

MUA FAN INFORMATION - Job#2672323

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
1		A2-IBT-400-200-200-G15	G15-PB	A2-IBT-400-200-200	3350	1.500	1212	5.000	3.8620	3	208	15.0	1339	25	80

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
1		384412	307530	85 deg F	7 in. w.c. - 14 in. w.c.	Natural

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1		1 - Standard Electrical Connection (main and control panel) for Standing Power - Single Module. If a Non-DCV Prewire is used on the IBT Heater, the #28, #47, "NS", "MA", or "E2" Option Prewire must be selected. Do not provide supply starter in prewire.
		1 - Motorized Backdraft Damper for A2-I Housing
		1 - Heated Drain System For 2 Furnaces. Drains Flue Condensation From Furnaces. Required For Winter Design Temp of 0 degrees F or Lower.
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, 0 to 10" wc, 2 Furnaces
		1 - Full Crating For Commercial Heater
		1 - Insulated Blower Section Size 1-2 Commercial
		1 - 5" DuraVent Type B High-Wind Cap. High Wind B Vent cap meets the UL standard for "high Wind" which is a 45 MPH test. Used with 2 furnaces. Replaces SRP12
		1 - 3 Year Extended Motor Warranty
		1 - Extra Set of Belts
	1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only	

FAN ACCESSORIES

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

CURB ASSEMBLIES

NO.	DN FAN	WEIGHT	ITEM	SIZE
1	# 1	88 LBS	Curb	31.000"W x 79.000"L x 24.000"H Insulated
	# 1		Rail	6.000"W x 31.000"L x 24.000"H

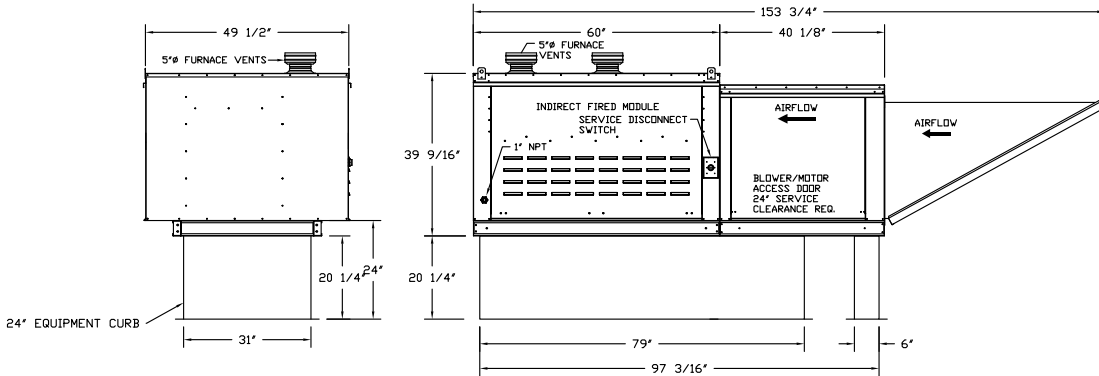
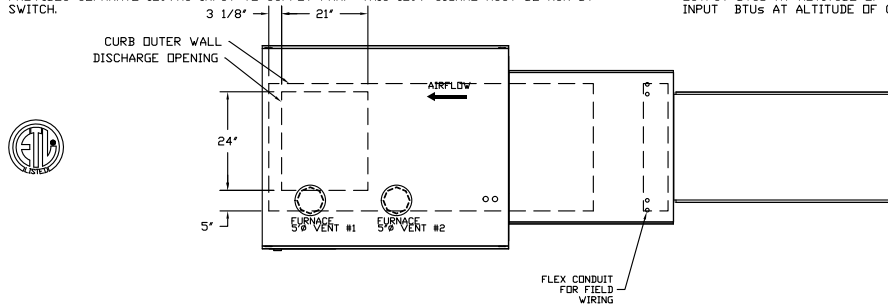


JOB CN Shawarma Job MUA options	
LOCATION	, 0
DATE	6/2/2016
DWG #	1
REV.	
JOB #	2672323
DRAWN BY	BFC-21
SCALE	3/8" = 1'-0"

