



Unit heaters





Since 1950 Sabiana has been manufacturing **hot water, superheated water and steam air heaters** for heating industrial and commercial work environments, with proprietary manufacturing technology and a wide range of solutions.

Both in Germany and Italy, the countries where the European manufacturing industry is most developed, above all regarding machinery, the most common heating system for industrial environments uses hot water air heaters connected to a central heating system. The **excellent ratio of indoor comfort to system cost**, continual improvements in efficiency of hot water production, using both condensing boilers and heat pumps, the use of specific solutions such as flow optimisers on the terminal units, as well as **flexible installation** and easy adaptation to new production plant layouts even after installation, mean that still today thousands of designers and businesses propose and adopt this heating solution.

Following increased demand for **low-cost cooling in summer**, a new generation of air heaters fitted with coils designed for use with cold water, has joined the traditional series of hot water air heaters, with the result that **a complete range of solutions** can now be offered to meet all needs.

Sabiana is currently the leading Italian manufacturer of air heaters, and every day competes with its eternal German rivals, helping spread Italian know-how throughout Europe.



All range is compliant with the new ERP 2015 Regulation (EU) No. 327/2011 which requires very low electric consumption ratings in relation to performances provided.

Atlas

Unit Heater



The **Atlas Sabiana** unit heaters have a big "heart": a coil, which has been developed, studied and constructed expressly for heating industrial environments. The increased thickness of the tubes (1 mm steel tube, 0,7 mm copper tube), their large diameter (Ø 22 mm) and the excellent ratio between the air flow and the output guarantee a long life and a high environmental comfort. The Atlas unit heaters are produced in 10 sizes from 5 to 120 kW and are available with a 1-row coil for steam and high temperature hot water installations, a 2-row coil for hot water installations and a 3-row coil for low temperature hot water installations.

The coil of Sabiana Atlas unit heaters with steel tubes Ø 22 mm and aluminium fins has the following advantages compared with the copper-aluminium small diameter tube coils: the material used for the steel tube, which is very thick (1 mm instead of 0,3 - 0,4 mm), makes the Sabiana coil extremely sturdy and long lasting. The tube's large diameter reduces the water pressure drop: this means that reduced power pumps are installed and a very rapid heating capacity is provided. The Sabiana coil for unit heaters uses a reduced number of tubes to give the same yield: this determines a low resistance to the air flow and consequently an optimum leaving air temperature and a very high throw. The greater spacing between the fins as well as their thickness facilitate cleaning and maintenance operations, which is essential to keep the unit heater efficient.

The steel tube coil is the ideal choice for plants where all tubes and equipment are made of steel because it avoids physical and chemical unbalance due to the interaction of different metals. The special painting coat makes the coil long lasting and increases the thermal output.

The Sabiana coil can be used with hot water, high temperature hot water or steam, even with a high working pressure. As a matter of fact each coil is submitted to two tests at 30 bars. However Sabiana, in order to meet any design and installation need, can offer a complete set of unit heaters with copper tubes and aluminium fins.

This coil has the same features (tube diameter, fin pitch, etc.) of the steel coil but it is built with copper tube 0,7 mm thick, of higher quality and with a total weight which is double compared with the coils normally used for unit heaters. The wide range of products includes 10 different sizes with 1, 2 or 3 rows each.

Upon request, sizes 1 to 6 are available with **the innovative electronic motors** with extremely low energy consumption, controlled by an inverter board and identified by ECM.

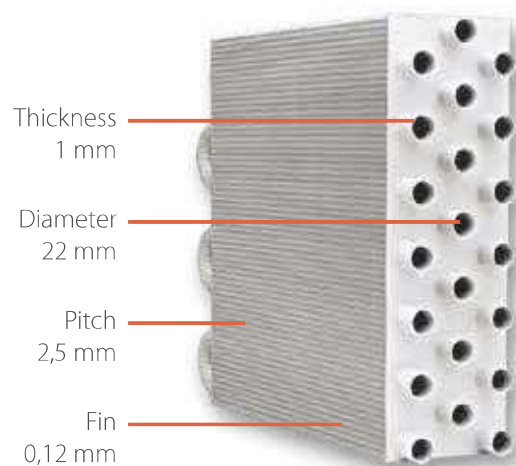
The ECM motors allow to decrease electric consumption compared to traditional asynchronous motors and they enable to adjust the air flow continuously and control the ambient temperature with precision, with further benefits in terms of very low noise levels.



- The **main casing** is manufactured from **galvanized prepainted steel** finished in a light grey colour (RAL 9002) and is assembled from three component parts.
- The **coil** is manufactured from the **highest quality steel or copper tube**. The fins are pressed from aluminium sheet, bonded onto the tubes facilitating the maximum transfer contact available.
- The **fan and motor assembly** is made up of three components: the fan, the motor and the safety guard, which also acts as the main support. The standard motor fitted is a hermetically sealed motor which is maintenance free. The motors are supplied as standard for a three phase 230/400V 50Hz supply, and they are available, according to the size, with 4/6 or 6/8 pole two speed (protection IP55) and with 4 or 6 pole one speed (protection IP44).

A **wide range** of air boxes and accessories is **available**.

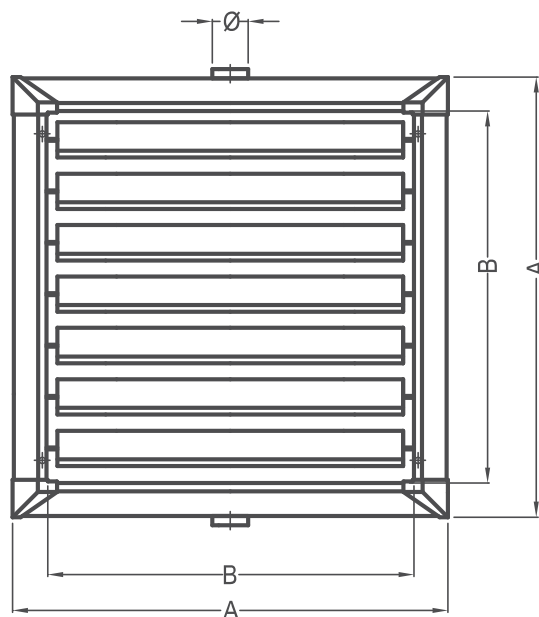
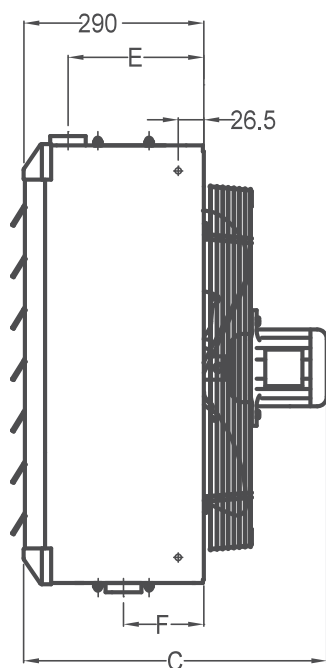
On request: special voltages and special air boxes.



Atlas identification code

Reference: **46A42 SX**

46	A	4	2	SX	SP
Motor 4/6 Pole (1350/1000 r.p.m.)	Range Atlas	Size 4	Rows 2	Coil steel tube	Coil copper tube



Size	A	B	C (C-ATEX)	D	E	F	Ø
1	472	336	465 (595)	375	220	130	1 ¼"
2	526	390	465 (595)	429	220	130	1 ¼"
3	580	444	465 (595)	483	220	130	1 ¼"
4	634	498	488 (618)	537	220	130	1 ¼"
5	688	552	488 (618)	591	220	130	1 ¼"
6	742	606	513 (643)	645	220	130	1 ¼"
7	793	657	560 (740)	696	210	140	1 ½"
8	900	764	575 (755)	803	210	140	1 ½"
9	1010	874	595 (775)	913	210	140	1 ½"
10	1117	980	640 (820)	1020	210	140	2"

Size	Weight Kg (ATEX)			Water content liters		
	1R	2R	3R	1R	2R	3R
1	19 (32)	22 (35)	24 (37)	1,3	2,6	3,9
2	22 (35)	25 (37)	27 (40)	1,6	3,2	4,8
3	26 (38)	30 (42)	33 (45)	1,9	3,8	5,7
4	30 (42)	34 (46)	38 (50)	2,3	4,6	6,9
5	33 (47)	40 (54)	44 (58)	3,0	6,0	9,0
6	38 (52)	46 (60)	51 (65)	3,5	7,0	10,5
7	46 (63)	55 (72)	61 (78)	4,3	8,2	12,3
8	55 (71)	66 (82)	73 (89)	5,8	11,1	16,6
9	65 (86)	79 (100)	88 (109)	7,6	14,5	21,8
10	79 (98)	95 (114)	106 (125)	9,6	18,2	27,3

4/6 pole models

Water temperature 85-75°C

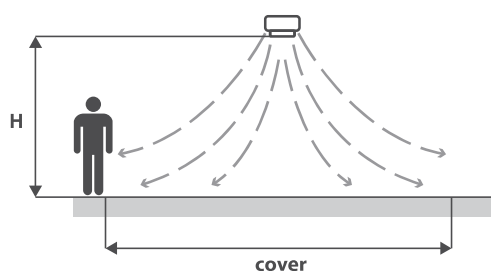
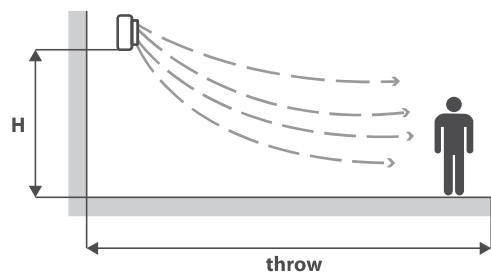
Drop 10°C - Δtm 65°C - Entering air temperature 15°C

Size	Model	Motor speed r.p.m.		Air flow m³/h		Noise level at 5 m * dB(A)		Emission W		Leaving air temp. °C	
		Poles									
		4	6	4	6	4	6	4	6	4	6
1	46A11	1350	1000	1415	1055	56	50	—	—	—	—
	46A12	1350	1000	1340	990	56	50	10,24	8,79	37,4	41,0
	46A13	1350	1000	1195	885	56	50	11,39	9,62	42,9	46,8
2	46A21	1350	1000	2190	1680	59	53	—	—	—	—
	46A22	1350	1000	2010	1570	59	53	13,95	12,36	35,3	38,0
	46A23	1350	1000	1875	1420	59	53	17,52	15,07	42,4	46,0
3	46A31	1350	1000	3325	2510	61	55	—	—	—	—
	46A32	1350	1000	2915	2255	61	55	20,85	18,44	35,9	38,9
	46A33	1350	1000	2610	2040	61	55	25,68	22,41	43,8	47,1
4	46A41	1350	1000	4415	3305	64	57	—	—	—	—
	46A42	1350	1000	3725	2745	64	57	27,86	24,06	36,9	40,6
	46A43	1350	1000	3210	2390	64	57	32,03	27,14	44,2	48,2
5	46A51	1350	1000	5770	4250	66	59	—	—	—	—
	46A52	1350	1000	4800	3500	66	59	34,89	29,94	36,3	40,0
	46A53	1350	1000	4325	3110	66	59	43,06	35,90	44,1	48,8
6	46A61	1350	1000	6590	5065	69	62	—	—	—	—
	46A62	1350	1000	5515	4160	69	62	41,76	36,36	37,2	40,6
	46A63	1350	1000	4900	3620	69	62	50,96	42,98	45,4	49,7

* The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

Size	Poles	Mounting heights			
		horizontal discharge		vertical discharge	
		height m	throw m	height max m	cover m ²
1	4	2,5÷3,5	7,5	3,5	50
	6	2,5÷3	5	3	36
2	4	3÷4	10	4	60
	6	2,5÷3,5	7	3,5	45
3	4	3÷4	13,5	5	70
	6	2,5÷3,5	10	4	50
4	4	3,5÷4,5	16	5,5	75
	6	3÷4	12	4,5	55
5	4	4÷5	18	6	90
	6	3,5÷4,5	13	5	70
6	4	4÷5,5	22	7	120
	6	4÷5	16	6	100

Mounting heights



6/8 pole models

Water temperature 85-75°C

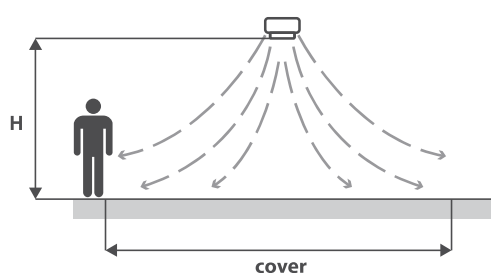
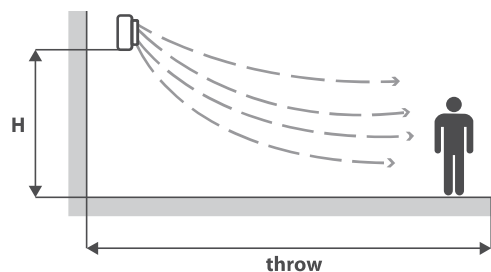
Drop 10°C - Δt_m 65°C - Entering air temperature 15°C

