Quick Guide and Accessory Kit Configuration Instructions: Smart Equipment™ Replacement Board Factory Configuration

S1-03526539001 A-0824
5.0
2024-08-28

General

This kit applies to the following unit control boards (UCB):

- Single-stage UCB without comm card: S1-6434428, SE-SPU2001-0
- Single-stage UCB with RS485 comm card: S1-6434429, SE-SPU2011-0
- Dual-stage UCB without comm card: S1-6434430, SE-SPU2002-0
- Dual-stage UCB with RS485 comm card: S1-6434431, SE-SPU2012-0

Refrigeration detection sensor (RDS)

If the rooftop unit does not have a refrigerant detection sensor installed, the jumper included in this package must be attached to the RDS input of the controller.

Configuring the replacement board

If the old UCB still functions, see Backing up the UCB parameters to create a backup of the parameters.

If you previously backed up the parameters from the control board, see Configuring the replacement board.

Backing up the UCB parameters

A FAT32 formatted USB flash drive is required to complete this task. See Formatting your USB drive to correctly format your flash drive.

1. Connect the USB flash drive to the USB port on the UCB.
2. When **USB OK** appears on the LCD screen, use the joystick on the UCB to select **Update** and press **ENTER**.
3. Select **Backup** and press **ENTER**. When **BKP:OK** appears on the LCD screen, press **CANCEL** to go back to the main menu.

When the UCB parameters are backed up you can proceed to Restoring the UCB parameters.

Downloading the factory configuration file

If you do not have a copy of the UCB parameters, or the old UCD does not function to make a backup, you can use the factory reconfiguration file for the replacement UCB.

1. Log in to Solution Navigator.
2. Hover over Application, Parts and select Smart Search - UPG Products.
3. In the Item Number Search field, enter the serial number of your unit and press Search.
4. In the Search Results pane, select the Material number.
5. In the Material Detail pane, select SSE Control Board.
6. Follow the instructions on the screen to download the SSE Control Board settings for your unit.
7. In the pop-up window, select Save as and save the file onto your flash drive. Do not change the name of the file as this is formatted for use with your unit.

To install the configuration file, see Restoring the UCB parameters

Restoring the UCB parameters

1. Connect the USB flash drive to the USB port on the UCB.
2. When **USB OK** appears on the LCD screen, use the joystick on the UCB to select **Update** and press **ENTER**.
3. Select **Restore** and press **ENTER**.
4. If you want to restore parameters backed up from an old UCB, select **serialflash/ BackupConfig.csv** and press **ENTER**.
5. If you want to restore the factory configuration file, select **[unit serial number].csv** and press **ENTER**.

6. When **Confirm?** appears on the LCD screen, press **ENTER**. The LCD screen displays **RTR: OK** and reboots. When the startup timer ends, the configuration is restored

Enabling Bluetooth

The unit can be commissioned using the Johnson Controls Connected Workflow for Technicians mobile app over Bluetooth. Bluetooth communication can be enabled in two ways:

- Press the Down direction on the joystick and hold for 3 seconds. The device name and PIN is displayed.
- Navigate to the Bluetooth menu on the display: Controller > Bluetooth. Change BT-Ena to True and BT-Command to Start.

Manually setting the UCB parameters

Install the replacement board into the unit then program the parameters required for your specific application.

If the unit is controlled using a standard thermostat and it is not connected to a network, the number of configurable parameters are less than 15. Manually setting the parameters requires less than 5 minutes to complete.

If you have a VAV unit, heat pump unit, or specialized accessory functions such as hot gas reheat, CO2 sensors, or power exhaust, you must set the parameters related to those functions.

The following table lists the parameters that you must check and set on a replacement board.

ⓘ **Note:** Depending on the configuration of your unit you may need to set other parameters as well.

Table 1: UCB parameters to check and set

SSE parameters	SSE and MAP Gateway path	BACnet point	Setting value
Occupancy mode	Commission > Standard > OccMode	29518	Set to External if you use the occ terminal for the economizer minimum position
Cooling enabled	Commission > Standard > Clg-En	29575	Yes or No
Heating enabled	Commission > Standard > Htg-En	29707	Yes or No
Economizer enabled	Commission > Standard > Econ-En	29747	Yes or No

Table 1: UCB parameters to check and set

SSE parameters	SSE and MAP Gateway path	BACnet point	Setting value
Thermostat only	Commission > Standard > Tstat-Only	29514	Yes or No
Number of cooling stages	Commission > Standard > #ClgStgs	29576	1 to 4
Number of heating stages	Commission > Standard > #HtgStgs	29731	1 to 3
Fan ON delay heat	Details > Fan > Setup > FanOnDlyHeat	29560	0 to 30 second timer. The value must be 0 for electric heat.
OAT cooling lockout enable	Commission > Standard > ClgOATCutout-En	29581	Yes or No
OAT cooling lockout setpoint	Commission > Standard > ClgOATCutout	29582	0 to 100 degrees
Supply air cool limit enable	Commission > Standard > SATCoolLimit-En	29590	Yes or No
Supply air cool limit setpoint	Commission > Standard > SATCoolLimit-Sp	29591	40 to 65 degrees
Heating OAT cutout setpoint	Details > Heating > Setup > HtgOATCutout-Sp	29711	0 to 100 degrees
0 to 100 degrees	Details > Heating > Setup > SATHtgLimit-En	29709	Yes or No
Supply air heating limit setpoint	Details > Heating > Setup > SATHtgLimit-Sp	29710	100 degree to 180 degrees
Economizer minimum position	Commission > Standard > Econ-MinPos	29759	Percentage open setpoint
Number of Heat Pump Stages Installed	Commission > Options > #HtPumpStgs	29898	0 to 2
Number of Refrig Systems Installed	Commission > Options > #RefrigSys	29890	0 to 4
Fan Control Type	Commission > Options > FanCtl-Type	29555	Single Speed, Not Used, Fixed Variable, Variable Speed
Continuous Fan Operation in Occupied Mode	Commission > Standard > FanOnOcc	29568	Yes or No

⚠ CAUTION

SSE boards from Source 1 come with the OccMode parameter set to Schedule. This runs the unit off the internal schedule. If you use a thermostat-only control or a building automation system, change this to External.

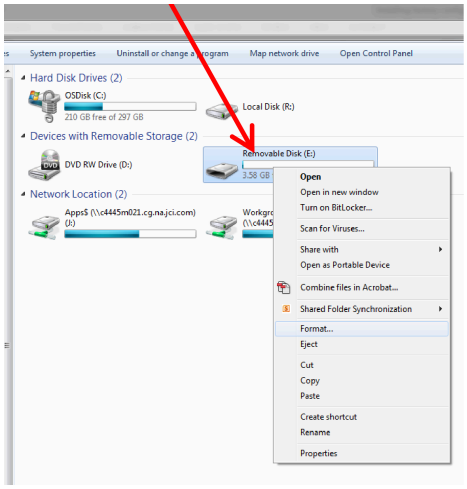
Formatting your USB drive

1. From the start menu, open the **This PC** window, right click on the **Removable disk** and select **Format**.

   Note: On PCs using operating systems older than Windows 8, open **My Computer** to navigate to the USB drive.

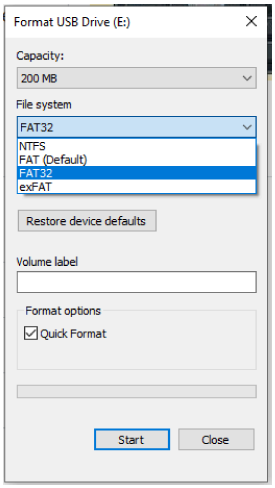
2. In the **Format Removable Disk** window, click the drop-down **File system** menu.

Figure 1: Removable disk menu



3. If the file system displayed is not FAT32, in the menu select FAT32 and then select Start.

Figure 2: File system menu



Smart Equipment 5.0 UCB display menu guide

Status menu

The following tables outline the sub-menus and parameters in the Status menu.

Table 2: Status > Thermostat menu guide

Parameter	Setting	Condition	Note
Y1-Tstat	Off	24vac Input To Y1 Term	
Y2-Tstat	Off	24vac Input To Y2 Term	UCB Conditional Parameter
Y3-Tstat	Off	24vac Input To Y3 Term	UCB Conditional Parameter
Y4-Tstat	Off	24vac Input To Y4 Term	UCB Conditional Parameter
W1-Tstat	Off	24vac Input To W1 Term	UCB Conditional Parameter
W2-Tstat	Off	24vac Input To W2 Term	UCB Conditional Parameter
W3-Tstat	Off	24vac Input To W3 Term	UCB Conditional Parameter
G-Tstat	Off	24vac Input To G Term	
Occ-Tstat	On (Default Setting)	T-Stat Input Only	

Table 3: Status > SmokeCtrl menu guide

Parameter	Setting	Condition	Note
OprPurgeCmd	False	ActivePurgeCmd	Economizer Board Presence
PurgeCmdSrc	RATemp	PurgeCmdSource	Economizer Board Presence
Purge	False	Purge Input Status	Economizer Board Presence
NetPurge	False	Purge Command Status	
SD	Normal	SD 24 VAC Input Status	

Table 4: Status > Status menu guide

Parameter	Setting	Condition	Note
Unit-S	Idle	Unit Status	
Econ-S	Disabled (Default Setting)	Economizer Status	
ExF-S	Off-Idle	Exhaust Fan Status	Economizer Board Presence
Fan-S	Off-Idle	Fan Status	
HGR-S	Off-Idle	Hot Gas Reheat Status	
Clg-S	Off-Idle	Cooling Status	
HTG-S	Off-Idle	Heating Status	
DFS	Normal	Dirty Filter Switch	
UCB24VAC ForOutp	.3VAC	UCB 24VAC Input	

Table 5: Status > ControlSysCntlrs menu guide

Parameter	Setting	Condition	Note
EconCntlr	Not Present	Econ Board Comm Status	
4StgCntlr	Not Present	4 STG Board Comm Status	
FDDMCntlr	Not Present	FDDM Board Comm Status	
FDDSCntlr	Not Present	FDDS Board Comm Status	

Alarms

The following table outlines the Alarm menu parameters.

