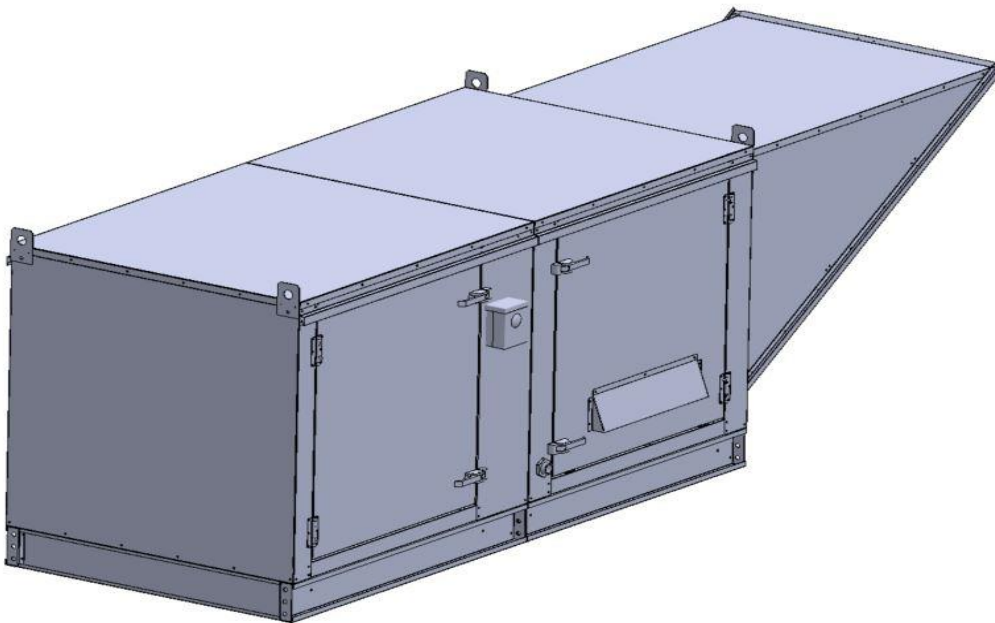


## Gas-Fired Tempered Make-Up Air Unit

Model:

TK76-3PH-FF

3-Phase, 208V, 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, 208 V, 60Hz, 3.4 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: 5.5 Amps MCA, 15 Amps MOP, 208 V, 14 AWG Wire Min.  
Supply Unit Voltage: 3 phs 208 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)

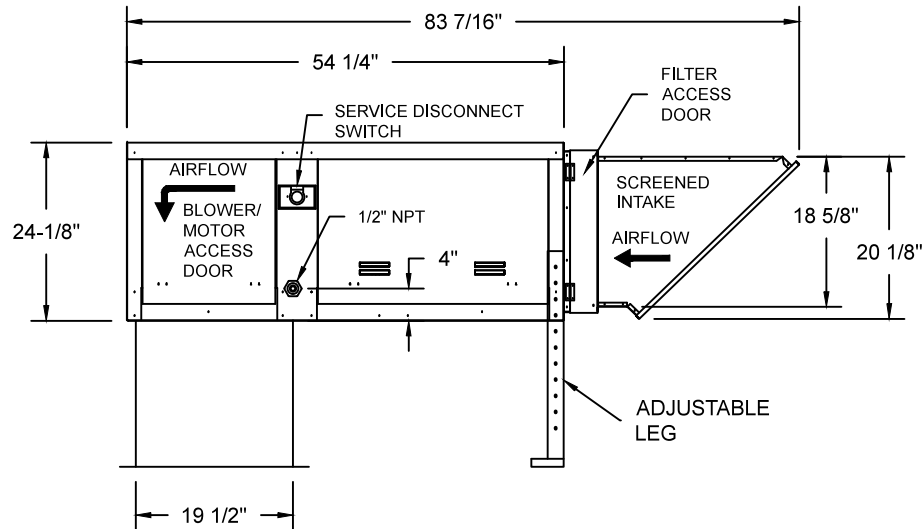
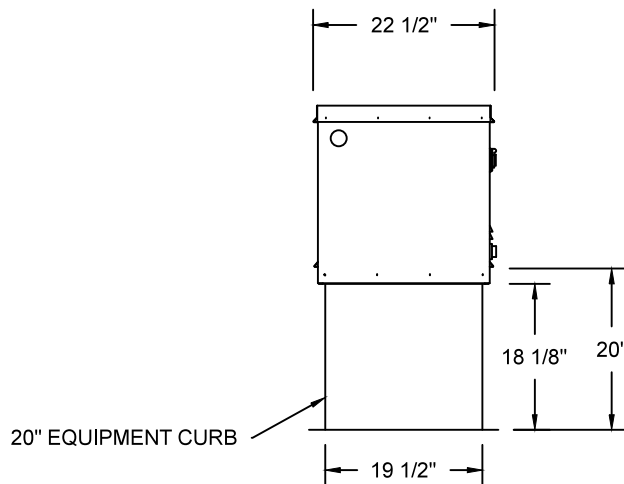
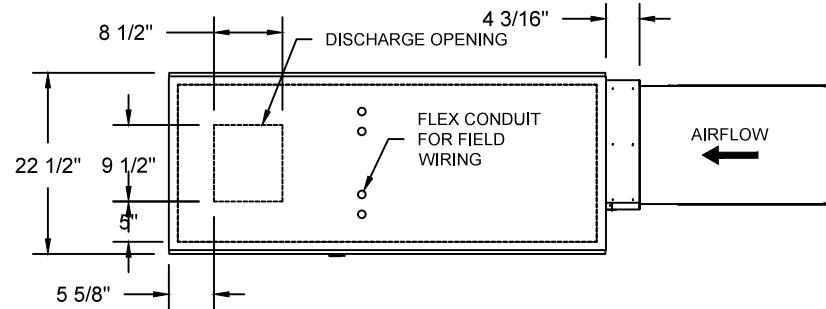
**Selected Options:**

