

**SDV Job #: 5415121 - Penn Station V2BLD2 (Lake St Louis)**

**Service Region:** 328 - St. Louis, MO Service  
**Service Person:** Adam Stanley

**Customer Number:** 882009      **Customer Name:** Region 120 - Air Solutions

**Address:** Penn Station  
 6424 Ronald Reagan Dr  
 Lake Saint Louis, MO 63367

**Region Job #:** 5361980  
**Region Job Name:** Penn Station V2BLD2 (Lake St Louis)

**Sales Region:** 120 - Air Solutions  
**Sales Person:** Joe Hertenstein

**Created By:** Adam Stanley      **Creation Date:** 9/8/2022 1:08 PM  
**Last Modified By:** Adam Stanley      **Last Modified Date:** 9/13/2022 2:23 PM

**Dining Room Pressure:** 0.0      **Kitchen Pressure:** 0.0  
**Hours On Job:** 0.0      **Extra Hours:** 0.0

**Completed:** Yes      **Completed By:** Adam Stanley  
**Completion Date:** 9/13/2022 2:23 PM

**UDS**

NONE

**Hood Group 1**

**Exhaust CFM:** Design = 1050      Initial = 0      Final = 0      (0.0% of design)

**Hood 1 ( HD1-Grill ) (HD1-Grill) - NOT AVAILABLE!**

**Model:** 3650BD-2      **Length:** 6' 0.00"  
**Exhaust CFM:** Design = 1050      Initial = 0      Final = 0      (0.0% of design)

**Other Notes:***Not included in SDV pricing.***Installation**

Hung Using appropriate material to safely secure hood.      **N/A**

COOKING EQUIPMENT ON AND OPERATING      **N/A**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE      **N/A**

END PANELS INSTALLED CORRECTLY      **N/A**

**Filters**

**Type:** Captrate Solo

**Filter 1**      Size: 16x16      Initial Velocity: 0 fpm      Final Velocity: 0 fpm      Initial CFM: 0      Final CFM: 0  
 Fan: #1 - DU85HFA (EF-1 (Grill))

**Filter 2**      Size: 16x16      Initial Velocity: 0 fpm      Final Velocity: 0 fpm      Initial CFM: 0      Final CFM: 0  
 Fan: #1 - DU85HFA (EF-1 (Grill))

**Filter 3**      Size: 16x16      Initial Velocity: 0 fpm      Final Velocity: 0 fpm      Initial CFM: 0      Final CFM: 0  
 Fan: #1 - DU85HFA (EF-1 (Grill))

**Filter 4**      Size: 16x16      Initial Velocity: 0 fpm      Final Velocity: 0 fpm      Initial CFM: 0      Final CFM: 0  
 Fan: #1 - DU85HFA (EF-1 (Grill))

## Hood Group 2

**Exhaust CFM:** Design = 800 Initial = 0 Final = 0 (0.0% of design)

### Hood 2 ( HD3-Fry ) (HD3-Fry) - NOT AVAILABLE!

**Model:** 3650BD-2 **Length:** 4' 2.00"  
**Exhaust CFM:** Design = 800 Initial = 0 Final = 0 (0.0% of design)

**Other Notes:**

*Not included in SDV pricing.*

#### Installation

Hung Using appropriate material to safely secure hood. **N/A**

COOKING EQUIPMENT ON AND OPERATING **N/A**

COOKING EQUIPMENT INSTALLED AS CLOSE TO BACK WALL AS POSSIBLE **N/A**

END PANELS INSTALLED CORRECTLY **N/A**

#### Filters

**Type:** Captrate Solo

**Filter 1** Size: 16x16 Initial Velocity: 0 fpm Final Velocity: 0 fpm Initial CFM: 0 Final CFM: 0  
Fan: #3 - DU85HFA (KEF3 (FRY))

**Filter 2** Size: 16x16 Initial Velocity: 0 fpm Final Velocity: 0 fpm Initial CFM: 0 Final CFM: 0  
Fan: #3 - DU85HFA (KEF3 (FRY))

**Filter 3** Size: 16x16 Initial Velocity: 0 fpm Final Velocity: 0 fpm Initial CFM: 0 Final CFM: 0  
Fan: #3 - DU85HFA (KEF3 (FRY))

## AQEs

NONE

## Fans

### Fan 1 - DU85HFA (EF-1 (Grill)) (EF-1 (Grill)) - NOT AVAILABLE!

**Model:** DU85HFA

**Other Notes:**

*Not included in SDV pricing.*

#### Exhaust

**Exhaust CFM:** Design = 1050 Actual = 0 (0.0% of design)

Record the ECM Speed	N/A
VOLTS	N/A
HP	N/A
HUB SET SCREW TIGHT	N/A
FAN LEVEL	N/A
ROTATION	N/A
FAN VIBRATION	N/A
RPM - DESIGN	N/A
RPM - MAX	N/A
RPM - MAX RECOMMENDED	N/A
FLA	N/A
OVERLOAD SET POINT	N/A
PHASE	N/A
FAN WITHIN 5 MILES OF COAST	N/A
HINGE KIT INSTALLED	N/A
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	N/A
SPEED CONTROL VOLTAGE	N/A

**Fan 2 - DU33HFA (KEF2 (OVEN)) (KEF2 (OVEN)) - NOT AVAILABLE!**

**Model:** DU33HFA

**Other Notes:**

*Not included in SDV pricing.*

**Exhaust**

**Exhaust CFM:** Design = 600 Actual = 0 (0.0% of design)

Record the ECM Speed	N/A
VOLTS	N/A
HP	N/A
HUB SET SCREW TIGHT	N/A
FAN LEVEL	N/A
ROTATION	N/A
FAN VIBRATION	N/A
RPM - DESIGN	N/A
RPM - MAX	N/A
RPM - MAX RECOMMENDED	N/A
FLA	N/A
OVERLOAD SET POINT	N/A
PHASE	N/A
FAN WITHIN 5 MILES OF COAST	N/A
HINGE KIT INSTALLED	N/A
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	N/A
SPEED CONTROL VOLTAGE	N/A

