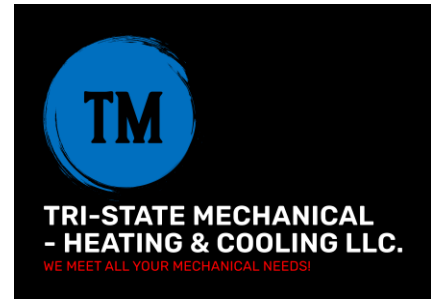


Approved



## SUBMITTAL COVER PAGE

Project #: C2023-1014

Project Name: Enterprise Rental – Fields Ertel

Construction Manager: Derek Inc.

Architect: D.R. Brooks Architect

Engineer: Hal-pe Associates

Reference: Makeup Air Unit

Spec. #: N/A

Drawing #: H-2

Manufacturer: CaptiveAire

Supplier: CaptiveAire

Contact Person Name & #: Grant Homan (513) 275-4986

Print Name: Larry Sawyer

Date#: 5/25/23

X Approved Spec # N/A

Approved As Noted

Rejected

Revise and Resubmit

Sign Name: Larry Sawyer

FOR QUESTIONS, CALL THE  
 Western OH Mechanical  
 REGION 133  
 PHONE: (513) 275-4986  
 EMAIL: reg133@ruppams.com

**MUA FAN INFORMATION – JOB#5947260**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCF	WEIGHT (LBS)	SDNES
1	MAU-1	1	R76	G7D	D.6	600	600	0.500	1392	TEAD-ECM	1.000	0.2000	1	115	11.6	16.6A	25A	330	12.9

**GAS FIRED MAKE-UP AIR UNIT(S)**

FAN UNIT NO	TAG	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
1	MAU-1	42852	39424	63°F	7 IN. W.C. – 14 IN. W.C.	NATURAL

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	MAU-1	1	INLET PRESSURE GAUGE, 0-35"
		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK – ALARM SUPPLIED BY OTHERS
		1	ECM WIRING PACKAGE – DD SUPPLY – MANUAL REFERENCE SPEED CONTROL (TELCO MOTOR) – PCB CONTROL
		1	MOTORIZED INTAKE DAMPER (D76)
		1	FREEZESTAT
		1	EXHAUST CONTACTOR BEFORE AIRFLOW SWITCH – FIELD WIRED
		1	CURB DUCT HANGER

**FAN ACCESSORIES**

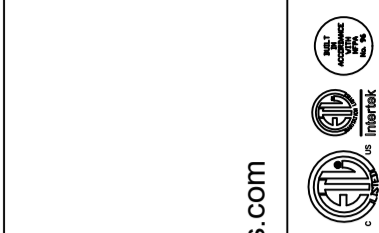
FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	MAU-1						YES	

**CURB ASSEMBLIES**

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	MAU-1	50 LBS	CURB	19.500"W X 52.000"L X 20.000"H ALONG WIDTH, RIGHT INSULATED.

**REVISIONS**

DESCRIPTION	DATE:



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 9015 Fields Ertel Road,  
 Cincinnati, OH, 45249

