bit Float	In Tenths, linear from 0.0 to 100.0%.
00048 LSW 00049 MSW	Active Zone Temperature Setpoint	Read Only	32-bit Float	In Tenths, linear from -42.0°F to 137.0°F.

*Holding Register Address	Description	Holding Registers 4X	Data Format	Comments
00050 LSW 00051 MSW	Network Zone Relative Humidity Setpoint.	Read/ Write	32-bit Float	Settable from 0.0 to 100.0%.
00052 LSW 00053 MSW	Network Zone Temperature Setpoint.	Read/ Write	32-bit Float	Settable from 65.0 to 99.0°F.
00054 LSW 00055 MSW	Network Un-Occupied Zone Relative Humidity Setpoint.	Read/ Write	32-bit Float	Settable from 0.0 to 100.0%.
00056 LSW 00057 MSW	Network Un-Occupied Zone Temperature Setpoint.	Read/ Write	32-bit Float	Settable from 65.0 to 99.0°F.
00058 LSW 00059 MSW	Network Zone Temperature	Read/ Write	32-bit Float	Settable from -42.0°F to 137.0°F.
00060 LSW 00061 MSW	Network Zone Relative Humidity	Read/ Write	32-bit Float	Settable from 0.0 to 100.0%.
00062 LSW 00063 MSW	Network Heartbeat Delay	Read/ Write	32-bit Float	Settable from 1.0 to 999.0 Seconds. Default 120.0 Seconds.
00064	Zone Sensor Status	Read Only	16-bit Integer	For code definitions, see table below.

*Coil Address	Description	Coils 0x	Data Format	Comments
00001	Network Remote On/Off	Read/ Write	Boolean	Set 0 for Unit On, Set 1 for Unit Off. This action needs to be enabled at the controller before it can be used.
00002	Network Occupied Input	Read/ Write	Boolean	Set 0 for Network Unoccupied request. Set 1 for Network Occupancy Request.
00003	Remote Reset	Read/ Write	Boolean	Set 1 to Remote Reset the Unit. 0 is reset after 5 seconds.
00004	Blower Continuous	Read/ Write	Boolean	Set 1 for blower in Automatic mode, Set 0 for blower in Continuous mode.
00026	Network Hearbeat Enable	Read/ Write	Boolean	Write 1 to Enable Network Heartbeat, write 0 to disable.
00027	Network Heartbeat	Read/ Write	Boolean	Toggle from 1 to 0 within Heartbeat delay timing.

*Coil Address	Description	Discrete Inputs 1x	Data Format	Comments
00005	Supply Fan	Read Only	Boolean	Confirmation of Supply Fan, 0 = Off, 1 = On.
00006	Compressor	Read Only	Boolean	Confirmation of Compressor, 0 = Off, 1 = On.
00007	Liquid Solenoid	Read Only	Boolean	Confirmation of Liquid Solenoid, 0 =Off, 1 = On.
00008	Defrost Solenoid	Read Only	Boolean	Confirmation of Defrost Solenoid, 0 =Off, 1 = On.
00009	Reheat Solenoid	Read Only	Boolean	Confirmation of Reheat Solenoid, 0 =Off, 1 = On.
00010	Heating Required	Read Only	Boolean	Confirmation of Heating Required, 0 = Off, 1 = On.
00011	Occupied Status	Read Only	Boolean	0 = Unoccupied, 1 = Occupied.
00012	Alarm Active	Read Only	Boolean	Confirmation of Alarm Status. 0 = Norma, 1 = Alarm
00013	Retain Memory Alarm	Read Only	Boolean	Retain Memory Alarm. 0 = Normal, 1 = Alarm.
00014	Retain Memory Write Alarm	Read Only	Boolean	Retain Memory Write Alarm. 0 = Normal, 1 = Alarm.
00015	Blower Overload Alarm	Read Only	Boolean	Blower Overload Alarm. 0 = Normal, 1 = Alarm.
00016	Compressor Overload Alarm	Read Only	Boolean	Compressor Overload Alarm. 0 = Normal, 1 = Alarm.

*Coil Address	Description	Discrete Inputs 1x	Data Format	Comments
00017	Smoke/ General Alarm	Read Only	Boolean	Smoke Alarm. 0 = Normal, 1 = Alarm.
00018	Low Suction Pressure Alarm	Read Only	Boolean	Low Suction Pressure. 0 = Normal, 1 = Alarm.
00019	Discharge Pressure Alarm	Read Only	Boolean	High Discharge Pressure. 0 = Normal, 1 = Alarm.
00020	Zone Sensor Fault	Read Only	Boolean	Zone Sensor Fault. 0 = Normal, 1 = Fault.
00021	c.PCOe Configuration Alarm	Read Only	Boolean	cPCOe Configuration Error. 0 = Normal, 1 = Error.
00022	c.PCOe Offline Alarm	Read Only	Boolean	cPCOe Offline Error. 0 = Normal, 1 = Error.
00023	ExV Motor Alarm	Read Only	Boolean	ExV Motor Error. 0 = Normal, 1 = Error.
00024	ExV Control Alarm	Read Only	Boolean	ExV Control Alarm. 0 = Normal, 1 = Error.
00025	ExV Emergency Closing Alarm	Read Only	Boolean	ExV Emergency Closing Alarm. 0 = Normal, 1 = Emergency Closing.
00028	Discharge Pressure Sensor Alarm	Read Only	Boolean	Discharge Pressure Sensor Fault. 0 = Normal, 1 = Alarm.
00029	Network Sensor Alarm	Read Only	Boolean	Network Sensor Alarm. 0 = Normal, 1 = Alarm.
00030	Lead Sensor Alarm	Read Only	Boolean	Lead Sensor Alarm. 0 = Normal, 1 = Alarm.
00031	Very Low Suction Pressure Alarm	Read Only	Boolean	Very Low Suction Pressure Alarm. 0 = Normal, 1 = Alarm.
00032	Suction Temperature Sensor Alarm	Read Only	Boolean	Suction Temperature Sensor Alarm. 0 = Normal, 1 = Alarm.

CODE	UNIT STATUS DESCRIPTION
0	Zone Satisfied
1	Heating Required
2	Cooling Required
3	Dehumidification Required
4	Dehum/Heat
5	Dehum/Cool
6	Low Airflow
7	Defrost Cycle
8	Low R/A Temperature
9	ExV Intialize
10	Surface Dehumidification
11	Factory Test Running

CODE	ZONE SENSOR STATUS
0	Zone Sensor
1	BMS Zone Sensor
2	Lead Unit Zone Sensor

Revision (Rev.) History				
Rev.	**Description**	**Date**	**Initials**	**ECN #**
00	Initial Release	6/10/2020	MJH	580
01	Release LW 2.0.3	6/4/2021	MJH	10688
02	Added Boolean 28 - Discharge Pressure Sensor Fault.		MJH	10880
03	Added alarms for LW 2.0.6	10/10/2023	MJH	10971