

Gas-Fired Tempered Make-Up Air Unit

Model:

TK76-3PH-FF

3-Phase, 460V, 1.00 HP, Belt driven with Motorized Damper and 7" Blower. MAX 1200 CFM's





TK-76 Direct Fired (342 lbs.)

Supply Motor:

Model 00118OT3E56-S48PP, 1.000 HP, 3 Phase, 460 V, 60Hz, 1.5 FLA, ODP (Open Drip Proof)

Supply Motor Pulleys:

<u>Part Type</u>	<u>Qty</u>	<u>Browning #</u>	<u>Turns Out</u>
Blower Pulley	1	AK39 x 3/4	
Motor Pulley	1	1VP50 x 5/8	2.5

Burner:

Min Output BTU: 13,000 BTU/Hr
Max Output BTU: 275,000 BTU/Hr
Size: 6" long
Gas Type: Natural

Supply Performance:

Volume: 1200 cfm Volume Range: 600-1200 cfm
RPM: 1887
TS: 3458 ft/min
SP: 0.831" w.g.
0.500" Ext. + 0.259" Int. + 0.072" Opt.
BHP: 0.885

Heating Schedule:

Altitude: 0'
Winter Entering Air Dry Bulb Temp: 0°F
Temp Rise: 100°F
Output BTU: 129600
Input BTU: 140870
BTUs BASED OFF STANDARD AIR DENSITY

Supply Installation Information:

Gas Inlet Pressure: 7 in. w.c. - 14 in. w.c.
Insurance: No Insurance Requirement (ANSI)
Unit Main Input: 2.4 Amps MCA, 15 Amps MOP, 460 V, 14 AWG Wire Min.
Supply Unit Voltage: 3 phs 460 V 60Hz

Blower:

7" forward curved, centrifugal blower. Permanently lubricated ball bearings. Galvanized finish. 400-2000 CFM. 3/4" x 14-3/16" Shaft. 3600 max. RPM. Used in heated and non-heated supply fans.

Temp Control:

RTC Solutions • 40-90°F Discharge Temp Control • Field Wired On/Off Start Command

Intake:

Screen Intake Hood with EZ Filter.

Filters:

1x MV EZ Kleen Metal Mesh Filter. 16"x 20"x 2" Used for heater and supply fan intakes. (3412)

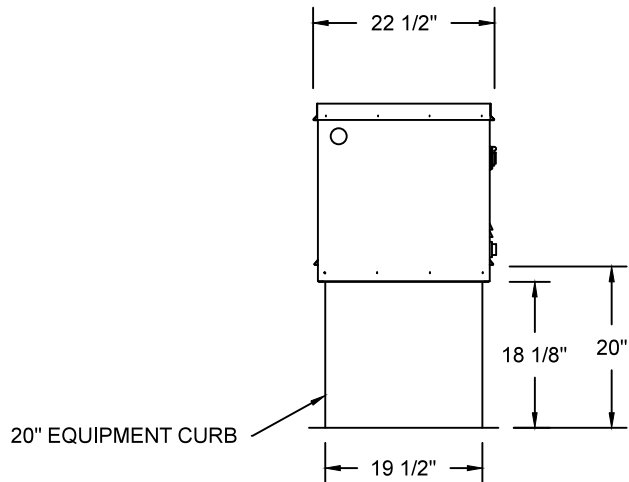
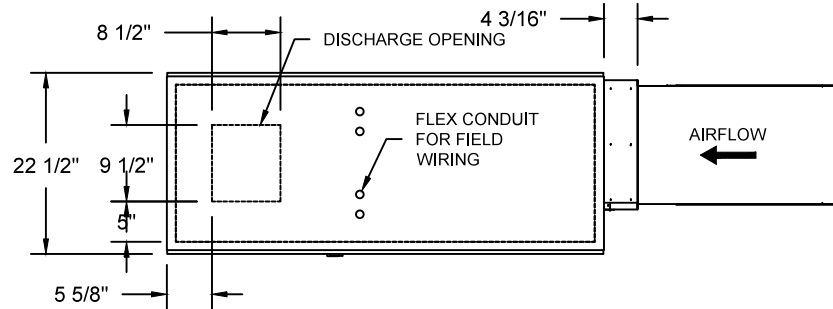
Selected Options:

