UDX UNIT HEATER

POWER-VENTED, LOW-STATIC AXIAL FAN COMMERCIAL/INDUSTRIAL

82 - 83% THERMAL EFFICIENCY

Reznor® Model UDX gas-fired unit heaters are available in 14 sizes ranging from 30,000 to 400,000 BTUH gas input. Model UDX heaters are approved for installation in the United States and Canada by ETL.

Each size cabinet is easily suspended from either two or four suspension points. Or, an optional hanger kit for Sizes 30-125 allows for ceiling mounting. The low voltage terminal strip on the outside of the cabinet makes connecting control wiring easy with no panels to remove. The addition of terminal G to the strip, along with the new design of the circuit board, allows for fan only operation (without adding relays).

Reznor model UDX unit heaters feature a two-tone black and white powder coated, scratch-resistant paint scheme. Each unit has clean rounded corners and edges with no visible screws or fasteners. Model UDX unit heaters provide the same superior performance customers have relied on for more than 100 years along with added features that improve monitoring capabilities and make servicing the unit easier and installation safer.

STANDARD FEATURES AND BENEFITS

- Sizes 30 - 400 MBTUH certified for commercial/industrial heating application
- Sizes 30 - 125 MBTUH carry an additional approval for use in residential garage/workshop heating applications
- 50 - 60°F Rise range
- Integrated circuit board with seven segment display
- External status indicating LED
- Hinged door with ¼ turn latch
- Improved cabinet design with removable front face
- Integrated horizontal louvers in front face
- TCORE2® titanium stabilized aluminized steel heat exchanger
- Patented[A] single burner combustion system including a one-piece burner assembly
- 115V, 1 phase, 60 Hz supply voltage
- 115V open fan motor with internal overload protection
- Transformer for 24-volt controls
- Multi-try direct spark ignition with timed lockout
- Fan relay (included on the circuit board)
- Single-stage natural gas valve (field adjustable for operation to 10,000 ft. elevation[B])
- Vibration/noise isolated fan and venter motors – designed for low noise operation
- 2-point and 4-point suspension
- External terminal strip for 24-volt wiring
- External gas pipe connection
- Full fan guard

OPTIONAL FEATURES

- Single-stage propane gas valve (field adjustable for operation to 10,000 ft.)
- Two-stage gas valve (sizes 60 - 400)
- 409 or 316 stainless steel heat exchangers
- Totally enclosed fan motor (sizes 30 - 400, 115V only)
- Vent cap
- Thermostat
- Integrated vertical louvers
- Integrated 30° and 60° downturn nozzles
- Gas conversion kits (natural and propane)
- Primary/secondary controls for zoning up to six units
- Ceiling suspension kit - Sizes 30 - 125
- Hanger kits for 1" pipe
- Stepdown transformer (for 208/115, 230/115 or 460/115 supply voltage)
- Manual shutoff valves

For installations where dirt, dust, and other airborne contamination is present in the indoor environment, it is recommended to use separated combustion units (Model UDX). These models use air from outside the space for combustion. This helps reduce the buildup of contaminates on the burner that could affect the combustion process. Refer to the installation manual for the recommended frequency of maintenance and cleaning.

[A] U.S. Patent Number 6,889,686

[B] Pressure switch change required for installations above 6,000 ft.

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UDX TECHNICAL DATA

Size		30	45	60	75	100	125	150
Input Heating Capacity	BTUH	30,000	45,000	60,000	75,000	105,000	120,000	150,000
	kw/h	8.8	13.2	17.6	22.0	30.8	35.2	43.9
Thermal Efficiency (%)		82	83	83	83	83	83	83
Output Heating Capacity *C*	BTUH	24,600	37,350	49,800	62,250	87,150	99,600	124,500
	kw/h	7.2	11.0	14.6	18.3	25.6	29.2	36.4
Gas Connection (inches) *D*	Natural	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Propane	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Vent Connection Size (inches) *E*		4	4	4	4	4	4	5
Control Amps (24 volt)		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Full-Load Amps (115 volt)		1.9	2.4	2.4	3.7	4.3	5.6	3.8
Maximum Over Current Protection (115V) *F*		15	15	15	15	15	15	15
Normal Power Consumption (watts)		109	155	155	217	276	354	392
Discharge Air Temperature Rise (°F)		50	55	60	60	60	60	60
Air Volume	CFM	456	629	769	961	1345	1537	1921
	M^3/minute	12.9	17.8	21.8	27.5	36.7	45.9	54.4
Discharge Air Opening Area	ft^2	0.96	0.96	1.25	1.25	2.01	2.01	2.56
	M^2	0.09	0.09	0.12	0.12	0.19	0.19	0.24
Outlet Velocity	FPM	475	656	616	770	668	763	752
	M/minute	145	200	188	238	196	245	229
Fan Motor HP *G*	Open	0.02	0.03	0.03	0.06	1/30	1/20	1/6
	Enclosed	0.06	0.06	0.06	0.06	1/4	1/4	1/4
Fan Motor RPM		1550	1550	1550	1550	1050	1050	1050
Fan Diameter (inches)		10	10	12	12	16	16	18
Sound Level	dba @ 15 ft	40	40	40	49	54	55	51
Approximate Net Weight	lbs	57	62	71	76	101	106	178
	kg	26	28	32	34	46	48	81
Approximate Ship Weight	lbs	63	68	76	81	120	125	206
	kg	29	31	34	37	54	57	93

