

Gas-Fired Tempered Make-Up Air Unit

Model:

TK76ECDD-1PH-FF

1-Phase, 115V, 1.00 HP, Direct Drive, ECM Motor with Motorized Damper and 7" Blower. MAX 900 CFM's



TK-76D Direct Fired Direct Drive (323 lbs.)



Low CFM Direct Fired Heater. Direct Drive.

Supply Motor:

Model BMN48-750I1-60-115, 1.000 HP, 1 Phase, 115 V, 60Hz, 11.6 FLA, TEAO-ECM (Totally Enclosed Air Over Electronically Commutated Motor)

Burner:

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

Supply Performance:

Volume Range: 600-900 cfm
RPM: 1714
TS: 3141 ft/min
SP: 0.686" w.g.
0.500" Ext. + 0.146" Int. + 0.040" Opt.
BHP: 0.441

Heating Schedule:

Altitude: 0'
Winter Entering Air Dry Bulb Temp: 0°F
Temp Rise: 100°F
Output BTU: 97200
Input BTU: 105652
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: 16.6 Amps MCA, 25 Amps MOP, 115 V, 12 AWG Wire Min.
Supply Unit Voltage: 1 phs 115 V 60Hz

Blower:

7" forward curved, centrifugal blower. Galvanized finish. 0-2000 CFM. 3600 max. RPM. Used in heated and non-heated supply fans. LH-RCD (Left Hub, Right Center Disk) 8 weldnuts. Replacement for Canarm G7DD. Requires G7DDMM motor mount. P/N G7D RH-

Temp Control:

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

Intake:

Screen Intake Hood with EZ Filter.

Filters:

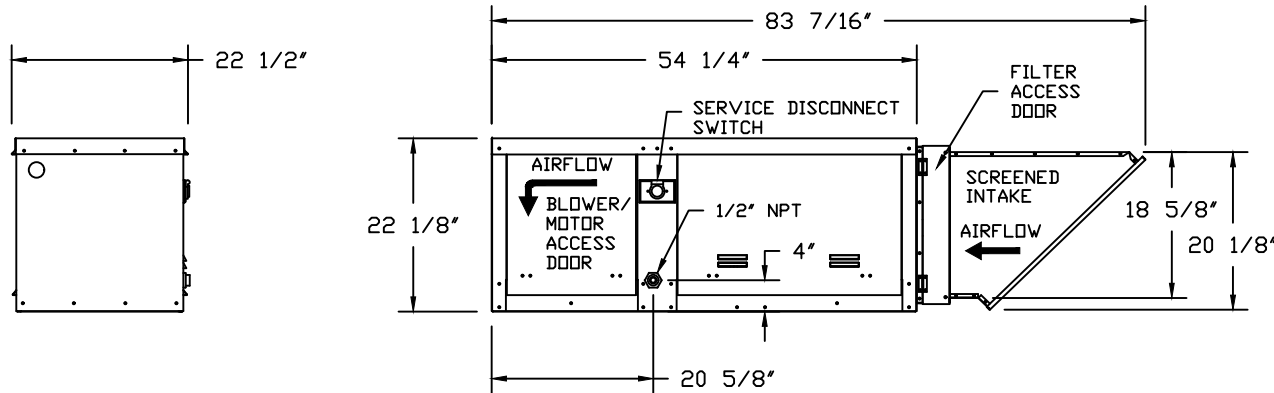
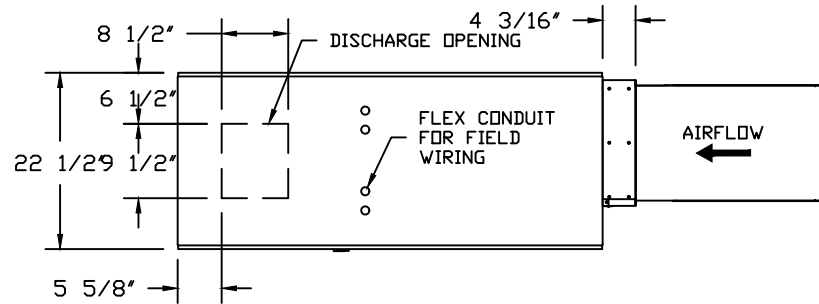
1x MV EZ Kleen Metal Mesh Filter. 16"x 20"x 2" Used for heater and supply fan intakes. (3412)