**Fan 3 - DU85HFA (KEF3 (FRY)) (KEF3 (FRY)) - NOT AVAILABLE!**

**Model:** DU85HFA

**Other Notes:**

*Not included in SDV pricing.*

**Exhaust**

**Exhaust CFM:** Design = 800 Actual = 0 (0.0% of design)

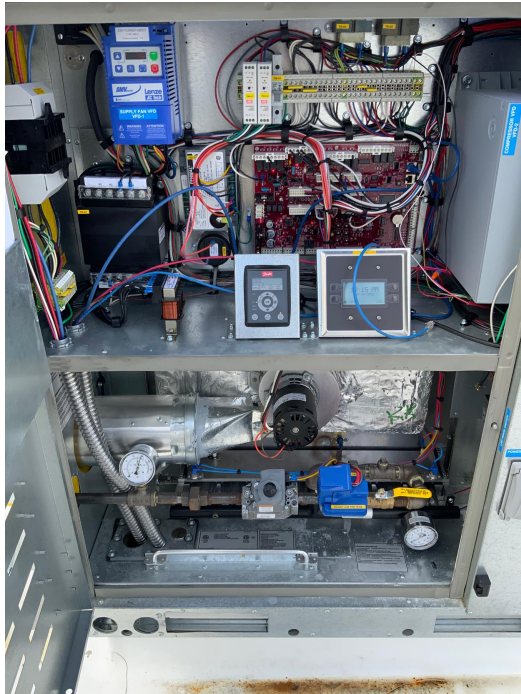
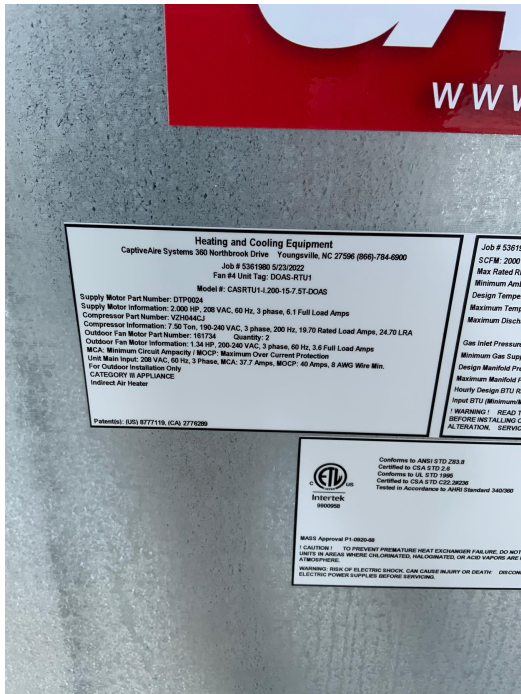
Record the ECM Speed	N/A
VOLTS	N/A
HP	N/A
HUB SET SCREW TIGHT	N/A
FAN LEVEL	N/A
ROTATION	N/A
FAN VIBRATION	N/A
RPM - DESIGN	N/A
RPM - MAX	N/A
RPM - MAX RECOMMENDED	N/A
FLA	N/A
OVERLOAD SET POINT	N/A
PHASE	N/A
FAN WITHIN 5 MILES OF COAST	N/A
HINGE KIT INSTALLED	N/A
INSPECT ALL EXTERIOR SIDES OF UNIT. ANY VISIBLE DAMAGE	N/A
SPEED CONTROL VOLTAGE	N/A

**Fan 4 - CASRTU1-I.200-15-7.5T-DOAS (DOAS-RTU1) (DOAS-RTU1)**

**Model:** CASRTU1-I.200-15-7.5T-DOAS

**Other Notes:**

N/A

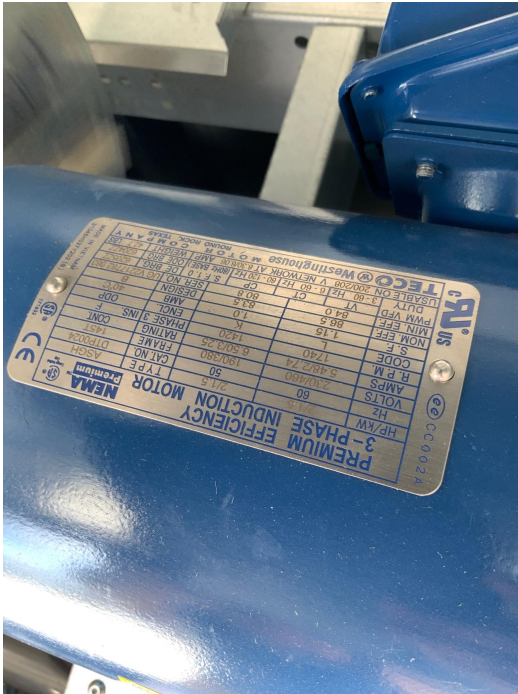


**Supply**

**Supply CFM:**      Design = 2000      Actual = 2064      (103.2% of design)

**Other Notes:**

*Fans balanced by National Tab*



VOLTS	Design: <b>208</b>	Actual: <b>210</b>
HP	Design: <b>2</b>	Actual: <b>2</b>
HUB SET SCREW TIGHT	Design: <b>Yes</b>	Actual: <b>Yes</b>
FAN LEVEL	Design: <b>Yes</b>	Actual: <b>Yes</b>
ROTATION	Design: <b>Correct</b>	Actual: <b>Correct</b>
FAN VIBRATION	Design: <b>Good</b>	Actual: <b>Good</b>
RPM - DESIGN	Design: <b>1502</b>	Actual: <b>1275</b>
RPM - MAX	Design: <b>2200</b>	Actual: <b>N/A</b>
RPM - MAX RECOMMENDED	Design: <b>1800</b>	Actual: <b>N/A</b>
Is blower door tamper switch operational? Does blower shut down when the door is opened?	Design: <b>Yes</b>	Actual: <b>Yes</b>
Record the VFD HZ		Actual: <b>44</b>

**Other Notes:**

N/A



Design OA %	Design: <b>74%</b>	Actual: <b>72</b>
Design OA CFM	Design: <b>1475</b>	Actual: <b>1436</b>
Damper voltage at design outside air?		Actual: <b>7.4</b>

**Other Notes:**

N/A



How was outside air measured?	Actual: <b>Flowhood</b>
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**Other Notes:**

*Velocity grid at fan intake.*

How was airflow measured for the T&B?	Actual: <b>Flowhood</b>
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Blower motor actual amperage at design airflow?	Design: <b>Less than or equal to 6.1</b>	Actual: <b>3.9</b>
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**Other Notes:**

N/A



Record pressure off the sampling tube of the air proving switch. For MUA Board: Note the differential pressure displayed on the HMI.

Actual: **0.24**

**Other Notes:**

N/A



Modulate the blower to the minimum speed that will be required for the application. Modulate the damper to the minimum position required for the application. Calibrate the airflow proving.

Design: **Complete**

Actual: **Complete**

Is photohelic/space pressure port installed and wired?

N/A

Is photohelic/space pressure port modulating the blower or damper

N/A

as needed?

Does unit have return?

Design: **Yes**

Actual: **Yes**

**DOAS**

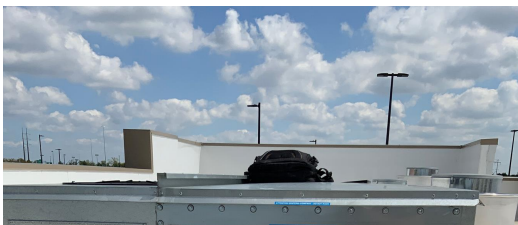
Take pictures of all four sides of the unit.

Design: **Complete**

Actual: **Complete**

**Other Notes:**

N/A





Duct properly sealed to curb base and not bypassing through openings?

Design: **Yes**

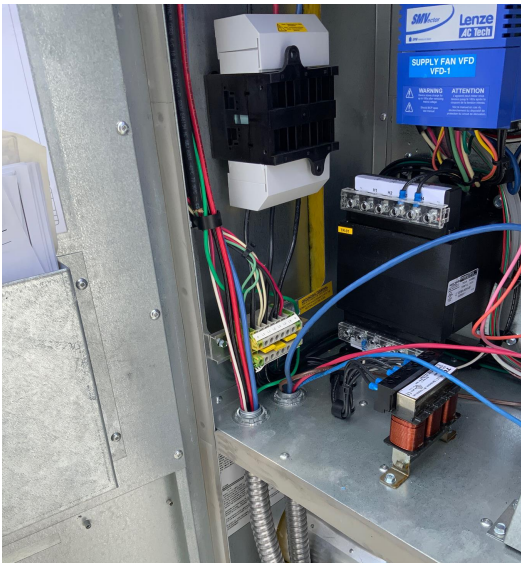
Actual: **Yes**

Electrical input properly run through base or side?

