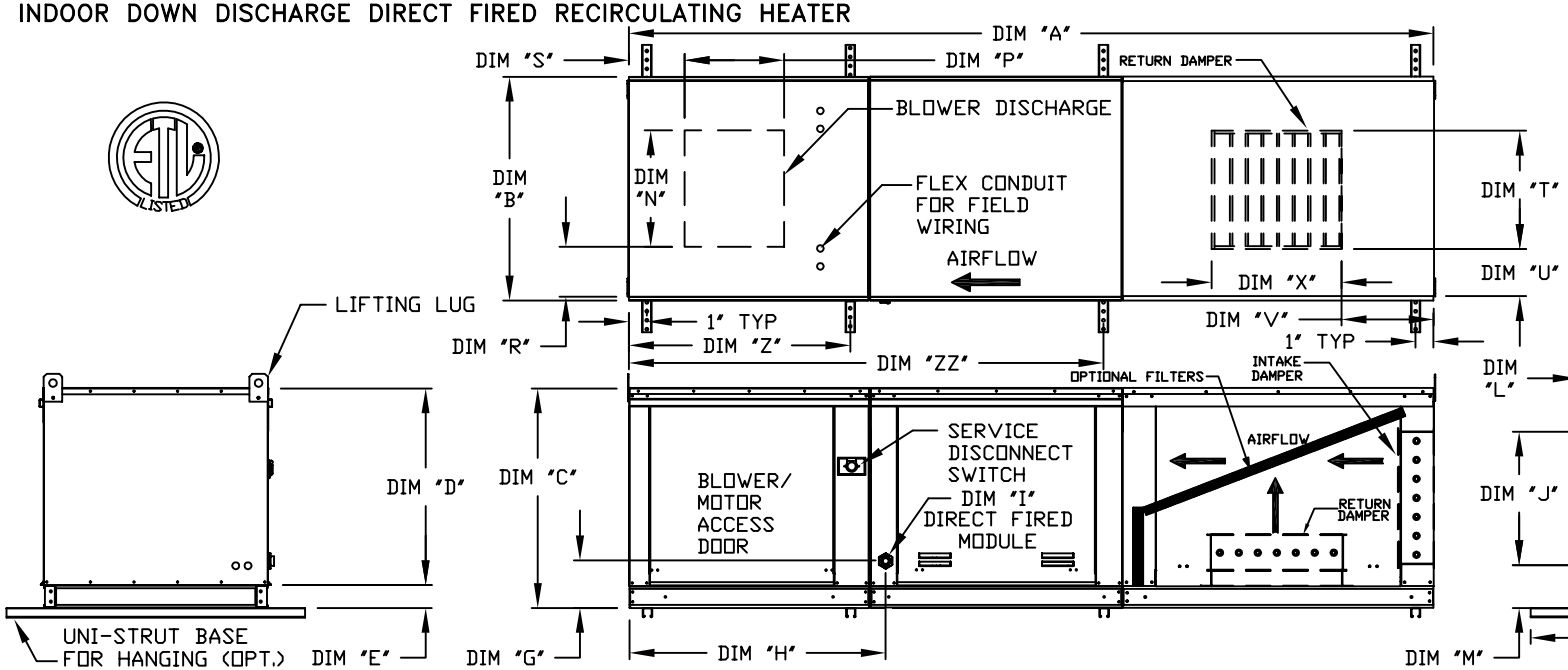
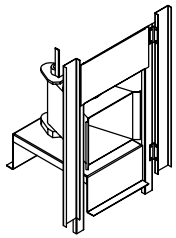
MODULAR INDOOR DOWN DISCHARGE DIRECT FIRED RECIRCULATING HEATER

MBDFDAH
REV.#2 06/15/2015





Direct Fired (DF) Profile Plate Assembly

ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.

		UNIT DIMENSIONS								INTAKE OPENING				DISCHARGE OPENING				RETURN OPENING					
MODEL	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	X	Z	ZZ
D.250-G10	705 LBS	116-5/8	27-3/8	29-3/4	26-1/16	3-3/4	36	7-13/16	34-13/16	18	16	8	5-3/4	13-1/4	11-1/2	6-3/8	7-1/4	14	8	14	18	31-1/8	73-1/4
D.500-G10	710 LBS	116-5/8	27-3/8	29-3/4	26-1/16	3-3/4	36	7-13/16	34-13/16	18	16	8	5-3/4	13-1/4	11-1/2	6-3/8	7-1/4	14	8	14	18	31-1/8	73-1/4
D.250-G15	990 LBS	124-5/8	37-3/8	36-3/4	33-1/16	3-3/4	48	7-13/16	42-13/16	24	22-3/4	8	5-3/4	18-3/4	16	8-5/8	10	22-3/4	8	11	24	39-1/8	81-1/4
D.500-G15	995 LBS	124-5/8	37-3/8	36-3/4	33-1/16	3-3/4	48	7-13/16	42-13/16	24	22-3/4	8	5-3/4	18-3/4	16	8-5/8	10	22-3/4	8	11	24	39-1/8	81-1/4
D.750-G15	1000 LBS	124-5/8	37-3/8	36-3/4	33-1/16	3-3/4	48	7-13/16	42-13/16	24	22-3/4	8	5-3/4	18-3/4	16	8-5/8	10	22-3/4	8	11	24	39-1/8	81-1/4
D.500-G18	1160 LBS	129-5/8	41-3/8	43-3/8	38-1/16	5-1/4	60	9-1/2	47-13/16	30	30	8	7-1/2	22	19	9	12	28	8	7	30	44-1/8	86-1/4
D.750-G18	1165 LBS	129-5/8	41-3/8	43-3/8	38-1/16	5-1/4	60	9-1/2	47-13/16	30	30	8	7-1/2	22	19	9	12	28	8	7	30	44-1/8	86-1/4
D.1000-G18	1170 LBS	129-5/8	41-3/8	43-3/8	38-1/16	5-1/4	60	9-1/2	47-13/16	30	30	8	7-1/2	22	19	9	12	28	8	7	30	44-1/8	86-1/4
D.1000-920	1900 LBS	172-13/16	48-7/16	51-3/8	46-1/8	5-1/4	60	13-9/16	66-5/16	36	34	10	7-1/2	24-7/8	24-7/8	11-1/16	12-1/4	33	10	11	36	63-3/16	117-3/8
D.1500-920	1915 LBS	172-13/16	48-7/16	51-3/8	46-1/8	5-1/4	60	13-9/16	66-5/16	36	34	10	7-1/2	24-7/8	24-7/8	11-1/16	12-1/4	33	10	11	36	63-3/16	117-3/8
D.2000-925	2510 LBS	182-13/16	59-3/16	58-3/8	53-1/8	5-1/4	72	13-3/4	76-7/16	43	43	10	7-1/2	31-3/8	31-3/8	13-3/16	14-1/2	43	10	6-1/2	43	73-3/16	127-3/8
D.2500-925	2525 LBS	182-13/16	59-3/16	58-3/8	53-1/8	5-1/4	72	13-3/4	76-7/16	43	43	10	7-1/2	31-3/8	31-3/8	13-3/16	14-1/2	43	10	6-1/2	43	73-3/16	127-3/8

UNIT INFORMATION.

	BTU RANGE (MBH)			GAS PRESSURE		GAS CONNECTION
MODEL	BURNER LENGTH	BTU LOW	BTU HIGH	MIN	MAX	"I" (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

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)
14.5"x19"x2" (12)
14.5"x19"x2" (12)

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 (NO_2).

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 the 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 combine 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.