- FAN #1 A2-IBT-400-200-200-G15 - HEATER
1. INDIRECT BENT TUBE GAS FIRED HEATER WITH 15" BLOWER, 2 FURNACES, ELECTRONIC FULL MODULATION, CONSTANT 80% EFFICIENCY, AND 12:1 MAX TURNDOWN FOR NG, (10:1 MAX TURNDOWN FOR LP). STAINLESS STEEL BURNER AND HEAT EXCHANGER.
 2. INTAKE HOOD WITH E2 FILTERS.
 3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
 4. SEPARATE 120V ELECTRICAL CONNECTION FOR ALL IBT HEATERS WITH 1 MODULE FOR STANDING POWER. 120V MUST BE RUN BY ELECTRICIAN FROM BUILDING PANEL TO MUA SWITCH.
 5. MOTORIZED BACK DRAFT DAMPER 22.75" X 24" W/JACK SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, INCLUDES LF120S MOTOR, FOR SIZE. 2 INDIRECT FIRED HOUSING
 6. FACTORY ASSEMBLED IBT CONDENSATION DRAIN KIT FOR 2 FURNACE UNITS. REQUIRED FOR WINTER DESIGN TEMP OF 0 DEGREES F AND LOWER.
 7. KIT INCLUDES DRAIN ASSEMBLY, MOUNTING SCREWS, ZIP TIES, AND HEAT TAPE FOR DOUBLE FURNACE UNIT. FIELD PIPING FROM UNIT BY OTHERS.
 8. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
 9. GAS PRESSURE GAUGE, 0 TO +10 INCHES WC, 2.5" DIAMETER, 1/8" THREAD SIZE, REAR THREAD, FOR 2 FURNACES
 10. FULL CRATING FOR COMMERCIAL HEATERS FOR SHIPPING.
 11. INSULATED BLOWER HOUSING SIZES 1-2 COMMERCIAL MODULAR
 12. 5" DURAVENT TYPE B HIGH-WIND CAP. HIGH WIND B VENT CAP MEETS THE UL STANDARD FOR "HIGH WIND" WHICH IS A 45 MPH TEST. USED WITH 2 FURNACES. REPLACES SRP12
 13. 3 YEAR EXTENDED WARRANTY FOR FAN MOTOR. PARTS ONLY, DOES NOT INCLUDE LABOR.
 14. EXTRA SET OF V-BELTS. ONLY TO BE ORDERED AS FAN OPTION AT TIME FAN IS ORDERED.
 15. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MUA SWITCH.

SUPPLY SIDE HEATER INFORMATION:

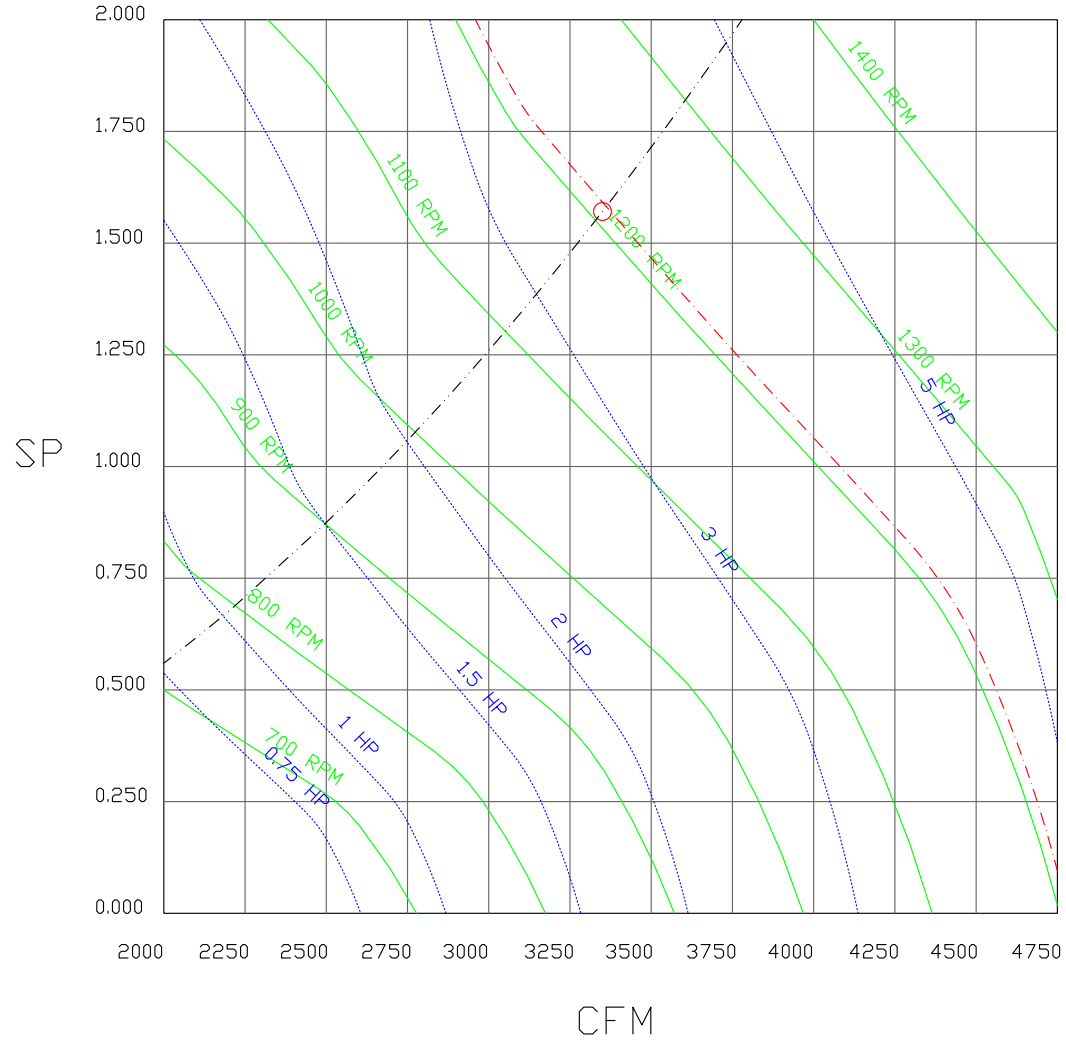
WINTER TEMPERATURE = 0°F. TEMP. RISE = 85°F.
 BTUs CALCULATED OFF STANDARD AIR DENSITY
 OUTPUT BTUs AT ALTITUDE OF 0.0 Ft. = 307530
 INPUT BTUs AT ALTITUDE OF 0.0 Ft. = 384413



JOB CN Shawarma Job MUA options	
LOCATION , 0	
DATE 6/2/2016	JOB # 2672323
DWG # 2	DRAWN BY BFC-21
REV.	SCALE 1/4" = 1'-0"

FAN#1 - HEATER PERFORMANCE CURVES.

3350 CFM, 1.571 SP @ 1212 RPM and 3.862 BHP at 0 feet and 0 deg F
 * Please note that these curves were adjusted for job specific temperature and altitude.



	CAPTIVEAIRE		JOB CN Shawarma Job MUA options	
			LOCATION , 0	
			DATE 6/2/2016	JOB # 2672323
			DWG # 3	DRAWN BY BFC-21
			REV.	SCALE 3/8" = 1'-0"

