APPENDIX B — CCN TABLES STATUS DISPLAY TABLES

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--|--|---|---|--------------|
| CIRCA_AN | Percent Total Capacity Discharge Pressure Suction Pressure Crank Heater Current Cp1 Crank Heater Current Cp2 Crank Heater Current Cp3 Crank Heater Current Cp4 Motor Thermistor Comp 1 Motor Thermistor Comp 2 Motor Thermistor Comp 3 Motor Thermistor Comp 4 Saturated Condensing Tmp Saturated Suction Temp Suction Gas Temperature Suction Superheat Temp EXV Position Head Press Actuator Pos | 0 - 100 nnn.n nnn.n nnn.n nnn.n nnn.n nnn.n nnnn nnnn nnnn tnnn tnnn tnnnn tnnnn tnnnn tnnnn tnnnn tnnnn tnnn.n tnnn.n tnnn.n tnnn.n tnnn.n tnnn.n tnnn.n | % PSI PSI AMPS AMPS AMPS AMPS OHMS OHMS OHMS OHMS *F *F *F %F % % | CAPA_T DP_A SP_A cpa1_cur cpa2_cur cpa3_cur cpa4_cur cpa3_tmp cpa3_tmp cpa4_tmp SCT_A SST_A SUCT_T_A SH_A EXV_A hd_pos_a | |
| CIRCA_D | Compressor 1 Output Compressor 2 Output Compressor 3 Output Compressor 4 Output Compressor 1 Heater Out Compressor 2 Heater Out Compressor 3 Heater Out Compressor 4 Heater Out Compressor 4 Heater Out Hot Gas Bypass Output | On/Off On/Off On/Off On/Off On/Off On/Off On/Off On/Off | | CP_A1 CP_A2 CP_A3 CP_A4 cp_a1_ht cp_a2_ht cp_a3_ht cp_a4_ht HGBP_V_A | |
| | Fan Output DO # 1 Fan Output DO # 2 Fan Output DO # 3 Fan Output DO # 4 Fan Output DO # 5 Fan Output DO # 6 Fan Staging Number | On/Off On/Off On/Off On/Off On/Off On/Off 0-6 | | fan_a1 fan_a2 fan_a3 fan_a4 fan_a5 fan_a6 FAN_ST_A | |
| | 4 Way Refrigerant Valve | On/Off | | RV_A | <u> </u> |
| CIRCB_AN | Percent Total Capacity Discharge Pressure Suction Pressure Crank Heater Current Cp1 Crank Heater Current Cp2 Crank Heater Current Cp3 Crank Heater Current Cp4 Motor Thermistor Comp 1 Motor Thermistor Comp 2 Motor Thermistor Comp 3 Motor Thermistor Comp 4 Saturated Condensing Tmp Saturated Suction Temp Suction Gas Temperature Suction Superheat Temp EXV Position Head Press Actuator Pos | 0 - 100 nnn.n nnn.n nnn.n nnn.n nnn.n nnn.n nnnn nnnn nnnn tnnn tnnn tnnnn tnnn tnnn tnnnn | % PSI PSI AMPS AMPS AMPS OHMS OHMS OHMS OHMS *F *F *F % % | CAPB_T DP_B SP_B cpb1_cur cpb2_cur cpb3_cur cpb4_cur cpb1_tmp cpb2_tmp cpb3_tmp cpb4_tmp SCT_B SST_B SUCT_T_B SH_B EXV_B hd_pos_b | |
| CIRCB_D | Compressor 1 Output Compressor 2 Output Compressor 3 Output Compressor 4 Output Compressor 1 Heater Out Compressor 2 Heater Out Compressor 3 Heater Out Compressor 4 Heater Out Hot Gas Bypass Output | On/Off On/Off On/Off On/Off On/Off On/Off On/Off On/Off | | CP_B1 CP_B2 CP_B3 CP_B4 cp_b1_ht cp_b2_ht cp_b3_ht cp_b4_ht HGBP_V_B | |
| | Fan Output DO # 1 Fan Output DO # 2 Fan Output DO # 3 Fan Output DO # 4 Fan Output DO # 5 Fan Output DO # 6 Fan Staging Number | On/Off On/Off On/Off On/Off On/Off On/Off 0-6 | | fan_b1 fan_b2 fan_b3 fan_b4 fan_b5 fan_b6 FAN_ST_B | |
| | 4 Way Refrigerant Valve | On/Off | | RV_B | <u> </u> |

STATUS DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--|------------------|--------------|-----------------------|--------------|
| CIRCC_AN | | • | • | • | |
| | Percent Total Capacity | 0-100 | % | CAPC_T | |
| | Discharge Pressure | nnn.n | PSI | DP_C | |
| | Suction Pressure Crank Heater Current Cp1 | nnn.n nnn.n | PSI AMPS | SP_C cpc1_cur | |
| | Crank Heater Current Cp2 | nnn.n | AMPS | cpc2 cur | |
| | Crank Heater Current Cp3 | nnn.n | AMPS | cpc3_cur | |
| | Crank Heater Current Cp4 | nnn.n | AMPS | cpc4_cur | |
| | Motor Thermistor Comp 1 | nnnn | OHMS | cpc1_tmp | |
| | Motor Thermistor Comp 2 | nnnn | OHMS OHMS | cpc2_tmp | |
| | Motor Thermistor Comp 3 Motor Thermistor Comp 4 | nnnn nnnn | OHMS | cpc3_tmp cpc4_tmp | |
| | Saturated Condensing Tmp | ±nnn.n | °F | SCT_C | |
| | Saturated Suction Temp | ±nnn.n | °F °F | SST_C | |
| | Suction Gas Temperature | ±nnn.n | °F ^F | SUCT_T_C | |
| | Suction Superheat Temp | ±nnn.n | \^F | SH_C | |
| | EXV Position Head Press Actuator Pos | 0-100 0-100 | % | EXV_C hd_pos_c | |
| CIRCC_D | Tlead Fless Actuator Fos | 0-100 | /0 | ITIU_POS_C | |
| מ_סטחוס | Compressor 1 Output | I On/Off | 1 | CP_C1 | I |
| | Compressor 2 Output | On/Off | | CP_C2 | |
| | Compressor 3 Output | On/Off | | CP_C3 | |
| | Compressor 4 Output | On/Off | | CP_C4 | |
| | Compressor 1 Heater Out Compressor 2 Heater Out | On/Off On/Off | | cp_c1_ht cp_c2_ht | |
| | Compressor 3 Heater Out | On/Off | | cp_c2_fit cp_c3_ht | |
| | Compressor 4 Heater Out | On/Off | | cp_co_nt | |
| | Hot Gas Bypass Output | On/Off | | HGBP_V_C | |
| | | | | | |
| | Fan Output DO # 1 | On/Off On/Off | | fan_c1 | |
| | Fan Output DO # 2 Fan Output DO # 3 | On/Off | | fan_c2 fan_c3 | |
| | Fan Output DO # 4 | On/Off | | fan c4 | |
| | Fan Output DO # 5 | On/Off | | fan_c5 | |
| | Fan Output DO # 6 | On/Off | | fan_c6 | |
| | Fan Staging Number | 0-6 | | FAN_ST_C | |
| FANHOURS | FAN Operating Hours Circuit A Fan #1 Hours | Lnnnnn | Ihours | hr fana1 | |
| | Circuit A Fan #1 Hours | nnnnn | hours | hr fana2 | |
| | Circuit A Fan #3 Hours | nnnnn | hours | hr fana3 | |
| | Circuit A Fan #4 Hours | nnnnn | hours | hr_fana4 | |
| | Circuit A Fan #5 Hours | nnnnn | hours | hr_fana5 | |
| | Circuit A Fan #6 Hours | nnnnn | hours | hr_fana6 | |
| | Circuit B Fan #1 Hours | nnnnn | hours | hr_fanb1 | |
| | Circuit B Fan #2 Hours Circuit B Fan #3 Hours | nnnnn nnnnn | hours | hr_fanb2 hr_fanb3 | |
| | Circuit B Fan #4 Hours | nnnnn | hours | hr fanb4 | |
| | Circuit B Fan #5 Hours | nnnnn | hours | hr_fanb5 | |
| | Circuit B Fan #6 Hours | nnnnn | hours | hr_fanb6 | |
| | Circuit C Fan #1 Hours | nnnnn | hours | hr_fanc1 | |
| | Circuit C Fan #2 Hours | nnnnn | hours | hr_fanc2 | |
| | Circuit C Fan #3 Hours Circuit C Fan #4 Hours | nnnnn | hours | hr_fanc3 hr_fanc4 | |
| | Circuit C Fan #4 Hours | nnnnn nnnnn | hours | hr_fanc5 | |
| | Circuit C Fan #6 Hours | nnnnn | hours | hr_fanc6 | |
| | WATER PUMPS | • | • | • | |
| | Water Pump #1 Hours | nnnnn | hours | hr_cpum1 | |
| | Water Pump #2 Hours | nnnnn | hours | hr_cpum2 | |
| | Heat Reclaim Pump Hours | nnnnn | hours | hr_hpump | |
| | FREE COOLING PUMPS Circuit A Pump Hours | nnnnn | hours | hr_fcp_a | |
| | Circuit B Pump Hours | nnnnn | hours | hr_fcp_b | |
| | Circuit C Pump Hours | nnnnn | hours | hr_fcp_c | |
| | 1 - 1 - 1 - 1 - p - 1 - 1 - 1 | 1 | 1 | 1 - 1F-1 | |

