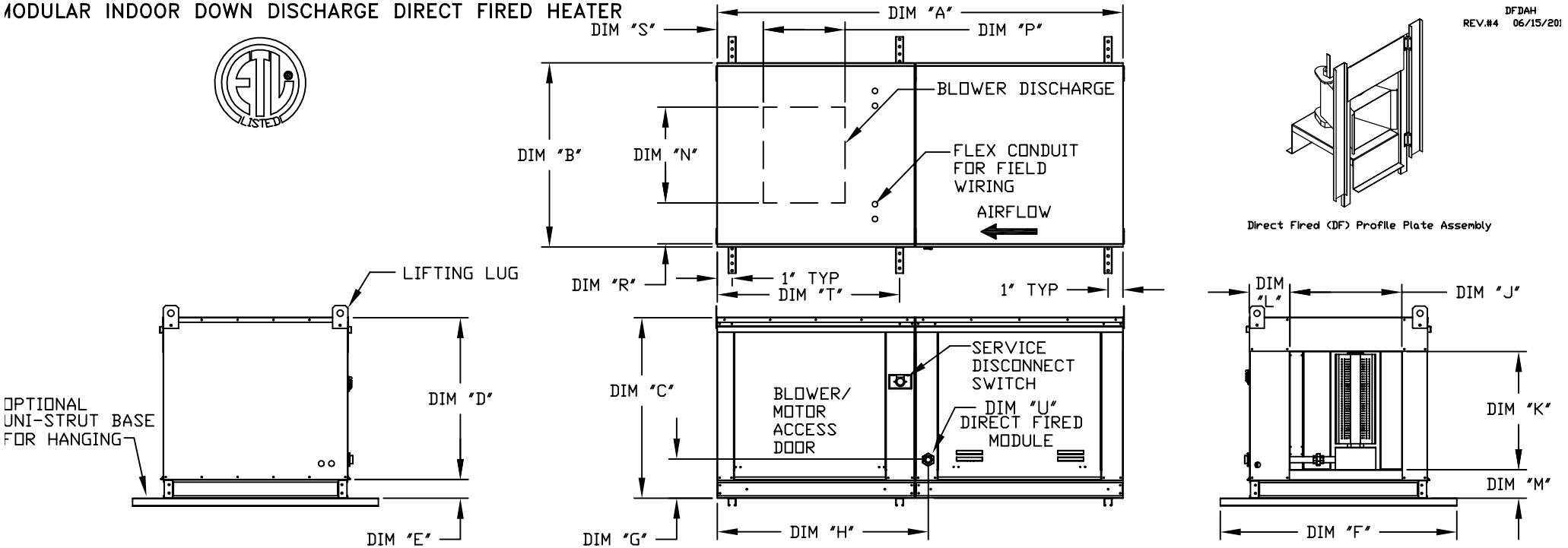
MODULAR INDOOR DOWN DISCHARGE DIRECT FIRED HEATER

DFDAH
REV.#4 06/15/201

Direct Fired (DF) Profile Plate Assembly



ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.

		UNIT DIMENSIONS								INTAKE OPENING				DISCHARGE OPENING				
MODEL	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T
D.250-G10	550 LBS	74-3/8	27-3/8	29-3/4	26-1/16	3-3/4	36	7-13/16	34-13/16	16	18	8-1/8	5-3/4	13-1/4	11-1/2	6-3/8	7-1/4	31-1/8
D.500-G10	555 LBS	74-3/8	27-3/8	29-3/4	26-1/16	3-3/4	36	7-13/16	34-13/16	16	18	8-1/8	5-3/4	13-1/4	11-1/2	6-3/8	7-1/4	31-1/8
D.250-G15	775 LBS	82-3/8	37-3/8	36-3/4	33-1/16	3-3/4	48	7-13/16	42-13/16	22-3/4	24	8-1/8	5-3/4	18-3/4	16	8-5/8	10	39-1/8
D.500-G15	780 LBS	82-3/8	37-3/8	36-3/4	33-1/16	3-3/4	48	7-13/16	42-13/16	22-3/4	24	8-1/8	5-3/4	18-3/4	16	8-5/8	10	39-1/8
D.750-G15	785 LBS	82-3/8	37-3/8	36-3/4	33-1/16	3-3/4	48	7-13/16	42-13/16	22-3/4	24	8-1/8	5-3/4	18-3/4	16	8-5/8	10	39-1/8
D.500-G18	880 LBS	87-3/8	41-3/8	43-3/8	38-1/16	5-1/4	60	9-1/2	47-13/16	30	30	8-1/8	7-1/2	22	19	9	12	44-1/8
D.750-G18	885 LBS	87-3/8	41-3/8	43-3/8	38-1/16	5-1/4	60	9-1/2	47-13/16	30	30	8-1/8	7-1/2	22	19	9	12	44-1/8
D.1000-G18	890 LBS	87-3/8	41-3/8	43-3/8	38-1/16	5-1/4	60	9-1/2	47-13/16	30	30	8-1/8	7-1/2	22	19	9	12	44-1/8
D.1000-920	1425 LBS	118-1/2	48-7/16	51-3/8	46-1/8	5-1/4	60	13-9/16	66-5/16	34	36	10-3/16	7-1/2	24-7/8	24-7/8	11-1/16	12-1/4	63-3/16
D.1500-920	1440 LBS	118-1/2	48-7/16	51-3/8	46-1/8	5-1/4	60	13-9/16	66-5/16	34	36	10-3/16	7-1/2	24-7/8	24-7/8	11-1/16	12-1/4	63-3/16
D.2000-925	1935 LBS	128-1/2	59-3/16	58-3/8	53-1/8	5-1/4	72	13-3/4	76-7/16	43	43	10-3/16	7-1/2	31-3/8	31-3/8	13-3/16	14-1/2	73-3/16
D.2500-925	1950 LBS	128-1/2	59-3/16	58-3/8	53-1/8	5-1/4	72	13-3/4	76-7/16	43	43	10-3/16	7-1/2	31-3/8	31-3/8	13-3/16	14-1/2	73-3/16

UNIT INFORMATION.

	BTU RANGE (MBH)			GAS PRESSURE		GAS CONNECTION
MODEL	BURNER LENGTH	BTU LOW	BTU HIGH	MIN	MAX	"U" (NPT)
D.250-G10	6"	18	275	7" WC	14" WC	3/4
D.500-G10	12"	18	550	7" WC	14" WC	3/4
D.250-G15	6"	18	275	7" WC	14" WC	1
D.500-G15	12"	18	550	7" WC	14" WC	1
D.750-G15	18"	27.5	825	7" WC	14" WC	1
D.500-G18	12"	18	550	7" WC	14" WC	1
D.750-G18	18"	27.5	825	7" WC	14" WC	1
D.1000-G18	24"	36.6	1100	7" WC	14" WC	1
D.1000-920	24"	36.6	1100	7" WC	5 PSI	1-1/4
D.1500-920	30"	45.8	1375	7" WC	5 PSI	1-1/4
D.2000-925	48"	73.3	2200	7" WC	5 PSI	1-1/2
D.2500-925	60"	91.6	2750	7" WC	5 PSI	1-1/2

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.