CoolLoop Chiller Screw Communication Points List

Reference Guide

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Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit https://www.vertiv.com/en-us/support/ for additional assistance.

TABLE OF CONTENTS

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1 Scope

This document provides the monitoring data point lists for Vertiv™ Thermal Management Units running the V1C SW application. The Vertiv units that are covered by this monitoring manual are:

- Vertiv™ CoolLoop Chiller with Vertiv™ Liebert® iCOM3™ controller

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2 Monitoring Protocols

All of the monitoring protocols provided are over IP through a dedicated Ethernet port, that is physically disconnected from the rest of the other controller interfaces and communicating via serial RS485 protocol with the microprocessor.

- Default IP Address of the monitoring port: 192.168.254.200

The web site is available at that address at https:// 192.168.254.200. At first access the user is guided by a “First Boot Access” wizard that forces the creation of the web user accounts.

The following standard monitoring protocols are made available together in parallel:

- Modbus TCP/IP
  - Port 502
  - Default address: 1
- BACnet IP v19
  - UDP Port 47808
  - Default address: 1
  - Default device name: MP_VERTIV
- SNMP v2c
  - UDP Port 161
  - R/W community: private
  - RO community: public

The last column on every data points table reports the software version from which the specific data point is made available.

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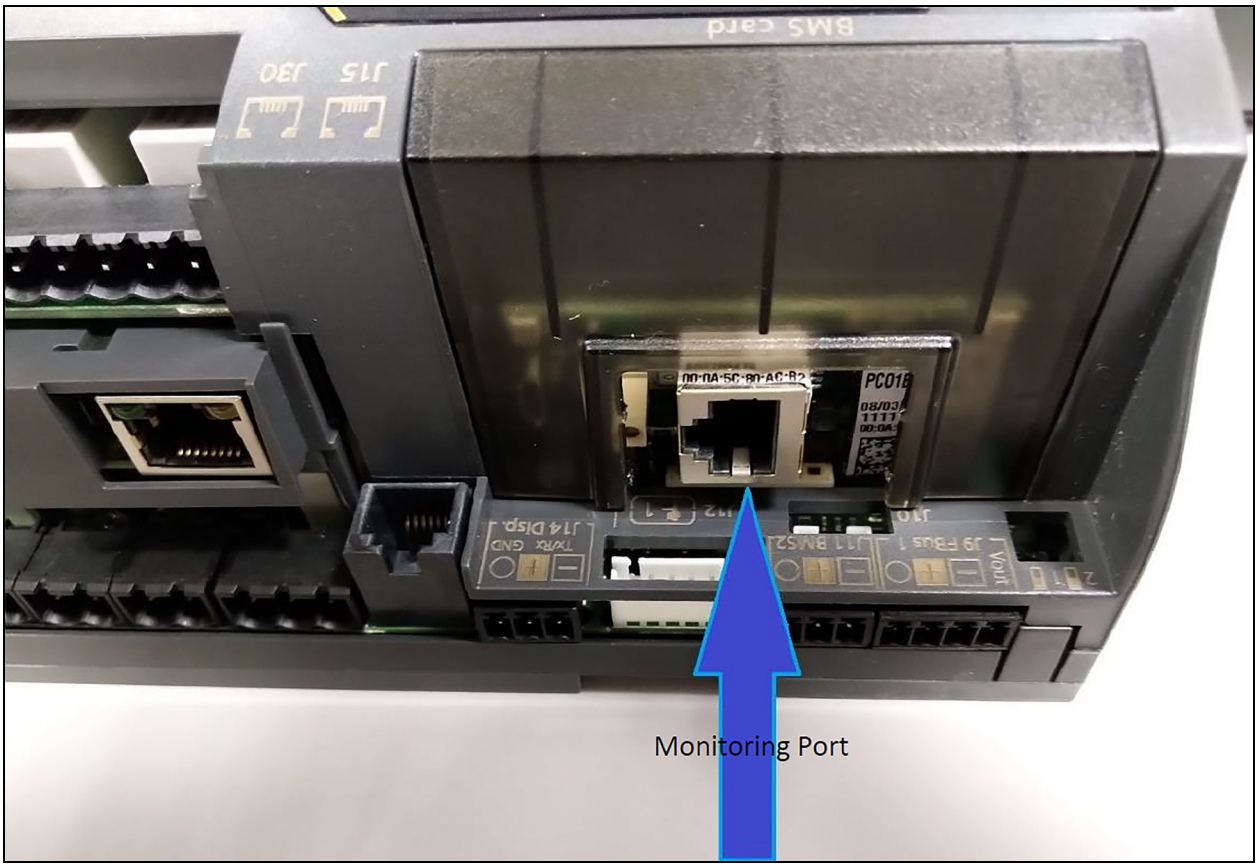
3 Connections

3.1 Ethernet Connection on Vertiv™ Liebert® iCOM™3 Large

Figure 5.1 Monitoring Port



NOTE: See the "Vertiv™ Liebert® iCOM™3 Monitoring Port Configuration Reference Guide" for further information about how to upload and activate a usable monitoring model into the monitoring port of a Liebert® iCOM™3 controller.

3.2 Networking

The monitoring port must not be connected to the same network as the Vertiv™ Liebert® iCOM™3 boards, in order to separate completely the Monitoring from the Teamwork local network. The Liebert® iCOM™3 Teamwork port shall not be used for monitoring or management purposes by the customer since it is reserved for authorized Service.

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4 Modbus TCP/IP

4.1 Input Status

The following Boolean read-only data points are available on:

Input Status Command 02

(*) This alarm shuts down the unit.

(**) This alarm might shut down the unit depending on the specific configuration.

IS	Variable	Description	Type	Version
40501	AlarmsData[1].Active	Display OFF	Message	1.0.0
40502	AlarmsData[2].Active	Unit ON	Message	1.0.0
40503	AlarmsData[3].Active	System OFF	Message	1.0.0
40504	AlarmsData[4].Active	System ON	Message	1.0.0
40505	AlarmsData[5].Active	Standby	Message	1.0.0
40506	AlarmsData[6].Active	Evaporator Pump 1 Failure	Warning	1.0.0
40507	AlarmsData[7].Active	Evaporator Pump 2 Failure	Warning	1.0.0
40508	AlarmsData[8].Active	Missing Primary Water Flow	Alarm (*)	1.0.0
40509	AlarmsData[9].Active	Manual Mode Enabled	Message	1.0.0
40510	AlarmsData[10].Active	Evaporator Freeze protection	Alarm	1.0.0
40511	AlarmsData[11].Active	Unit Inlet Temperature Probe Failure	Alarm	1.0.0
40512	AlarmsData[12].Active	Evaporator Inlet Temperature Probe Failure	Alarm	1.0.0
40513	AlarmsData[13].Active	Unit Outlet Temperature Probe Failure	Alarm	1.0.0
40514	AlarmsData[14].Active	Adiabatic - Pad's DP Sensor Failure	Alarm	1.2.0
40515	AlarmsData[15].Active	Ambient Temperature Probe Failure	Alarm	1.0.0
40524	AlarmsData[24].Active	Fans Communication Failure	Alarm	1.0.0
40525	AlarmsData[25].Active	Circuit 1 - Fans Failure	Alarm	1.0.0
40526	AlarmsData[26].Active	Circuit 2 - Fans Failure	Alarm	1.0.0
40527	AlarmsData[27].Active	Circuit 1 - Single Fan Failures	Warning	1.0.0
40528	AlarmsData[28].Active	Circuit 2 - Single Fan Failures	Warning	1.0.0
40529	AlarmsData[29].Active	Compressors Off by Low Ambient Temperature	Message	---
40530	AlarmsData[30].Active	Circuit 1 - Fans Working Hours Limit Exceeded	Warning	1.0.0
40531	AlarmsData[31].Active	Circuit 2 - Fans Working Hours Limit Exceeded	Warning	1.0.0
40532	AlarmsData[32].Active	Adiabatic - Low Pad Efficiency	Warning	1.2.0
40534	AlarmsData[34].Active	Free Cooling Valve Feedback Failure	Warning	1.0.0

IS	Variable	Description	Type	Version
40535	AlarmsData[35].Active	Circuit 1 - High Condensing Pressure	Alarm	1.0.0
40536	AlarmsData[36].Active	Circuit 1 - Low Evaporating Pressure	Alarm	1.0.0
40537	AlarmsData[37].Active	Circuit 1 – Very Low Superheat	Alarm	1.0.0
40538	AlarmsData[38].Active	Circuit 1 - Compressor 1 Thermal Protection	Alarm	1.0.0
40539	AlarmsData[39].Active	Circuit 1 - Compressor 2 Thermal Protection	Alarm	1.0.0
40540	AlarmsData[40].Active	Circuit 1 - Compressor 3 Thermal Protection	Alarm	1.0.0
40541	AlarmsData[41].Active	Circuit 1 - Fans Override Enabled	Warning	1.0.0
40542	AlarmsData[42].Active	Circuit 1 - Compressors Unload Enabled	Warning	1.0.0
40543	AlarmsData[43].Active	Circuit 1 - Critical Condensing Pressure	Warning	1.0.0
40546	AlarmsData[46].Active	Circuit 1 - Compressor 1 Contactors Glued	Alarm	1.0.0
40550	AlarmsData[50].Active	Circuit 1 - Condensing Pressure Probe Failure	Alarm	1.0.0
40551	AlarmsData[51].Active	Circuit 1 - Liquid Temperature Probe Failure	Warning	1.0.0
40552	AlarmsData[52].Active	Circuit 1 - Evaporating Pressure Probe Failure	Alarm	1.0.0
40553	AlarmsData[53].Active	Circuit 1 - Evaporating Temperature Probe Failure	Alarm	1.0.0
40555	AlarmsData[55].Active	Circuit 1 - High Superheat	Warning	1.0.0
40556	AlarmsData[56].Active	Power Failure	Message	1.0.0
40557	AlarmsData[57].Active	EEV Driver 1 - Communication Failure	Alarm	1.0.0
40558	AlarmsData[58].Active	EEV Driver 1 - Valve Motor Error	Alarm	1.0.0
40559	AlarmsData[59].Active	Evaporator Pump 1 Communication Failure	Warning	1.0.0
40560	AlarmsData[60].Active	Evaporator Pump 2 Communication Failure	Warning	1.0.0
40561	AlarmsData[61].Active	Circuit 2 - High Condensing Pressure	Alarm	1.0.0
40562	AlarmsData[62].Active	Circuit 2 - Low Evaporating Pressure	Alarm	1.0.0
40563	AlarmsData[63].Active	Circuit 2 - Very Low Superheat	Alarm	1.0.0
40564	AlarmsData[64].Active	Circuit 2 - Compressor 1 Thermal Protection	Alarm	1.0.0
40565	AlarmsData[65].Active	Circuit 2 - Compressor 2 Thermal Protection	Alarm	1.0.0
40566	AlarmsData[66].Active	Circuit 2 - Compressor 3 Thermal Protection	Alarm	1.0.0
40567	AlarmsData[67].Active	Circuit 2 - Fans Override Enabled	Warning	1.0.0
40568	AlarmsData[68].Active	Circuit 2 - Compressors Unload Enabled	Warning	1.0.0
40569	AlarmsData[69].Active	Circuit 2 - Critical Condensing Pressure	Warning	1.0.0
40572	AlarmsData[72].Active	Circuit 2 - Compressor 1 Contactors Glued	Alarm	1.0.0
40575	AlarmsData[75].Active	Unit Freeze Protection	Alarm	1.0.0
40576	AlarmsData[76].Active	Circuit 2 - Condensing Pressure Probe Failure	Alarm	1.0.0
40577	AlarmsData[77].Active	Circuit 2 - Liquid Temperature Probe Failure	Warning	---

IS	Variable	Description	Type	Version
40578	AlarmsData[78].Active	Circuit 2 - Evaporating Pressure Probe Failure	Alarm	---
40579	AlarmsData[79].Active	Circuit 2 - Evaporating Temperature Probe Failure	Alarm	---
40581	AlarmsData[81].Active	Circuit 2 - High Superheat	Warning	1.0.0
40582	AlarmsData[82].Active	Power Failure Line B	Message	1.0.0
40583	AlarmsData[83].Active	EEV Driver 2 - Communication Failure	Alarm	1.0.0
40584	AlarmsData[84].Active	EEV Driver 2 - Valve Motor Error	Alarm	1.0.0
40585	AlarmsData[85].Active	Evaporator Pump 1 Working Hours Limit Exceeded	Warning	1.0.0
40586	AlarmsData[86].Active	Evaporator Pump 2 Working Hours Limit Exceeded	Warning	1.0.0
40587	AlarmsData[87].Active	Adiabatic - Pad Clogging	Warning	1.2.0
40588	AlarmsData[88].Active	Adiabatic - Critical Pad Clogging	Alarm	1.2.0
40589	AlarmsData[89].Active	Remove Power From Unit	Message	1.0.0
40590	AlarmsData[90].Active	User Analog Input 1 Failure	Warning	1.2.0
40592	AlarmsData[92].Active	Energy Meter 1 Communication Failure	Warning	1.0.0
40594	AlarmsData[94].Active	Energy Meter 2 Communication Failure	Warning	1.0.0
40595	AlarmsData[95].Active	Circuit 1 - Compressor 1 Working Hours Limit Exceeded	Warning	1.0.0
40596	AlarmsData[96].Active	Circuit 1 - Compressor 2 Working Hours Limit Exceeded	Warning	1.0.0
40597	AlarmsData[97].Active	Circuit 1 - Compressor 3 Working Hours Limit Exceeded	Warning	1.0.0
40598	AlarmsData[98].Active	Circuit 2 - Compressor 1 Working Hours Limit Exceeded	Warning	1.0.0
40599	AlarmsData[99].Active	Circuit 2 - Compressor 2 Working Hours Limit Exceeded	Warning	1.0.0
40600	AlarmsData[100].Active	Circuit 2 - Compressor 3 Working Hours Limit Exceeded	Warning	1.0.0
40601	AlarmsData[101].Active	Expansion Board Communication Failure	Warning	1.0.0
40602	AlarmsData[102].Active	Water Flow Meter Sensor Failure	Warning	1.0.0
40603	AlarmsData[103].Active	Remote OFF	Message	1.0.0
40604	AlarmsData[104].Active	Variable Water Flow Control Failure	Warning	1.0.0
40605	AlarmsData[105].Active	Low External Water Flow	Warning	1.0.0
40607	AlarmsData[107].Active	Unstable External Water Flow	Warning	1.0.0
40608	AlarmsData[108].Active	Low Evaporator Water Flow	Warning	1.0.0
40609	AlarmsData[109].Active	High Evaporator Water Flow	Warning	1.0.0
40610	AlarmsData[110].Active	Low Evaporator Water Flow	Alarm (**)	---
40611	AlarmsData[111].Active	High Evaporator Water Flow	Alarm (**)	1.0.0
40612	AlarmsData[112].Active	Circuit 1 - Low Refrigerant Charge Warning	Warning	1.0.0
40613	AlarmsData[113].Active	Circuit 1 - Low Refrigerant Charge Alarm	Alarm	1.0.0
40614	AlarmsData[114].Active	Circuit 2 - Low Refrigerant Charge Warning	Warning	1.0.0

IS	Variable	Description	Type	Version
40615	AlarmsData[115].Active	Circuit 2 - Low Refrigerant Charge Alarm	Alarm	1.0.0
40616	AlarmsData[116].Active	Circuit 1 - Compressors Out of Envelope	Warning	1.0.0
40617	AlarmsData[117].Active	Circuit 2 - Compressors Out of envelope	Warning	---
40626	AlarmsData[126].Active	Too Fast Water Flow Variation	Warning	1.0.0
40627	AlarmsData[127].Active	Too Fast Water Flow Variation	Alarm	1.0.0
40628	AlarmsData[128].Active	Circuit 1 - Compressor Oil Level Alarm	Alarm	1.0.0
40629	AlarmsData[129].Active	Circuit 2 - Compressor Oil Level Alarm	Alarm	1.0.0
40630	AlarmsData[130].Active	Auxiliary Power Failure	Alarm (*)	1.0.0
40631	AlarmsData[131].Active	Circuit 1 - Compressors Off by Envelope Protection	Message	1.0.0
40632	AlarmsData[132].Active	Circuit 2 - Compressors Off by Envelope Protection	Message	1.0.0
40633	AlarmsData[133].Active	Circuit 1 - Compressors Unload Stop by Envelope Protection	Message	1.0.0
40634	AlarmsData[134].Active	Circuit 2 - Compressors Unload Stop by Envelope Protection	Message	1.0.0
40635	AlarmsData[135].Active	Circuit 1 - Compressors Out of Envelope (Level 2)	Message	1.0.0
40636	AlarmsData[136].Active	Circuit 2 - Compressors Out of Envelope (Level 2)	Message	1.0.0
40637	AlarmsData[137].Active	Circuit 1 - Low Differential Pressure	Alarm	1.0.0
40638	AlarmsData[138].Active	Circuit 2 - Low Differential Pressure	Alarm	1.0.0
40640	AlarmsData[140].Active	Condenser Inlet Temperature Probe Failure	Alarm	1.0.0
40641	AlarmsData[141].Active	Condenser Outlet Temperature Probe Failure	Alarm	1.0.0
40642	AlarmsData[142].Active	Free Cooling Pump Working Hours Limit Exceeded	Warning	1.0.0
40645	AlarmsData[145].Active	Free Cooling By-Pass Valve Feedback Failure	Warning	1.0.0
40648	AlarmsData[148].Active	Low Evaporator Water Pressure	Alarm (*)	1.0.0
40649	AlarmsData[149].Active	Evaporator Water Pressure Sensors Failure	Warning	1.0.0
40651	AlarmsData[151].Active	Evaporator Bypass Valve Feedback Failure	Alarm	1.0.0
40652	AlarmsData[152].Active	Circuit 1 - Low Evaporating Temperature	Alarm	1.0.0
40653	AlarmsData[153].Active	Circuit 2 - Low Evaporating Temperature	Alarm	1.0.0
40656	AlarmsData[156].Active	Circuit 1 - Compressor Starts/h Limit Reached	Alarm	1.0.0
40657	AlarmsData[157].Active	Circuit 2 - Compressor Starts/h Limit Reached	Alarm	1.0.0
40658	AlarmsData[158].Active	Emergency Mode Active	Message	1.1.0
40659	AlarmsData[159].Active	CWM Communication Failure	Warning	1.0.0
40660	AlarmsData[160].Active	Missing Unit Configuration	Alarm (*)	1.0.0
40663	AlarmsData[163].Active	Too Long Fans Off Time	Warning	1.4.0
40670	AlarmsData[170].Active	Fans Anti-Freeze Protection	Warning	1.4.0
40671	AlarmsData[171].Active	Circuit 1 - Compressor Inverter Communication Failure	Alarm	1.0.0

IS	Variable	Description	Type	Version
40672	AlarmsData[172].Active	Circuit 2 - Compressor Inverter Communication Failure	Alarm	1.0.0
40673	AlarmsData[173].Active	Circuit 1 - Compressor Inverter Alarm	Alarm	1.0.0
40674	AlarmsData[174].Active	Circuit 2 - Compressor Inverter Alarm	Alarm	1.0.0
40675	AlarmsData[175].Active	EEV Driver 1 - Generic Alarm	Alarm	1.0.0
40676	AlarmsData[176].Active	EEV Driver 2 - Generic Alarm	Alarm	1.0.0
40677	AlarmsData[177].Active	Free Cooling Inlet Pressure Probe Failure	Alarm	1.0.0
40678	AlarmsData[178].Active	Free Cooling Outlet Pressure Probe Failure	Alarm	1.0.0
40679	AlarmsData[179].Active	Free Cooling Pump Alarm	Alarm	1.0.0
40680	AlarmsData[180].Active	Free Cooling Pump Communication Failure	Warning	1.0.0
40682	AlarmsData[182].Active	iCOM Memory Error	Alarm (*)	1.0.0
40683	AlarmsData[183].Active	Critical Refrigerant Leakage Detected	Alarm (**)	1.0.0
40684	AlarmsData[184].Active	Refrigerant Leakage Detected	Warning	1.0.0
40685	AlarmsData[185].Active	Gas Leak Detector Communication Failure	Warning (**)	1.0.0
40686	AlarmsData[186].Active	Gas Leak Detector Sensor Calibration Required	Warning	1.0.0
40687	AlarmsData[187].Active	Circuit 1 - Critical Refrigerant Depressurization	Alarm	1.0.0
40688	AlarmsData[188].Active	Circuit 2 - Critical Refrigerant Depressurization	Alarm	1.0.0
40689	AlarmsData[189].Active	ATS 1 Communication Failure	Warning	1.0.0
40690	AlarmsData[190].Active	ATS 2 Communication Failure	Warning	1.0.0
40691	AlarmsData[191].Active	Freecooling Failure	Alarm	1.0.0
40692	AlarmsData[192].Active	Fans Rotation Error	Alarm	1.0.0
40694	AlarmsData[194].Active	Network Failure	Warning	1.0.0
40695	AlarmsData[195].Active	No Connection to Unit 1	Warning	1.0.0
40696	AlarmsData[196].Active	Master Unit Changed	Message	1.0.0
40697	AlarmsData[197].Active	Master Unit not Available	Warning	1.0.0
40701	AlarmsData[201].Active	Free Cooling Circuit – Glycol Leakage	Alarm	1.1.3
40702	AlarmsData[202].Active	Free Cooling Circuit – High pressure	Alarm	1.1.3
40703	AlarmsData[203].Active	Safety Fan Failure	Warning	1.2.1
40704	AlarmsData[204].Active	Critical Safety Fan Failure	Alarm	1.2.1
40705	AlarmsData[205].Active	Compressor Inverter 1 Not Available	Message	1.2.3
40706	AlarmsData[206].Active	Compressor Inverter 2 Not Available	Message	1.2.3
40707	AlarmsData[207].Active	Gas Leakage Detector Fault	Alarm (*)	1.3.0
40708	AlarmsData[208].Active	Low Evaporator Water Pressure	Warning	1.2.4
40709	AlarmsData[209].Active	Circuit 1 – Pump Down not finished	Alarm	1.3.0