Actual: **Base**

**Other Notes:**

N/A





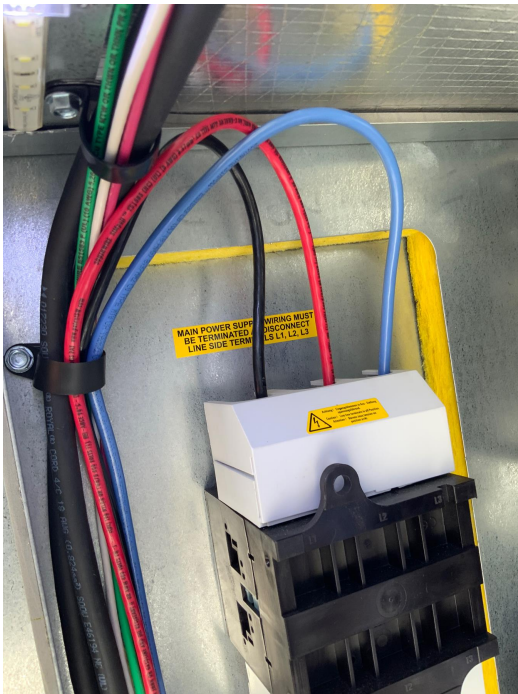
Incoming gauge of wire

Design: **8 AWG**

Actual: **8**

**Other Notes:**

N/A

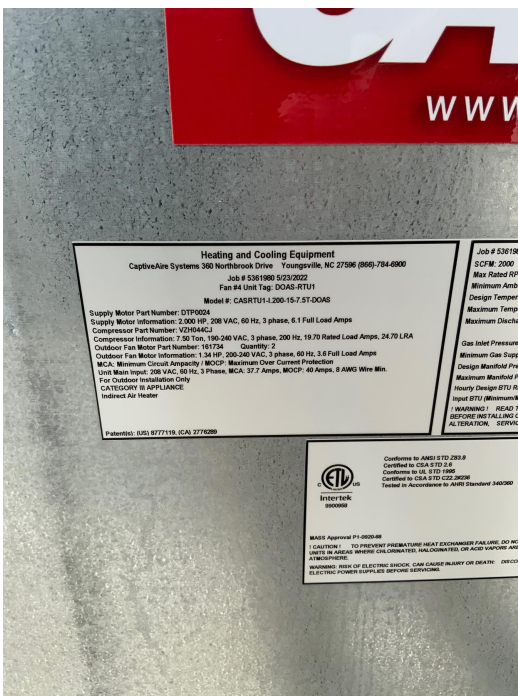


Verify breaker size is appropriate for unit. Breaker size should be greater than or equal to MCA and less than or equal to MOCP. Must include picture.

Actual: **40**

**Other Notes:**

N/A



Volts	208Y/120V	Int Amps	225
Neut Cal	1C0664000	Phase	3 Wire



Unit within five miles from the coast?

Actual: **No**

Was the CAS supplied condensate drain used in the installation?

Design: **Yes**

Actual: **No**

**Other Notes:**

N/A



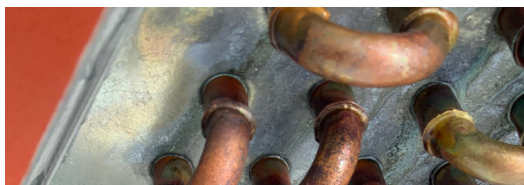
Is condensate pan float switch free of debris and able to slide up and down?

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A





Is there any damage to refrigerant piping, distributor lines, or coils?

Design: **No**

Actual: **No**

**Other Notes:**

N/A



Confirm field wiring shown on wiring diagrams are complete and check for loose connections. Correct as needed.

Design: **Complete**

Actual: **Complete**

Upload CAAL file received from DOAS@captiveaire.com to the control board.

Actual: **Complete**

**Other Notes:**

N/A, received set points from DOAS team.

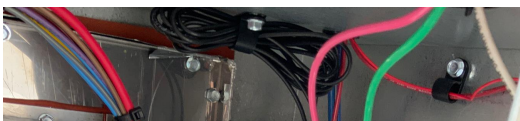
Has SCADA been registered, activated and obtained a CASLink heartbeat?

Design: **Yes**

Actual: **No**

**Plant Notes:**

Scada module was not installed at plant.





### Temp Verification

Measure intake temp with meter and confirm it is within 10F of HMI readout.

Design: **True**

Actual: **True**

**Other Notes:**

N/A





Measure return temp with meter and confirm it is within 10F of HMI readout.

Design: **True**

Actual: **True**

**Other Notes:**

N/A



Measure evap coil temp with meter and confirm it is within 10F of HMI readout.

Design: **True**

Actual: **True**

**Other Notes:**

N/A



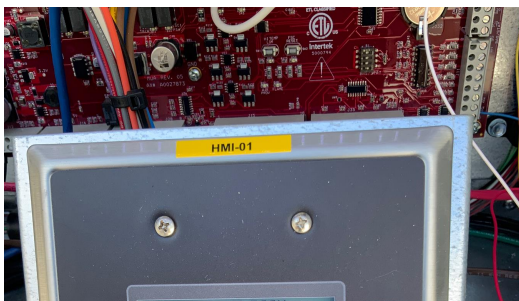
Review intake humidity on HMI. Does it appear to be reporting correctly?

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A





Are extra HMIs being used? Do not count the HMI in the unit. Upload picture of space HMI(s) and surrounding area.

Actual: **Yes**

**Other Notes:**

N/A



Record number of extra HMI's used.

Actual: **1**

What are those HMI's being used for?

Actual: **Space Temp & Humidity**

Is wired space wall temp/humidity sensor (not HMI) being used?

Actual: **No**

**Heater Gas**

Gas Type

Design: **Natural**

Actual: **Natural**

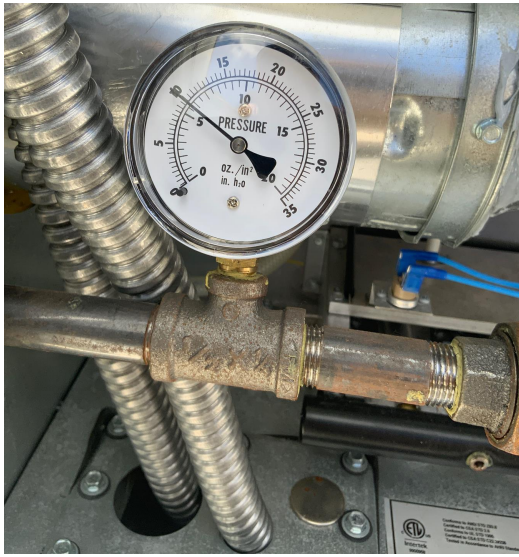
Inlet Gas Pressure

Actual: **10**

**Other Notes:**

N/A





Set mod valve low fire setting using the IOM and STB20-1011. Record manifold gas pressure.

Design: **0.15**

Actual: **0.21**

**Other Notes:**

N/A

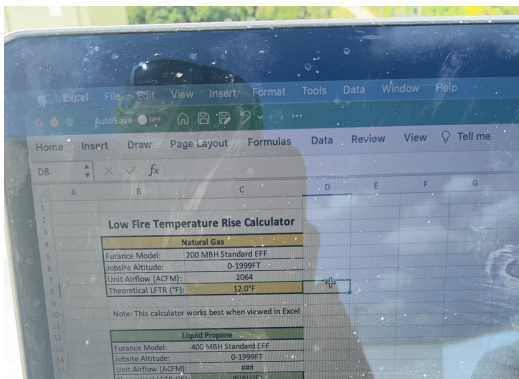


Theoretical low fire temperature rise. Use STB20-1011 Calculator

Actual: **12**

**Other Notes:**

N/A





With unit maintaining steady state low fire, record intake temperature.

Actual: 82

**Other Notes:**

N/A



With unit maintaining steady state low fire, record discharge temperature.

Actual: 89

Min Temp Rise. If the low fire temperature rise is not within 5 deg of the calculated theoretical, contact DOAS@captiveaire.com

Actual: 7

Set high fire pressure using test menu procedure in O&IM and record manifold gas pressure on pressure gauge.

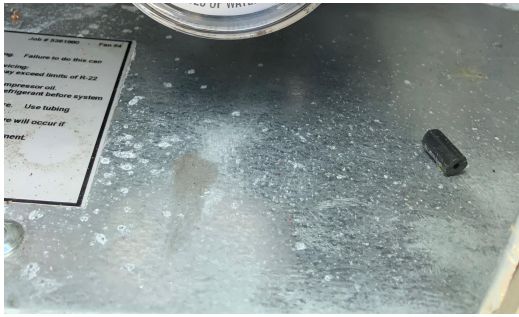
Design: 3.5" W.C.

