
AMBIRAD

ENERGY EFFICIENT HEATING SYSTEMS

CENTURION

HIGH EFFICIENCY
CABINET HEATERS



CENTURION

The Ambi-Rad range of high efficiency cabinet heaters achieve thermal efficiencies of 91-92% and are eligible for enhanced capital allowances. Through the Enhanced Capital Allowance scheme investing in higher efficiency equipment will cost less in both capital and on going running costs- via energy savings. The high efficiency cabinet heaters are built using the proven pentapost construction and include a four pass heat exchanger system. Eleven model sizes, available in gas and oil fired versions, cover heat outputs from 30 to 248kW to allow for close matching to the buildings heat requirements.

Benefits

- Increased airflows reduce stratification in the roof space.
- Improved distribution and air throws.
- Eligible for Enhanced Capital Allowances.

Features

- High efficiency four pass heat exchanger.
- Thermal efficiencies up to 92%.
- Natural gas, propane or oil fired.
- Vertical or horizontal units.

Options

Please refer to standard Cabinet heater leaflet.

Specification

Please refer to standard Cabinet heater leaflet.



High efficiency vertical and horizontal cabinet heaters

Model VCHE/HCHE		30	40	50	60	75	90	120	140	180	215	250
Nominal output	kW	30	43	52	60	75	89	119	140	178	217	248
Efficiency on net CV	%	92.1	90.6	92	91.4	91.4	91.3	91.1	91.6	91.8	91.7	92.3
Gas Rate												
Natural Gas G20	M ³ /hr	3.49	4.98	5.94	6.95	8.69	10.36	13.86	16.19	20.55	25	28.51
Propane G31	Kg/h	2.61	3.73	4.44	5.21	6.51	7.76	10.38	12.12	15.39	18.71	21.34
Minimum inlet pressure nat gas	mbar	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Gas connection size ¹	Rc	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1 1/4"	1 1/4"
Oil consumption	Kg/h	2.78	3.95	4.71	5.65	6.91	8.23	11.01	12.86	16.32	19.85	22.63
Oil connection size		3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Airflow @15°C	m ³ /h	2500	2500	5180	5180	5180	7140	8750	10500	12800	14100	17330
Temperature rise	°C	36	50	29	34	42	37	40	39	41	45	42
Approx throw	M	18	18	21	21	21	21	25	25	30	26	31
Number of nozzles		2	2	3	3	3	4	4	4	4	4	4
Avail.able outlet press ducted	Pa	95	95	130	130	130	125	150	200	95	160	250
Electrical supply		230 volt 1 phase 50Hz					400 volt 3 phase 50Hz					
Main fan motor	kW	0.55	0.55	0.74	0.74	0.74	1.5	2.2	3	4	4	5.5
Burner motor	W	70	70	70	70	70	90	90	90	90	250	250
Absorbed electric power	kW	0.91	0.91	1.6	1.6	1.6	2.41	2.76	4.6	5.8	5.47	8.39
Running current	amps	3.4	3.4	6.6	6.6	6.6	2.3	3.7	5.5	8.3	7	12
Noise level at 5m ²	dB(A)	52	52	53	53	53	59	61	61	65	63	67
High air flow option *	m ³ /h	N/A	N/A	N/A	N/A	N/A	8750	N/A	16900	N/A	17330	N/A
Static pressure with high airflow	Pa	N/A	N/A	N/A	N/A	N/A	150	N/A	95	N/A	250	N/A
Temperature rise with high airflow	°C	N/A	N/A	N/A	N/A	N/A	30	N/A	24	N/A	36	N/A
Airflow	M ³ /h	N/A	N/A	N/A	N/A	N/A	7140	N/A	12300	N/A	14100	N/A
Increased static pressure *	Pa	N/A	N/A	N/A	N/A	N/A	205	N/A	350	N/A	330	N/A
Temperature rise with increased static pressure	°K	N/A	N/A	N/A	N/A	N/A	49	N/A	42	N/A	49	N/A
Approximate weight ³	Kg	190	190	225	225	225	280	292	300	320	360	380
Flue diameter	dia.mm	125	125	150	150	178	178	178	178	223	223	223
Minimum flue height	m	2	2	2	2	2	2	2	2	2	2	2
Maximum mounting heights (Horizontal units) ⁴	m	3	3	5	5	5	6	6	6	6	6	6

* Increased static pressure is NOT available with high air flow option.

VCHE for vertical high efficiency cabinet heaters. HCHE for horizontal high efficiency cabinet heaters. Add 'N' for natural gas, 'O' for oil fired and 'ND' or 'OD' for ducted outlet.