- 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.

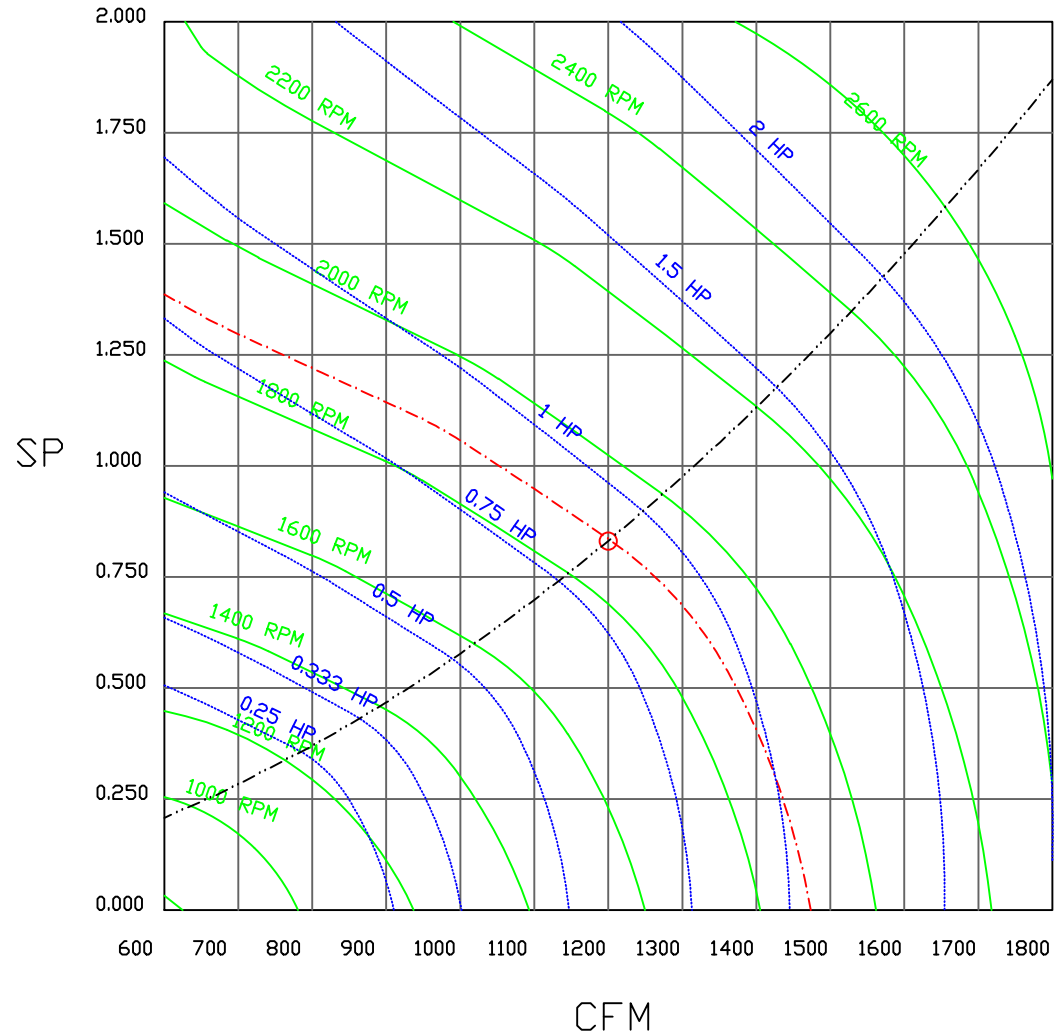


ROOF OPENING 2" SMALLER THAN CURB DIMENSION.