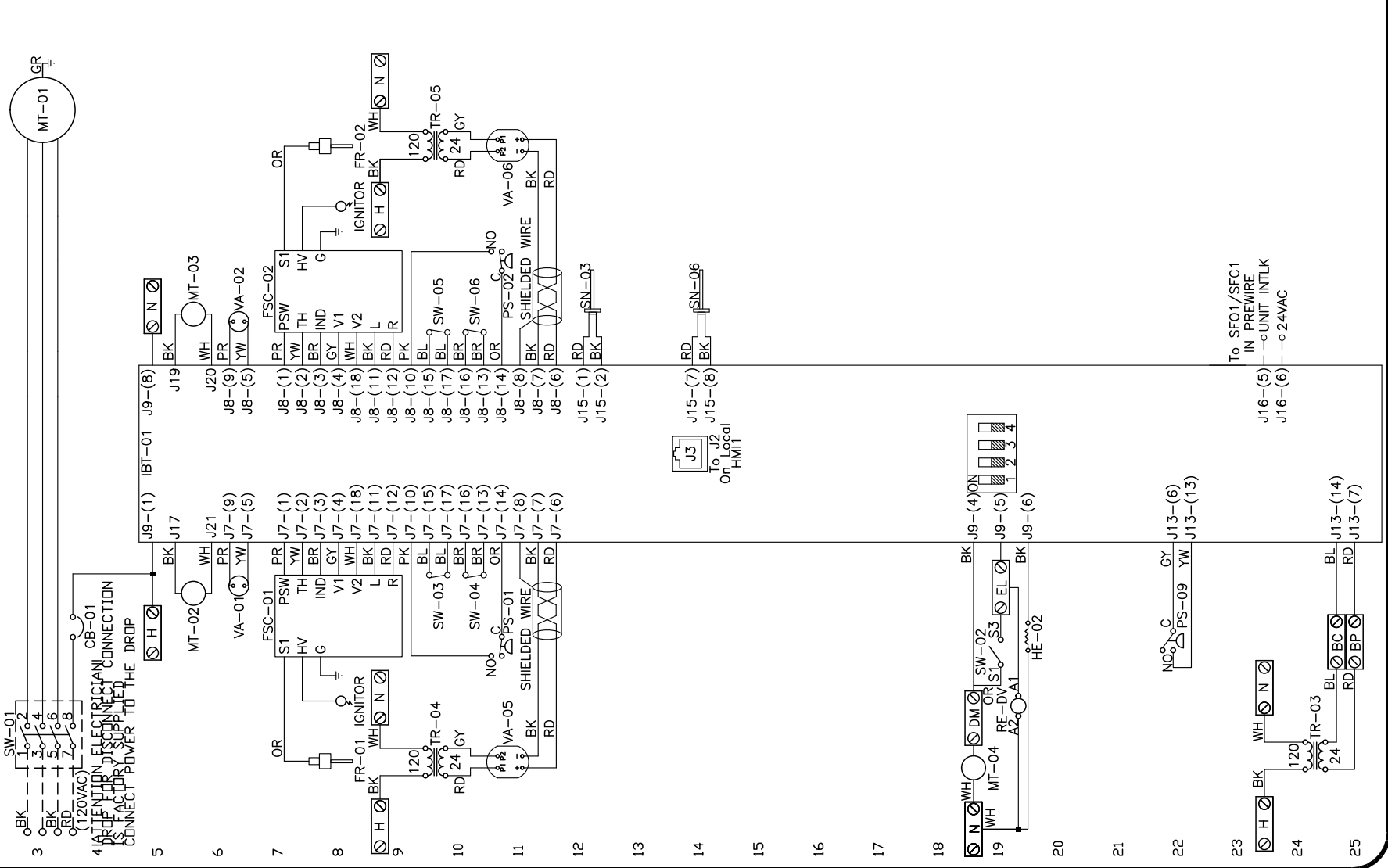
Wire to IL1A in DCV
and IL1B in DCV

Installed Options

Drain Heater
DCV Wiring



Label	Description	Component Identification	Location
CB-01	10A Circuit Breaker	S20IU-K10 C30	
FR-01	Flame Rod 1		E80
FR-02	Flame Rod 2		E80
FSC-01	Flame Safety Controller 1		E80
FSC-02	Flame Safety Controller 2		E80
HE-02	Drain Heater		E200
MT-01	Supply motor		E50
MT-02	Power Vent 1		E50
MT-03	Power Vent 2		E50
MT-04	Motorized Damper Motor		E190
PS-01	Vent Proving 1		E110
PS-02	Vent Proving 2		E110
PS-09	Air-flow Proving Switch		E220
RE-DV	DCV Damper Relay		E100E90
SN-03	Intake Temperature Sensor		E120
SN-06	Discharge Temperature Sensor		E140
SV-01	Main Disconnect Switch		E30
SV-02	Damper End Limit Switch		E190
SV-03	Rail Out Switch 1		E190
SV-04	High Temp Switch 1		E100
SV-05	High Temp Switch 2		E100
SV-06	High Temp Switch 2		E100
TR-03	Board Power Transformer	40VBE48	
TR-04	Mod Valve 1 Transformer	20VA50	
TR-05	Mod Valve 2 Transformer	20 V90	
VA-01	Main Gas Valve 1		E60
VA-02	Main Gas Valve 2		E60
VA-05	Modulating Gas Valve 1		E100
VA-06	Modulating Gas Valve 2		E100