STATUS DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|----------------------------|--------|-------|------------|--------------|
| FREECOOL | GENERAL PARAMETER | | | | |
| | Free Cooling Disable? | Yes/No | | FC_SW | |
| | LWT-OAT Delta | nnn.n | ^F | fc_delta | |
| | Current Cooling Power | nnn | KW | cool_pwr | |
| | Estimated FreeCool Power | nnn | KW | fc_pwr | |
| | Next session allowed in | nn | min | fc_next | |
| | Cooling/FreeCool Timeout | nn | min | fc_tmout | |
| | Free Cool Conditions OK? | Yes/No | | fc_ready | |
| | Free Cool Request ? | Yes/No | | fc_reqst | |
| | Valve Actuator Heaters ? | On/Off | | FC_HTR | |
| | CIRCUIT A | | | | |
| | Free Cooling Active | Yes/No | | fc_on_a | |
| | Fan Staging Number | 1-6 | | FAN_ST_A | |
| | 3 Way Valve Position | nnn | % | fc_vlv_a | |
| | 3 Way Valve Status | text* | | FC_VLV_A | |
| | Refrigerant Pump Out | On/Off | | fc_pmp_a | |
| | Pump Inlet Pressure | nnn | PSI | fc_inp_a | |
| | Pump Outlet Pressure | nnn | PSI | fc_oup_a | |
| | Pump Differential Pressure | nnn | PSI | fc_dp_a | |
| | CIRCUIT B | | | | |
| | Free Cooling Active | Yes/No | | fc_on_b | |
| | Fan Staging Number | 1-6 | | FAN_ST_B | |
| | 3 Way Valve Position | nnn | % | fc_vlv_b | |
| | 3 Way Valve Status | text* | | FC_VLV_B | |
| | Refrigerant Pump Out | On/Off | | fc_pmp_b | |
| | Pump Inlet Pressure | nnn | PSI | fc_inp_b | |
| | Pump Outlet Pressure | nnn | PSI | fc_oup_b | |
| | Pump Differential Pressure | nnn | PSI | fc_dp_b | |

^{*} Text reflects status of valve "Closed," "Closing," "Opened," "Opening," "Stopped," or "Failed."

APPENDIX B — CCN TABLES (cont) STATUS DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|---------|---|--|----------|--|--------------|
| GENUNIT | GENERAL PARAMETER | | | | |
| | Control Type | Local | | ctr_type | |
| | | CCN | | | |
| | Run Status | Remote 0 = Off | | STATUS | |
| | Hun Status | 0 = Οπ 1 = Running | | SIAIUS | |
| | | 2 = Stopping | | | |
| | | 3 = Delay | | | |
| | | 4 = Tripout | | | |
| | | 5 = Ready 6 = Override | | | |
| | | 7 = Defrost | | | |
| | | 8 = Run Test | | | |
| | | 9 = Test | | | |
| | CCN Chiller Start/Stop | Enable/Disable | | CHIL_S_S | forcible |
| | Chiller Occupied? | Yes/No | | CHIL_OCC | forcible |
| | Minutes Left for Start | 0-15 0 = Cool, 1 = Heat | min | min_left HEATCOOL | |
| | Heat/Cool Status | 2 = Stand-by | | HEATCOOL | |
| | | 3 = Both | | | |
| | Heat/Cool Select (0=Cool, 1=Heat, | 0 = Cool | | HC_SEL | forcible |
| | 2= Auto) | 1 = Heat | | | |
| | Lie at Be aleita Oal | 2 = Auto | | DEOL OF: | famalista |
| | Heat Reclaim Select | Yes/No | | RECL_SEL | forcible |
| | Free Cooling Disable Alarm State | Yes/No 0 Normal | | FC_DSBLE ALM | |
| | Alarm State | 1 Partial | | ALIVI | |
| | | 2 Shutdown | | | |
| | Current Alarm 1 | nnnnn | | alarm 1 | |
| | Current Alarm 2 | nnnnn | | alarm_2 | |
| | Current Alarm 3 | nnnnn | | alarm_3 | |
| | Current Alarm 4 | nnnnn | | alarm_4 | |
| | Current Alarm 5 | nnnnn | | alarm_5 | |
| | Percent Total Capacity | nnn | % | CAP_T | |
| | Active Demand Limit Val | nnn | % | DEM_LIM | forcible |
| | Lag Capacity Limit Value | nnn | % °F | LAG_LIM SP | |
| | Current Setpoint Setpoint Occupied | ±nnn.n Yes/No | - | SP_OCC | forcible |
| | Setpoint Occupied Setpoint Control | Setpt 1 | | sp_ctrl | lorcible |
| | Scipoliti Control | Setpt 2 | | SP_CIII | |
| | | lce_sp | | | |
| | | 4-20mA | | | |
| | Octobro I Delicat | Auto | ۰ | OTDL DNT | formation a |
| | Control Point | ±nnn.n | °F °F | CTRL_PNT | forcible |
| | Controlled Water Temp External Temperature | ±nnn.n ±nnn.n | l°F | CTRL_WT OAT | |
| | Emergency Stop | Enable/Disable | 'F | EMSTOP | forcible |
| MODEC | , , | Lilable/Disable | | LIVISTOF | loicible |
| MODES | OPERATING MODES | | | | |
| | Startup Delay in Effect Second Setpoint in Use | Yes/No Yes/No | | Mode_01 Mode_02 | |
| | Reset in Effect | Yes/No | | Mode_02 Mode 03 | |
| | Demand Limit Active | Yes/No | | Mode_04 | |
| | Ramp Loading Active | Yes/No | | Mode_05 | |
| | Cooler Heater Active | Yes/No | | Mode_06 | |
| | Cooler Pumps Rotation Pump Periodic Start | Yes/No Yes/No | | Mode_07 Mode_08 | |
| | Night Low Noise Active | Yes/No | | Mode_08 | |
| | System Manager Active | Yes/No | | Mode_10 | |
| | Master Slave Active | Yes/No | | Mode_11 | |
| | Auto Changeover Active | Yes/No | | Mode_12 | |
| | Free Cooling Active Reclaim Active | Yes/No Yes/No | | Mode_13 Mode_14 | |
| | Electric Heat Active | Yes/No | | Mode_14 | |
| | Heating Low EWT Lockout | Yes/No | | Mode_16 | |
| | Boiler Ăctive | Yes/No | | Mode_17 | |
| | Ice Mode in Effect | Yes/No | | Mode_18 | |
| | Defrost Active On Cir A Defrost Active On Cir B | Yes/No Yes/No | | Mode_19 Mode_20 | |
| | Low Suction Circuit A | Yes/No | | Mode_20 Mode 21 | |
| | | Yes/No | | Mode_22 | |
| | Low Suction Circuit B | | | Mada 00 | |
| | Low Suction Circuit C | Yes/No | | Mode_23 | |
| | Low Suction Circuit C High DGT Circuit A | Yes/No Yes/No | | Mode_24 | |
| | Low Suction Circuit C High DGT Circuit A High DGT Circuit B | Yes/No Yes/No Yes/No | | Mode_24 Mode_25 | |
| | Low Suction Circuit C High DGT Circuit A High DGT Circuit B High DGT Circuit C | Yes/No Yes/No | | Mode_24 Mode_25 Mode_26 | |
| | Low Suction Circuit C High DGT Circuit A High DGT Circuit B | Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No | | Mode_24 Mode_25 Mode_26 Mode_27 Mode_28 | |
| | Low Suction Circuit C High DGT Circuit A High DGT Circuit B High DGT Circuit C High Pres Override Cir A High Pres Override Cir B High Pres Override Cir C | Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No | | Mode_24 Mode_25 Mode_26 Mode_27 Mode_28 Mode_29 | |
| | Low Suction Circuit C High DGT Circuit A High DGT Circuit B High DGT Circuit C High Pres Override Cir A High Pres Override Cir B | Yes/No Yes/No Yes/No Yes/No Yes/No Yes/No | | Mode_24 Mode_25 Mode_26 Mode_27 Mode_28 | |

