



HMP

Air heaters

General information & application

HMP air heaters are suitable for heating of industrial halls, warehouses, garages, cash and carry shops and also for store entrances. Heat transfer medium is water. By providing the air heaters with air cone, they are suitable for jet-shaped air distribution in high ceiling rooms. Maximum operating temperature is 110 °C and pressure 6 bar.

Coil

Heat transfer section is made of an efficient finned coil with copper tubes and aluminium fins. Water flow direction is marked on tube connections. Air heater is provided with venting screws.

Casing

HMP air heater has a low profile, the casing is made of easily cleanable PVC-coated hot dip galvanized steel, colour white. Tube connections for HMP are made from the side and electric connections directly to motor from outside. Mounting on ceiling, on the wall or above of the drop ceiling. HMP is provided with mounting rails for helping the assembling e.g. directly on the ceiling or on the wall.

Fan motors

Air heaters HMP are equipped with axial fan units in two sizes (40 and 50) with different fan speeds to achieve suitable heating capacity, air flow and sound levels (HMP-40: 700, 900 & 1400 rpm, HMP-50: 700, 900, 1150 & 1400 rpm).

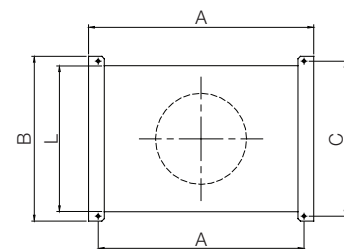
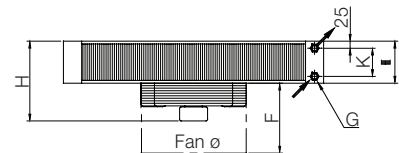
The fan motors are two-speed motors, fitted with pre-wired thermal protections (except model HMP-40-4). Protection class IP44 for HMP 40 range, IP54 for HMP 50 range.



HMP

Options

Long air throw is achieved by providing the air heater with an air cone K-40/50. The material of the air cone is the same as the casing material. Service and installation instruction manual is delivered with air heater.



Dimensions

HMP	A	B	C	D	E	F	H	K	L	M	G	Weight kg	Int.vol. l
40	930	680	640	850	150	250	285	101	603	25	R¾	25.0	1.5
50	1150	780	740	1050	210	300	350	159	703	25	R1	38.0	2.5

Technical data

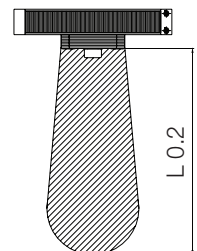
Size	Vi	t _{ti}	Water °C																								
			90/70				80/60				80/40				70/40				60/40				50/40				
			t _{2i}	Q	qv	dPv	t _{2i}	Q	V _v	dPv	t _{2i}	Q	V _v	dPv	t _{2i}	Q	V _v	dPv	t _{2i}	Q	V _v	dPv	t _{2i}	Q	V _v	dPv	
°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa
40	700	0.34	+10	53	17.6	0.22	5.8	46	15.0	0.18	4.5	36	10.8	0.06	0.8	34	10.0	0.08	1.2	33	9.4	0.12	2.1	31	8.6	0.20	6.2
	900	0.46		49	21.4	0.26	8.1	43	18.0	0.22	6.2	33	12.8	0.08	1.1	32	12.0	0.10	1.6	30	11.2	0.14	2.8	29	10.4	0.24	8.6
	1400	0.70		43	27.4	0.34	12.6	38	23.0	0.28	9.5	30	16.2	0.10	1.6	28	15.0	0.12	2.3	27	14.2	0.18	4.4	26	13.40	0.32	13.3
	700	0.34	+15	55	16.4	0.20	5.1	48	13.6	0.16	3.8	38	9.4	0.06	0.6	36	8.8	0.08	0.9	34	8.0	0.10	1.6	33	7.2	0.18	4.6
	900	0.46		51	19.8	0.24	7.1	45	16.4	0.20	5.2	35	11.2	0.06	0.8	34	10.4	0.08	1.2	32	9.6	0.12	2.2	31	8.8	0.22	6.4
	1400	0.70		46	25.4	0.32	10.9	40	21.0	0.26	8.1	32	14.0	0.08	1.2	31	13.0	0.10	1.8	30	12.2	0.14	3.3	29	11.2	0.26	9.9
	700	0.34	+20	56	15	0.18	4.4	50	12.2	0.14	3.2	39	8.0	0.04	0.4	38	7.2	0.06	0.7	36	6.6	0.08	1.2	34	6.0	0.14	3.3
	900	0.46		53	18.2	0.22	6.1	47	14.8	0.18	4.4	37	9.4	0.06	0.6	36	8.8	0.08	0.9	34	8.0	0.10	1.6	33	7.2	0.18	4.5
	1400	0.70		48	23.2	0.28	9.4	43	18.8	0.22	6.7	34	12.0	0.08	0.9	33	10.5	0.08	1.3	32	10.0	0.12	2.3	31	9.2	0.22	6.9
50	700	0.80	+10	49	37.8	0.46	12.3	43	32.0	0.38	9.4	34	23.2	0.14	1.7	32	21.6	0.18	2.4	31	20.0	0.24	4.4	29	18.4	0.44	13.1
	900	1.22		44	48.6	0.60	19.1	38	41	0.50	14.6	30	29.2	0.18	2.5	29	27.4	0.22	3.7	28	25.6	0.30	6.8	26	23.8	0.58	20.4
	1150	1.42		41	53.4	0.66	22.4	37	45	0.54	17.1	29	31.8	0.20	2.8	28	30.0	0.24	4.3	27	28.0	0.34	7.9	25	26.0	0.62	23.9
	1400	1.82		38	61.6	0.76	28.9	34	52.0	0.64	22	27	36.6	0.22	3.6	26	34.2	0.28	5.5	25	32.2	0.38	10.2	24	30.0	0.72	30.8
	700	0.80	+15	51	35.0	0.42	10.7	45	29.2	0.36	8	36	20.4	0.12	1.3	34	18.8	0.16	1.9	33	17.0	0.20	3.4	31	15.6	0.38	9.8
	900	1.22		46	45.0	0.56	16.7	41	37.4	0.46	12.4	33	25.6	0.16	1.9	31	23.6	0.18	2.8	30	21.8	0.26	5.2	29	20.0	0.48	15.2
	1150	1.42		44	49.2	0.60	19.5	39	40.8	0.50	14.5	31	27.6	0.16	2.2	30	25.8	0.20	3.3	29	23.8	0.28	6.0	28	22.0	0.52	17.8
	1400	1.82		41	57.0	0.70	25.2	37	47.2	0.58	18.6	29	31.4	0.18	2.8	29	29.4	0.24	4.2	28	27.4	0.32	7.7	27	25.4	0.60	22.9
	700	0.80	+20	53	32.2	0.40	9.3	47	26.2	0.32	6.7	38	17.4	0.10	1.0	36	15.8	0.12	1.4	35	14.2	0.18	2.4	33	12.8	0.30	6.9
	900	1.22		48	41.4	0.50	14.4	43	33.6	0.40	10.3	35	21.6	0.14	1.5	34	19.8	0.16	2.1	33	18.2	0.22	3.7	31	16.4	0.40	10.7
	1150	1.42		47	45.2	0.56	16.8	42	36.8	0.44	12.1	34	23.4	0.14	1.7	33	21.4	0.18	2.4	32	19.8	0.24	4.3	31	17.8	0.44	12.5
	1400	1.82		44	52.2	0.64	21.7	40	42.6	0.52	15.5	32	26.4	0.16	2.1	31	24.6	0.20	3.1	30	22.6	0.28	5.5	30	20.6	0.50	16.0