Size		175	200	225	250	300	350	400
Input Heating Capacity	BTUH	175,000	200,000	225,000	250,000	300,000	350,000	400,000
	kw/h	51.2	58.6	65.9	73.2	87.8	102.5	117.1
Thermal Efficiency (%)		83	83	83	83	83	83	83
Output Heating Capacity *C*	BTUH	145,250	166,000	186,750	207,500	249,000	290,500	332,000
	kw/h	42.5	48.6	54.7	60.8	72.9	85.1	97.2
Gas Connection (inches) *D*	Natural	1/2	1/2	3/4	3/4	3/4	3/4	3/4
	Propane	1/2	1/2	3/4	3/4	3/4	3/4	3/4
Vent Connection Size (inches) *E*		5	5	5	5	6	6	6
Control Amps (24 volt)		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Full-Load Amps (115 volt)		3.8	4.6	7.5	7.5	11.0	11.0	11.0
Maximum Over Current Protection (115V) *F*		15	15	15	15	20	20	20
Normal Power Consumption (watts)		392	491	747	747	1086	1086	1086
Discharge Air Temperature Rise (°F)		60	60	60	60	60	60	60
Air Volume	CFM	2242	2562	2882	3202	3843	4483	5123
	M^3/minute	63.5	72.5	81.6	90.7	108.8	126.9	145.1
Discharge Air Opening Area	ft^2	2.56	2.56	3.51	3.51	4.79	4.79	4.79
	M^2	0.24	0.24	0.33	0.33	0.45	0.45	0.45
Outlet Velocity	FPM	877	1003	820	911	802	936	1069
	M/minute	267	306	250	278	244	285	326
Fan Motor HP *G*	Open	1/6	1/6	1/4	1/4	1/2	1/2	1/2
	Enclosed	1/4	1/4	1/4	1/4	1/2	1/2	1/2
Fan Motor RPM		1050	1050	1050	1050	1050	1050	1050
Fan Diameter (inches)		18	18	20	20	24	24	24
Sound Level	dba @ 15 ft	52	53	56	56	59	61	62
Approximate Net Weight	lbs	193	193	211	223	277	303	316
	kg	88	88	96	101	126	137	143
Approximate Ship Weight	lbs	221	221	247	259	323	348	360
	kg	100	100	112	117	147	158	163

C ETL rating for altitudes to 2000 ft.
D Size shown is for gas connection to a single stage gas valve, not supply line size.
E Smaller or larger vent pipe diameters may be allowed; refer to the Venting Installation Manual. If vent diameter is different from vent connection, reducer/enlargers will be field-required.
F MOP = 2.25 x largest motor FLA + remaining load. Answer is rounded down to the next size of commercially available circuit breaker or fuse.
G All other information in this table is based on a heater equipped with a standard 115 volt open fan motor.