Table 6: Alarms menu guide

Parameter	Condition	Notes
No Events	No Active Alarm	UCB Conditional Parameter
Alarm Description	Most Recent Alarm	UCB Conditional Parameter
Alarm Description	2nd Most Resent Alarm	UCB Conditional Parameter
Alarm Description	3rd Most Resent Alarm	UCB Conditional Parameter

Table 6: Alarms menu guide

Parameter	Condition	Notes
Alarm Description	4th Most Resent Alarm	UCB Conditional Parameter
Alarm Description	5th Most Resent Alarm	UCB Conditional Parameter

Summary menu

The following tables outline the sub-menus and parameters in the Summary menu.

Table 7: Summary > Senors > Operational Mode menu

Parameter	Setting	Condition	Note
OprOAT	73.0 F	Operational Outdoor Air Temperature	
OprST	73.0 F	Operational Space Temperature In Use	
OprSSO	.0 F	Operational Space Temperature Setpoint Offset In Use	
OprSH	49.6 %H	Operational Space Humidity In Use	
OprOAH	19%H	Operational Outdoor Air Humidity	Economizer Board Presence
OprIAQ	477ppm	Operational Indoor Air Quality In Use	Economizer Board Presence
OprOAQ	990ppm	Operational Outdoor Air Quality In Use	Economizer Board Presence
OprPurgeCmd	False	ActivePurgeCmd	Economizer Board Presence

Table 8: Summary > Sensors > Sensors menu

Parameter	Setting	Condition	Note
SAT	60.7 F	S A Temp Thermistor Input	
RAT	73.0 F	R A Temp Thermistor Input	
OAT	73.0 F	UCB OAT Thermistor Input	
OATSrc	Local Input	Outdoor Air Temperature Source	
ST	69.9 F	Space Temperature Input	
STSrc	Network Sensor	Space Temperature Source	
STAlarmOffset	5 F	Space Temperature Alarm Setpoint Offset	
STAlarmDelay	60min	Space Temperature Alarm Time Delay	
SSO	.0 F	Space Temp Setpoint Offset Input	
SSOSrc	Network Sensor	Space Temperature Setpoint Offset Source	
SSORange	3.0 F	Space Temperature Setpoint Offset Range	
RAH	79.4 %H	Space Humidity RAH Input	
SHSrc	Local Input	Space Humidity Source	
OAH	50.2 %H	Outdoor Air Humidity Input	
OAHSrc	Local Input	Outdoor Air Humidity Source	
IAQ	477ppm	IAQ 0-10 VDC Input	Economizer Board Presence
IAQSrc	Local Input	Indoor Air Quality Source	Economizer Board Presence
OAQ	477ppm	OAQ 0-10 VDC Input	Economizer Board Presence
OAQSrc	Local Input	Outdoor Air Quality Source	Economizer Board Presence
PurgeCmdSrc	RATemp	Purge Command Source	Economizer Board Presence
SAH	49%H	SAH 0-10 VDC Input	Economizer Board Presence
MAT	70 F	Mixed Air Temperature	
BLDGPres	.095"/w	Building Static Pressure	

Table 8: Summary > Sensors > Sensors menu

Parameter	Setting	Condition	Note
DctPrs	1.50"/w	DuctPres 0-5 VDC input	UCB Conditional Parameter
NS-Calibration	0 F	Netsensor Calibration	UCB Conditional Parameter

Table 9: Summary > Unit menu

Parameter	Setting	Condition	Note
Name	RTUxxxx	14 character max	
Model#	RTUxxxxx	14 character max	
Serial#	DEFAULT_SERIAL	14 character max	
ModelName		Model Name	
Unit-S	Idle	Unit Status	
UnitEn	Enable (Default Setting)	Unit Enable	
HdwrReset	No (Default Setting)	Hardware Reset	
ResetLO	Off (Default Setting)	Reset Lockouts	

Commission menu

The following tables outline the sub-menus and parameters in the Commission menu.

Table 10: Commission > Quick Start menu guide

Parameter	Setting	Condition	Notes
#ClgStsg	4 (Default Setting)	Number Of Cooling Stages Installed	
#HtgStgs	3 (Default Setting)	Number Of Heating Stages Installed	
#HtPumpStgs	0 (Default Setting)	Number Of Heat Pump Stages Installed	
#RefrigSys	4 (Default Setting)	Number Of Refig Systems Installed	
FanCtl-Type	Single Speed (Default Setting)	Fan control Type	
Tstat-Only	Yes (Default Setting)	Thermostat Only Control Enabled	
FanOnOcc	Yes (Default Setting)	Continuous Fan Operation In Occupied Mode	UCB Conditional Parameter
Econ-MinPos	%	Economizer Minimum Position Setpoint	Economizer Board Presence
SAT	Deg F	Supply Air Temperature	UCB Conditional Parameter
RAT	Deg F	Return Air Temperature	UCB Conditional Parameter
OAT	Deg F	Output Air Temperature Input	
Clg-S	Off-Idle	Cooling Status	
Htg-S	Off-Idle	Heating Status	
Clg-En	Yes (Default Setting)	Cooling Mode Enabled Operation	
Htg-En	Yes	Heating Mode Enabled For Operation	
Unique Equipment Identifier	Standard (Default Setting)	Unique Equipment Identifier	

Table 11: Commission > Standard menu guide

Parameter	Setting	Condition	Notes
OccMode	Schedule (Default Setting)	Occupancy Mode	
Tstat-Only	Yes (Default Setting)	T-Stat Input Only	
Clg-En	Yes (Default Setting)	Cooling Enabled/Disabled	
#ClgStgs	4 (Default Setting)	Cooling Enabled/Disabled	
Htg-En	Yes (Default Setting)	Heating Enabled/Disabled	
#HtgStgs	3 (Default Setting)		
Econ-En	Yes (Default Setting)	Permit Free Cooling operation	Economizer Board Presence
Econ-MinPos	20% (Default Setting)	OccEconoMinPos	Economizer Board Presence
LowSpeedFan-MinPos	25%	AI-IN 0-10vdc Input	Economizer Board Presence

Table 11: Commission > Standard menu guide

Parameter	Setting	Condition	Notes
FanOnOcc	Yes (Default Setting)	CV ConstantFanOccupiedMode	UCB Conditional Parameter
SATCoolLimit-En	Yes	Enable SAT Limit	
SATCoolLimit-Sp	50 F (Default Setting)	SAT Limit SetPt	
ClgOATCutout-En	Yes	LowAmbComp LO	
ClgOATCutout	45 F (Default Setting)	LoAmbCompLO StPt	
Circ1ClgOATCutout	45 F (default setting)	Circuit 1 OAT Cooling Cutout	UCB Conditional Parameter
Circ2ClgOATCutout	45 F (default setting)	Circuit 2 OAT Cooling Cutout	UCB Conditional Parameter
Unique Equipment Identifier	Standard (Default Setting)	Unique Equipment Identifier	

Table 12: Commission > Options menu guide

Parameter	Setting	Condition	Notes
FanCtl-Type	Single Speed (Default Setting)	ID Blower Type	
ExFType	None (Default Setting)	Power Exh Fan mode selection	
#RefrigSys	4 (Default Setting)	#Refrig Circuits	
ModCondFanCir1En	No (Default Setting)	Cir1 Modulating Condenser Fan Installed	
ModCondFanCir2En	No (Default Setting)	Cir2 Modulating Condenser Fan Installed	
LowAmb-En	Yes (Default Setting)	Low Ambient Enabled	
LeadLag-En	No	EqualCompRuntime	
HGP-Inst	No (Default Setting)	Hot Gas Bypass Installed	
Htg-En	Yes (Default Setting)	Heating Enabled/Disabled	
Htg-Type	Staged (Default Setting)	Heating Control Method	
SATHtgLimit-En	Yes (Default Setting)	SA HtgLimitEnabled	
SATHtgLimit-Sp	140 F (Default Setting)	SA HtgLimitSetPt	
HtgOATCutout-Sp	75 F (Default Setting)	HtgOAT CO SetPt	
APSSetup	None (Default Setting)	Air Proving Switch Operation	
DFSINst	Yes (Default Setting)	Dirty Filter Switch Installed	
DVent-Mode	Yes (Default Setting)	Dmand Vent mode select	Economizer Board Presence
HGR-En	No (Default Setting)	Hot Gas Reheat Enabled	
MornW-En	No (Default Setting)	Morning Warm up Enabled	UCB Conditional Parameter
#HtPumpStgs	0 (Default Setting)	# of Heat Pumps	
LowAmbFanPre-runCool	60 Sec (Default Setting)	Low Ambient Fan Pre-run Time For Cooling	
PIDTunRst	False (Default Setting)	PID Tuning Reset	
LowAmbStart	No (Default Setting)	Low Ambient Start	
SZVAVEn	No	Single Zone VAV Enabled	
PressureizeNotPurge	No (Default Setting)	Pressurize Instead Of Purge	
CoolDuringHeatLimit	No (Default Setting)	Cooling Allowed During Heating	
FddAlarmEn	Enable (Default Setting)	FDD Alarm Enable	UCB Conditional Parameter
EconSensorFaults	Enable (Default Setting)	Econ Sensor Fault Indications	UCB Conditional Parameter
Oil Switch Installed	False (Default Setting)	Oil Switch Installed	

Table 13: Commission > Network Setup menu guide

Default settings and conditions for parameter display	Setting	Condition	Notes
FcBusMode	Wired	FC Bus Comm Mode	
Address	4 (Default Setting)	FCBusBACnetNetworkAddress	
DeviceId	1	Device OID	
BaudRate	Auto (Default Setting)	FC BUS baud rate in use	

Table 13: Commission > Network Setup menu guide

Default settings and conditions for parameter display	Setting	Condition	Notes
DevName	UCBApp	FCBusBACnetNtwrkName	
EncodeType	ANSI X3.4 (Default Setting)	US-ASCII	