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
- ECM Wiring Package and Manual or 0-10VDC Control for Supply EC motors. RTC Controller. **DO NOT ORDER UNDER WARRANTY, SEE PART NUMBER "ECM-VCU-RTC**.
- 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-76D DIRECT FIRED HEATER

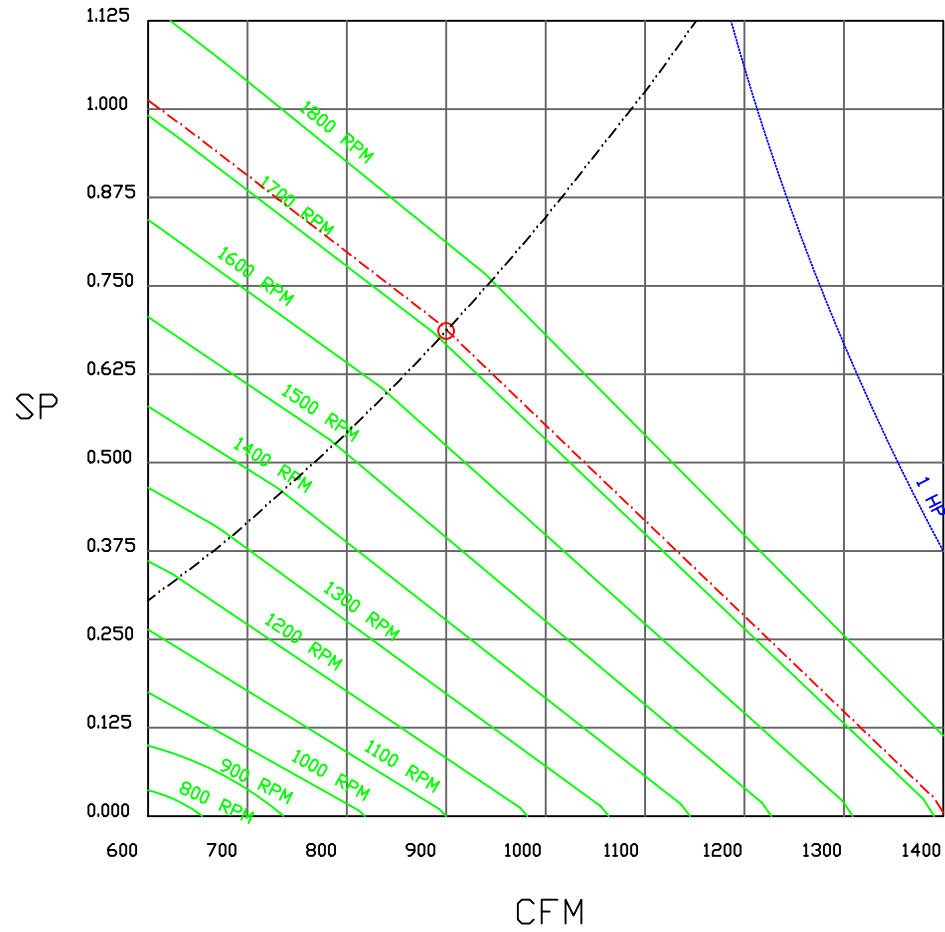
1. LOW CFM DIRECT FIRED HEATER. DIRECT DRIVE.
2. INTAKE HOOD WITH EZ FILTERS
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
5. GAS PRESSURE GAUGE, -5 TO +15 INCHES WC., 2.5" DIAMETER, 1/4" THREAD SIZE
6. ECM WIRING PACKAGE AND MANUAL OR 0-10VDC CONTROL FOR SUPPLY EC MOTORS. RTC CONTROLLER. **DO NOT ORDER UNDER WARRANTY, SEE PART NUMBER *ECM-VCU-RTC**.
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



  	 NORTH AMERICAN KITCHEN SOLUTIONS INCORPORATED		JOB			
			LOCATION			
			DATE	2/22/2019	JOB #	
			DWG #		DRAWN BY	
			REV.		SCALE 3/8" = 1'-0"	

<900 1HP/1PH-115V-ECM> - HEATER PERFORMANCE CURVES.

900 CFM, 0.686 SP @ 1714 RPM and 0.441 BHP at 0 feet and 100 deg F
 * Please note that these curves were adjusted for Job specific temperature and altitude.