Size	Model	Motor speed r.p.m.		Air flow m³/h		Noise level at 5 m * dB(A)		Emission W		Leaving air temp. °C	
		Poles									
		6	8	6	8	6	8	6	8	6	8
1	68A11	900	750	970	860	48	44	—	—	—	—
	68A12	900	750	935	830	48	44	8,54	8,01	41,7	43,2
	68A13	900	750	835	740	48	44	9,29	8,65	47,5	49,2
2	68A21	900	750	1495	1170	50	46	—	—	—	—
	68A22	900	750	1410	1100	50	46	11,70	10,26	39,3	42,3
	68A23	900	750	1290	1025	50	46	14,23	12,41	47,3	50,4
3	68A31	900	750	2100	1620	52	48	—	—	—	—
	68A32	900	750	1880	1470	52	48	16,83	14,74	41,2	44,3
	68A33	900	750	1735	1320	52	48	20,39	17,28	49,4	53,3
4	68A41	900	750	2795	2195	54	50	—	—	—	—
	68A42	900	750	2345	1755	54	50	22,14	18,91	42,6	46,5
	68A43	900	750	2010	1535	54	50	24,47	20,70	50,6	54,4
5	68A51	900	750	3685	2865	56	51	—	—	—	—
	68A52	900	750	3050	2335	56	51	27,87	24,17	41,7	45,3
	68A53	900	750	2785	2100	56	51	33,58	27,27	50,3	54,4
6	68A61	900	750	4445	3550	59	54	—	—	—	—
	68A62	900	750	3710	2960	59	54	34,33	30,37	42,1	45,0
	68A63	900	750	3270	2610	59	54	40,43	35,19	51,2	54,4
7	68A71	900	750	5100	3960	65	59	—	—	—	—
	68A72	900	750	4800	3650	65	59	44,20	38,13	41,9	45,6
	68A73	900	750	4600	3500	65	59	52,35	44,50	48,3	52,2
8	68A81	900	750	7650	5400	67	61	—	—	—	—
	68A82	900	750	6900	4950	67	61	57,57	48,47	39,4	43,6
	68A83	900	750	6300	4500	67	61	70,23	57,52	47,6	52,4
9	68A91	900	750	10600	7600	68	62	—	—	—	—
	68A92	900	750	10200	7200	68	62	82,12	68,82	38,6	43,0
	68A93	900	750	9400	6400	68	62	101,49	81,06	46,6	52,1
10	68A101	900	750	12250	9215	71	65	—	—	—	—
	68A102	900	750	11800	8800	71	65	101,20	86,99	40,1	43,9
	68A103	900	750	11000	7950	71	65	124,93	102,93	48,2	52,9

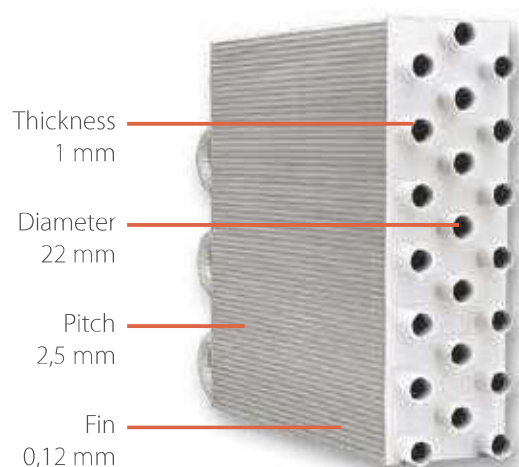
* The sound pressure levels dB(A) are measured at a distance of 5m, directional factor Q = 2, compliant with the EN 3744 standard.

Size	Poles	Mounting heights			
		horizontal discharge		vertical discharge	
		height m	throw m	height max m	cover m ²
1	6	2,5÷3	5	3	36
	8	2,5÷3	4,5	—	—
2	6	2,5÷3,5	7	3,5	45
	8	2,5÷3,5	5,5	—	—
3	6	2,5÷3,5	10	4	50
	8	2,5÷3,5	7	—	—
4	6	3÷4	12	4,5	55
	8	3÷4	8	—	—
5	6	3,5÷4,5	13	5	70
	8	3,5÷4,5	9,5	—	—
6	6	4÷5	16	6	100
	8	4÷5	12	—	—
7	6	4÷5	24	7	120
	8	3,5÷4	18	6	100
8	6	4÷5,5	26	9	160
	8	3,5÷4,5	20	7	130
9	6	4÷6	28	11	200
	8	3,5÷5	21	8	150
10	6	4÷6	30	12	220
	8	4÷5	22	9	160

Mounting heights



Unit Heater with EC Brushless Electronic Motor and Inverter Board



Sabiana Atlas series is available, for the first 6 sizes, in version with electronic motor and inverter board.

For the technical characteristics of the various components refer to Atlas Unit Heater, excluding the Electronic motor.



Electronic motor

Single phase permanent magnet brushless electronic motor (protection IP54). The inverter board that controls the motor operation is powered by single-phase and it generates a frequency modulated wave form power supply. The electric power supply required for the machine is therefore single-phase with voltage of 200 - 240 V and frequency of 50 - 60 Hz.



Helicoidal fan

The fan is made with statically and dynamically balanced plastic or aluminium blades. Its rational high-capacity profile provides the maximum air volume with the minimum energy consumption. The fan hub is secured onto the motor shaft and it is protected by a safety guard.

TECHNICAL SPECIFICATIONS



Water temperature 85-75°C - Drop 10°C - Δtm 65°C - Entering air temperature 15°C

Model		Atlas A-ECM11						Atlas A-ECM12						Atlas A-ECM13					
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5
Speed	r.p.m.	1126	1047	945	852	736	623	1126	1047	945	852	736	623	1126	1047	945	852	736	623
Air flow	m³/h	1260	1100	965	835	695	580	1155	1060	915	800	665	565	1100	1010	870	760	640	545
Thermal emission	kW	5,67	5,35	5,04	4,72	4,33	3,96	9,12	8,74	8,10	7,53	6,81	6,19	11,39	10,83	9,94	9,16	8,23	7,41
Leaving air temperature	°C	28	29	30	32	33	35	38	39	41	43	45	47	45	46	48	50	53	55
Fan	W	78,2	62,0	45,5	33,0	22,5	14,3	78,2	62,0	45,5	33,0	22,5	14,3	78,2	62,0	45,5	33,0	22,5	14,3
Sound pressure (*)	dB(A)	42,0	40,5	38,5	35,5	31,7	27,5	42,0	40,5	38,5	35,5	31,7	27,5	42,0	40,5	38,5	35,5	31,7	27,5
Horizontal discharge: height	m	2,5 ÷ 3,5						2,5 ÷ 3,5						2,5 ÷ 3,5					
Horizontal discharge: throw	m	6,5	6,0	5,5	5,0	4,5	4,0	6,0	5,5	5,0	5,0	4,5	4,0	6,0	5,5	5,0	4,5	4,5	4,0
Vertical discharge: height max.	m	3,5	3,0	2,5	—	—	—	3,0	3,0	2,5	—	—	—	3,0	3,0	2,6	—	—	—
Vertical discharge: cover	m²	40	40	35	—	—	—	40	40	35	—	—	—	40	40	35	—	—	—

Model		Atlas A-ECM21						Atlas A-ECM22						Atlas A-ECM23					
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5
Speed	r.p.m.	1124	1023	918	823	713	601	1124	1023	918	823	713	601	1124	1023	918	823	713	601
Air flow	m³/h	1790	1545	1350	1190	980	780	1650	1450	1255	1080	890	735	1580	1390	1205	1035	855	705
Thermal emission	kW	8,26	7,74	7,29	6,88	6,29	5,61	13,34	12,47	11,58	10,68	9,57	8,55	16,73	15,56	14,31	13,04	11,55	10,15
Leaving air temperature	°C	29	30	31	32	34	36	39	40	42	44	46	49	46	48	50	52	55	57
Fan	W	122,0	92,5	67,0	49,0	34,0	21,5	122,0	92,5	67,0	49,0	34,0	21,5	122,0	92,5	67,0	49,0	34,0	21,5
Sound pressure (*)	dB(A)	47,0	45,5	43,5	40,5	36,7	32,5	47,0	45,5	43,5	40,5	36,7	32,5	47,0	45,5	43,5	40,5	36,7	32,5
Horizontal discharge: height	m	2,5 ÷ 3,5						2,5 ÷ 3,5						2,5 ÷ 3,5					
Horizontal discharge: throw	m	8,0	7,0	6,5	6,0	5,5	5,0	7,5	7,0	5,7	5,5	5,0	4,5	7,0	6,5	6,0	5,5	5,0	4,5
Vertical discharge: height max.	m	4,0	3,5	3,0	—	—	—	3,5	3,5	3,0	—	—	—	3,5	3,0	3,0	—	—	—
Vertical discharge: cover	m²	50	45	45	—	—	—	45	45	45	—	—	—	40	40	40	—	—	—

Model		Atlas A-ECM31						Atlas A-ECM32						Atlas A-ECM33					
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5
Speed	r.p.m.	1126	1047	945	852	736	623	1126	1047	945	852	736	623	1126	1047	945	852	736	623
Air flow	m³/h	2620	2340	2050	1740	1475	1180	2235	2040	1830	1610	1315	1090	2075	1895	1700	1500	1220	1015
Thermal emission	kW	11,76	11,21	10,59	9,82	9,10	8,16	18,36	17,54	16,59	15,50	13,86	12,43	22,60	21,48	20,14	18,68	16,42	14,56
Leaving air temperature	°C	28	29	30	32	33	35	39	40	42	43	46	48	47	48	50	51	54	57
Fan	W	166	136	101	73	50	31,5	166	136	101	73	50	31,5	166	136	101	73	50	31,5
Sound pressure (*)	dB(A)	44,0	44,0	41,5	39,0	35,7	31,0	44,0	44,0	42,0	40,0	36,0	32,0	44,0	44,0	42,0	40,0	36,0	32,0
Horizontal discharge: height	m	2,5 ÷ 3,5						2,5 ÷ 3,5						2,5 ÷ 3,5					
Horizontal discharge: throw	m	12,0	11,0	10,0	8,5	7,5	6,5	10,5	10,0	9,0	8,0	7,0	6,5	10,0	9,5	8,5	8,0	7,0	6,0
Vertical discharge: height max.	m	4,5	4,0	4,0	3,5	—	—	4,0	4,0	3,5	3,5	—	—	4,0	3,5	3,5	—	—	—
Vertical discharge: cover	m²	60	60	55	50	—	—	60	55	50	50	—	—	55	50	50	—	—	—

Model		Atlas A-ECM41						Atlas A-ECM42						Atlas A-ECM43					
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5
Speed	r.p.m.	1059	979	893	798	692	588	1059	979	893	798	692	588	1059	979	893	798	692	588
Air flow	m³/h	3440	3210	2875	2460	2075	1680	2815	2395	2040	1710	1390	1150	2490	2120	1805	1515	1230	1020
Thermal emission	kW	15,48	15,04	14,34	13,39	12,37	11,19	23,68	21,83	20,02	18,18	16,11	14,35	28,40	25,81	23,41	20,96	18,22	16,02
Leaving air temperature	°C	28	29	30	31	32	34	40	42	44	46	49	52	48	51	53	55	58	61
Fan	W	166	131	98,5	70	48	30	166	131	98,5	70	48	30	166	131	98,5	70	48	30
Sound pressure (*)	dB(A)	45,0	45,0	42,5	40,0	36,7	32,0	45,0	45,0	42,5	40,0	36,7	32,0	45,0	45,0	42,5	40,0	36,7	32,0
Horizontal discharge: height	m	3 ÷ 4,5						3 ÷ 4,5						3 ÷ 4,5					
Horizontal discharge: throw	m	14,5	14,0	12,5	11,0	9,5	8,5	12,5	11,0	9,6	8,5	7,0	6,5	11,0	10,0	9,0	8,0	6,5	6,0
Vertical discharge: height max.	m	5,0	5,0	4,5	4,0	—	—	4,5	4,0	4,0	3,5	—	—	4,0	4,0	3,5	—	—	—
Vertical discharge: cover	m²	70	70	65	60	—	—	65	60	55	50	—	—	60	55	50	—	—	—

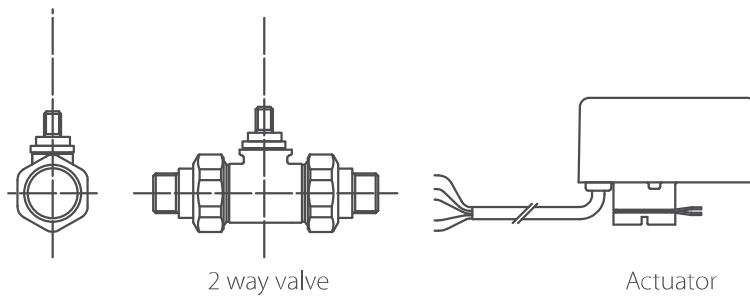
Model		Atlas A-ECM51						Atlas A-ECM52						Atlas A-ECM53					
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5
Speed	r.p.m.	1108	1108	1044	924	800	650	1108	1108	1044	924	800	650	1108	1108	1044	924	800	650
Air flow	m³/h	5130	5130	4600	4045	3340	2575	4010	4010	3695	3185	2705	2060	3455	3455	3185	2745	2330	1775
Thermal emission	kW	21,10	21,10	20,18	19,14	17,60	15,62	32,00	32,00	30,74	28,51	26,17	22,53	38,11	38,11	36,40	33,36	30,17	25,34
Leaving air temperature	°C	27	27	28	29	30	33	38	38	39	41	43	47	47	47	48	51	53	57
Fan	W	265	265	219	156	104	59	265	265	219	156	104	59	265	265	219	156	104	59
Sound pressure (*)	dB(A)	47,0	47,0	46,5	44,0	40,0	35,0	47,0	47,0	46,5	44,0	40,0	35,0	47,0	47,0	46,5	44,0	40,0	35,0
Horizontal discharge: height	m	3 ÷ 4,5						3 ÷ 4,5						3 ÷ 4,5					
Horizontal discharge: throw	m	19,0	19,0	17,0	15,0	12,6	10,0	15,0	15,0	14,0	12,0	10,5	8,0	13,0	13,0	12,0	10,5	9,0	7,0
Vertical discharge: height max.	m	6,0	6,0	5,5	5,0	—	—	5,0	5,0	5,0	4,5	—	—	5,0	5,0	4,5	4,0	—	—
Vertical discharge: cover	m²	85	85	80	80	—	—	80	80	75	70	—	—	75	75	70	65	—	—