STATUS DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|---|------------------|-----------------------|----------------------|--------------|
| RECLAIM | Heat Reclaim Select | Yes/no | | RECL_SEL | |
| | Reclaim Condenser Pump | On/Off | | CONDPUMP | |
| | Reclaim Condenser Flow | On/Off | | condflow | |
| | Reclaim Condenser Heater | On/Off | l | cond_htr_ | |
| | Reclaim Entering Fluid | ±nnn.n | °F | HR_EWT | |
| | Reclaim Leaving Fluid | ±nnn.n | °F °F | HR_LWT | |
| | Reclaim Fluid Setpoint | ±nnn.n | °F | RSP | forcible |
| | Reclaim Valve Position | ±nnn.n | % | hr_v_pos | |
| | HEAT RECLAIM CIRCUIT A | _ | | brotot o | |
| | Reclaim Status Circuit A | n | noi | hrstat_a | |
| | Pumpdown Pressure Cir A Sub Condenser Temp Cir A | ±nnn.n | psi °F °F ^F | PD_P_A | |
| | Pumdown Saturated Tmp A | ±nnn.n ±nnn.n | ∘⊑ | hr_subta hr_sat_a | |
| | Subcooling Temperature A | ±nnn.n | ۸E | hr_subca | |
| | Air Cond Entering Valv A | On/Off | 1' | hr_ea_a | |
| | Water Cond Enter Valve A | On/Off | | hr_ew_a | |
| | Air Cond Leaving Valve A | On/Off | | hr_la_a | |
| | Water Cond Leaving Val A | On/Off | | hr_lw_a | |
| | HEAT RECLAIM CIRCUIT B | 0.40 | | w_a | |
| | Reclaim Status Circuit B | n | | hrstat b | |
| | Pumpdown Pressure Cir B | ±nnn.n | psi | PD P B | |
| | Sub Condenser Temp Cir B | ±nnn.n | psi °F °F | hr_subtb | |
| | Pumdown Saturated Tmp B | ±nnn.n | ۰F | hr_sat_b | |
| | Subcooling Temperature B | ±nnn.n | ^F | hr subcb | |
| | Air Cond Entering Valv B | On/Off | | hr_ea_b | |
| | Water Cond Enter Valve B | On/Off | | hr_ew_b | |
| | Air Cond Leaving Valve B | On/Off | | hr_la_b | |
| | Water Cond Leaving Val B | On/Off | | hr_lw_b | |
| STATEGEN | UNIT DISCRETE IN | • | | | |
| | On/Off - Remote Switch | Open/Close | 1 | I ONOFF SW | 1 |
| | Remote Heat/Cool Switch | Open/Close | | HC_SW | |
| | Current Control | Off, On Cool, On | | on_ctrl | |
| | | Heat, On Auto | | | |
| | Remote Reclaim Switch | Open/Close | | RECL_SW | |
| | Free Cooling Disable Sw. | Open/close | | FC_SW | |
| | Remote Setpoint Switch | Open/Close | | SETP_SW | |
| | Limit Switch 1 Status | Open/Close | | LIM_SW1 | |
| | Limit Switch 2 Status | Open/Close | | LIM_SW2 | |
| | Occupied Override Switch | Open/Close | | OCC_OVSW | |
| | Ice Done Storage Switch | Open/Close | | ICE_SW | |
| | Interlock Status | Open/Close | | LOCK_1 | |
| | Pump Run Status | Open/Close | | PUMP_DEF | |
| | Remote Interlock Status | Open/Close | | REM_ LOCK | |
| | Electrical Box Safety | Open/Close | | ELEC_BOX | |
| | UNIT DISCRETE OUT | 10.4/0% | | LEUG OTTO | i |
| | Electrical Heat Stage | 0-4/Off | | EHS_STEP | |
| | Boiler Command | On/Off | | BOILER | formallal a |
| | Water Pump #1 Command | On/Off | | CPUMP_1 | forcible |
| | Water Pump #2 Command | On/Off | | CPUMP_2 | forcible |
| | Rotate Pumps Now | Yes/No | | ROT_PUMP | forcible |
| | Reclaim Condenser Pump | On/Off | | COND_PMP | forcible |
| | Cooler Heater Command | On/Off | | COOLHEAT | |
| | Shutdown Indicator State Alarm Relay Status | On/Off | | SHUTDOWN | |
| | | On/Off On/Off | | ALARMOUT ALERT | |
| | Alert Relay Status Ready or Running Status | On/Off | | READY | |
| | Running Status | On/Off | | RUNNING | |
| | Critical Alarm Status | On/Off | | CRITICAL | |
| | + | 1 31 // 311 | 1 | J GT III TO / IL | 1 |
| | UNIT ANALOG | Limana | 10 | LEVAT | 1 |
| | Water Exchanger Entering | ±nnn.n | l°F | EWT | |
| | Water Exchanger Leaving | ±nnn.n | °F °F | LWT | |
| | Optional Space Temp CHWS Temperature | ±nnn.n | °F | SPACETMP | |
| | Reset /Setpoint 4-20mA In | ±nnn.n | | CHWSTEMP SP_RESET | |
| | Limit 4-20mA Signal | ±nn.n ±nn.n | ma ma | LIM_ANAL | |
| | Chiller Capacity Signal | ±nn.n | volts | CAPT_010 | |
| | Orinior Oapaoity Olyriai | -1111511 | VOILG | J D/11 1_010 | 1 |