ELECTRICAL INFORMATION
 MOTOR ELECTRICAL INFORMATION
 MOTOR CIRCUIT MOP: 15A
 CONTROL CIRCUIT MOP: 30A
 CONTROL CIRCUIT MOP: 15A

NOTES
 --- DENOTES FIELD WIRING
 - - - DENOTES INTERNAL WIRING

** TERMINALS S4 AND S6 USED ON NF & AF SERIES ACTUATORS

WIRE COLOR	SOCKET STYLE	CLIMB RELAY
YV - YELLOW	NI 4	3
RD - RED	NI 2	1
GR - GREEN	WH 8	7
WH - WHITE	WH 8	7
PK - PINK	WH 8	7
PR - PURPLE	WH 8	7

To SFO1/SFC1
 IN PREWIRE
 -o-UNIT INTLK
 J16-(5)
 -o-24VAC
 J16-(6)

Installation Wiring

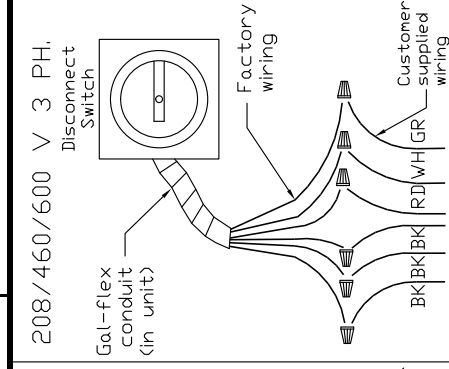
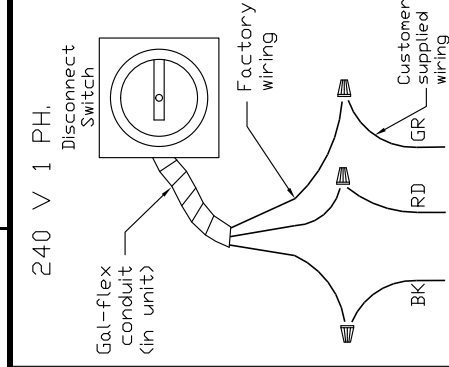
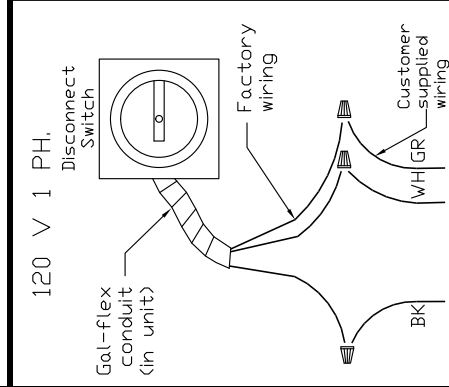
JOB

2672323 - CN Shawarma Job MUA options

DRAWING NUMBER RP2672323-1

SHIP DATE 6/2/2016

MODEL A2-IBT-400-200-200-G15



Installed Options

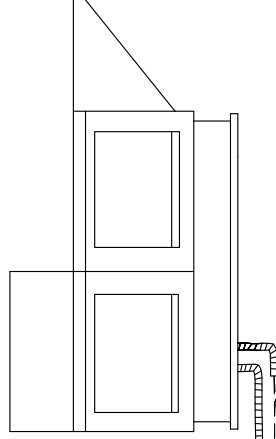
DCV Connections

Factory Settings
(Leave as default if not listed)
Tempering Mode = Discharge
Activate Based On = Intake
Of Heat Stages = 2

Blower Mode = Manual

Drain Heater = On

POWER FROM DEDICATED BREAKER



See above details.

D3 IN HEATER TO IL1A IN DCV
D7 IN HEATER TO IL1B IN DCV
WIRE TO DCV

NOTES

WIRE COLOR

BK	-	BLACK	YW	-	YELLOW
BL	-	BLUE	GR	-	GREEN
BR	-	BROWN	GY	-	GRAY
OR	-	ORANGE	PR	-	PURPLE
RD	-	RED	PK	-	PINK
WH	-	WHITE			