IS	Variable	Description	Type	Version
40710	AlarmsData[210].Active	Circuit 2 – Pump Down not finished	Alarm	1.3.0
40775	AlarmsData[275].Active	Adiabatic Temperature Probe 1 Failure	Warning	1.2.0
40776	AlarmsData[276].Active	Adiabatic Temperature Probe 2 Failure	Warning	1.2.0
40777	AlarmsData[277].Active	Adiabatic Humidity Probe 1 Failure	Warning	1.2.0
40778	AlarmsData[278].Active	Adiabatic Humidity Probe 2 Failure	Warning	1.2.0
40779	AlarmsData[279].Active	Adiabatic Pump 1 Working Hours Limit	Warning	1.2.0
40780	AlarmsData[280].Active	Adiabatic Pump 2 Working Hours Limit	Warning	1.2.0
40781	AlarmsData[281].Active	Adiabatic Temperature Probes Failure	Alarm	1.2.0
40782	AlarmsData[282].Active	Adiabatic Humidity Probes Failure	Alarm	1.2.0
40783	AlarmsData[283].Active	Adiabatic Pump 1 Failure	Alarm	1.2.0
40784	AlarmsData[284].Active	Adiabatic Pump 2 Failure	Alarm	1.2.0
40785	AlarmsData[285].Active	Adiabatic Emergency Drain 1	Alarm	1.2.0
40786	AlarmsData[286].Active	Adiabatic Emergency Drain 2	Alarm	1.2.0
40787	AlarmsData[287].Active	Adiabatic Flow Meter 1 Failure	Alarm	1.2.0
40788	AlarmsData[288].Active	Adiabatic Flow Meter 2 Failure	Alarm	1.2.0
40793	AlarmsData[293].Active	External Adiabatic Warning Side 1	Warning	1.2.0
40794	AlarmsData[294].Active	External Adiabatic Warning Side 2	Warning	1.2.0
40795	AlarmsData[295].Active	External Adiabatic Offline Side 1	Alarm	1.2.0
40796	AlarmsData[296].Active	External Adiabatic Offline Side 2	Alarm	1.2.0
40797	AlarmsData[297].Active	Stop Adiabatic	Message	1.2.3
40798	AlarmsData[298].Active	Stop Freecooling	Message	1.2.3
40800	AlarmsData[300].Active	External Adiabatic Alarm Side 1	Alarm	1.2.3
40801	AlarmsData[301].Active	External Adiabatic Alarm Side 2	Alarm	1.2.3
40802	AlarmsData[302].Active	Interlock Valve Failure	Alarm	1.2.3
40805	AlarmsData[305].Active	Compressor Inverter 3 Not Available	Message	1.3.1
40809	AlarmsData[309].Active	Circuit 3 - Pump Down not finished	Warning	1.3.1
40849	AlarmsData[349].Active	Harmonic filter fault supply line 1	Warning	1.5.0
40850	AlarmsData[350].Active	Harmonic filter fault supply line 2	Warning	1.5.0
40851	AlarmsData[351].Active	Harmonic filter fault 1	Warning	1.5.0
40852	AlarmsData[352].Active	Harmonic filter fault 2	Warning	1.5.0
40853	AlarmsData[353].Active	Harmonic filter fault 3	Warning	1.5.0
40854	AlarmsData[354].Active	Harmonic filter fault 4	Warning	1.5.0
40855	AlarmsData[355].Active	Harmonic filter communication error 1	Warning	1.5.0

IS	Variable	Description	Type	Version
40856	AlarmsData[356].Active	Harmonic filter communication error 2	Warning	1.5.0
40857	AlarmsData[357].Active	Harmonic filter communication error 3	Warning	1.5.0
40858	AlarmsData[358].Active	Harmonic filter communication error 4	Warning	1.5.0
40861	AlarmsData[361].Active	Electrical cabinet cooling fault	Alarm	1.5.1
40862	AlarmsData[362].Active	Electrical cabinet NTC air temperature probe fault	Warning	1.5.1
40863	AlarmsData[363].Active	Electrical cabinet high air temperature	Alarm	1.5.1
40910	AlarmsData[410].Active	Evaporator 2 Freeze Protection	Alarm	1.0.0
40911	AlarmsData[411].Active	Unit Inlet Temperature Probe 2 Failure	Alarm	1.0.0
40912	AlarmsData[412].Active	Evaporator Inlet Temperature Probe 2 Failure	Alarm	1.1.0
40913	AlarmsData[413].Active	Unit Outlet Temperature Probe 2 Failure	Alarm	1.1.0
40915	AlarmsData[415].Active	Ambient Temperature Probe 2 Failure	Alarm	1.1.0
40925	AlarmsData[425].Active	Circuit 3 - Fans Failure	Alarm	1.1.0
40926	AlarmsData[426].Active	Circuit 4 - Fans Failure	Alarm	1.1.0
40927	AlarmsData[427].Active	Circuit 3 - Single Fans Failure	Warning	1.1.0
40928	AlarmsData[428].Active	Circuit 4 - Single Fans Failure	Warning	1.1.0
40930	AlarmsData[430].Active	Circuit 3 - Fans Working Hours Limit Exceeded	Warning	1.1.0
40931	AlarmsData[431].Active	Circuit 4 - Fans Working Hours Limit Exceeded	Warning	1.1.0
40934	AlarmsData[434].Active	Free Cooling Valve 2 Feedback Failure	Warning	1.1.0
40935	AlarmsData[435].Active	Circuit 3 - High Condensing Pressure	Alarm	1.1.0
40936	AlarmsData[436].Active	Circuit 3 - Low Evaporating Pressure	Alarm	1.1.0
40937	AlarmsData[437].Active	Circuit 3 - Very Low Superheat	Alarm	1.1.0
40938	AlarmsData[438].Active	Circuit 3 - Compressor 1 Thermal Protection	Alarm	1.1.0
40939	AlarmsData[439].Active	Circuit 3 - Compressor 2 Thermal Protection	Alarm	1.1.0
40940	AlarmsData[440].Active	Circuit 3 - Compressor 3 Thermal Protection	Alarm	1.1.0
40941	AlarmsData[441].Active	Circuit 3 - Fans Override Enabled	Warning	1.1.0
40942	AlarmsData[442].Active	Circuit 3 - Compressors Unload Enabled	Warning	1.1.0
40943	AlarmsData[443].Active	Circuit 3 - Critical Condensing Pressure	Warning	1.1.0
40946	AlarmsData[446].Active	Circuit 3 - Compressor 1 Contactors Glued	Alarm	1.1.0
40950	AlarmsData[450].Active	Circuit 3 - Condensing Pressure Probe Failure	Alarm	1.1.0
40951	AlarmsData[451].Active	Circuit 3 - Liquid Temperature Probe Failure	Warning	1.1.0
40952	AlarmsData[452].Active	Circuit 3 - Evaporating Pressure Probe Failure	Alarm	1.1.0
40953	AlarmsData[453].Active	Circuit 3 - Evaporating Temperature Probe Failure	Alarm	1.1.0
40955	AlarmsData[455].Active	Circuit 3 - High Superheat	Warning	1.1.0

IS	Variable	Description	Type	Version
40957	AlarmsData[457].Active	EEV Driver 3 - Communication Failure	Alarm	1.1.0
40958	AlarmsData[458].Active	EEV Driver 3 - Valve Motor Error	Alarm	1.1.0
40961	AlarmsData[461].Active	Circuit 4 - High Condensing Pressure	Alarm	1.1.0
40962	AlarmsData[462].Active	Circuit 4 - Low Evaporating Pressure	Alarm	1.1.0
40963	AlarmsData[463].Active	Circuit 4 - Very Low Superheat	Alarm	1.1.0
40964	AlarmsData[464].Active	Circuit 4 - Compressor 1 Thermal Protection	Alarm	1.1.0
40965	AlarmsData[465].Active	Circuit 4 - Compressor 2 Thermal Protection	Alarm	1.1.0
40966	AlarmsData[466].Active	Circuit 4 - Compressor 3 Thermal Protection	Alarm	1.1.0
40967	AlarmsData[467].Active	Circuit 4 - Fans Override Enabled	Warning	1.1.0
40968	AlarmsData[468].Active	Circuit 4 - Compressors Unload Enabled	Warning	1.1.0
40969	AlarmsData[469].Active	Circuit 4 - Critical Condensing Pressure	Warning	1.1.0
40972	AlarmsData[472].Active	Circuit 4 - Compressor 1 Contactors Glued	Alarm	1.1.0
40976	AlarmsData[476].Active	Circuit 4 - Condensing Pressure Probe Failure	Alarm	1.1.0
40977	AlarmsData[477].Active	Circuit 4 - Liquid Temperature Probe Failure	Warning	1.1.0
40978	AlarmsData[478].Active	Circuit 4 - Evaporating Pressure Probe Failure	Alarm	1.1.0
40979	AlarmsData[479].Active	Circuit 4 - Evaporating Temperature Probe Failure	Alarm	1.1.0
40981	AlarmsData[481].Active	Circuit 4 - High Superheat	Warning	1.1.0
40983	AlarmsData[483].Active	EEV Driver 4 - Communication Failure	Alarm	1.1.0
40984	AlarmsData[484].Active	EEV Driver 4 - Valve Motor Error	Alarm	1.1.0
40995	AlarmsData[495].Active	Circuit 3 - Compressor 1 Working Hours Limit Exceeded	Warning	1.1.0
40996	AlarmsData[496].Active	Circuit 3 - Compressor 2 Working Hours Limit Exceeded	Warning	1.1.0
40997	AlarmsData[497].Active	Circuit 3 - Compressor 3 Working Hours Limit Exceeded	Warning	1.1.0
40998	AlarmsData[498].Active	Circuit 4 - Compressor 1 Working Hours Limit Exceeded	Warning	1.1.0
40999	AlarmsData[499].Active	Circuit 4 - Compressor 2 Working Hours Limit Exceeded	Warning	1.1.0
41000	AlarmsData[500].Active	Circuit 4 - Compressor 3 Working Hours Limit Exceeded	Warning	1.1.0
41002	AlarmsData[502].Active	Water Flow Meter Sensor 2 Failure	Warning	1.1.0
41012	AlarmsData[512].Active	Circuit 3 - Low Refrigerant Charge Warning	Warning	1.1.0
41013	AlarmsData[513].Active	Circuit 3 - Low Refrigerant Charge Alarm	Alarm	1.1.0
41014	AlarmsData[514].Active	Circuit 4 - Low Refrigerant Charge Warning	Warning	1.1.0
41015	AlarmsData[515].Active	Circuit 4 - Low Refrigerant Charge Alarm	Alarm	1.1.0
41016	AlarmsData[516].Active	Circuit 3 - Compressors Out of Envelope	Warning	1.1.0
41017	AlarmsData[517].Active	Circuit 4 - Compressors Out of Envelope	Warning	1.1.0
41028	AlarmsData[528].Active	Circuit 3 - Compressor Oil Level Alarm	Alarm	1.1.0

IS	Variable	Description	Type	Version
41029	AlarmsData[529].Active	Circuit 4 - Compressor Oil Level Alarm	Alarm	1.1.0
41031	AlarmsData[531].Active	Circuit 3 - Compressors Off by Envelope Protection	Message	1.1.0
41032	AlarmsData[532].Active	Circuit 4 - Compressors Off by Envelope Protection	Message	1.1.0
41033	AlarmsData[533].Active	Circuit 3 - Compressors Unload Stop by Envelope Protection	Message	1.1.0
41034	AlarmsData[534].Active	Circuit 4 - Compressors Unload Stop by Envelope Protection	Message	1.1.0
41035	AlarmsData[535].Active	Circuit 3 - Compressors Out of Envelope (Level 2)	Message	1.1.0
41036	AlarmsData[536].Active	Circuit 4 - Compressors Out of Envelope (Level 2)	Message	1.1.0
41037	AlarmsData[537].Active	Circuit 3 - Low Differential Pressure	Alarm	1.1.0
41038	AlarmsData[538].Active	Circuit 4 - Low Differential Pressure	Alarm	1.1.0
41045	AlarmsData[545].Active	Free Cooling By-Pass Valve 2 Feedback Failure	Warning	1.1.0
41049	AlarmsData[549].Active	Evaporator Water Pressure Sensors 2 Failure	Warning	1.1.0
41052	AlarmsData[552].Active	Circuit 3 - Low Evaporating Temperature	Alarm	1.1.0
41053	AlarmsData[553].Active	Circuit 4 - Low Evaporating Temperature	Alarm	1.1.0
41056	AlarmsData[556].Active	Circuit 3 - Compressor Starts/h Limit Reached	Alarm	1.1.0
41057	AlarmsData[557].Active	Circuit 4 - Compressor Starts/h Limit Reached	Alarm	1.1.0
41071	AlarmsData[571].Active	Circuit 3 - Compressor Inverter Communication Failure	Alarm	1.3.1
41073	AlarmsData[573].Active	Circuit 3 - Compressor Inverter Alarm	Alarm	1.3.1
41075	AlarmsData[575].Active	EEV Driver 3 - Generic Alarm	Alarm	1.1.0
41076	AlarmsData[576].Active	EEV Driver 4 - Generic Alarm	Alarm	1.1.0
41087	AlarmsData[587].Active	Circuit 3 - Critical Refrigerant Depressurization	Alarm	1.1.0
41088	AlarmsData[588].Active	Circuit 4 - Critical Refrigerant Depressurization	Alarm	1.1.0
41091	AlarmsData[591].Active	Freecooling Failure 2	Alarm	1.1.0
41093	AlarmsData[593].Active	Bypass valve feedback missing or fault or alarm	Alarm	1.4.1
41094	AlarmsData[594].Active	Main valve feedback missing or fault or alarm	Alarm	1.4.1
41095	AlarmsData[595].Active	Bypass valve command and feedback mismatch	Warning	1.4.1
41096	AlarmsData[596].Active	Main valve command and feedback mismatch	Warning	1.4.1

4.2 Holding Registers

The following analog and integer data points are available on:

Holding Registers Command 03

HR	Variable	Description	Range	Scale	Version
45101	BmsOnOffCmd	Unit ON/OFF	Set 1 to change Status (Toggle)	x1	1.0.0
45102	AlrmResByBms	Event Reset	Set 9999 to Reset Events	x1	1.0.0
45103	Cfg_Reg_SetP	Temperature Setpoint 1	0.0 / 40.0°C	x10	1.0.0
45104	Cfg_Reg_SetP2	Temperature Setpoint 2	0.0 / 40.0°C	x10	1.1.0
45109	Cfg_WH_ThrshPmp1	Limit Working Hours Evaporator Pump 1	0-32000 h	x1	1.0.0
45110	Cfg_WH_ThrshPmp2	Limit Working Hours Evaporator Pump 2	0-32000 h	x1	1.0.0
45111	Cfg_WH_ThrshFC_Pmp	Limit Working Hours FC Pump	0-32000 h	x1	1.0.0
45112	Cfg_WH_ThrshFanC1	Limit Working Hours Fans Circ.1	0-32000 h	x1	1.0.0
45113	Cfg_WH_ThrshFanC2	Limit Working Hours Fans Circ.2	0-32000 h	x1	1.0.0
45115	Cfg_WH_ThrshCmp1C1	Limit Working Hours Comp. 1 Circuit 1	0-32000 h	x1	1.0.0
45116	Cfg_WH_ThrshCmp2C1	Limit Working Hours Comp. 2 Circuit 1	0-32000 h	x1	1.0.0
45118	Cfg_WH_ThrshCmp1C2	Limit Working Hours Comp. 1 Circuit 2	0-32000 h	x1	1.0.0
45119	Cfg_WH_ThrshCmp2C2	Limit Working Hours Comp. 1 Circuit 2	0-32000 h	x1	1.0.0
45121	MuteBuzzerEn	Event Acknowledge	0/1 Toggle	x1	1.0.0
45122	ManModeEn	Manual Mode Enabling via BMS	0=No; 1=Yes	x1	1.0.0
45123	BMS_EvPmpFlwReq	Remote water flow request	10-250 m^3/h	x10	1.0.0
45124	Cfg_Pmp_DPsetP	DP Setpoint	0-10.0 bar	x10	1.0.0
45127	BmsSysOnOffCmd	System On/Off Toggle Command	0/1 Toggle	x1	1.1.0
45131	BmsEmgModeEn	Emergency Mode Activation Command	1= Emg mode activated	x1	1.1.0
45141	Cfg_WH_ThrshFanC3	Limit Working Hours Fans Circ.3	0-32000 h	x1	1.1.0
45142	Cfg_WH_ThrshFanC4	Limit Working Hours Fans Circ.4	0-32000 h	x1	1.1.0
45143	Cfg_WH_ThrshCmp1C3	Limit Working Hours Comp. 1 Circuit 3	0-32000 h	x1	1.1.0
45146	Cfg_WH_ThrshCmp1C4	Limit Working Hours Comp. 1 Circuit 4	0-32000 h	x1	1.1.0
45149	gfBmsStopAdi	Stop Adiabatic from BMS	1= forced stop	x1	1.2.0
45150	gfBmsAdiEMDrain1	Enable Adiabatic Emergency Drain for Side 1	1= activate drain	x1	1.2.0
45151	gfBmsAdiEMDrain2	Enable Adiabatic Emergency Drain for Side 2	1= activate drain	x1	1.2.0
45152	gfBmsStopFC	Stop or Inhibit FC activation	1= stop or inhbit	x1	1.2.3
45153	gfQuickStartBMS	Quick Start Activation	0=ON; 1=OFF	x1	1.4.0
45154	Cfg_Tw_Setpoint	System Setpoint	5.0 / 30.0°C	x1	1.5.0

4.3 Input Registers

The following analog and integer data points are available on:

Input Registers Command 04

IR	Variable	Description	Range	Scale	Version
49201	BMS_UnitSts	Unit Status	0=Local On 2=Local Off 3=Remote Off 6=Manual 7=Alarm Off 8=Power Failure 9=Alarm On 10=Warning On 11=System Off 12=Standby 14=BMS Off	x1	1.0.0
49202	W_Reg_UserSetP	Current Temperature Setpoint	-10.0 / + 30.0°C	x10	1.0.0
49203	UnitInletTempVal	Unit Inlet Temperature	-40.0 / +110.0°C	x10	1.0.0
49204	EvapInletTempVal	Evaporator Inlet Temperature	-40.0 / +110.0°C	x10	1.0.0
49205	EvapOutletTempVal	Unit Outlet Temperature	-40.0 / +110.0°C	x10	1.0.0
49206	AmbAirTempVal	Ambient Temperature	-40.0 / +110.0°C	x10	1.0.0
49207	FC_Active	Status of Freecooling	0=Not Active, 1=Active	x1	1.0.0
49208	BMS_Pmp_Sts[0]	Evaporator Pump 1 Status	0=N.A., 1=ON, 2=Maintenance, 3=OFF, 4=Alarm 5=Starting, 6=Stopping	x1	1.0.0
49209	BMS_Pmp_Sts[1]	Evaporator Pump 2 Status		x1	1.0.0
49210	BMS_Pmp_Sts[2]	FC Pump Status		x1	1.0.0
49211	FC_Info.FC_VlvReq	Freecooling Valve Position Request	0.0 – 100.0%	x10	1.0.0
49212	FanSpeed[1]	Circuit 1 Fans Speed Request	0 – 100%	x1	1.0.0
49213	FanSpeed[2]	Circuit 2 Fans Speed Request	0 – 100%	x1	1.0.0
49215	BMS_Cmp_Sts[1]	Compressor 1 Circuit 1 Status	0=N.A.,1=ON, 2=MTN, 3=OFF 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED 13=UNLOADING 14=UNLOADED	x1	1.0.0

IR	Variable	Description	Range	Scale	Version
49216	BMS_Cmp_Sts[2]	Compressor 2 Circuit 1 Status	0=N.A.,1=ON, 2=MTN, 3=OFF 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED 13=UNLOADING 14=UNLOADED	x1	1.0.0
49218	BMS_Cmp_Sts[5]	Compressor 1 Circuit 2 Status	0=N.A.,1=ON, 2=MTN, 3=OFF 4=ALARM, 10=STARTING 11=LOADING, 12=LOADED 13=UNLOADING 14=UNLOADED	x1	1.0.0
49219	BMS_Cmp_Sts[6]	Compressor 2 Circuit 2 Status	0=N.A.,1=ON, 2=MTN, 3=OFF 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED 13=UNLOADING 14=UNLOADED	x1	1.0.0
49221	HP_Circ1.Value	Condenser Pressure Circuit 1	-10.0 / +50.0 bar	x10	1.0.0
49222	LP_Circ1.Value	Evaporating Pressure Circuit 1	-10.0 / +50.0 bar	x10	1.0.0
49223	HP_Circ2.Value	Condenser Pressure Circuit 2	-10.0 / +50.0 bar	x10	1.0.0
49224	LP_Circ2.Value	Evaporating Pressure Circuit 2	-10.0 / +50.0 bar	x10	1.0.0
49225	BMS_WH_Pmp1	Working Hours Evaporator Pump 1	0-32000 h	x1	1.0.0
49226	BMS_WH_Pmp2	Working Hours Evaporator Pump 2	0-32000 h	x1	1.0.0
49227	BMS_WH_FC_Pmp	Working Hours FC Pump	0-32000 h	x1	1.0.0
49228	BMS_WH_FanC1	Working Hours Fans Circuit 1	0-32000 h	x1	1.0.0
49229	BMS_WH_FanC2	Working Hours Fans Circuit 2	0-32000 h	x1	1.0.0
49231	BMS_WH_Cmp1C1	Working Hours Compressor 1 Circuit 1	0-32000 h	x1	1.0.0
49232	BMS_WH_Cmp2C1	Working Hours Compressor 2 Circuit 1	0-32000 h	x1	1.0.0
49234	BMS_WH_Cmp1C2	Working Hours Compressor 1 Circuit 2	0-32000 h	x1	1.0.0
49235	BMS_WH_Cmp2C2	Working Hours Compressor 2 Circuit 2	0-32000 h	x1	1.0.0
49237	BMS_Starts_Cmp1C1	Starts Compressor 1 Circuit 1	0-32000	x1	1.0.0
49238	BMS_Starts_Cmp2C1	Starts Compressor 2 Circuit 1	0-32000	x1	1.0.0
49240	BMS_Starts_Cmp1C2	Starts Compressor 1 Circuit 2	0-32000	x1	1.0.0