Model		Atlas A-ECM61						Atlas A-ECM62						Atlas A-ECM63					
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5
Speed	r.p.m.	1107	1107	1053	930	798	653	1107	1107	1053	930	798	653	1107	1107	1053	930	798	653
Air flow	m³/h	5895	5895	5355	4585	3765	2910	4535	4535	4260	3590	2975	2375	3845	3845	3610	3040	2520	2010
Thermal emission	kW	25,35	25,35	24,34	22,77	20,90	18,53	38,05	38,05	36,83	33,73	30,45	26,86	44,48	44,48	42,86	38,65	34,39	29,69
Leaving air temperature	°C	28	28	28	30	31	34	40	40	40	42	45	48	49	49	50	52	55	58
Fan	W	246	246	211	148	96	59	246	246	211	148	96	59	246	246	211	148	96	59
Sound pressure (*)	dB(A)	48,0	48,0	47,5	45,0	41,0	36,0	48,0	48,0	47,5	45,0	41,0	36,0	48,0	48,0	47,5	45,0	41,0	36,0
Horizontal discharge: height	m	3 ÷ 5						3 ÷ 5						3 ÷ 5					
Horizontal discharge: throw	m	22,0	22,0	20,0	17,0	14,0	11,0	17,0	17,0	16,0	13,5	11,5	9,0	14,5	14,5	13,5	11,5	9,5	8,0
Vertical discharge: height max.	m	6,5	6,5	6,0	5,5	–	–	5,5	5,5	5,0	5,0	–	–	5,0	5,0	5,0	4,5	–	–
Vertical discharge: cover	m²	100	100	95	90	–	–	90	90	90	85	–	–	85	85	85	80	–	–

VA2V 2 way valve

Composed by:

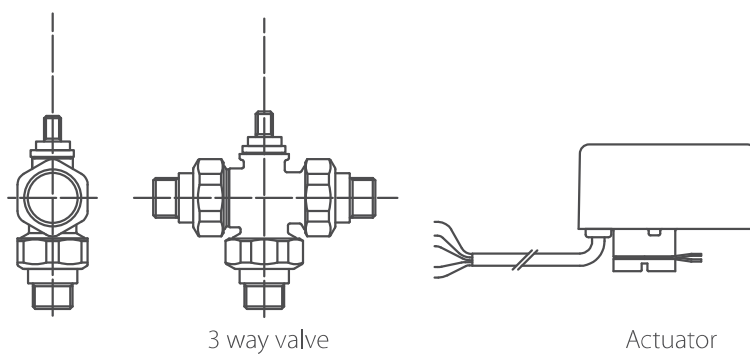
- one 2-way valve
- one ON-OFF 230V actuator



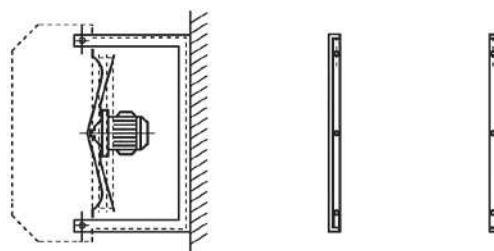
VA3V 3 way valve

Composed by:

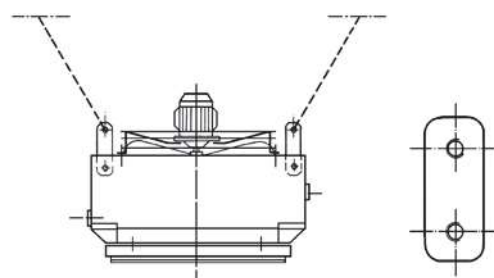
- one 3-way valve
- one ON-OFF 230V actuator



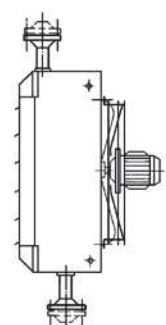
AMP Wall bracket



AS Suspension plate for ceiling installation



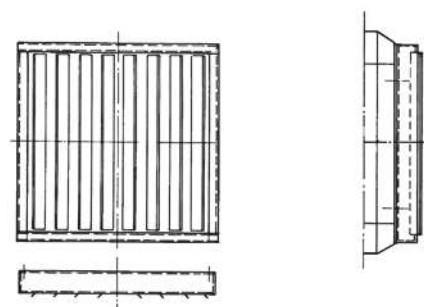
AF Flanged connections PN16 UNI 2282



AD

4 way diffuser

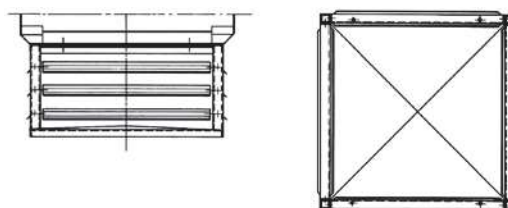
To be used when discharging downflow to create a 4 way discharge pattern
For normal heights of installation



AW4

4 way diffuser

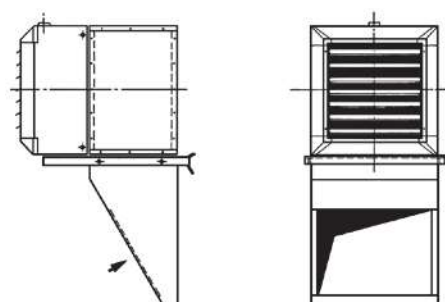
To be used when discharging downflow to create a 4 way discharge pattern
For low heights of installation



ARC

Simple intake hood fitted underneath

Wall bracket included
Prepainted steel thickness 1 mm

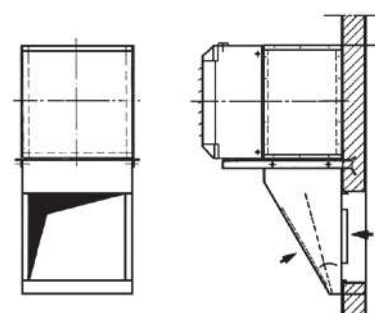


AMC

Double intake hood

with internal/external air mixing, manually controlled damper

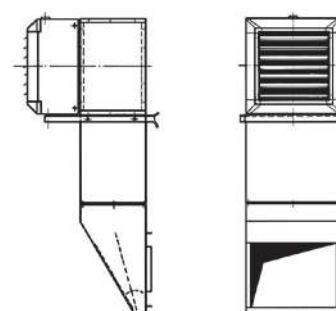
Wall bracket included
Prepainted steel thickness 1 mm



AP

Intermediate section for ARC and AMC air boxes

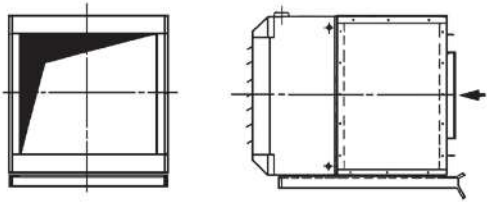
Prepainted steel thickness 1 mm



AE

Fresh air box

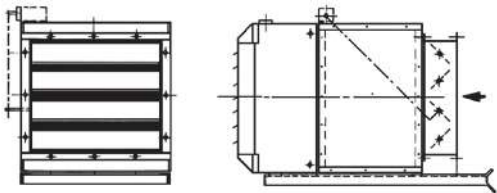
Prepainted steel thickness 1 mm



AES

Fresh air box with manually operated damper
(can be motorized by the customer)

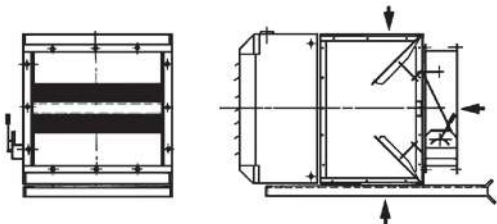
Prepainted steel thickness 1 mm



AM

Internal/external air mixing box manually
controlled

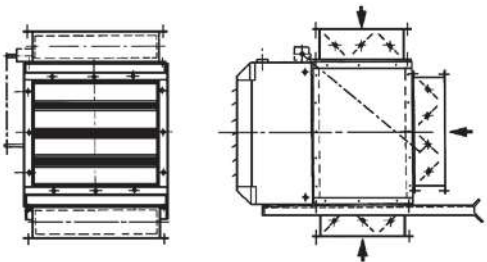
Prepainted steel thickness 1 mm



AMS

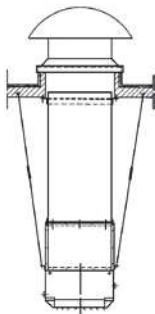
Internal/external air mixing box, manually
controlled (can be motorized by customer)

Prepainted steel thickness 1 mm

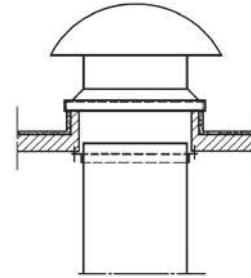


AC

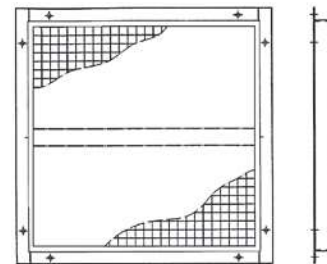
Intermediate section for AE - AES - AM - AMS
air boxes



AT Roof-mounted air intake

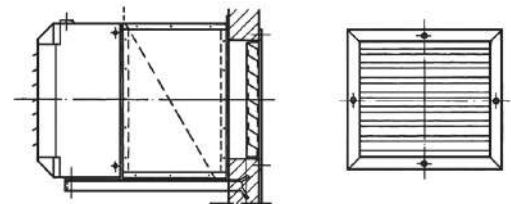


APP Ball protection grid



AG Fresh air intake grille suitable with AE - AES - AMC air boxes

Galvanized steel thickness 1 mm



• **Two speed Delta-Star motors, 4/6 or 6/8 poles, three phase, IP 55, with klixon thermic protection**

DSS

Delta-Star switch

for two speed Delta-Star motors, 4/6 or 6/8 poles



Manual two-position switch

for two speed Delta-Star motors, 4/6 or 6/8 poles

BS 2S
BS 2-ST

without thermostat
with thermostat



Multi-function automatic control panel

for two speed Delta-Star motors, 4/6 or 6/8 poles

BSA-B
BSA-A
BSA-D

without timer
with manual daily timer
with digital weekly timer



• **IP 55 motor protection**

• **Single speed flame proof motor II 2G IIB T4/T3 - compliant with the ATEX Standard**

• **Capacitor for single phase motor (not mounted)**

WALL ELECTRONIC CONTROLS FOR ATLAS ECM UNIT HEATERS SIZES 1÷6

For each unit must be provided the ADC converter for wall controls

ADCA-M	ADC signal converter for wall controls fitted on the unit	
ADC-S	ADC signal converter for wall controls supplied with separate packaging	
WM-3V	3 speed control	
WM-T	3 speed control with electronic thermostat and manual summer/ winter switch	

Remote control for industrial applications

For each unit must be provided the 4-20 mA / 0-10V signal converter

UH-ECM	EC Base Control	
UH-ECM-CNV	4-20 mA / 0-10V signal converter	
UH-ECM-RLP	Potentiometer to control the speed of the motor	
UH-ECM-NTC	NTC probe with box	

Helios

Unit Heater



The **Helios Sabiana** unit heaters, built with the same criteria of sturdiness and safety that define all Sabiana products, stand out for the splendid design of the casing, made using anodised aluminium bars and polished die-cast corners. They have the same big heart as the Atlas unit heaters: a coil that has been conceived, designed and manufactured specifically for heating industrial environments. The thickness of the pipes, standard in steel, the diameter (Ø 22 mm) and the excellent ratio between the flow-rate of air and the heat output guarantee long life and exceptional comfort.

Helios unit heaters are produced in **6 sizes** from **5 to 60 kW** and are available with a 1-row coil for steam and high temperature hot water installations, a 2-row coil for hot water installations and a 3-row coil for low temperature hot water installations.

The coil of Sabiana Helios unit heaters with steel tubes Ø 22 mm and aluminium fins has the following **advantages** compared with the copperaluminium small diameter tube coils: the material used for the steel tube, which is very thick (1 mm instead of 0,3 - 0,4 mm), makes the Sabiana coil extremely sturdy and long lasting. The tube's big diameter reduces the water pressure drop: this means that reduced power pumps are installed and a very rapid heating capacity is provided. The Sabiana coil for unit heaters uses a reduced number of tubes to give the same yield: this determines a low resistance to the air flow and consequently an optimum leaving air temperature and a very high throw.

The greater spacing between the fins as well as their thickness facilitate cleaning and maintenance operations, which is essential to keep the unit heater efficient.

The steel tube coil is **the ideal choice for plants** where all tubes and equipment are made of steel because it avoids physical and chemical unbalance due to the interaction of different metals.

The special painting coat makes the coil long lasting and increases the thermal output.

The Sabiana coil can be used with hot water, high temperature hot water or steam, even with a high working pressure. As a matter of fact each coil is submitted to two tests at 30 bars.

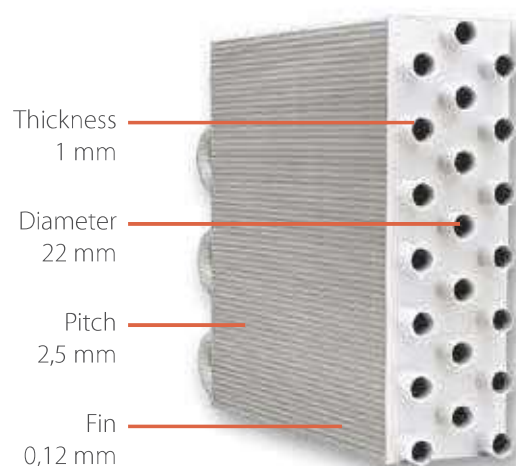
However Sabiana, in order to meet any design and installation need, can offer a complete set of unit heaters with copper tubes and aluminium fins. This coil has the same features (tube diameter, fin pitch, etc.) of the steel coil but it is built with copper tube 0,7 mm thick, of higher quality and with a total weight which is double compared with the coils normally used for unit heaters.

