

AIRTECH

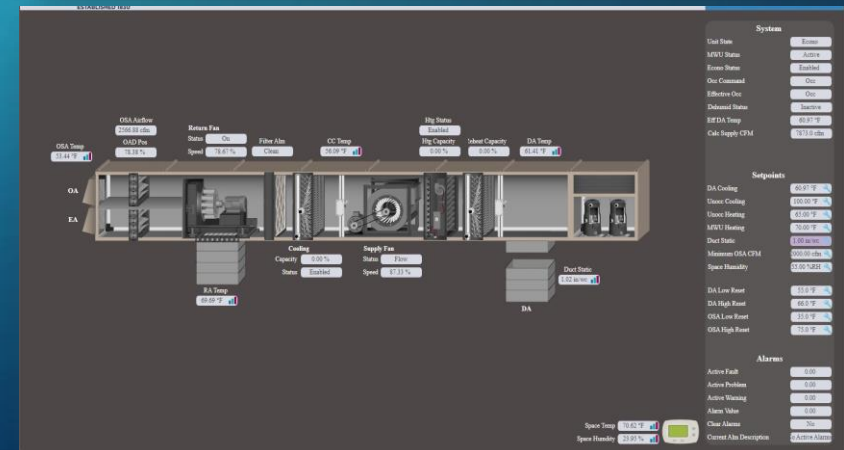
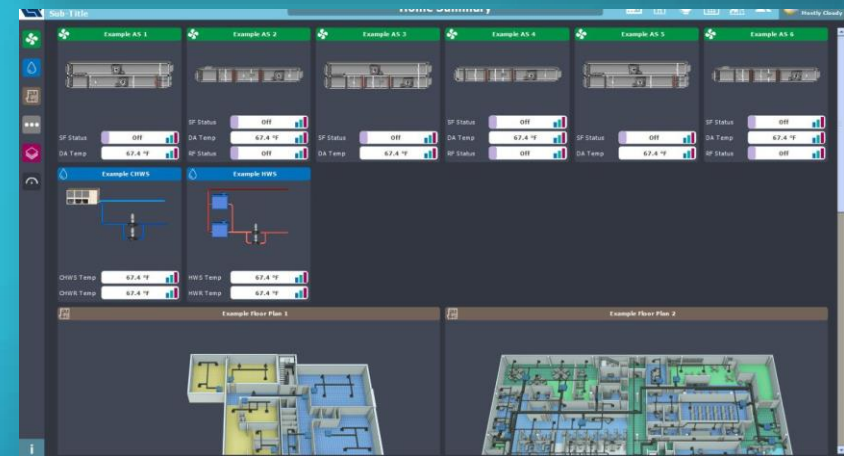
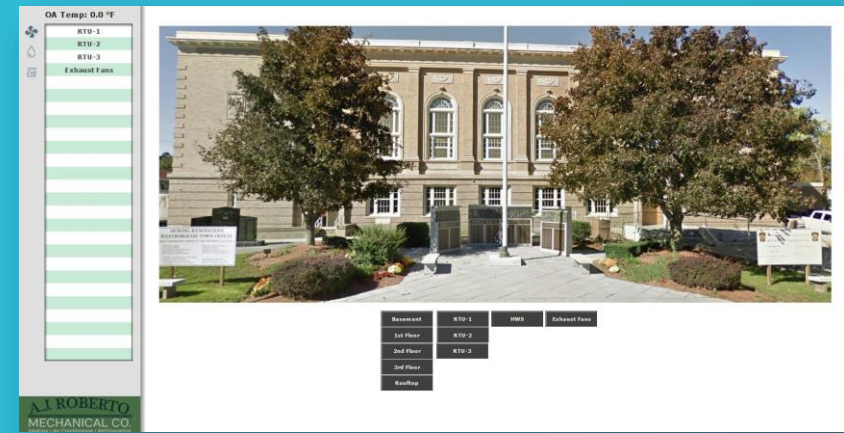
BUILDING MANAGEMENT SYSTEM

CUSTOM FRONT END



Custom Front End

- All HVAC and lighting controls in one location.
- Trending, alarms/emailing, status and temperature monitoring, set point changes, and scheduling.
- Integrate various types of equipment and manufacturers.
- Boiler, chiller, heat pumps, VAVs, VRF, RTUs, AHUs, FTRs, etc.
- BACnet/MSTP, BACnet/IP, Modbus.



Home Page

- Personalized front page with your logo.
- Add important notes for maintenance or critical temperatures.

(Buttons to navigate through different pages.

Display company Logo.

Site Name and Location.)

The screenshot shows a web-based dashboard titled "HOME PAGE". On the left is a vertical navigation menu with icons and labels: CHWS, CWS, CHW PUMPSKID, COOLING TOWER 1, COOLING TOWER 2, COOLING TOWER 3, HWS, HW PUMP SKID, BOILER 1, BOILER 2, BOILER 3, BOILER 4, DOMESTIC HW, DOMESTIC BOOSTER, SNOW MELT, INFLOOR HEATING, CHILLER 1, CHILLER 2, and CHILLER 3. The main content area features a weather widget for "Weather Service Appleton" with "Weather Forecast" data. The current weather is 55.0 °F, Clear. The forecast for today is 66.0 °F/55.0 °F with rain and 23% precipitation. The forecast for tomorrow is 65.0 °F/48.0 °F with rain and 61% precipitation. Below the weather widget is a large image of a modern multi-story building with a glass facade and a sign that says "SECURA". The top right of the dashboard has navigation icons: back, home, refresh, calendar, and user profile.