IR	Variable	Description	Range	Scale	Version
49241	BMS_Starts_Cmp2C2	Starts Compressor 2 Circuit 2	0-32000	x1	1.0.0
49243	RemOnOffState	Remote On/Off Status	0=OFF, 1=ON	x1	1.0.0
49244	FlwSwtchState	Flow Switch Status	0=OK, 1=Alarm	x1	1.0.0
49245	PwrMonitState	Power Monitoring Status	0=OK, 1=Power Failure	x1	1.0.0
49248	DiffPress_PAD.Value	Delta Pressure Adiabatic Pad	0.0 – 2000.0 Pa	x10	1.0.0
49249	Hmi.UO_Adi_VTemp	Adiabatic Temperature after PAD	-40.0 / +110.0°C	x10	1.0.0
49250	Hmi.FansRevRot	Snow/Dirt Adiabatic Pad Cleaning Cycle	0=Not Active, 1=Active	x1	1.0.0
49251	Adi_Status	Adiabatic Status	0 = Local Off 1 = Working 2 = Standby 3 = Alarm On 4 = Alarm Off 5 = Remote Off 6=Antifreeze 7 = Antilegionella 8 = Drying 9 = Manual mode 11 = External Adb No Power 12 = External Adb Alarm 13 = Stopped by User	x1	1.0.0
49253	kWtot	Instant Power Consumption	0 – 999.9 kW	x10	1.0.0
49254	EnEff_RollEERF	Instant EER	0 – 999.9	x10	1.0.0
49255	EnEff_RollViPUEF	Instant PPUE	0 – 999.9	x10	1.0.0
49256	EnEff_RollWUEF	Instant WUE	0 – 999.9 l/kWh	x10	1.0.0
49257	WaterFlowFilt_m3h	Water Flow	0.0 – 300.0 m^3/h	x10	1.0.0
49258	CmpStartState	Comp Start per Hour Status	0=all available, 1=at least 1 reach limit, 2=all reach limit	---	1.0.0
49259	TimeToNextCmpAvbl	Time to have next comp. available	0 – 3600 s	x1	1.0.0
49260	Pmp_CtrlInput	Water DP	0-10.0 bar	x10	1.0.0
49261	BypassVlvReq	Bypass Valve Position	0.0 -100.0%	x10	1.0.0
49262	UnitOpMode	Unit Operating Mode	0=Cooling,1=Heating	x1	1.2.4
49263	UsrDigInpState[1]	Digital User Input 1 Status	0=Off, 1=Act	---	1.0.0
49264	UsrAnlgInpState[1]	Analog User Input 1 Value	0.0 - 100.0	X10	1.0.0
49267	EventsActive	General Alarm	0=Off, 1=Act	x1	1.2.2

IR	Variable	Description	Range	Scale	Version
49277	BMS_AdiTotWaterConsum	Adiabatic Pump Water Consumption	0-3000 l/h	x1	1.0.0
49284	AdiabaticWH	Adiabatic Working Hours	0-32000 h	x1	1.0.0
49285	EmgModeActive	Emergency Mode status	0=OFF, 1=Act	x1	1.1.0
49288	EnEff_TotalCapacityF	Total Capacity	0.0 – 2000.0 kW	x10	1.1.3
49289	EnEff_FCCapacityF	Freecooling Capacity	0.0 – 2000.0 kW	x10	1.1.3
49290	EnEff_MechCapacityF	Mechanical Capacity	0.0 – 2000.0 kW	x10	1.1.3
49309	Gvz1.Hz	Frequency Line 1 (ATS 1 or EM 1)	0.0 – 999.9 Hz	x10	1.1.3
49310	Gvz2.Hz	Frequency Line 2 (ATS 2 or EM 2)	0.0 – 999.9 Hz	x10	1.1.3
49311	Gvz1.VL1L2	Voltage L1-L2 (ATS 1 or EM 1)	0.0 – 999.9 V	x10	1.0.0
49312	Gvz1.VL2L3	Voltage L2-L3 (ATS 1 or EM 1)	0.0 – 999.9 V	x10	1.0.0
49313	Gvz1.VL3L1	Voltage L3-L1 (ATS 1 or EM 1)	0.0 – 999.9 V	x10	1.0.0
49314	Gvz2.VL1L2	Voltage L1-L2 (ATS 2 or EM 2)	0.0 – 999.9 V	x10	1.0.0
49315	Gvz2.VL2L3	Voltage L2-L3 (ATS 2 or EM 2)	0.0 – 999.9 V	x10	1.0.0
49316	Gvz2.VL3L1	Voltage L3-L1 (ATS 2 or EM 2)	0.0 – 999.9 V	x10	1.0.0
49317	Gvz1.AL1	Current L1 (ATS 1 or EM 1)	0.0 – 999.9 A	x10	1.0.0
49318	Gvz1.AL2	Current L2 (ATS 1 or EM 1)	0.0 – 999.9 A	x10	1.0.0
49319	Gvz1.AL3	Current L3 (ATS 1 or EM 1)	0.0 – 999.9 A	x10	1.0.0
49320	Gvz2.AL1	Current L1 (ATS 2 or EM 2)	0.0 – 999.9 A	x10	1.0.0
49321	Gvz2.AL2	Current L2 (ATS 2 or EM 2)	0.0 – 999.9 A	x10	1.0.0
49322	Gvz2.AL3	Current L3 (ATS 2 or EM 2)	0.0 – 999.9 A	x10	1.0.0
49323	Gvz1.kWtot	Total Power Consumption (ATS 1 or EM 1)	0.0 – 999.9 kW	x10	1.0.0
49324	Gvz2.kWtot	Total Power Consumption (ATS 2 or EM 2)	0.0 – 999.9 kW	x10	1.0.0
49325	Hmi.AtsState[1]	ATS 1 line status	0 = not installed 1 = line 1, 2 = line 2 3 = transition 4 = communication error 5 = alarm	X1	1.0.0
49326	Hmi.AtsState[2]	ATS 2 line status	0 = not installed 1 = line 1, 2 = line 2 3 = transition 4 = communication error 5 = alarm	X1	1.0.0

IR	Variable	Description	Range	Scale	Version
49327	FanSpeed[3]	Circuit 3 Fans Speed Request	0 – 100%	x1	1.1.0
49328	FanSpeed[4]	Circuit 4 Fans Speed Request	0 – 100%	x1	1.1.0
49329	BMS_Cmp_Sts[9]	Compressor 1 Circuit 3 Status	0=N.A.,1=ON, 2=MTN, 3=OFF 4=ALARM, 10=STARTING 11=LOADING, 12=LOADED 13=UNLOADING 14=UNLOADED	X1	1.1.0
49332	BMS_Cmp_Sts[13]	Compressor 1 Circuit 4 Status	0=N.A.,1=ON, 2=MTN, 3=OFF 4=ALARM, 10=STARTING 11=LOADING, 12=LOADED 13=UNLOADING 14=UNLOADED	X1	1.1.0
49335	HP_Circ3.Value	Condenser Pressure Circuit 3	-10.0 / +50.0 bar	x10	1.1.0
49336	LP_Circ3.Value	Evaporating Pressure Circuit 3	-10.0 / +50.0 bar	x10	1.1.0
49337	HP_Circ4.Value	Condenser Pressure Circuit 4	-10.0 / +50.0 bar	x10	1.1.0
49338	LP_Circ4.Value	Evaporating Pressure Circuit 4	-10.0 / +50.0 bar	x10	1.1.0
49339	BMS_WH_FanC3	Working Hours Fans Circuit 3	0-32000 h	x1	1.1.0
49340	BMS_WH_FanC4	Working Hours Fans Circuit 4	0-32000 h	x1	1.1.0
49341	BMS_WH_Cmp1C3	Working Hours Compressor 1 Circuit 3	0-32000 h	x1	1.1.0
49344	BMS_WH_Cmp1C4	Working Hours Compressor 1 Circuit 4	0-32000 h	x1	1.1.0
49347	BMS_Starts_Cmp1C3	Starts Compressor 1 Circuit 3	0-32000	x1	1.1.0
49350	BMS_Starts_Cmp1C4	Starts Compressor 1 Circuit 4	0-32000	x1	1.1.0
49353	FlwSwtch2State	Flow Switch 2 Status	0=OK, 1=Alarm	x1	1.1.3
49354	kWhtot	Total Kilo Watt Hour	0.0 - 999.9 kWH	x10	1.1.3
49355	VARtot	Total VAR Volt Ampere Reactive	0.0 - 999.9 VAR	x10	1.1.3
49356	VAtot	Total Volt Ampere	0.0 - 999.9 VA	x10	1.1.3
49357	EnEff_TotalCapacity24	Total Capacity 24 (FC + DX)	0.0 – 2000.0 kW	x10	1.1.3
49358	EnEff_CoolingCapacity24	Freecooling Capacity 24	0.0 – 2000.0 kW	x10	1.1.3
49359	EnEff_MechCapacity24	Mechanical Cooling Capacity 24	0.0 – 2000.0 kW	x10	1.1.3
49360	EnEff_RollEER24	EER – Energy Efficiency Ratio 24	0.0 - 999.9	x10	1.1.3
49361	EnEff_RollVirtualPUE24	Virtual Power Usage Efficiency – Virtual PUE 24	0.0 - 999.9	x10	1.1.3
49362	EnEff_RollWUE24	Water Usage Efficiency - WUE 24	0.0 - 999.9 l/kWh	x10	1.1.3

IR	Variable	Description	Range	Scale	Version
49373	Hmi.UO_Pmp_Req[0]	Pump 1 Request	%	x10	1.4.0
49374	Hmi.UO_Pmp_Req[1]	Pump 2 Request	%	x10	1.4.0
49405	GLD_GasLevel	Refrigerant gas concentration ppm – Carel GLD. GLD type 1 or 2.	ppm	x1	1.4.0
49406	GLD_GasLevelLEL	Refrigerant gas concentration LEL/LFL % – Sensitron GLD. GLD type 3 or 4.	LEL/LFL	x10	1.4.0
49407	GasLeakDetector.GLD_SafetyStatus	GLD and A2L working status	0: Power on initial state 1: Concentration check after start-up 2: Concentration check after safety fan on by low concentration detected during start-up 3: Concentration check after safety fan on by high concentration detected during start-up 4: Safety fan on required by low concentration detected during start-up 5: Safety fan on required by high concentration detected during start-up 6: Warning manual reset in case of low concentration still present during start-up 7: Warning manual reset in case of high concentration still present during start-up 8: Concentration check during normal work 9: Warning condition in case of low concentration detected 10: Alarm in case of high concentration detected 11: GLD Fault Status	x1	1.4.0
49408	FreeCooling._FC_Pmp_SpeedPerc	FC Pump speed % Request	0 - 100 %	x1	1.4.0
49409	FreeCooling._FC_Pmp_SpeedRpm	FC Pump speed feedback in rpm	---	x1	1.4.0
49410	FCVlv.Value	FC valve % open request value	0 - 100 %	x1	1.4.0
49411	FC_BypassVlv.Value	FC Bypass valve % open request value	0 - 100 %	x1	1.4.0
49412	NG_LowP.Value	FC No Glycol Low Pressure - Probe value	---	x1	1.4.0

IR	Variable	Description	Range	Scale	Version
49413	NG_HighP.Value	FC No Glycol High Pressure - Probe value	---	x1	1.4.0
49414	FC_Valvefbk_AI.Value	FC Valve Analogue Feedback % value	0 - 100 %	x1	1.4.0
49415	BMS_FC_Vlvfbk_DI	FC Valve digital feedback	---	x1	1.4.0
49416	BMS_FC_BypassVlvfbk_DI	FC Baypass Valve digital feedback	---	x1	1.4.0
49417	BypassValve.Value	Bypass Valve Opening Command	0 - 100 %	x1	1.4.1
49418	MainValve.Value	Main Valve Opening Command	0 - 100 %	x1	1.4.1
49419	BypVlvFbk_0_100	Bypass Valve Opening Feedback	0 - 100 %	x1	1.4.1
49420	MainVlvFbk_0_100	Main Valve Opening Feedback	0 - 100 %	x1	1.4.1
49421	Hmi.BMS_Cmp_Cap_Per[1]	Circ 1 - Comp 1 Capacity percentage	0 - 100 %	x1	1.4.1
49422	Hmi.BMS_Cmp_Cap_Per[2]	Circ 1 - Comp 2 Capacity percentage	0 - 100 %	x1	1.4.1
49423	Hmi.BMS_Cmp_Cap_Per[3]	Circ 1 - Comp 3 Capacity percentage	0 - 100 %	x1	1.4.1
49424	Hmi.BMS_Cmp_Cap_Per[4]	Circ 1 - Comp 4 Capacity percentage	0 - 100 %	x1	1.4.1
49425	Hmi.BMS_Cmp_Cap_Per[5]	Circ 2 - Comp 1 Capacity percentage	0 - 100 %	x1	1.4.1
49426	Hmi.BMS_Cmp_Cap_Per[6]	Circ 2 - Comp 2 Capacity percentage	0 - 100 %	x1	1.4.1
49427	Hmi.BMS_Cmp_Cap_Per[7]	Circ 2 - Comp 3 Capacity percentage	0 - 100 %	x1	1.4.1
49428	Hmi.BMS_Cmp_Cap_Per[8]	Circ 2 - Comp 4 Capacity percentage	0 - 100 %	x1	1.4.1
49429	Hmi.BMS_Cmp_Cap_Per[9]	Circ 3 - Comp 1 Capacity percentage	0 - 100 %	x1	1.4.1
49430	Hmi.BMS_Cmp_Cap_Per[10]	Circ 3 - Comp 2 Capacity percentage	0 - 100 %	x1	1.4.1
49431	Hmi.BMS_Cmp_Cap_Per[11]	Circ 3 - Comp 3 Capacity percentage	0 - 100 %	x1	1.4.1
49432	Hmi.BMS_Cmp_Cap_Per[12]	Circ 3 - Comp 4 Capacity percentage	0 - 100 %	x1	1.4.1
49433	Hmi.BMS_Cmp_Cap_Per[13]	Circ 4 - Comp 1 Capacity percentage	0 - 100 %	x1	1.4.1
49434	Hmi.BMS_Cmp_Cap_Per[14]	Circ 4 - Comp 2 Capacity percentage	0 - 100 %	x1	1.4.1
49435	Hmi.BMS_Cmp_Cap_Per[15]	Circ 4 - Comp 3 Capacity percentage	0 - 100 %	x1	1.4.1

IR	Variable	Description	Range	Scale	Version
49436	Hmi.BMS_Cmp_Cap_Per[16]	Circ 4 - Comp 4 Capacity percentage	0 - 100 %	x1	1.4.1
49461	WPressMeter.Value	Evaporator Inlet Water pressure	-999.9 - 999.9 bar	x10	1.4.1
49462	WPressMeterOutlet.Value	Evaporator Outlet Water pressure	-999.9 - 999.9 bar	x10	1.4.1
49476	HarmFiltDataLine1.THDI1_Load	Supply Line 1 THDI Phase A Load	0.0 - 100.0 %	x10	1.5.0
49477	HarmFiltDataLine1.THDI2_Load	Supply Line 1 THDI Phase B Load	0.0 - 100.0 %	x10	1.5.0
49478	HarmFiltDataLine1.THDI3_Load	Supply Line 1 THDI Phase C Load	0.0 - 100.0 %	x10	1.5.0
49479	HarmFiltDataLine1.THDU1_Grid	Supply Line 1 THDU Phase A Grid	0.0 - 100.0 %	x10	1.5.0
49480	HarmFiltDataLine1.THDU2_Grid	Supply Line 1 THDU Phase B Grid	0.0 - 100.0 %	x10	1.5.0
49481	HarmFiltDataLine1.THDU3_Grid	Supply Line 1 THDU Phase C Grid	0.0 - 100.0 %	x10	1.5.0
49482	HarmFiltDataLine1.PF1_Grid	Supply Line 1 Power Factor Phase A Grid	0.00 - 1.00	x10	1.5.0
49483	HarmFiltDataLine1.PF2_Grid	Supply Line 1 Power Factor Phase B Grid	0.00 - 1.00	x10	1.5.0
49484	HarmFiltDataLine1.PF3_Grid	Supply Line 1 Power Factor Phase C Grid	0.00 - 1.00	x10	1.5.0
49485	HarmFiltDataLine2.THDI1_Load	Supply Line 2 THDI Phase A Load	0.0 - 100.0 %	x10	1.5.0
49486	HarmFiltDataLine2.THDI2_Load	Supply Line 2 THDI Phase B Load	0.0 - 100.0 %	x10	1.5.0
49487	HarmFiltDataLine2.THDI3_Load	Supply Line 2 THDI Phase C Load	0.0 - 100.0 %	x10	1.5.0
49488	HarmFiltDataLine2.THDU1_Grid	Supply Line 2 THDU Phase A Grid	0.0 - 100.0 %	x10	1.5.0
49489	HarmFiltDataLine2.THDU2_Grid	Supply Line 2 THDU Phase B Grid	0.0 - 100.0 %	x10	1.5.0
49490	HarmFiltDataLine2.THDU3_Grid	Supply Line 2 THDU Phase C Grid	0.0 - 100.0 %	x10	1.5.0
49491	HarmFiltDataLine2.PF1_Grid	Supply Line 2 Power Factor Phase A Grid	0.00 - 1.00	x10	1.5.0
49492	HarmFiltDataLine2.PF2_Grid	Supply Line 2 Power Factor Phase B Grid	0.00 - 1.00	x10	1.5.0
49493	HarmFiltDataLine2.PF3_Grid	Supply Line 2 Power Factor Phase C Grid	0.00 - 1.00	x10	1.5.0

5 BACnet

5.1 BACnet Implementation

The monitoring port features the following BACnet implementation on protocol rev. 19:

BACnet Standardized Device Profile: BACnet Application Specific Controller (B-ASC)

Table 7.1 Building Blocks Supported

DS-COV-B	DS-RP-A	DS-RP-B	DS-WP-A	DS-WP-B	DS-RPM-A	DS-RPM-B
DS-WPM-A	DS-WPM-B	DM-DDB-A	DM-DDB-B	DM-DOB-B	DM-DCC-B	

Segmentation Capability:

- Able to transmit segmented messages Window Size: 16
- Able to receive segmented messages Window Size: 16

Table 7.2 Standard Object Types Supported

Device	Analog Input (AI)
Analog Output (AO)	Analog Value (AV)
Binary Input (BI)	Binary Output (BO)
Binary Value (BV)	MultiState Input (MSI)
MultiState Output (MSO)	MultiState Value (MSV)
Positive Integer Value (PIV)	Integer Value (IV)

Data Link Layer Options:

- BACnet IP
- BACnet IP, Foreign Device

Character Sets Supported: ISO 10646 (UTF-8)

Network Security Options: Non-secure Device - is capable of operating without BACnet Network Security.

5.2 Binary Values

(*) This alarm shuts down the unit.

(**) This alarm might shut down the unit depending on the specific configuration.

BV	Variable and Object Name	Description	Event Type	Version
1	AlarmsData[1].Active	Display OFF	Message	1.0.0
2	AlarmsData[2].Active	Unit ON	Message	1.0.0
3	AlarmsData[3].Active	System OFF	Message	1.0.0
4	AlarmsData[4].Active	System ON	Message	1.0.0
5	AlarmsData[5].Active	Standby	Message	1.0.0
6	AlarmsData[6].Active	Evaporator Pump 1 Failure	Warning	1.0.0
7	AlarmsData[7].Active	Evaporator Pump 2 Failure	Warning	1.0.0
8	AlarmsData[8].Active	Missing Primary Water Flow	Alarm (*)	1.0.0
9	AlarmsData[9].Active	Manual Mode Enabled	Message	1.0.0
10	AlarmsData[10].Active	Evaporator Freeze protection	Alarm	1.0.0
11	AlarmsData[11].Active	Unit Inlet Temperature Probe Failure	Alarm	1.0.0
12	AlarmsData[12].Active	Evaporator Inlet Temperature Probe Failure	Alarm	1.0.0
13	AlarmsData[13].Active	Unit Outlet Temperature Probe Failure	Alarm	1.0.0
14	AlarmsData[14].Active	Adiabatic - Pad's DP Sensor Failure	Alarm	1.2.0
15	AlarmsData[15].Active	Ambient Temperature Probe Failure	Alarm	1.0.0
24	AlarmsData[24].Active	Fans Communication Failure	Alarm	1.0.0
25	AlarmsData[25].Active	Circuit 1 - Fans Failure	Alarm	1.0.0
26	AlarmsData[26].Active	Circuit 2 - Fans Failure	Alarm	1.0.0
27	AlarmsData[27].Active	Circuit 1 - Single Fan Failures	Warning	1.0.0
28	AlarmsData[28].Active	Circuit 2 - Single Fan Failures	Warning	1.0.0
29	AlarmsData[29].Active	Compressors Off by Low Ambient Temperature	Message	1.0.0
30	AlarmsData[30].Active	Circuit 1 - Fans Working Hours Limit Exceeded	Warning	1.0.0
31	AlarmsData[31].Active	Circuit 2 - Fans Working Hours Limit Exceeded	Warning	1.0.0
32	AlarmsData[32].Active	Adiabatic - Low Pad Efficiency	Warning	1.2.0
34	AlarmsData[34].Active	Free Cooling Valve Feedback Failure	Warning	1.0.0
35	AlarmsData[35].Active	Circuit 1 - High Condensing Pressure	Alarm	1.0.0
36	AlarmsData[36].Active	Circuit 1 - Low Evaporating Pressure	Alarm	1.0.0
37	AlarmsData[37].Active	Circuit 1 – Very Low Superheat	Alarm	1.0.0
38	AlarmsData[38].Active	Circuit 1 - Compressor 1 Thermal Protection	Alarm	1.0.0
39	AlarmsData[39].Active	Circuit 1 - Compressor 2 Thermal Protection	Alarm	1.0.0

BV	Variable and Object Name	Description	Event Type	Version
40	AlarmsData[40].Active	Circuit 1 - Compressor 3 Thermal Protection	Alarm	1.0.0
41	AlarmsData[41].Active	Circuit 1 - Fans Override Enabled	Warning	1.0.0
42	AlarmsData[42].Active	Circuit 1 - Compressors Unload Enabled	Warning	1.0.0
43	AlarmsData[43].Active	Circuit 1 - Critical Condensing Pressure	Warning	1.0.0
46	AlarmsData[46].Active	Circuit 1 - Compressor 1 Contactors Glued	Alarm	1.0.0
47	AlarmsData[47].Active	Circuit 1 - Compressor 2 Contactors Glued	Alarm	1.3.0
48	AlarmsData[48].Active	Circuit 1 - Compressor 3 Contactors Glued	Alarm	1.3.0
50	AlarmsData[50].Active	Circuit 1 - Condensing Pressure Probe Failure	Alarm	1.0.0
51	AlarmsData[51].Active	Circuit 1 - Liquid Temperature Probe Failure	Warning	1.0.0
52	AlarmsData[52].Active	Circuit 1 - Evaporating Pressure Probe Failure	Alarm	1.0.0
53	AlarmsData[53].Active	Circuit 1 - Evaporating Temperature Probe Failure	Alarm	1.0.0
55	AlarmsData[55].Active	Circuit 1 - High Superheat	Warning	1.0.0
56	AlarmsData[56].Active	Power Failure	Message	1.0.0
57	AlarmsData[57].Active	EEV Driver 1 - Communication Failure	Alarm	1.0.0
58	AlarmsData[58].Active	EEV Driver 1 - Valve Motor Error	Alarm	1.0.0
59	AlarmsData[59].Active	Evaporator Pump 1 Communication Failure	Warning	1.0.0
60	AlarmsData[60].Active	Evaporator Pump 2 Communication Failure	Warning	1.0.0
61	AlarmsData[61].Active	Circuit 2 - High Condensing Pressure	Alarm	1.0.0
62	AlarmsData[62].Active	Circuit 2 - Low Evaporating Pressure	Alarm	1.0.0
63	AlarmsData[63].Active	Circuit 2 - Very Low Superheat	Alarm	1.0.0
64	AlarmsData[64].Active	Circuit 2 - Compressor 1 Thermal Protection	Alarm	1.0.0
65	AlarmsData[65].Active	Circuit 2 - Compressor 2 Thermal Protection	Alarm	1.0.0
66	AlarmsData[66].Active	Circuit 2 - Compressor 3 Thermal Protection	Alarm	1.0.0
67	AlarmsData[67].Active	Circuit 2 - Fans Override Enabled	Warning	1.0.0
68	AlarmsData[68].Active	Circuit 2 - Compressors Unload Enabled	Warning	1.0.0
69	AlarmsData[69].Active	Circuit 2 - Critical Condensing Pressure	Warning	1.0.0
72	AlarmsData[72].Active	Circuit 2 - Compressor 1 Contactors Glued	Alarm	1.0.0
73	AlarmsData[73].Active	Circuit 2 - Compressor 2 Contactors Glued	Alarm	1.3.0
74	AlarmsData[74].Active	Circuit 2 - Compressor 3 Contactors Glued	Alarm	1.3.0
75	AlarmsData[75].Active	Unit Freeze Protection	Alarm	1.0.0
76	AlarmsData[76].Active	Circuit 2 - Condensing Pressure Probe Failure	Alarm	1.0.0
77	AlarmsData[77].Active	Circuit 2 - Liquid Temperature Probe Failure	Warning	1.0.0
78	AlarmsData[78].Active	Circuit 2 - Evaporating Pressure Probe Failure	Alarm	1.0.0