Upon request, all sizes are available with the **innovative electronic motors** with extremely low energy consumption, controlled by an inverter board and identified by ECM.

The ECM motors allow to decrease electric consumption compared to traditional asynchronous motors and they enable to adjust the air flow continuously and control the ambient temperature with precision, with further benefits in terms of very low noise levels.



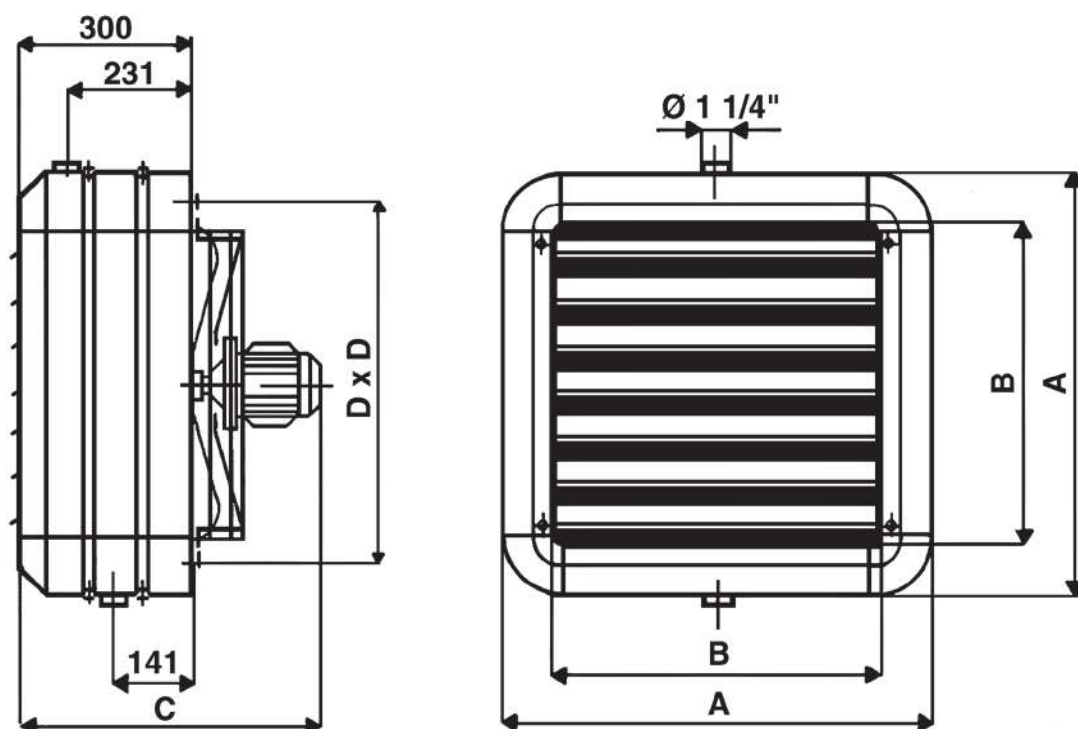
- The **main casing** is manufactured from 4 angular diecast aluminium components and lateral elements made of extruded, anodized aluminium in a silver colour.
- The **coil** is manufactured from the highest **quality steel or copper tube**. The fins are pressed from aluminium sheet and bonded onto the tubes facilitating the maximum transfer contact available.
- The **fan and motor assembly** consists of three components: the fan, the motor and the safety guard, which also acts as the main support. The standard motor is a hermetically sealed motor which is maintenance free. The motors are supplied as standard for a three phase 230/400V 50Hz supply, and they are available, according to the size, with 4/6 or 6/8 pole two speed (protection IP55) and with 4 or 6 pole one speed (protection IP44).



Helios identification code

Reference: 46H53 SX

46	H	5	3	SX	SP
Motor 4/6 pole (1350/1000 r.p.m.)	Range Helios	Size 5	Rows 3	Coil steel tube	Coil copper tube



Size	A	B	C	D
1	486	330	477	406
2	540	384	477	460
3	594	438	477	514
4	648	492	500	568
5	702	546	500	622
6	756	600	525	676

Size	Weight Kg			Water content liters		
	1R	2R	3R	1R	2R	3R
1	19	22	24	1,3	2,6	3,9
2	22	25	27	1,6	3,2	4,8
3	26	30	33	1,9	3,8	5,7
4	30	34	38	2,3	4,6	6,9
5	33	40	44	3,0	6,0	9,0
6	38	46	51	3,5	7,0	10,5

4/6 pole models

Water temperature 85-75°C

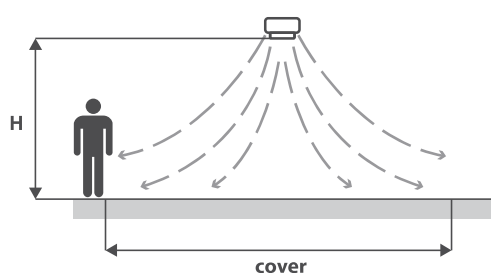
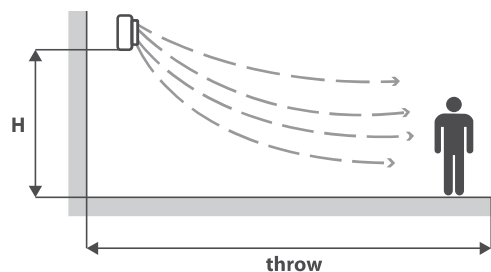
Drop 10°C - Δtm 65°C - Entering air temperature 15°C

Size	Model	Motor speed r.p.m.		Air flow m³/h		Noise level at 5 m * dB(A)		Emission W		Leaving air temp. °C	
		Poles									
		4	6	4	6	4	6	4	6	4	6
1	46H11	1350	1000	1415	1055	56	50	—	—	—	—
	46H12	1350	1000	1340	990	56	50	10,24	8,79	37,40	41,00
	46H13	1350	1000	1195	885	56	50	11,39	9,62	42,90	46,80
2	46H21	1350	1000	2190	1680	59	53	—	—	—	—
	46H22	1350	1000	2010	1570	59	53	13,95	12,36	35,30	38,00
	46H23	1350	1000	1875	1420	59	53	17,52	15,07	42,40	46,00
3	46H31	1350	1000	3325	2510	61	55	—	—	—	—
	46H32	1350	1000	2915	2255	61	55	20,85	18,44	35,90	38,90
	46H33	1350	1000	2610	2040	61	55	25,68	22,41	43,80	47,10
4	46H41	1350	1000	4415	3305	64	57	—	—	—	—
	46H42	1350	1000	3725	2745	64	57	27,86	24,06	36,90	40,60
	46H43	1350	1000	3210	2390	64	57	32,03	27,14	44,20	48,20
5	46H51	1350	1000	5770	4250	66	59	—	—	—	—
	46H52	1350	1000	4800	3500	66	59	34,89	29,94	36,30	40,00
	46H53	1350	1000	4325	3110	66	59	43,06	35,90	44,10	48,80
6	46H61	1350	1000	6590	5065	69	62	—	—	—	—
	46H62	1350	1000	5515	4160	69	62	41,76	36,36	37,20	40,60
	46H63	1350	1000	4900	3620	69	62	50,96	42,98	45,40	49,70

* The sound pressure levels dB(A) are measured at a distance of 5m, directional factor Q = 2, compliant with the EN 3744 standard.

Size	Poles	Mounting heights			
		horizontal discharge		vertical discharge	
		height m	throw m	height max m	cover m ²
1	4	2,5÷3,5	7,5	3,5	50
	6	2,5÷3	5	3	36
2	4	3÷4	10	4	60
	6	2,5÷3,5	7	3,5	45
3	4	3÷4	13,5	5	70
	6	2,5÷3,5	10	4	50
4	4	3,5÷4,5	16	5,5	75
	6	3÷4	12	4,5	55
5	4	4÷5	18	6	90
	6	3,5÷4,5	13	5	70
6	4	4÷5,5	22	7	120
	6	4÷5	16	6	100

Mounting heights



6/8 pole models

Water temperature 85-75°C

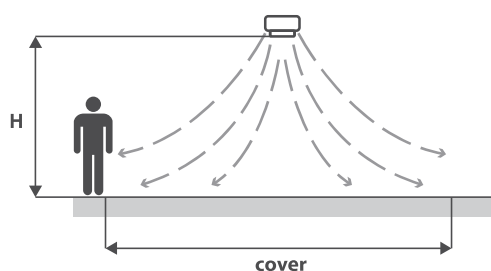
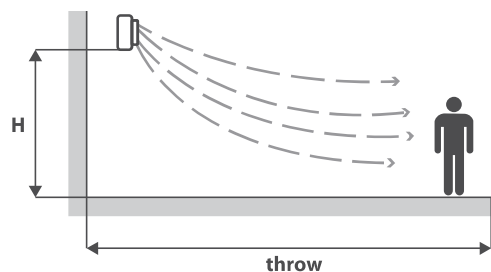
Drop 10°C - Δtm 65°C - Entering air temperature 15°C

Size	Model	Motor speed r.p.m.		Air flow m³/h		Noise level at 5 m * dB(A)		Emission W		Leaving air temp. °C	
		Poles									
		6	8	6	8	6	8	6	8	6	8
1	68H11	900	750	970	860	48	44	—	—	—	—
	68H12	900	750	935	830	48	44	8,54	8,01	41,70	43,20
	68H13	900	750	835	740	48	44	9,29	8,65	47,50	49,20
2	68H21	900	750	1495	1170	50	46	—	—	—	—
	68H22	900	750	1410	1100	50	46	11,70	10,26	39,30	42,30
	68H23	900	750	1290	1025	50	46	14,23	12,41	47,30	50,40
3	68H31	900	750	2100	1620	52	48	—	—	—	—
	68H32	900	750	1880	1470	52	48	16,83	14,74	41,20	44,30
	68H33	900	750	1735	1320	52	48	20,39	17,28	49,40	53,30
4	68H41	900	750	2795	2195	54	50	—	—	—	—
	68H42	900	750	2345	1755	54	50	22,14	18,91	42,60	46,50
	68H43	900	750	2010	1535	54	50	24,47	20,70	50,60	54,40
5	68H51	900	750	3685	2865	56	51	—	—	—	—
	68H52	900	750	3050	2335	56	51	27,87	24,17	41,70	45,30
	68H53	900	750	2785	2100	56	51	33,58	27,27	50,30	54,40
6	68H61	900	750	4445	3550	59	54	—	—	—	—
	68H62	900	750	3710	2960	59	54	34,33	30,37	42,10	45,00
	68H63	900	750	3270	2610	59	54	40,43	35,19	51,20	54,40

* The sound pressure levels dB(A) are measured at a distance of 5m, directional factor Q = 2, compliant with the EN 3744 standard.

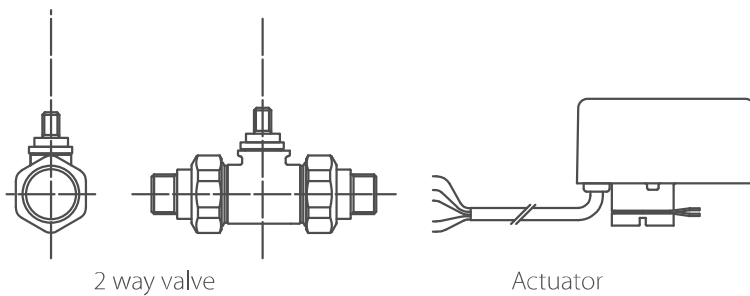
Size	Poles	Mounting heights			
		horizontal discharge		vertical discharge	
		height m	throw m	height max m	cover m ²
1	6	2,5÷3	5	3	36
	8	2,5÷3	4,5	–	–
2	6	2,5÷3,5	7	3,5	45
	8	2,5÷3,5	5,5	–	–
3	6	2,5÷3,5	10	4	50
	8	2,5÷3,5	7	–	–
4	6	3÷4	12	4,5	55
	8	3÷4	8	–	–
5	6	3,5÷4,5	13	5	70
	8	3,5÷4,5	9,5	–	–
6	6	4÷5	16	6	100
	8	4÷5	12	–	–

Mounting heights



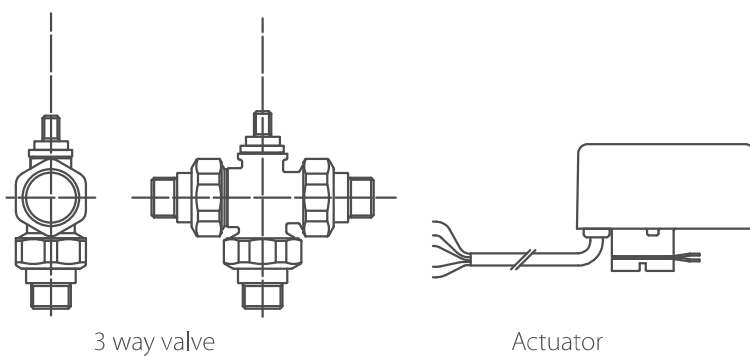
VA2V 2 way valve

- Composed by:
- one 2-way valve
 - one ON-OFF 230V actuator

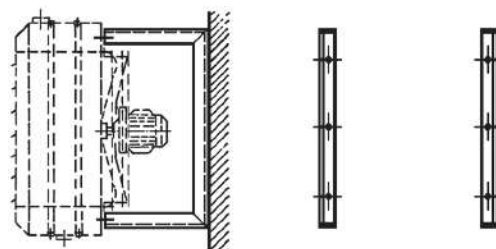


VA3V 3 way valve

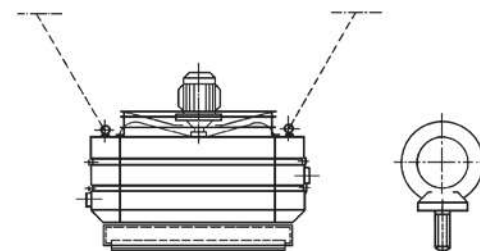
- Composed by:
- one 3-way valve
 - one ON-OFF 230V actuator



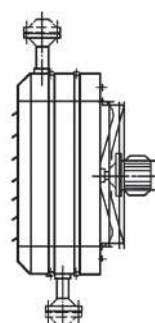
HMP Wall bracket



HS Suspension plate for ceiling installation



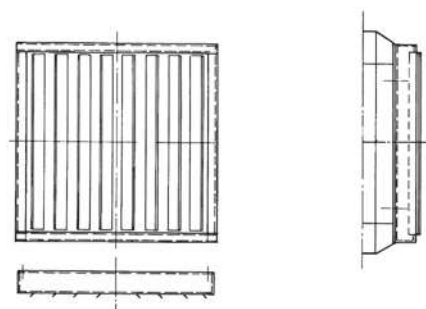
HF Flanged connections PN16 UNI 2282



AD

4 way diffuser

To be used when discharging downflow to create a 4 way discharge pattern.
For normal heights of installation



Controls and special motors

- Two speed Delta-Star motors, 4/6 or 6/8 poles, three phase, IP 55, with klixon thermic protection

DSS

Delta-Star switch

for two speed Delta-Star motors, 4/6 or 6/8 poles



Manual two-position switch

for two speed Delta-Star motors, 4/6 or 6/8 poles

- **BS 2S** without thermostat
- **BS 2-ST** with thermostat



Multi-function automatic control panel

for two speed Delta-Star motors, 4/6 or 6/8 poles

- **BSA-B** without timer
- **BSA-A** with manual daily timer
- **BSA-D** with digital weekly timer



- **IP 55 motor protection**

- **Capacitor for single phase motor (not mounted)**

Jetstream

Induction Flow Optimizer



The Atlas, Helios, Atlas ECM and Janus 05 unit heaters can be supplied with the innovative **Jetstream** induction flow optimiser, in the manual version or the motorised version for wall-hung or ceiling installation. The lower outlet temperature of the air from the units means less stratification of the hot air in the building and less operating time for the same ambient temperature.