- Gas Pressure Gauge, 0-35", 2.5" Diameter, 1/4" Thread Size
- Gas Pressure Gauge, -5 to +15 Inches Wc., 2.5" Diameter, 1/4" Thread Size
- Motorized Back Draft Damper 13" X 17" for D76 Compact Direct Fired Heaters w/Extended Shaft, Standard Galvanized Construction, 3/4" Rear Flange, TF120S Actuator Included

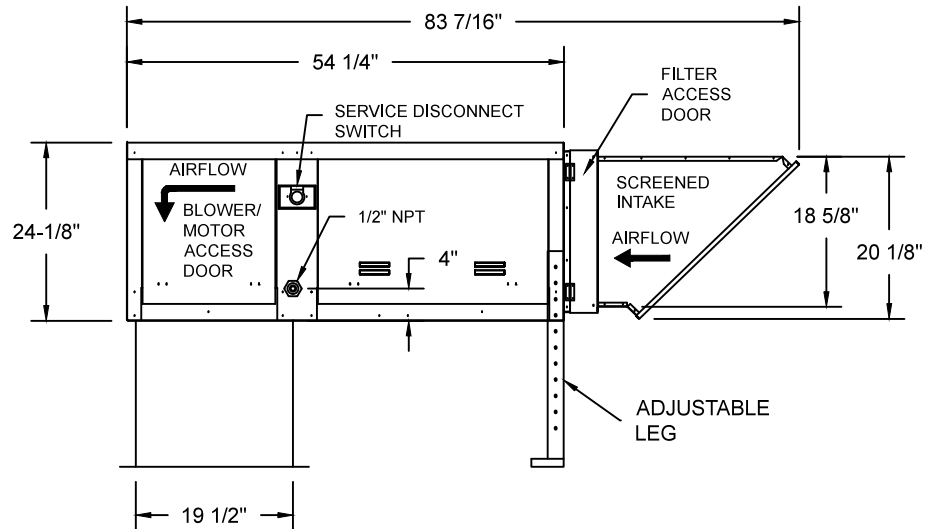
TK-76 DIRECT FIRED HEATER

1. LOW CFM DIRECT FIRED HEATER. BELT DRIVE.
2. INTAKE HOOD WITH EZ FILTERS
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. HIGH PROFILE LID OPTION FOR D76. REQUIRED WITH BELT DRIVE, SINGLE PHASE MOTORS.
5. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
6. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5" DIAMETER, 1/4" THREAD SIZE
7. MOTORIZED BACK DRAFT DAMPER 13" X 17" FOR D76 COMPACT DIRECT FIRED HEATERS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, TF120S ACTUATOR INCLUDED

NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE UNLESS OTHERWISE SPECIFIED. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT.



