

## UCH-SIMUL-HR Master Alarms

Alarm Name	Alarm BACnet Point Name	Input Type	Self Reset?	# Trips to Alarm	Alarm in Mode		Trip Condition
					Off	Run	
High CHWRT Alarm	hi_ch_ent_tmp_off_1	Temp	Yes	1	No	Yes	Cool Loop Inlet Temp too High
High CHWST Alarm	hi_ch_leav_tmp_off_1	Temp	Yes	1	No	Yes	Cool Loop Outlet Temp too High
COND ENT TMP OFF	hi_cond_leav_tmp_off_1	Temp	Yes	1	No	Yes	Heat Loop Outlet Temp too High
COND ENTERING TMP OFF	hi_cond_ent_tmp_off_1	Temp	Yes	1	No	Yes	Heat Loop Inlet Temp too High
High SWST Alarm	hi_src_leav_off_1	Temp	Yes	1	No	Yes	Source Loop Outlet Temp too High
High SWRT Alarm	hi_src_ent_off_1	Temp	Yes	1	No	Yes	Source Loop Inlet Temp too High
Low CHWRT Alarm	lo_ch_ent_tmp_off_1	Temp	Yes	1	No	Yes	Cool Loop Inlet Temp too Low
Low CHWST Alarm	lo_ch_leav_tmp_off_1	Temp	Yes	1	No	Yes	Cool Loop Outlet Temp too Low
LO CND ENT TMP OFF	lo_cnd_ent_tmp_off_1	Temp	Yes	1	No	Yes	Heat Loop Inlet Temp too Low
LO CND LEAVING TMP OFF	lo_cnd_leav_tmp_off_1	Temp	Yes	1	No	Yes	Heat Loop Outlet Temp too Low
Low SWRT Alarm	lo_src_leav_off_1	Temp	Yes	1	No	Yes	Source Loop Inlet Temp too Low
Low SWST Alarm	lo_src_ent_off_1	Temp	Yes	1	No	Yes	Source Loop Outlet Temp too Low
No Cool Flow Alarm	no_cool_flow_1	Psid	Yes	1	No	Yes	Loss of Cool water flow > 5 seconds (Cool or Source Loops)
No Heat Flow Alarm	no_heat_flow_1	Psid	Yes	1	No	Yes	Loss of Heat water flow > 5 seconds (Heat or Source Loops)
No Heat Rec Flow Alarm	no_heat_rec_flow_1	Psid	Yes	1	No	Yes	Loss of Heat Recovery water flow > 5 seconds (Cool or Heat Loops)
CHW PSI Out of Range	chwpsi_oor_1	Psid	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply (or < Opsid/> 47.5 psid)
CW PSI Out of Range	cwpsi_oor_1	Psid	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply (or < Opsid/> 47.5 psid)
SRC PSI Out of Range	srcpsi_oor_1	Psid	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply (or < Opsid/> 47.5 psid)
CHWR Out of Range	chwr_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
CHWS Out of Range	chws_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
CWR Out of Range	cwr_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
CWS Out of Range	cws_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
SWR Out of Range	swr_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
SWS Out of Range	sws_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
OAT Out of Range	oat_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
OAT Out of Range	oat_oor_1	Temp	No	1	No	Yes	Sensor Disconnected or Shorted, bad 5 vdc supply
No Modules Available Alarm	no_mods_avail_1	Calc	Yes	1	No	Yes	No Modules available (all faulted or no communication with any modules)
Phase Alarm	phase_alarm_1	Digital	No	1	Yes	Yes	Loss of Phase, High Voltage, Low Voltage, Phase Imbalance for >1 second

