

V3



UDSA Model

Gas-fired unit heaters for indoor installation



REZNOR®

Reznor V3 unit heaters are one of the most technically advanced products available on the market today. Incorporating a radical new horizontal heat exchanger and premix burner. V3 is compact, lightweight and delivers the highest possible standards of energy efficiency and performance.

The range has 14 different model sizes up to 97 kW (output).

Vertical down flow units are also available.

These heaters are suitable for indoor installation in industrial and commercial premises, retail, sports and leisure, warehouses and many other applications.



TECHNICAL DATA

Model		008	011	015	020	025	030	035
Gas Categories		I ₂ H ₃ +UK						
Comb. Air and Venting; Type-B & C Installations¹		B22, C12, C32, C42, C52, C62, C82						
Heat Input (Hs)	kW	8,8	13,2	17,6	22,0	30,8	35,2	42,2
Heat Input (Hi)	kW	7,9	11,9	15,9	19,8	27,8	31,7	38,0
Heat Output	kW	7,3	11,0	14,6	18,2	25,5	29,2	34,9
Thermal Efficiency (Hi)	%	92	92	92	92	92	92	92
Gas Consumption Rate								
natural gas G20	m³/h	0,84	1,26	1,68	2,10	2,94	3,36	4,02
propane gas G31	kg/h	0,62	0,93	1,24	1,55	2,16	2,47	2,96
Gas Connection Size (not supply line size)		Rc 1/2						
Temperature Rise ΔT (±1)	K	32	32	32	32	32	32	29
Sound pressure level⁴	dB(A)	47	46	47	48	50	51	55
Sound pressure level⁵	dB(A)	40	39	40	41	43	44	48
Airflow (15°)	m³/h	680	1020	1360	1700	2385	2725	3510
Motor Speed	rpm	1425	1425	1425	1425	950	950	950
Recommended Maximum Hor. Mounting Height²	m	2,5	2,5	3,0	3,0	3,5	3,5	3,5
Horizontal Air Throw³	m	8	10	13	16	20	22	25
Electrical Service (protection class IP 20)		230/240V 1N ~ 50Hz						
Total Electrical Rating	W	121		126		273		333
Vent & Combustion Air Connection Collars	Ømm	80	80	80	80	100	100	100
Weight (net)	kg	30	33	38	40	56	60	88

Energy saving

- 4-pass heat exchanger, achieves over 92% thermal efficiency.
- Reduced NOx emissions.
- An improved airflow and a new louvre design give longer air throws and significantly reduce stratification within the building. Consequently, the units are particularly suitable for well insulated buildings. If necessary, destratification fans can be installed.
- Aerodynamic heat exchanger profile enables an increase in airflow up to 40% with a 30% reduction in electrical consumption.



Application versatility

- Both horizontal and vertical down flow units are available.
- Fourteen different heat outputs from 7 to 97kW.
- The smallest unit is only 310mm high – making it ideal for mounting in confined spaces.
- Units may be suspended or base mounted on a suitable non combustible support.

Easy installation and maintenance

- Up to 25% lighter than comparative models and easy to install.
- Balanced flue wall terminal provides both flue outlet and combustion air inlet thereby reducing installation time.
- All connections (gas and electricity) are accessible at one side of the heater.



Maintenance is very simple, thanks to the use of a single gas injector for all models.

Extended operational life

- The titanium stabilised aluminised steel heat exchanger is particularly strong and durable providing additional temperature resistance. Its weld free construction ensures long life.
- Self-aligning burner with single orifice eliminates possible flame impingement and premature heat exchanger failure.



	043	050	055	064	073	085	100
I ₂ H ₃ +UK							
B22, C12, C32, C42, C52, C62, C82							
	50,8	58,6	66,0	77,7	88,0	102,7	117,3
	45,8	52,8	59,5	70,0	79,3	92,5	105,7
	42,1	48,6	54,7	64,4	73,0	85,1	97,0
	92	92	92	92	92	92	92
	4,85	5,59	6,30	7,41	8,39	9,79	11,18
	3,57	4,12	4,64	5,46	6,18	7,21	8,24
Rc 3/4							
	28	28	28	28	28	28	28
	57	58	59	60	58	59	59
	50	51	52	53	51	52	52
	4535	5180	5830	6810	7770	9065	10360
	1425	1425	950	1425	950	950	950
	3,5	3,5	3,5	4,0	4,0	4,0	4,0
	28	30	30	33	35	36	39
230/240V 1N ~ 50Hz							
	368	558	490	678	848	848	848
	100	100	130	130	130	130	130
	99	99	112	118	143	158	168



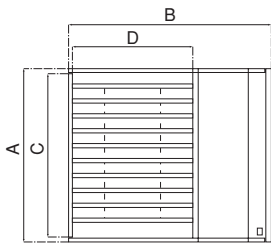
- 1) Gas Appliance Classifications for Approved Venting Methods based on CEN report - CR1749:2001.
- 2) Height from floor to bottom surface of heater. These are RECOMMENDATIONS ONLY. Positioning of unit heaters for proper performance is application dependent. Operation is affected by other air moving equipment in the space, obstructions to the airflow, drafts and/or close proximity to doors or windows, etc...Care should be taken to **avoid mounting the heaters above these recommendations**, unless downturn nozzle options are used, as significant stratification may occur resulting in poor floor coverage and higher energy losses through the roof structure.
- 3) Isothermal conditions - 20°C ambient air temperature - discharge louvers zero deflection - v=0,5m/s.
- 4) dB(A) values at **5 meters** from the unit with reference circumstances **A=160m² and Q=2**.
- 5) dB(A) values at **5 meters** from the unit in **free field**.