In addition, the increased air throw means greater uniformity of the temperature at floor level, with an expansion of the comfort zone, and consequently the possibility to install smaller and more silent appliances.



The use of the **Jetstream** induction flow optimizer has the following advantages:

a) Energy saving:

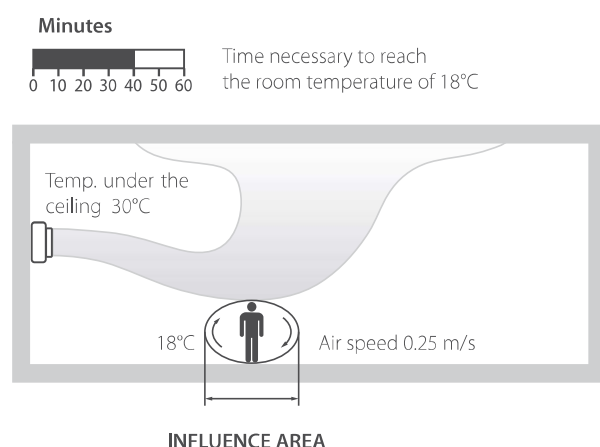
- reduced hot air stratification within the building.
- reduced operating time of the units with the same ambient temperature.

Energy saving varies between a minimum of 5% and a maximum of 15%, with maximum amortization in two seasons.

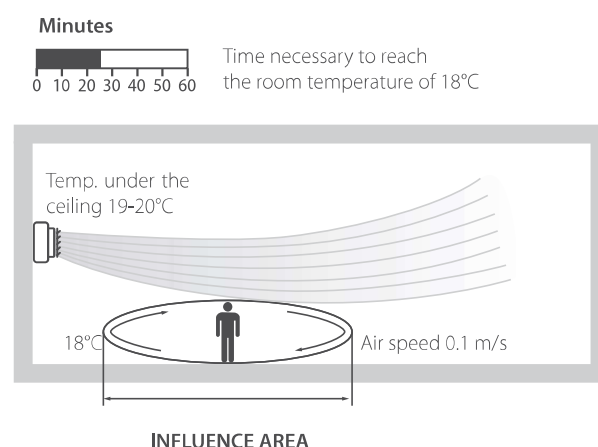
b) Environment comfort advantages:

- increased floor-temperature uniformity with greater comfort area.
- possibility to install smaller and quieter units, due to the increase of the throw.

Air flow produced by a unit heater without induction flow optimizer



Air flow produced by a unit heater with induction flow optimizer



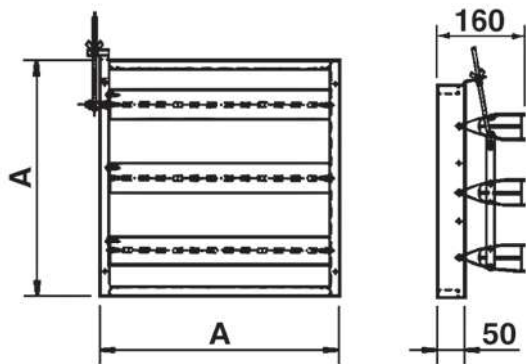
Four versions are available:

- Manual for wall installation (all sizes)
- Manual for ceiling installation (all sizes)
- Motorized for wall installation (sizes 1÷7 only)
- Motorized for ceiling installation (all sizes)

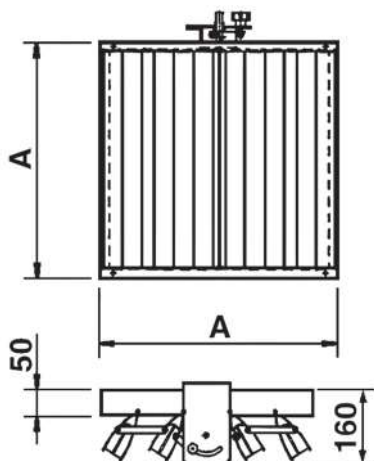
The manually controlled version calls for manual orientation of the fins and for them to be locked using a special threaded rod.

The motorized version is supplied with single phase motor that can be controlled by the remote switch.

O (horizontal discharge)



V (vertical discharge)



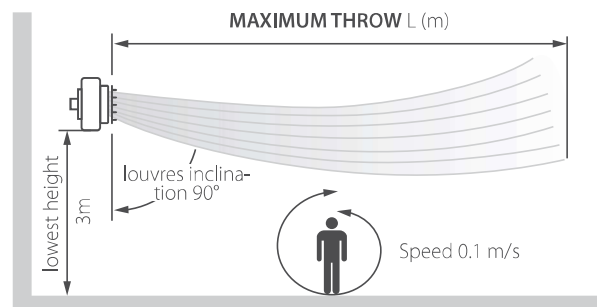
Model		A mm	Weight Kg
O - 1	V - 1	368	1,4
O - 2	V - 2	422	1,7
O - 3	V - 3	476	1,8
O - 4	V - 4	530	2,0
O - 5	V - 5	584	2,2
O - 6	V - 6	638	2,4
O - 7	V - 7	793	2,6
O - 8	V - 8	900	3,0
O - 9	V - 9	1010	3,4
O - 10	V - 10	1117	3,7

Controls

Remote switch

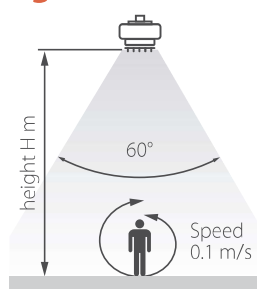


A wall installation for horizontal discharge

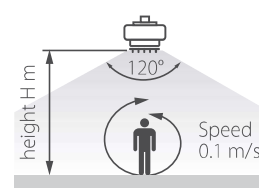


Sabiana unit heater Size	Maximum throw L (m)					
	without Jetstream			with Jetstream		
	4P	6P	8P	4P	6P	8P
1	7,5	5	4,5	12	8	-
2	10	7	5,5	16	11	-
3	13,5	10	7	18	14	-
4	16	12	8	20	15	-
5	18	13	8	23	16	-
6	22	16	12	28	20	-
7	-	24	18	-	28	22
8	-	26	20	-	32	25
9	-	28	21	-	34	26
10	-	30	22	-	37	28

B ceiling installation for vertical discharge



THROW 30° every side



THROW 60° every side

Sabiana unit heater Size	Installation height H (m)								
	without Jetstream			with Jetstream a 60°			with Jetstream a 120°		
	4P	6P	8P	4P	6P	8P	4P	6P	8P
1	4	3	-	5,5	4	-	4	3	-
2	4,5	3,5	-	8	6,5	-	5	4	-
3	5	4	-	11	8	-	6,5	5,5	-
4	5,5	4,5	-	12	9	-	6,5	5,5	-
5	6	5	-	13	10	-	7	6	-
6	7	6	-	14	12	-	8	7	-
7	-	7	6	-	13	11	-	8	7
8	-	9	7	-	15	12	-	10	8
9	-	11	8	-	18	13	-	13	9
10	-	12	9	-	19	14	-	14	10

Aix

Stainless Steel Unit Heater



AIX Sabiana unit heaters are made with stainless steel structures and coils with stainless steel pipes and flanged fittings, and aluminium fins. They are available in four sizes, for a total of eight models. These units can be supplied with hot water, high-temperature hot water and steam.

They are especially suitable for working environments in which these types of system configurations are required.



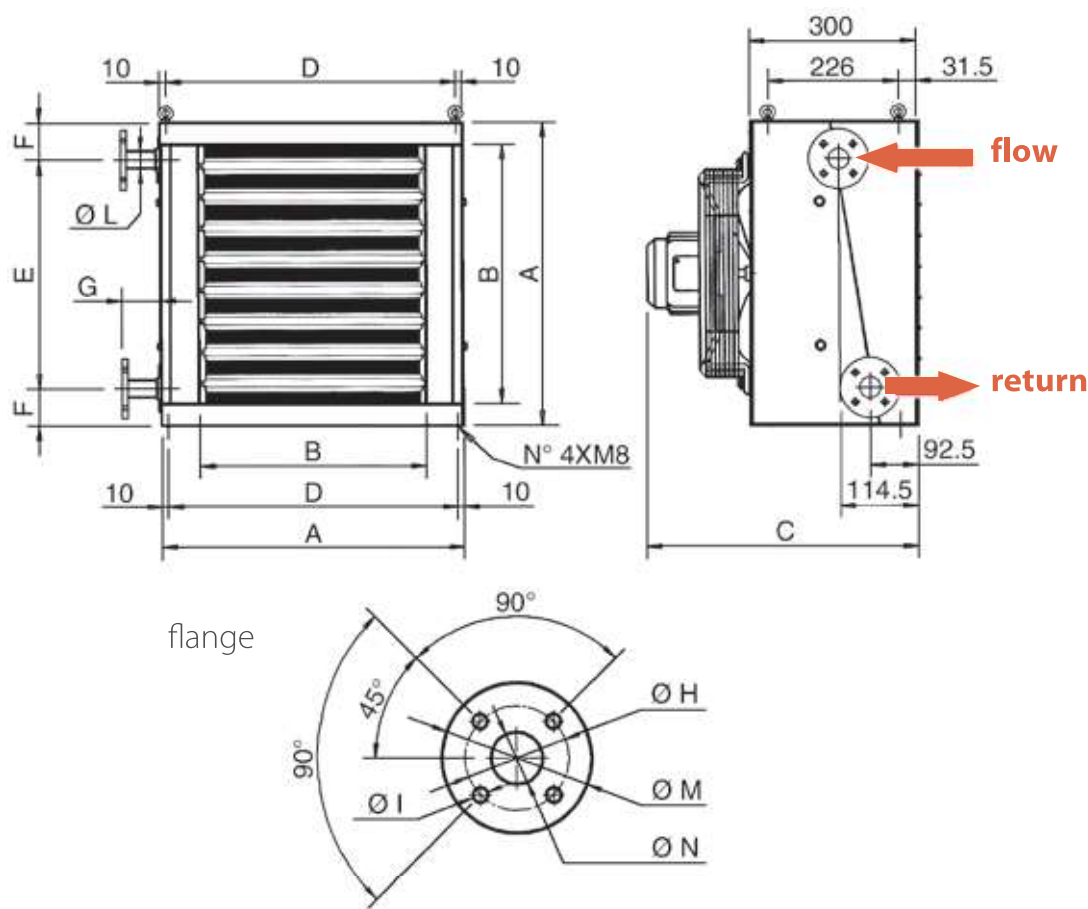
- The **main casing** is manufactured from AISI 304 stainless steel, 1 mm thick.
- The **adjustable louvres** are held firm by spring loaded pivots and they are mounted in horizontal position on the front part of the unit.
- **Coil:** the fins are pressed from aluminium sheet, bonded onto the AISI 304 stainless steel tubes facilitating the maximum transfer contact. The AIX units are supplied with flanged connections.
- The **standard motor** is hermetically sealed and is maintenance free. The motor is 2 speeds, 3 phase, single voltage, 400V 50Hz, protection IP55, with klixon thermal protection.