BV	Variable and Object Name	Description	Event Type	Version
79	AlarmsData[79].Active	Circuit 2 - Evaporating Temperature Probe Failure	Alarm	1.0.0
81	AlarmsData[81].Active	Circuit 2 - High Superheat	Warning	1.0.0
82	AlarmsData[82].Active	Power Failure Line B	Message	1.0.0
83	AlarmsData[83].Active	EEV Driver 2 - Communication Failure	Alarm	1.0.0
84	AlarmsData[84].Active	EEV Driver 2 - Valve Motor Error	Alarm	1.0.0
85	AlarmsData[85].Active	Evaporator Pump 1 Working Hours Limit Exceeded	Warning	1.0.0
86	AlarmsData[86].Active	Evaporator Pump 2 Working Hours Limit Exceeded	Warning	1.0.0
87	AlarmsData[87].Active	Adiabatic - Pad Clogging	Warning	1.2.0
88	AlarmsData[88].Active	Adiabatic - Critical Pad Clogging	Alarm	1.2.0
89	AlarmsData[89].Active	Remove power from unit	Message	1.0.0
90	AlarmsData[90].Active	User Analog Input 1 Failure	Warning	1.2.0
92	AlarmsData[92].Active	Energy Meter 1 Communication Failure	Warning	1.0.0
94	AlarmsData[94].Active	Energy Meter 2 Communication Failure	Warning	1.0.0
95	AlarmsData[95].Active	Circuit 1 - Compressor 1 Working Hours Limit Exceeded	Warning	1.0.0
96	AlarmsData[96].Active	Circuit 1 - Compressor 2 Working Hours Limit Exceeded	Warning	1.0.0
97	AlarmsData[97].Active	Circuit 1 - Compressor 3 Working Hours Limit Exceeded	Warning	1.0.0
98	AlarmsData[98].Active	Circuit 2 - Compressor 1 Working Hours Limit Exceeded	Warning	1.0.0
99	AlarmsData[99].Active	Circuit 2 - Compressor 2 Working Hours Limit Exceeded	Warning	1.0.0
100	AlarmsData[100].Active	Circuit 2 - Compressor 3 Working Hours Limit Exceeded	Warning	1.0.0
101	AlarmsData[101].Active	Expansion Board Communication Failure	Warning	1.0.0
102	AlarmsData[102].Active	Water Flow Meter Sensor Failure	Warning	1.0.0
103	AlarmsData[103].Active	Remote OFF	Message	1.0.0
104	AlarmsData[104].Active	Variable Water Flow Control Failure	Warning	1.0.0
105	AlarmsData[105].Active	Low External Water Flow	Warning	1.0.0
107	AlarmsData[107].Active	Unstable External Water Flow	Warning	1.0.0
108	AlarmsData[108].Active	Low Evaporator Water Flow	Warning	1.0.0
109	AlarmsData[109].Active	High Evaporator Water Flow	Warning	1.0.0
110	AlarmsData[110].Active	Low Evaporator Water Flow	Alarm (**)	1.0.0
111	AlarmsData[111].Active	High Evaporator Water Flow	Alarm (**)	1.0.0
112	AlarmsData[112].Active	Circuit 1 - Low Refrigerant Charge Warning	Warning	1.0.0
113	AlarmsData[113].Active	Circuit 1 - Low Refrigerant Charge Alarm	Alarm	1.0.0
114	AlarmsData[114].Active	Circuit 2 - Low Refrigerant Charge Warning	Warning	1.0.0
115	AlarmsData[115].Active	Circuit 2 - Low Refrigerant Charge Alarm	Alarm	1.0.0

BV	Variable and Object Name	Description	Event Type	Version
116	AlarmsData[116].Active	Circuit 1 - Compressors Out of Envelope	Warning	1.0.0
117	AlarmsData[117].Active	Circuit 2 - Compressors Out of envelope	Warning	1.0.0
126	AlarmsData[126].Active	Too Fast Water Flow Variation	Warning	1.0.0
127	AlarmsData[127].Active	Too Fast Water Flow Variation	Alarm	1.0.0
128	AlarmsData[128].Active	Circuit 1 - Compressor Oil Level Alarm	Alarm	1.0.0
129	AlarmsData[129].Active	Circuit 2 - Compressor Oil Level Alarm	Alarm	1.0.0
130	AlarmsData[130].Active	Auxiliary Power Failure	Alarm (*)	1.0.0
131	AlarmsData[131].Active	Circuit 1 - Compressors Off by Envelope Protection	Message	1.0.0
132	AlarmsData[132].Active	Circuit 2 - Compressors Off by Envelope Protection	Message	1.0.0
133	AlarmsData[133].Active	Circuit 1 - Compressors Unload Stop by Envelope Protection	Message	1.0.0
134	AlarmsData[134].Active	Circuit 2 - Compressors Unload Stop by Envelope Protection	Message	1.0.0
135	AlarmsData[135].Active	Circuit 1 - Compressors Out of Envelope (Level 2)	Message	1.0.0
136	AlarmsData[136].Active	Circuit 2 - Compressors Out of Envelope (Level 2)	Message	1.0.0
137	AlarmsData[137].Active	Circuit 1 - Low Differential Pressure	Alarm	1.0.0
138	AlarmsData[138].Active	Circuit 2 - Low Differential Pressure	Alarm	1.0.0
140	AlarmsData[140].Active	Condenser Inlet Temperature Probe Failure	Alarm	1.0.0
141	AlarmsData[141].Active	Condenser Outlet Temperature Probe Failure	Alarm	1.0.0
142	AlarmsData[142].Active	Free Cooling Pump Working Hours Limit Exceeded	Warning	1.0.0
145	AlarmsData[145].Active	Free Cooling By-Pass Valve Feedback Failure	Warning	1.0.0
148	AlarmsData[148].Active	Low Evaporator Water Pressure	Alarm (*)	1.0.0
149	AlarmsData[149].Active	Evaporator Water Pressure Sensors Failure	Warning	1.0.0
151	AlarmsData[151].Active	Evaporator Bypass Valve Feedback Failure	Alarm	1.0.0
152	AlarmsData[152].Active	Circuit 1 - Low Evaporating Temperature	Alarm	1.0.0
153	AlarmsData[153].Active	Circuit 2 - Low Evaporating Temperature	Alarm	1.0.0
156	AlarmsData[156].Active	Circuit 1 - Compressor Starts/h Limit Reached	Alarm	1.0.0
157	AlarmsData[157].Active	Circuit 2 - Compressor Starts/h Limit Reached	Alarm	1.0.0
158	AlarmsData[158].Active	Emergency Mode Active	Message	1.1.0
159	AlarmsData[159].Active	CWM Communication Failure	Warning	1.1.0
160	AlarmsData[160].Active	Missing Unit Configuration	Alarm (*)	1.1.0
163	AlarmsData[163].Active	Too Long Fans Off Time	Warning	1.4.0
163	AlarmsData[170].Active	Fans Anti-Freeze Protection	Warning	1.4.0
171	AlarmsData[171].Active	Circuit 1 - Compressor Inverter Communication Failure	Alarm	1.1.0
172	AlarmsData[172].Active	Circuit 2 - Compressor Inverter Communication Failure	Alarm	1.1.0

BV	Variable and Object Name	Description	Event Type	Version
173	AlarmsData[173].Active	Circuit 1 - Compressor Inverter Alarm	Alarm	1.1.0
174	AlarmsData[174].Active	Circuit 2 - Compressor Inverter Alarm	Alarm	1.1.0
175	AlarmsData[175].Active	EEV Driver 1 - Generic Alarm	Alarm	1.1.0
176	AlarmsData[176].Active	EEV Driver 2 - Generic Alarm	Alarm	1.1.0
177	AlarmsData[177].Active	Free Cooling Inlet Pressure Probe Failure	Alarm	1.1.0
178	AlarmsData[178].Active	Free Cooling Outlet Pressure Probe Failure	Alarm	1.1.0
179	AlarmsData[179].Active	Free Cooling Pump Alarm	Alarm	1.1.0
180	AlarmsData[180].Active	Free Cooling Pump Communication Failure	Warning	1.1.0
182	AlarmsData[182].Active	iCOM Memory Error	Alarm (*)	1.1.0
183	AlarmsData[183].Active	Critical Refrigerant Leakage Detected	Alarm (**)	1.1.0
184	AlarmsData[184].Active	Refrigerant Leakage Detected	Warning	1.1.0
185	AlarmsData[185].Active	Gas Leak Detector Communication Failure	Warning (**)	1.1.0
186	AlarmsData[186].Active	Gas Leak Detector Sensor Calibration Required	Warning	1.1.0
187	AlarmsData[187].Active	Circuit 1 - Critical Refrigerant Depressurization	Alarm	1.1.0
188	AlarmsData[188].Active	Circuit 2 - Critical Refrigerant Depressurization	Alarm	1.1.0
189	AlarmsData[189].Active	ATS 1 Communication Failure	Warning	1.1.0
190	AlarmsData[190].Active	ATS 2 Communication Failure	Warning	1.1.0
191	AlarmsData[191].Active	Freecooling Failure	Alarm	1.0.0
192	AlarmsData[192].Active	Fans Rotation Error	Alarm	1.0.0
193	AlarmsData[193].Active	C3 and C4 Offline	Alarm	1.1.0
194	AlarmsData[194].Active	Network Failure	Warning	1.1.0
195	AlarmsData[195].Active	No Connection to Unit 1	Warning	1.1.0
196	AlarmsData[196].Active	Master Unit Changed	Message	1.1.0
197	AlarmsData[197].Active	Master Unit not Available	Warning	1.1.0
198	AlarmsData[198].Active	Remote ByPass Valve A Feedback Fail	Warning	1.1.0
199	AlarmsData[199].Active	Remote ByPass Valve B Feedback Fail	Warning	1.1.0
201	AlarmsData[201].Active	Free Cooling Circuit – Glycol Leakage	Alarm	1.3.1
202	AlarmsData[202].Active	Free Cooling Circuit – High pressure	Alarm	1.3.1
203	AlarmsData[203].Active	Safety Fan Failure	Warning	1.2.1
204	AlarmsData[204].Active	Critical Safety Fan Failure	Alarm	1.2.3
205	AlarmsData[205].Active	Compressor Inverter 1 Not Available	Message	1.2.3
206	AlarmsData[206].Active	Compressor Inverter 2 Not Available	Message	1.2.1
207	AlarmsData[207].Active	Gas Leakage Detector Fault	Alarm (*)	1.3.0

BV	Variable and Object Name	Description	Event Type	Version
208	AlarmsData[208].Active	Low Evaporator Water Pressure	Warning	1.2.4
209	AlarmsData[209].Active	Circuit 1 – Pump Down not finished	Warning	1.3.0
210	AlarmsData[210].Active	Circuit 2 – Pump Down not finished	Warning	1.3.0
275	AlarmsData[275].Active	Adiabatic Temperature Probe 1 Failure	Warning	1.2.0
276	AlarmsData[276].Active	Adiabatic Temperature Probe 2 Failure	Warning	1.2.0
277	AlarmsData[277].Active	Adiabatic Humidity Probe 1 Failure	Warning	1.2.0
278	AlarmsData[278].Active	Adiabatic Humidity Probe 2 Failure	Warning	1.2.0
279	AlarmsData[279].Active	Adiabatic Pump 1 Working Hours Limit	Warning	1.2.0
280	AlarmsData[280].Active	Adiabatic Pump 2 Working Hours Limit	Warning	1.2.0
281	AlarmsData[281].Active	Adiabatic Temperature Probes Failure	Alarm	1.2.0
282	AlarmsData[282].Active	Adiabatic Humidity Probes Failure	Alarm	1.2.0
283	AlarmsData[283].Active	Adiabatic Pump 1 Failure	Alarm	1.2.0
284	AlarmsData[284].Active	Adiabatic Pump 2 Failure	Alarm	1.2.0
285	AlarmsData[285].Active	Adiabatic Emergency Drain 1	Alarm	1.2.0
286	AlarmsData[286].Active	Adiabatic Emergency Drain 2	Alarm	1.2.0
287	AlarmsData[287].Active	Adiabatic Flow Meter 1 Failure	Alarm	1.2.0
288	AlarmsData[288].Active	Adiabatic Flow Meter 2 Failure	Alarm	1.2.0
293	AlarmsData[293].Active	External Adiabatic Warning Side 1	Warning	1.2.0
294	AlarmsData[294].Active	External Adiabatic Warning Side 2	Warning	1.2.0
295	AlarmsData[295].Active	External Adiabatic Offline Side 1	Alarm	1.2.0
296	AlarmsData[296].Active	External Adiabatic Offline Side 2	Alarm	1.2.0
297	AlarmsData[297].Active	Stop Adiabatic	Message	1.2.3
298	AlarmsData[298].Active	Stop Freecooling	Message	1.2.3
300	AlarmsData[300].Active	External Adiabatic Alarm Side 1	Alarm	1.2.3
301	AlarmsData[301].Active	External Adiabatic Alarm Side 2	Alarm	1.2.3
302	AlarmsData[302].Active	Interlock Valve Failure	Alarm	1.2.3
305	AlarmsData[305].Active	Compressor Inverter 3 Not Available	Message	1.3.1
309	AlarmsData[309].Active	Circuit 3 - Pump Down not finished	Warning	1.3.1
349	AlarmsData[349].Active	Harmonic filter fault supply line 1	Warning	1.5.0
350	AlarmsData[350].Active	Harmonic filter fault supply line 2	Warning	1.5.0
351	AlarmsData[351].Active	Harmonic filter fault 1	Warning	1.5.0
352	AlarmsData[352].Active	Harmonic filter fault 2	Warning	1.5.0
353	AlarmsData[353].Active	Harmonic filter fault 3	Warning	1.5.0

BV	Variable and Object Name	Description	Event Type	Version
354	AlarmsData[354].Active	Harmonic filter fault 4	Warning	1.5.0
355	AlarmsData[355].Active	Harmonic filter communication error 1	Warning	1.5.0
356	AlarmsData[356].Active	Harmonic filter communication error 2	Warning	1.5.0
357	AlarmsData[357].Active	Harmonic filter communication error 3	Warning	1.5.0
358	AlarmsData[358].Active	Harmonic filter communication error 4	Warning	1.5.0
361	AlarmsData[361].Active	Electrical cabinet cooling fault	Alarm	1.5.1
362	AlarmsData[362].Active	Electrical cabinet NTC air temperature probe fault	Warning	1.5.1
363	AlarmsData[363].Active	Electrical cabinet high air temperature	Alarm	1.5.1
410	AlarmsData[410].Active	Evaporator 2 Freeze Protection	Alarm	1.1.0
411	AlarmsData[411].Active	Unit Inlet Temperature Probe 2 Failure	Alarm	1.1.0
412	AlarmsData[412].Active	Evaporator Inlet Temperature Probe 2 Failure	Alarm	1.1.0
413	AlarmsData[413].Active	Unit Outlet Temperature Probe 2 Failure	Alarm	1.1.0
415	AlarmsData[415].Active	Ambient Temperature Probe 2 Failure	Alarm	1.1.0
425	AlarmsData[425].Active	Circuit 3 - Fans Failure	Alarm	1.1.0
426	AlarmsData[426].Active	Circuit 4 - Fans Failure	Alarm	1.1.0
427	AlarmsData[427].Active	Circuit 3 - Single Fans Failure	Warning	1.1.0
428	AlarmsData[428].Active	Circuit 4 - Single Fans Failure	Warning	1.1.0
430	AlarmsData[430].Active	Circuit 3 - Fans Working Hours Limit Exceeded	Warning	1.1.0
431	AlarmsData[431].Active	Circuit 4 - Fans Working Hours Limit Exceeded	Warning	1.1.0
434	AlarmsData[434].Active	Free Cooling Valve 2 Feedback Failure	Warning	1.1.0
435	AlarmsData[435].Active	Circuit 3 - High Condensing Pressure	Alarm	1.1.0
436	AlarmsData[436].Active	Circuit 3 - Low Evaporating Pressure	Alarm	1.1.0
437	AlarmsData[437].Active	Circuit 3 - Very Low Superheat	Alarm	1.1.0
438	AlarmsData[438].Active	Circuit 3 - Compressor 1 Thermal Protection	Alarm	1.1.0
439	AlarmsData[439].Active	Circuit 3 - Compressor 2 Thermal Protection	Alarm	1.1.0
440	AlarmsData[440].Active	Circuit 3 - Compressor 3 Thermal Protection	Alarm	1.1.0
441	AlarmsData[441].Active	Circuit 3 - Fans Override Enabled	Warning	1.1.0
442	AlarmsData[442].Active	Circuit 3 - Compressors Unload Enabled	Warning	1.1.0
443	AlarmsData[443].Active	Circuit 3 - Critical Condensing Pressure	Warning	1.1.0
446	AlarmsData[446].Active	Circuit 3 - Compressor 1 Contactors Glued	Alarm	1.1.0
450	AlarmsData[450].Active	Circuit 3 - Condensing Pressure Probe Failure	Alarm	1.1.0
451	AlarmsData[451].Active	Circuit 3 - Liquid Temperature Probe Failure	Warning	1.1.0
452	AlarmsData[452].Active	Circuit 3 - Evaporating Pressure Probe Failure	Alarm	1.1.0

BV	Variable and Object Name	Description	Event Type	Version
453	AlarmsData[453].Active	Circuit 3 - Evaporating Temperature Probe Failure	Alarm	1.1.0
455	AlarmsData[455].Active	Circuit 3 - High Superheat	Warning	1.1.0
457	AlarmsData[457].Active	EEV Driver 3 - Communication Failure	Alarm	1.1.0
458	AlarmsData[458].Active	EEV Driver 3 - Valve Motor Error	Alarm	1.1.0
461	AlarmsData[461].Active	Circuit 4 - High Condensing Pressure	Alarm	1.1.0
462	AlarmsData[462].Active	Circuit 4 - Low Evaporating Pressure	Alarm	1.1.0
463	AlarmsData[463].Active	Circuit 4 - Very Low Superheat	Alarm	1.1.0
464	AlarmsData[464].Active	Circuit 4 - Compressor 1 Thermal Protection	Alarm	1.1.0
465	AlarmsData[465].Active	Circuit 4 - Compressor 2 Thermal Protection	Alarm	1.1.0
466	AlarmsData[466].Active	Circuit 4 - Compressor 3 Thermal Protection	Alarm	1.1.0
467	AlarmsData[467].Active	Circuit 4 - Fans Override Enabled	Warning	1.1.0
468	AlarmsData[468].Active	Circuit 4 - Compressors Unload Enabled	Warning	1.1.0
469	AlarmsData[469].Active	Circuit 4 - Critical Condensing Pressure	Warning	1.1.0
472	AlarmsData[472].Active	Circuit 4 - Compressor 1 Contactors Glued	Alarm	1.1.0
476	AlarmsData[476].Active	Circuit 4 - Condensing Pressure Probe Failure	Alarm	1.1.0
477	AlarmsData[477].Active	Circuit 4 - Liquid Temperature Probe Failure	Warning	1.1.0
478	AlarmsData[478].Active	Circuit 4 - Evaporating Pressure Probe Failure	Alarm	1.1.0
479	AlarmsData[479].Active	Circuit 4 - Evaporating Temperature Probe Failure	Alarm	1.1.0
481	AlarmsData[481].Active	Circuit 4 - High Superheat	Warning	1.1.0
483	AlarmsData[483].Active	EEV Driver 4 - Communication Failure	Alarm	1.1.0
484	AlarmsData[484].Active	EEV Driver 4 - Valve Motor Error	Alarm	1.1.0
495	AlarmsData[495].Active	Circuit 3 - Compressor 1 Working Hours Limit Exceeded	Warning	1.1.0
496	AlarmsData[496].Active	Circuit 3 - Compressor 2 Working Hours Limit Exceeded	Warning	1.1.0
497	AlarmsData[497].Active	Circuit 3 - Compressor 3 Working Hours Limit Exceeded	Warning	1.1.0
498	AlarmsData[498].Active	Circuit 4 - Compressor 1 Working Hours Limit Exceeded	Warning	1.1.0
499	AlarmsData[499].Active	Circuit 4 - Compressor 2 Working Hours Limit Exceeded	Warning	1.1.0
500	AlarmsData[500].Active	Circuit 4 - Compressor 3 Working Hours Limit Exceeded	Warning	1.1.0
502	AlarmsData[502].Active	Water Flow Meter Sensor 2 Failure	Warning	1.1.0
512	AlarmsData[512].Active	Circuit 3 - Low Refrigerant Charge Warning	Warning	1.1.0
513	AlarmsData[513].Active	Circuit 3 - Low Refrigerant Charge Alarm	Alarm	1.1.0
514	AlarmsData[514].Active	Circuit 4 - Low Refrigerant Charge Warning	Warning	1.1.0
515	AlarmsData[515].Active	Circuit 4 - Low Refrigerant Charge Alarm	Alarm	1.1.0
516	AlarmsData[516].Active	Circuit 3 - Compressors Out of Envelope	Warning	1.1.0