STATUS DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--------------------------|-------|-------|------------|--------------|
| STRTHOUR | Machine Operating Hours | nnnnn | hours | HR MACH | |
| | Machine Starts Number | nnnnn | | st mach | |
| | Compressor A1 Hours | nnnnn | hours | HR_CP_A1 | |
| | Compressor A2 Hours | nnnnn | hours | HR_CP_A2 | |
| | Compressor A3 Hours | nnnnn | hours | HR_CP_A3 | |
| | Compressor A4 Hours | nnnnn | hours | HR_CP_A4 | |
| | Compressor A1 Starts | nnnnn | | st_cp_a1 | |
| | Compressor A2 Starts | nnnnn | | st_cp_a2 | |
| | Compressor A3 Starts | nnnnn | | st_cp_a3 | |
| | Compressor A4 Starts | nnnnn | | st_cp_a4 | |
| | Compressor B1 Hours | nnnnn | hours | HR_CP_B1 | |
| | Compressor B2 Hours | nnnnn | hours | HR_CP_B2 | |
| | Compressor B3 Hours | nnnnn | hours | HR_CP_B3 | |
| | Compressor B4 Hours | nnnnn | hours | HR_CP_B4 | |
| | Compressor B1 Starts | nnnnn | | st_cp_b1 | |
| | Compressor B2 Starts | nnnnn | | st_cp_b2 | |
| | Compressor B3 Starts | nnnnn | | st_cp_b3 | |
| | Compressor B4 Starts | nnnnn | | st_cp_b4 | |
| | Compressor C1 Hours | nnnnn | hours | HR_CP_C1 | |
| | Compressor C2 Hours | nnnnn | hours | HR_CP_C2 | |
| | Compressor C3 Hours | nnnnn | hours | HR_CP_C3 | |
| | Compressor C4 Hours | nnnnn | hours | HR_CP_C4 | |
| | Compressor C1 Starts | nnnnn | | st_cp_c1 | |
| | Compressor C2 Starts | nnnnn | | st_cp_c2 | |
| | Compressor C4 Starts | nnnnn | | st_cp_c3 | |
| | Compressor C4 Starts | nnnnn | | st_cp_c4 | |
| | CYCLES | | | | |
| | Starts Max During 1 Hour | nn | | st_cp_mx | |
| | Starts/hr From Last 24 h | nn | | st_cp_av | |
| | Circuit A Defrost Number | nnnnn | | nb_def_a | |
| | Circuit B Defrost Number | nnnnn | | nb_def_b | |

CONFIGURATION DISPLAY TABLES

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|-----------------------|--|---|---------------------------------------|------------|---|
| ALARMDEF/ ALARMS01 | Alarm Routing Control Alarm Equipment Priority Comm Failure Retry Time Realarm Time Alarm System Name | 0 or 1 for each position 0-7 1-240 1-255 8 chars | 00000000 4 10 30 PRO_RBRQ | min min | ALRM_CNT EQP_TYP RETRY_TM RE_ALARM ALRM_NAM |
| BRODEFS/ BRODCASTS | Activate OAT Broadcast | 0=Unused 1=Broadcast time, date, holiday flag and OAT (as like existing pro_dialog control). 2=For Standalone chiller. Daylight sav- ings time & holiday determination will be done without broadcasting through the bus. | 2 | | Ccnbroad |
| | Bus # Element # DAYLIGHT SAVINGS SELECT ENTERING Month Day of week* (1=Monday) Week Number of Month† LEAVING Month Day of week* (1=Monday) | 0 to 239 0 to 239 Disable/Enable 1 to 12 1 to 7 1 to 5 1 to 12 1 to 7 | 0 0 Disable 3 7 5 | | Oatbusnm Oatlocad dayl_sel Startmon Startdow Startwom Stopmon Stopdow |
| | Week Number of Month† | 1 to 5 | 5 | | stopwom |

^{*}Day of week where daylight savings time will occur in the morning (at 2:00 am). In the default setting, daylight savings time occurs on Sunday (7) morning, 1 hour shall be added when entering and 1 hour subtracted when leaving.

[†]Date once selected (from 1) shall occur in the week number entered. 1: If day of week selected is 7 (Sunday) time change will occur the first Sunday (week number 1) in the month. 5: If day of week selected is 7 (Sunday) time change will occur the last Sunday of the month (week number 4 or 5).

CONFIGURATION DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|-----------------------|---|--|---------------------------|-------|------------|
| !CtrID / PD5_RBRQ: | Device Name Description | 8 chars 24 chars | PRO-DIALOG 5 30RB&30RQ | | |
| | Location Software Part Number Model Number Serial Number Reference Number | 24 chars 16 chars 20 chars 12 chars 24 chars | CSA-SR-20C460301 | | |

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|----------|---|---|--|-------|--|
| DISPCONF | Metric Display on STDU Language Selection 0=English 1=Espanol 2=Francais 3=Portugues 4=English2 | Yes/No 0=English 1=Espanol 2=Francais 3=Portugues 4=English2 | No 0 | | DISPUNIT LANGUAGE |
| FACTORY | Unit Type Unit Capacity* NB Fans on Varifan Cir A† NB Fans on Varifan Cir B† NB Fans on Varifan Cir C† Air Cooled Reclaim Sel Free Cooling Select Electrical Heat Stages Boiler Command Select Power Frequence 60HZ Sel Energy Management Module Hot Gas Bypass Select | 1 (Cooling Only), 2 (not supported) 56 to 500 0 to 6 0 to 6 0 to 6 Yes/No Yes/No 0 to 4 Yes/No Yes/No O-Hot gas bypass valve (not used) 1=Used for Startup only 2=Close Control 3=High Ambient (if High pressure mode is active, close control shall be active) No=Use ComfortLink™ display as user interface (factory installed) Yes=Use Pro_dialog synopsis as user interface | Unit Dependent Unit Dependent | tons | unit_typ unitsize varfan_a varfan_b varfan_c recl_opt free_opt ehs_sel boil_sel freq_60H emm_nrcp hgbp_sel pd4_disp |
| | Factory Password High Static Fan Control MCHX Exchanger Select VLT Fan Drive Select VLT Fan Drive RPM Desuperheater Select Dual Speed Fan Select | (not supported) 0 to 150 Yes/No Yes/No Not Supported Not Supported Not Supported Not Supported Not Supported Not Supported | 111 No Unit Dependent 0 0 No No | | fac_pass hsta_fan mchx_sel vlt_sel vlt_rpm desuper dual_fan |

^{*} Enter unit size. This item allows the controls to determine capacity of each compressor and the total number of fans on each circuit based on a compressor arrangement array (can be viewed in table FACTORY2). It is not necessary to enter compressor capacity and number of fans on each circuit. See the Unit Compressor Configuration table below as a reference.

UNIT COMPRESSOR CAPACITY (%) CONFIGURATION

| 30RB UNIT | | | | | POINT | NAME (FA | CTORY2 T | ABLE) | | | | - |
|-----------|--------|--------|--------|--------|--------|----------|----------|--------|--------|--------|--------|--------|
| SIZE | cap_a1 | cap_a2 | cap_a3 | cap_a4 | cap_b1 | cap_b2 | cap_b3 | cap_b4 | cap_c1 | cap_c2 | cap_c3 | cap_c4 |
| 060 | 20 | 20 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 070 | 25 | 25 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 080 | 20 | 20 | 0 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| 090 | 25 | 25 | 0 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 | 25 | 25 | 0 | 0 | 25 | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110 | 25 | 25 | 0 | 0 | 20 | 20 | 20 | 0 | 0 | 0 | 0 | 0 |
| 120 | 25 | 25 | 0 | 0 | 25 | 25 | 25 | 0 | 0 | 0 | 0 | 0 |
| 130 | 25 | 25 | 25 | 0 | 20 | 20 | 20 | 0 | 0 | 0 | 0 | 0 |
| 150 | 25 | 25 | 25 | 0 | 25 | 25 | 25 | 0 | 0 | 0 | 0 | 0 |
| 160 | 25 | 25 | 25 | 25 | 20 | 20 | 20 | 0 | 0 | 0 | 0 | 0 |
| 170 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 0 | 0 | 0 | 0 | 0 |
| 190 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 0 | 0 | 0 | 0 |
| 210 | 25 | 25 | 25 | 0 | 20 | 20 | 20 | 0 | 25 | 25 | 25 | 0 |
| 225 | 25 | 25 | 25 | 0 | 25 | 25 | 25 | 0 | 25 | 25 | 25 | 0 |
| 250 | 25 | 25 | 25 | 0 | 25 | 25 | 25 | 0 | 25 | 25 | 25 | 25 |
| 275 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 0 |
| 300 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

[†] Number of fans controlled directly by a variable speed fan actuator using 0 to 10 vdc signal. This will enable the controls to determine the remaining discrete fan staging outputs from the total fans on each circuit. Configure to 1 for low ambient head pressure control.