V_i = air volume flow, m³/s
 t_{ti} = air on temperature °C
 t_{2i} = air off temperature °C
 Q = heating capacity, kW
 qv = water flow, l/s
 dPv = pressure drop, water, kPa

Size HMP	rpm	Sound pressure level dB(A) ¹	Sound power level Lwi/octave band								Air throw m, Lo.2				Motors 3/400/50	
			125	250	500	1000	2000	4000	8000	without air cone	with air cone	Power input kW	Full load current A	Power input kW	Full load current A	
40	6Y 700	56	59	62	58	55	48	42	35	1.5	2.5	0.04	0.10	0.07	0.15	
	6A 900	62	63	67	64	61	56	50	39	2.0	3.5	0.07	0.22	0.09	0.20	
	4Y 1400	73	78	77	74	72	67	65	58	4.0	6.0	0.16	0.45	0.15	0.38	
50	6Y 700	62	69	70	64	61	53	42	26	3.0	5.0	0.14	0.45	0.15	0.32	
	6A 900	70	71	75	72	70	65	59	52	4.0	6.5	0.24	0.80	0.24	0.52	
	4Y 1150	73	73	77	75	73	68	64	42	5.0	8.5	0.46	1.00	0.39	0.68	
	4A 1400	81	80	85	81	81	77	73	65	6.0	10.0	0.64	1.40	0.59	1.27	

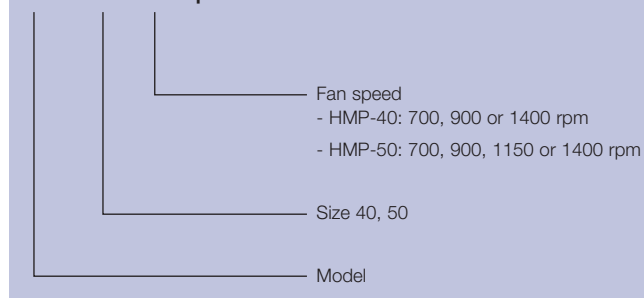
1) A-weighted sound pressure level is given in 10 m² Sabine room and observation point is 1 m distance from the middle of fan guard at 45 °C angle.

Air throw defines the straight downwards distance from the device, where air velocity is 0,2 m/s. Air on temperature +150°C and air off temperature +35°C, provided that the air flow is not obstructed.



Code description

HMP - 50 - 900 rpm



How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

