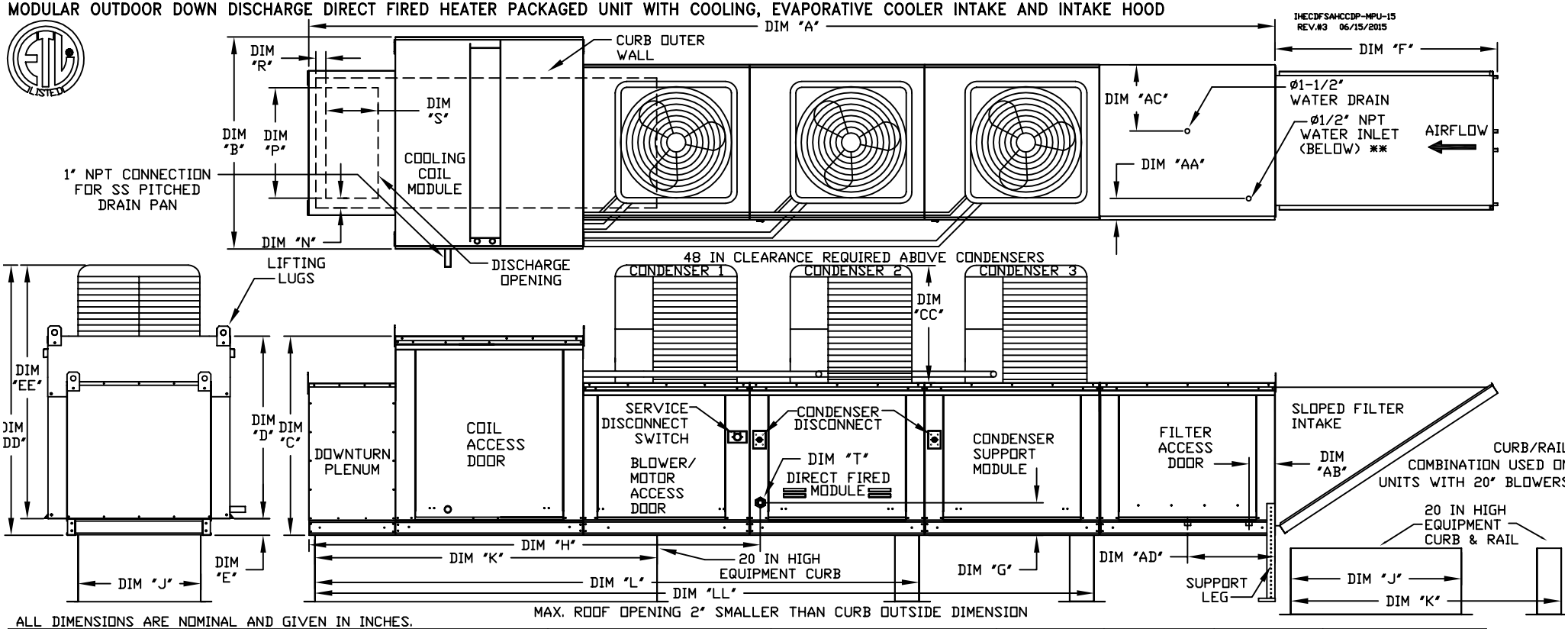
# MODULAR OUTDOOR DOWN DISCHARGE DIRECT FIRED HEATER PACKAGED UNIT WITH COOLING, EVAPORATIVE COOLER INTAKE AND INTAKE HOOD

IHECDFSAHCCDP-MPU-15
REV.#3 06/15/2015




ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.

| MODEL | UNIT DIMENSIONS | | | | | | | | CURB/RAIL | | | | DISCHARGE OPENING | | | | WATER INLET | | DRAIN OPENING | | FILTER SIZE & QTY | MAX. FILTER VELOCITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | LL | N | P | R | S | AA | AB | AC | AD | | |
| D.500-G18 | 234-1/2 | 54-3/8 | 56-3/8 | 51-1/8 | 5-1/4 | 51-5/8 | 9-1/2 | 114-7/16 | 35 | 84 | 150-5/8 | 192-7/8 | 3-9/16 | 13-7/8 | 1-13/16 | 11-1/2 | 4-1/2 | 5-3/4 | 20 | 19 | 16"x20"x2" (6) | @8000 CFM = 762 FPM |
| D.750-G18 | 234-1/2 | 54-3/8 | 56-3/8 | 51-1/8 | 5-1/4 | 51-5/8 | 9-1/2 | 114-7/16 | 35 | 84 | 150-5/8 | 192-7/8 | 3-9/16 | 13-7/8 | 1-13/16 | 11-1/2 | 4-1/2 | 5-3/4 | 20 | 19 | 16"x20"x2" (6) | @8000 CFM = 762 FPM |
| D.1000-G18 | 234-1/2 | 54-3/8 | 56-3/8 | 51-1/8 | 5-1/4 | 51-5/8 | 9-1/2 | 114-7/16 | 35 | 84 | 150-5/8 | 192-7/8 | 4-5/16 | 22-3/8 | 1-9/16 | 18 | 4-1/2 | 5-3/4 | 20 | 19 | 16"x20"x2" (6) | @8000 CFM = 762 FPM |
| D.1000-920 | 292-7/8 | 60-7/16 | 64-3/8 | 59-1/8 | 5-1/4 | 76-3/8 | 13-9/16 | 151 | 42 | 115-3/16 | 199-7/8 | 254-1/8 | 5-1/4 | 31-1/2 | 1-13/16 | 23-1/2 | 4-1/2 | 5-3/4 | 23-1/2 | 17-1/2 | 16"x20"x2" (10) | @13000 CFM = 743 FPM |
| D.1500-920 | 292-7/8 | 60-7/16 | 64-3/8 | 59-1/8 | 5-1/4 | 76-3/8 | 13-9/16 | 151 | 42 | 115-3/16 | 199-7/8 | 254-1/8 | 5-1/4 | 31-1/2 | 1-13/16 | 23-1/2 | 4-1/2 | 5-3/4 | 23-1/2 | 17-1/2 | 16"x20"x2" (10) | @13000 CFM = 743 FPM |