Table 14: Commission > Commissioning Mode menu guide

Parameter	Setting	Condition	Notes
Commissioning Mode	Disable	Commissioning Mode	
CommishTimeRemaining	Minutes	Commissioning Time Remaining	
ExtendCommishTime	No (Default Setting)	Extend Commissioning Time	
UnitEn	Enable	Unit Enable	
Fan	On	Supply Fan Command	
FanVFD	0% (Default Setting)	Fan % Command	UCB Conditional Parameter
C1	Off (Default Setting)	Compressor Stage Command 1	UCB Conditional Parameter
ModCompOut	0% (Default Setting)	Modulating Compressor Output	
C2	Off (Default Setting)	Compressor Stage Command 2	UCB Conditional Parameter
C3	Off (Default Setting)	Compressor Stage Command 3	UCB Conditional Parameter
C4	Off (Default Setting)	Compressor Stage Command 4	UCB Conditional Parameter
CN-Fan	Off (Default Setting)	Condenser Fan 1	
ModCondFan1Out	0% (Default Setting)	Modulating Condenser Fan 1 Output	UCB Conditional Parameter
CF2	Off (Default Setting)	Condenser Fan 2	
ModCondFan2Out	0% (Default Setting)	Modulating Condenser Fan 2 Output	UCB Conditional Parameter
H1	Off (Default Setting)	Heating Stage Command 1	UCB Conditional Parameter
H2	Off (Default Setting)	Heating Stage Command 2	UCB Conditional Parameter
H3	Off (Default Setting)	Heating Stage Command 3	UCB Conditional Parameter
HGR	Off (Default Setting)	Hot Gas Reheat Command	UCB Conditional Parameter
HGR	0% (Default Setting)	Hot Gas Reheat	UCB Conditional Parameter
Hot Gas Reheat Bleed Value Command	Open (Default Setting)	Hot Gas Reheat Bleed Valve Command	UCB Conditional Parameter
Econ	%	Economizer Damper % Command	Economizer Board Presence
ExFanVFD	% (Default Setting)	Exhaust Fan VFD % Command	UCB Conditional Parameter
ExFan	On (Default Setting)	Exhaust Fan Command	UCB Conditional Parameter
EAD-O	0% (Default Setting)	Exhaust Damper % Command	UCB Conditional Parameter
Cancel ASCD Timers	No (Default Setting)	Cancel ASCD Timers	

Controller menu

The following tables outline the sub-menus and parameters in the Controller menu.

Table 15: Controller > Network menu guide

Parameter	Setting	Condition	Notes
DevName	UCBApp	FC Bus BACnet network name	
BASCom	BACnet (Default Setting)	Comm Sub-board operation	
Address	4 (Default Setting)	FC BUS BACnet network address	
TimeZone	Central		
Descript			
Comm-S	Waiting For Poll	FC Bus comm status	
FcBusMode	Wired	FC Bus Comm Mode	
OprBaudRate	Auto	FC BUS baud rate to be used	
BaudRate	Auto (Default Setting)	FC BUS baud rate in use	
Deviceid	1	Device OID	
Language	English (Default Setting)		

Table 15: Controller > Network menu guide

Parameter	Setting	Condition	Notes
Units	IP (Default Setting)	Units Of Measure To Be Used	
#NetSensors	1	Number of Network Sensors Online	
Relearn	False	Relearn System	
EncodeType	ANSI X3.4 (US-ASCII)	BACnet Encoding Type	

Table 16: Controller > Firm > UCB menu guide

Parameter	Setting	Condition	Notes
Firm-S	Firmware Versions OK	Firmware Status	
FirmVer	3.4.1.447	Firmware Version	
UCBMainVer	3.4.1.447	Firmware Revision	
UCBAppVer	1223_2017.9.6.255	Software App Rev	
UCBHardVer	001	Hardware Revision	
SerialFlashSize	16777216	Serial Flash Size	

Table 17: Controller > Firm > Econ menu guide

Parameter	Setting	Condition	Notes
EconMainVer	3.4.1.447	Firmware Revision	
EconAppVer	1223_2017.9.6.255	Software App Rev	
EconHardVer	001	Hardware Revision	

Table 18: Controller > Firm > 4 Stage menu guide

Parameter	Setting	Condition	Notes
4StgMainVer	3.4.1.447	Firmware Revision	UCB Conditional Parameter
4StgAppVer	1223_2017.9.6.255	Software App Rev	UCB Conditional Parameter
4StgHardVer	001	Hardware Revision	UCB Conditional Parameter

Table 19: Controller > Firm > FDD Manager menu guide

Parameter	Setting	Condition	Notes
FDDMMainVer	4.0.0.xxxx	Firmware Revision	UCB Conditional Parameter
FDDMAppVer	1223_2017.9.6.255	Software App Rev	UCB Conditional Parameter
FDDMHardVer	001	Hardware Revision	UCB Conditional Parameter

Table 20: Controller > Firm > FDD Subordinate menu guide

Parameter	Setting	Condition	Notes
FDDSMainVer	3.4.1.447	Firmware Revision	UCB Conditional Parameter
FDDSAppVer	1223_2017.9.6.255	Software App Rev	UCB Conditional Parameter
FDDSHardVer	Not Present	Hardware Revision	UCB Conditional Parameter

Table 21: Controller > Firm > Bluetooth menu guide

Parameter	Setting	Condition	Notes
BT-Ena	True (Default Setting)	Bluetooth Enabled	UCB Conditional Parameter
BT-Status	Not Connected (Default Setting)	BLE Connection Status	UCB Conditional Parameter
BT-Command	Stopped (Default Setting)	Initiate Connection	UCB Conditional Parameter
PIN		PIN	UCB Conditional Parameter
BT-Name		BLE Device Name	UCB Conditional Parameter

Table 21: Controller > Firm > Bluetooth menu guide

Parameter	Setting	Condition	Notes
BT-ClrInfo	False (Default Setting)	Clear Bluetooth Connections	UCB Conditional Parameter
BT-Version		Bluetooth Firmware Version	UCB Conditional Parameter

Table 22: Controller > Network Inputs menu guide

Parameter	Setting	Condition	Notes
NetST		FC Bus Space Temp	
NetSSO		FC BusSpaceSetPtOffset	
NetSH		FC BusSpaceHumidity	
NetOcc	Not Set	FC BusOccupncyStatus	
NetTempOcc	False	TempOccCommand	
NetIAQ		FC Bus IAQ value	
NetFanReq		FC BusFanOn reqst	
NetOAT		FC Bus OA Temp	
NetOAH		FC Bus OA Humidity	
NetOAQ		FC Bus OA Quality	
NetPurge		FC BusPurge Comand	
DirLoadshd	No (Default Setting)	Direct Loadshed	
Redline	No (Default Setting)	Redline	

Table 23: Controller > FDD menu guide

Parameter	Setting	Condition	Notes
UnitType			UCB Conditional Parameter
EER			UCB Conditional Parameter
SubcoolGoal			UCB Conditional Parameter
RefrigType			UCB Conditional Parameter
HiSidePortLoc			UCB Conditional Parameter
EvapCoil-Type			UCB Conditional Parameter
CondCoil-Type			UCB Conditional Parameter
InMeterDev-Type			UCB Conditional Parameter
OutMeterDev-Type			UCB Conditional Parameter
UnitCap			UCB Conditional Parameter
FanPower			UCB Conditional Parameter
SuperHeatGoal			UCB Conditional Parameter
Altitude			UCB Conditional Parameter

Table 24: Controller > Time menu guide

Parameter	Setting	Condition	Notes
Time	Central (Default Setting)		
Daylight Savings Enable	False (Default Setting)		
Time Format	False (Default Setting)		

Table 25: Controller > Description menu guide

Parameter	Setting	Condition	Notes
CntrlType	CV (Default Setting)	Rooftop Controller Type	
EquipType	RTU (Default Setting)	Rooftop Equipment Type	

Table 26: Controller > Controller Info menu guide

Parameter	Setting	Condition	Notes
Brightness Setting	7	Brightness Setting	
Firmware Version	5.0.0.XXX		

Table 26: Controller > Controller Info menu guide

Parameter	Setting	Condition	Notes
Firmware Status	Firmware Versions OK		
Language	English		
Units	IP	Units of measure to be used	

Update menu

The following table outlines the sub-menus and parameters in the Update menu.

Table 27: Update menu guide

Update sub-menu	Parameter	Setting	Condition	Notes
View Ver	5.0.0.x.x.x Firmware OK			
LoadFirm	No Package Present	Error	USB w/firmware must be present	
Backup	BKP:Wait	bCfg 0%		
Restore	>serialflash/BackupConfig			
Full clone	>serialflash/BackupConfig			
Factory default	Confirm			
Time	Hour	0 (Default Setting)	0 through 23	
	Minute	11 (Default Setting)	0 through 59	
	Day	1 (Default Setting)	1 through 31	
	Month	1 (Default Setting)	1 through 12	
	Year	2000 (Default Setting)	1900 through 2155	
Export Trend	USB	Missing (Default Setting)		

Details menu

The following tables outline the sub-menus and parameters in the Details menu.