AIX identification code

Reference: **46I42**

46	I	4	2
Motor 4/6 pole (1350/1000 r.p.m.)	Range Aix	Size 4	Rows 2



Model	A	B	C	D	E	F	G	ØH	ØI	ØL	ØM	ØN
46 I 21-22	526	393	468	506	330	98	66	65	14	1 ½"	95	15
46 I 41-42	636	501	468	616	497	69.5	66	85	14	1"	115	25
46 I 61-62	743	609	468	723	588	77.5	56	100	18	1 ¼"	140	32
68 I 91-92	1011	877	576	991	832	89.5	87	110	18	1 ½"	150	40

Model	Weight Kg		Water content liters	
	1R	2R	1R	2R
46 I 21-22	26	30	1,7	2,5
46 I 41-42	33	38	2,9	4,2
46 I 61-62	45	51	5,3	5,9
68 I 91-92	82	92	8,2	12

Heating emission

Model		46 I 21		46 I 41		46 I 61		68 I 91	
Mounting height	m	2.5 ÷ 4		3 ÷ 4.5		3 ÷ 5		3.5 ÷ 5.5	
Speed	r.p.m.	1350	1000	1350	1000	1350	1000	900	700
Air flow	m³/h	2300	1500	3900	2600	6900	4400	10200	7600
Throw	m	11	7.5	16	12	25	18	28	21
Noise level at 5 m (*)	dB(A)	59	51	64	54	69	60	68	62
Steam 3 bars	kW	14,30	11,90	23,40	19,80	37,00	31,00	68,40	60,50
Entering air temperature +15°C	Leaving air temp. °C	33,3	38,3	32,6	37,4	30,8	35,7	34,7	38,4
Steam 6 bars	kW	16,50	13,80	27,00	22,90	42,70	35,90	79,00	70,00
Entering air temperature +15°C	Leaving air temp. °C	36,1	42	35,4	40,9	33,2	39	37,8	42,1

Modello		46 I 22		46 I 42		46 I 62		68 I 92	
Mounting height	m	2.5 ÷ 4		3 ÷ 4.5		3 ÷ 5		3.5 ÷ 5.5	
Speed	r.p.m.	1350	1000	1350	1000	1350	1000	900	700
Air flow	m³/h	2100	1400	3600	2400	6300	4100	9200	7000
Throw	m	11	7.5	16	12	25	18	28	21
Noise level at 5 m (*)	dB(A)	59	51	64	54	69	60	68	62
Water temperature 85/75°C	kW	13,00	10,60	21,10	17,20	36,50	29,30	59,20	51,40
Entering air temperature +15°C	Leaving air temp. °C	33,2	37,3	32,2	36,1	32	36	33,9	36,6
Water temperature 130/100°C	kW	18,90	15,40	302,00	247,00	533,00	43,00	841,00	74,00
Entering air temperature +15°C	Leaving air temp. °C	41,5	47,3	39,7	45,3	39,9	45,8	41,9	46,1

(*) = The sound pressure levels dB(A) are measured at a distance of 5m, directional factor Q = 2, compliant with the EN 3744 standard.

Controls

DSS **Delta-Star switch**
for two speed Delta-Star motors, 4/6 or 6/8 poles.

Manual two-position switch
for two speed Delta-Star motors, 4/6 or 6/8 poles.

BS 2S without thermostat
BS 2-ST with thermostat

Multi-function automatic control panel
for two speed Delta-Star motors, 4/6 or 6/8 poles.

BSA-B without timer
BSA-A with manual daily timer
BSA-D with digital weekly timer

Atlas STP

Door Curtain Unit



The **Atlas STP** door curtain units, supplied with hot water, are fitted with special diffusers that create a curtain of hot air. Installed above the door, they deliver a constant vertical flow of air, representing a barrier that, by thermodynamic effect, stops the infiltration of air from the outside, and mixes the residual cold currents. Available in three sizes, with two speed and 1, 2, 3 row coils.

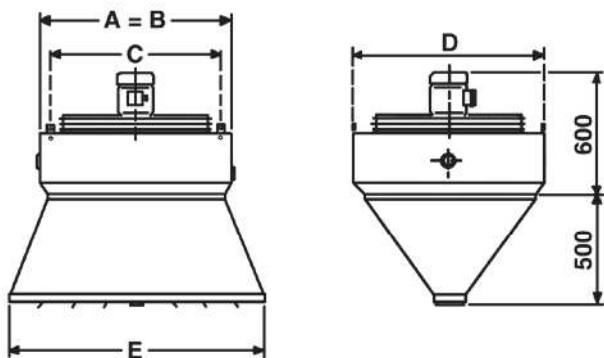
- The **main casing** is **manufactured from galvanized prepainted steel** finished in light grey colour (RAL 9002), and is assembled from three component parts, which are assembled using self-tapping screws in order to allow quick maintenance on the coil.
- **Fishtail diffuser** produced from steel sheet with manually adjustable louvres for individual requirements.
- Coil manufactured from high quality steel or copper tube 22 mm of diameter to reduce resistance with mechanically bonded aluminium fins for high efficient heat transfer. Available in 1, 2 or 3 rows.
- **The fan** consists of aluminium helicoidal blades statically and dynamically balanced with a cast alloy hub, keyed into the motor shaft and mounted onto the casing with antivibration rubber mounting blocks. The motor is supplied as standard for a three phase, 400V 50Hz, class B, IP55, 6/8 poles two speed: 900 r.p.m. (6 poles) or 700 r.p.m. (8 poles).

Identification code

Reference: **68A71 SX / STP**

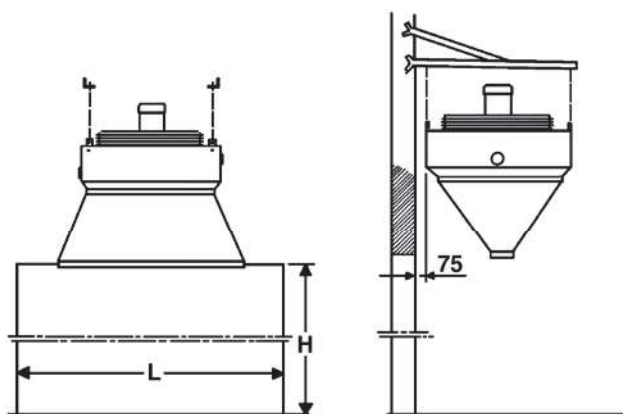
68	A	7	1	SX	SP	/ STP
Motor 6/8 pole	Range Atlas	Size 7	Rows 1	Coil steel tube	Coil copper tube	Type STP





Size	Dimensions				Rows	Weight	Water content
	A=B	C	D	E			
	mm						
7	793	696	793	1000	1	62	4,3
					2	70	8,2
					3	76	12,3
8	900	803	900	1200	1	75	5,8
					2	86	11,1
					3	93	16,6
9	1010	913	1010	1400	1	90	7,6
					2	104	14,5
					3	113	21,8

Correct selection of the door curtain



Size	Motor pole	Door height H (m)	Door width L (m)
7	6	3,0 ÷ 4,0	1,5
8	6	3,5 ÷ 4,5	2,0
9	6	4,5 ÷ 5,5	2,5
7	8	2,5 ÷ 3,0	1,5
8	8	3,0 ÷ 3,5	1,8
9	8	3,5 ÷ 4,5	2,0

Entering air temperature 15°C

Size	Model							Emission							
								Water temperature 85-70°C				Water temperature 140-100°C			
		Motor speed r.p.m.	Air flow m³/h	Noise level at 5 m * dB(A)	kW		Leaving air temperature °C		kW		Leaving air temperature °C				
		Poles													
6	8	6	8	6	8	6	8	6	8	6	8	6	8	6	8
7	68A71/STP	900	750	4435	3440	69	63	—	—	—	—	39,42	35,03	41,0	44,8
	68A72/STP	900	750	4175	3175	69	63	38,15	32,87	41,7	45,3	62,72	54,06	59,0	64,8
	68A73/STP	900	750	4000	3045	69	63	44,87	38,06	47,8	51,5	—	—	—	—
8	68A81/STP	900	750	6655	4700	69	64	—	—	—	—	50,62	43,35	37,2	42,0
	68A82/STP	900	750	6000	4300	69	64	49,08	41,20	38,9	43,0	80,12	67,29	54,1	60,8
	68A83/STP	900	750	5480	3915	69	64	59,42	48,49	46,7	51,2	—	—	—	—
9	68A91/STP	900	750	9220	6610	70	65	—	—	—	—	70,80	61,10	37,5	42,0
	68A92/STP	900	750	8870	6260	70	65	70,79	59,10	38,3	42,6	116,23	96,92	53,3	60,3
	68A93/STP	900	750	8170	5560	70	65	86,68	69,00	46,0	51,3	—	—	—	—

* = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

No-Strat

Anti-stratification and Heat Economiser Unit



No-Strat, an anti-air-stratification unit, recirculates the hot air downwards, hot air that in large spaces heated with warm air (for example, using hot air generators) tends to stratify towards the top. The temperature controller fitted on the appliance can be used to set the air temperature at which the **No-Strat** starts operation. In addition, it can be used to increase the recirculation air rate and improve the uniformity of the ambient temperature.

The series includes 8 models, with flow-rates from 3.500 to 14.000 m³/h.

- The **casing** is manufactured from galvanised prepainted steel sheet (1 mm thick) finished in light grey colour (RAL 9002). The adjustable louvres are held firm by spring loaded pivots.
- The fan assembly is made up of the **aluminium helicoidal fan**, the safety guard support and the three phase V400/3 electric motor with 4 or 6 poles, protection IP44.
- A **room thermostat** is mounted on the unit for the automatic on/off switching of the motor in accordance with the temperature under the ceiling.
- **3-phase power switch** V400/3 with built-in overload protection.



No-Strat

DIMENSIONS AND WEIGHT

- 1

Three phase electric motor
- 2

Motor support with safety guard
- 3

Aluminium fan
- 4

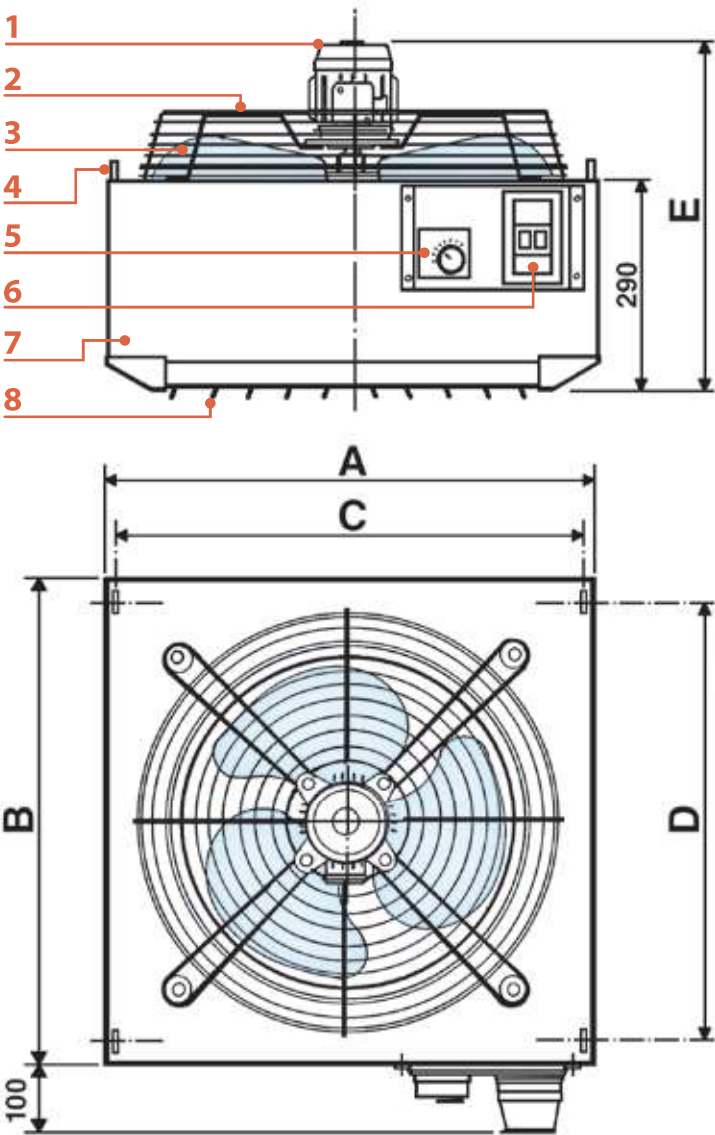
Brackets
- 5

Ambient thermostat
- 6

Switch with thermal relay
- 7

Galvanised and prepainted steel case
- 8

Adjustable louvres



Model		A	B	C	D	E	Weight kg
DNS-450/4	DNS-450/6	634	634	629	537	488	20
DNS-500/4	DNS-500/6	688	688	683	591	488	23
DNS-550/4	DNS-550/6	742	742	737	645	513	25
-	DNS-650/6	900	900	895	803	575	33
-	DNS-750/6	1010	1010	1005	913	595	42

Model	Motor speed r.p.m.	Air flow m ³ /h	Installation height m	Surface m ²	Noise level at 5 m * dB(A)
DNS-450/4	1400	4300	4,5 ÷ 6,5	100	61
DNS-450/6	900	2800	3,5 ÷ 6	60	52
DNS-500/4	1400	5500	5 ÷ 8	150	66
DNS-500/6	900	3750	4 ÷ 8	90	56
DNS-550/4	1400	6300	6,5 ÷ 9	200	69
DNS-550/6	900	4600	5 ÷ 8,5	120	60
DNS-650/6	900	9100	6,5 ÷ 11	300	67
DNS-750/6	900	13200	7 ÷ 13	400	68

(*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

Comfort

Circular Unit Heater



Comfort Sabiana circular unit heaters, for ceiling installation only, are especially suitable for high rooms, even if the optimum ratio between the air flow-rate and the heat output make them suitable for any manufacturing environment.

The large coil and the fan downstream of the coil ensure optimum mixing of the air in the environment, meaning less stratification of the hot air than with traditional unit heaters.

Two different diffusers ensure perfect control of the air flow, with the possibility on the more common diffusers to tilt each louvre in the desired direction.

The Comfort unit heaters are made in 10 sizes, with heat outputs from 17 to 107 kW, and one or two speeds motors.

- The **casing** is made of spun steel on both top and bottom sections which is designed to give greater strength and quieter operation. The casing is then finished with an epoxy, polyester powder coating of light grey, RAL 9002.
- The **circular coil** is constructed of copper tubes with aluminium fins.
- The **helicoidal fan** is statically and dynamically balanced, the rational high-capacity profile provides maximum air volume with a minimum power consumption.
- **Standard motors are three phase 400 V**, closed frame, flange mounted, pre-greased bearings. Available with single speed at 4 and 6 pole (IP44), with double speed double wiring at 4/6 pole (IP44) or with two speed Delta-Star motors at 6/8 pole (IP55).

