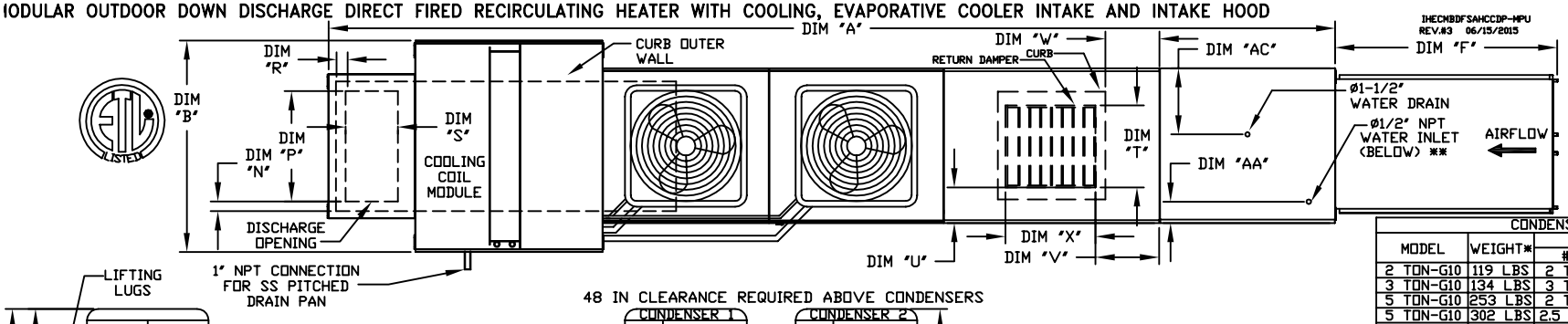
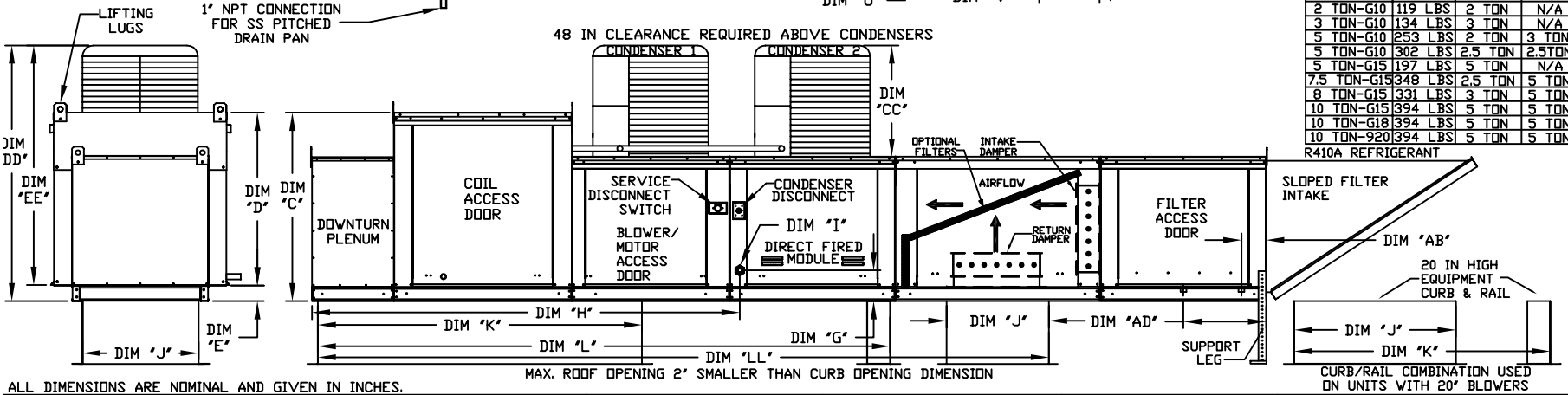
IODULAR OUTDOOR DOWN DISCHARGE DIRECT FIRED RECIRCULATING HEATER WITH COOLING, EVAPORATIVE COOLER INTAKE AND INTAKE HOOD