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

(1200 1HP/3PH-208V) - 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.



|  |  |  |               |                    |
|--|--|--|---------------|--------------------|
|  |  |  | JOB           |                    |
|  |  |  | LOCATION      |                    |
|  |  |  | DATE 8/3/2018 | JOB #              |
|  |  |  | DWG #         | DRAWN BY           |
|  |  |  | REV.          | SCALE 3/8" = 1'-0" |

# Compact Direct Fired Heater

JOB NAKS Direct Fired MUA

DRAWING NUMBER

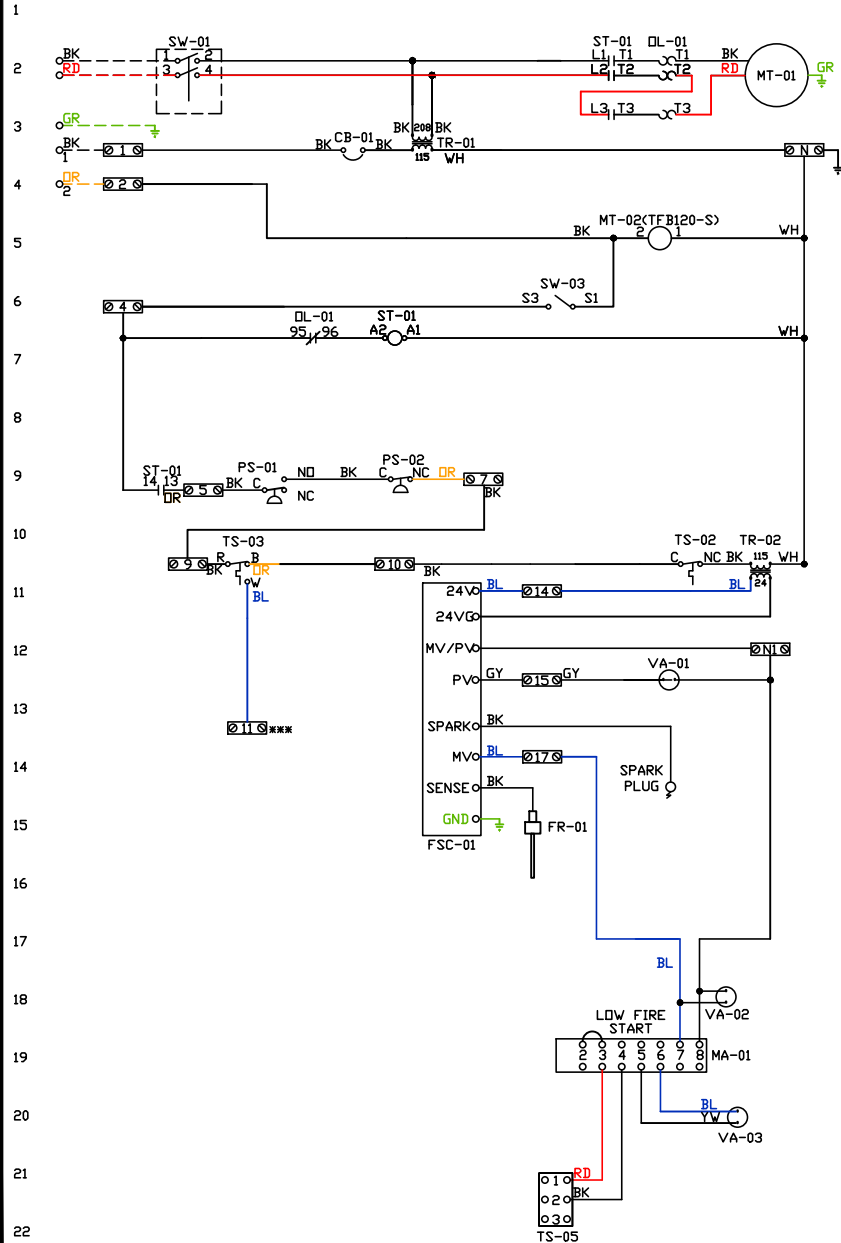
SHIP DATE

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



| 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 Air-Flow Switch       | [9]       |
| PS-02  | High Air-Flow Switch      | [9]       |
| ST-01  | Supply motor contactor    | [2,17,19] |
| 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-208V-3P-3.4FLA  
 CONTACTOR: 100-K05D10  
 OVERLOAD: 193-KB40