Actual: 3.5

**Other Notes:**

N/A





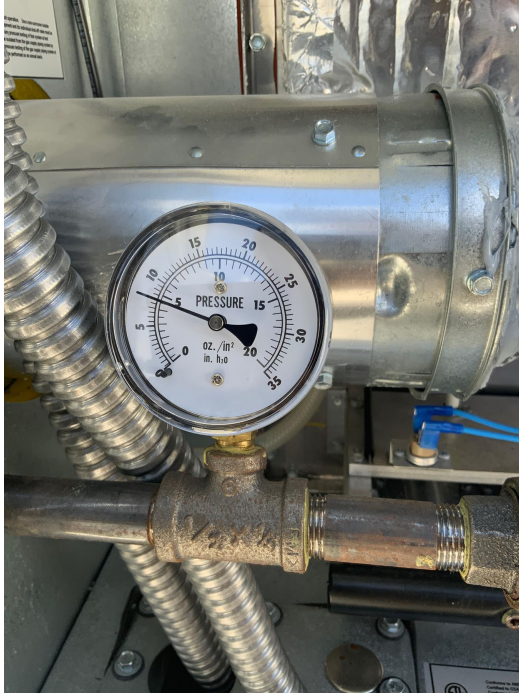
Recorded Inlet Gas Pressure With Unit in high fire

Design: 7" - 14" W.C.

Actual: 8

**Other Notes:**

N/A

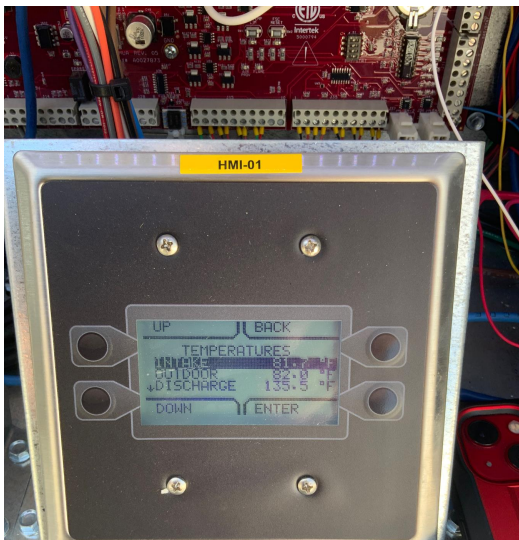


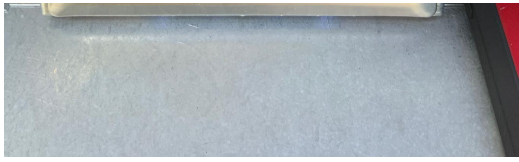
Confirm the discharge air temp sensor is reading accurately in high fire. Reference STB20-1007 and modulate the burner to the highest capacity heat that can be achieved. Record the discharge air temp reading on the HMI.

Actual: 135

**Other Notes:**

N/A





With unit still holding highest capacity heat, go into space and record discharge temp at the supply diffuser closest to unit using a handheld temp probe. Record Temperature.

Actual: **132**

Difference between measured and actual temperature.

Actual: **3**

(For HE Furnaces Only) Is heat tape installed and wired for drain tubing that is not in conditioned space? If No, take a picture and upload.

N/A

### Cooling

Check status of Oil Sensor Level in HMI. Is status open or closed? Open means oil level is low. Do not operate compressor if the OLS is open.

Design: **Closed**

Actual: **Closed**

**Other Notes:**

N/A



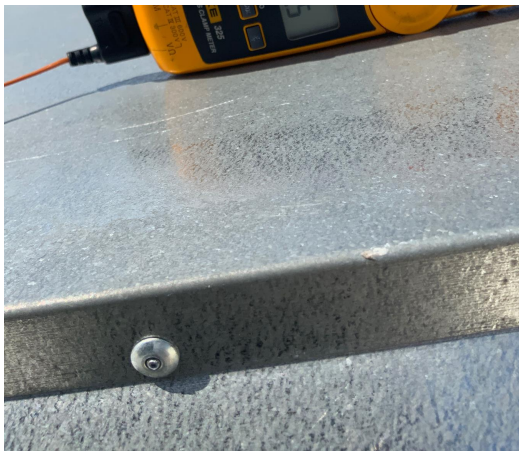
Measure the outside air temp and record the value.

Actual: **93**

**Other Notes:**

N/A





For IBT verify superheat controller settings. For MUA, verify EEV model in setting match the valve install on the unit.

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A



Verify compressor VFD settings.  
Do settings match schematic?

Design: **Yes**

Actual: **Yes**

Place the system in evacuation mode and record the pressure at the suction service port with a gauge set.

Actual: **227**

**Other Notes:**

N/A



With the unit still in evacuation mode, record the suction pressure reading from HMI.

Actual: **227**

**Other Notes:**

N/A



With the unit still in evacuation mode, record the discharge

Actual: **228**

mode, record the discharge pressure reading from HMI.

Difference between measured and actual?

Actual: 0

### Over 50F

Start a cooling test. Do condensing fans turn on and modulate?

Design: **Yes**

Actual: **Yes**

Does EEV modulate to maintain 20F superheat?

Actual: **Yes**

Does Compressor ramps up to max speed (200Hz or 330Hz) depending on model?

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A

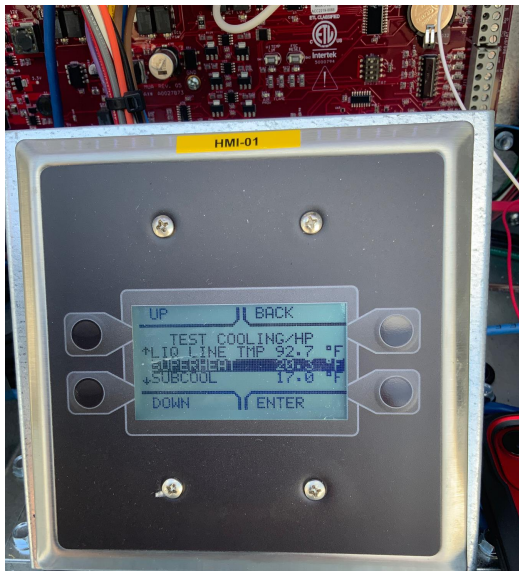


Cooling superheat measured? (Target is 20)

Actual: 20

**Other Notes:**

N/A





Record discharge pressure reading from HMI.

Actual: **373**

**Other Notes:**

N/A



Record liquid line pressure.

Actual: **364**

**Other Notes:**

N/A



Record liquid line temperature.

Actual: **92**

**Other Notes:**

N/A



Record Subcool reading. Contact DOAS Support if subcooling is outside of the range of 12F - 20F. Do not adjust refrigerant charge until directed to by DOAS Support.

Actual: **17**

**Other Notes:**

N/A



**Final Checks**

**Plant Notes:**

*Scada module was not installed at plant. Return trip is needed to install. All CASLink questions will be marked N/A.*

FINAL STEPS OF SDV. ONLY PERFORM FOLLOWING QUESTIONS IF REST OF SDV HAS BEEN COMPLETED!