## UCH-SIMUL-HR Module Alarms

Alarm Name	Alarm BACnet Point Name	Input Type	Self Reset?	# Trips to Alarm	Lockout Comp	Lockout Module	Alarm in Mode		Trip Condition
							Off	Run	
ModX Compr1 High Discharge Pressure	m1c1_hi_pres_alm_5	Pressure	No	3	Yes	No	No	Yes	C1 Discharge Pressure > 560 for 2 seconds
ModX Compr1 Low Suction Pressure	m1c1_low_suc_pres_alm_5	Pressure	No	3	Yes	No	No	Yes	C1 Suction Pressure < 90 psig for 30 seconds and compressor 1 on
ModX Compr1 Low Low Suction Pressure	m1c1_lolo_suc_pres_alm_5	Pressure	No	3	Yes	No	No	Yes	C1 Suction Pressure < 5 psig and compressor 1 on; loss of refrigerant charge
ModX Compr1 Low Suction Temp	m1c1_lo_suc_tmp_5	Temp	No	1	Yes	No	No	Yes	C1 Suction Temp < 32 degree for 15 seconds
ModX Compr1 High Suction Superheat	m1c1_hi_suc_supht_5	Calc	No	1	No	No	No	Yes	Superheat above 30 AND Comp 1 On for minimum run time
ModX Compr1 Low Suction Superheat	m1c1_low_suc_supht_5	Calc	Yes	1	No	No	No	Yes	Superheat below 2 degrees
ModX Compr2 High Discharge Pressure	m1c2_hi_pres_alm_5	Pressure	No	3	Yes	No	No	Yes	C2 Discharge Pressure > 560 for 2 seconds
ModX Compr2 Low Suction Pressure	m1c2_low_suc_pres_alm_5	Pressure	No	3	Yes	No	No	Yes	C2 Suction Pressure < 90 psig for 30 seconds and compressor 2 on
ModX Compr2 Low Low Suction Pressure	m1c2_lolo_suc_pres_alm_5	Pressure	No	3	Yes	No	No	Yes	Suction Pressure < 5 psig and compressor 2 on; loss of refrigerant charge
ModX Compr2 Low Suction Temp	m1c2_lo_suc_tmp_5	Temp	No	1	Yes	No	No	Yes	C2 Suction Temp < 32 degree for 15 seconds
ModX Compr2 High Suction Superheat	m1c2_hi_suc_supht_5	Calc	No	1	No	No	No	Yes	Superheat above 30 AND Comp 2 On for minimum run time
ModX Compr2 Low Suction Superheat	m1c2_low_suc_supht_5	Calc	Yes	1	No	No	No	Yes	Superheat below 2 degrees
ModX Compr1 NO-Run Alarm	m1c1_no_run_5	Digital	No	1	Yes	No	No	Yes	C1 does not show status after 990 seconds
ModX Compr2 NO-Run Alarm	m1c2_no_run_5	Digital	No	1	Yes	No	No	Yes	C2 does not show status after 990 seconds
ModX High Chilled Water Leaving Temp	m1_chwst_hi_5	Temp	No	1	Yes-Both	Yes	No	Yes > 2 min	> 90 degrees for 2 min AND after start up delay of 10 minutes
ModX High Cond Water Leaving Temp	m1_cwrt_hi_5	Temp	No	3	Yes-Both	Yes	No	Yes	> 140 degrees for 15 seconds
ModX Low Cond Water Leaving Temp	m1_cwrt_lo_5	Temp	No	1	Yes-Both	Yes	No	Yes >2 min	< 45 degrees for 2 min AND after start up delay of 10 minutes
M1 FREEZE TRG	m1_freeze_trg_5	Temp	No	3	Yes-Both	Yes	Yes	Yes	< 36 degrees for 15 seconds
ModX Evap Motorized Vlv Alarm	m1_hr_slh_vlv_al_5	Digital	No	1	Yes	Yes	No	Yes	Valves fails to report open after configured time (990 seconds)
ModX HR MVL Motorized Vlv Alarm	m1_hr_mvl_vlv_al_5	Digital	No	1	Yes	Yes	No	Yes	Valves fails to report open after configured time (990 seconds)
ModX Pr Ht SLC Motorized Vlv Alarm	m1_pr_ht_slc_vlv_al_5	Digital	No	1	Yes	Yes	No	Yes	Valves fails to report open after configured time (990 seconds)
ModX Pr Ht SLH Motorized Vlv Alarm	m1_pr_ht_slh_vlv_al_5	Digital	No	1	Yes	Yes	No	Yes	Valves fails to report open after configured time (990 seconds)
Mod1 Pr Cl MVL Motorized Vlv Alarm	m1_pr_cl_mvl_vlv_al_5	Digital	No	1	Yes	Yes	No	Yes	Valves fails to report open after configured time (990 seconds)
Mod1 Pr Cl MVS Motorized Vlv Alarm	m1_pr_cl_mvs_vlv_al_5	Digital	No	1	Yes	Yes	No	Yes	Valves fails to report open after configured time (990 seconds)
C1_P1 HD PRESS Out of Range	m1c1p1_oor_5	Pressure	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
C1_P2 SUC PRESS Out of Range	m1c1p2_oor_5	Pressure	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
C2_P1 HD PRESS Out of Range	m1c2p1_oor_5	Pressure	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
C2_P2 SUC PRESS Out of Range	m1c2p2_oor_5	Pressure	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
Mod X C1_T2 SUC Temp Out of Range	m1c1t2_oor_5	Temp	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
Mod X C2_T2 SUC TEMP Out of Range	m1c2t2_oor_5	Temp	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
Module X CHWS Out of Range	m1chws_oor_5	Temp	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply
Module X CWS Out of Range	m1cwr_oor_5	Temp	No	1	Yes	No	Yes	Yes	Sensor disconnected, shorted, or bad 5 vdc power supply