Weather Service Appleton		Weather Forecast	
Current:	55.0 °F, Clear {ok}	Today	Tomorrow
Sunrise	6:47 AM	66.0 °F/55.0 °F	65.0 °F/48.0 °F
Sunset	6:44 PM	Rain	Rain
OA DewPt	-41.0 °F {ok}	Precip: 23 %	Precip: 61 %
OA Humidity	59.0 %RH {ok}		

Home Page



Unit Title

3D Floor Plans

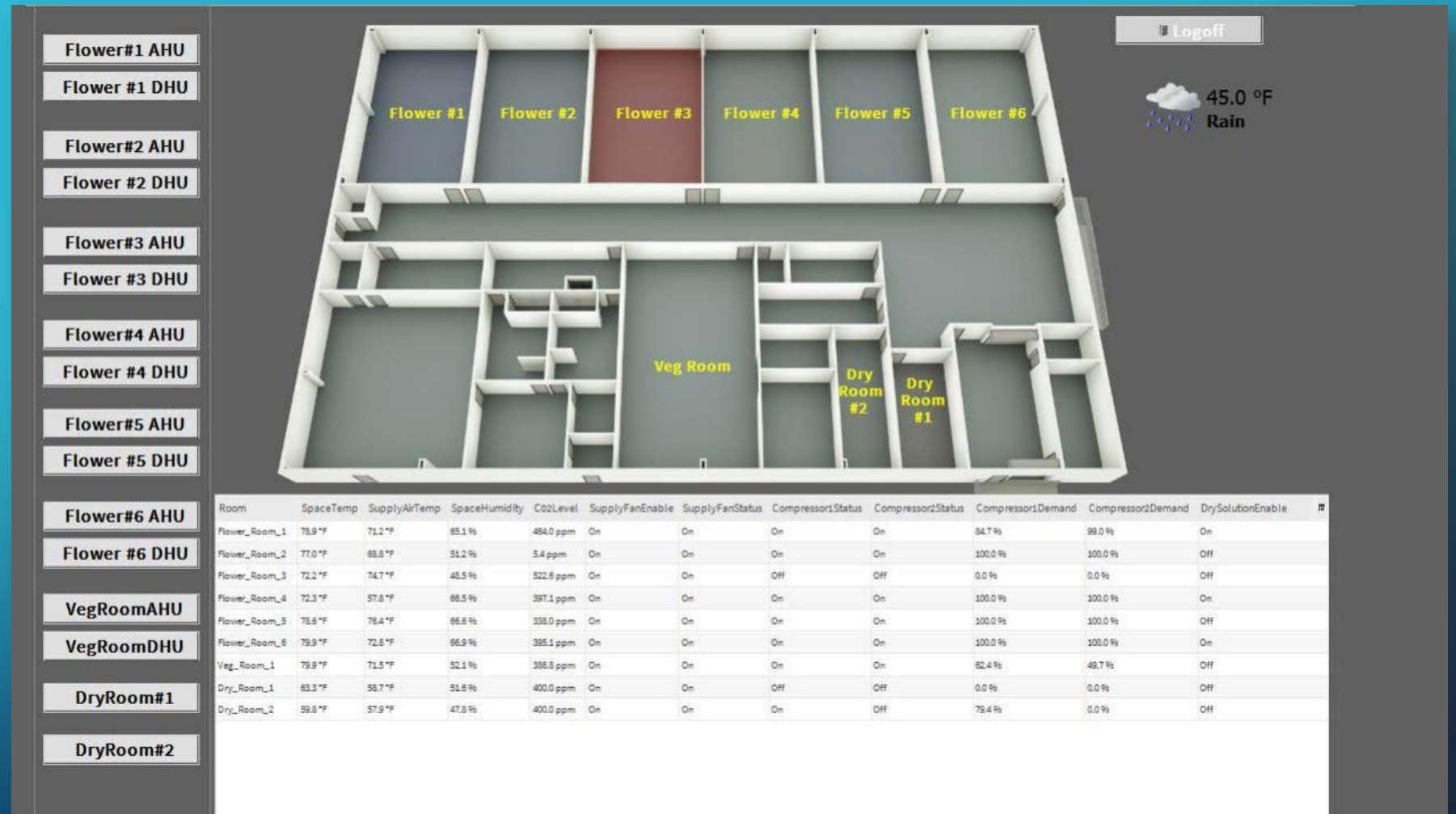


3D Floor Plans



Mechanical Systems

Buttons for each type of equipment.



The interface displays a 3D perspective view of a facility layout. The layout includes six flower rooms (Flower #1 to #6), a vegetable room (Veg Room), and two dry rooms (Dry Room #1 and #2). Flower #3 is highlighted in red. The interface also features a sidebar with control buttons for each room's AHU and DHU, a weather widget showing 45.0 °F and Rain, and a data table for room status.