	JOB	
	LOCATION	
	DATE 2/22/2019	JOB #
	DWG #	DRAWN BY
	REV.	SCALE 3/8" = 1'-0"

Compact Direct Fired Heater

JOB NAKS Direct Fired Direct Drive MUA

DRAWING NUMBER

SHIP DATE

MODEL TK-76D

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

OPTIONAL 0-10VDC
SPEED REFERENCE
INPUT

RD 0-10V
BK GND
24 VAC

MOTOR CONTROL
P2

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][17]
PS-01	Low Airflow Switch	[9]
PS-02	High Airflow Switch	[9]
ST-01	Supply motor contactor	[2][17][19]
SC-01	RTC-FSC-1	[1]
SW-01	Main disconnect switch	[2]
SW-03	Damper end limit switch	[4]
TR-01	Power transformer(200va)	[3]
TR-02	Control transformer(20vd)	[10]
TR-06	24VAC 20VA Transformer	[1]
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-115V-1P-11.6FLA
CONTACTOR: 100-CJ6D10
OVERLOAD: 193-TIAC12

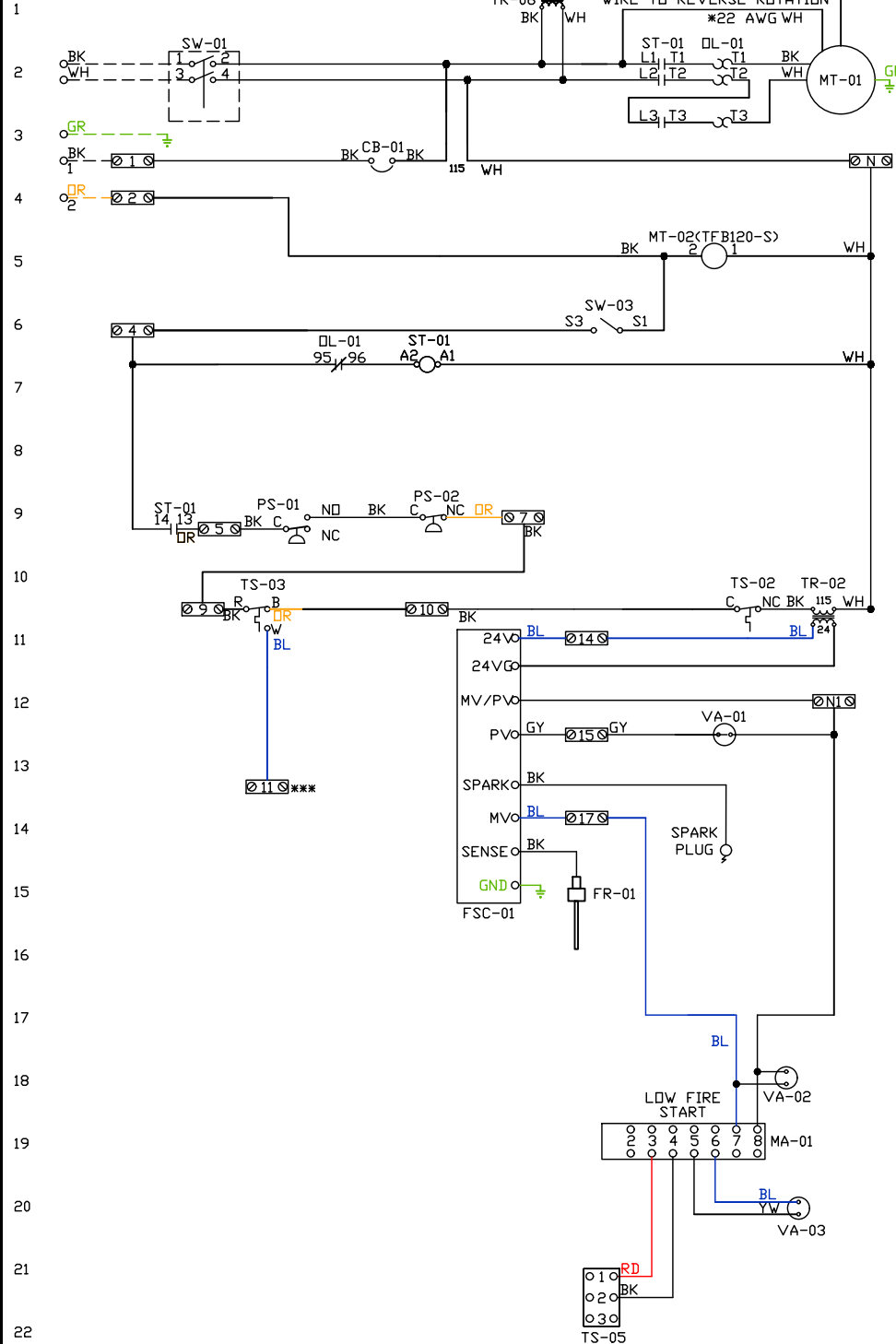
ELECTRICAL INFORMATION
MOTOR/CTRL CIRCUIT MCB: 15.6A
MOTOR/CTRL CIRCUIT MDP: 25A