BV	Variable and Object Name	Description	Event Type	Version
517	AlarmsData[517].Active	Circuit 4 - Compressors Out of Envelope	Warning	1.1.0
528	AlarmsData[528].Active	Circuit 3 - Compressor Oil Level Alarm	Alarm	1.1.0
529	AlarmsData[529].Active	Circuit 4 - Compressor Oil Level Alarm	Alarm	1.1.0
531	AlarmsData[531].Active	Circuit 3 - Compressors Off by Envelope Protection	Message	1.1.0
532	AlarmsData[532].Active	Circuit 4 - Compressors Off by Envelope Protection	Message	1.1.0
533	AlarmsData[533].Active	Circuit 3 - Compressors Unload Stop by Envelope Protection	Message	1.1.0
534	AlarmsData[534].Active	Circuit 4 - Compressors Unload Stop by Envelope Protection	Message	1.1.0
535	AlarmsData[535].Active	Circuit 3 - Compressors Out of Envelope (Level 2)	Message	1.1.0
536	AlarmsData[536].Active	Circuit 4 - Compressors Out of Envelope (Level 2)	Message	1.1.0
537	AlarmsData[537].Active	Circuit 3 - Low Differential Pressure	Alarm	1.1.0
538	AlarmsData[538].Active	Circuit 4 - Low Differential Pressure	Alarm	1.1.0
545	AlarmsData[545].Active	Free Cooling By-Pass Valve 2 Feedback Failure	Warning	1.1.0
549	AlarmsData[549].Active	Evaporator Water Pressure Sensors 2 Failure	Warning	1.1.0
552	AlarmsData[552].Active	Circuit 3 - Low Evaporating Temperature	Alarm	1.1.0
553	AlarmsData[553].Active	Circuit 4 - Low Evaporating Temperature	Alarm	1.1.0
556	AlarmsData[556].Active	Circuit 3 - Compressor Starts/h Limit Reached	Alarm	1.1.0
557	AlarmsData[557].Active	Circuit 4 - Compressor Starts/h Limit Reached	Alarm	1.1.0
571	AlarmsData[571].Active	Circuit 3 - Compressor Inverter Communication Failure	Alarm	1.3.1
573	AlarmsData[573].Active	Circuit 3 - Compressor Inverter Alarm	Alarm	1.3.1
575	AlarmsData[575].Active	EEV Driver 3 - Generic Alarm	Alarm	1.1.0
576	AlarmsData[576].Active	EEV Driver 4 - Generic Alarm	Alarm	1.1.0
587	AlarmsData[587].Active	Circuit 3 - Critical Refrigerant Depressurization	Alarm	1.1.0
588	AlarmsData[588].Active	Circuit 4 - Critical Refrigerant Depressurization	Alarm	1.1.0
591	AlarmsData[591].Active	Freecooling Failure 2	Alarm	1.1.0
593	AlarmsData[593].Active	Bypass valve feedback missing or fault or alarm	Alarm	1.4.1
594	AlarmsData[594].Active	Main valve feedback missing or fault or alarm	Alarm	1.4.1
595	AlarmsData[595].Active	Bypass valve command and feedback mismatch	Warning	1.4.1
596	AlarmsData[596].Active	Main valve command and feedback mismatch	Warning	1.4.1

5.3 Analog Values

AV	Variable	Description	Range	Access	Version
0	W_Reg_UserSetP	Current Temperature Setpoint	-10.0 / + 30.0°C	R	1.0.0
1	UnitInletTempVal	Unit Inlet Temperature	-40.0 / +110.0°C	R	1.0.0
2	EvapInletTempVal	Evaporator Inlet Temperature	-40.0 / +110.0°C	R	1.0.0
3	EvapOutletTempVal	Unit Outlet Temperature	-40.0 / +110.0°C	R	1.0.0
4	AmbAirTempVal	Ambient Temperature	-40.0 / +110.0°C	R	1.0.0
5	FC_Info.FC_VlvReq	Freecooling Valve Position Request	0.0 – 100.0%	R	1.0.0
6	FanSpeed[1]	Circuit 1 Fans Speed Request	0 – 100%	R	1.0.0
7	FanSpeed[2]	Circuit 2 Fans Speed Request	0 – 100%	R	1.0.0
9	HP_Circ1.Value	Condenser Pressure Circuit 1	-10.0 / +50.0 bar	R	1.0.0
10	LP_Circ1.Value	Evaporating Pressure Circuit 1	-10.0 / +50.0 bar	R	1.0.0
11	HP_Circ2.Value	Condenser Pressure Circuit 2	-10.0 / +50.0 bar	R	1.0.0
12	LP_Circ2.Value	Evaporating Pressure Circuit 2	-10.0 / +50.0 bar	R	1.0.0
13	BMS_WH_Pmp1	Working Hours Evaporator Pump 1	0-32000 h	R	1.0.0
14	BMS_WH_Pmp2	Working Hours Evaporator Pump 2	0-32000 h	R	1.0.0
15	BMS_WH_FC_Pmp	Working Hours FC Pump	0-32000 h	R	1.0.0
16	BMS_WH_FanC1	Working Hours Fans Circuit 1	0-32000 h	R	1.0.0
17	BMS_WH_FanC2	Working Hours Fans Circuit 2	0-32000 h	R	1.0.0
19	BMS_WH_Cmp1C1	Working Hours Compressor 1 Circuit 1	0-32000 h	R	1.0.0
20	BMS_WH_Cmp2C1	Working Hours Compressor 2 Circuit 1	0-32000 h	R	1.0.0
22	BMS_WH_Cmp1C2	Working Hours Compressor 1 Circuit 2	0-32000 h	R	1.0.0
23	BMS_WH_Cmp2C2	Working Hours Compressor 2 Circuit 2	0-32000 h	R	1.0.0
25	BMS_Starts_Cmp1C1	Starts Compressor 1 Circuit 1	0-32000	R	1.0.0
26	BMS_Starts_Cmp2C1	Starts Compressor 2 Circuit 1	0-32000	R	1.0.0
28	BMS_Starts_Cmp1C2	Starts Compressor 1 Circuit 2	0-32000	R	1.0.0
29	BMS_Starts_Cmp2C2	Starts Compressor 2 Circuit 2	0-32000	R	1.0.0
31	DiffPress_PAD.Value	Delta Pressure Adiabatic PAD	0.0 – 2000.0 Pa	R	1.0.0
32	Hmi.UO_Adi_VTemp	Adiabatic Temperature after PAD	-40.0 / +110.0°C	R	1.0.0
33	kWtot	Instant Power Consumption	0 – 999.9 kW	R	1.0.0
34	EnEff_RollEERF	Instant EER	0 – 999.9	R	1.0.0
35	EnEff_RollViPUEF	Instant PPUE	0 – 999.9	R	1.0.0
36	EnEff_RollWUEF	Instant WUE	0 – 999.9 l/kWh	R	1.0.0

AV	Variable	Description	Range	Access	Version
37	AlrmResByBms	Event Reset	Set 9999 to Reset Events	R/W	1.0.0
38	Cfg_Reg_SetP	Temperature Setpoint 1	0.0 / 40.0°C	R/W	1.0.0
39	Cfg_Reg_SetP2	Temperature Setpoint 2	0.0 / 40.0°C	R/W	1.1.0
44	Cfg_WH_ThrshPmp1	Limit Working Hours Evaporator Pump 1	0-32000 h	R/W	1.0.0
45	Cfg_WH_ThrshPmp2	Limit Working Hours Evaporator Pump 2	0-32000 h	R/W	1.0.0
46	Cfg_WH_ThrshFC_Pmp	Limit Working Hours FC Pump	0-32000 h	R/W	1.0.0
47	Cfg_WH_ThrshFanC1	Limit Working Hours Fans Circ.1	0-32000 h	R/W	1.0.0
48	Cfg_WH_ThrshFanC2	Limit Working Hours Fans Circ.2	0-32000 h	R/W	1.0.0
50	Cfg_WH_ThrshCmp1C1	Limit Working Hours Comp. 1 Circuit 1	0-32000 h	R/W	1.0.0
51	Cfg_WH_ThrshCmp2C1	Limit Working Hours Comp. 2 Circuit 1	0-32000 h	R/W	1.0.0
53	Cfg_WH_ThrshCmp1C2	Limit Working Hours Comp. 1 Circuit 2	0-32000 h	R/W	1.0.0
54	Cfg_WH_ThrshCmp2C2	Limit Working Hours Comp. 1 Circuit 2	0-32000 h	R/W	1.0.0
56	WaterFlowFilt_m3h	Water Flow	0.0 – 300.0 m^3/h	R	1.0.0
57	TimeToNextCmpAvbl	Time to have next comp. available	0 – 3600 s	R	1.0.0
58	BMS_EvPmpFlwReq	Remote water flow request	10-250 m^3/h	R/W	1.0.0
59	Cfg_Pmp_DPsetP	DP Setpoint	0-10.0 bar	R/W	1.0.0
62	Pmp_CtrlInput	Water DP	0-10.0 bar	R	1.0.0
63	BypassVlvReq	Bypass valve position	0.0 - 100.0%	R	1.0.0
64	UsrAnlgInpState[1]	Analog User Input 1 Value	0.0 - 100.0	R	1.2.2
77	BMS_AdiTotWaterConsum	Adiabatic Pump Water Consumption	0-3000 l/h	R	1.0.0
78	AdiabaticWH	Adiabatic Working Hours	0-32000 h	R	1.0.0
83	EnEff_TotalCapacityF	Total Capacity	0.0 – 2000.0 kW	R	1.2.2
84	EnEff_FCCapacityF	Freecooling Capacity	0.0 – 2000.0 kW	R	1.2.2
85	EnEff_MechCapacityF	Mechanical Capacity	0.0 – 2000.0 kW	R	1.2.2
89	BmsEmgModeEn	Emergency Mode Activation Command	1= Emg mode activated	R/W	1.1.0
103	Gvz1.Hz	Frequency Line 1 (ATS 1 or EM 1)	0.0 – 999.9 Hz	R	1.1.3
104	Gvz2.Hz	Frequency Line 2 (ATS 2 or EM 2)	0.0 – 999.9 Hz	R	1.1.3
105	Gvz1.VL1L2	Voltage L1-L2 (ATS 1 or EM 1)	0.0 – 999.9 V	R	1.0.0
106	Gvz1.VL2L3	Voltage L2-L3 (ATS 1 or EM 1)	0.0 – 999.9 V	R	1.0.0
107	Gvz1.VL3L1	Voltage L3-L1 (ATS 1 or EM 1)	0.0 – 999.9 V	R	1.0.0
108	Gvz2.VL1L2	Voltage L1-L2 (ATS 2 or EM 2)	0.0 – 999.9 V	R	1.0.0
109	Gvz2.VL2L3	Voltage L2-L3 (ATS 2 or EM 2)	0.0 – 999.9 V	R	1.0.0

AV	Variable	Description	Range	Access	Version
110	Gvz2.VL3L1	Voltage L3-L1 (ATS 2 or EM 2)	0.0 – 999.9 V	R	1.0.0
111	Gvz1.AL1	Current L1 (ATS 1 or EM 1)	0.0 – 999.9 A	R	1.0.0
112	Gvz1.AL2	Current L2 (ATS 1 or EM 1)	0.0 – 999.9 A	R	1.0.0
113	Gvz1.AL3	Current L3 (ATS 1 or EM 1)	0.0 – 999.9 A	R	1.0.0
114	Gvz2.AL1	Current L1 (ATS 2 or EM 2)	0.0 – 999.9 A	R	1.0.0
115	Gvz2.AL2	Current L2 (ATS 2 or EM 2)	0.0 – 999.9 A	R	1.0.0
116	Gvz2.AL3	Current L3 (ATS 2 or EM 2)	0.0 – 999.9 A	R	1.0.0
117	Gvz1.kWtot	Total Power Consumption (ATS 1 or EM 1)	0.0 – 999.9 kW	R	1.0.0
118	Gvz2.kWtot	Total Power Consumption (ATS 2 or EM 2)	0.0 – 999.9 kW	R	1.0.0
119	FanSpeed[3]	Circuit 3 Fans Speed Request	0 – 100%	R	1.1.0
120	FanSpeed[4]	Circuit 4 Fans Speed Request	0 – 100%	R	1.1.0
121	HP_Circ3.Value	Condenser Pressure Circuit 3	-10.0 / +50.0 bar	R	1.1.0
122	LP_Circ3.Value	Evaporating Pressure Circuit 3	-10.0 / +50.0 bar	R	1.1.0
123	HP_Circ4.Value	Condenser Pressure Circuit 4	-10.0 / +50.0 bar	R	1.1.0
124	LP_Circ4.Value	Evaporating Pressure Circuit 4	-10.0 / +50.0 bar	R	1.1.0
125	BMS_WH_FanC3	Working Hours Fans Circuit 3	0-32000 h	R	1.1.0
126	BMS_WH_FanC4	Working Hours Fans Circuit 4	0-32000 h	R	1.1.0
127	BMS_WH_Cmp1C3	Working Hours Compressor 1 Circuit 3	0-32000 h	R	1.1.0
130	BMS_WH_Cmp1C4	Working Hours Compressor 1 Circuit 4	0-32000 h	R	1.1.0
133	BMS_Starts_Cmp1C3	Starts Compressor 1 Circuit 3	0-32000	R	1.1.0
136	BMS_Starts_Cmp1C4	Starts Compressor 1 Circuit 4	0-32000	R	1.1.0
139	Cfg_WH_ThrshFanC3	Limit Working Hours Fans Circ.3	0-32000 h	R/W	1.1.0
140	Cfg_WH_ThrshFanC4	Limit Working Hours Fans Circ.4	0-32000 h	R/W	1.1.0
141	Cfg_WH_ThrshCmp1C3	Limit Working Hours Comp. 1 Circuit 3	0-32000 h	R/W	1.1.0
144	Cfg_WH_ThrshCmp1C4	Limit Working Hours Comp. 1 Circuit 4	0-32000 h	R/W	1.1.0
147	kWhtot	Total Kilo Watt Hour	0.0 - 999.9 kWh	R	1.1.3
148	VARtot	Total VAR Volt Ampere Reactive	0.0 - 999.9 VAR	R	1.1.3
149	VAtot	Total Volt Ampere	0.0 - 999.9 VA	R	1.1.3
150	EnEff_TotalCapacity24	Total Capacity 24 (FC + DX)	0.0 – 2000.0 kW	R	1.1.3
151	EnEff_CoolingCapacity24	Freecooling Capacity 24	0.0 – 2000.0 kW	R	1.1.3
152	EnEff_MechCapacity24	Mechanical Cooling Capacity 24	0.0 – 2000.0 kW	R	1.1.3
153	EnEff_RollEER24	EER – Energy Efficiency Ratio 24	0.0 - 999.9	R	1.1.3
154	EnEff_RollVirtualPUE24	Virtual Power Usage Efficiency – Virtual PUE 24	0.0 - 999.9	R	1.1.3

AV	Variable	Description	Range	Access	Version
155	EnEff_RollWUE24	Water Usage Efficiency - WUE 24	0.0 - 999.9 l/kWh	R	1.1.3
166	Hmi.UO_Pmp_Req[0]	Pump 1 Request	%	R	1.4.0
167	Hmi.UO_Pmp_Req[1]	Pump 2 Request	%	R	1.4.0
198	GLD_GasLevel	Refrigerant gas concentration ppm – Carel GLD. GLD type 1 or 2.	ppm	R	1.4.0
199	GLD_GasLevelLEL	Refrigerant gas concentration LEL/LFL % – Sensitron GLD. GLD type 3 or 4.	LEL/LFL	R	1.4.0
200	FreeCooling._FC_Pmp_SpeedPerc	FC Pump speed % feedback	% x 10	R	1.4.0
201	FreeCooling._FC_Pmp_SpeedRpm	FC Pump speed feedback in rpm		R	1.4.0
202	FCVlv.Value	FC valve % open request value	0 - 100 %	R	1.4.0
203	FC_BypassVlv.Value	FC Bypass valve % open request value	0 - 100 %	R	1.4.0
204	NG_LowP.Value	FC No Glycol Low Pressure - Probe value		R	1.4.0
205	NG_HighP.Value	FC No Glycol High Pressure - Probe value		R	1.4.0
206	FC_Valvefbk_AI.Value	FC Valve Analogue Feedback % value	0 - 100 %	R	1.4.0
207	BypassValve.Value	Bypass Valve Opening Command	0 - 100 %	R	1.4.1
208	MainValve.Value	Main Valve Opening Command	0 - 100 %	R	1.4.1
209	BypVlvFbk_0_100	Bypass Valve Opening Feedback	0 - 100 %	R	1.4.1
210	MainVlvFbk_0_100	Main Valve Opening Feedback	0 - 100 %	R	1.4.1
211	Hmi.BMS_Cmp_Cap_Per[1]	Circ 1 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
212	Hmi.BMS_Cmp_Cap_Per[2]	Circ 1 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
213	Hmi.BMS_Cmp_Cap_Per[3]	Circ 1 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
214	Hmi.BMS_Cmp_Cap_Per[4]	Circ 1 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
215	Hmi.BMS_Cmp_Cap_Per[5]	Circ 2 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
216	Hmi.BMS_Cmp_Cap_Per[6]	Circ 2 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
217	Hmi.BMS_Cmp_Cap_Per[7]	Circ 2 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
218	Hmi.BMS_Cmp_Cap_Per[8]	Circ 2 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
219	Hmi.BMS_Cmp_Cap_Per[9]	Circ 3 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
220	Hmi.BMS_Cmp_Cap_Per[10]	Circ 3 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
221	Hmi.BMS_Cmp_Cap_Per[11]	Circ 3 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
222	Hmi.BMS_Cmp_Cap_Per[12]	Circ 3 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
223	Hmi.BMS_Cmp_Cap_Per[13]	Circ 4 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
224	Hmi.BMS_Cmp_Cap_Per[14]	Circ 4 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
225	Hmi.BMS_Cmp_Cap_Per[15]	Circ 4 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1

AV	Variable	Description	Range	Access	Version
226	Hmi.BMS_Cmp_Cap_Per[16]	Circ 4 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
227	WPressMeter.Value	Evaporator Inlet Water pressure	-999.9 - 999.9 bar	R	1.4.1
228	WPressMeterOutlet.Value	Evaporator Outlet Water pressure	-999.9 - 999.9 bar	R	1.4.1
229	Cfg_Tw_Setpoint	System Setpoint	5.0 / 30.0°C	R/W	1.5.0
230	HarmFiltDataLine1.THDI1_Load	Supply Line 1 THDI Phase A Load	0.0 - 100.0 %	R	1.5.0
231	HarmFiltDataLine1.THDI2_Load	Supply Line 1 THDI Phase B Load	0.0 - 100.0 %	R	1.5.0
232	HarmFiltDataLine1.THDI3_Load	Supply Line 1 THDI Phase C Load	0.0 - 100.0 %	R	1.5.0
233	HarmFiltDataLine1.THDU1_Grid	Supply Line 1 THDU Phase A Grid	0.0 - 100.0 %	R	1.5.0
234	HarmFiltDataLine1.THDU2_Grid	Supply Line 1 THDU Phase B Grid	0.0 - 100.0 %	R	1.5.0
235	HarmFiltDataLine1.THDU3_Grid	Supply Line 1 THDU Phase C Grid	0.0 - 100.0 %	R	1.5.0
236	HarmFiltDataLine1.PF1_Grid	Supply Line 1 Power Factor Phase A Grid	0.00 - 1.00	R	1.5.0
237	HarmFiltDataLine1.PF2_Grid	Supply Line 1 Power Factor Phase B Grid	0.00 - 1.00	R	1.5.0
238	HarmFiltDataLine1.PF3_Grid	Supply Line 1 Power Factor Phase C Grid	0.00 - 1.00	R	1.5.0
239	HarmFiltDataLine2.THDI1_Load	Supply Line 2 THDI Phase A Load	0.0 - 100.0 %	R	1.5.0
240	HarmFiltDataLine2.THDI2_Load	Supply Line 2 THDI Phase B Load	0.0 - 100.0 %	R	1.5.0
241	HarmFiltDataLine2.THDI3_Load	Supply Line 2 THDI Phase C Load	0.0 - 100.0 %	R	1.5.0
242	HarmFiltDataLine2.THDU1_Grid	Supply Line 2 THDU Phase A Grid	0.0 - 100.0 %	R	1.5.0
243	HarmFiltDataLine2.THDU2_Grid	Supply Line 2 THDU Phase B Grid	0.0 - 100.0 %	R	1.5.0
244	HarmFiltDataLine2.THDU3_Grid	Supply Line 2 THDU Phase C Grid	0.0 - 100.0 %	R	1.5.0
245	HarmFiltDataLine2.PF1_Grid	Supply Line 2 Power Factor Phase A Grid	0.00 - 1.00	R	1.5.0
246	HarmFiltDataLine2.PF2_Grid	Supply Line 2 Power Factor Phase B Grid	0.00 - 1.00	R	1.5.0
247	HarmFiltDataLine2.PF3_Grid	Supply Line 2 Power Factor Phase C Grid	0.00 - 1.00	R	1.5.0

5.4 Multi-State Values

MSV	Variable	Description	Nr States	Access	Version
0	BMS_UnitSts	Unit Status: 0=Local On, 2=Display Off, 3=Remote Off, 6=Manual, 7=Alarm Off, 8=Power Failure, 9=Alarm On, 10=Warning On, 11=System Off, 12=Standby, 14=BMS Off	11	R	1.0.0
1	FC_Active	Status of Freecooling; 0=Not Active, 1=Active	2	R	1.0.0
2	BMS_Pmp_Sts[0]	Evaporator Pump 1 – Evaporator Pump 2 – FC Pump Status: 0=N.A., 1=ON, 2=Maintenance, 3=OFF, 4=Alarm, 5=Starting, 6=Stopping	7	R	1.0.0
3	BMS_Pmp_Sts[1]		7	R	1.0.0
4	BMS_Pmp_Sts[2]		7	R	1.0.0
5	BMS_Cmp_Sts[1]	Compressors Status: 0=N.A., 1=ON, 2=MTN, 3=OFF, 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED, 13=UNLOADING, 14=UNLOADED	10	R	1.0.0
6	BMS_Cmp_Sts[2]		10	R	1.0.0
8	BMS_Cmp_Sts[5]		10	R	1.0.0
9	BMS_Cmp_Sts[6]		10	R	1.0.0
11	RemOnOffState	Remote On/Off Status; 0=OFF, 1=ON	2	R	1.0.0
12	FlwSwtchState	Flow Switch Status; 0=OK, 1=Alarm	2	R	1.0.0
13	PwrMonitState	Power Monitoring Status; 0=OK, 1=Power Failure	2	R	1.0.0
16	Hmi.FansRevRot	Snow/Dirt Adiabatic Pad Cleaning Cycle: 0=Not Active,1=Active	2	R	1.0.0
17	Adi_Status	Adiabatic Status: 0 = Local Off, 1 = Working, 2 = Standby, 3 = Alarm Off, 4 = Alarm On, 6 = Antifreeze, 7 = Antilegionella, 8 = Drying, 9 = Manual mode, 11 = External Adb No Power, 12 = External Adb Alarm, 13 = Stopped by User	12	R	1.0.0
19	BmsOnOffCmd	Unit ON/OFF: 0=Stay, 1= Change status (toggle)	2	R/W	1.0.0
20	MuteBuzzerEn	Event Acknowledge; 0=Stay, 1=Aknowledge (toggle)	2	R/W	1.0.0
21	ManModeEn	Manual Mode Enabling via BMS: 0=No; 1=Yes	2	R/W	1.0.0
22	CmpStartState	Comp Start per Hour Status: 0=all available, 1=at least 1 reach limit, 2=all reach limit	3	R	1.0.0
23	UnitOpMode	Unit Operating Mode;0=Cooling,1=Heating	2	R	1.0.0
24	UsrDigInpState[1]	Digital User Input 1 Status: 0=Off, 1=Act	2	R	1.0.0
26	BmsSysOnOffCmd	System On/Off Toggle Command: 0=Stay, 1= Change status (toggle)	2	R/W	1.1.0
27	EmgModeActive	Emergency Mode Status: 0 = Not active, 1 = Active	2	R	1.1.0
40	Hmi.AtsState[1]	ATS 1 status: 0 = not installed, 1 = line 1, 2 = line 2, 3 = transition, 4 = communication error, 5 = alarm	6	R	1.0.0

MSV	Variable	Description	Nr States	Access	Version
41	Hmi.AtsState[2]	ATS 1 status: 0 = not installed, 1 = line 1, 2 = line 2, 3 = transition, 4 = communication error, 5 = alarm	6	R	1.0.0
42	BMS_Cmp_Sts[9]	Compressors Status: 0=N.A., 1=ON, 2=MTN, 3=OFF, 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED, 13=UNLOADING, 14=UNLOADED	10	R	1.1.0
45	BMS_Cmp_Sts[13]		10	R	1.1.0
48	FlwSwtch2State	Flow Switch 2 Status; 0=OK, 1=Alarm	2	R	1.1.0
49	EventsActive	General Alarm; 0=Off, 1=Act	2	R	1.1.7
50	gfBmsStopAdi	Stop Adiabatic from BMS; 1= forced stop	2	RW	1.2.0
51	gfBmsAdiEMDrain1	Enable Adiabatic Emergency Drain for Side 1; 1= activate drain	2	RW	1.2.0
52	gfBmsAdiEMDrain2	Enable Adiabatic Emergency Drain for Side 2; 1= activate drain	2	RW	1.2.0
53	gfBmsAStopFC	Stop or Inhibit FC activation; 1= stop or inhbit	2	RW	1.2.3
54	gfQuickStartBMS	BMS Quick Start Command; 1 = enable	2	RW	1.4.0
55	GasLeakDetector.GLD_SafetyStatus	GLD and A2L working status	12	R	1.4.0
56	BMS_FC_Vlvfbk_DI	FC Valve digital feedback	2	R	1.4.0
57	BMS_FC_BypassVlvfbk_DI	FC Baypass Valve digital feedback	2	R	1.4.0

5.5 Integer Values

This Integer Values list can be provided as an alternative to the Multi-State Value list on demand.