Room	SpaceTemp	SupplyAirTemp	SpaceHumidity	CO2Level	SupplyFanEnable	SupplyFanStatus	Compressor1Status	Compressor2Status	Compressor1Demand	Compressor2Demand	DrySolutionEnable
Flower_Room_1	78.9°F	71.2°F	65.1%	464.0 ppm	On	On	On	On	84.7%	99.0%	On
Flower_Room_2	77.0°F	68.8°F	51.2%	5.4 ppm	On	On	On	On	100.0%	100.0%	Off
Flower_Room_3	72.2°F	74.7°F	45.5%	522.6 ppm	On	On	Off	Off	0.0%	0.0%	Off
Flower_Room_4	72.3°F	57.8°F	66.5%	397.1 ppm	On	On	On	On	100.0%	100.0%	On
Flower_Room_5	78.5°F	76.4°F	66.6%	338.0 ppm	On	On	On	On	100.0%	100.0%	Off
Flower_Room_6	79.9°F	72.8°F	66.9%	385.1 ppm	On	On	On	On	100.0%	100.0%	On
Veg_Room_1	79.9°F	71.5°F	52.1%	386.8 ppm	On	On	On	On	82.4%	48.7%	Off
Dry_Room_1	63.3°F	58.7°F	51.6%	400.0 ppm	On	On	Off	Off	0.0%	0.0%	Off
Dry_Room_2	59.8°F	57.9°F	47.8%	400.0 ppm	On	On	On	Off	79.4%	0.0%	Off

Equipment Tables

- Quick view of equipment status points.
- See alarms and override set points as needed all in one quick view.
- Short cuts that direct you to the associated equipment/room graphic page by clicking on the equipment name.

The screenshot displays a control interface for a building management system. At the top, there is a section for 'RTU_1' (Return Air Handling Unit) with two fan icons labeled 'SF' and 'RF'. Below the fans are three status indicators: 'SF Sts' (Flow), 'RF Sts' (On), and 'DA Temp' (61.41 °F). Below this is a section for 'VAVs' (Variable Air Volume units) which contains a table with 11 columns: Name, Room_Name, SpaceTemperature, SpaceTempSetpoint, OccStatus, Mode, SupplyAirTemperature, DamperPosition, ReheatOutput, Airflow, and AirflowSetpoint. The table lists 8 VAV units (VAV_100 to VAV_108) with their respective room names and operational parameters. At the bottom of the interface, there is a button labeled 'First Floor'.

Name	Room_Name	SpaceTemperature	SpaceTempSetpoint	OccStatus	Mode	SupplyAirTemperature	DamperPosition	ReheatOutput	Airflow	AirflowSetpoint
VAV_100	US Marshal	72.70 °F	74.00 °F	Occupied	Heat	61.10 °F	60.0 %	60.00 %	282.00 cfm	300.00 cfm
VAV_101	Waiting/Corridor	70.80 °F	72.00 °F	Occupied	Heat	60.90 °F	62.0 %	15.00 %	293.00 cfm	320.00 cfm
VAV_102	Interview Rooms	70.80 °F	72.00 °F	Occupied	Heat	61.50 °F	47.0 %	100.00 %	276.00 cfm	310.00 cfm
VAV_103	Patrol Offices	73.80 °F	74.50 °F	Occupied	Vent	61.30 °F	40.0 %	0.00 %	123.00 cfm	125.00 cfm
VAV_104	Reception	72.30 °F	73.50 °F	Occupied	Vent	61.10 °F	58.0 %	0.00 %	244.00 cfm	270.00 cfm
VAV_105	Patrol/Training Rooms	69.70 °F	72.00 °F	Occupied	Heat	61.50 °F	47.0 %	70.00 %	951.00 cfm	1050.00 cfm
VAV_106	Patrol Offices	70.80 °F	72.00 °F	Occupied	Heat	61.50 °F	51.0 %	15.00 %	185.00 cfm	190.00 cfm
VAV_107	Patrol Offices	70.60 °F	72.00 °F	Occupied	Heat	60.90 °F	59.0 %	45.00 %	487.00 cfm	525.00 cfm
VAV_108	Patrol/Evidence	71.70 °F	73.00 °F	Occupied	Heat	61.50 °F	77.0 %	100.00 %	376.00 cfm	400.00 cfm

Alarms

Time Range ? to ? 1 Source(s) / 36 Alarm(s)

Info	Timestamp	Source	Message Text	Source State	Priority	Ack State	Alarm Class
<input type="checkbox"/>	23-Mar-21 5:59:00 AM EDT	VAV_111 LowTempAlarm	Low Space Temp	Offnormal	255	0 Acked / 36 Unacked	Default Alarm Class

Acknowledge Hyperlink Notes Silence Filter Show Recurring

AX Alarm Console

Time Range ? to ? 10 Sources / 124 Alarms

Timestamp	Source State	Ack State	Source	Alarm Class	Priority	Message Text
18-Mar-21 11:39:54 AM EDT	Normal	0 Acked / 3 Unacked	Compressor1Failure	CriticalAlarms	255	Compressor1Failure
03-Jun-21 8:14:59 PM EDT	Normal	0 Acked / 92 Unacked	Compressor2Failure	CriticalAlarms	255	Compressor1Failure
04-Jun-21 1:06:44 PM EDT	Normal	0 Acked / 7 Unacked	Compressor3Failure	CriticalAlarms	255	Compressor1Failure
17-Mar-21 5:11:38 PM EDT	Normal	0 Acked / 4 Unacked	Compressor4Failure	CriticalAlarms	255	Compressor1Failure
08-Apr-21 7:14:44 AM EDT	Normal	0 Acked / 4 Unacked	ExhaustFan1VFDFault	Default Alarm Class	255	
08-Apr-21 7:14:44 AM EDT	Normal	0 Acked / 4 Unacked	ExhaustFan2VFDFault	Default Alarm Class	255	
10-Mar-21 10:37:45 AM EST	Normal	0 Acked / 1 Unacked	SupplyFan1Failure	CriticalAlarms	255	Supply Fan Motor 1 Status Failure
7:14:43 AM EDT	Normal	0 Acked / 4 Unacked	SupplyFan1VFDFault	Default Alarm Class	255	
10:37:45 AM EST	Normal	0 Acked / 1 Unacked	SupplyFan2Failure	CriticalAlarms	255	Supply Fan Motor 1 Status Failure
7:14:44 AM EDT	Normal	0 Acked / 4 Unacked	SupplyFan2VFDFault	Default Alarm Class	255	

Acknowledge Hyperlink Notes Silence Filter Review Video

- Alarm handler.
- Can view all points that are in alarm.
- Can view time when point went into alarm and when they came out of alarm.
- Can setup alarms to be sent to a customer email address.