Occupancy Status

Table 28: Details > Occupancy Status menu guide

Parameter	Setting	Condition	Notes
OccMode	External (Default Setting)	Occupancy Mode	
OCC	UnOccupied	Occupancy Input	
OprOcc	UnOccupied	Occupancy status	
OccSrc	Local Input	Occ/UnOcc Status Source	
TempOcc	Disable	Temporary Occupancy Input	
TempOccTimeout	120 (Default Setting)	Temporary Occupancy Timeout	
OffDurUnocc	No (Default Setting)	Off During Unoccupied	
OptStrt-En	No (Default Setting)	Optimal Start Enabled	UCB Conditional Parameter
EarlyStrtPeriod	60min (Default Setting)	Early Start Period	UCB Conditional Parameter
PreOccPurgeEna		Pre Occupancy Purge Enable	UCB Conditional Parameter
PreOccPurge-Time	60 (Default Setting)	Pre Occupancy Purge Time	UCB Conditional Parameter
PreOccUp-SAT_SP	90 (Default Setting)	Pre Occupancy Purge Upper SAT Setpoint	UCB Conditional Parameter
PreOccLow-SAT_SP	45 (Default Setting)	Pre Occupancy Purge Lower SAT Setpoint	UCB Conditional Parameter

Cooling (Clg)

Table 29: Details > Clg > Setup menu guide

Parameter	Setting	Condition	Note
ClgOcc-Sp	72 F Default Setting	CV Occupied Cooling Setpoint	

Table 29: Details > Clg > Setup menu guide

Parameter	Setting	Condition	Note
ClgUnocc-Sp	85 F Default Setting	CV Unoccupied Cooling Setpoint	
SZVAVClgUnocc-Sp	False Default Setting	SZ VAV Occupied Cooling Setpoint	
SZVAVClgUnocc-Sp	False Default Setting	SZ VAV Occupied Cooling Setpoint	
Common-Sp	False Default Setting	Common Setpoint	
Auto Changeover	False Default Setting	Auto Changeover	
Heat Cool Setpoint Mode	Individual Setpoints Default Setting	Heat Cool Setpoint Mode	
C1-En	Yes Default Setting	C1 24vacOutputEnabled	
C2-En	Yes Default Setting	C2 24vac output enabled	UCB Conditional Parameter
C3-En	Yes Default Setting	C3 24vacOutputEnabled	UCB Conditional Parameter
C4-En	Yes Default Setting	C4 24vacOutputEnabled	UCB Conditional Parameter
MinRtCoolStg	3min Default Setting	Minimum Runtime for a Cooling Stage	
ClgAdapTunEn	Yes Default Setting	Cooling Adaptive Tuning Enable	
LowAmb-En	No	Low Ambient Enabled	
LowAmb10On5OffSp	45 F	Low Ambient Cooling Stages 10 on 5 off Setpoint	
EnabledLeadLag-En	No Default Setting	Lead/Lag Equalize Cooling Stage Runtime	
ClgOATCutout-En	Yes Default Setting	LowAmbComp LO	
ClgOATCutout	45 F Default Setting	LoAmbCompLO StPt	
SATCoolLimit-En	Yes	Enable SAT Limit	
SATCoolLimit-Sp	45 F Default Setting	SAT Limit for Cooling Setpoint	
HGP-Inst	No Default Setting	Hot Gas Bypass Present	
Freeze-Sp	26.0 F Default Setting	Freeze Condition Setpoint	
PmpOut-En	Disable Default Setting	Pump Out Enable	
LowAmbFanPrerun-Coo	60sec Default Setting	Low Ambient Fan Pre-run Time For Cooling	
ClgManualTune	No Default Setting	Cooling Manual Tuning	UCB Conditional Parameter
LowAmbStart	No Default Setting	Low Ambient Start	
4pipeEna	No Default Setting	4 Pipe Split Enable	
ClgRapidStartEn	Disable Default Setting	Cooling Rapid Start Enable	
ClgRapidStartTime	5 Min Default Setting	Cooling Rapid Start Time	

Table 30: Details > Clg > Service > Unit menu guide

Parameter	Setting	Condition	Note
StgClgCmd	0%	Staged Cooling Command	UCB Conditional Parameter
OprCVClg-Sp	72 F	CV Operating Cooling Setpoint	
OprVAVClg-Sp	False	VAV Operating Cooling Supply Air Temp Setpoint	UCB Conditional Parameter
Clg-S	Off-Idle	Cooling Status	UCB Conditional Parameter
OprOAT	73.0 F	Operational Outdoor Air Temperature	
OprST	73.0 F	Operational Space Temperature	
RAT	73.0 F	UCB RAT thermistor input	UCB Conditional Parameter
Econ-Free	No	Econ Free Cooling Available	Economizer Board Presence
SAT	60.7 F	UCB SAT thermistor input	UCB Conditional Parameter
Y1-Tstat	Off	24vac input to Y1 term	
Y2-Tstat	Off	24vac input to Y2 term	UCB Conditional Parameter
Y3-Tstat	Off	24vac input to Y3 term	UCB Conditional Parameter
Y4-Tstat	Off	24vac input to Y4 term	UCB Conditional Parameter

Table 30: Details > Clg > Service > Unit menu guide

Parameter	Setting	Condition	Note
CN-Fan	Off	CN-Fan 24 VAC output	
ModCondFan1Out	0%	Modulating Condenser Fan 1 Output	UCB Conditional Parameter
CF2	Off	CF2 24 VAC output	UCB Conditional Parameter
ModCondFan2Out	0%	Modulating Condenser Fan 2 Output	UCB Conditional Parameter

Table 31: Details > Clg > Service Stage 1 menu guide

Parameter	Setting	Condition	Note
C1-S	Off - Idle	Compressor Stage 1 Status	
C1	Off	C1 24vac output status	
ModCompOut	0%	Modulating Compressor Output	
C1OnTmr	180 Sec	Min On Time Remaining 1	
1C1ASCDTmr	300 Sec	Anti-Short Cycle Delay Time Remaining	
C1RunTim	. 0 hr Default Setting	Compressor Stage Accumulated Runtime 1	
C1-EI	? %	Efficiency Index 1	UCB Conditional Parameter
C1-CI	? F	Capacity Index 1	UCB Conditional Parameter
C1-CondTempOvrAmb		Condensing Temperature over Ambient 1	UCB Conditional Parameter
C1-EvapTempValue		Evaporating Temperature Value Circuit 1	UCB Conditional Parameter
ClgCktTestS-1		Cooling Circuit Test Status	UCB Conditional Parameter
C1-SuperHeat		Superheat	UCB Conditional Parameter
C1-SubCool		Subcooling	UCB Conditional Parameter
OIL-A	Normal	Oil Level Switch	

Table 32: Details > Clg > Service > Stage 2 menu guide

Parameter	Setting	Condition	Note
C2-S	Off - Idle	Compressor Stage 2 Status	UCB Conditional Parameter
C2	Off	C2 24vac output status	UCB Conditional Parameter
C2OnTmr	180 sec Default Setting	Min On Time Remaining 2	UCB Conditional Parameter
C2ASCDTmr	300 sec Default Setting	Anti-Short Cycle Delay Time Remaining 2	UCB Conditional Parameter
C2RunTim	.0 hr Default Setting	Compressor Stage Accumulated Runtime 2	UCB Conditional Parameter
C2-EI	? %	Efficiency Index 2	UCB Conditional Parameter
C2-CI	? F	Capacity Index 2	UCB Conditional Parameter
C2-CondTempOvrAmb		Condensing Temperature over Ambient 2	UCB Conditional Parameter
C2-EvapTempValue		Evaporating Temperature Value Circuit 2	UCB Conditional Parameter
ClgCktTestS-1		Cooling Circuit Test Status	UCB Conditional Parameter
C1-SuperHeat		Superheat	UCB Conditional Parameter
C1-SubCool		Subcooling	UCB Conditional Parameter

Table 33: Details > Clg > Service > Stage 3 menu guide

Parameter	Setting	Condition	Note
C3-S	Off - Idle	Compressor Stage 3 Status	UCB Conditional Parameter
C3	Off	C3 24vac output status	UCB Conditional Parameter
C3OnTmr	180 sec Default Setting	Min On Time Remaining 3	UCB Conditional Parameter

Table 33: Details > Clg > Service > Stage 3 menu guide

Parameter	Setting	Condition	Note
C3ASCDTmr	300 sec Default Setting	Anti-Short Cycle Delay Time Remaining 3	UCB Conditional Parameter
C3RunTim	.0 hr Default Setting	Compressor Stage Accumulated Runtime 3	UCB Conditional Parameter
C3-EI	? %	Efficiency Index 3	UCB Conditional Parameter
C3-CI	? F	Capacity Index 3	UCB Conditional Parameter
C3-CondTempOvrAmb		Condensing Temperature over Ambient 3	UCB Conditional Parameter
C3-EvapTempValue		Evaporating Temperature Value Circuit 3	UCB Conditional Parameter
ClgCktTestS-1		Cooling Circuit Test Status	UCB Conditional Parameter
C1-SuperHeat		Superheat	UCB Conditional Parameter
C1-SubCool		Subcooling	UCB Conditional Parameter

Table 34: Details > Clg > Service > Stage 4 menu guide

Parameter	Setting	Condition	Note
C4-S	Off - Idle	Compressor Stage 4 Status	UCB Conditional Parameter
C4	Off	C4 24vac output status	UCB Conditional Parameter
C4OnTmr	180 sec Default Setting	Min On Time Remaining 4	UCB Conditional Parameter
C4ASCDTmr	300 sec Default Setting	Anti-Short Cycle Delay Time Remaining 4	UCB Conditional Parameter
C4RunTim	.0 hr Default Setting	Compressor Stage Accumulated Runtime 4	UCB Conditional Parameter
C4-EI	? %	Efficiency Index 4	UCB Conditional Parameter
C4-CI	? F	Capacity Index 4	UCB Conditional Parameter
C4-CondTempOvrAmb		Condensing Temperature over Ambient 4	UCB Conditional Parameter
C4-EvapTempValue		Evaporating Temperature Value Circuit 4	UCB Conditional Parameter
ClgCktTestS-1		Cooling Circuit Test Status	UCB Conditional Parameter
C1-SuperHeat		Superheat	UCB Conditional Parameter
C1-SubCool		Subcooling	UCB Conditional Parameter