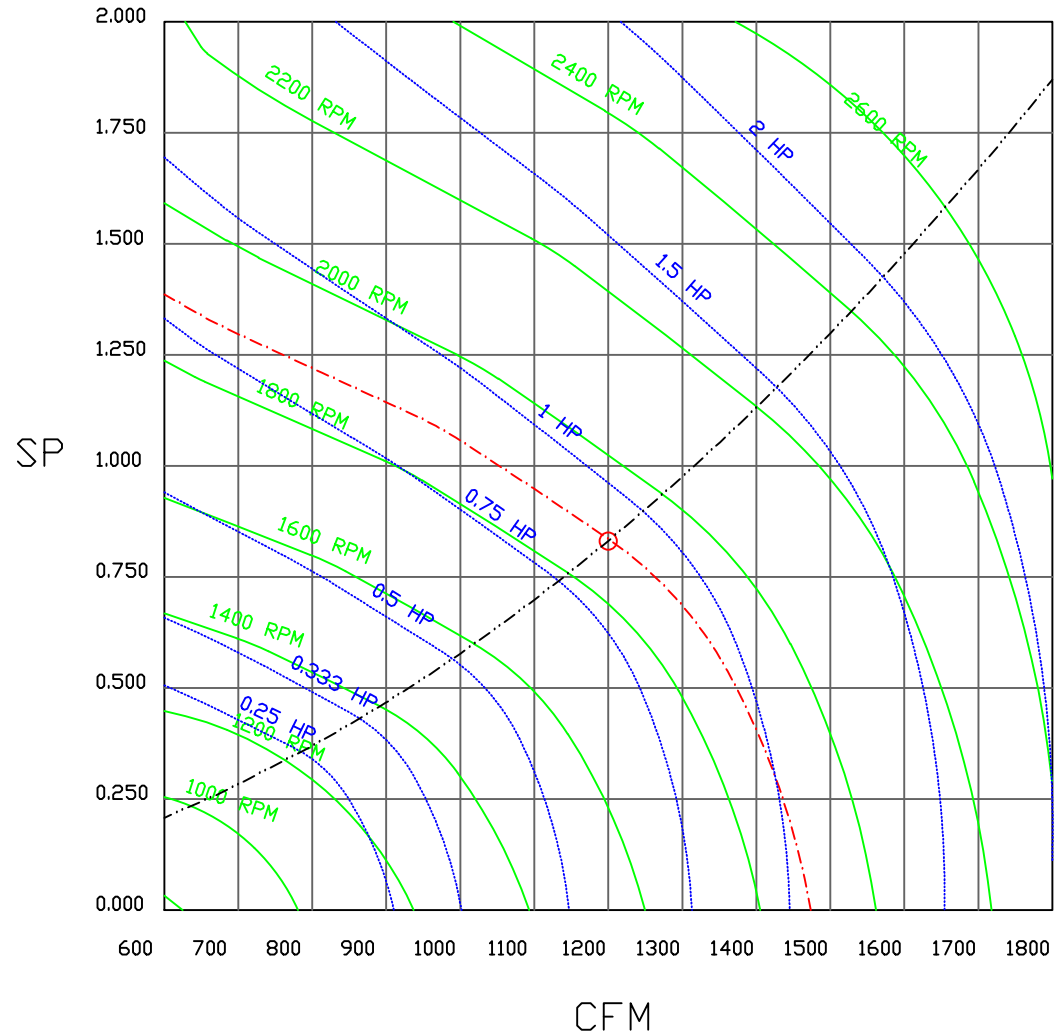
ROOF OPENING 2" SMALLER THAN CURB DIMENSION.



	NORTH AMERICAN KITCHEN SOLUTIONS INCORPORATED	JOB	
		LOCATION	
		DATE 8/3/2018	JOB #
		DWG #	DRAWN BY
		REV.	SCALE 3/8" = 1'-0"

(1200 1HP/3PH-460V) - HEATER PERFORMANCE CURVES.

1200 CFM, 0.831 SP @ 1887 RPM and 0.885 BHP at 0 feet and 100 deg F
 * Please note that these curves were adjusted for job specific temperature and altitude.