IV	Variable	Description	Access	Version
0	BMS_UnitSts	Unit Status: 0=Local On, 2=Display Off, 3=Remote Off, 6=Manual, 7=Alarm Off, 8=Power Failure, 9=Alarm On, 10=Warning On, 11=System Off, 12=Standby, 14=BMS Off	R	1.0.0
1	FC_Active	Status of Freecooling; 0=Not Active, 1=Active	R	1.0.0
2	BMS_Pmp_Sts[0]	Evaporator Pump 1 – Evaporator Pump 2 – FC Pump Status: 0=N.A., 1=ON, 2=Maintenance, 3=OFF, 4=Alarm, 5=Starting, 6=Stopping	R	1.0.0
3	BMS_Pmp_Sts[1]		R	1.0.0
4	BMS_Pmp_Sts[2]		R	1.0.0
5	BMS_Cmp_Sts[1]	Compressors Status: 0=N.A., 1=ON, 2=MTN, 3=OFF, 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED, 13=UNLOADING, 14=UNLOADED	R	1.0.0
6	BMS_Cmp_Sts[2]		R	1.0.0
8	BMS_Cmp_Sts[5]		R	1.0.0
9	BMS_Cmp_Sts[6]		R	1.0.0
11	RemOnOffState	Remote On/Off Status; 0=OFF, 1=ON	R	1.0.0
12	FlwSwtchState	Flow Switch Status; 0=OK, 1=Alarm	R	1.0.0
13	PwrMonitState	Power Monitoring Status; 0=OK, 1=Power Failure	R	1.0.0
16	Hmi.FansRevRot	Snow/Dirt Adiabatic Pad Cleaning Cycle: 0=Not Active,1=Active	R	1.0.0
17	Adi_Status	Adiabatic Status: 0 = Local Off, 1 = Working, 2 = Standby, 3 = Alarm Off, 4 = Alarm On, 6 = Antifreeze, 7 = Antilegionella, 8 = Drying, 9 = Manual mode, 11 = External Adb No Power, 12 = External Adb Alarm, 13 = Stopped by User	R	1.0.0
19	BmsOnOffCmd	Unit ON/OFF: 0=Stay, 1= Change status (toggle)	R/W	1.0.0
20	MuteBuzzerEn	Event Acknowledge; 0=Stay, 1=Aknowledge (toggle)	R/W	1.0.0
21	ManModeEn	Manual Mode Enabling via BMS: 0=No; 1=Yes	R/W	1.0.0
22	CmpStartState	Comp Start per Hour Status: 0=all available, 1=at least 1 reach limit, 2=all reach limit	R	1.0.0
23	UnitOpMode	Unit Operating Mode;0=Cooling,1=Heating	R	1.0.0
24	UsrDigInpState[1]	Digital User Input 1 Status: 0=Off, 1=Act	R	1.0.0
26	BmsSysOnOffCmd	System On/Off Toggle Command: 0=Stay, 1= Change status (toggle)	R/W	1.1.0
27	EmgModeActive	Emergency Mode Status: 0 = Not active, 1 = Active	R	1.1.0
40	Hmi.AtsState[1]	ATS 1 status: 0 = not installed, 1 = line 1, 2 = line 2, 3 = transition, 4 = communication error, 5 = alarm	R	1.0.0

IV	Variable	Description	Access	Version
41	Hmi.AtsState[2]	ATS 1 status: 0 = not installed, 1 = line 1, 2 = line 2, 3 = transition, 4 = communication error, 5 = alarm	R	1.0.0
42	BMS_Cmp_Sts[9]	Compressors Status: 0=N.A., 1=ON, 2=MTN, 3=OFF, 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED, 13=UNLOADING, 14=UNLOADED	R	1.1.0
45	BMS_Cmp_Sts[13]		R	1.1.0
48	FlwSwtch2State	Flow Switch 2 Status; 0=OK, 1=Alarm	R	1.1.0
49	EventsActive	General Alarm; 0=Off, 1=Act	R	1.1.7
50	gfBmsStopAdi	Stop Adiabatic from BMS; 1= forced stop	RW	1.2.0
51	gfBmsAdiEMDrain1	Enable Adiabatic Emergency Drain for Side 1; 1= activate drain	RW	1.2.0
52	gfBmsAdiEMDrain2	Enable Adiabatic Emergency Drain for Side 2; 1= activate drain	RW	1.2.0
53	gfBmsAStopFC	Stop or Inhibit FC activation; 1= stop or inhbit	RW	1.2.3
54	gfQuickStartBMS	BMS Quick Start Command; 1 = enable	RW	1.4.0
55	GasLeakDetector.GLD_SafetyStatus	GLD and A2L working status	R	1.4.0
56	BMS_FC_Vlvfbk_DI	FC Valve digital feedback	R	1.4.0
57	BMS_FC_BypassVlvfbk_DI	FC Baypass Valve digital feedback	R	1.4.0

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6 SNMP

6.1 OID TABLE

The following OID table is available under the Liebert LIEBERT_GP_REG.MIB MIB in position 32 of ProductSpecific|AcProducts.

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.1.0	BMS_UnitSts	Unit Status	0=Local On 2=Display Off 3=Remote Off 6=Manual 7=Alarm Off 8=Power Failure 9=Alarm On 10=Warning On 11=System Off 12=Standby 14=BMS Off	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.2.0	W_Reg_UserSetP	Current Temperature Setpoint	-10.0 / + 30.0°C	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.3.0	UnitInletTempVal	Unit Inlet Temperature	-40.0 / +110.0°C	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.4.0	EvapInletTempVal	Evaporator Inlet Temperature	-40.0 / +110.0°C	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.5.0	EvapOutletTempVal	Unit Outlet Temperature	-40.0 / +110.0°C	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.6.0	AmbAirTempVal	Ambient Temperature	-40.0 / +110.0°C	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.7.0	FC_Active	Status of Freecooling	0=Not Active, 1=Active	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.8.0	BMS_Pmp_Sts[0]	Evaporator Pump 1 Status	0=N.A., 1=ON, 2=Maintenance, 3=OFF,4=Alarm, 5=Starting, 6=Stopping	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.9.0	BMS_Pmp_Sts[1]	Evaporator Pump 2 Status		R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.10.0	BMS_Pmp_Sts[2]	FC Pump Status		R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.11.0	FC_Info.FC_VlvReq	Freecooling Valve Position Request	0.0 – 100.0%	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.12.0	FanSpeed[1]	Circuit 1 Fans Speed Request	0 – 100%	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.13.0	FanSpeed[2]	Circuit 2 Fans Speed Request	0 – 100%	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.15.0	BMS_Cmp_Sts[1]	Compressor 1 Circuit 1 Status	0=N.A., 1=ON, 2=MTN, 3=OFF, 4=ALARM, 10=STARTING, 11=LOADING, 12=LOADED 13=UNLOADING, 14=UNLOADED	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.16.0	BMS_Cmp_Sts[2]	Compressor 2 Circuit 1 Status		R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.18.0	BMS_Cmp_Sts[5]	Compressor 1 Circuit 2 Status		R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.19.0	BMS_Cmp_Sts[6]	Compressor 2 Circuit 2 Status		R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.21.0	HP_Circ1.Value	Condenser Pressure Circuit 1	-10.0 / +50.0 bar	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.22.0	LP_Circ1.Value	Evaporating Pressure Circuit 1	-10.0 / +50.0 bar	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.23.0	HP_Circ2.Value	Condenser Pressure Circuit 2	-10.0 / +50.0 bar	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.24.0	LP_Circ2.Value	Evaporating Pressure Circuit 2	-10.0 / +50.0 bar	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.25.0	BMS_WH_Pmp1	Working Hours Evaporator Pump 1	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.26.0	BMS_WH_Pmp2	Working Hours Evaporator Pump 2	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.27.0	BMS_WH_FC_Pmp	Working Hours FC Pump	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.28.0	BMS_WH_FanC1	Working Hours Fans Circuit 1	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.29.0	BMS_WH_FanC2	Working Hours Fans Circuit 2	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.31.0	BMS_WH_Cmp1C1	Working Hours Compressor 1 Circuit 1	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.32.0	BMS_WH_Cmp2C1	Working Hours Compressor 2 Circuit 1	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.34.0	BMS_WH_Cmp1C2	Working Hours Compressor 1 Circuit 2	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.35.0	BMS_WH_Cmp2C2	Working Hours Compressor 2 Circuit 2	0-32000 h	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.37.0	BMS_Starts_Cmp1C1	Starts Compressor 1 Circuit 1	0-32000	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.38.0	BMS_Starts_Cmp2C1	Starts Compressor 2 Circuit 1	0-32000	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.40.0	BMS_Starts_Cmp1C2	Starts Compressor 1 Circuit 2	0-32000	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.41.0	BMS_Starts_Cmp2C2	Starts Compressor 2 Circuit 2	0-32000	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.43.0	RemOnOffState	Remote On/Off Status	0=OFF, 1=ON	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.44.0	FlwSwtchState	Flow Switch Status	0=OK, 1=Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.45.0	PwrMonitState	Power Monitoring Status	0=OK, 1=Power Failure	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.48.0	DiffPress_PAD.Value	Delta Pressure Adiabatic PAD	0 – 2000 Pa	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.49.0	Hmi.UO_Adi_VTemp	Adiabatic Temperature after PAD	-40.0 / +110.0°C	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.50.0	Hmi.FansRevRot	Snow/Dirt Adiabatic Pad Cleaning Cycle	0=Not Active, 1=Active	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.51.0	Adi_Status	Adiabatic Status	0 = Local Off 1 = Working 2 = Standby 3 = Alarm On 6 = Antifreeze 7 = Antilegionella 8 = Drying 9 = Manual mode 11 = External Adb No Power 12 = External Adb Alarm 13 = Stopped by User	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.53.0	kWtot	Instant Power Consumption	0 – 999.9 kW	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.54.0	EnEff_RollEERF	Instant EER	0 – 999.9	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.55.0	EnEff_RollViPUEF	Instant PPUE	0 – 999.9	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.56.0	EnEff_RollWUEF	Instant WUE	0 – 999.9 l/kWh	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.57.0	WaterFlowFilt_m3h	Water Flow	0 – 300 m^3/h	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.58.0	CmpStartState	Comp Start per Hour Status	0=all available, 1=at least 1 reach limit, 2=all reach limit	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.59.0	TimeToNextCmpAvbl	Time to have next comp. available	0 – 3600 s	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.60.0	Pmp_CtrlInput	Water DP	0-10.0 bar	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.61.0	BypassVlvReq	Bypass valve position	0-100%	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.62.0	UnitOpMode	Unit Operating Mode	0=Cooling,1=Heating	R	1.2.4
.1.3.6.1.4.1.476.1.42.4.3.30.1.63.0	UsrDigInpState[1]	Digital User Input 1 Status	0=Off, 1=Act	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.64.0	UsrAnlgInpState[1]	Analog User Input 1 Value	0.0 - 100.0	R	1.2.2
.1.3.6.1.4.1.476.1.42.4.3.30.1.77.0	BMS_AdiTotWaterConsum	Adiabatic pump water consumption	0-3000 l/h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.84.0	AdiabaticWH	Adiabatic Working Hours	0-32000 h	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.85.0	EmgModeActive	Emergency Mode Status	0=OFF, 1=Act	R	1.2.4
.1.3.6.1.4.1.476.1.42.4.3.30.1.88.0	EnEff_TotalCapacityF	Total Capacity	0.0 – 2000.0 kW	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.89.0	EnEff_FCCapacityF	Freecooling Capacity	0.0 – 2000.0 kW	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.90.0	EnEff_MechCapacityF	Mechanical Capacity	0.0 – 2000.0 kW	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.109.0	Gvz1.Hz	Frequency Line 1 (ATS 1 or EM 1)	0.0 – 999.9 Hz	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.110.0	Gvz2.Hz	Frequency Line 2 (ATS 2 or EM 2)	0.0 – 999.9 Hz	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.111.0	Gvz1.VL1L2	Voltage L1-L2 (ATS 1 or EM 1)	0.0 – 999.9 V	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.112.0	Gvz1.VL2L3	Voltage L2-L3 (ATS 1 or EM 1)	0.0 – 999.9 V	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.113.0	Gvz1.VL3L1	Voltage L3-L1 (ATS 1 or EM 1)	0.0 – 999.9 V	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.114.0	Gvz2.VL1L2	Voltage L1-L2 (ATS 2 or EM 2)	0.0 – 999.9 V	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.115.0	Gvz2.VL2L3	Voltage L2-L3 (ATS 2 or EM 2)	0.0 – 999.9 V	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.116.0	Gvz2.VL3L1	Voltage L3-L1 (ATS 2 or EM 2)	0.0 – 999.9 V	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.117.0	Gvz1.AL1	Current L1 (ATS 1 or EM 1)	0.0 – 999.9 A	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.118.0	Gvz1.AL2	Current L2 (ATS 1 or EM 1)	0.0 – 999.9 A	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.119.0	Gvz1.AL3	Current L3 (ATS 1 or EM 1)	0.0 – 999.9 A	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.120.0	Gvz2.AL1	Current L1 (ATS 2 or EM 2)	0.0 – 999.9 A	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.121.0	Gvz2.AL2	Current L2 (ATS 2 or EM 2)	0.0 – 999.9 A	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.122.0	Gvz2.AL3	Current L3 (ATS 2 or EM 2)	0.0 – 999.9 A	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.123.0	Gvz1.kWtot	Total Power Consumption (ATS 1 or EM 1)	0.0 – 999.9 kW	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.124.0	Gvz2.kWtot	Total Power Consumption (ATS 2 or EM 2)	0.0 – 999.9 kW	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.125.0	Hmi.AtsState[1]	ATS 1 status	0 = not installed, 1 = line 1, 2 = line 2, 3 = transition, 4 = communication error, 5 = alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.126.0	Hmi.AtsState[2]	ATS 2 status	0 = not installed, 1 = line 1, 2 = line 2, 3 = transition, 4 = communication error, 5 = alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.127.0	FanSpeed[3]	Circuit 3 Fans Speed Request	0 – 100%	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.128.0	FanSpeed[4]	Circuit 4 Fans Speed Request	0 – 100%	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.129.0	BMS_Cmp_Sts[9]	Compressor 1 Circuit 3 Status	0=N.A.,1=ON, 2=MTN, 3=OFF, 4=ALARM, 10=STARTING, 11=LOADING,12=LOADED 13=UNLOADING,14=UNLOADED	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.132.0	BMS_Cmp_Sts[13]	Compressor 1 Circuit 4 Status		R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.135.0	HP_Circ3.Value	Condenser Pressure Circuit 3	-10.0 / +50.0 bar	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.136.0	LP_Circ3.Value	Evaporating Pressure Circuit 3	-10.0 / +50.0 bar	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.137.0	HP_Circ4.Value	Condenser Pressure Circuit 4	-10.0 / +50.0 bar	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.138.0	LP_Circ4.Value	Evaporating Pressure Circuit 4	-10.0 / +50.0 bar	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.139.0	BMS_WH_FanC3	Working Hours Fans Circuit 3	0-32000 h	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.140.0	BMS_WH_FanC4	Working Hours Fans Circuit 4	0-32000 h	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.141.0	BMS_WH_Cmp1C3	Working Hours Compressor 1 Circuit 3	0-32000 h	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.144.0	BMS_WH_Cmp1C4	Working Hours Compressor 1 Circuit 4	0-32000 h	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.147.0	BMS_Starts_Cmp1C3	Starts Compressor 1 Circuit 3	0-32000	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.150.0	BMS_Starts_Cmp1C4	Starts Compressor 1 Circuit 4	0-32000	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.153.0	FlwSwtch2State	Flow Switch 2 Status	0=OK, 1=Alarm	R	
.1.3.6.1.4.1.476.1.42.4.3.30.1.154.0	kWhtot	Total Kilo Watt Hour	0.0 – 999.9 kWh	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.155.0	VARtot	Total VAR Volt Ampere Reactive	0.0 – 999.9 VAR	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.156.0	VAtot	Total Volt Ampere	0.0 – 999.9 VA	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.157.0	EnEff_TotalCapacity24	Total Capacity 24 (FC + DX)	0.0 – 2000.0 kW	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.158.0	EnEff_CoolingCapacity24	Freecooling Capacity 24	0.0 – 2000.0 kW	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.159.0	EnEff_MechCapacity24	Mechanical Cooling Capacity 24	0.0 – 2000.0 kW	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.160.0	EnEff_RollEER24	EER – Energy Efficiency Ratio 24	0.0 - 999.9	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.161.0	EnEff_RollVirtualPUE24	Virtual Power Usage Efficiency – Virtual PUE 24	0.0 - 999.9	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.162.0	EnEff_RollWUE24	Water Usage Efficiency - WUE 24	0.0 - 999.9 l/kWh	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.1.164.0	EventsActive	General Alarm	0 : No events active	R	1.1.7

OID	Variable	Parameter Description	Range, Unit	Access	Version
			1: At least one event active		
.1.3.6.1.4.1.476.1.42.4.3.30.1.175.0	Hmi.UO_Pmp_Req[0]	Pump 1 Request	0 - 100 %	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.176.0	Hmi.UO_Pmp_Req[1]	Pump 2 Request	0 - 100 %	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.207.0	GLD_GasLevel	Refrigerant gas concentration ppm – Carel GLD. GLD type 1 or 2.	ppm	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.208.0	GLD_GasLevelLEL	Refrigerant gas concentration LEL/LFL % – Sensitron GLD. GLD type 3 or 4.	LEL/LFL	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.209.0	GasLeakDetector.GLD_ SafetyStatus	GLD and A2L working status	-	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.210.0	FreeCooling._FC_Pmp_ SpeedPerc	FC Pump speed % request	0 - 100 %	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.211.0	FreeCooling._FC_Pmp_ SpeedRpm	FC Pump speed feedback in rpm		R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.212.0	FCVlv.Value	FC valve % open request value	0 - 100 %	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.213.0	FC_BypassVlv.Value	FC Bypass valve % open request value	0 - 100 %	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.214.0	NG_LowP.Value_R	FC No Glycol Low Pressure - Probe value		R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.215.0	NG_HighP.Value_R	FC No Glycol High Pressure - Probe value		R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.216.0	FC_Valvefbk_AI.Value	FC Valve Analogue Feedback % value	0 - 100 %	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.217.0	BMS_FC_Vlvfbk_DI	FC Valve digital feedback		R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.218.0	BMS_FC_BypassVlvfbk_DI	FC Baypass Valve digital feedback		R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.219.0	BypassValve.Value	Bypass Valve Opening Command	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.220.0	MainValve.Value	Main Valve Opening Command	0 - 100 %	R	1.4.1

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.221.0	BypVlvFbk_0_100	Bypass Valve Opening Feedback	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.222.0	MainVlvFbk_0_100	Main Valve Opening Feedback	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.223.0	Hmi.BMS_Cmp_Cap_Per[1]	Circ 1 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.224.0	Hmi.BMS_Cmp_Cap_Per[2]	Circ 1 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.225.0	Hmi.BMS_Cmp_Cap_Per[3]	Circ 1 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.226.0	Hmi.BMS_Cmp_Cap_Per[4]	Circ 1 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.227.0	Hmi.BMS_Cmp_Cap_Per[5]	Circ 2 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.228.0	Hmi.BMS_Cmp_Cap_Per[6]	Circ 2 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.229.0	Hmi.BMS_Cmp_Cap_Per[7]	Circ 2 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.230.0	Hmi.BMS_Cmp_Cap_Per[8]	Circ 2 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.231.0	Hmi.BMS_Cmp_Cap_Per[9]	Circ 3 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.232.0	Hmi.BMS_Cmp_Cap_Per[10]	Circ 3 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.233.0	Hmi.BMS_Cmp_Cap_Per[11]	Circ 3 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.234.0	Hmi.BMS_Cmp_Cap_Per[12]	Circ 3 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.235.0	Hmi.BMS_Cmp_Cap_Per[13]	Circ 4 - Comp 1 Capacity percentage	0 - 100 %	R	1.4.1