Table 35: Details > Clg > Sensors menu guide

Parameter	Setting	Condition	Note
EC1		EC1 thermistor input	
CC1		CC1 thermistor input	UCB Conditional Parameter
DLP1		Discharge Line Pressure 1	
SLP-1		Suction Pressure 1	UCB Conditional Parameter
LLP-1		Liquid Pressure 1	UCB Conditional Parameter
DLT1		Discharge Line Temperature 1	
SLT-1		Suction Temperature 1	UCB Conditional Parameter
LLT-1		Liquid Temperature 1	UCB Conditional Parameter
EC2		EC2 thermistor input	UCB Conditional Parameter
CC2		CC2 thermistor input	UCB Conditional Parameter
DLP2		Discharge Line Pressure 2	
SLP-2		Suction Pressure 2	UCB Conditional Parameter
LLP-2		Liquid Pressure 2	UCB Conditional Parameter
DLT2		Discharge Line Temperature 2	
SLT-2		Suction Temperature 2	UCB Conditional Parameter
LLT-2		Liquid Temperature 2	UCB Conditional Parameter
EC3		EC3 thermistor input	UCB Conditional Parameter
CC3		CC3 thermistor input	UCB Conditional Parameter

Table 35: Details > Clg > Sensors menu guide

Parameter	Setting	Condition	Note
SLP-3		Suction Pressure 3	UCB Conditional Parameter
LLP-3		Liquid Pressure 3	UCB Conditional Parameter
SLT-3		Suction Temperature 3	UCB Conditional Parameter
LLT-3		Liquid Temperature 3	UCB Conditional Parameter
EC4		EC4 thermistor input	UCB Conditional Parameter
CC4		CC4 thermistor input	UCB Conditional Parameter
SLP-4		Suction Pressure 4	UCB Conditional Parameter
LLP-4		Liquid Pressure 4	UCB Conditional Parameter
SLT-4		Suction Temperature 4	UCB Conditional Parameter
LLT-4		Liquid Temperature 4	UCB Conditional Parameter

Table 36: Details > Clg > Safeties menu guide

Parameter	Setting	Condition	Note
HPS1	Normal	HPS1 24vac input status	
HPS1-LO	Normal	HiPress1 switch status	
LPS1	Normal	LPS1 24vac input status	
LPS1-LO	Normal	LoPress1 switch status	
FS1	Normal	Freeze Protect1 status	
FS1-LO	Normal	Freeze Protect1 status	
HPS2	Normal	HPS2 24vac input status	UCB Conditional Parameter
HPS2-LO	Normal	HiPress2 switch status	UCB Conditional Parameter
LPS2	Normal	LPS2 24vac input status	UCB Conditional Parameter
LPS2-LO	Normal	LoPress2 switch status	UCB Conditional Parameter
FS2	Normal	Freeze Protect2 status	UCB Conditional Parameter
FS2-LO	Normal	Freeze Protect2 status	UCB Conditional Parameter
HPS3	Normal	HPS3 24vac input status	UCB Conditional Parameter
HPS3-LO	Normal	HiPress3 switch status	UCB Conditional Parameter
LPS3	Normal	LPS3 34vac input status	UCB Conditional Parameter
LPS3-LO	Normal	LoPress3 switch status	UCB Conditional Parameter
FS3	Normal	Freeze Protect3 status	UCB Conditional Parameter
FS3-LO	Normal	Freeze Protect3 status	UCB Conditional Parameter
HPS4	Normal	HPS4 44vac input status	UCB Conditional Parameter
HPS4-LO	Normal	HiPress4 switch status	UCB Conditional Parameter
LPS4	Normal	LPS4 44vac input status	UCB Conditional Parameter
LPS4-LO	Normal	LoPress4 switch status	UCB Conditional Parameter
FS4	Normal	Freeze Protect4 status	UCB Conditional Parameter
FS4-LO	Normal	Freeze Protect4 status	UCB Conditional Parameter
A2LLeakAlarm	Normal	A2L Leak Detector Alarm	
A2LLeakAlarm-LO	Normal	A2L Leak Detector Alarm-Lockout	
COS-En	Disable	Condensate Alarm Enable	
COS	Normal	Condensate Overflow Switch	

Table 37: Details > Clg > Misc menu guide

Parameter	Setting	Condition	Note
MaxTempHumS-pOff	3.0 F (Default Setting)	Maximum Temperature / Humidity Setpoint Offset	UCB Conditional Parameter
TempHum-Sp	50%H (Default Setting)	*effectsOprClg-SP	UCB Conditional Parameter
TempHumC-trl-En	No (Default Setting)	Temperature/Humidity Return Control Enable	
OprSH	49.6 %H	Space Humidity in use	Economizer Board Presence
ClgOcc-Sp	72 F (Default Setting)	CV Occupied Cooling Setpoint	UCB Conditional Parameter
OprCVClg-Sp	72 F	CV Operating Cooling Setpoint	UCB Conditional Parameter

Table 37: Details > Clg > Misc menu guide

Parameter	Setting	Condition	Note
SZVAVClgOcc-SP	Deg F	SZ VAV Occupied Cooling Setpoint	UCB Conditional Parameter
OprSZVAVClg-SP	Deg F	SZ VAV Occupied Cooling Setpoint	UCB Conditional Parameter
Common-SP	Deg F	Common Setpoint	UCB Conditional Parameter
Auto Changeover	Deg F	Auto Changeover	UCB Conditional Parameter
TempHumValPerDegOff	5%H	Temperature/Humidity Value per Degree Offset	UCB Conditional Parameter
SucSuperheat1	DEG F	Suction Superheat 1	UCB Conditional Parameter
SatSucTemp1	Deg F	Saturated Suction Temperature 1	UCB Conditional Parameter
SatDischTemp1	Deg F	Saturated Discharge Temperature 1	UCB Conditional Parameter
SatSucTemp2	Deg F	Saturated Suction Temperature 2	UCB Conditional Parameter
SatDischTemp2	Deg F	Saturated Discharge Temperature 2	UCB Conditional Parameter
Cir1HighPresUnloadEn	Enable	Circuit 1 High Pressure Unload Enable	UCB Conditional Parameter
Cir1LowPresUnloadEn	Enable	Circuit 1 Low Pressure Unload Enable	UCB Conditional Parameter
Cir2HighPresUnloadEn	Disable	Circuit 2 High Pressure Unload Enable	UCB Conditional Parameter
Cir2LowPresUnloadEn	Disable	Circuit 2 Low Pressure Unload Enable	UCB Conditional Parameter

Heating (Htg)

Table 38: Details > Htg > Setup menu guide

Parameter	Setting	Condition	Note
Htg-Type	Staged (Default Setting)	Heating Control Type	UCB Conditional Parameter
CVHtgOcc-Sp	68 F (Default Setting)	CV Occupied Heating Setpoint	UCB Conditional Parameter
CVHtgUnocc-Sp	60 F (Default Setting)	CV Unoccupied Heating Setpoint	UCB Conditional Parameter
VAVHtgOcc-Sp	Def F	VAV Occupied Heating Setpoint	UCB Conditional Parameter
VAVHtgUnocc-Sp	Def F	VAV Unoccupied Heating Setpoint	UCB Conditional Parameter
SZVAVHtgOcc-Sp	Def F	SZ Unoccupied Heating Setpoint	UCB Conditional Parameter
SZVAVHtgUnocc-Sp	Def F	SZ Unoccupied Heating Setpoint	UCB Conditional Parameter
Common-Sp	Def F	Common Setpoint	
Auto Changeover	Def F	Auto Changeover	
Heat Cool Setpoint Mode	Individual Setpoints	Heat Cool Setpoint Mode	
HtgAdapTunEn	Yes	Heating Adaptive Tuning Enable	
SATHtgLimit-En	Yes	SAT Air Temp Limit for Heating Enabled	
SATHtgLimit-Sp	135 F	SAT Air Temp Limit For Heating Setpoint	
HtgOATCutout-Sp	75 F (Default Setting)	Outdoor Air Temp Heating Cutout Setpoint	
#GasVlvs	0 (Default Setting)	#HtPmpStgs = 0	UCB Conditional Parameter
#LimSwtchs	1 (Default Setting)	#HtPmpStgs = 0	UCB Conditional Parameter
LL_Enable	Disable	Low Limit Enable	UCB Conditional Parameter
LL_UpSAT_SP	80 F (Default Setting)	Low Limit Upper SAT Setpoint	UCB Conditional Parameter
LL_LowSAT_SP	80 F (Default Setting)	Low Limit Lower SAT Setpoint	UCB Conditional Parameter
HtgManualTune	No (Default Setting)	Heating Manual Tuning	UCB Conditional Parameter
CoolDuringHeatLimit	No (Default Setting)	Cool Allowed During Heat Limit	UCB Conditional Parameter

Table 38: Details > Htg > Setup menu guide

Parameter	Setting	Condition	Note
HtgRapidStartEn	Disable	Heating Rapid Start Enable	
HtgRapidStartTime	5 Min	Heating Rapid Start Time	

Table 39: Details > Htg > Service menu guide

Parameter	Setting	Condition	Note
StgHtgCmd	0% (Default Setting)	Staged Heating Command	UCB Conditional Parameter
CVOprHtg-Sp	68 F	CV Operating Heating Setpoint	UCB Conditional Parameter
VAVOprHtg-SP	Def F	VAV operating Heating Setpoint	UCB Conditional Parameter
OprHtgDAT-SP	100 F	Operating Heating Discharge Air Temp Setpoint	UCB Conditional Parameter
Htg-S	Off-Idle	Heating Status	UCB Conditional Parameter
OprOAT	73.0 F	Operational Outdoor Air Temperature	
OprST	73.0 F	Operational Space Temperature	
RAT	70.4 F	UCB RAT Thermistor Input	Economizer Board Presence + Another Condition
SAT	70.0F	Supply Air Temperature	UCB Conditional Parameter
W1-Tstat	Off	24vac input to W1 term	UCB Conditional Parameter
W2-Tstat	Off	24vac input to W2 term	UCB Conditional Parameter
W3-Tstat	Off	24vac input to W3 term	UCB Conditional Parameter
G-Tstat	Off	24vac input to G term	
H1-S	Off-Idle	Heating Stage 1 Status	UCB Conditional Parameter
H1	Off	1st Stage Heat Output Status	UCB Conditional Parameter
H1OnTmr	0 Sec	Heating Stage 1 Min On Time Remaining	UCB Conditional Parameter
H1ASCDTmr	0 Sec	Heating Stage 1 Anti-Short Cycle Delay Time Remaining	UCB Conditional Parameter
H1RunTim	. 0 hr (Default Setting)	Heating Stage 1 Accumulated Runtime	UCB Conditional Parameter
H2	Off	2nd stage heating output status	UCB Conditional Parameter
H2-S	Off-Idle	Heating Stage 2 Status	UCB Conditional Parameter
H2OnTmr	0 Sec	Heating Stage 2 Min On Time Remaining	UCB Conditional Parameter
H2ASCDTmr	0 Sec	Heating Stage 2 Anti-Short Cycle Delay Time Remaining	UCB Conditional Parameter
H2RunTim	.0 hr	Heating Stage 2 Accumulated Runtime	UCB Conditional Parameter
H3	Off	3rd stage heating output status	UCB Conditional Parameter
H3-S	Off-Idle	Heating Stage 3 Status	UCB Conditional Parameter
H3OnTmr	0 Sec	Heating Stage 3 Min On Time Remaining	UCB Conditional Parameter
H3ASCDTmr	0 Sec	Heating Stage 3 Anti-Short Cycle Delay Time Remaining	UCB Conditional Parameter
H3RunTim	.0 hr (Default Setting)	Heating Stage 3 Accumulated Runtime	UCB Conditional Parameter