Actual: **Ok**

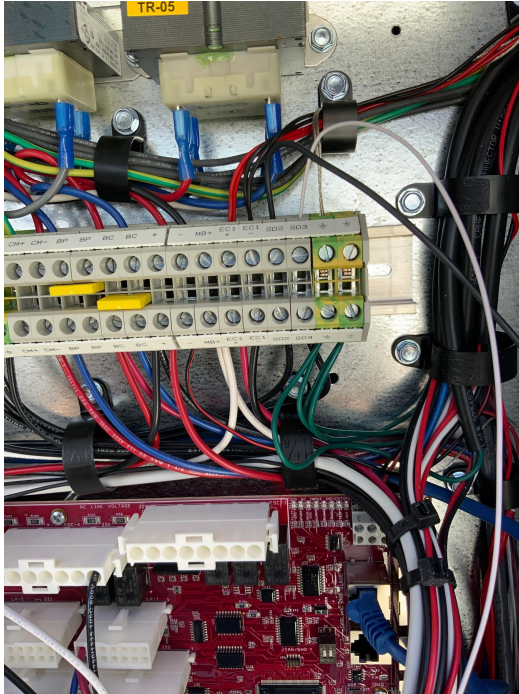
Is the smoke detector input wired

Actual: **Yes**

and functional? Add a note indicating what is wired to the smoke detector input (terminal SD3).

**Other Notes:**

*ECP*

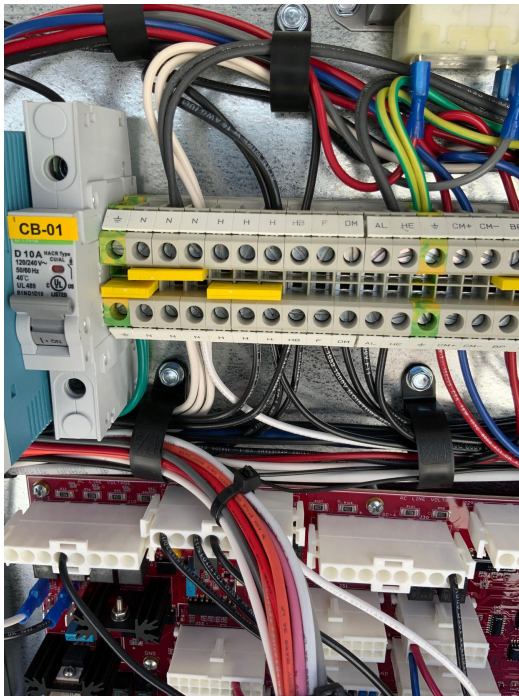


Is the fire alarm input (terminal F) wired and functional? Add a note indicating what is wired to the input (i.e. building fire panel, DCV fire interlock, etc.).

Actual: **No**

**Other Notes:**

*N/A*



Is either the wired occupied override or unit interlock being utilized and operational?

Actual: **No**

**Other Notes:**

*occupied by schedule*

Once all SDV adjustments are complete, update the factory default settings through the service menu.

Design: **Complete**

Actual: **Complete**

**Other Notes:**

N/A



Once all SDV adjustments are complete, download the CAAL file from the board, label it with the fan number, software revision and upload it to the NOLA job docs.

Actual: **Complete**

Take picture of CASLink showing last heartbeat.

Actual: **Incomplete**

**Other Notes:**

N/A

DOAS data is visible on CASLink, tagged unique from other equipment and matches field labeling

Actual: **No**

**Other Notes:**

N/A

Take picture of CASLink showing DOAS data responding.

Actual: **Incomplete**

**Other Notes:**

N/A

All other equipment on job labeled and can see data on CASLink?

Actual: **No**

**Other Notes:**

N/A

Has someone from DOAS\_support@captiveaire.com confirmed they are seeing data on this job?

Actual: **No**

**Other Notes:**

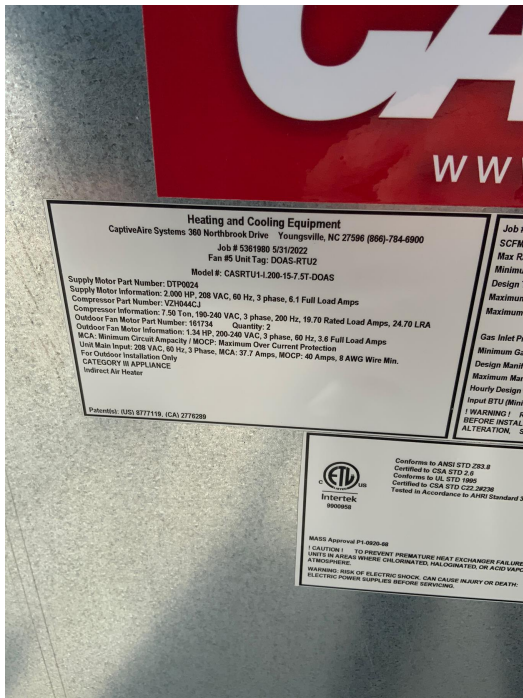
N/A

Fan 5 - CASRTU1-I.200-15-7.5T-DOAS (DOAS-RTU2) (DOAS-RTU2)

Model: CASRTU1-I.200-15-7.5T-DOAS

Other Notes:

N/A



Supply

Supply CFM: Design = 2200 Actual = 2118 (96.3% of design)



**Other Notes:**

N/A



Design OA %	Design: <b>58%</b>	Actual: <b>66</b>
Design OA CFM	Design: <b>1275</b>	Actual: <b>1392</b>
Damper voltage at design outside air?		Actual: <b>5.8</b>
How was outside air measured?		Actual: <b>Flowhood</b>

**Other Notes:**

*Velocity grid at fan intake*

How was airflow measured for the T&B?		Actual: <b>Flowhood</b>
Blower motor actual amperage at design airflow?	Design: <b>Less than or equal to 6.1</b>	Actual: <b>5</b>
Record pressure off the sampling tube of the air proving switch. For MUA Board: Note the differential pressure displayed on the HMI.		Actual: <b>0.3</b>

**Other Notes:**

N/A





Modulate the blower to the minimum speed that will be required for the application. Modulate the damper to the minimum position required for the application. Calibrate the airflow proving.

Design: **Complete**

Actual: **Complete**

Is photohelic/space pressure port installed and wired?

N/A

Is photohelic/space pressure port modulating the blower or damper as needed?

N/A

Does unit have return?

Design: **Yes**

Actual: **Yes**

## DOAS

Take pictures of all four sides of the unit.

Design: **Complete**

Actual: **Complete**

### Other Notes:

N/A





Duct properly sealed to curb base and not bypassing through openings?

Design: **Yes**

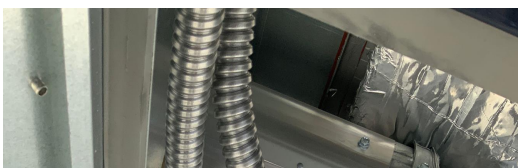
Actual: **Yes**

Electrical input properly run through base or side?

Actual: **Base**

**Other Notes:**

N/A





Incoming gauge of wire

Design: **8 AWG**

Actual: **8**

**Other Notes:**

N/A

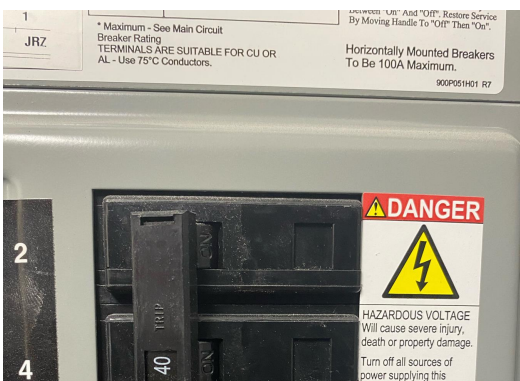


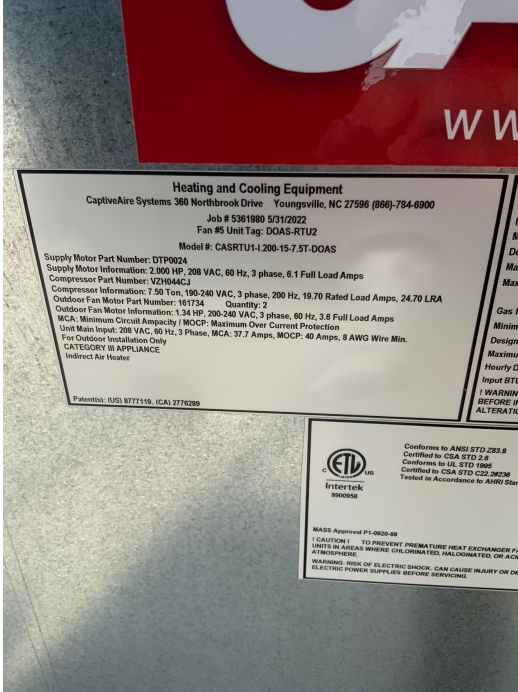
Verify breaker size is appropriate for unit. Breaker size should be greater than or equal to MCA and less than or equal to MOCP. Must include picture.