CONFIGURATION DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|----------|--------------------------|---------|----------------|-------|------------|
| FACTORY2 | Compressor A1 Capacity | 0 to 99 | 0 | | cap_a1 |
| | Compressor A2 Capacity | 0 to 99 | 0 | | cap_a2 |
| | Compressor A3 Capacity | 0 to 99 | 0 | | cap_a3 |
| | Compressor A4 Capacity | 0 to 99 | 0 | | cap_a4 |
| | Compressor B1 Capacity | 0 to 99 | 0 | | cap_b1 |
| | Compressor B2 Capacity | 0 to 99 | 0 | | cap_b2 |
| | Compressor B3 Capacity | 0 to 99 | 0 | | cap_b3 |
| | Compressor B4 Capacity | 0 to 99 | 0 | | cap_b4 |
| | Compressor C1 Capacity | 0 to 99 | 0 | | cap_c1 |
| | Compressor C2 Capacity | 0 to 99 | 0 | | cap_c2 |
| | Compressor C3 Capacity | 0 to 99 | 0 | | cap_c3 |
| | Compressor C4 Capacity | 0 to 99 | 0 | | cap_c4 |
| | Circuit A Total Fans NB | 0 to 6 | 0 | | nb_fan_a |
| | Circuit B Total Fans NB | 0 to 6 | 0 | | nb_fan_b |
| | Circuit C Total Fans NB | 0 to 6 | 0 | | nb_fan_c |
| | EXV A Maximum Steps Numb | 0/15000 | 0=EXV not used | | exva_max |
| | EXV B Maximum Steps Numb | 0/15000 | 0 | | exvb_max |
| | EXV C Maximum Steps Numb | 0/15000 | 0 | | exvc_max |

^{2.} Total number of fans includes fans controlled by a variable speed fan. This value will be automatically populated if unit size entered in FACTORY1 table matches the values in the unit compressor configuration table.

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|-------------------------|--|----------------------------|----------|-------|---------------------|
| | | | | UNITS | |
| HOLIDAY/ HOLDY01S to | Holiday Start Month Start Day | 0-12 0-31 | 0 | | HOL_MON HOL DAY |
| HOLDY16S | Duration (days) | 0-99 | 0 | | HOL_DAY |
| MST SLV | MASTER SLAVE CONTROL | 0 00 | | | TIOL_LLIV |
| IVIO I _SLV | Master/Slave Select | 0=Disable | 0 | | ms sel |
| | 0=Disable | 1=Master | ľ | | 1113_301 |
| | 1=Master | 2=Slave | | | |
| | 2=Slave | _ 0.0.0 | | | |
| | Master Control Type | 1=Local Control | 1 | | ms_ctrl |
| | 1=Local Control | 2=Remote Control | | | |
| | 2=Remote Control | 3=CCN Control | | | |
| | 3=CCN Control | 4. 000 | | | |
| | Slave Address | 1 to 236 | 10 | | slv_addr |
| | Lag Start Timer Lead/Lag Balance | 2 to 30 Yes/No | No | min | lstr_tim bal |
| | Lead/Lag Balance Delta | 40 to 400 | 168 | hours | II bal d |
| | Lag Unit Pump Control | 0=Stop if Unit Stops | 0 | nouis | lag_pump |
| | 0=Stop if Unit Stops | 1=Run if Unit Stops | | | lag_pamp |
| | 1=Run if Unit Stops | | | | |
| | Lead Pulldown Time | 0 to 60 | 0 | min | lead_pul |
| OCCDEFCS/ | Timed Override Hours | 0-4 | 0 | | OVR EXT |
| OCCPC01S and | Period 1 DOW (MTWTFSSH) | 0/1 | 11111111 | | DOW1 |
| OCCPC02S | Occupied From` | 00:00-24:00 | 00:00 | | OCCTOD1 |
| | Occupied To | 00:00-24:00 | 24:00 | | UNOCTOD1 |
| | Period 2 DOW (MTWTFSSH) Occupied From | 0/1 00:00-24:00 | 11111111 | | DOW2 OCCTOD2 |
| | Occupied From Occupied To | 00:00-24:00 | 00:00 | | UNOCTOD2 |
| | Period 3 DOW (MTWTFSSH) | 0/1 | 00000000 | | DOW3 |
| | Occupied From | 00:00-24:00 | 00:00 | | OCCTOD3 |
| | Occupied To | 00:00-24:00 | 00:00 | | UNOCTOD3 |
| | Period 4 DOW (MTWTFSSH) | 0/1 | 00000000 | | DOW4 |
| | Occupied From | 00:00-24:00 | 00:00 | | OCCTOD4 |
| | Occupied To | 00:00-24:00 | 00:00 | | UNOCTOD4 |
| | Period 5 DOW (MTWTFSSH) | 0/1 | 00000000 | | DOW5 |
| | Occupied From Occupied To | 00:00-24:00 00:00-24:00 | 00:00 | | OCCTOD5 UNOCTOD5 |
| | Period 6 DOW (MTWTFSSH) | 0/1 | 00000000 | | DOW6 |
| | Occupied From | 00:00-24:00 | 00:00 | | OCCTOD6 |
| | Occupied To | 00:00-24:00 | 00:00 | | UNOCTOD6 |
| | Period 7 DOW (MTWTFSSH) | 0/1 | 00000000 | | DOW7 |
| | Occupied From` | 00:00-24:00 | 00:00 | | OCCTOD7 |
| | Occupied To | 00:00-24:00 | 00:00 | | UNOCTOD7 |
| | Period 8 DOW (MTWTFSSH) | 0/1 | 00000000 | | DOW8 |
| | Occupied From | 00:00-24:00 | 00:00 | | OCCTOD8 |
| | Occupied To | 00:00-24:00 | 00:00 | | UNOCTOD8 |

NOTES:

1. Compressor capacity will be automatically be determined if unit size entered in FACTORY1 table matches the values in the unit compressor configuration table.

CONFIGURATION DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|-------|--|--|--|-----------------------------------|--|
| USER | Circuit Loading Sequence 0=Auto,1=A Lead 2=B Lead, 3 =C Lead | 0-3 0=Auto, 1=A Lead 2=B Lead, 3 =C Lead | 0 | | lead_cir |
| | Staged Loading Sequence Ramp Loading Select Unit Off to On Delay Cooler Pumps Sequence 0=No Pump 1=One Pump Only 2=Two Pumps Auto | No/Yes No/Yes 1-15 0-4 0=No Pump 1=One Pump Only 2=Two Pumps Auto | No No 1 0 | Min | seq_typ ramp_sel off_on_d pump_seq |
| | 3=Pump#1 Manual 4=Pump#2 Manual Pump Auto Rotation Delay Pump Sticking Protection Stop Pump During Standby Flow Checked if Pump Off Auto Changeover Select Cooling Reset Select Heating Reset Select 1 = OAT, 0=None 2=Delta T, | 3=Pump#1 Manual 4=Pump#2 Manual 24-3000 No/Yes No/Yes No/Yes No/Yes O-4 0-4 1 = OAT, 0=None 2=Delta T, | 48 No No Yes No 0 | hours | pump_del pump_per pump_sby pump_loc auto_sel cr_sel hr_sel |
| | 3=4-20mÅ Control 4=Space Temp Demand Limit Type Select 0=None 1=Switch Control | 3=4-20mÅ Control 4=Space Temp 0-2 0=None 1=Switch Control | 0 | | lim_sel |
| | 2=4-20mA Control mA For 100% Demand Limit mA For 0% Demand Limit Heating OAT Threshold Boiler OAT Threshold Free Cooling OAT Threshold Full Load Timeout Pre_Cooling Selected HSM Both Commande Select Elec Stage OAT Threshold 1 Elec Stage for backup Electrical Pulldown Time | 2=4-20mA Control 0-20 0-20 -4-32 5-59 -4-37.4 -4-37.4 5-60 No/Yes No/Yes 23-70 No/Yes 0-60 | 0 0 5 14 32 32.0 15 No No No 41 No 0 | ma ma °F °F °F min | lim_mx lim_ze heat_th boil_th free_oat free_th fc_tmout pre_cool both_sel ehs_th ehs_back ehs_pull |
| | Quick EHS for Defrost Night control Start Hour End Hour Capacity Limit Ice Mode Enable Menu Description Select Pass For All User Config | No/Yes 00:00-24:00 00:00-24:00 0-100 No/Yes No/Yes No/Yes | No 00:00 00:00 100 No Yes No | % | ehs_defr nh_start nh_end nh_cnfg ice_cnfg menu_des all_pass |

NOTES:

controls, then a 4 to 20 mA reset function shall be ignored. Configuration 3 (4-20mA Control) and 4 (Space Temperature) shall require an Energy Management Module.