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



CONDENSER INFORMATION						
MODEL	WEIGHT*	TONNAGE #1	TONNAGE #2	CC	DD	EE
2 TON-G10	119 LBS	2 TON	N/A	26-5/16	56-1/16	52-3/8
3 TON-G10	134 LBS	3 TON	N/A	33-5/16	63-1/16	59-3/8
5 TON-G10	253 LBS	2 TON	3 TON	33-5/16	63-1/16	59-3/8
5 TON-G10	302 LBS	2.5 TON	2.5TON	32-13/16	62-9/16	58-7/8
5 TON-G15	197 LBS	5 TON	N/A	32-13/16	69-9/16	65-7/8
7.5 TON-G15	348 LBS	2.5 TON	5 TON	32-13/16	69-9/16	65-7/8
8 TON-G15	331 LBS	3 TON	5 TON	33-5/16	71-11/16	68
10 TON-G15	394 LBS	5 TON	5 TON	32-13/16	69-9/16	65-7/8
10 TON-G18	394 LBS	5 TON	5 TON	32-13/16	76-3/16	70-7/8
10 TON-920	394 LBS	5 TON	5 TON	32-13/16	97-3/16	91-15/16

R410A REFRIGERANT



MAX. ROOF OPENING 2" SMALLER THAN CURB OPENING DIMENSION

CURB/RAIL COMBINATION USED ON UNITS WITH 20" BLOWERS

ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.

MODEL	UNIT DIMENSIONS A	B	C	D	E	F	G	H	CURB/RAIL J	K	L	LL	DISCHARGE OPENING N	P	R	S	RETURN DAMPER OPENING T	U	V	W	X	WATER INLET AA	AB	DRAIN OPENING AC	AD	FILTER SIZE & QTY	MAX. FILTER VELOCITY
D.250-G10	209-1/2	39-3/8	42-3/4	39	3-3/4	44-3/8	7-13/16	95-7/16	21	71	131-5/8	163-1/16	3-9/16	13-7/8	1-13/16	11-1/2	14	8	14	12-1/2	18	4-1/2	6-1/4	13	16	16"x20"x2" (3)	@3000 CFM = 572 FPM
D.500-G10	209-1/2	39-3/8	42-3/4	39	3-3/4	44-3/8	7-13/16	95-7/16	21	71	131-5/8	163-1/16	3-9/16	13-7/8	1-13/16	11-1/2	14	8	14	12-1/2	18	4-1/2	6-1/4	13	16	16"x20"x2" (3)	@3000 CFM = 572 FPM
D.250-G15	223-1/2	49-3/8	47-3/4	44	3-3/4	53-5/8	7-13/16	109-7/16	31	79	145-5/8	182-1/16	4-5/16	22-3/8	1-9/16	18	22-3/4	8	11	7-1/2	24	4-1/2	6-1/4	18	16	20"x25"x2" (3)	@6000 CFM = 696 FPM
D.500-G15	223-1/2	49-3/8	47-3/4	44	3-3/4	53-5/8	7-13/16	109-7/16	31	79	145-5/8	182-1/16	4-5/16	22-3/8	1-9/16	18	22-3/4	8	11	7-1/2	24	4-1/2	6-1/4	18	16	20"x25"x2" (3)	@6000 CFM = 696 FPM
D.750-G15	223-1/2	49-3/8	47-3/4	44	3-3/4	53-5/8	7-13/16	109-7/16	31	79	145-5/8	182-1/16	4-5/16	22-3/8	1-9/16	18	22-3/4	8	11	7-1/2	24	4-1/2	6-1/4	18	16	20"x25"x2" (3)	@6000 CFM = 696 FPM
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	190-1/16	6-5/16	22-3/8	1-1/2	18	28	8	7	4-1/2	30	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	190-1/16	6-5/16	22-3/8	1-1/2	18	28	8	7	4-1/2	30	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	190-1/16	6-5/16	22-3/8	1-1/2	18	28	8	7	4-1/2	30	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	247-7/8	5-1/4	31-1/2	1-13/16	23-1/2	33	10	11	8	36	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	247-7/8	5-1/4	31-1/2	1-13/16	23-1/2	33	10	11	8	36	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) BTU LOW	BTU HIGH	GAS PRESSURE MIN	MAX	GAS CONNECTION "I" (NPT)	TONNAGE RANGE MIN	MAX
D.250-G10	6"	18	275	7" WC	14" WC	3/4	2 Ton	5 Ton
D.500-G10	12"	18	550	7" WC	14" WC	3/4	2 Ton	5 Ton
D.250-G15	6"	18	275	7" WC	14" WC	1	2 Ton	5 Ton
D.500-G15	12"	18	550	7" WC	14" WC	1	5 Ton	10 Ton
D.750-G15	18"	27.5	825	7" WC	14" WC	1	5 Ton	10 Ton
D.500-G18	12"	18	550	7" WC	14" WC	1	5 Ton	10 Ton
D.750-G18	18"	27.5	825	7" WC	14" WC	1	5 Ton	10 Ton
D.1000-G18	24"	36.6	1100	7" WC	14" WC	1	10 Ton	10 Ton
D.1000-920	24"	36.6	1100	7" WC	5 PSI	1-1/4	10 Ton	10 Ton
D.1500-920	30"	45.8	1375	7" WC	5 PSI	1-1/4	10 Ton	10 Ton