Scheduling

Building Schedule

Weekly Schedule | Special Events | Summary

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
3:00 AM	Occupied 12:00 AM - 12:00 AM	Occupied 12:00 AM - 12:00 AM	Occupied 12:00 AM - 12:00 AM	Occupied 12:00 AM - 12:00 AM	Occupied 12:00 AM - 12:00 AM	Occupied 12:00 AM - 12:00 AM	Occupied 12:00 AM - 12:00 AM
6:00 AM							
9:00 AM							
12:00 PM							
3:00 PM							
6:00 PM							
9:00 PM							

Event Start 12:00 AM ▾ Event Finish 12:00 AM ▾ Event Output Occupied

Equipment Graphics



Equipment Graphics

Outdoor Air Temp: 56.1 °F

71.3 °F Supply Air Temp

Electric Heat: 35.8%

Ox Reheat On

FanSpeed: 100.0% On

Pre Filter: Clean
Final Filter: Clean


Home

Lockoff

Light Schedule

Water Schedule

CoolDown

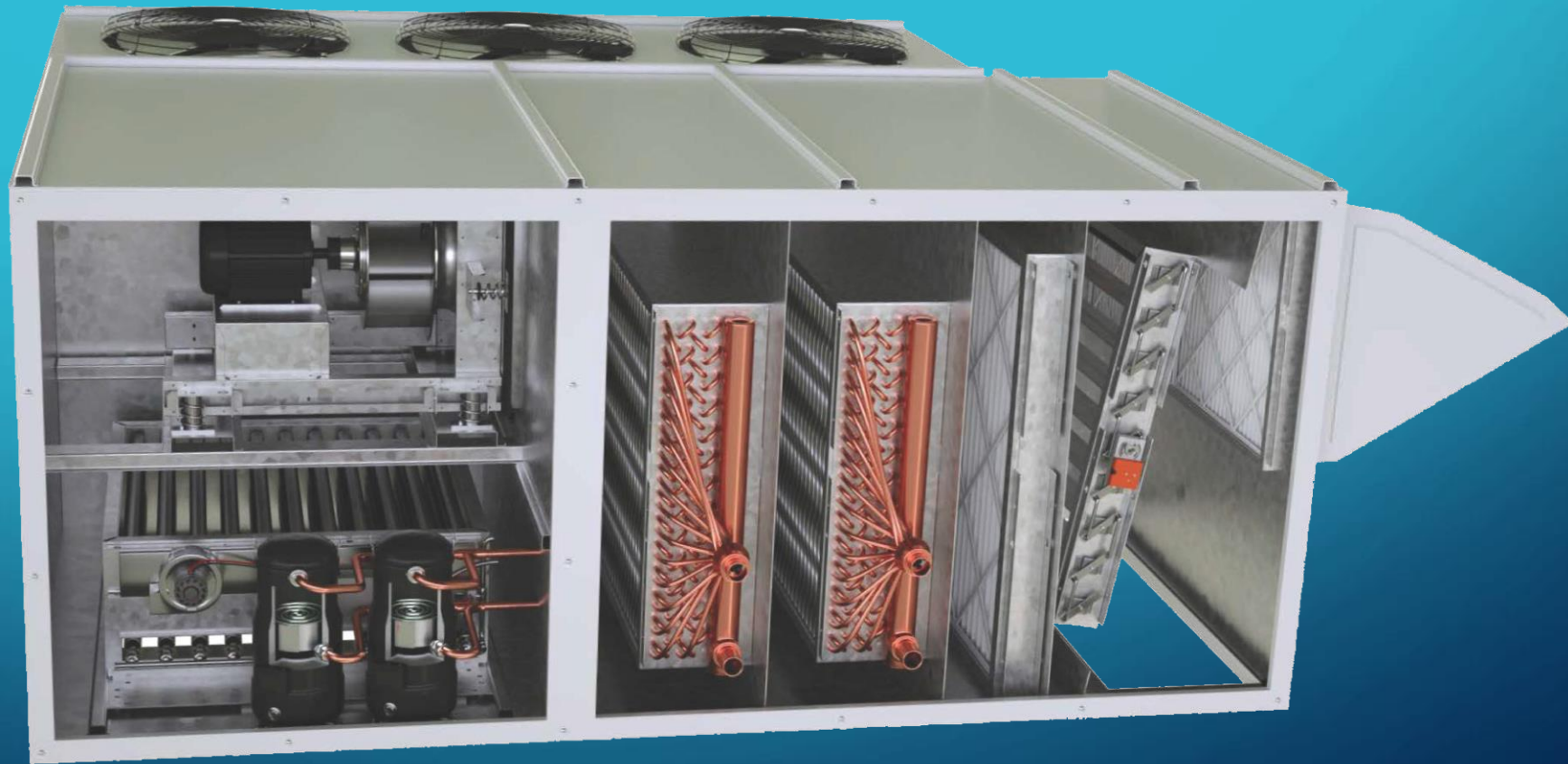


Critical Points & Alarms	Temp/Humidity/C02	On/Off Points	Demand Outputs	System Control Points
Remote Shutdown: Normal	Space Humidity: 66.2 %RH	Supply Fan Enable: On	Supply Fan Speed: 100.0 %	Space Temp Setpoint: 80.0 °F
Supply Fan Failure: Normal	Average Space Temp: 79.0 °F	Compressor #1 Enable: On	Compressor 1: 87.2 %	Eff. Cooling Setpoint: 80.5 °F
High C02: Normal	Space C02: 468.4 ppm	Compressor #2 Enable: On	Compressor 2: 98.0 %	Eff. Heating Setpoint: 79.5 °F
C02 Disable: Normal	Space Temp #1: 80.4 °F	Electric Heat Enable: On	Electric Heat: 35.8 %	Effective RH Setpoint: 65.0 %
Intake Damper Fail: Normal	Space Temp #2: 79.3 °F	Dehumidification Enable: On	Compressor Suction PSI	Eff. Cool DA Spt: 65.0 °F
Compressor 1 Fail: Normal	Space Temp #3: 78.8 °F	Exhaust Fan Enable: Off	Compressor 1 PSI: 128.7 psig	Eff. Reheat DA Spt: 71.5 °F
Compressor 2 Fail: Normal	Space Temp #4: 77.5 °F	Intake Damper Enable: Off	Compressor 2 PSI: 129.6 psig	
		GPS Status: On		