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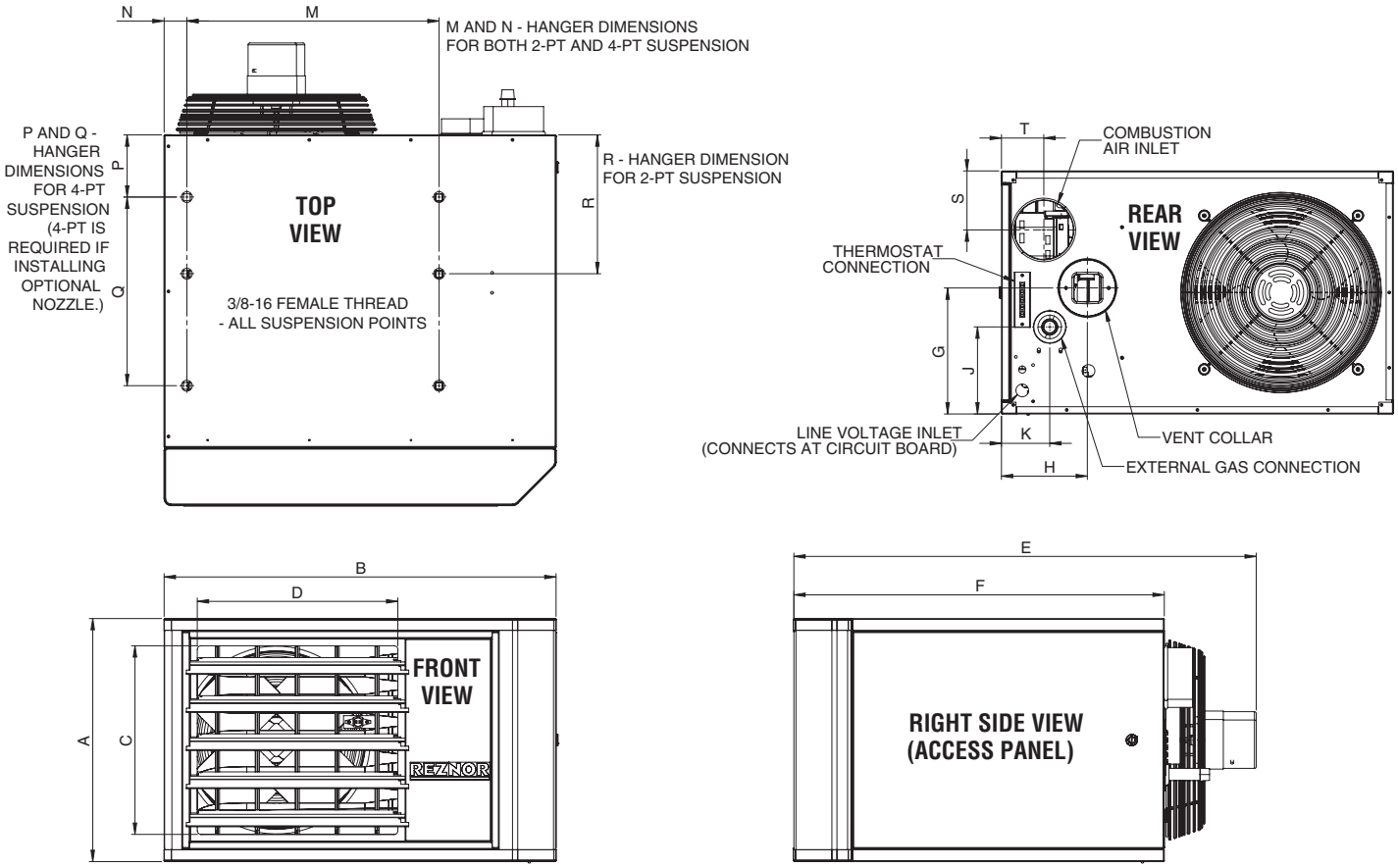
UDX DIMENSIONS

±1/16” (2MM)

UNIT SIZE	A	B	C	D	E	F	G	H	J	K	M	N	P	Q	R	S	T
	INCHES (±1/16) (mm (± 2))																
030, 045	13 3/4 (349)	27 (686)	10 (254)	13 13/16 (351)	29 3/4 (756)	25 9/16 (649)	6 (152)	5 15/16 (151)	3 1/2 (89)	3 11/32 (85)	17 3/8 (441)	1 9/16 (40)	4 9/32 (109)	13 (330)	9 9/16 (243)	3 3/4 (95)	2 15/16 (75)
060	16 3/4 (425)		13 (330)		32 23/32 (831)		8 11/16 (221)		6 (152)							4 1/16 (103)	
075					31 29/32 (810)												
100	24 3/4 (629)		21 (533)		34 9/32 (871)		15 5/16 (389)		8 29/32 (226)							5 15/32 (139)	
125																	
150,175,200	20 1/8 (511)	38 3/16 (970)	16 (406)	23 (584)	48 7/16 (1230)	40 (1016)	9 5/8 (244)	8 5/16 (211)	5 3/8 (137)	6 1/2 (165)	25 11/16 (652)	1 13/32 (36)	8 1/8 (206)	22 3/16 (564)	16 3/8 (416)	5 1/2 (140)	4 1/4 (108)
225,250	26 1/8 (664)		22 (559)				13 1/16 (332)		9 (229)							8 1/16 (205)	4 5/16 (110)
300,350,400	34 1/8 (867)	41 (1041)	30 (762)		48 29/32 (1243)		17 1/16 (433)	8 1/2 (216)	11 13/16 (300)	7 5/16 (186)	27 11/16 (703)				16 1/4 (413)	11 9/16 (294)	4 1/2 (114)



CLEARANCES FROM COMBUSTIBLES

Size	Top		Flue Connector		Access Panel *J*		Non-Access Side		Bottom *K*		Rear *L*	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
30-125	1	25	6	152	18	457	1	25	1	25	18	457
150-400	4	102	6	152	18	457	2	51	1	25	18	457

J Access Panel clearance is required for service clearance to controls
K Suspend the heater so that the bottom is a minimum of 5’ (1.5M) above the floor.
L Rear clearance is required for air movement. Rear clearance should be measured from the fan motor.

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