On request:

- **Flanged connections.**
- **Steam execution.**



Comfort

Comfort identification code

Reference: 6Z-415

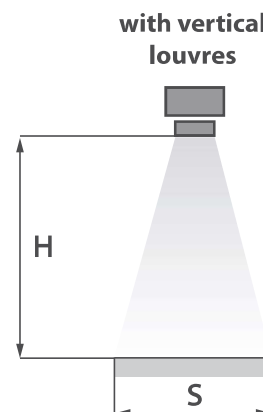
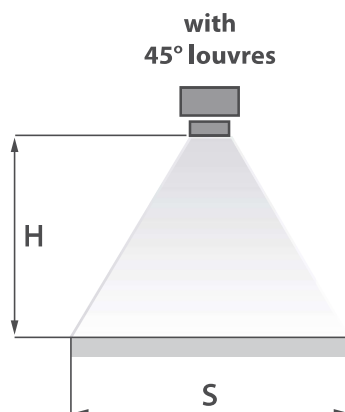
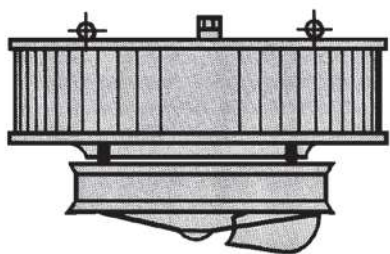
6	Z	4	15
Motor 6 pole (900 r.p.m.)	Range Comfort	Size 4	N° of circuits



This is the most commonly used model; made of eight separately adjustable large louvers, shaped so as to be able to cover the whole outlet area and therefore adaptable for minimum to maximum heights.

This diffuser allows the air to be directed more easily to the areas where it is required most, or conversely, if you do not require air to one particular corner you can close down one, two or three vanes and restrict the distribution.

Mounting heights and area of air distribution



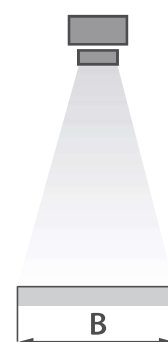
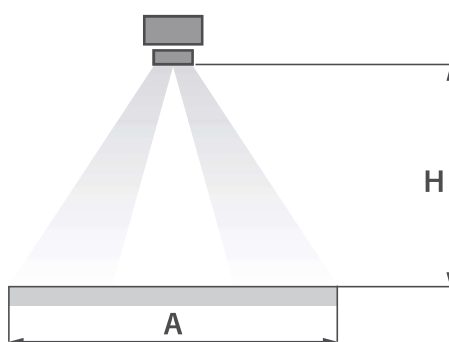
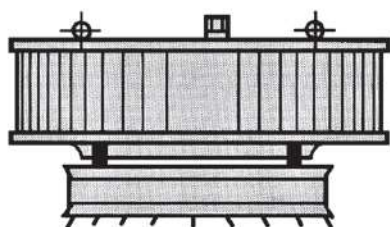
Size	1400 r.p.m. motor speed			
	45° louvres		Vertical louvres	
	H suggested m	S diameter m	H suggested m	S diameter m
0	3÷5	15÷21	4÷6	7,5÷10,5
1	3,5÷5,5	16,5÷21	4,5÷6,5	9÷12
2	4÷6	18÷25,5	5÷7	10,5÷13,5
3	4÷6,5	18÷27	5,5÷8	10,5÷15
4	4÷7	18÷28,5	6÷9	10,5÷16,5
5	–	–	–	–
6	–	–	–	–
7	–	–	–	–
8	–	–	–	–
9	–	–	–	–

	900 r.p.m. motor speed			
	45° louvres		Vertical louvres	
	H suggested m	S diameter m	H suggested m	S diameter m
	2,5÷4	10,5÷16,5	3,5÷5	6÷9
	3÷4,5	12÷18	4÷5,5	7,5÷10,5
	3÷5	12÷19,5	4,5÷6,5	9÷12
	3,5÷5,5	15÷22,5	5÷7	9÷13,5
	3,5÷6	15÷24	5,5÷8	10,5÷15
	4÷6,5	16,5÷25,5	5,5÷8,5	10,5÷15
	4÷8	16,5÷28,5	6÷10	12÷18
	4÷8	16,5÷28,5	6÷10	12÷18
	5÷11	18÷31,5	6,5÷14	13,5÷19,5
	5÷11	18÷33	6,5÷14	13,5÷21



It is designed to give a two way or corridor distribution, suitable for corridor or gangway areas, between storage racks etc., generally mounted at any height depending upon the length of corridor required.

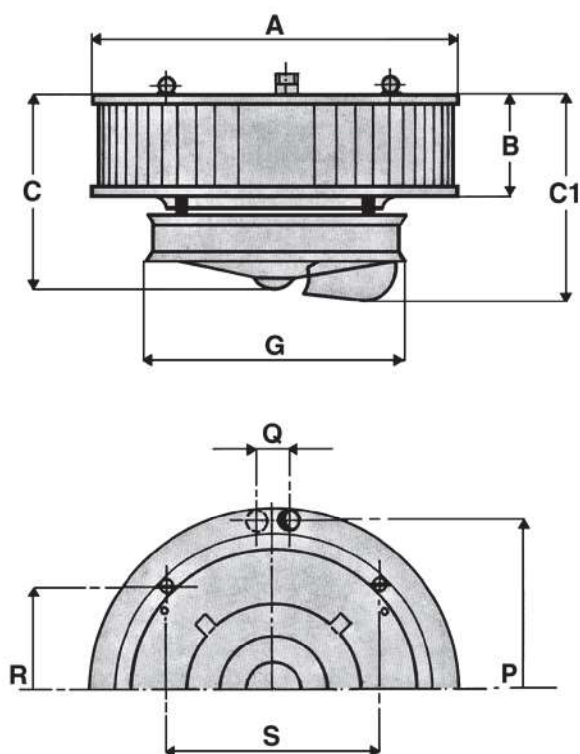
Mounting heights and area of air distribution



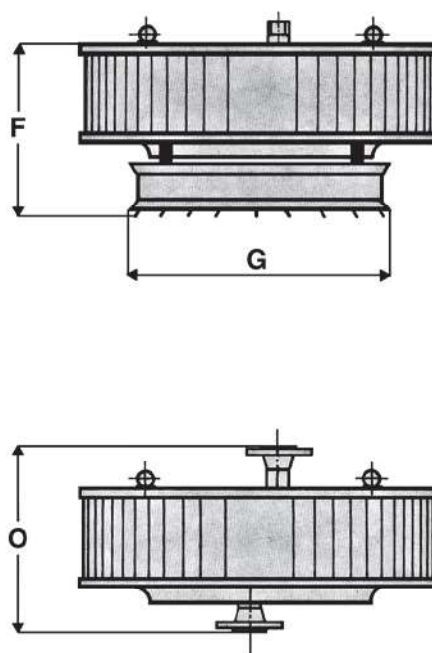
Size	1400 r.p.m. motor speed	
	H suggested m	Zone m A ÷ B
0	3÷6	15x6÷10x4
1	3÷6	16x7÷10x5
2	3,5÷7	18x8 ÷14x5
3	3,5÷8	20x10÷14x6
4	4÷9	22x10÷15x7
5	–	–
6	–	–
7	–	–
8	–	–
9	–	–

900 r.p.m. motor speed	
H suggested m	Zone m A ÷ B
2,5÷5	13x5÷9x4
2,5÷5	14x6÷10x4
3÷6	16x7÷10x4
3÷6,5	17x8÷13x5
3,5÷7	20x10÷15x5
4÷8	22x10÷16x5
4÷10	24x10÷18x6
4÷11	24x11÷20x8
6÷15	26x12÷22x10
6÷15	26x12÷22x10

DRA



T2



Version with PN 16 flanges

Size	A	B	C	C1	F	G	O	P	Q	R	S	Connections Ø	Weight kg	Water content Liters
0	680	180	430	560	380	560	331	612	62	350	350	1 ¼"	31	1,2
1	780	180	430	560	380	560	331	702	62	421	421	1 ¼"	36	1,3
2	780	280	530	660	480	560	431	702	62	421	421	1 ¼"	42	1,9
3	880	280	530	700	480	660	435	802	68	491	491	1 ½"	52	2,4
4	880	380	630	760	580	660	535	802	68	491	491	1 ½"	58	3,2
5	1080	380	630	870	580	760	539	1005	80	755	440	2"	75	4,3
6	1080	455	705	945	655	760	614	1005	80	755	440	2"	85	5,2
7	1080	555	805	1045	755	760	714	1005	80	755	440	2"	95	5,9
8	1080	555	815	1055	765	760	714	1005	80	755	440	2"	97	5,9
9	1080	605	865	1105	815	760	765	1005	80	755	440	2"	106	6,5

The units with steam coils are supplied with connections for welding; on request they can be supplied with flanges.

Water temperature 85-75°C
Drop 10°C - Δtm 65°C - Entering air temperature 15°C

Size	Motor speed r.p.m.	Model ref.	Air flow m³/h	Noise level at 5 m (*) dB(A)	Emission W	Leaving air temperature °C
0	1400	4Z-007	3.000	56	24.400	39
1	1400	4Z-107	3.400	60	28.400	39
2	1400	4Z-211	5.100	63	41.800	39
3	1400	4Z-311	6.000	65	48.800	39
4	1400	4Z-415	7.800	66	64.400	39
0	900	6Z-007	2.000	48	19.100	43
1	900	6Z-107	2.400	52	22.100	42
2	900	6Z-211	3.700	54	32.700	41
3	950	6Z-311	4.400	55	38.000	40
4	950	6Z-415	5.700	56	50.200	41
5	930	6Z-515	7.100	63	61.500	40
6	930	6Z-618	9.000	64	77.800	40
7	930	6Z-722	9.900	65	92.000	42
8	930	6Z-822	11.000	65	107.000	44
9	930	6Z-924	12.000	66	115.100	44

Thermal emission with motor running at 700 r.p.m.:

Watt = 0.85 x Watt with motor at 900 r.p.m.

Air = 0.70 x air flow with motor at 900 r.p.m.

(*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

On request: double speed motor, single tension.

Polaris

Air Conditioner



Polaris Sabiana circular unit heaters, for ceiling installation only, are especially suitable for high rooms, even if the optimum ratio between the air flow-rate and the heat / cool output make them suitable for any manufacturing environment.

The large coil and the fan downstream of the coil ensure optimum mixing of the air in the environment, meaning less stratification of the hot air than with traditional unit heaters.

When supplied with cold water they can also be used in the summer months, thus allowing cooling at very reasonable costs.

The Polaris unit heaters are made in 9 sizes, all fitted with very silent two speeds motors, heat outputs from 17 to 107 kW and cooling capacities from 2 to 20 kW.

- The **casing** is made of spun steel on both top and bottom sections which is designed to give greater strength and quieter operation. The casing is then finished with an epoxy, polyester powder coating of light grey, RAL 9002.
- The **circular coil** is constructed of copper tubes with aluminium fins.
- The **helicoidal fan** is statically and dynamically balanced, the rational high-capacity profile provides maximum air volume with a minimum power consumption.
- **Standard motors are three phase 400 V**, closed frame, flange mounted, pre-greased bearings, protection IP 55. Available with two speed Delta-Star motors at 6/8 pole.

On request:

- **Delta-Star switch** for two speed Delta-Star motors, 6/8 poles, with klaxon thermic protection.

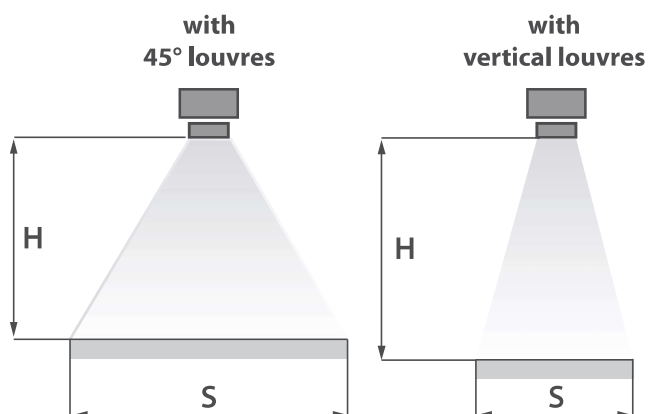




Made of eight separately adjustable large louvers, shaped so as to be able to cover the whole outlet area and therefore adaptable for minimum to maximum heights.

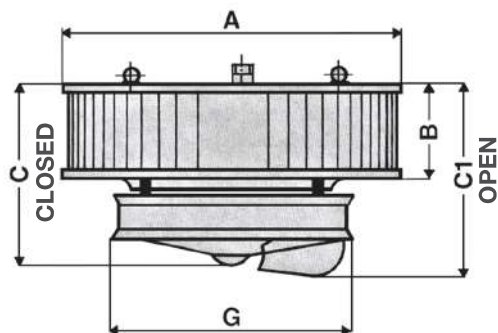
This diffuser allows the air to be directed more easily to the areas where it is required most, or conversely, if you do not require air to one particular corner you can close down one, two or three vanes and restrict the distribution.