HORIZONTAL MODEL

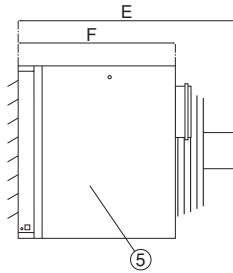
MODEL UDSA DIMENSIONS (mm ± 2)

Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
008, 011	307	700	267	404	696	546	131	191	129	67	85	413	16	98	350	120
015	383	700	343	404	723	546	200	191	139	122	86	413	16	98	350	120
020	383	700	343	404	723	546	200	191	139	122	86	413	16	98	350	120
025	586	700	546	404	771	546	368	191	222	122	121	413	16	98	350	140
030	586	700	546	404	771	546	368	191	222	122	121	413	16	98	350	140
035, 043, 050	510	971	456	601	1129	897	371	195	126	166	121	623	33	149	600	140
055, 064	663	971	609	601	1138	897	354	207	150	166	204	623	33	149	600	225
073, 085, 100	865	1040	812	651	1138	897	562	213	299	186	204	673	33	149	600	225

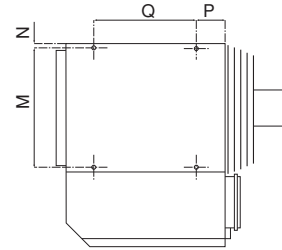
1. combustion air inlet 2. flue connection 3. gas connection 4. electrical connections 5. service panel



FRONT VIEW



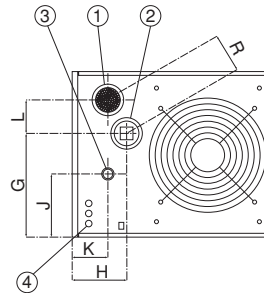
SIDE VIEW



TOP VIEW

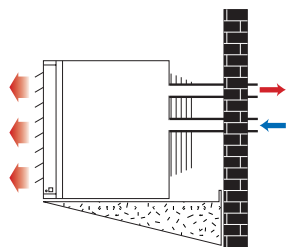


REAR VIEW
(models 035, 043, 050)

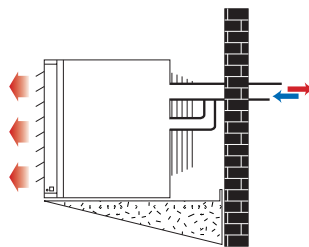


REAR VIEW
(all models except for 035, 043, 050)

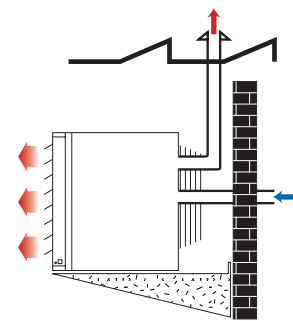
BALANCED FLUE WALL AND ROOF TERMINAL



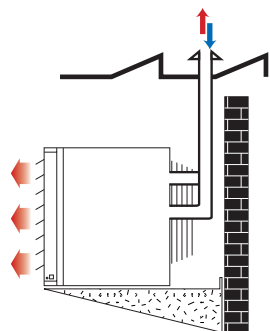
Type C12



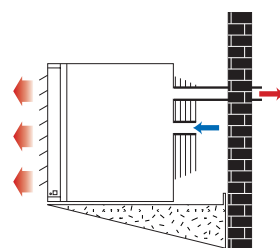
Type C12b



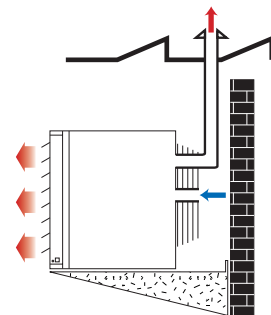
Type C52



Type C32



Type B22



Type B22b

C type: the allowed length between the unit heater and the flue terminal amounts to 9m, a 90° bend offering an equivalent resistance of 1.5 m and a 45° bend –0.75m

VERTICAL MODEL

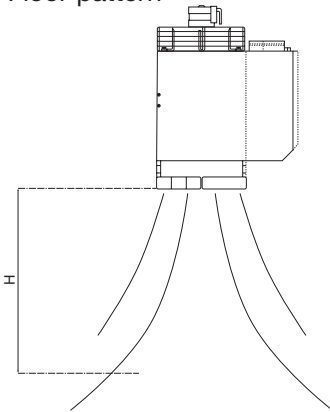
To ensure heat losses through the roof are kept to a minimum and to avoid the occurrence of stratification, it is possible to suspend the UDSA unit in a vertical orientation. This way of suspension allows the unit to dually operate as heater and as destratification unit.