¹ Not supply line size

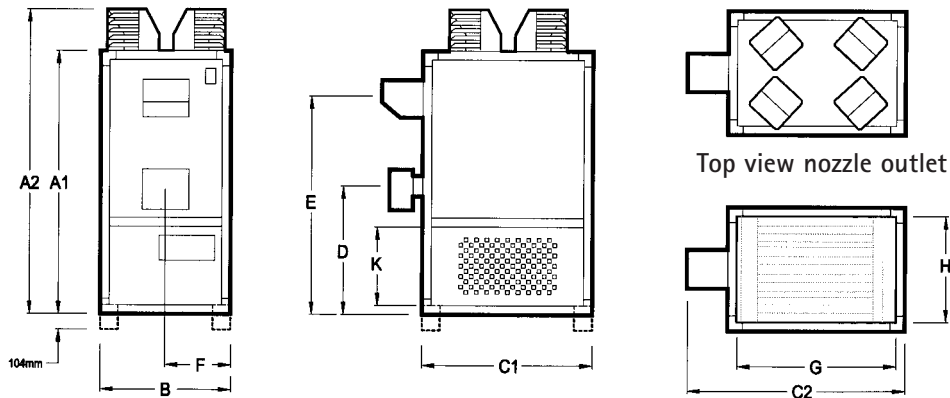
² Typical factory application Q = 2 A = 160

³ Unit weight including burner

⁴ Consult Ambi-Rad for higher mounting applications

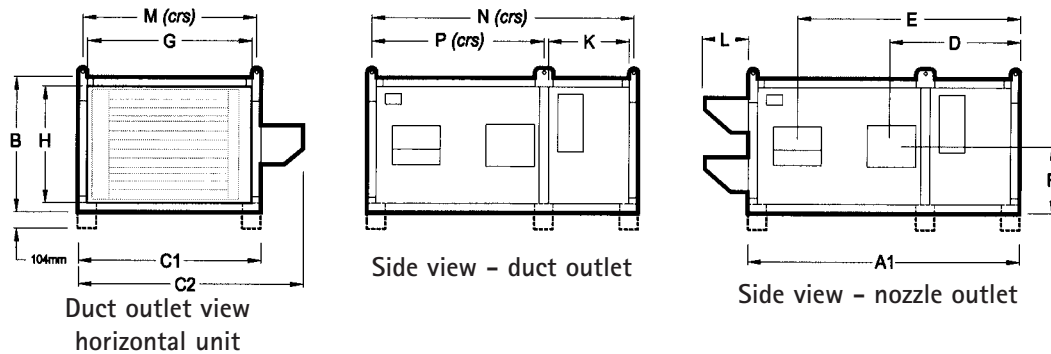
Specification and technical data high efficiency cabinets

Dimensions - VCHE



Model	30/40	50/60/75	90/120	140/180	215/250
A1 Cabinet width	1804	1804	2012	2073	2012
A2 Overall height	2088	2168	2376	2477	2466
B Overall width	865	865	795	1186	1186
C1 Cabinet depth	613	859	1158	1305	1504
C2 Overall depth	908	1207	1547	1915	2114
D Bottom to burner centre	1007	1019	1041	1184	1112
E Bottom to flue centre	1441	1465	1637	1750	1678
F Side to burner centre	433	433	398	593	593
G Duct outlet depth/side duct inlet depth	513	759	1058	1205	1404
H Duct outlet width/rear duct inlet width	765	765	695	1086	1086
K Duct inlet height	445	516	600	711	600

Dimensions - HCHE



Model	30/40	50/60/75	90/120	140/180	215/250
A1 Cabinet width	1804	1804	2012	2073	2012
B Overall height	865	865	795	1186	7786
C1 Cabinet depth	613	859	1158	1305	1504
C2 Overall depth	908	1207	1547	1915	2114
D Side to burner centre	1007	1019	1041	1184	1112
E Side to flue centre	1441	1465	1637	1750	1678
F Bottom to burner centre	433	433	398	593	593
G Duct outlet depth/top duct inlet depth	513	759	1058	1205	1404
H Duct outlet height/rear duct inlet height	765	765	695	1086	1086
K Top duct inlet width	445	516	600	711	600
L Horizontal nozzle outlet width	315	315	315	370	370
M Hanger point depth	560	806	1105	1252	1451
N Hanger point width	1751	1751	1959	2020	1959
P Hanger point side to middle	1258	1187	1311	1261	1311



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