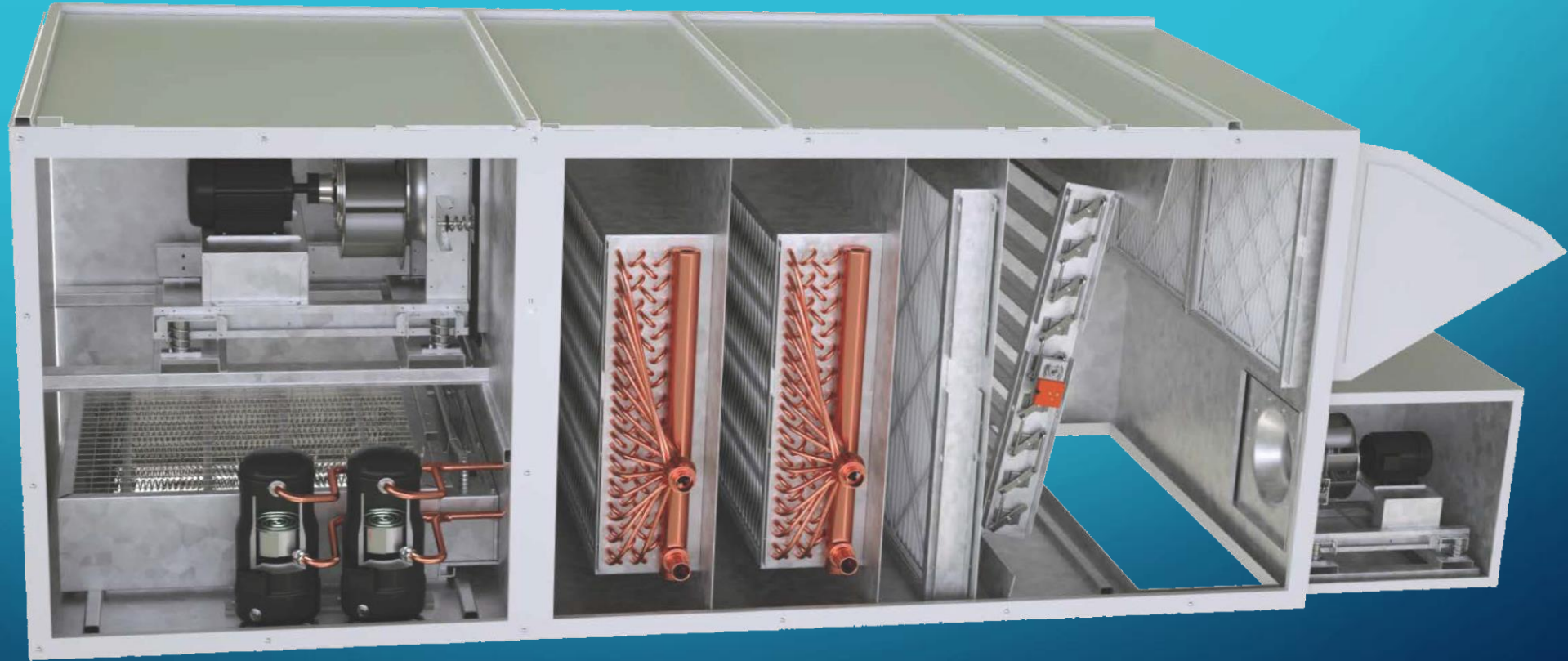
Effective Season: Week 1-3

Control Mode: HEATING

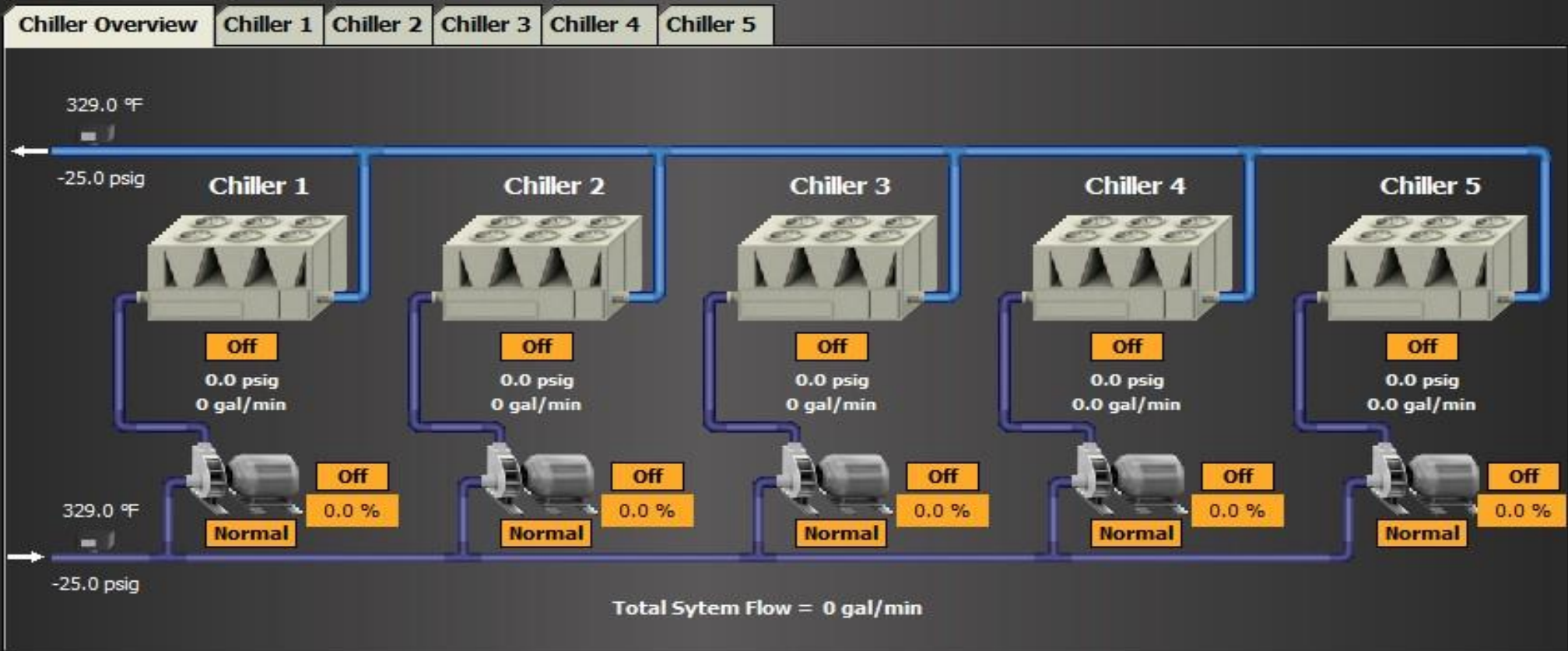
Equipment Graphics



Equipment Graphics



Equipment Graphics



Setpoints	
System Enable.....	Off
System Supply Temp.....	32.0 °F
System Diff Pressure.....	38.0 psig

System DP: 0.0 psig
Bypass Valve: 100.0 %
Supply Temp: 329.0 °F
Return Temp: 329.0 °F