Actual: **40**

**Other Notes:**

N/A





Unit within five miles from the coast?

Actual: **No**

Was the CAS supplied condensate drain used in the installation?

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A



Is condensate pan float switch free of debris and able to slide up and down?

Design: **Yes**

Actual: **Yes**

**Other Notes:**

*With modifications*



Is there any damage to refrigerant piping, distributor lines, or coils?

Design: **No**

Actual: **No**

Confirm field wiring shown on wiring diagrams are complete and check for loose connections. Correct as needed.

Design: **Complete**

Actual: **Complete**

Upload CAAL file received from DOAS@captiveaire.com to the control board.

Actual: **Complete**

**Other Notes:**

*N/A, received set points from DOAS team*

Has SCADA been registered, activated and obtained a CASLink heartbeat?

Design: **Yes**

Actual: **No**

**Plant Notes:**

*Scada module was not installed at plant.*

**Temp Verification**

Measure intake temp with meter and confirm it is within 10F of HMI readout.

Design: **True**

Actual: **True**

Measure return temp with meter and confirm it is within 10F of HMI readout.

Design: **True**

Actual: **True**

Measure evap coil temp with meter and confirm it is within 10F of HMI readout.

Design: **True**

Actual: **True**

Review intake humidity on HMI. Does it appear to be reporting correctly?

Design: **Yes**

Actual: **Yes**

Are extra HMIs being used? Do not count the HMI in the unit. Upload picture of space HMI(s) and surrounding area.

Actual: **Yes**

**Other Notes:**

N/A



Record number of extra HMI's used.

Actual: **1**

What are those HMI's being used for?

Actual: **Space Temp & Humidity**

Is wired space wall temp/humidity sensor (not HMI) being used?

Actual: **No**

**Heater Gas**

Gas Type

Design: **Natural**

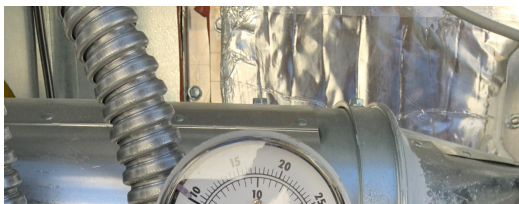
Actual: **Natural**

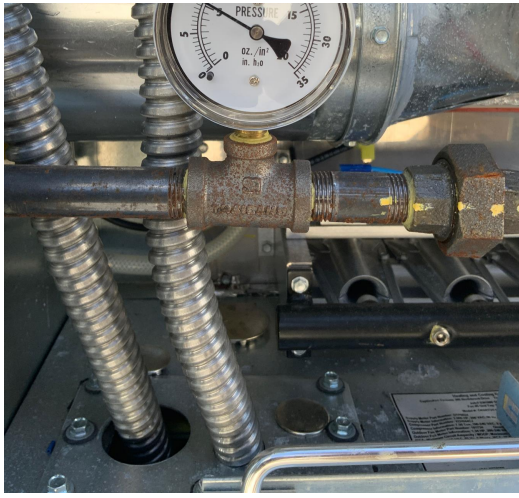
Inlet Gas Pressure

Actual: **9**

**Other Notes:**

N/A





Set mod valve low fire setting using the IOM and STB20-1011. Record manifold gas pressure.

Design: **0.15**

Actual: **0.21**

**Other Notes:**

N/A

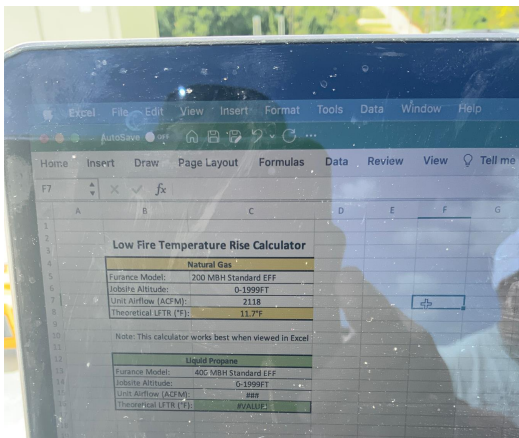


Theoretical low fire temperature rise. Use STB20-1011 Calculator

Actual: **11.7**

**Other Notes:**

N/A



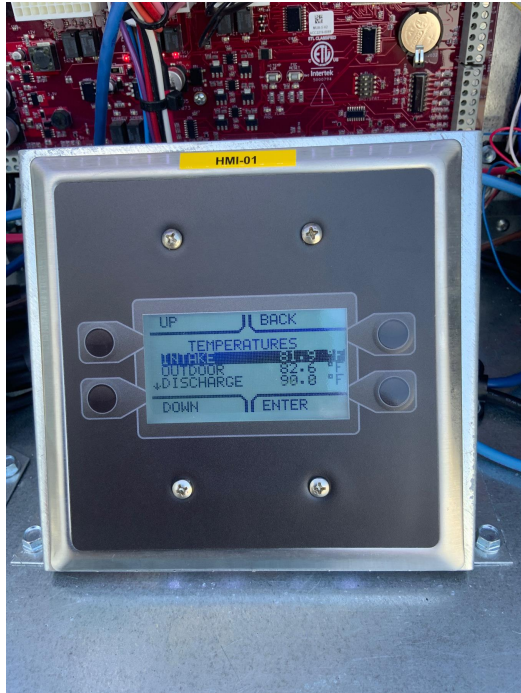


With unit maintaining steady state low fire, record intake temperature.

Actual: **81**

**Other Notes:**

N/A



With unit maintaining steady state low fire, record discharge temperature.

Actual: **90**

Min Temp Rise. If the low fire temperature rise is not within 5 deg of the calculated theoretical, contact DOAS@captiveaire.com

Actual: **9**

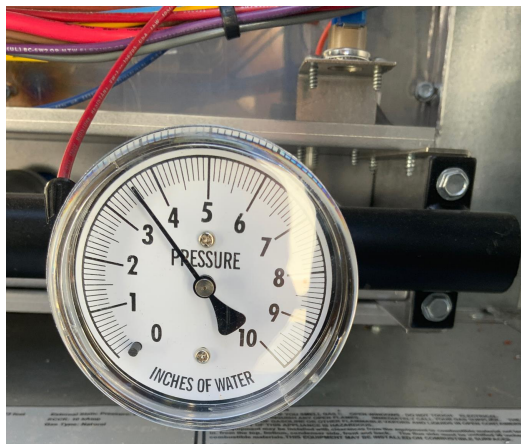
Set high fire pressure using test menu procedure in O&IM and record manifold gas pressure on pressure gauge.