STANDARD EVAPORATIVE COOLING UNIT				
TOT. WEIGHT	MEDIA SIZE & QTY	VEL. @ MAX. CFM	NOZZLES	MAX. FLOW RATE
1315 LBS	20"x25"x2" (3)	406 FPM	6	3 GPH
1320 LBS	20"x25"x2" (3)	406 FPM	6	3 GPH
1780 LBS	16"x20"x2" (8)	429 FPM	10	5 GPH
1785 LBS	16"x20"x2" (8)	429 FPM	10	5 GPH
1790 LBS	16"x20"x2" (8)	429 FPM	10	5 GPH
2135 LBS	20"x25"x2" (8)	348 FPM	14	7 GPH
2140 LBS	20"x25"x2" (8)	348 FPM	14	7 GPH
2145 LBS	20"x25"x2" (8)	348 FPM	14	7 GPH
3410 LBS	16"x20"x2" (15)	572 FPM	24	12 GPH
3425 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
1320 LBS	20"x24"x12"	1050 FPM	12	3.9 GPH
1325 LBS	20"x24"x12"	1050 FPM	12	3.9 GPH
1775 LBS	25"x32"x12"	1080 FPM	20	6.5 GPH
1780 LBS	25"x32"x12"	1080 FPM	20	6.5 GPH
1785 LBS	25"x32"x12"	1080 FPM	20	6.5 GPH
2125 LBS	30"x36"x12"	1067 FPM	28	8.4 GPH
2130 LBS	30"x36"x12"	1067 FPM	28	8.4 GPH
2135 LBS	30"x36"x12"	1067 FPM	28	8.4 GPH
3380 LBS	38"x43"x12"	1322 FPM	35	10.15 GPH
3395 LBS	38"x43"x12"	1322 FPM	35	10.15 GPH

OPTIONAL MIXING BOX FILTERS
FILTER SIZE & QTY
10"x16"x2" (5)
10"x16"x2" (5)
20"x25"x2" (2), 16"x25"x2" (1)
20"x25"x2" (2), 16"x25"x2" (1)
20"x25"x2" (2), 16"x25"x2" (1)
15"x20"x2" (4), 15"x15"x2" (2)
15"x20"x2" (4), 15"x15"x2" (2)
15"x20"x2" (4), 15"x15"x2" (2)
18"x25"x2" (4), 16"x20"x2" (2)
18"x25"x2" (4), 16"x20"x2" (2)

*ADD CONDENSING UNIT WEIGHT TO WEIGHT IN TABLE ABOVE

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

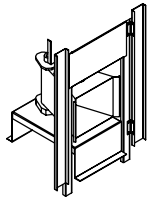
Direct Fired Profile Plate Specifications:

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.



Direct Fired (DF) Profile Plate Assembly