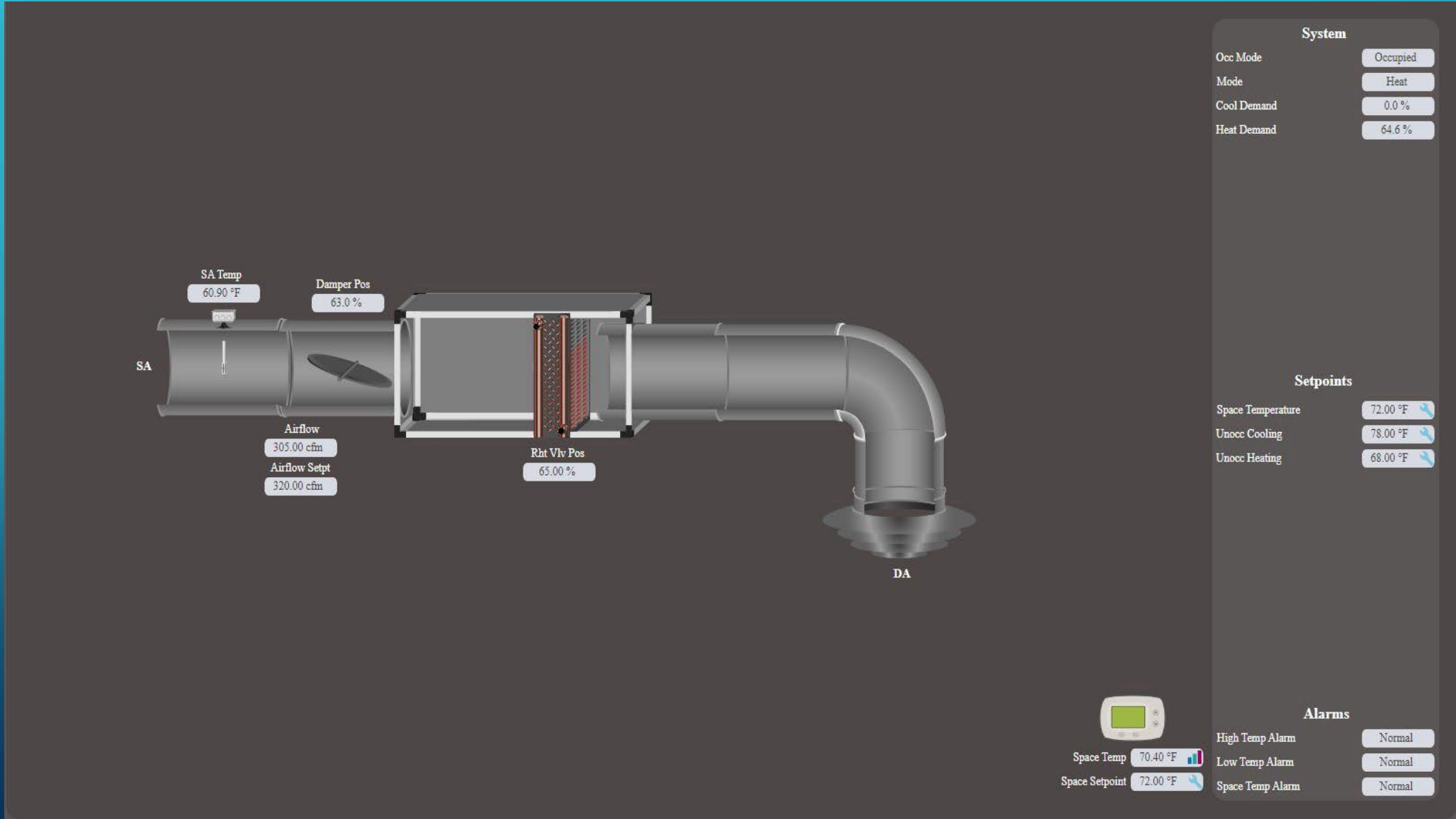
Alarms | **Alarm Setpoints**

Chiller Staging

Lead: **Chiller5**
Lag: **Chiller1**
Third: **Chiller2**