Table 40: Details > Htg > Safeties menu guide

Parameter	Setting	Condition	Note
Limit	Normal	Limit 24vac input status	
LimitLO	Normal	HeaT Limit status	
Lim2	Normal	Limit 24vac input status	UCB Conditional Parameter
Lim2LO	Normal	Heat Limit status	UCB Conditional Parameter
Lim3	Normal	Limit 24vac input status	UCB Conditional Parameter

Table 40: Details > Htg > Safeties menu guide

Parameter	Setting	Condition	Note
Lim3LO	Normal	Heat Limit status	UCB Conditional Parameter
MV	No	(MV pin 24vac input status	UCB Conditional Parameter
GV2	Off	GV2 pin 24vac input status	
GV3	Off	GV3,4 pin 24vac input status	

Table 41: Details > Htg > Prop > Setup menu guide

Parameter	Setting	Condition	Note
HydH1SA-Sp	120 F (Default Setting)	Hydronic Heating Stage #1 Supply Air Setpoint	UCB Conditional Parameter
HydH2SA-Sp	150 F (Default Setting)	Hydronic Heating Stage #2 Supply Air Setpoint	UCB Conditional Parameter
SATTempHydHt-En	No (Default Setting)	Hydronic Heat SAT Tempering Enabled	UCB Conditional Parameter
SATTempHydHt-Sp	40	Hydronic Heat SAT Tempering Setpoint	UCB Conditional Parameter
HydReverse	No (Default Setting)	ModHt 2-10vdcAction	UCB Conditional Parameter

Table 42: Details > Htg > Prop > Service menu guide

Parameter	Setting	Condition	Note
CVHtgOcc-SP	68 F (Default Setting)	CV Occupied Heating Setpoint	
CVHtgUnocc-Sp	60 F (Default Setting)	CV Unoccupied Heating Setpoint	
CVOprHtg-Sp	68 F	CV Operating Heating Setpoint	
VAVOprHtg-Sp	68 F	VAV Operating Heating Setpoint	UCB Conditional Parameter
Opr ST	73.0 F	Operational Space Temperature	UCB Conditional Parameter
SAT	60.7 F	S A Temp Thermistor input	
W1-Tstat	Off	24vac input to W1 term	UCB Conditional Parameter
W2-Tstat	Off	24vac input to W2 term	UCB Conditional Parameter
HWV	0%	HWV VDC output	Economizer Board Presence + Another Condition
HydReverse	No (Default Setting)	ModHt 2-10vdcAction	UCB Conditional Parameter
FSHW	Normal	Hot Water Freeze Stat	

Indoor (Fan)

Table 43: Details > Fan > Setup

Parameter	Setting	Conditions	Note
FanCtl-Type	Single Speed (Default Setting)	ID Blwr/Unit Op Mode	
FanOn Occ	Yes (Default Setting)	CV Constant Fan in Occupied Mode	UCB Conditional Parameter
FanOnDlyHeat	30 sec (Default Setting)	Fan On Delay for Heat	UCB Conditional Parameter
FanOffDlyHeat	60 sec (Default Setting)	Fan Off Delay for Heat	UCB Conditional Parameter
FanOffStartHeat	Yes (Default Setting)	Turn Off Continuous Fan Operation When Starting Heat	UCB Conditional Parameter
FanOnDlyCool	0 sec (Default Setting)	Fan Off Delay for Cool	
FanOffDlyCool	30 sec (Default Setting)	Fan Off Delay for Cool	
Fan Only-% Cmd	50% (Default Setting)	CV IS fan only	UCB Conditional Parameter
1ClgStg-% Cmd	70% (Default Setting)	CV IS 1 Stg Cool	UCB Conditional Parameter
2ClgStg-% Cmd	80% (Default Setting)	CV IS 2 Stg Cool	UCB Conditional Parameter
3ClgStg-% Cmdt	90% (Default Setting)	CV IS 3 Stg Cool	UCB Conditional Parameter
4ClgStg-% Cmd	100% (Default Setting)	CV IS 4 Stg Cool	UCB Conditional Parameter
1HtgStg-%Cmd	100% (Default Setting)	Occupied: One Stage of Heat % Command	

Table 43: Details > Fan > Setup

Parameter	Setting	Conditions	Note
2HtgStg-%Cmd	100% (Default Setting)	Occupied: Two Stage of Heat % Command	
3HtgStg-%Cmd	100% (Default Setting)	Occupied: Three Stage of Heat % Command	
Dehum%Cmd	%	Dehumidification % Command	UCB Conditional Parameter
LowAmbFanPre-runCool	60 sec (Default Setting)	Low Ambient Fan Pre-run Time For Cooling	UCB Conditional Parameter
APSSetup	None	Air Proving Switch Operation	
DFS	Normal	DFS 24vac input status	

Table 44: Details > Fan > Service

Parameter	Setting	Conditions	Note
G-Tstat	Off	24vac input to G term	
Fan-S	Off-Idle	Fan Status	
Fan	Off	FAN 24vac output status	
Fan-RT	.0 hr (Default Setting)	Fan Accumulated Runtime	
OprFanReq	Off (Default Setting)	Operating Fan Request	
FanReqSrc	Local Input	Fan Request Source	
APS	Off	Air Proving Switch	
FanOverload	Normal	Fan Overload	
FanVFDFlt	Normal	Fan VFD Fault	UCB Conditional Parameter

Economizer (Econ)

Table 45: Details > Econ > Setup menu guide

Parameter	Setting	Condition	Note
Econ-En	Yes (Default Setting)	Economizer Enabled For Operation	Economizer Board Presence
Econ-MinPos	10% (Default Setting)	Economizer Minimum Position Setpoint	Economizer Board Presence
LowSpeedFan-MinPos	25% (Default Setting)	Econ Damper Minimum Position Low Speed Fan	Economizer Board Presence
LowAmb-MinPos	0%v (Default Setting)	Low Ambient Economizer Minimum Position	Economizer Board Presence
LowAmb-Sp	0 F (Default Setting)	Low Ambient Economizer Setpoint	Economizer Board Presence
FreeClg-Sel	Auto (Default Setting)	FreClgChngOvrMethod	Economizer Board Presence
FreeClg-Mode	Dry Bulb	ChngoverMode	Economizer Board Presence
AllCompOff-Econ	No (Default Setting)	All Compressors Off in Free Cooling	Economizer Board Presence
EconOAT-SpEn	55 F (Default Setting)	Economizer Outdoor Air Temp Enable Setpoint	Economizer Board Presence
EconOAEnth-Sp	27 B/# (Default Setting)	Economizer Outdoor Air Enthalpy Setpoint	Economizer Board Presence
DVent-Mode	Disabled (Default Setting)	Demand Ventilation Mode of Operation	Economizer Board Presence
DVentMaxEconPos	50% (Default Setting)	Demand Ventilation Maximum Economizer Position	Economizer Board Presence
DVentIAQ-Sp	1000ppm (Default Setting)	Demand Ventilation Indoor Air Quality Setpoint	Economizer Board Presence
DVentDiff-Sp	600ppm (Default Setting)	Demand Ventilation Differential Setpoint	Economizer Board Presence
IAQRange	2000ppm (Default Setting)	w/Co2 sensor inst	Economizer Board Presence
OAQRange	2000ppm (Default Setting)	w/Co2 sensor inst	Economizer Board Presence
EconLoad-En	No (Default Setting)	Economizer Loading Enabled	Economizer Board Presence
MOAFlow-Sp	10CFM (Default Setting)	Fresh Air Intake Setpoint	Economizer Board Presence

Table 45: Details > Econ > Setup menu guide

Parameter	Setting	Condition	Note
MOA-Range	10000CFM (Default Setting)	Fresh Air Intake Max Sensor Range	Economizer Board Presence
EconMechStp	Option B (Default Setting)	EconMech Setup	Economizer Board Presence
EconFltDetectEn	Disable (Default Setting)	Economizer Fault Detection Enable	Economizer Board Presence
CalFaultDetectEn	Disable (Default Setting)	Calibration Fault Detect Enable	Economizer Board Presence
MATClgLim	Enable (Default Setting)	Mixed Air Temperature Cooling Limit	Economizer Board Presence