NOTES

--- DENOTES FIELD WIRING
— DENOTES INTERNAL WIRING

*** TERMINAL 11 PROVIDES COOLING CONNECTION

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



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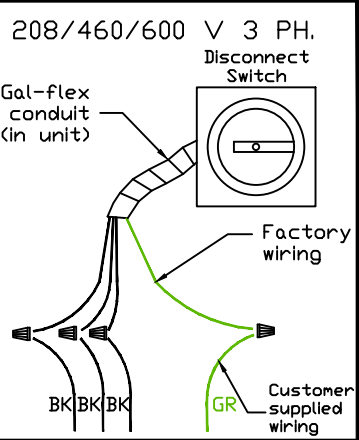
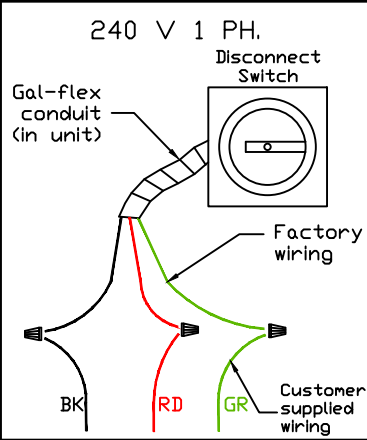
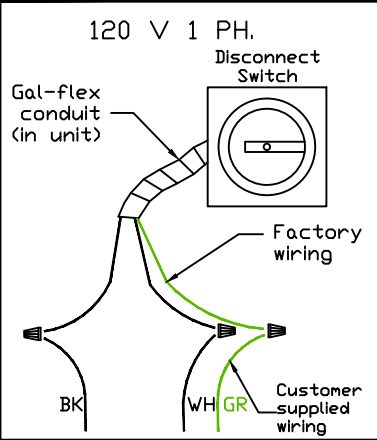
Installation Wiring

JOB *NAKS Direct Fired MUA*

DRAWING NUMBER

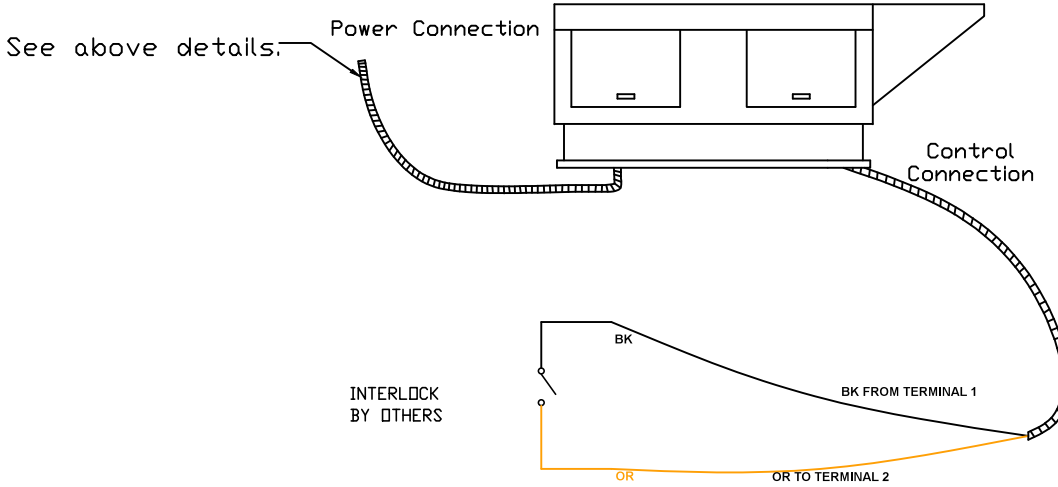
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MODEL **TK 1-5 Series**



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 | |