**ELECTRICAL INFORMATION**  
 MOTOR/CTRL CIRCUIT MCA: 5.5A  
 MOTOR/CTRL CIRCUIT MDP: 15A

**NOTES**  
 - - - - DENOTES FIELD WIRING  
 \_\_\_\_\_ DENOTES INTERNAL WIRING  
 \*\*\* TERMINAL 11 PROVIDES COOLING CONNECTION

| WIRE COLOR  | SOCKET STYLE |            |             |
|-------------|--------------|------------|-------------|
| BK - BLACK  | YV - YELLOW  | RD - RED   | NS [2, 13]  |
| BL - BLUE   | GR - GREEN   | WH - WHITE | NC [2, 1]   |
| BR - BROWN  | GY - GRAY    | PK - PINK  | NO [2, 17]  |
| DR - ORANGE | PR - PURPLE  |            | COM [2, 13] |

# Installation Wiring

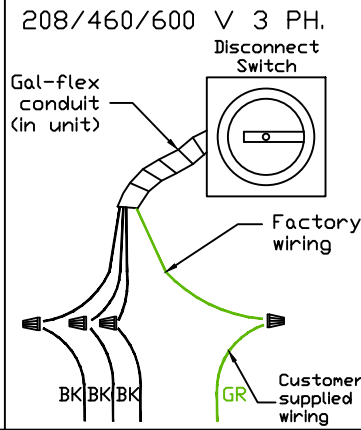
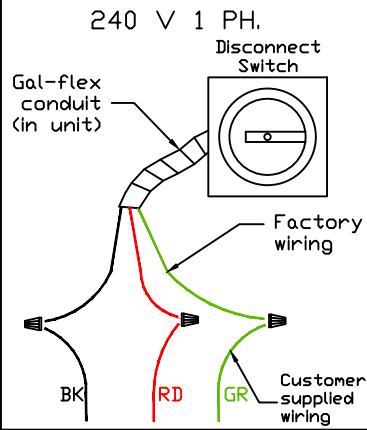
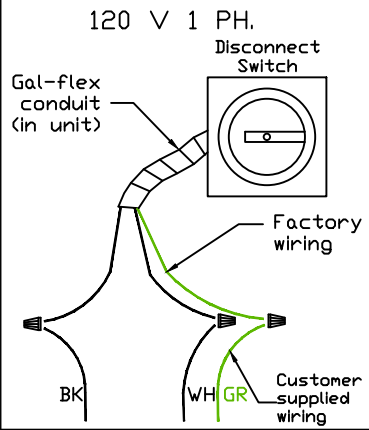
JOB *NAKS Direct Fired MUA*

DRAWING NUMBER

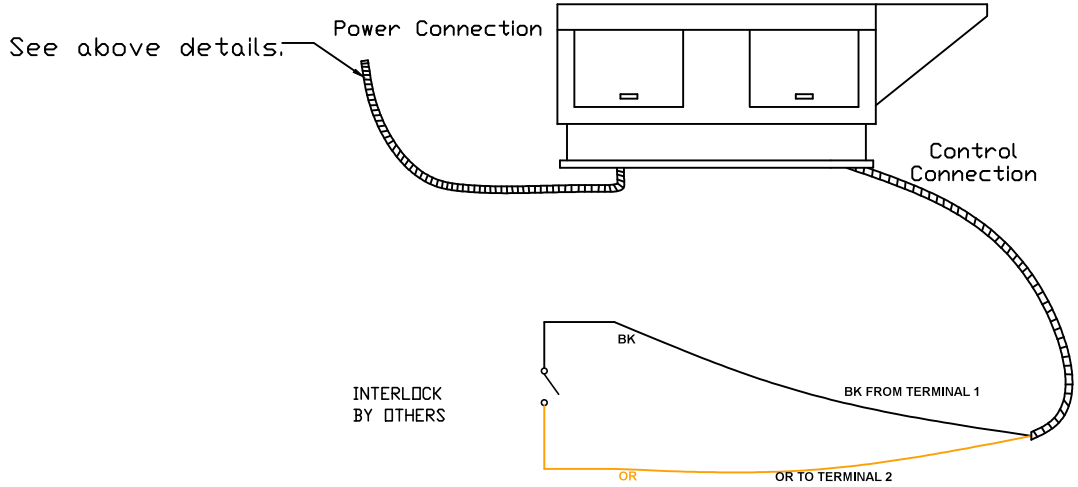
SHIP DATE

MODEL **TK-76**

Installed Options



Field Wired On/Off Switch



NOTES

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