Table 46: Details > Econ > Service menu guide

Parameter	Setting	Condition	Note
Clg-S	Off-Idle	Cooling Status	UCB Conditional Parameter
Econ-S	Disabled	Economizer Status	Economizer Board Presence
Econ-Free	No	Econ Free Cooling Available	Economizer Board Presence
Econ	0%	ECON 2-10vdc output status	Economizer Board Presence
SAT	60.7 F	UCB SAT thermistor input	
OprOAT	73.0 F	Operational Outdoor Air Temperature	
OA-Enth	20 B/#	CalcOA enthalpyInput	Economizer Board Presence
RA-Enth	20B/#	Return Air Enthalpy	Economizer Board Presence
OprIAQ	477ppm	Operational Indoor Air Quality	Economizer Board Presence
OprOAQ	990ppm	Operational Outdoor Air Quality	Economizer Board Presence
Fr Air	7940CFM	Fresh Air Intake Value	Economizer Board Presence
EconDampPos	38	AI-IN 0-10vdc Input	Economizer Board Presence
EconAlrmDly	600 Sec (Default Setting)	FDD Economizer Alarm Delay	Economizer Board Presence
EconPosErr	8% (Default Setting)	FDD Economizer Damper Allowed Error	Economizer Board Presence
EconMinErr	5% (Default Setting)	FDD Damper Min Position Tolerance	Economizer Board Presence

Demand verification (Dvent)

Table 47: Details > Dvent menu guide

Parameter	Setting	Condition	Note
Econ-En	Yes (Default Setting)	Economizer Enabled For Operation	Economizer Board Presence
DVent-Mode	Disabled (Default Setting)	Demand Ventilation Mode of Operation	Economizer Board Presence
DVentMaxEconPos	50% (Default Setting)	Demand Ventilation Maximum Economizer Position	Economizer Board Presence
DVentIAQ-Sp	1000ppm (Default Setting)	Demand Ventilation Indoor Air Quality Setpoint	Economizer Board Presence
DVentDiff-Sp	600ppm (Default Setting)	Occ Diff IAQ/OAQ SetPt	Economizer Board Presence
IAQRange	2000ppm (Default Setting)	ppm@10vdcIAQ Output	Economizer Board Presence
OAQRange	2000ppm (Default Setting)	ppm@10vdcOAQ Output	Economizer Board Presence
OprIAQ	477ppm	IAQ 0-10vdcInput in use	Economizer Board Presence
OprOAQ	990ppm	OutdoorAirQuality in use	Economizer Board Presence
EconDampPos	38	AI-IN 0-10vdc Input	Economizer Board Presence

Air Monitor Station (AirMonStation)

Table 48: Details > AirMonStation menu

Parameter	Setting	Condition	Note
Econ-En	Yes (Default Setting)	Economizer Enabled For Operation	Economizer Damper Position
FrAir-En	Disable (Default Setting)	Fresh Air Intake Enable	Economizer Damper Position
MOAFlow-Sp	10CFM (Default Setting)	Fresh Air Intake Setpoint	Economizer Damper Position
MOA-Range	10000CFM (Default Setting)	Fresh Air Intake Max Sensor Range	Economizer Damper Position

Table 48: Details > AirMonStation menu

Parameter	Setting	Condition	Note
Fr Air	7953CFM	Fresh Air Intake Value	Economizer Damper Position
EconDampPos	38	AI-IN 0-10vdc Input	Economizer Damper Position
Control	40CFM	Fresh Air Range	Economizer Damper Position

Power Exhaust (PowerEx)

Table 49: Details > PowerEx > Setup menu guide

Parameter	Setting	Condition	Note
ExFType	None	PwrExFanModeSelection	Economizer Board Presence
EconDmpPosFanOn	60%	Economizer Damper Position for Exhaust Fan to Turn On	Economizer Board Presence + Another Condition
EconDmpPosFanOff	20%	Economizer Damper Position for Exhaust Fan to Turn Off	Economizer Board Presence + Another Condition
ExDmpPosFanOn	80%	Exhaust Damper Position for Exhaust Fan to Turn On	Economizer Board Presence + Another Condition
ExDmpPosFanOff	20%	Exhaust Damper Position for Exhaust Fan to Turn Off	Economizer Board Presence + Another Condition
Bldg-Sp	100"/w	Building Pressure Setpoint	Economizer Board Presence + Another Condition
DctPrs		Duct Static Pressure	Economizer Board Presence

Table 50: Details > PowerEx > Service menu guide

Parameter	Setting	Condition	Note
ExF-S	Off	Exhaust Fan Status	Economizer Board Presence
ExFan	Off	EX-FAN 24vacOutputStatus	Economizer Board Presence
BldgPres	.164"/w	BldgPres 0-5vdc Input	Economizer Board Presence + Another Condition
EAD-O	0%	EXVFD2-10vdcOutptStatus	Economizer Board Presence + Another Condition
ExFanVFD	0%	EX VFD2-10vdc Output	Economizer Board Presence + Another Condition
ExFan-RunTime	.0 hr	24vacOutputAccRunTime	Economizer Board Presence
ExFanVFDFlt	Normal	VFD FLT24vacInput	Economizer Board Presence + Another Condition

FanVFD

Table 51: Details > FanVFD > Setup menu

Parameter	Setting	Condition	Notes
FanCtl-Type	Single Speed (Default Setting)	UnitOpMode	
DctPrs-Sp	1.50"/w (Default Setting)	Duct Pressure Setpoint	UCB Conditional Parameter
DctShutdownSp	4.5"/w (Default Setting)	Duct Pressure Shutdown Setpoint	UCB Conditional Parameter
SATUp-Sp	60 Fc (Default Setting)	VAV Cooling Supply Air Temp Upper Setpoint	
SATLo-Sp	55 F (Default Setting)	VAV Cooling Supply Air Temp Lower Setpoint	
SATRst-Sp	72 F (Default Setting)	VAV Supply Air Temp Reset Setpoint	UCB Conditional Parameter
VAVClgUnocc-Sp	85 F (Default Setting)	FanCtl-Type = Variable Speed	UCB Conditional Parameter
MornW-En	No (Default Setting)	Morning Warmup Enabled	UCB Conditional Parameter
MornWRAT-Sp	71 F (Default Setting)	Morning Warmup/Return Air Temp Setpoint	UCB Conditional Parameter
HtgOcc-En	Yes (Default Setting)	VAV Occupied Heating Enabled	UCB Conditional Parameter
VAVHtgOcc-SP	85 F (Default Setting)	VAV Occupied Heating Setpoint	UCB Conditional Parameter

Table 51: Details > FanVFD > Setup menu

Parameter	Setting	Condition	Notes
HtgUnocc-En	No (Default Setting)	Unoccupied Heating Enabled	
VAVHtgUnocc-Sp	60 F (Default Setting)	VAV Unoccupied Heating Setpoint	UCB Conditional Parameter
MornC-En	No	Morning Cooldown Enabled	UCB Conditional Parameter
MornCRAT-Sp	74F	Morning Cooldown/Return Air Temp Setpoint	UCB Conditional Parameter
OptStrt-En	No (Default Setting)	Optimal Start Enabled	UCB Conditional Parameter
EarlyStrtPeriod	60min (Default Setting)	Early Start Period	UCB Conditional Parameter
DAP-Min	In WC (Default Setting)	Discharge Air Static Pressure Minimum	
DAP-AlmDly	Seconds	Discharge Air Static Pressure Alarm Delay	
HtgOcc-En	Yes (Default Setting)	COBP Occupied Heating Enabled	UCB Conditional Parameter

Table 52: Details > FanVFD > Service menu

Parameter	Setting	Condition	Notes
FanVFD	0%	VFD 2-10 VDC output	UCB Conditional Parameter
DctPrs	1.50"/w	DCT PRS 0-5vdcInput	UCB Conditional Parameter
DctPrs-Sp	1.5"/w	Duct Pressure Limit	UCB Conditional Parameter
OprVAVClg-Sp	55 F	VAV Operating Cooling Supply Air Temp Setpoint	UCB Conditional Parameter
SAT	60.7 F	UCB SAT thermistor input	
StgClgCmd	0%	Staged Cooling Command	
Clg-S	Yes	Cooling Status	UCB Conditional Parameter
Econ-Free	No	Econ Free Cooling Available	Economizer Board Presence
C1	Off	UCB C1 24 VAC output status	
C2	Off	Demand Vent Set Point	UCB Conditional Parameter
C3	Off	Off	UCB Conditional Parameter
C4	Off	4stg C4 24 VAC output status	UCB Conditional Parameter
VAVOprHtg-Sp	68 F	VAV Operating Heating Setpoint	UCB Conditional Parameter
StgHtgCmd	0%	Staged Heating Command	
OprST	73.0 F	Operational Space Temperature	
Htg-S	Off-Idle	Heating Status	UCB Conditional Parameter
H1	Off (Default Setting)	CV IS 1 Stg Heat	UCB Conditional Parameter
H2	Off (Default Setting)	CV IS 2 Stg Heat	UCB Conditional Parameter
H3	Off (Default Setting)	CV IS 3 Stg Heat	UCB Conditional Parameter
VAV Box	Off	VAV Box Heat Command	UCB Conditional Parameter

Single Zone VAV (SZVAV)

Table 53: Details > SZVAV > Setup menu

Parameter	Setting	Condition	Note
SZVAVEn	No (Default Setting)	SZ VAV Enabled	
SZVAVMinFanSpd	66% (Default Setting)	SZ VAV Minimum Fan Speed	UCB Conditional Parameter
SZVAVClgOcc-Sp	72 F (Default Setting)	SZ VAV Occupied Cooling Setpoint	UCB Conditional Parameter
SZVAVClgUnocc-Sp	85 F (Default Setting)	SZ VAV Unoccupied Cooling Setpoint	UCB Conditional Parameter
VAVHtgOcc-SP	68 F (Default Setting)	VAV Occupied Heating Setpoint	UCB Conditional Parameter
VAVHtgUnocc-Sp	60 F (Default Setting)	VAV Unoccupied Heating Setpoint	UCB Conditional Parameter
DATMaxHtgSP	105 F (Default Setting)	DAT Max Heating SP	UCB Conditional Parameter
DATSATSP	70 F (Default Setting)	DAT Satisfied SP	UCB Conditional Parameter

Table 53: Details > SZVAV > Setup menu

Parameter	Setting	Condition	Note
SATUp-Sp	54 F (Default Setting)	VAV Cooling Supply Air Temp Upper Setpoint	UCB Conditional Parameter
SATLo-Sp	54 F (Default Setting)	VAV Cooling Supply Air Temp Lower Setpoint	UCB Conditional Parameter