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Compact Direct Fired Heater

JOB NAKS Direct Fired MUA

DRAWING NUMBER

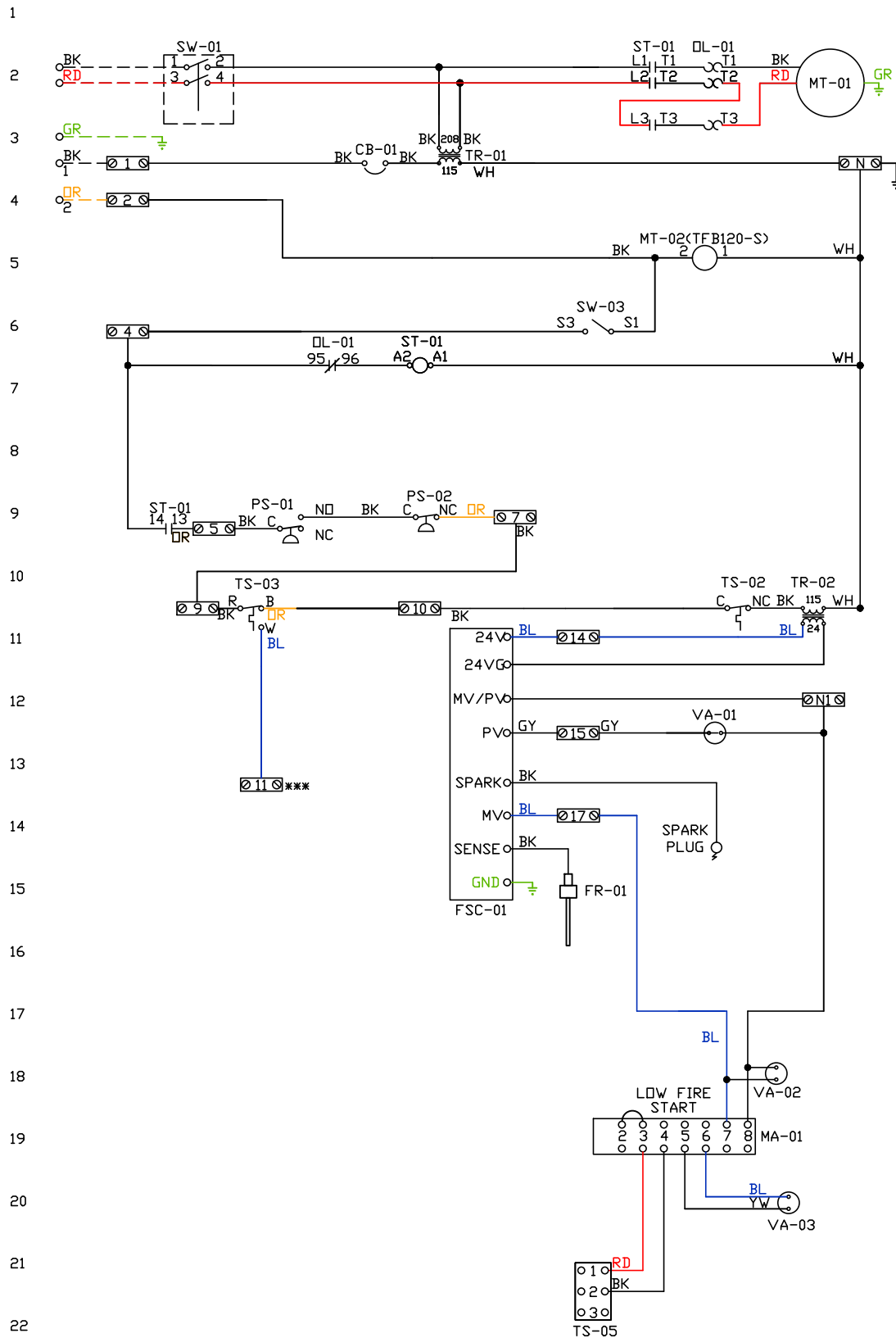
SHIP DATE

MODEL TK-76 Series

ATTENTION ELECTRICIAN!
 DROP FOR DISCONNECT CONNECTION
 IS FACTORY SUPPLIED
 CONNECT POWER TO THE DROP

Installed Options
 Field Wired Single Switch Control
 Motorized Back Draft Damper

Discharge Temp. Control



Component Identification

Label	Description	Location
CB-01	Circuit breaker (2amp)	[3]
FR-01	Flame rod	[16]
FSC-01	Flame Safety Control	[11-14]
MA-01	Modulating Dial/Amplifier	[19]
MT-01	Supply motor	[2]
MT-02	Damper motor	[5]
DL-01	Supply motor overload	[2][7][9]
PS-01	Low Airflow Switch	[9]
PS-02	High Airflow Switch	[9]
ST-01	Supply motor contactor	[2][7][9]
SW-01	Main disconnect switch	[2]
SW-03	Damper end limit switch	[4]
TR-01	Power transformer(200va)	[3]
TR-02	Control transformer(20v)	[10]
TS-02	High temp limit switch	[10]
TS-03	Intake air thermostat	[10]
TS-05	Discharge Air Sensor	[21]
VA-01	Pilot gas valve	[13]
VA-02	Main gas valve	[18]
VA-03	Modulating gas valve	[20]