Fourth: **Chiller3**
Fifth: **Chiller4**

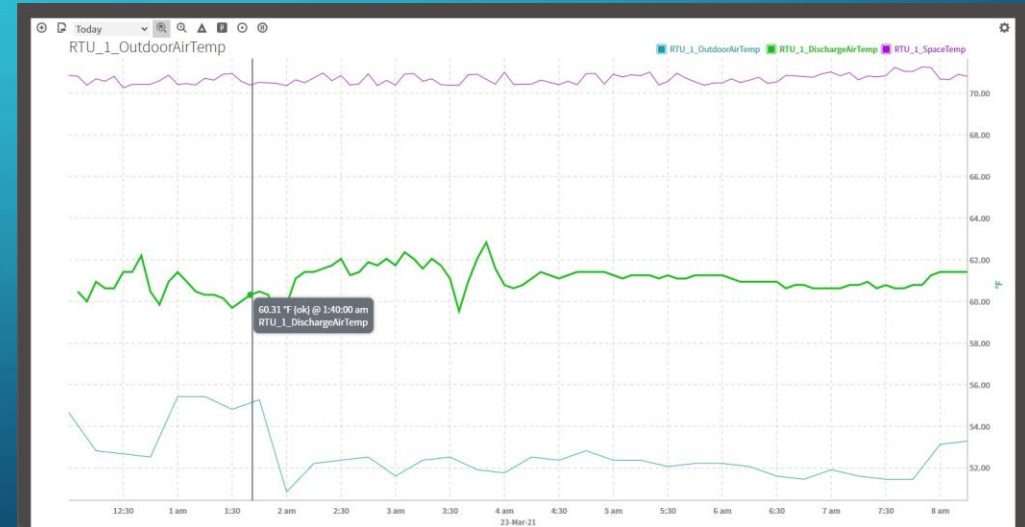
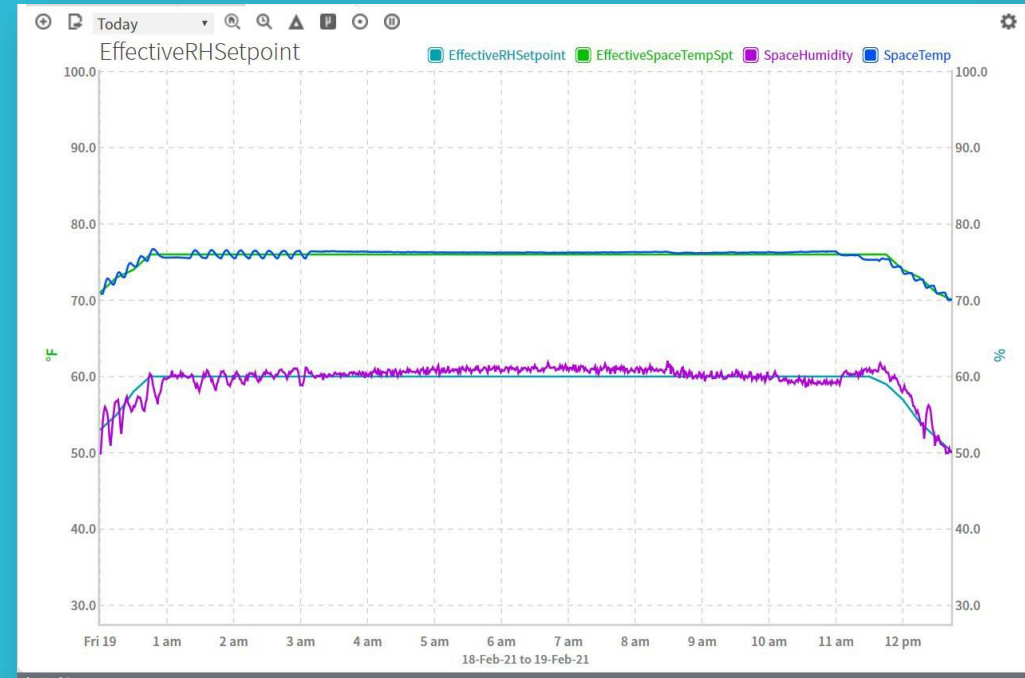
Manual Rotate