Table 54: Details > SZVAV > Service menu

Parameter	Setting	Condition	Note
OprSZVAV-Clg-Sp	72 F	SZ VAV Operating Cooling Setpoint	UCB Conditional Parameter
OprSZVAV-Htg-Sp	60 F	SZ VAV Operating Heating Setpoint	UCB Conditional Parameter
OprHtgDAT-SP	100 F	Operating Heating Discharge Air Temp Setpoint	UCB Conditional Parameter
SZVAVClgLd	0%	SZ VAV Cooling Load	UCB Conditional Parameter
SZVAVHtgLd		SZ VAV Heating Load	UCB Conditional Parameter
OprVAVClg-Sp	60 F	VAV Operating Cooling Supply Air Temp Setpoint	UCB Conditional Parameter
OprST	73.0 F	Operational Space Temperature	
SAT	60.7 F	SAT thermistor input	
FanVFD	0%	VFD 2-10vdc output status	UCB Conditional Parameter
Econ	0%	ECON 2-10 VDC output status	Economizer Board Presence
C1	Off	1st Cool 24 VAC output	
C2	Off	2nd+ Cool 24 VAC output	UCB Conditional Parameter
C3	Off	3rd+ Cool 24 VAC output	UCB Conditional Parameter
C4	Off	4th+ Cool 24 VAC output	UCB Conditional Parameter

Hot Gas Reheat (HGR)

Table 55: Details > HGR > Setup

Parameter	Setting	Condition	Note
HGR-En	No (Default Setting)	Hot Gas Reheat Enabled For Operation	
HGRAlt-En	No (Default Setting)	Hot Gas Reheat Alternate Operation Enabled	
HGRAltWrite	No (Default Setting)	Hot Gas Reheat Alternate Operation Writeable	
HGRHum-Sp	50% (Default Setting)	Hot Gas Reheat Humidity Setpoint	
HGRUnocc-En	Yes (Default Setting)	HGR Enabled for Unoccupied Operation	
HGRUnoccHum-SP	70% (Default Setting)	HGR Unoccupied Humidity Setpoint	
HGR-Diff	3% (Default Setting)	HGR Humidity Setpoint Differential	
Hybrid Mode	Off (Default Setting)	Hybrid Mode	
Use DFS For Dehum	No (Default Setting)	Use DFS For Dehum	
NeuAirModHGR-En	Disable (Default Setting)	Neutral Air ModHGR Enable	UCB Conditional Parameter
NeuAirModHGR-Off	0 F (Default Setting)	Neutral Air ModHGR Offset	UCB Conditional Parameter

Table 56: Details > HGR > Service

Parameter	Setting	Condition	Note
StgClgCmd	0%	Staged Cooling Command	
OprCVClg-Sp	72 F	CV Operating Cooling Setpoint	
OprST	73.0 F	Operational Space Temperature	
HGRHum-Sp	50% (Default Setting)	Hot Gas Reheat Humidity Setpoint	
OprSH	45%	Operational Space Humidity	
HGR-S	Off-Idle	Hot Gas Reheat Status	
ModHGR	0%	Hot Gas Reheat Command	UCB Conditional Parameter

Table 56: Details > HGR > Service

Parameter	Setting	Condition	Note
HGR	Off	Hot Gas Reheat Command	
C1	Off	Compressor Stage Command 1	
C2	Off	Compressor Stage Command 2	UCB Conditional Parameter
C3	Off	Compressor Stage Command 3	UCB Conditional Parameter
C4	Off	Compressor Stage Command 4	UCB Conditional Parameter
ModCompOut	0%	Modulating Compressor Output	
RAH	45%	Space Humidity RAH Input	
OprOAT	73.0 F	Operational Outdoor Air Temperature	

ModHGR

Table 57: Details > ModHGR > Setup

Parameter	Setting	Condition	Note
HGR-En	No (Default Setting)	Hot Gas Reheat Enabled For Operation	
SatisfiedDehum	True (Default Setting)	Dehumidify In Satisfied	
HGRHum-Sp	50% (Default Setting)	Hot Gas Reheat Humidity Setpoint	
HGRUnocc-En	Yes (Default Setting)	HGR Enabled for Unoccupied Operation	
HGRUnoccHum-SP	70% (Default Setting)	HGR Unoccupied Humidity Setpoint	
HGR-Diff	3% (Default Setting)	HGR Humidity Setpoint Differential	
Use DFS For Dehum	No (Default Setting)	Use DFS For Dehum	
SATUp-Sp	60 F (Default Setting)	VAV Cooling Supply Air Temp Upper Setpoint	
SATLo-Sp	55 F (Default Setting)	VAV Cooling Supply Air Temp Lower Setpoint	
SATRst-Sp	72 F (Default Setting)	VAV Supply Air Temp Reset Setpoint	
DehumEvapLowSp	40 F (Default Setting)	Dehum Evap Low Setpoint	
ClgOcc-Sp	72 F (Default Setting)	Occupied Cooling Setpoint	
Dehum%Cmd	80% (Default Setting)	Dehumidification % Command	
HGRModVlvMinSP	20% (Default Setting)	HGR Mod Valve Min Setpoint	
HGRModVlvMaxSP	80% (Default Setting)	HGR Mod Valve Max Setpoint	
CondFan2OATCutoutSP	75 F (Default Setting)	Condenser Fan 2 OAT Cutout Setpoint	
CondFan2MaxPosCutoutEn	Enable (Default Setting)	Condenser Fan 2 Max Pos Cutout Enable	
ModHGRFullOpenAllowed	No (Default Setting)	Modulating HGR Valve Full Open Allowed	
UseOprSTforHGR	No (Default Setting)	Use OprST for HGR	

Table 58: Details > ModHGR > Service

Parameter	Setting	Condition	Note
StgClgCmd	0%	Staged Cooling Command	
OprCVClg-Sp	72 F	CV Operating Cooling Setpoint	
OprST	73.0 F	Operational Space Temperature	
OprEvapTempSp	45.0 F	Operational Evap Temperature Sp	
Evaporator Coil Temp	45.0 F	Evaporator Coil Temp	

Table 58: Details > ModHGR > Service

Parameter	Setting	Condition	Note
HGRHum-Sp	50% (Default Setting)	Hot Gas Reheat Humidity Setpoint	
OprSH	45%	Operational Space Humidity	
HGR-S	Off-Idle	Hot Gas Reheat Status	
OprHGRTempSp	60.0 F	Operational HGR Temperature Sp	
SAT	60.7 F	Supply Air Temperature	
ModHGR	0%	Hot Gas Reheat Command	
Hot Gas Reheat Bleed Valve Command	Close	Hot Gas Reheat Bleed Valve Command	
C1	Off	Compressor Stage Command 1	
C2	Off	Compressor Stage Command 2	UCB Conditional Parameter
C3	Off	Compressor Stage Command 3	UCB Conditional Parameter
C4	Off	Compressor Stage Command 4	UCB Conditional Parameter
ModCompOut	0%	Modulating Compressor Output	UCB Conditional Parameter
RAH	45%	Space Humidity RAH Input	
OprOAT	73.0 F	Operational Outdoor Air Temperature	

Heat Pump

Table 59: Details > Heat Pump menu guide

Parameter	Setting	Condition	Note
#HtPumpStgs	0 (Default Setting)	Number of Heat Pump Stages Installed	
TestDefrost-Enable	No (Default Setting)	Test Defrost Enable	UCB Conditional Parameter
CompDelay-Enable	No (Default Setting)	Compressor Delay Enable	UCB Conditional Parameter
DefrostCur-veSel	Curve 1 (Default Setting)	Defrost Curve Selection	UCB Conditional Parameter
RevVlv	Off	Reversing Valve	UCB Conditional Parameter
AuxHtg	Off	Auxiliary Heat	UCB Conditional Parameter
Mode	Cooling	Mode	UCB Conditional Parameter
OATDefPerm	50 F	OAT Defrost Permission	
OprOAT	73.0 F	Operational Outdoor Air Temperature	
Condenser Coil Temp 1	96 F	CC1	
Condenser Coil Temp 2	96 F	CC2	
OATHPCutout	20 F	OAT Heat Pump Cutout	
DualFuelHP-En	Disable	Dual Fuel HP Enable	
DualFuelOATHPCutout	40 F	Dual Fuel OAT HP Cutout	
RevVlvDelay	0 Sec	Reversing Valve Delay	

ERV-En

Table 60: Details > ERV-En menu guide

Parameter	Setting	Condition	Note
ERV-En	No (Default Setting)	Econ&PwrExIntrgrationW/ERV	Economizer Board Presence
ERVUnoccFan-En		ERV Unoccupied Fan Enabled	Economizer Board Presence
FanCtl-Type	Single Speed (Default Setting)	UnitOpMode	
Fan	Off (Default Setting)	UCB FAN 24 VAC output status	
Econ-Free	No	Free Cooling available	Economizer Board Presence
ExFan	Off	EX-Fan 24 VAC output	Economizer Board Presence

T24Load Shed

Table 61: Details > T24Load Shed menu guide

Parameter	Setting	Condition	Note
LoadShedRateLim	.066 (Default Setting)	Rate Limiter	
Load Shed Adjust LoadShedAdjust	4.0 F (Default Setting)	Load Shed Adjust	
Load Shed Active LoadShedEnable	No (Default Setting)	Load Shed Enable	

Verasys

Table 62: Details > Verasys

Parameter	Setting	Condition	Note
CntrlType	Constant Volume	Rooftop Controller Type	
VZC Online	No	VZC Online	
COBP Mode	Off	COBP Mode	
COBP SAT SP	70 F	COBP Supply Air Temperature Setpoint	
Operating State	Heat	Operating State	
SATLo-Sp	55 F	VAV Cooling Supply Air Temp Lower Setpoint	
Econ-MinPos	10%	Economizer Minimum Position Setpoint	