The option 'vertical orientation' (option number 205.8) can only be applied on the UDSA models 015, 025, 035, 043, 050, 055, 064, 073, 085 & 100. A destratification thermostat (option 904) is available resulting in energy saving and comfort.

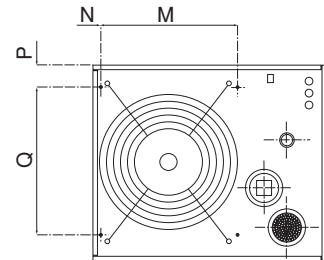
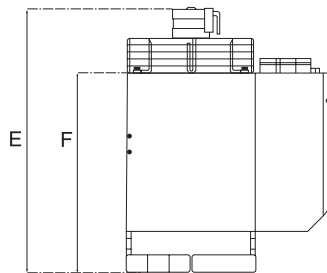


The air pattern can be modified by bending the adjustable air louvers.

Floor pattern



Louvre setting



MOUNTING DATA

Maximum mounting height from floor H (m)⁽¹⁾

Model	Air louvres 'neutral'	Air louvres '30°'	Air louvres '45°'
015	5,0	4,5	4,0
025	6,0	5,0	4,5
035	7,0	6,0	5,5
043	9,0	7,5	7,0
050	10,0	8,5	7,5
055	9,0	7,5	7,0
064	10,5	8,5	8,0
073	10,0	8,0	7,5
085	11,0	9,0	8,5
100	12,0	10,0	9,0

(1) max.mounting heights are defined at an uniform room temperature of 15°C and a temperature rise at nominal heat output

MODEL UDSA DIMENSIONS (mm ± 2)

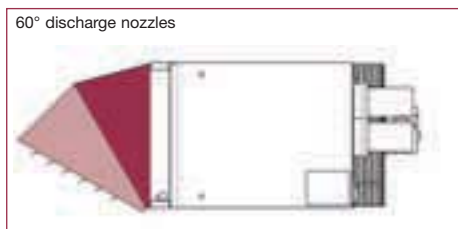
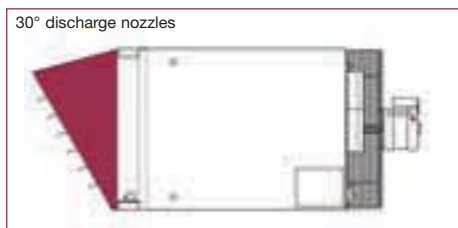
Model	E	F	M	N	P	Q
015	864	686	413	16	67	250
025	918	686	413	16	68	450
035, 043, 050	1270	1037	623	35	55	400
055, 064	1278	1037	623	35	82	500
073, 085, 100	1317	1057	673	35	183	500

For other dimensions: see table indicated as horizontal model

OPTIONS

Unit heater accessories

- Two stage burner control
- Modulating burner control
- Destratification thermostat
- Stainless steel heat exchanger RVS 409
- Vertical louvres
- 30° discharge nozzles
- 60° discharge nozzles



Control equipment

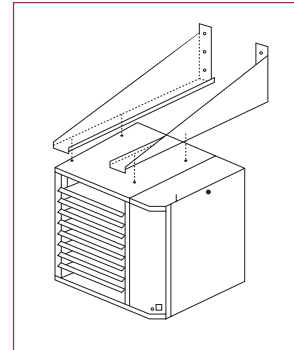
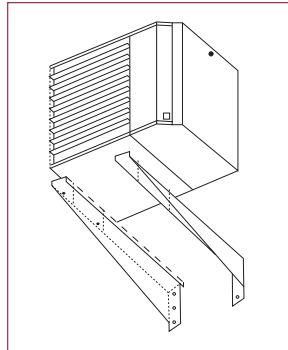
- Combined thermostat + remote control
- Thermostat provided with time and temperature control for one and two stage REZNOR unit heaters. Microprocessor, adjusts heating period. Several thermostats can be connected with each other.



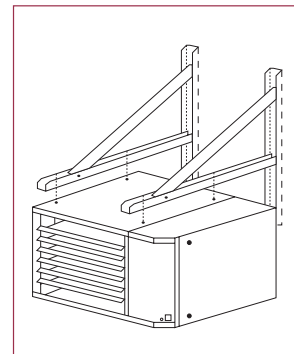
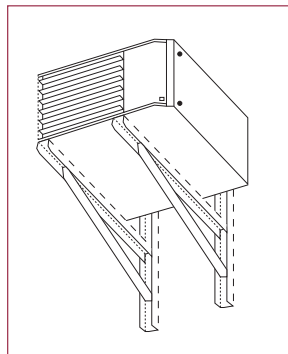
Mounting

- Wall brackets

wall brackets for models 008 – 030



wall brackets for models 035 – 100



Flue outlet

- Balanced flue wall and roof terminal (see p.4)
 - Aluminised steel plate
 - Adjustable chimney for pitched roof