Equipment Graphics

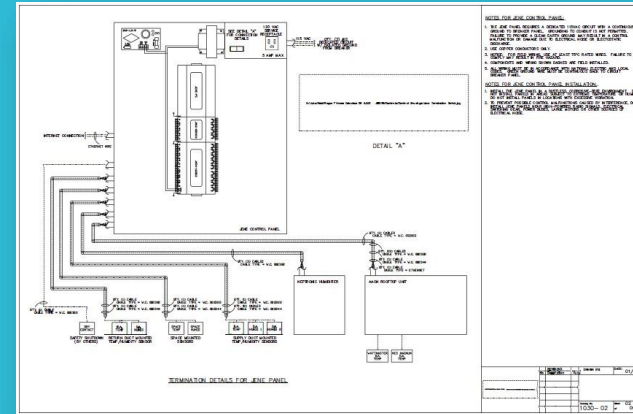


Trending

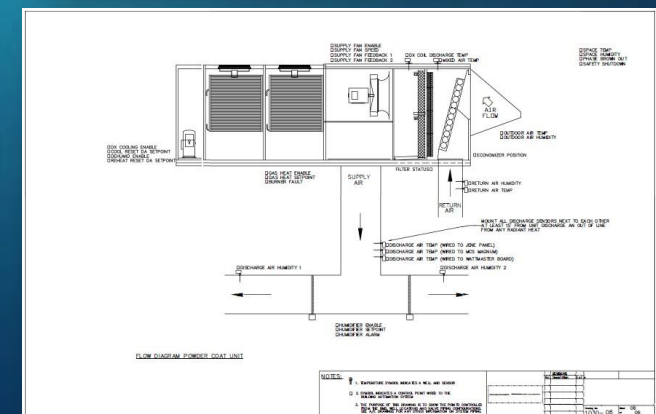
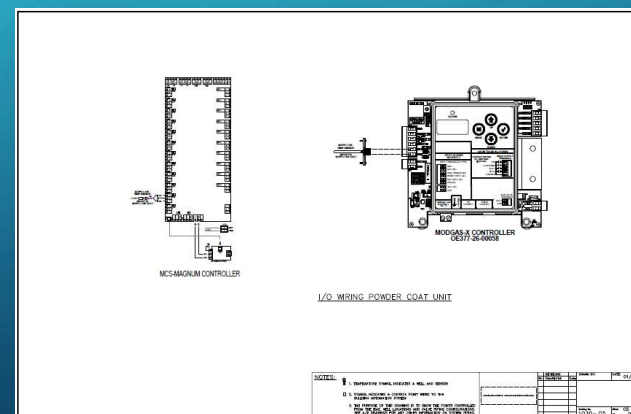
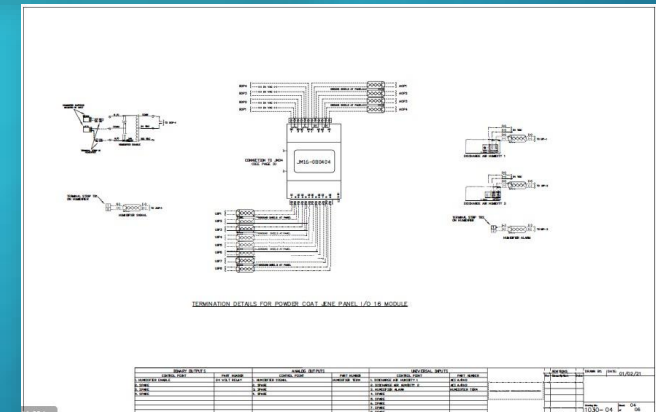
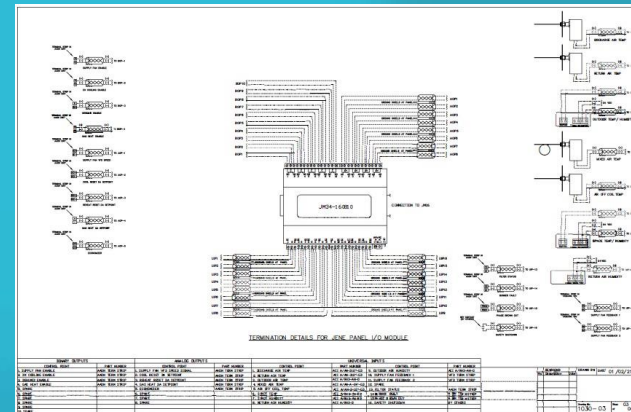
- System data that starts upon installation.
- Chart multiple points on the same timeline to compare how system is running.



Engineered Control Drawings



- In house control engineering.
- Quick turn around on lead times for detailed engineered control drawings, wiring diagrams and submittals.





AIRTECH

269-716-1150

- **Integrate to existing building automation systems and equipment**
- **Engineer, program and install new building automation systems**



AIRTECH

Airtech is comprised of Airtech Equipment and Airtech Automation.

Airtech Equipment sells applied commercial HVAC equipment.

Airtech Automation engineers, sells and installs custom control systems.



AIRTECH
AUTOMATION



AIRTECH
EQUIPMENT