**DATE:** 5/26/2023

**DWG.#:**  
5947260

**DRAWN BY:** grant.honar

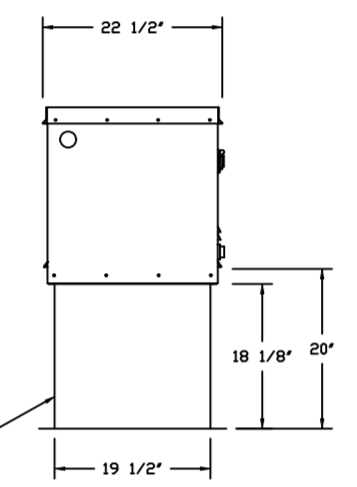
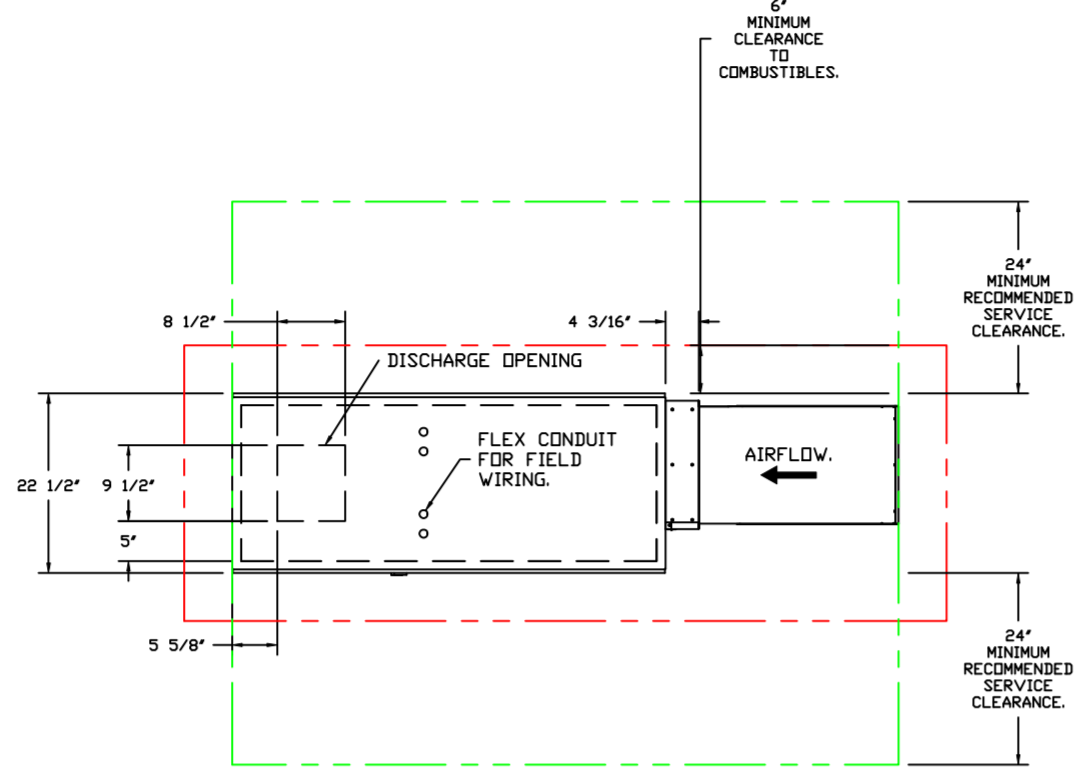
**SCALE:**  
3/4" = 1'-0"

**MASTER DRAWING**

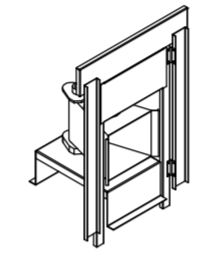
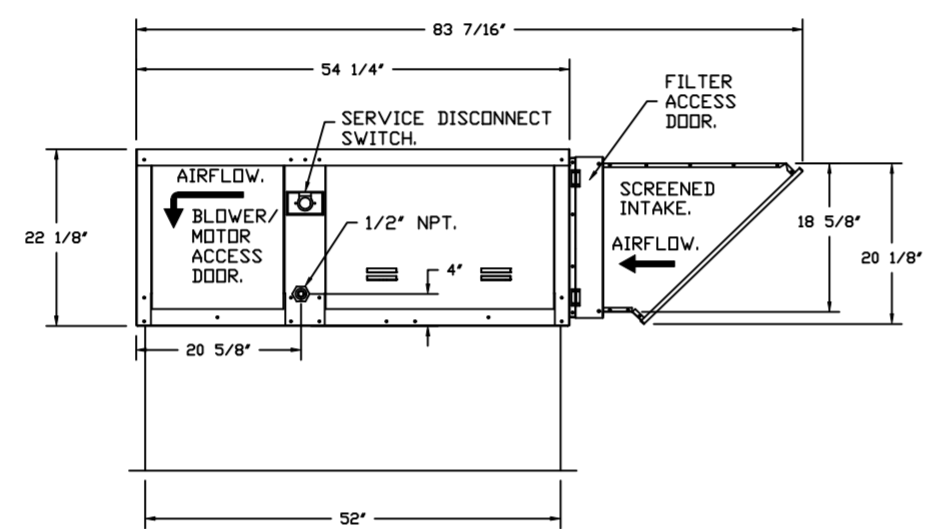
**SHEET NO.**  
1