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.236.0	Hmi.BMS_Cmp_Cap_Per[14]	Circ 4 - Comp 2 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.237.0	Hmi.BMS_Cmp_Cap_Per[15]	Circ 4 - Comp 3 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.238.0	Hmi.BMS_Cmp_Cap_Per[16]	Circ 4 - Comp 4 Capacity percentage	0 - 100 %	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.239.0	WPressMeter.Value	Evaporator Inlet Water pressure	-999.9 - 999.9 bar	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.240.0	WPressMeterOutlet.Value	Evaporator Outlet Water pressure	-999.9 - 999.9 bar	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.1.241.0	HarmFiltDataLine1.THDI1_Load	Supply Line 1 THDI Phase A Load	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.242.0	HarmFiltDataLine1.THDI2_Load	Supply Line 1 THDI Phase B Load	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.243.0	HarmFiltDataLine1.THDI3_Load	Supply Line 1 THDI Phase C Load	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.244.0	HarmFiltDataLine1.THDU1_Grid	Supply Line 1 THDU Phase A Grid	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.245.0	HarmFiltDataLine1.THDU2_Grid	Supply Line 1 THDU Phase B Grid	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.246.0	HarmFiltDataLine1.THDU3_Grid	Supply Line 1 THDU Phase C Grid	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.247.0	HarmFiltDataLine1.PF1_Grid	Supply Line 1 Power Factor Phase A Grid	0.00 - 1.00	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.248.0	HarmFiltDataLine1.PF2_Grid	Supply Line 1 Power Factor Phase B Grid	0.00 - 1.00	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.249.0	HarmFiltDataLine1.PF3_Grid	Supply Line 1 Power Factor Phase C Grid	0.00 - 1.00	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.250.0	HarmFiltDataLine2.THDI1_Load	Supply Line 2 THDI Phase A Load	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.251.0	HarmFiltDataLine2.THDI2_Load	Supply Line 2 THDI Phase B Load	0.0 - 100.0 %	R	1.5.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.1.252.0	HarmFiltDataLine2.THDI3_Load	Supply Line 2 THDI Phase C Load	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.253.0	HarmFiltDataLine2.THDU1_Grid	Supply Line 2 THDU Phase A Grid	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.254.0	HarmFiltDataLine2.THDU2_Grid	Supply Line 2 THDU Phase B Grid	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.255.0	HarmFiltDataLine2.THDU3_Grid	Supply Line 2 THDU Phase C Grid	0.0 - 100.0 %	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.256.0	HarmFiltDataLine2.PF1_Grid	Supply Line 2 Power Factor Phase A Grid	0.00 - 1.00	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.257.0	HarmFiltDataLine2.PF2_Grid	Supply Line 2 Power Factor Phase B Grid	0.00 - 1.00	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.1.258.0	HarmFiltDataLine2.PF3_Grid	Supply Line 2 Power Factor Phase C Grid	0.00 - 1.00	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.1.0	BmsOnOffCmd	Unit On/Off	Set 1 to change Status (Toggle)	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.2.0	AlrmResByBms	Event Reset	Set 9999 to Reset Events	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.3.0	Cfg_Reg_SetP	Temperature Setpoint 1	0.0 / 40.0°C	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.4.0	Cfg_Reg_SetP2	Temperature Setpoint 2	0.0 / 40.0°C	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.9.0	Cfg_WH_ThrshPmp1	Limit Working Hours Evaporator Pump 1	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.10.0	Cfg_WH_ThrshPmp2	Limit Working Hours Evaporator Pump 2	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.11.0	Cfg_WH_ThrshFC_Pmp	Limit Working Hours FC Pump	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.12.0	Cfg_WH_ThrshFanC1	Limit Working Hours Fans Circ.1	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.13.0	Cfg_WH_ThrshFanC2	Limit Working Hours Fans Circ.2	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.15.0	Cfg_WH_ThrshCmp1C1	Limit Working Hours Comp. 1 Circuit 1	0-32000 h	R/W	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.2.16.0	Cfg_WH_ThrshCmp2C1	Limit Working Hours Comp. 2 Circuit 1	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.18.0	Cfg_WH_ThrshCmp1C2	Limit Working Hours Comp. 1 Circuit 2	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.19.0	Cfg_WH_ThrshCmp2C2	Limit Working Hours Comp. 1 Circuit 2	0-32000 h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.21.0	MuteBuzzerEn	Event Acknowledge	0/1 Toggle	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.22.0	ManModeEn	Manual Mode Enabling via BMS	0=ON; 1=OFF	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.23.0	BMS_EvPmpFlwReq	Remote water flow request	10-250 m^3/h	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.24.0	Cfg_Pmp_DPsetP	DP Setpoint	0-10.0 bar	R/W	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.27.0	BmsSysOnOffCmd	System On/Off Toggle Command	Set 1 to change Status (Switch)	R/W	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.31.0	BmsEmgModeEn	Emergency Mode Activation Command	1= Emg mode activated	R/W	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.41.0	Cfg_WH_ThrshFanC3	Limit Working Hours Fans Circ.3	0-32000 h	R/W	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.42.0	Cfg_WH_ThrshFanC4	Limit Working Hours Fans Circ.4	0-32000 h	R/W	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.43.0	Cfg_WH_ThrshCmp1C3	Limit Working Hours Comp. 1 Circuit 3	0-32000 h	R/W	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.46.0	Cfg_WH_ThrshCmp1C4	Limit Working Hours Comp. 1 Circuit 4	0-32000 h	R/W	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.47.0	gfBmsStopAdi	Stop Adiabatic from BMS	1= forced stop	RW	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.48.0	gfBmsAdiEMDrain1	Enable Adiabatic Emergency Drain for Side 1	1= activate drain	RW	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.49.0	gfBmsAdiEMDrain2	Enable Adiabatic Emergency Drain for Side 2	1= activate drain	RW	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.2.50.0	gfBmsStopFC	Stop or Inhibit FC activation	1= stop or inhbit	RW	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.2.51.0	gfQuickStartBMS	Quick Start Activation	0=ON; 1=OFF	RW	1.4.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.2.52.0	Cfg_Tw_Setpoint	System Setpoint	5.0 / 30.0°C	RW	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.1.0	AlarmsData[1].Active	Display OFF	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.2.0	AlarmsData[2].Active	Unit ON	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.3.0	AlarmsData[3].Active	System OFF	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.4.0	AlarmsData[4].Active	System ON	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.5.0	AlarmsData[5].Active	Standby	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.6.0	AlarmsData[6].Active	Evaporator Pump 1 Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.7.0	AlarmsData[7].Active	Evaporator Pump 2 Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.8.0	AlarmsData[8].Active	Missing Primary Water Flow	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.9.0	AlarmsData[9].Active	Manual Mode Enabled	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.10.0	AlarmsData[10].Active	Evaporator Freeze protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.11.0	AlarmsData[11].Active	Unit Inlet Temperature Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.12.0	AlarmsData[12].Active	Evaporator Inlet Temperature Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.13.0	AlarmsData[13].Active	Unit Outlet Temperature Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.14.0	AlarmsData[14].Active	Adiabatic - Pad's pressure Sensor Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.15.0	AlarmsData[15].Active	Ambient Temperature Probe Failure	Alarm	R	1.00
.1.3.6.1.4.1.476.1.42.4.3.30.3.24.0	AlarmsData[24].Active	Fans Communication Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.25.0	AlarmsData[25].Active	Circuit 1 - Fans Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.26.0	AlarmsData[26].Active	Circuit 2 - Fans Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.27.0	AlarmsData[27].Active	Circuit 1 - Single Fan Failures	Warning	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.28.0	AlarmsData[28].Active	Circuit 2 - Single Fan Failures	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.29.0	AlarmsData[29].Active	Compressors Off by Low Ambient Temperature	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.30.0	AlarmsData[30].Active	Circuit 1 - Fans Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.31.0	AlarmsData[31].Active	Circuit 2 - Fans Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.32.0	AlarmsData[32].Active	Adiabatic - Low Pad Efficiency	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.34.0	AlarmsData[34].Active	Free Cooling Valve Feedback Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.35.0	AlarmsData[35].Active	Circuit 1 - High Condensing Pressure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.36.0	AlarmsData[36].Active	Circuit 1 - Low Evaporating Pressure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.37.0	AlarmsData[37].Active	Circuit 1 – Very Low Superheat	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.38.0	AlarmsData[38].Active	Circuit 1 - Compressor 1 Thermal Protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.39.0	AlarmsData[39].Active	Circuit 1 - Compressor 2 Thermal Protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.40.0	AlarmsData[40].Active	Circuit 1 - Compressor 3 Thermal Protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.41.0	AlarmsData[41].Active	Circuit 1 - Fans Override Enabled	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.42.0	AlarmsData[42].Active	Circuit 1 - Compressors Unload Enabled	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.43.0	AlarmsData[43].Active	Circuit 1 - Critical Condensing Pressure	Warning	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.46.0	AlarmsData[46].Active	Circuit 1 - Compressor 1 Contactors Glued	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.50.0	AlarmsData[50].Active	Circuit 1 - Condensing Pressure Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.51.0	AlarmsData[51].Active	Circuit 1 - Liquid Temperature Probe Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.52.0	AlarmsData[52].Active	Circuit 1 - Evaporating Pressure Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.53.0	AlarmsData[53].Active	Circuit 1 - Evaporating Temperature Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.55.0	AlarmsData[55].Active	Circuit 1 - High Superheat	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.56.0	AlarmsData[56].Active	Power failure	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.57.0	AlarmsData[57].Active	EEV Driver 1 - Communication Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.58.0	AlarmsData[58].Active	EEV Driver 1 - Valve Motor Error	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.59.0	AlarmsData[59].Active	Evaporator Pump 1 Communication Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.60.0	AlarmsData[60].Active	Evaporator Pump 2 Communication Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.61.0	AlarmsData[61].Active	Circuit 2 - High Condensing Pressure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.62.0	AlarmsData[62].Active	Circuit 2 - Low Evaporating Pressure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.63.0	AlarmsData[63].Active	Circuit 2 - Very Low Superheat	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.64.0	AlarmsData[64].Active	Circuit 2 - Compressor 1 Thermal Protection	Alarm	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.65.0	AlarmsData[65].Active	Circuit 2 - Compressor 2 Thermal Protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.66.0	AlarmsData[66].Active	Circuit 2 - Compressor 3 Thermal Protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.67.0	AlarmsData[67].Active	Circuit 2 - Fans Override Enabled	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.68.0	AlarmsData[68].Active	Circuit 2 - Compressors Unload Enabled	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.69.0	AlarmsData[69].Active	Circuit 2 - Critical Condensing Pressure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.72.0	AlarmsData[72].Active	Circuit 2 - Compressor 1 Contactors Glued	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.75.0	AlarmsData[75].Active	Unit freeze protection	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.76.0	AlarmsData[76].Active	Circuit 2 - Condensing Pressure Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.77.0	AlarmsData[77].Active	Circuit 2 - Liquid Temperature Probe Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.78.0	AlarmsData[78].Active	Circuit 2 - Evaporating Pressure Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.79.0	AlarmsData[79].Active	Circuit 2 - Evaporating Temperature Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.81.0	AlarmsData[81].Active	Circuit 2 - High Superheat	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.82.0	AlarmsData[82].Active	Power Failure line B	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.83.0	AlarmsData[83].Active	EEV Driver 2 - Communication Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.84.0	AlarmsData[84].Active	EEV Driver 2 - Valve Motor Error	Alarm	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.85.0	AlarmsData[85].Active	Evaporator Pump 1 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.86.0	AlarmsData[86].Active	Evaporator Pump 2 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.87.0	AlarmsData[87].Active	Adiabatic - Pad Clogging	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.88.0	AlarmsData[88].Active	Adiabatic - Critical Pad Clogging	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.89.0	AlarmsData[89].Active	Remove power from unit	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.90.0	AlarmsData[90].Active	User Analog Input 1 Failure	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.92.0	AlarmsData[92].Active	Energy Meter 1 Communication Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.94.0	AlarmsData[94].Active	Energy Meter 2 Communication Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.95.0	AlarmsData[95].Active	Circuit 1 - Compressor 1 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.96.0	AlarmsData[96].Active	Circuit 1 - Compressor 2 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.97.0	AlarmsData[97].Active	Circuit 1 - Compressor 3 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.98.0	AlarmsData[98].Active	Circuit 2 - Compressor 1 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.99.0	AlarmsData[99].Active	Circuit 2 - Compressor 2 Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.100.0	AlarmsData[100].Active	Circuit 2 - Compressor 3 Working Hours Limit Exceeded	Warning	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.101.0	AlarmsData[101].Active	Expansion Board Communication Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.102.0	AlarmsData[102].Active	Water Flow Meter Sensor Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.103.0	AlarmsData[103].Active	Remote off	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.104.0	AlarmsData[104].Active	Variable Water Flow Control Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.105.0	AlarmsData[105].Active	Low External Water Flow	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.107.0	AlarmsData[107].Active	Unstable External Water Flow	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.108.0	AlarmsData[108].Active	Low Evaporator Water Flow	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.109.0	AlarmsData[109].Active	High Evaporator Water Flow	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.110.0	AlarmsData[110].Active	Low Evaporator Water Flow	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.111.0	AlarmsData[111].Active	High Evaporator Water Flow	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.112.0	AlarmsData[112].Active	Circuit 1 - Low Refrigerant Charge Warning	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.113.0	AlarmsData[113].Active	Circuit 1 - Low Refrigerant Charge Alarm	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.114.0	AlarmsData[114].Active	Circuit 2 - Low Refrigerant Charge Warning	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.115.0	AlarmsData[115].Active	Circuit 2 - Low Refrigerant Charge Alarm	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.116.0	AlarmsData[116].Active	Circuit 1 - Compressors Out of Envelope	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.117.0	AlarmsData[117].Active	Circuit 2 - Compressors Out of envelope	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.126.0	AlarmsData[126].Active	Too Fast Water Flow Variation	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.127.0	AlarmsData[127].Active	Too Fast Water Flow Variation	Alarm	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.128.0	AlarmsData[128].Active	Circuit 1 - Compressor Oil Level Alarm	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.129.0	AlarmsData[129].Active	Circuit 2 - Compressor Oil Level Alarm	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.130.0	AlarmsData[130].Active	Auxiliary Power Failure	Alarm (*)	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.131.0	AlarmsData[131].Active	Circuit 1 - Compressors Off by Envelope Protection	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.132.0	AlarmsData[132].Active	Circuit 2 - Compressors Off by Envelope Protection	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.133.0	AlarmsData[133].Active	Circuit 1 - Compressors Unload Stop by Envelope Protection	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.134.0	AlarmsData[134].Active	Circuit 2 - Compressors Unload Stop by Envelope Protection	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.135.0	AlarmsData[135].Active	Circuit 1 - Compressors Out of Envelope (Level 2)	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.136.0	AlarmsData[136].Active	Circuit 2 - Compressors Out of Envelope (Level 2)	Message	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.137.0	AlarmsData[137].Active	Circuit 1 - Low Differential Pressure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.138.0	AlarmsData[138].Active	Circuit 2 - Low Differential Pressure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.140.0	AlarmsData[140].Active	Condenser Inlet Temperature Probe Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.141.0	AlarmsData[141].Active	Condenser Outlet Temperature Probe Failure	Alarm	R	1.0.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.142.0	AlarmsData[142].Active	Free Cooling Pump Working Hours Limit Exceeded	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.145.0	AlarmsData[145].Active	Free Cooling By-Pass Valve Feedback Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.148.0	AlarmsData[148].Active	Low Evaporator Water Pressure	Alarm (*)	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.149.0	AlarmsData[149].Active	Evaporator Water Pressure Sensors Failure	Warning	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.151.0	AlarmsData[151].Active	Evaporator ByPass Valve Feedback Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.152.0	AlarmsData[152].Active	Circuit 1 - Low Evaporating Temperature	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.153.0	AlarmsData[153].Active	Circuit 2 - Low Evaporating Temperature	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.156.0	AlarmsData[156].Active	Circuit 1 - Compressor Starts/h Limit Reached	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.157.0	AlarmsData[157].Active	Circuit 2 - Compressor Starts/h Limit Reached	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.158.0	AlarmsData[158].Active	Emergency Mode Active	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.159.0	AlarmsData[159].Active	CWM Communication Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.160.0	AlarmsData[160].Active	Missing Unit Configuration	Alarm (*)	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.163.0	AlarmsData[163].Active	Too Long Fans Off Time	Warning	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.170.0	AlarmsData[170].Active	Fans Anti-Freeze Protection	Warning	R	1.4.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.171.0	AlarmsData[171].Active	Circuit 1 - Compressor Inverter Communication Failure	Alarm	R	1.1.7

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.172.0	AlarmsData[172].Active	Circuit 2 - Compressor Inverter Communication Failure	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.173.0	AlarmsData[173].Active	Circuit 1 - Compressor Inverter Alarm	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.174.0	AlarmsData[174].Active	Circuit 2 - Compressor Inverter Alarm	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.175.0	AlarmsData[175].Active	EEV Driver 1 - Generic Alarm	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.176.0	AlarmsData[176].Active	EEV Driver 2 - Generic Alarm	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.177.0	AlarmsData[177].Active	Free Cooling Inlet Pressure Probe Failure	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.178.0	AlarmsData[178].Active	Free Cooling Outlet Pressure Probe Failure	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.179.0	AlarmsData[179].Active	Free Cooling Pump Alarm	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.180.0	AlarmsData[180].Active	Free Cooling Pump Communication Failure	Warning	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.182.0	AlarmsData[182].Active	iCOM Memory Error	Alarm (*)	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.183.0	AlarmsData[183].Active	Critical Refrigerant Leakage Detected	Alarm (**)	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.184.0	AlarmsData[184].Active	Refrigerant Leakage Detected	Warning	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.185.0	AlarmsData[185].Active	Gas Leak Detector Communication Failure	Warning (**)	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.186.0	AlarmsData[186].Active	Gas Leak Detector Sensor Calibration Required	Warning	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.187.0	AlarmsData[187].Active	Circuit 1 - Critical Refrigerant Depressurization	Alarm	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.188.0	AlarmsData[188].Active	Circuit 2 - Critical Refrigerant Depressurization	Alarm	R	1.1.7

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.189.0	AlarmsData[189].Active	ATS 1 Communication Failure	Warning	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.190.0	AlarmsData[190].Active	ATS 2 Communication Failure	Warning	R	1.1.7
.1.3.6.1.4.1.476.1.42.4.3.30.3.191.0	AlarmsData[191].Active	Freecooling Failure	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.192.0	AlarmsData[192].Active	Fans Rotation Error	Alarm	R	1.0.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.193.0	AlarmsData[193].Active	C3 and C4 Offline	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.194.0	AlarmsData[194].Active	Network Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.195.0	AlarmsData[195].Active	No Connection to Unit 1	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.196.0	AlarmsData[196].Active	Master Unit Changed	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.197.0	AlarmsData[197].Active	Master Unit not Available	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.198.0	AlarmsData[198].Active	Remote ByPass Valve A Feedback Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.199.0	AlarmsData[199].Active	Remote ByPass Valve B Feedback Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.201.0	AlarmsData[201].Active	Free Cooling Circuit – Glycol Leakage	Alarm	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.202.0	AlarmsData[202].Active	Free Cooling Circuit – High pressure	Alarm	R	1.1.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.203.0	AlarmsData[203].Active	Safety Fan Failure	Warning	R	1.2.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.204.0	AlarmsData[204].Active	Critical Safety Fan Failure	Alarm	R	1.2.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.205.0	AlarmsData[205].Active	Compressor Inverter 1 Not Available	Message	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.206.0	AlarmsData[206].Active	Compressor Inverter 2 Not Available	Message	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.207.0	AlarmsData[207].Active	Gas Leakage Detector Fault	Alarm (*)	R	1.3.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.208.0	AlarmsData[208].Active	Low Evaporator Water Pressure	Warning	R	1.2.4