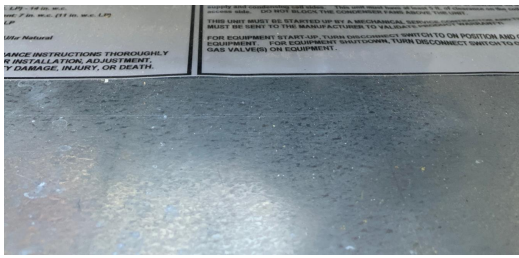
Design: **3.5" W.C.**

Actual: **3.5**

**Other Notes:**

N/A





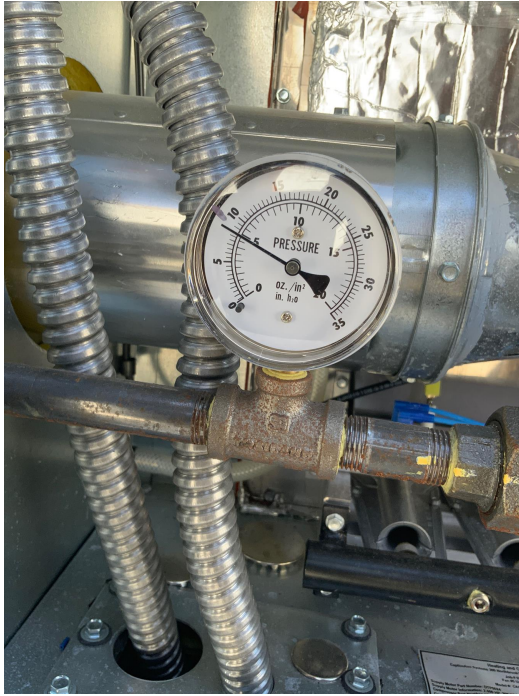
Recorded Inlet Gas Pressure With Unit in high fire

Design: 7" - 14" W.C.

Actual: 8.4

**Other Notes:**

N/A

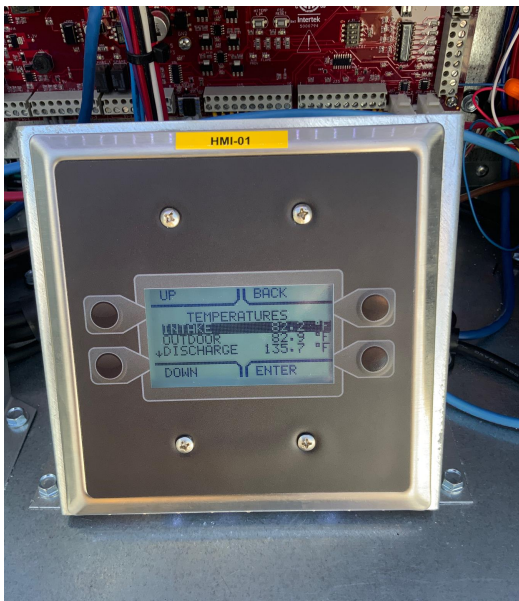


Confirm the discharge air temp sensor is reading accurately in high fire. Reference STB20-1007 and modulate the burner to the highest capacity heat that can be achieved. Record the discharge air temp reading on the HMI.

Actual: 135

**Other Notes:**

N/A





With unit still holding highest capacity heat, go into space and record discharge temp at the supply diffuser closest to unit using a handheld temp probe. Record Temperature.

Actual: **133**

Difference between measured and actual temperature.

Actual: **2**

(For HE Furnaces Only) Is heat tape installed and wired for drain tubing that is not in conditioned space? If No, take a picture and upload.

N/A

### Cooling

Check status of Oil Sensor Level in HMI. Is status open or closed? Open means oil level is low. Do not operate compressor if the OLS is open.

Design: **Closed**

Actual: **Closed**

**Other Notes:**

N/A



Measure the outside air temp and record the value.

Actual: **93**

**Other Notes:**

N/A





For IBT verify superheat controller settings. For MUA, verify EEV model in setting match the valve install on the unit.

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A



Verify compressor VFD settings. Do settings match schematic?

Design: **Yes**

Actual: **Yes**

Place the system in evacuation mode and record the pressure at the suction service port with a gauge set.

Actual: **227**

**Other Notes:**

N/A





With the unit still in evacuation mode, record the suction pressure reading from HMI.

Actual: **226**

**Other Notes:**

N/A



With the unit still in evacuation mode, record the discharge pressure reading from HMI.

Actual: **226**

Difference between measured and actual?

Actual: **1**

**Over 50F**

Start a cooling test. Do condensing fans turn on and modulate?

Design: **Yes**

Actual: **Yes**

Does EEV modulate to maintain 20F superheat?

Actual: **Yes**

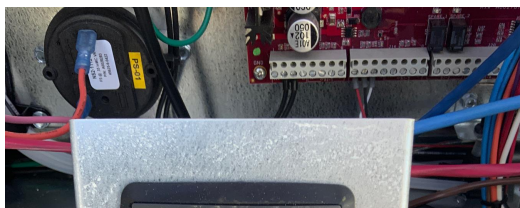
Does Compressor ramps up to max speed (200Hz or 330Hz) depending on model?

Design: **Yes**

Actual: **Yes**

**Other Notes:**

N/A



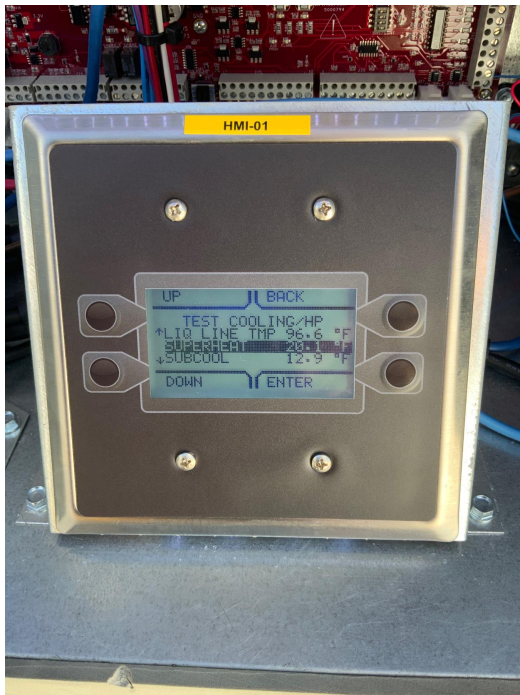


Cooling superheat measured?  
(Target is 20)

Actual: 20

**Other Notes:**

N/A

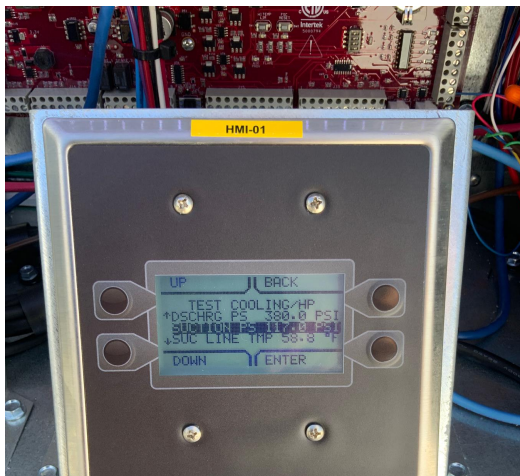


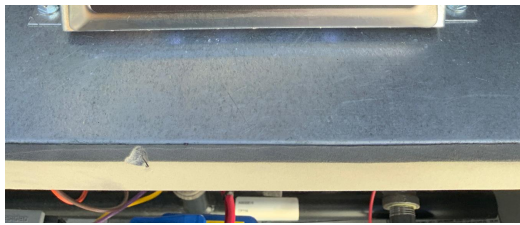
Record discharge pressure  
reading from HMI.

Actual: 380

**Other Notes:**

N/A





Record liquid line pressure.

Actual: **366**

**Other Notes:**

N/A



Record liquid line temperature.