FAN #1 R760 - HEATER MAU-1J  
 1. LHM DIRECT FIRED HEATER. DIRECT DRIVE.  
 2. INTAKE HOOD WITH EZ FILTERS.  
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.  
 4. GAS PRESSURE GAUGE, 0-30", 2.5" DIAMETER, 1/4" THREAD SIZE.  
 5. GAS PRESSURE GAUGE, -5 TO 115 INCHES WC, 2.5" DIAMETER, 1/4" THREAD SIZE.  
 6. COMMERCIAL SMOKE DETECTOR INTERLOCK (DETECTOR BY OTHERS).  
 7. ECM WIRING PACKAGE AND MANUAL, OR 0-10VDC CONTROL, FOR SUPPLY EC MOTORS, MUA BOARD. \*\*MID NOT ORDER UNDER WARRANTY\*\*  
 8. MOTORIZED BACK DRAFT DAMPER 13" X 17" FOR D76 COMPACT DIRECT FIRED HEATERS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, 1F180S ACTUATOR INCLUDED.  
 9. FREEZE/STAT FACTORY SET AT 35°F AND 10 MINUTES.  
 10. FIELD WIRED EXHAUST CONTACTOR BEFORE AIRFLOW SWITCH. RATED 23 AMPS. STARTS UP TO (2) SINGLE PHASE MOTORS. SHP MAX 120V. SHP MAX 240V. STARTS ONE THREE PHASE MOTOR. SHP MAX 208V. 7.5HP MAX 220V. SHP MAX 480V. OVERLOAD NOT INCLUDED.  
 11. CURB DUCT HANGER - 1-1/4" ANGLE IRON FRAME WELDED TO CURB TO SUPPORT STANDARD SIZE DUCTWORK. PRICED PER CURB. ONLY AVAILABLE WHEN CURB ASSEMBLY IS ORDERED.