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.209.0	AlarmsData[209].Active	Circuit 1 - Pump Down not finished	Warning	R	1.3.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.210.0	AlarmsData[210].Active	Circuit 2 - Pump Down not finished	Warning	R	1.3.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.275.0	AlarmsData[275].Active	Adiabatic Temperature Probe 1 Failure	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.276.0	AlarmsData[276].Active	Adiabatic Temperature Probe 2 Failure	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.277.0	AlarmsData[277].Active	Adiabatic Humidity Probe 1 Failure	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.278.0	AlarmsData[278].Active	Adiabatic Humidity Probe 2 Failure	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.279.0	AlarmsData[279].Active	Adiabatic Pump 1 Working Hours Limit	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.280.0	AlarmsData[280].Active	Adiabatic Pump 2 Working Hours Limit	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.281.0	AlarmsData[281].Active	Adiabatic Temperature Probes Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.282.0	AlarmsData[282].Active	Adiabatic Humidity Probes Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.283.0	AlarmsData[283].Active	Adiabatic Pump 1 Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.284.0	AlarmsData[284].Active	Adiabatic Pump 2 Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.285.0	AlarmsData[285].Active	Adiabatic Emergency Drain 1	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.286.0	AlarmsData[286].Active	Adiabatic Emergency Drain 2	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.287.0	AlarmsData[287].Active	Adiabatic Flow Meter 1 Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.288.0	AlarmsData[288].Active	Adiabatic Flow Meter 2 Failure	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.293.0	AlarmsData[293].Active	External Adiabatic Warning Side 1	Warning	R	1.2.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.294.0	AlarmsData[294].Active	External Adiabatic Warning Side 2	Warning	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.295.0	AlarmsData[295].Active	External Adiabatic Offline Side 1	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.296.0	AlarmsData[296].Active	External Adiabatic Offline Side 2	Alarm	R	1.2.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.297.0	AlarmsData[297].Active	Stop Adiabatic	Message	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.298.0	AlarmsData[298].Active	Stop Freecooling	Message	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.300.0	AlarmsData[300].Active	External Adiabatic Alarm Side 1	Alarm	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.301.0	AlarmsData[301].Active	External Adiabatic Alarm Side 2	Alarm	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.302.0	AlarmsData[302].Active	Interlock Valve Failure	Alarm	R	1.2.3
.1.3.6.1.4.1.476.1.42.4.3.30.3.305.0	AlarmsData[305].Active	Compressor Inverter 3 Not Available	Message	R	1.3.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.309.0	AlarmsData[309].Active	Circuit 3 - Pump Down not finished	Warning	R	1.3.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.349.0	AlarmsData[349].Active	Harmonic filter fault supply line 1	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.350.0	AlarmsData[350].Active	Harmonic filter fault supply line 2	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.351.0	AlarmsData[351].Active	Harmonic filter fault 1	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.352.0	AlarmsData[352].Active	Harmonic filter fault 2	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.353.0	AlarmsData[353].Active	Harmonic filter fault 3	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.354.0	AlarmsData[354].Active	Harmonic filter fault 4	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.355.0	AlarmsData[355].Active	Harmonic filter communication error 1	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.356.0	AlarmsData[356].Active	Harmonic filter communication error 2	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.357.0	AlarmsData[357].Active	Harmonic filter communication error 3	Warning	R	1.5.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.358.0	AlarmsData[358].Active	Harmonic filter communication error 4	Warning	R	1.5.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.361.0	AlarmsData[361].Active	Electrical cabinet cooling fault	Warning	R	1.5.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.362.0	AlarmsData[362].Active	Electrical cabinet NTC air temperature probe fault	Alarm	R	1.5.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.363.0	AlarmsData[363].Active	Electrical cabinet high air temperature	Warning	R	1.5.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.410.0	AlarmsData[410].Active	Evaporator 2 Freeze Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.411.0	AlarmsData[411].Active	Unit Inlet Temperature Probe 2 Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.412.0	AlarmsData[412].Active	Evaporator Inlet Temperature Probe 2 Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.413.0	AlarmsData[413].Active	Unit Outlet Temperature Probe 2 Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.415.0	AlarmsData[415].Active	Ambient Temperature Probe 2 Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.425.0	AlarmsData[425].Active	Circuit 3 - Fans Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.426.0	AlarmsData[426].Active	Circuit 4 - Fans Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.427.0	AlarmsData[427].Active	Circuit 3 - Single Fans Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.428.0	AlarmsData[428].Active	Circuit 4 - Single Fans Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.430.0	AlarmsData[430].Active	Circuit 3 - Fans Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.431.0	AlarmsData[431].Active	Circuit 4 - Fans Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.434.0	AlarmsData[434].Active	Free Cooling Valve 2 Feedback Failure	Warning	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.435.0	AlarmsData[435].Active	Circuit 3 - High Condensing Pressure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.436.0	AlarmsData[436].Active	Circuit 3 - Low Evaporating Pressure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.437.0	AlarmsData[437].Active	Circuit 3 - Very Low Superheat	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.438.0	AlarmsData[438].Active	Circuit 3 - Compressor 1 Thermal Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.439.0	AlarmsData[439].Active	Circuit 3 - Compressor 2 Thermal Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.440.0	AlarmsData[440].Active	Circuit 3 - Compressor 3 Thermal Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.441.0	AlarmsData[441].Active	Circuit 3 - Fans Override Enabled	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.442.0	AlarmsData[442].Active	Circuit 3 - Compressors Unload Enabled	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.443.0	AlarmsData[443].Active	Circuit 3 - Critical Condensing Pressure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.446.0	AlarmsData[446].Active	Circuit 3 - Compressor 1 Contactors Glued	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.450.0	AlarmsData[450].Active	Circuit 3 - Condensing Pressure Probe Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.451.0	AlarmsData[451].Active	Circuit 3 - Liquid Temperature Probe Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.452.0	AlarmsData[452].Active	Circuit 3 - Evaporating Pressure Probe Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.453.0	AlarmsData[453].Active	Circuit 3 - Evaporating Temperature Probe Failure	Alarm	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.455.0	AlarmsData[455].Active	Circuit 3 - High Superheat	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.457.0	AlarmsData[457].Active	EEV Driver 3 - Communication Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.458.0	AlarmsData[458].Active	EEV Driver 3 - Valve Motor Error	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.461.0	AlarmsData[461].Active	Circuit 4 - High Condensing Pressure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.462.0	AlarmsData[462].Active	Circuit 4 - Low Evaporating Pressure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.463.0	AlarmsData[463].Active	Circuit 4 - Very Low Superheat	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.464.0	AlarmsData[464].Active	Circuit 4 - Compressor 1 Thermal Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.465.0	AlarmsData[465].Active	Circuit 4 - Compressor 2 Thermal Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.466.0	AlarmsData[466].Active	Circuit 4 - Compressor 3 Thermal Protection	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.467.0	AlarmsData[467].Active	Circuit 4 - Fans Override Enabled	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.468.0	AlarmsData[468].Active	Circuit 4 - Compressors Unload Enabled	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.469.0	AlarmsData[469].Active	Circuit 4 - Critical Condensing Pressure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.472.0	AlarmsData[472].Active	Circuit 4 - Compressor 1 Contactors Glued	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.476.0	AlarmsData[476].Active	Circuit 4 - Condensing Pressure Probe Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.477.0	AlarmsData[477].Active	Circuit 4 - Liquid Temperature Probe Failure	Warning	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.478.0	AlarmsData[478].Active	Circuit 4 - Evaporating Pressure Probe Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.479.0	AlarmsData[479].Active	Circuit 4 - Evaporating Temperature Probe Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.481.0	AlarmsData[481].Active	Circuit 4 - High Superheat	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.483.0	AlarmsData[483].Active	EEV Driver 4 - Communication Failure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.484.0	AlarmsData[484].Active	EEV Driver 4 - Valve Motor Error	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.495.0	AlarmsData[495].Active	Circuit 3 - Compressor 1 Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.496.0	AlarmsData[496].Active	Circuit 3 - Compressor 2 Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.497.0	AlarmsData[497].Active	Circuit 3 - Compressor 3 Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.498.0	AlarmsData[498].Active	Circuit 4 - Compressor 1 Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.499.0	AlarmsData[499].Active	Circuit 4 - Compressor 2 Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.500.0	AlarmsData[500].Active	Circuit 4 - Compressor 3 Working Hours Limit Exceeded	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.502.0	AlarmsData[502].Active	Water Flow Meter Sensor 2 Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.512.0	AlarmsData[512].Active	Circuit 3 - Low Refrigerant Charge Warning	Warning	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.513.0	AlarmsData[513].Active	Circuit 3 - Low Refrigerant Charge Alarm	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.514.0	AlarmsData[514].Active	Circuit 4 - Low Refrigerant Charge Warning	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.515.0	AlarmsData[515].Active	Circuit 4 - Low Refrigerant Charge Alarm	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.516.0	AlarmsData[516].Active	Circuit 3 - Compressors Out of Envelope	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.517.0	AlarmsData[517].Active	Circuit 4 - Compressors Out of Envelope	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.528.0	AlarmsData[528].Active	Circuit 3 - Compressor Oil Level Alarm	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.529.0	AlarmsData[529].Active	Circuit 4 - Compressor Oil Level Alarm	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.531.0	AlarmsData[531].Active	Circuit 3 - Compressors Off by Envelope Protection	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.532.0	AlarmsData[532].Active	Circuit 4 - Compressors Off by Envelope Protection	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.533.0	AlarmsData[533].Active	Circuit 3 - Compressors Unload Stop by Envelope Protection	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.534.0	AlarmsData[534].Active	Circuit 4 - Compressors Unload Stop by Envelope Protection	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.535.0	AlarmsData[535].Active	Circuit 3 - Compressors Out of Envelope (Level 2)	Message	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.536.0	AlarmsData[536].Active	Circuit 4 - Compressors Out of Envelope (Level 2)	Message	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.537.0	AlarmsData[537].Active	Circuit 3 - Low Differential Pressure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.538.0	AlarmsData[538].Active	Circuit 4 - Low Differential Pressure	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.545.0	AlarmsData[545].Active	Free Cooling By-Pass Valve 2 Feedback Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.549.0	AlarmsData[549].Active	Evaporator Water Pressure Sensors 2 Failure	Warning	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.552.0	AlarmsData[552].Active	Circuit 3 - Low Evaporating Temperature	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.553.0	AlarmsData[553].Active	Circuit 4 - Low Evaporating Temperature	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.556.0	AlarmsData[556].Active	Circuit 3 - Compressor Starts/h Limit Reached	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.557.0	AlarmsData[557].Active	Circuit 4 - Compressor Starts/h Limit Reached	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.571.0	AlarmsData[571].Active	Circuit 3 - Compressor Inverter Comm. Fail	Alarm	R	1.3.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.573.0	AlarmsData[573].Active	Circuit 3 - Compressor Inverter Alarm	Alarm	R	1.3.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.575.0	AlarmsData[575].Active	EEV Driver 3 - Generic Alarm	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.576.0	AlarmsData[576].Active	EEV Driver 4 - Generic Alarm	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.587.0	AlarmsData[587].Active	Circuit 3 - Critical Refrigerant Depressurization	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.588.0	AlarmsData[588].Active	Circuit 4 - Critical Refrigerant Depressurization	Alarm	R	1.1.0
.1.3.6.1.4.1.476.1.42.4.3.30.3.591.0	AlarmsData[591].Active	Freecooling Failure 2	Alarm	R	1.1.0

OID	Variable	Parameter Description	Range, Unit	Access	Version
.1.3.6.1.4.1.476.1.42.4.3.30.3.593.0	AlarmsData[593].Active	Bypass valve feedback missing or fault or alarm	Alarm	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.594.0	AlarmsData[594].Active	Main valve feedback missing or fault or alarm	Alarm	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.595.0	AlarmsData[595].Active	Bypass valve command and feedback mismatch	Warning	R	1.4.1
.1.3.6.1.4.1.476.1.42.4.3.30.3.596.0	AlarmsData[596].Active	Main valve command and feedback mismatch	Warning	R	1.4.1

6.2 Traps

(*) This alarm shuts down the unit.

(**) This alarm might shut down the unit depending on the specific configuration.

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.6.0	Evap. Pump 1 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.7.0	Evaporator Pump 2 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.8.0	Missing Primary Water Flow	Alarm (*)
1.3.6.1.4.1.476.1.42.4.3.30.3.10.0	Evaporator Freeze protection	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.11.0	Unit Inlet Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.12.0	Evap. Inlet Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.13.0	Unit Outlet Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.14.0	Adia. - Pad's DP Sensor Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.15.0	Ambient Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.24.0	Fans Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.25.0	C1 - Fans Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.26.0	C2 - Fans Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.27.0	C1 - Single Fan Fails	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.28.0	C2 - Single Fan Fails	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.30.0	C1 - Fans Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.31.0	C2 - Fans Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.32.0	Adiabatic - Low Pad Efficiency	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.34.0	FC Valve Feedback Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.35.0	C1 - High Condensing Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.36.0	C1 - Low Evaporating Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.37.0	C1 – Very Low Superheat	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.38.0	C1 - Comp. 1 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.39.0	C1 - Comp. 2 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.40.0	C1 - Comp. 3 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.41.0	C1 - Fans Override Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.42.0	C1 - Comp.s Unload Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.43.0	C1 - Critical Conden. Press.	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.46.0	C1 - Comp. 1 Contactors Glued	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.50.0	C1 - Conden. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.51.0	C1 - Liquid Temp. Probe Fail	Warning

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.52.0	C1 - Evap. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.53.0	C1 - Evap. Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.55.0	C1 - High Superheat	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.57.0	EEV Driver 1 - Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.58.0	EEV Driver 1 - Valve Motor Err	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.59.0	Evaporator Pump 1 Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.60.0	Evaporator Pump 2 Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.61.0	C2 - High Condensing Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.62.0	C2 - Low Evaporating Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.63.0	C2 - Very Low Superheat	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.64.0	C2 - Comp. 1 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.65.0	C2 - Comp. 2 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.66.0	C2 - Comp. 3 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.67.0	C2 - Fans Override Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.68.0	C2 - Comp.s Unload Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.69.0	C2 - Critical Conden. Press.	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.72.0	C2 - Comp. 1 Contactors Glued	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.75.0	Unit freeze protection	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.76.0	C2 - Conden. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.77.0	C2 - Liquid Temp. Probe Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.78.0	C2 - Evap. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.79.0	C2 - Evap. Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.81.0	C2 - High Superheat	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.83.0	EEV Driver 2 - Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.84.0	EEV Driver 2 - Valve Motor Err	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.85.0	Evap. Pump 1 Wk Hrs Lim. Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.86.0	Evap. Pump 2 Wk Hrs Lim. Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.87.0	Adiabatic - Pad Clogging	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.88.0	Adia. - Critical Pad Clogging	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.90.0	User Analog Input 1 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.92.0	Energy Meter 1 Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.94.0	Energy Meter 2 Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.95.0	C1 - Comp. 1 Wk Hrs Limit Exc	Warning

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.96.0	C1 - Comp. 2 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.97.0	C1 - Comp. 3 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.98.0	C2 - Comp. 1 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.99.0	C2 - Comp. 2 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.100.0	C2 - Comp. 3 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.101.0	Expansion Board Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.102.0	Water Flow Meter Sensor Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.104.0	Var. Water Flow Control Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.105.0	Low External Water Flow	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.107.0	Unstable External Water Flow	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.108.0	Low Evaporator Water Flow	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.109.0	High Evaporator Water Flow	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.110.0	Low Evaporator Water Flow	Alarm (**)
1.3.6.1.4.1.476.1.42.4.3.30.3.111.0	High Evaporator Water Flow	Alarm (**)
1.3.6.1.4.1.476.1.42.4.3.30.3.112.0	C1 - Low Refr. Charge Warning	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.113.0	C1 - Low Refr. Charge Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.114.0	C2 - Low Refr. Charge Warning	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.115.0	C2 - Low Refr. Charge Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.116.0	C1 - Comp.s Out of Envelope	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.117.0	C2 - Comp.s Out of envelope	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.126.0	Too Fast Water Flow Variation	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.127.0	Too Fast Water Flow Variation	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.128.0	C1 - Comp. Oil Level Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.129.0	C2 - Comp. Oil Level Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.130.0	Auxiliary Power Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.137.0	C1 - Low Differential Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.138.0	C2 - Low Differential Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.140.0	Cond. Inlet Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.141.0	Cond. Outlet Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.142.0	FC Pump Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.145.0	FC By-Pass Valve Feedback Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.148.0	Low Evaporator Water Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.149.0	Evap. Water Press. Sens. Fail	Warning

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.151.0	Evap. ByPass Valve Feed. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.152.0	C1 - Low Evaporating Temp.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.153.0	C2 - Low Evaporating Temp.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.156.0	C1 - Comp. Starts/h Lim. Reach	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.157.0	C2 - Comp. Starts/h Lim. Reach	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.159.0	CWM Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.160.0	Missing Unit Configuration	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.163.0	Too Long Fans Off Time	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.170.0	Fans Anti-Freeze Protection	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.171.0	C1 - Comp. Inverter Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.172.0	C2 - Comp. Inverter Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.173.0	C1 - Comp. Inverter Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.174.0	C2 - Comp. Inverter Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.175.0	EEV Driver 1 - Generic Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.176.0	EEV Driver 2 - Generic Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.177.0	FC Inlet Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.178.0	FC Outlet Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.179.0	FC Pump Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.180.0	FC Pump Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.182.0	iCOM Memory Error	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.183.0	Critical Refr. Leak Detected	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.184.0	Refrigerant Leak Detected	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.185.0	Gas Leak Detector Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.186.0	Gas Leak Det. Sens. Calib. Req	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.187.0	C1 - Critical Refr. Depress.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.188.0	C2 - Critical Refr. Depress.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.189.0	ATS 1 Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.190.0	ATS 2 Comm. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.191.0	Freecooling Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.192.0	Fans Rotation Error	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.193.0	C3 and C4 Offline	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.194.0	Network Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.195.0	No Connection to Unit 1	Warning

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.197.0	Master Unit not Available	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.198.0	Remote ByPass Valve A Fbk Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.199.0	Remote ByPass Valve B Fbk Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.201.0	FC Circuit – Glycol Leak	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.202.0	FC Circuit – High Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.203.0	Safety Fan Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.204.0	Critical Safety Fan Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.207.0	Gas Leak Detector Fault	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.208.0	Low Evaporator Water Press.	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.209.0	C1 - Pump Down not finished	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.210.0	C2 - Pump Down not finished	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.275.0	Adiabatic Temp. Probe 1 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.276.0	Adiabatic Temp. Probe 2 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.277.0	Adia. Humidity Probe 1 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.278.0	Adia. Humidity Probe 2 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.279.0	Adiabatic Pump 1 Wk Hrs Limit	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.280.0	Adiabatic Pump 2 Wk Hrs Limit	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.281.0	Adiabatic Temp. Probes Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.282.0	Adiabatic Humidity Probes Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.283.0	Adiabatic Pump 1 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.284.0	Adiabatic Pump 2 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.285.0	Adiabatic Emergency Drain 1	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.286.0	Adiabatic Emergency Drain 2	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.287.0	Adiabatic Flow Meter 1 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.288.0	Adiabatic Flow Meter 2 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.293.0	Ext. Adia. Warning Side 1	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.294.0	Ext. Adia. Warning Side 2	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.295.0	Ext. Adia. Offline Side 1	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.296.0	Ext. Adia. Offline Side 2	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.300.0	Ext. Adia. Alarm Side 1	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.301.0	Ext. Adia. Alarm Side 2	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.302.0	Interlock Valve Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.305.0	Compressor Inverter 3 Not Available	Message

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.309.0	C3 - Pump Down not finished	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.349.0	Harmonic filter fault supply line 1	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.350.0	Harmonic filter fault supply line 2	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.351.0	Harmonic filter fault 1	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.352.0	Harmonic filter fault 2	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.353.0	Harmonic filter fault 3	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.354.0	Harmonic filter fault 4	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.355.0	Harmonic filter communication error 1	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.356.0	Harmonic filter communication error 2	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.357.0	Harmonic filter communication error 3	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.358.0	Harmonic filter communication error 4	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.361.0	Electrical cabinet cooling fault	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.362.0	Electrical cabinet NTC air temperature probe fault	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.363.0	Electrical cabinet high air temperature	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.410.0	Evaporator 2 Freeze Protection	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.411.0	Unit Inlet Temp. Probe 2 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.412.0	Evap. Inlet Temp. Probe 2 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.413.0	Unit Outlet Temp. Probe 2 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.415.0	Ambient Temp. Probe 2 Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.425.0	C3 - Fans Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.426.0	C4 - Fans Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.427.0	C3 - Single Fans Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.428.0	C4 - Single Fans Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.430.0	C3 - Fans Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.431.0	C4 - Fans Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.434.0	FC Valve 2 Feedback Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.435.0	C3 - High Condensing Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.436.0	C3 - Low Evaporating Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.437.0	C3 - Very Low Superheat	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.438.0	C3 - Comp. 1 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.439.0	C3 - Comp. 2 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.440.0	C3 - Comp. 3 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.441.0	C3 - Fans Override Enabled	Warning

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.442.0	C3 - Comp.s Unload Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.443.0	C3 - Critical Conden. Press.	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.446.0	C3 - Comp. 1 Contactors Glued	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.450.0	C3 - Conden. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.451.0	C3 - Liquid Temp. Probe Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.452.0	C3 - Evap. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.453.0	C3 - Evap. Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.455.0	C3 - High Superheat	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.457.0	EEV Driver 3 - Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.458.0	EEV Driver 3 - Valve Motor Err	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.461.0	C4 - High Condensing Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.462.0	C4 - Low Evaporating Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.463.0	C4 - Very Low Superheat	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.464.0	C4 - Comp. 1 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.465.0	C4 - Comp. 2 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.466.0	C4 - Comp. 3 Thrm Prot.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.467.0	C4 - Fans Override Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.468.0	C4 - Comp.s Unload Enabled	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.469.0	C4 - Critical Conden. Press.	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.472.0	C4 - Comp. 1 Contactors Glued	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.476.0	C4 - Conden. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.477.0	C4 - Liquid Temp. Probe Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.478.0	C4 - Evap. Press. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.479.0	C4 - Evap. Temp. Probe Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.481.0	C4 - High Superheat	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.483.0	EEV Driver 4 - Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.484.0	EEV Driver 4 - Valve Motor Err	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.495.0	C3 - Comp. 1 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.496.0	C3 - Comp. 2 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.497.0	C3 - Comp. 3 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.498.0	C4 - Comp. 1 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.499.0	C4 - Comp. 2 Wk Hrs Limit Exc	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.500.0	C4 - Comp. 3 Wk Hrs Limit Exc	Warning

OID	Description	Type
1.3.6.1.4.1.476.1.42.4.3.30.3.502.0	Water Flow Meter Sensor 2 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.512.0	C3 - Low Refr. Charge Warning	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.513.0	C3 - Low Refr. Charge Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.514.0	C4 - Low Refr. Charge Warning	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.515.0	C4 - Low Refr. Charge Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.516.0	C3 - Comp.s Out of Envelope	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.517.0	C4 - Comp.s Out of Envelope	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.528.0	C3 - Comp. Oil Level Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.529.0	C4 - Comp. Oil Level Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.537.0	C3 - Low Differential Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.538.0	C4 - Low Differential Press.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.545.0	FC By-Pass Valve 2 Feed. Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.549.0	Evap. Water Press. Sens 2 Fail	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.552.0	C3 - Low Evaporating Temp.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.553.0	C4 - Low Evaporating Temp.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.556.0	C3 - Comp. Starts/h Lim. Reach	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.557.0	C4 - Comp. Starts/h Lim. Reach	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.571.0	C3 - Compressor Inverter Comm. Fail	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.573.0	C3 - Compressor Inverter Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.575.0	EEV Driver 3 - Generic Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.576.0	EEV Driver 4 - Generic Alarm	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.587.0	C3 - Critical Refr. Depress.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.588.0	C4 - Critical Refr. Depress.	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.591.0	Freecooling Fail 2	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.593.0	Bypass valve feedback missing	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.594.0	Main valve feedback missing	Alarm
1.3.6.1.4.1.476.1.42.4.3.30.3.595.0	Bypass valve command mismatch	Warning
1.3.6.1.4.1.476.1.42.4.3.30.3.596.0	Main valve command mismatch	Warning

7 FAQs

The aim of this section is to collect a list of possible questions/issues directed primarily to the Vertiv Service Technical Support Team.

7.1 General FAQs

Question/Issue	Solution
Are the three monitoring protocols available simultaneously?	Yes they are.

7.2 Modbus Related FAQs

Question/Issue	Solution
Is Multi-Master supported?	Yes, it is.
Is serial connection RS485 available?	Not directly, but it is possible to connect an ETH/RS485 modbus converter like Moxa MGate 3180 (code 276989).

7.3 SNMP Related FAQs

Question/Issue	Solution
Is SNMP compatible with v1?	Yes, it is.
Is SNMP v3 available?	Yes, and parameters can be setup in the System web page, SNMP Agent V3 section.
Is there an MIB available?	Yes, it comes bundled with the documentation.

7.4 BACnet Related FAQs

Question/Issue	Solution
Does the monitoring port feature the official BACnet certification?	Not yet BTL certified, but the process is ongoing

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Appendices

Appendix A: Technical Support and Contacts

A.1 Technical Support/Service in the United States

Vertiv Group Corporation

24x7 dispatch of technicians for all products.

1-800-543-2378

Liebert® Thermal Management Products

1-800-543-2778

Liebert® Channel Products

1-800-222-5877

Liebert® AC and DC Power Products

1-800-543-2378

A.2 Locations

United States

Vertiv Headquarters

505 N Cleveland Ave

Westerville, OH, 43082, USA

Europe

Via Leonardo Da Vinci 8 Zona Industriale Tognana

35028 Piove Di Sacco (PD) Italy

Asia

7/F, Dah Sing Financial Centre

3108 Gloucester Road, Wanchai

Hong Kong

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