3. Configuration 2 (4-20mA Control) shall require an Energy Management Module. Configuration 1 Switch Demand limit provides 3 step demand limit if an Energy Management Module is present. Otherwise, only one step is allowed.

Flow checked if pump off needed when a command is sent to the primary pump to prevent cooler from freezing in winter condi-tions. Command will set the cooler flow switch to closed while the controls stop the cooler pump. The controls may then generate an alarm. If this decision is active, the cooler flow switch is not checked when the cooler pump is stopped.

2. If cooling reset select set point has been selected the set point based on 4 to 20 mA input signal through ComfortLinkTM

SETPOINT DISPLAY TABLES

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME |
|----------|--|---|--|--|--|
| SETPOINT | COOLING Cooling Setpoint 1 Cooling Setpoint 2 Cooling Ice Setpoinp OAT No Reset Value OAT Full Reset Value Delta T No Reset Value Delta T Full Reset Value Current No Reset Value Current Full Reset Value Space T No Reset Value Space T Full Reset Value Cooling Reset Deg. Value Cooling Ramp Loading | -20.0-78.8 -20.0-78.8 -20.0-32.0 14-125 14-125 0-25 0-25 0-20 0-20 14-125 14-125 14-125 -30-30 0.2-2.0 | 44.0 44.0 44.0 14.0 14.0 0.0 0.0 0.0 0.0 14.0 14.0 14.0 14.0 | °F °F °F °F ^F ^F AF AF Ma ma °F °F AF | csp1 csp2 ice_sp oatcr_no oatcr_fu dt_cr_no dt_cr_fu v_cr_no v_cr_fu spacr_no spacr_fu cr_deg cramp_sp |
| | HEATING Heating Setpoint 1 Heating Setpoint 2 OAT No Reset Value OAT Full Reset Value Delta T No Reset Value Delta T Full Reset Value Current No Reset Value Current Full Reset Value Heating Reset Deg. Value Heating Reset Deg. Value | 68.0-122.0 68.0-122.0 14-125 14-125 0-25 0-25 0-20 0-20 0-30-30 0.2-2.0 | 100.0 100.0 14.0 14.0 0.0 0.0 0.0 0.0 0.0 | °F °F °F ^AF ^F Ma ma ma AF ^F | hsp1 hsp2 oathr_no oathr_fu dt_hr_no dt_hr_fu v_hr_no v_hr_fu hr_deg hramp_sp |
| | AUTO CHANGEOVER Cool Changeover Setpt Heat Changeover Setpt MISCELLANEOUS Switch Limit Setpoint 1 Switch Limit Setpoint 2 Switch Limit Setpoint 3 Reclaim Setpoint Reclaim Deadband Head Setpoint Fan Max Speed | 39-122 32-115 0-100 0-100 0-100 95.0-122.0 5-27 40.0-122.0 0-100 | 75.0 64.0 100 100 100 122.0 9.0 95.0 100 | °F °F % % % % °F ^F %F % | cauto_sp hauto_sp lim_sp1 lim_sp2 lim_sp3 rsp hr_deadb head_stp fan_smax |

MAINTENANCE DISPLAY TABLES

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|---|-------------|-------------|----------------------|--------------|
| DEFROSTM | CIR A DEFROST CONTROL | • | • | | |
| | Exchanger Frost Factor | 0-100 | % | frost_a | |
| | Next Sequence Allowed in | nnn | min | def_se_a | |
| | Defrost Active? | True/False | | mode[19] | |
| | Defrost Temperature | ±nnn.n | °F | DEFRT_A | |
| | Defrost Duration | nnn | min | defr_dua | |
| | Fan Sequence Started | n | | def_fa_a | |
| | Override State | nn | | over_d_a | |
| | Mean SST Calculation | ±nnn.n | l° <u>F</u> | sst_dm_a | |
| | Delta: OAT - Mean SST | ±nnn.n | ^F | delt_a | |
| | Reference Delta | ±nnn.n | ^F | delt_r_a | |
| | Delta - Reference Delta | ±nnn.n | °F | delt_v_a | |
| | Frost Integrator Gain | n.n | | fr_int_a | |
| | Defrost Fan Start Cal A Defrost Fan Offset Cal A | 0.00 | psi | def_ca_a | |
| | | 0.00 | psi | def_of_a | |
| | CIR B DEFROST CONTROL | | | | |
| | Exchanger Frost Factor | 0-100 | % | frost_b | |
| | Next Sequence Allowed in | <u>n</u> nn | min | def_se_b | |
| | Defrost Active? | True/False | | mode[20] | |
| | Defrost Temperature | ±nnn.n | °F. | DEFRT_B | |
| | Defrost Duration | nnn | min | defr_dub | |
| | Fan Sequence Started? | n | | def_fa_b | |
| | Override State | nn | ٥,5 | over_d_b | |
| | Mean SST calculation | ±nnn.n | l°F - C | sst_dm_b | |
| | Delta: OAT - Mean SST | ±nnn.n | ^F ^F | delt_b | |
| | Reference Delta Delta - Reference Delta | ±nnn.n | ^F ^F | delt_r_b | |
| | | ±nnn.n | ^`F | delt_v_b | |
| | Frost Integrator Gain Defrost Fan Start Cal B | n.n 0.00 | noi | fr_int_b | |
| | Defrost Fan Offset Cal B | 0.00 | psi | def_ca_b def_of_b | |
| | Deliost Fall Oliset Gal B | 0.00 | psi | uei_ui_b | |

NOTES: Tables for display only. Forcing shall not be supported on this maintenance screen.