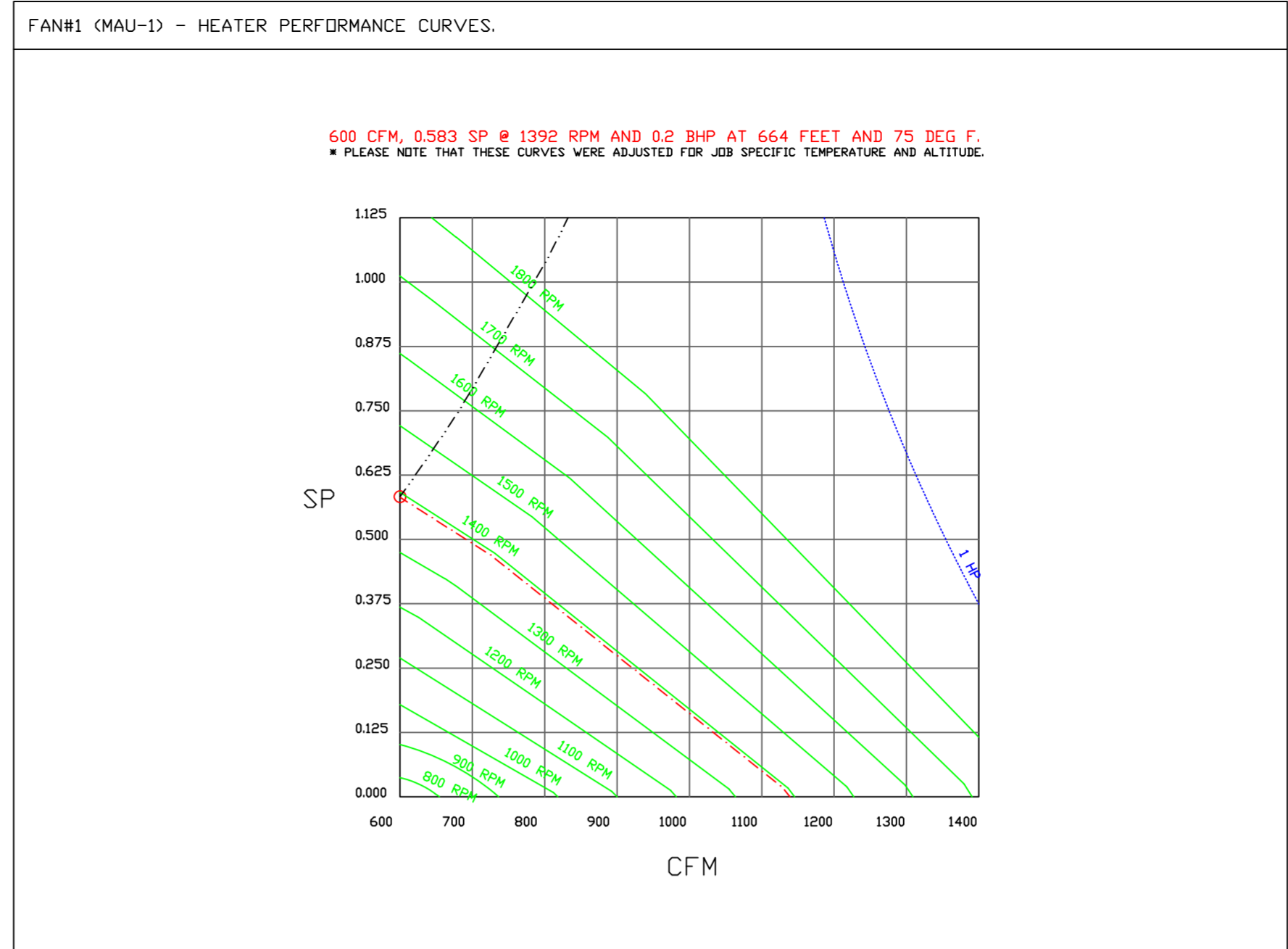
SUPPLY SIDE HEATER INFORMATION  
 WINTER TEMPERATURE = 12°F. TEMP. RISE = 63°F.  
 BTUS CALCULATED OFF ACTUAL AIR DENSITY.  
 OUTPUT BTUS AT ALTITUDE OF 0.0 FT. = 48383.  
 INPUT BTUS AT ALTITUDE OF 664 FT. = 39464.  
 OUTPUT BTUS AT ALTITUDE OF 664 FT. = 48852.



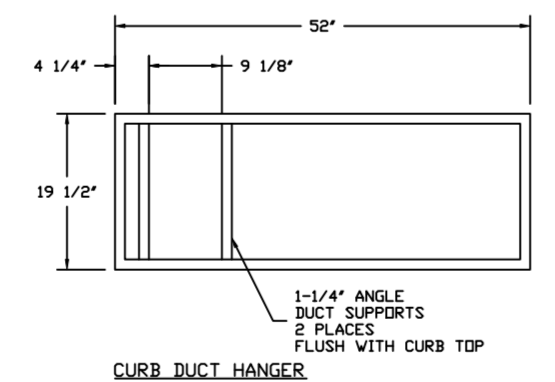
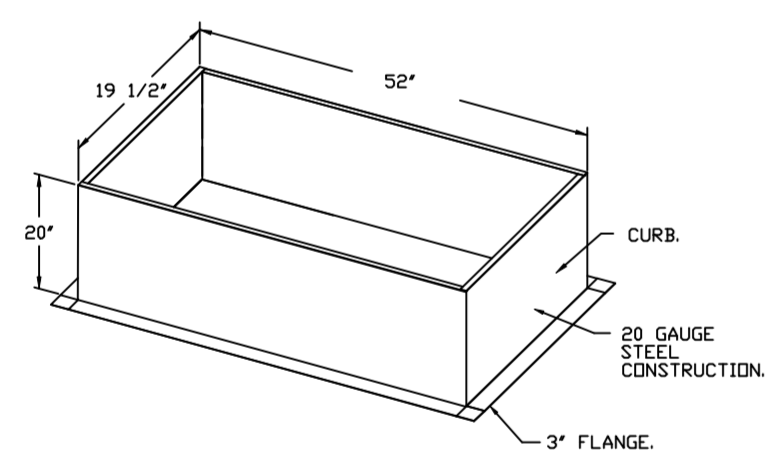
ROOF OPENING 2" SMALLER THAN CURB DIMENSION.



**DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY**  
**SELECTED PROFILE PLATE SPECIFICATIONS**  
 DIRECT FIRED BURNERS SHALL HAVE PATENTED USE PATENT NO. US6,682,000. SELF-ADJUSTING PROFILE PLATES DESIGNED TO ENSURE PROPER AIR VELOCITY AND PRESSURE DROP ACROSS THE BURNER PROFILE PLATES TO ALLOW BURNING AT LOWEST CLEAN COMBUSTION BY PRODUCT LEVELS TO A MAXIMUM OF 30% OF CLEAN BURNER CO. AND 100% OF THERMAL EFFICIENCY. PROFILE PLATES SHALL BE CONFORMED WITH THE BURNER PROFILE PLATE SPECIFICATIONS OF THE BURNER. THIS ARRANGEMENT WILL ASSURE A CORRECTIVE AIRFLOW, INDEPENDENT OF FUEL GAS TEMPERATURE.  
**ISOLATION**  
 SPRING LOADED BURNER PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOMENTUM OF A FRESH AIR STREAM WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM WITH THIS FEATURE. ALL DF UNITS ARE DESIGNED FOR MANUAL CONTROL. VENTILATOR ONLY REQUIREMENTS.  
**SAFETY STANDARDS**  
 SAFETY STANDARDS AND ASSEMBLIES SHALL BE INCLUDED IN THE DF UNIT'S ETL LISTING AND COMPLY WITH COMBINED SAFETY STANDARDS AND CSA 5.7 NON-RECIRCULATING OF HEATERS) AND ANSI Z89.10 (NON-RECIRCULATING OF HEATERS).  
**SPECIAL CONSTRUCTION**  
 -PROFILE PLATES SHALL BE FORMED FROM 20G GALVANIZED STEEL.  
 -PROFILE PLATES SHALL COMPLY IN SIZE FOR USE.  
 -PROFILE PLATES SHALL BE MOUNTED ALONG THE SAME PLANE AS THE DISCHARGE OF THE BURNER.  
 -BUSH SHALL INCORPORATE POSITIVE TORQUES PERMANENTLY MOUNTED SPRING HINGE.  
 -SPRING HOZES SHALL BE MADE FROM PLATED STEEL.



OPTIONS - FULL BOTTOM CORNERS.