Actual: **96**

**Other Notes:**

N/A



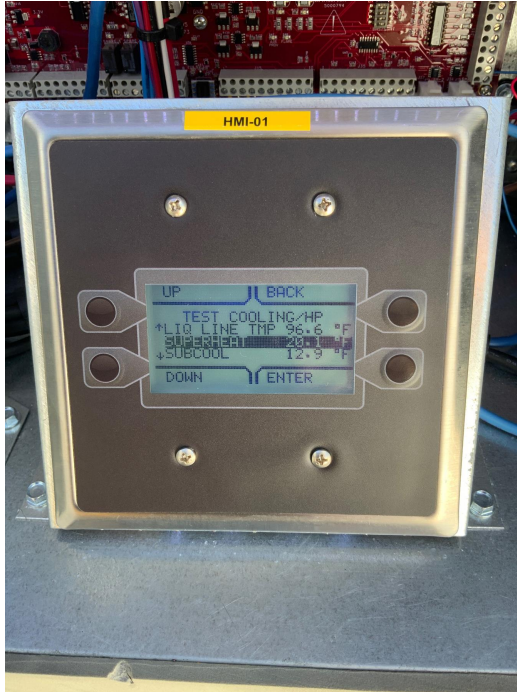
Record Subcool reading. Contact DOAS Support if subcooling is outside of the range of 12.5 - 20.5

Actual: **13**

outside of the range of 121 - 201.  
Do not adjust refrigerant charge  
until directed to by DOAS Support.

**Other Notes:**

N/A



**Final Checks**

**Plant Notes:**

*Scada module is not installed at plant. Return trip is needed to install. All CASLink questions will be marked N/A.*

FINAL STEPS OF SDV. ONLY  
PERFORM FOLLOWING  
QUESTIONS IF REST OF SDV HAS  
BEEN COMPLETED!

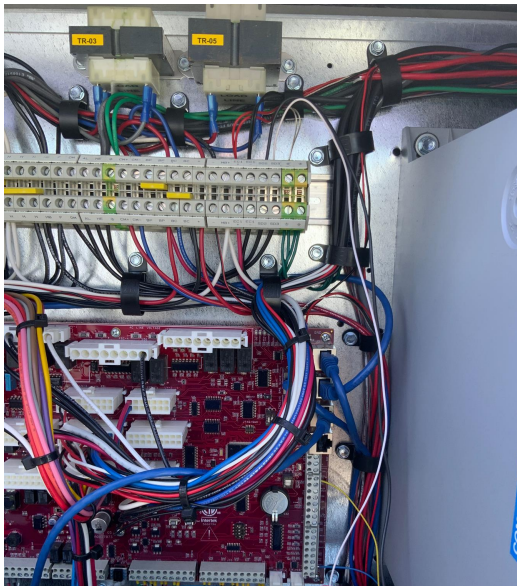
Actual: **Ok**

Is the smoke detector input wired  
and functional? Add a note  
indicating what is wired to the  
smoke detector input (terminal  
SD3).

Actual: **Yes**

**Other Notes:**

*Wired to ECP*



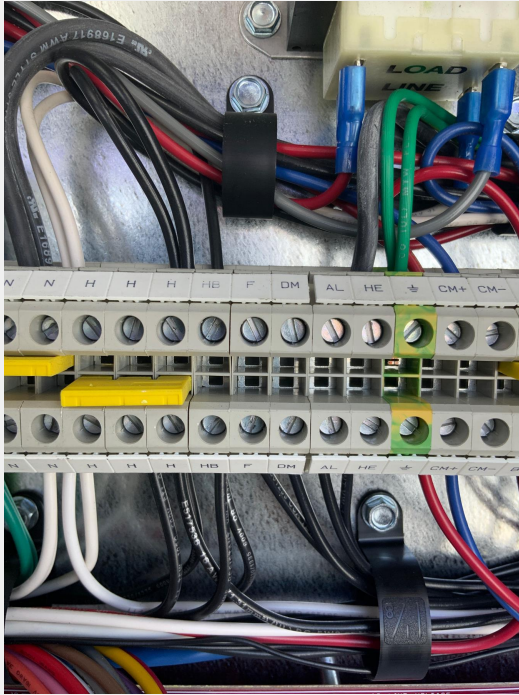


Is the fire alarm input (terminal F) wired and functional? Add a note indicating what is wired to the input (i.e. building fire panel, DCV fire interlock, etc.).

N/A

**Other Notes:**

N/A



Is either the wired occupied override or unit interlock being utilized and operational?

Actual: **No**

**Other Notes:**

*Occupied by schedule*

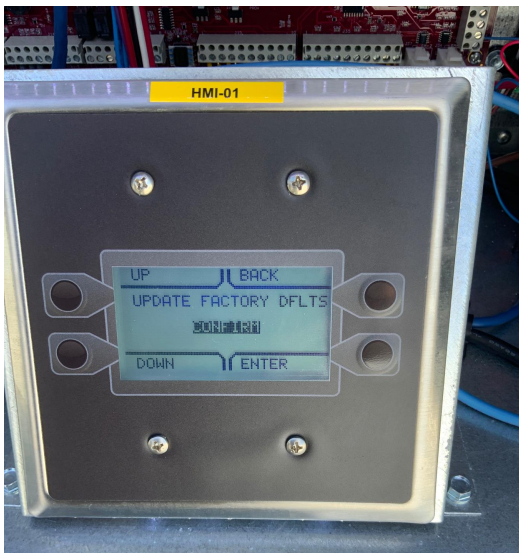
Once all SDV adjustments are complete, update the factory default settings through the service menu.

Design: **Complete**

Actual: **Complete**

**Other Notes:**

N/A





Once all SDV adjustments are complete, download the CAAL file from the board, label it with the fan number, software revision and upload it to the NOLA job docs.

Actual: **Complete**

Take picture of CASLink showing last heartbeat.

Actual: **Incomplete**

**Other Notes:**

N/A

DOAS data is visible on CASLink, tagged unique from other equipment and matches field labeling

Actual: **No**

**Other Notes:**

N/A

Take picture of CASLink showing DOAS data responding.

Actual: **Incomplete**

**Other Notes:**

N/A

All other equipment on job labeled and can see data on CASLink?

Actual: **No**

**Other Notes:**

N/A

Has someone from DOAS\_support@captiveaire.com confirmed they are seeing data on this job?

Actual: **No**

**Other Notes:**

N/A

## ECPs

### ECP 1 - SC-130220MA\_MA4 ( EP1 ) (EP1) - NOT AVAILABLE!

Package #: SC-130220MA\_MA4

**Other Notes:**

*Not included in SDV pricing.*

### Smart Control

ROOM TEMPERATURE OFFSET	N/A
HOW MANY FAN ZONES ARE THERE	N/A
HYSTERESIS TEMPERATURE	N/A
Room Sensor Type	N/A
Is room sensor wireless or wired?	N/A
Is room sensor operating correctly? Upload Picture of installation	N/A
Are there Tempering HMI's?	N/A
ALL TEMP SENSORS ARE WIRED IN	N/A
Do any of the light circuits exceed 1400W?	N/A
ALL LIGHTS WORK	N/A
ALL FAULTS CLEARED	N/A
ECPM03 HARDWARE REVISION	N/A
ECPM03 PROGRAM VERSION	N/A
CASHMI HARDWARE REVISION	N/A
CASHMI PROGRAM VERSION	N/A
ECPM03 DATE AND TIME ACCURATE	N/A
Smoke Test Performed on all Hoods? Upload Video	N/A
Ansul Cylinder Installed	N/A

### Ansul

Is the Ansul micro switch connected from common and normally closed to C1 & AR1 in control panel? N/A

(Test shunt trip) With system in Fire Mode, Take Multimeter and test between ST & N1. Do you have 120V? If No, replace ECPM03 board and retest. N/A

Does Exhaust Fan ramp up to full speed in fire mode? N/A

### VFDs - NOT AVAILABLE!

NONE

### CORE

NONE