APPENDIX B — CCN TABLES (cont) MAINTENANCE DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|------------|---|------------------|------------|----------------------|--------------|
| FANCTRL | Cir A SCT Control Point | | °F | sct_sp_a | |
| | Cir A SCT Candidate | | °F | sct_fu_a | |
| | Cir A Fan Drive Power | | kW | drva_pwr | |
| | Cir A Fan Drive Version | | | drva_ver | |
| | Cir B SCT Control Point | | °F | sct_sp_b | |
| | Cir B SCT Candidate | | °F | sct_fu_b | |
| | Cir B Fan Drive Power | | kW | drvb_pwr | |
| | Cir B Fan Drive Version | | | drvb_ver | |
| | Cir C SCT Control Point | | °F | sct_sp_c | |
| | Cir C SCT Candidate | | °F | sct_fu_c | |
| | Cir C Fan Drive Power | | kW | drvc_pwr | |
| | Cir C Fan Drive Version | | | drvc_ver | |
| LAST_POR | Power On 1: day-mon-year | nnnnnn | | date_on1 | |
| | Power On 1: hour-minute | nnnn | | time_on1 | |
| | PowerDown 1:day-mon-year PowerDown 1:hour-minute | nnnnnn | | date_of1 | |
| | Power On 2: day-mon-year | nnnn nnnnnn | | time_of1 date_on2 | |
| | Power On 2: hour-minute | nnnn | | time_on2 | |
| | PowerDown 2:day-mon-year | nnnnnn | | date_of2 | |
| | PowerDown 2:hour-minute Power On 3: day-mon-year | nnnn nnnnnn | | time_of2 date_on3 | |
| | Power On 3: hour-minute | nnnn | | time_on3 | |
| | PowerDown 3:day-mon-year | nnnnnn | | date_of3 | |
| | PowerDown 3:hour-minute | nnnn | | time_of3 | |
| | Power On 4: day-mon-year | nnnnn | | date_on4 | |
| | Power On 4: hour-minute PowerDown 4:day-mon-year | nnnn nnnnnn | | time_on4 date of4 | |
| | PowerDown 4:hour-minute | nnnn | | time_of4 | |
| | Power On 5: day-mon-year | nnnnnn | | date_on5 | |
| | Power On 5: hour-minute PowerDown 5:day-mon-year | nnnn | | time_on5 | |
| | PowerDown 5:hour-minute | nnnnn nnnn | | date_of5 time_of5 | |
| LOADFACT | · onergenin emical minate | | | | |
| 20/12///01 | Average Ctrl Water Temp | ±nnn.n | I°F | ctrl_avg | 1 |
| | Differential Water Temp | ±nnn.n | °F °F | diff_wt | |
| | Water Delta T Control Point | ±nnn.n | ^F °F | delta_t CTRL PNT | |
| | Reset Amount | ±nnn.n ±nnn.n | \rac{F}{F} | reset | |
| | Controlled Temp Error | ±nnn.n | ^F | tp_error | |
| | Actual Capacity | nnn | % | cap_t | |
| | Actual Capacity Limit Current Z Multiplier Val | nnn | % | cap_lim | |
| | Load/Unload Factor | ±n.n ±nnn.n | % | smz | |
| | Active Stage Number | nn | / - | cur_stag | |
| | Active Capacity Override | nn | | over_cap | |
| | EVA / De attieur Linette Oire A | 1 | 1.0/ | Laur Para | 1 |
| | EXV Position Limit Cir A SH Setpoint Circuit A | nnn.n nn.n | % ^F | exvlim_a sh_sp_a | |
| | Cooler Exchange DT Cir A | nn.n | ^F | pinch_a | |
| | Cooler Pinch Ctl Point A | nn.n | ^F | pinch_spa | |
| | EXV Override Circuit A | nn | 0/ | ov_exv_a | |
| | EXV Position Limit Cir B SH Setpoint Circuit B | nnn.n nn.n | % ^F | exvlim_b sh sp b | |
| | Cooler Exchange DT Cir B | nn.n | ^F | pinch b | |
| | Cooler Pinch Ctl Point B | nn.n | ^F | pinch_spb | |
| | EXV Override Circuit B | nn | 0/ | ov_exv_b | |
| | EXV Position Limit Cir C SH Setpoint Circuit C | nnn.n nn.n | % ^F | exvlim_c sh_sp_c | |
| | Cooler Exchange DT Cir C | nn.n | ^F | pinch_c | |
| | Cooler Pinch Ctl Point C | nn.n | ^F | pinch_spc | |
| | EXV Override Circuit C | nn | | ov_exv_c | |
| | FILE Ctrl Overwide | Lan | | Lavar abs | 1 |
| | EHS Ctrl Override Requested Electric Stage | nn nn | | over_ehs eh stage | |
| | Electrical Pulldown? | True/False | | Ehspulld | |
| | Required Cooling Power | | | req_pow | |
| | Free Cool Override Cir A | | | ov_fc_a | |
| | Free Cool Override Cir B | | | ov_fc_b | |

MAINTENANCE DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--|--|-------------------|---|--------------|
| MSTSLAVE | MASTER/SLAVE CONTROL | | | | |
| | Unit is Master or Slave Master Control Type* Master/Slave Ctrl Active Lead Unit is the Slave Chiller State† Slave Chiller Total Cap Lag Start Delay** Lead/Lag Hours Delta* Lead/Lag Changeover?** Lead Pulldown? Master/Slave Error Max Available Capacity?†† | Disable/Master/Slave Local/Remote/CCN True/False Master/Slave 0/1/2/3/4/5 0-100 1-30 ±nnnnn Yes/No Yes/No nn True/False | % min hours | mstslv ms_ctrl ms_activ lead_sel slv_stat slv_capt l_strt_d ll_chang ll_pull ms_error cap_max | |

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|-----------------------------------|--|--|-------|---|--------------|
| OCCDEFCM/ OCC1PO1S OCC2PO2S | Current Mode (1=occup.) Current Occp Period # Timed-Override in Effect Timed-Override Duration Current Occupied Time Current Unoccupied Time Next Occupied Day Next Occupied Time Next Unoccupied Day Next Unoccupied Day Next Unoccupied Time Prev Unoccupied Day Prev Unoccupied Day | 0/1 1 to 8 Yes/No 0-4 00:00-23:59 00:00-23:59 Mon-Sun 00:00-23:59 Mon-Sun 00:00-23:59 | hours | MODE PER_NO OVERLAST OVR_HRS STRTTIME ENDTIME NXTOCDAY NXTOCTIM NXTUNDAY NXTUNTIM PRVUNDAY PRVUNTIM | |

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--------------------------|--------|-------|------------|--------------|
| PR_LIMIT | Discharge A Temp Average | ±nnn.n | °F | sdt_m_a | |
| | Discharge A Temp Rate | ±nnn.n | ^F | sdt_mr_a | |
| | Discharge A Gas Limit | ±nnn.n | °F | sdtlim_a | |
| | Suction A Temp Average | ±nnn.n | °F | sst_m_a | |
| | Discharge A Tp Average 2 | ±nnn.n | ^F | sdt_m2_a | |
| | Discharge A Temp Limit2 | ±nnn.n | ^F | sdtlim2a | |
| | Discharge B Temp Average | ±nnn.n | °F | sdt_m_b | |
| | Discharge B Temp Rate | ±nnn.n | ^F | sdt_mr_b | |
| | Discharge B Gas Limit | ±nnn.n | °F | sdtlim_b | |
| | Suction B Temp Average | ±nnn.n | °F | sst_m_b | |
| | Discharge C Temp Average | ±nnn.n | °F | sdt_m_c | |
| | Discharge C Temp Rate | ±nnn.n | ^F | sdt_mr_c | |
| | Discharge C Gas Limit | ±nnn.n | °F | sdtlim_c | |
| | Suction C Temp Average | ±nnn.n | °F | sst_m_c | |

NOTE: Table for display only. Used for Cooling and Heat Pump Compressor Envelope.

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--|--|-------|---|--------------|
| SERMAINT | Reset Maintenance Alert 1 to 6: reset individually 7: reset all | nn | | S_RESET | forcible |
| | OPERATION WARNINGS 1 — Refrigerant Charge 2 — Water Loop Size | Normal/Low/Disable Normal/Low/Disable | | charge_m wloop_m | |
| | GENERAL SERVICING DELAYS 3 — Pump 1 (days) 4 — Pump 2 (days) 5 — Reclaim Pump (days) 6 — Water Filter (days) | 0-1000/Alert/Disable 0-1000/Alert/Disable 0-1000/Alert/Disable 0-1000/Alert/Disable | | cpump1_m cpump2_m hpump_m wfilte_m | |

^{*}Always CCN for the slave chiller.
†Slave chiller chillstat value.
**This decision is consistent for Master chiller only. It shall be set by default to 0 for the slave chiller.
††This item is true when chiller has loaded its total available capacity tonnage.

SERVICE DISPLAY TABLES

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME | WRITE STATUS |
|----------|---|--|--|-------|--|--------------|
| | | | | | | |
| CP_UNABL | Compressor A1 Disable Compressor A2 Disable Compressor A3 Disable Compressor A4 Disable Compressor B1 Disable Compressor B2 Disable Compressor B3 Disable Compressor B4 Disable Compressor C1 Disable Compressor C2 Disable Compressor C3 Disable Compressor C3 Disable Compressor C4 Disable | No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes No/Yes | No N | | un_cp_a1 un_cp_a2 un_cp_a3 un_cp_a4 un_cp_b1 un_cp_b2 un_cp_b3 un_cp_b4 un_cp_c1 un_cp_c2 un_cp_c3 un_cp_c4 | |

NOTES:

All data will be re-initialized to "NO" at Power on reset on units using pro_dialog display. For ComfortLink™ display, data shall be saved.