MOTOR INFO
 SUPPLY 1HP-460V-3P-1.5FLA
 CONTACTOR: 100-K05D10
 OVERLOAD: 193-KB16

ELECTRICAL INFORMATION
 MOTOR/CTRL CIRCUIT MCA: 2.4A
 MOTOR/CTRL CIRCUIT MDP: 15A

NOTES

---- DENOTES FIELD WIRING
 _____ DENOTES INTERNAL WIRING

*** TERMINAL 11 PROVIDES COOLING CONNECTION

WIRE COLOR			SOCKET STYLE *CLOW RELAY	
BK-BLACK	GR - GREEN	RD - RED	NO	4 3
BL-BLUE	YW - YELLOW	WH - WHITE	NC	2 1
BR - BROWN	GY - GRAY	PK - PINK	COM	8 7
OR - ORANGE	PR - PURPLE		COM	6 5

Installation Wiring

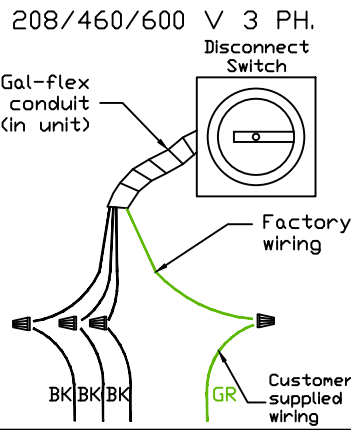
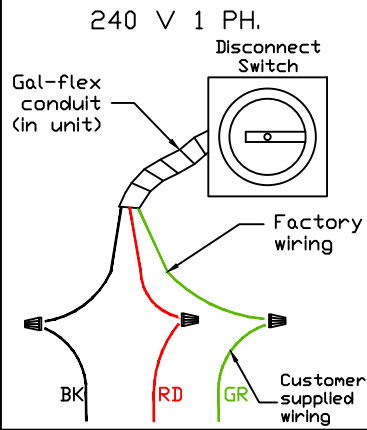
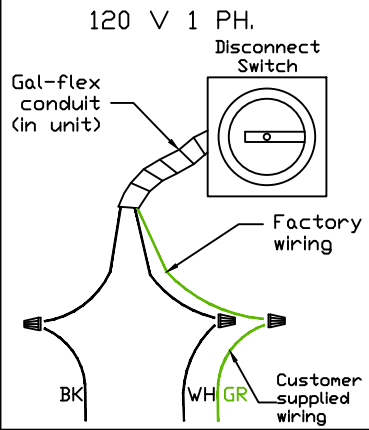
JOB NAKS Direct Fired MUA

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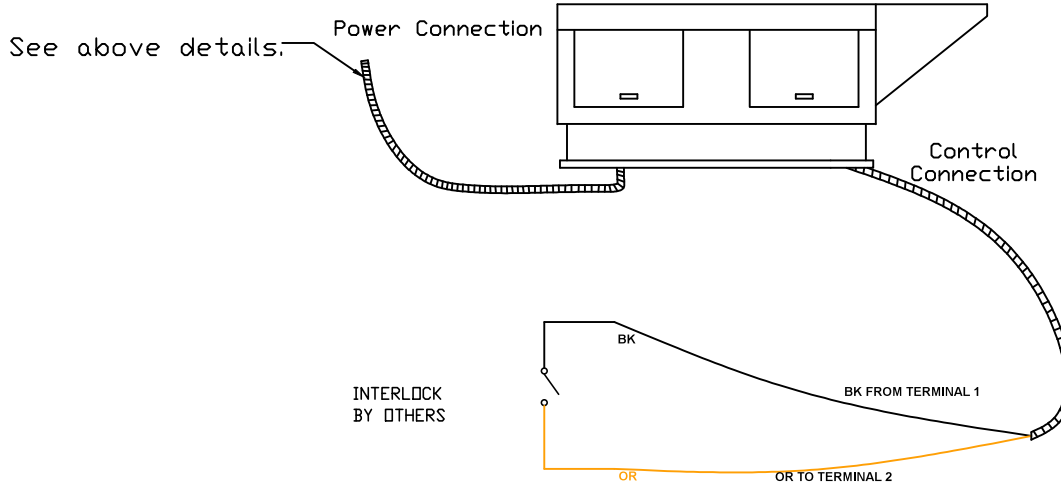
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MODEL TK-76

Installed Options



Field Wired On/Off Switch



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 | |