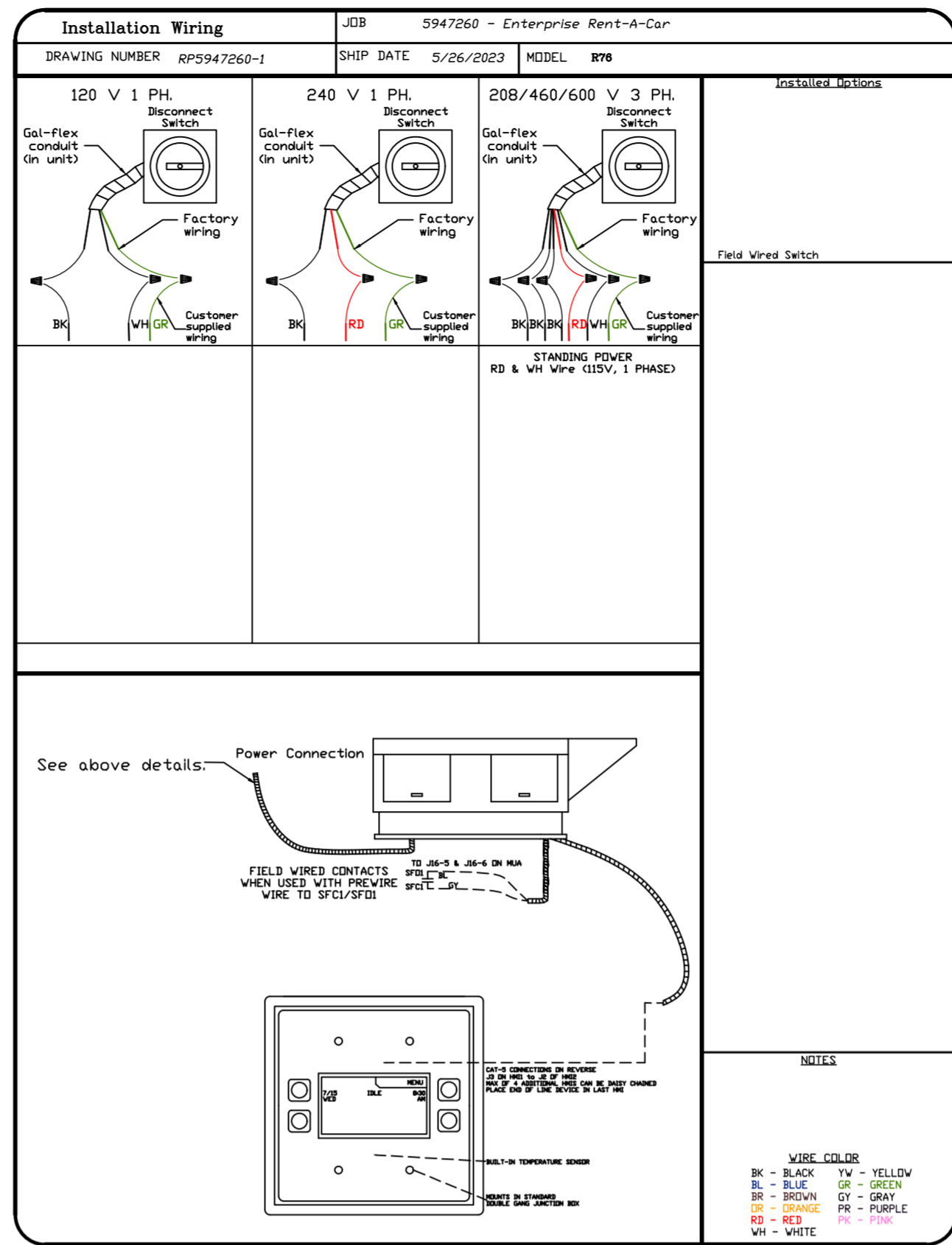
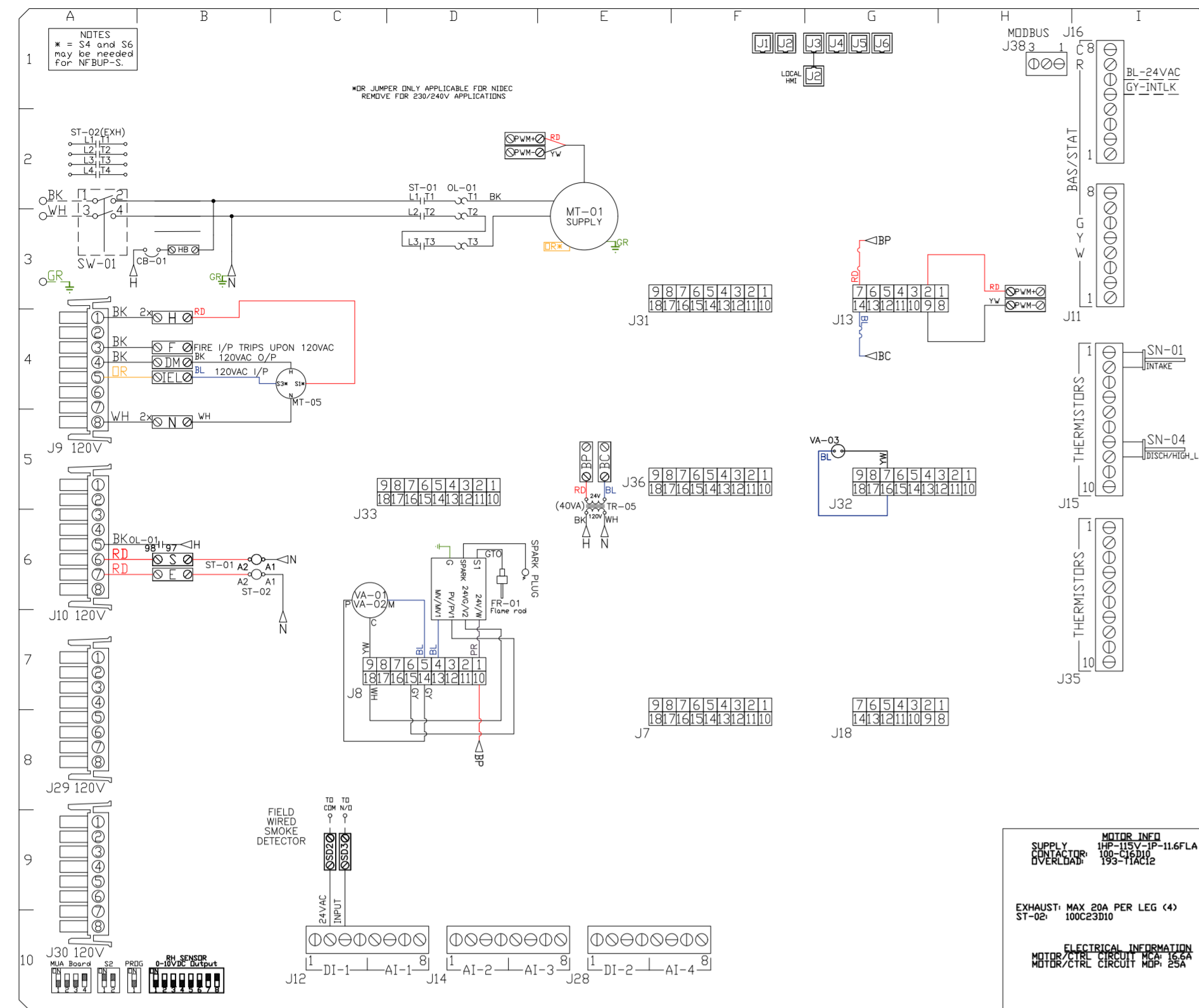
REVISIONS	
DESCRIPTION	DATE:

**RUPP AIR MANAGEMENT SYSTEMS**  
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**Western OH Mechanical**  
 Cincinnati, OH, 45258 PHONE: (613) 275-4986 FAX: (919) 516-8748 EMAIL: reg133@ruppams.com

Enterprise Rent-A-Car  
 9015 Fields Ertel Road,  
 Cincinnati, OH, 45249

DATE: 5/26/2023  
 DWG.#: 5947260  
 DRAWN BY: grant.homar  
 SCALE: 1/2" = 1'-0"  
 MASTER DRAWING

SHEET NO. 2



**REVISIONS**

REVISION	DESCRIPTION	DATE
1		
2		
3		
4		
5		

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MASTER DRAWING

SHEET NO. 3

SYSTEM DESIGN VERIFICATION (SDV)

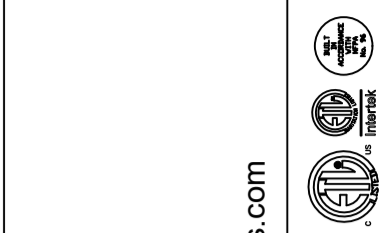
IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

**REVISIONS**

DESCRIPTION	DATE:
Δ	
Δ	
Δ	
Δ	



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**DRAWN BY:** grant.honar

**SCALE:**  
3/4" = 1'-0"

**MASTER DRAWING**

**SHEET NO.**  
4