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME | WRITE STATUS |
|----------|--------------------------|----------------|---------|-------|------------|--------------|
| MAINTCFG | MAINTENANCE CONFIG | | | | | |
| | Servicing Alert | Enable/Disable | Disable | | s_alert | |
| | Refrigerant Charge Ctrl | Enable/Disable | Disable | | charge_c | |
| | Water Loop Control | Enable/Disable | Disable | | wloop_c | |
| | CPump 1 Ctl Delay (days) | 0-1000 | 0 | | cpump1_c | |
| | CPump 2 Ctl Delay (days) | 0-1000 | 0 | | cpump2_c | |
| | HPump Ctrl Delay (days) | 0-1000 | 0 | | hpump_c | |
| | Water Filter Ctrl (days) | 0-1000 | 0 | | wfilte_c | |

| TABLE | DISPLAY NAME | RANGE | DEFAULT | UNITS | POINT NAME | WRITE STATUS |
|----------|--------------------------|-----------------------|----------|-------|------------|--------------|
| SERVICE1 | Cooler Fluid Type | 1-3 | 1 | | flui_typ | |
| | Entering Fluid Control | Yes/No | No | | ewt_opt | |
| | Prop PID Gain Varifan | -20.0-20.0 | 2.0 | | hd_pg | |
| | Int PID Gain Varifan | -5.0-5.0 | 0.2 | | hd_ig | |
| | Deri PID Gain Varifan | -20.0-20.0 | 0.4 | | hd_dg | |
| | EXV A Superheat Setpoint | 2.5-54.0 | 9.0 | ^F | sh_sp_a | |
| | EXV B Superheat Setpoint | 2.5-54.0 | 9.0 | ^F | sh_sp_b | |
| | EXV C Superheat Setpoint | 2.5-54.0 | 9.0 | ^F | sh_sp_c | |
| | EXV MOP Setpoint | 30.8-50.0 | 50.0 | °F | mop_sp | |
| | High Pressure Threshold | 500-640 | 609 | psi | hp_th | |
| | Cooler Heater Delta Spt | 1-6 | 2 | 'nΕ | heatersp | |
| | Brine Freeze Setpoint | -20-34 | 34 | °F | lowestsp | |
| | Minimum LWT Setpoint | | 38 | °F | mini_lwt | |
| | Auto Start When SM Lost | Enable/Disable | Disable | | auto_sm | |
| | Auto Z Multiplier Setpt | 4-10 | 6 | | zm_spt | |
| | Maximum Z Multiplier | 1.0-6.0 | 6.0 | | hc_zm | |
| | Recl Valve Min Position | 0-50 | 20 | % | min_3w | |
| | Recl Valve Max Position | 20-100 | 100 | % | max_3w | |
| | User Password | 0-150 | 11 | N/A | use_pass | |
| | Service Password | 0-150 | 88 | N/A | ser_pass | |
| | SPM Board Configuration | 0 or 1 for each digit | 00001010 | | spm_conf | |
| | Maximum Ducted Fan Speed | 0-100 | 100 | % | fan_max | |

NOTE: This table shall be downloadable at any time. However, modified value shall not be used by tasks until the unit is in OFF state. This shall not apply to the Varifan gains that shall be modified at any time and used immediately by the head pressure control tasks even if the unit is in operation.

Table used to disable compressors for maintenance purposes.
 The capacity control will consider that these compressors (once set to YES) are failed manually (no alarm will appear).

SERVICE DISPLAY TABLES (cont)

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|--|--|---|--|--------------|
| UPDHRFAN | TABLE TO BE USED FOR | | | | |
| | RUN TIMES & START | | | | |
| | UPDATE IN CASE OF CONTROL RETROFIT | | | | |
| | FAN Operating Hours Circuit A Fan #1 Hours Circuit A Fan #2 Hours Circuit A Fan #3 Hours Circuit A Fan #4 Hours Circuit A Fan #5 Hours Circuit A Fan #6 Hours Circuit B Fan #1 Hours Circuit B Fan #2 Hours Circuit B Fan #3 Hours Circuit B Fan #5 Hours Circuit B Fan #5 Hours Circuit B Fan #6 Hours Circuit B Fan #6 Hours Circuit C Fan #1 Hours Circuit C Fan #1 Hours Circuit C Fan #3 Hours Circuit C Fan #3 Hours | nnnnn nnnnn nnnnn nnnnn nnnnn nnnnn nnnn | hours | hr_fana1 hr_fana2 hr_fana3 hr_fana4 hr_fana5 hr_fana6 hr_fanb1 hr_fanb2 hr_fanb3 hr_fanb4 hr_fanb5 hr_fanb6 hr_fanc1 hr_fanc2 br_fanc3 | |
| | Circuit C Fan #3 Hours Circuit C Fan #4 Hours | nnnnn nnnnn | hours | hr_fanc3 hr_fanc4 | |
| | Circuit C Fan #5 Hours Circuit C Fan #6 Hours WATER PUMP | nnnnn nnnnn | hours hours | hr_fanc5 hr_fanc6 | |
| | WATER PUMP #1 Hours WATER PUMP #2 Hours | nnnnn nnnnn | hours hours | hr_cpum1 hr_cpum2 | |
| | Heat Reclaim Pump Hours FREE COOLING PUMPS | nnnnn | hours | hr_hpump | |
| | | | | | |
| | | | | | |
| | Free Cool A Pump Hours Free Cool B Pump Hours Free Cool C Pump Hours | nnnnn nnnnn nnnnn | hours hours hours | hr_fcp_a hr_fcp_b hr_fcp_c | |

NOTE: This table shall be used for purposes of transplanting the devices on time in the event of a module hardware failure or software upgrade via downloading. It shall be usable only if all items are still null. Afterwards, its access shall be denied.

| TABLE | DISPLAY NAME | RANGE | UNITS | POINT NAME | WRITE STATUS |
|----------|---|--|---|--|--------------|
| UPDTHOUR | TABLE TO BE USED FOR RUN TIMES UPDATE IN CASE OF CONTROL RETROFIT | | | | |
| | Machine Operating Hours Machine Starts Compressor A1 Hours Compressor A2 Hours Compressor A3 Hours Compressor A4 Hours Compressor A4 Starts Compressor A2 Starts Compressor A4 Starts Compressor A4 Starts Compressor B4 Hours Compressor B4 Hours Compressor B5 Hours Compressor B6 Hours Compressor B7 Hours Compressor B8 Hours Compressor B9 Starts Compressor B9 Starts Compressor B1 Starts Compressor B1 Starts Compressor B2 Hours Compressor B3 Hours Compressor B1 Starts Compressor B3 Starts Compressor C1 Hours Compressor C3 Hours Compressor C4 Hours Compressor C4 Hours Compressor C5 Starts Compressor C6 Starts Compressor C7 Starts Compressor C6 Starts Compressor C7 Starts Compressor C7 Starts Compressor C7 Starts Compressor C8 Starts Compressor C9 Starts Compressor C7 Starts Compressor C8 Starts Compressor C9 Starts Compressor C9 Starts Compressor C4 Starts C7 C | nnnnn nnnnn nnnnn nnnnn nnnnn nnnnn nnnn | hours | hr_mach st_mach hr_cp_a1 hr_cp_a2 hr_cp_a3 hr_cp_a4 st_cp_a1 st_cp_a2 st_cp_a3 st_cp_a4 hr_cp_b1 hr_cp_b2 hr_cp_b3 hr_cp_b4 st_cp_b1 st_cp_b1 st_cp_b3 st_cp_b3 st_cp_b4 st_cp_b1 st_cp_b2 hr_cp_c1 hr_cp_c2 hr_cp_c3 hr_cp_c2 hr_cp_c2 hr_cp_c2 st_cp_c3 st_cp_c4 st_cp_c1 st_cp_c2 st_cp_c3 hr_cp_c4 | |
| | Circuit B Defrost Number | nnnnn | | nb_def_b | |

NOTE: This table shall be used for purposes of transplanting the devices on time in the event of a module hardware failure or software upgrade via downloading. It shall be usable only if all items are still null. Afterwards, its access shall be denied.