UNIT INFORMATION

| MODEL | BURNER LENGTH | BTU RANGE (MBH) | | GAS PRESSURE | | GAS CONNECTION | TONNAGE RANGE | |
|---|---|---|---|---|---|---|---|---|
| | | BTU LOW | BTU HIGH | MIN | MAX | "T" (NPT) | MIN | MAX |
| D.500-G18 | 12" | 18 | 550 | 7" WC | 14" WC | 1 | 15 Ton | 15 Ton |
| D.750-G18 | 18" | 27.5 | 825 | 7" WC | 14" WC | 1 | 15 Ton | 15 Ton |
| D.1000-G18 | 24" | 36.6 | 1100 | 7" WC | 14" WC | 1 | 15 Ton | 15 Ton |
| D.1000-920 | 24" | 36.6 | 1100 | 7" WC | 5 PSI | 1-1/4 | 15 Ton | 15 Ton |
| D.1500-920 | 30" | 45.8 | 1375 | 7" WC | 5 PSI | 1-1/4 | 15 Ton | 15 Ton |

STANDARD EVAPORATIVE COOLING UNIT

| TOT. WEIGHT | MEDIA SIZE & QTY | VEL. @ MAX. CFM | NOZZLES | MAX. FLOW RATE |
|---|---|---|---|---|
| 1865 LBS | 20"x25"x2" (8) | 348 FPM | 14 | 7 GPH |
| 1870 LBS | 20"x25"x2" (8) | 348 FPM | 14 | 7 GPH |
| 1875 LBS | 20"x25"x2" (8) | 348 FPM | 14 | 7 GPH |
| 2950 LBS | 16"x20"x2" (15) | 572 FPM | 24 | 12 GPH |
| 2965 LBS | 16"x20"x2" (15) | 572 FPM | 24 | 12 GPH |

CELDEK EVAPORATIVE COOLING UNIT

| TOT. WEIGHT | MEDIA SIZE & QTY | VEL. @ MAX. CFM | NOZZLES | MAX. FLOW RATE |
|---|---|---|---|---|
| 1855 LBS | 30"x36"x12" | 1067 FPM | 28 | 8.4 GPH |
| 1860 LBS | 30"x36"x12" | 1067 FPM | 28 | 8.4 GPH |
| 1865 LBS | 30"x36"x12" | 1067 FPM | 28 | 8.4 GPH |
| 2920 LBS | 38"x43"x12" | 1322 FPM | 35 | 10.15 GPH |
| 2935 LBS | 38"x43"x12" | 1322 FPM | 35 | 10.15 GPH |

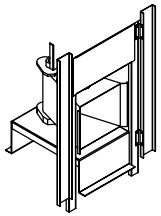
*ADD CONDENSING UNIT WEIGHT TO WEIGHT IN TABLE ABOVE

**MAX. EVAP WATER PRESSURE = 50 PSI @ 70 DEG. F

CONDENSER INFORMATION

| MODEL | WEIGHT* | TONNAGE | | | CC | DD | EE |
|---|---|---|---|---|---|---|---|
| | | #1 | #2 | #3 | | | |
| 15 TON-G18 | 591 LBS | 5 TON | 5 TON | 5 TON | 32-13/16 | 76-3/16 | 70-7/8 |
| 15 TON-920 | 591 LBS | 5 TON | 5 TON | 5 TON | 32-13/16 | 97-3/16 | 91-15/16 |

R410A REFRIGERANT



Direct Fired (DF) Profile Plate Assembly

**Direct Fired Profile Plate Specifications:**

**Description:**
Direct fired burners shall have patented (US Patent No: US6629523B2), self-adjusting profile plates designed to ensure proper air velocity and pressure drop across the burner. Profile plates shall allow burners to achieve clean combustion by limiting by-product levels to a maximum of 5ppm of carbon monoxide (CO), and 0.5ppm of nitrogen dioxide (NO2).

**Application:**
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 demand control ventilation (DCV) requirements.

**Certifications:**
All profile plate assemblies shall be included in the DF unit's ETL listing and comply with combined safety standards ANSI Z83.4 and CSA 3.7 (non-recirculating DF heaters) and ANSI Z83.18 (recirculating DF heaters).

**General Construction:**
-Profile plates shall be formed from G90 galvanized steel.
-Profile plates shall vary in size per unit.
-Profile plates shall be mounted along the same plane as the discharge of the burner.
-Design shall incorporate properly torqued, permanently mounted spring hinges.
-Spring hinges shall be made from plated steel.