Mounting heights and area of air distribution



Size	900 r.p.m. motor speed			
	45° louvers		Vertical louvers	
	H suggested m	S diameter m	H suggested m	S diameter m
0	2,5÷4	10,5÷16,5	3,5÷5	6÷9
1	3÷4,5	12÷18	4÷5,5	7,5÷10,5
3	3,5÷5,5	15÷22,5	5÷7	9÷13,5
4	3,5÷6	15÷24	5,5÷8	10,5÷15
5	4÷6,5	16,5÷25,5	5,5÷8,5	10,5÷15
6	4÷8	16,5÷28,5	6÷10	12÷18
7	4÷8	16,5÷28,5	6÷10	12÷18
8	5÷11	18÷31,5	6,5÷14	13,5÷19,5
9	5÷11	18÷33	6,5÷14	13,5÷21

Dimensions, weight, water content



Dimensions						Weight	Water content
A	B	C	C1	G	Connections		
mm	mm	mm	mm	mm	ø	kg	litri
680	180	430	560	560	1 ¼"	31	1,2
780	180	430	560	560	1 ¼"	36	1,3
880	280	530	700	660	1 ½"	52	2,4
880	380	630	760	660	1 ½"	58	3,2
1080	380	630	870	760	2"	75	4,3
1080	455	705	945	760	2"	85	5,2
1080	555	805	1045	760	2"	95	5,9
1080	555	815	1055	760	2"	97	5,9
1080	605	865	1105	760	2"	106	6,5

Size	Model	Noise level at 5 m (*) dB(A)		Air flow m ³ /h	
		930 r.p.m.	800 r.p.m.	930 r.p.m.	800 r.p.m.
0	P.007	48	46	2000	1400
1	P.107	52	49	2400	1680
3	P.311	55	52	4400	3080
4	P.415	56	53	5700	4000
5	P.515	63	58	7100	4970
6	P.618	64	59	9000	6300
7	P.722	65	60	9900	6930
8	P.822	65	60	11000	7700
9	P.924	66	61	12000	8400

Heating			
Water temperature 85/70 °C - Entering air temperature 15 °C			
W		Leaving air temp. °C	
930 r.p.m.	800 r.p.m.	930 r.p.m.	800 r.p.m.
17600	15100	41	47
20400	17400	40	46
35300	30000	38	44
46700	39600	39	44
57100	48500	39	44
72200	61400	38	44
85600	72700	40	46
99500	84500	43	48
106700	90700	42	47

Size	Model	Noise level at 5 m (*) dB(A)		Air flow m ³ /h	
		930 r.p.m.	800 r.p.m.	930 r.p.m.	800 r.p.m.
0	P.007	48	46	2000	1400
1	P.107	52	49	2400	1680
3	P.311	55	52	4400	3080
4	P.415	56	53	5700	4000
5	P.515	63	58	7100	4970
6	P.618	64	59	9000	6300
7	P.722	65	60	9900	6930
8	P.822	65	60	11000	7700
9	P.924	66	61	12000	8400

Cooling	
Relative humidity 55%	
Water temperature 11/15 °C - Entering air temperature 28 °C	
W	
930 r.p.m.	800 r.p.m.
3100	2700
4000	3500
7500	6600
10900	9500
13600	11900
17200	15000
18900	16500
22000	19000
23700	20600

(*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

Janus

Air Conditioner



Janus unit heaters can be used to economically cool industrial, commercial and sporting facilities, transforming a traditional heating system using unit heaters into a system that can also be used in the summer months, significantly improving the working conditions.

The condensate collection tray is built into the appliance, while two-speed motors are fitted as standard. Upon request, controls with thermostat can also be supplied.

The Janus unit heaters are made in 4 sizes, each with 3 and 4 row coils, for a total of 8 models, with heat outputs from 16 to 104 kW and cooling capacities from 5 to 28 kW.

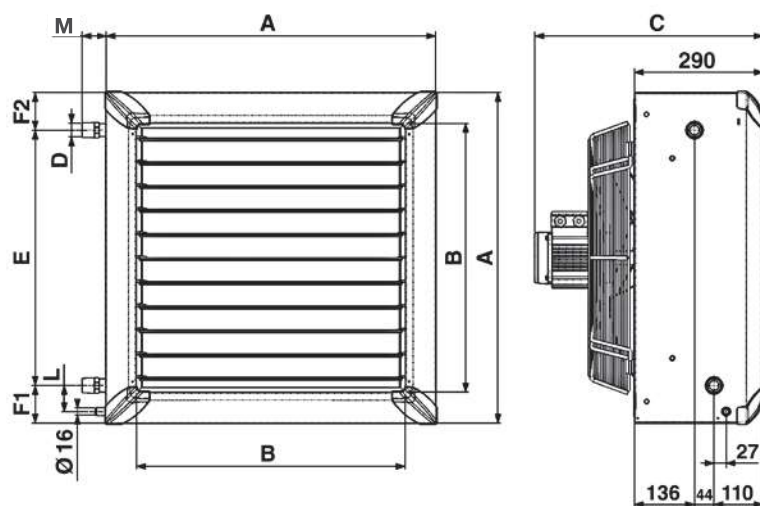
- The **main casing** is **manufactured from galvanized prepainted steel** (1 mm thick) finished in light grey (RAL 9002), and it is assembled from three component parts, assembled with self-tapping screws for quick maintenance on the heat coil. The use of hot dip galvanised and pre-painted steel ensures consistency and excellent protection against corrosion.
- The **standard motor** fitted is a hermetically sealed and is maintenance free. The motor is 2 speeds, 3 phase, single voltage 400V/50Hz, protection IP55, class B, with klaxon thermal protection that is triggered in the event of overheating. The rotation speed can be reduced by passing from delta to star connection.
- **Coil** with large heating surfaces with copper pipe and in aluminium fins.
- The **condensate collection tray** is fitted inside the unit. Made from galvanized steel insulated with polyolefin (PO) foam (class M1).

Janus identification code

Reference: **46F43**

46	F	4	3
Motor 4/6 pole (1350/1000 r.p.m.)	Range Janus	Size 4	Rows 3





Model	A	B	C	D	E	F1	F2	L	M
46 F 23/24	526	390	500	1"	376	78	71	58	55
46 F 43/44	634	498	500	1"	476	76	83	58	55
68 F 63/64	742	606	525	1"	576	83	83	58	55
68 F 93/94	1010	874	650	1 ¼"	818	90	100	67	63

Model	Weight Kg		Water content liters	
	3R	4R	3R	4R
46 F 23/24	25,0	26,0	1,7	2,2
46 F 43/44	32,5	34,0	2,7	3,4
68 F 63/64	42,5	44,5	4,0	5,1
68 F 93/94	77,0	81,0	7,6	9,8

Heating emission

Model		46 F 23		46 F 24		46 F 43		46 F4 4	
Mounting height	m	2.5 ÷ 4				3 ÷ 4.5			
Speed	r.p.m.	1350	1000	1350	1000	1350	1000	1350	1000
Air flow	m³/h	2000	1365	1800	1270	3450	2290	3100	2000
Throw	m	11	7,5	10	6,5	16	12	15	11
Noise level at 5 m (*)	dB(A)	59	51	59	51	64	54	64	54
Water temperature 45/40 °C - Δt 5 °C Entering air temperature +15 °C	kW	8,47	6,65	9,66	7,62	14,44	11,15	16,55	12,27
	Leaving air temp. °C	27,4	29,3	30,7	32,6	27,3	29,2	30,6	32,9
Water temperaturte 85/75 °C - Δt 10 °C Entering air temperature +15 °C	kW	20,75	16,23	23,58	18,52	35,15	27,08	40,14	29,66
	Leaving air temp. °C	43,4	49,8	53,3	57,7	44,8	49,6	52,9	58,4
Water temperaturte 90/70 °C - Δt 20 °C Entering air temperature +15 °C	kW	19,86	15,63	22,76	18,00	33,86	26,26	39,04	29,10
	Leaving air temp. °C	44,0	48,5	52,0	56,5	43,7	48,5	51,8	57,6

Model		68 F 63		68 F 64		68 F 93		68 F 94	
Mounting height	m	3 ÷ 5				3.5÷ 5.5			
Speed	r.p.m.	950	750	950	750	950	750	950	750
Air flow	m³/h	3930	3050	3510	2650	7500	5800	6800	5100
Throw	m	16	12	15	11	26	20	25	19
Noise level at 5 m (*)	dB(A)	60	52	60	52	66	60	66	60
Water temperature 45/40 °C - Δt 5 °C Entering air temperature +15 °C	kW	18,81	15,77	20,67	16,95	37,97	32,04	42,29	34,43
	Leaving air temp. °C	29,0	30,4	32,2	33,7	29,8	31,2	33,2	34,8
Water temperaturte 85/75 °C - Δt 10 °C Entering air temperature +15 °C	kW	45,46	38,07	49,79	40,75	92,37	77,80	102,66	83,31
	Leaving air temp. °C	48,8	52,1	56,5	60,0	51,0	54,2	59,2	62,8
Water temperaturte 90/70 °C - Δt 20 °C Entering air temperature +15 °C	kW	44,38	37,26	48,95	40,28	89,39	75,66	100,11	81,73
	Leaving air temp. °C	48,0	51,3	55,8	59,5	49,9	53,2	58,1	61,9

(*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

Cooling emission

Modello		46 F23	46 F24	46 F43	46 F44
Mounting height	m	2.5 ÷ 4		3 ÷ 4.5	
Speed	r.p.m.	1000	1000	1000	1000
Air flow	m³/h	1365	1270	2290	2000
Throw	m	7,5	6,5	12	11
Noise level at 5 m (*)	dB(A)	51	51	54	54
Water temperature 7/12 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	5,00	6,08	8,62	10,28
	kW Sensible	3,57	4,14	6,05	6,78
	Leaving air temp. °C	20,1	18,1	20,0	17,7
Water temperature 11/15 °C - Δt 4 °C Entering air temperature +28 °C - R.H. 55%	kW Total	3,57	4,27	6,21	7,32
	kW Sensible	3,25	3,62	5,43	5,86
	Leaving air temp. °C	20,8	19,4	20,8	19,1
Water temperature 9/14 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	4,02	4,90	6,93	8,34
	kW Sensible	3,31	3,79	5,51	6,11
	Leaving air temp. °C	20,6	19,0	20,7	18,7

Modello		68 F63	68 F64	68 F93	68 F94
Mounting height	m	3 ÷ 5		3.5 ÷ 5.5	
Speed	r.p.m.	750	750	750	750
Air flow	m³/h	3050	2650	5800	5100
Throw	m	12	11	20	19
Noise level at 5 m (*)	dB(A)	52	52	60	60
Water temperature 7/12 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	13,08	15,28	23,24	26,89
	kW Sensible	8,79	9,78	16,09	17,75
	Leaving air temp. °C	19,9	16,8	19,6	17,4
Water temperature 11/15 °C - Δt 4 °C Entering air temperature +28 °C - R.H. 55%	kW Total	9,33	10,89	16,56	19,08
	kW Sensible	7,61	8,28	14,28	15,38
	Leaving air temp. °C	20,3	18,5	20,5	18,9
Water temperature 9/14 °C - Δt 5 °C Entering air temperature +28 °C - R.H. 55%	kW Total	10,62	12,51	18,76	21,74
	kW Sensible	7,91	8,75	14,66	16,07
	Leaving air temp. °C	20,0	18,0	20,3	18,4

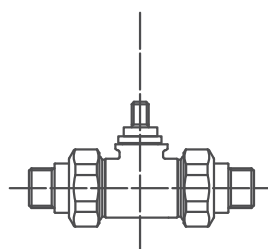
(*) = The sound pressure levels dB(A) are measured at a distance of 5 m, directional factor Q = 2, compliant with the EN 3744 standard.

VA2V

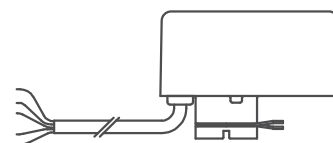
2 way valve

Composed by:

- one 2-way valve
- one ON-OFF 230V actuator



2 way valve



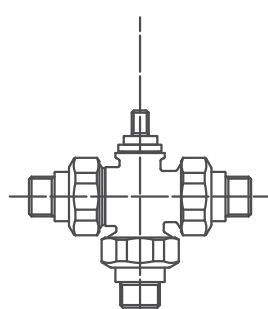
Actuator

VA3V

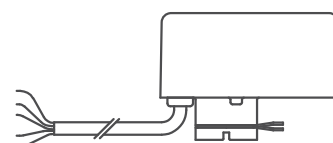
3 way valve

Composed by:

- one 3-way valve
- one ON-OFF 230V actuator



3 way valve



Actuator

KIT-VA

Extension kit

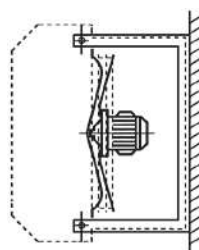
To be used with water valves (mandatory).



AMP

Wall bracket

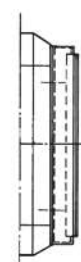
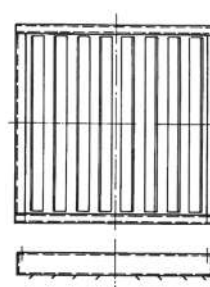
Horizontal discharge



AD

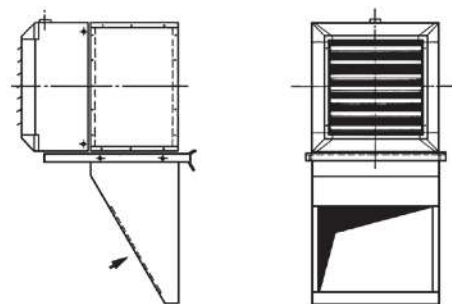
4 way diffuser

To be used when discharging downflow to create a 4 way discharge pattern



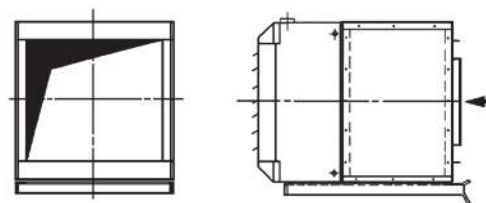
ARC Simple intake hood fitted underneath

Wall bracket included
Prepainted steel thickness 1 mm



AE Fresh air box

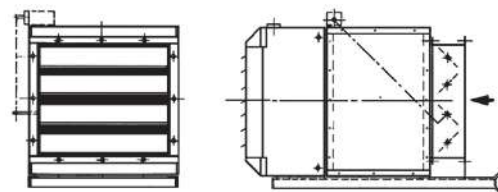
Prepainted steel thickness 1 mm



AES Fresh air box with manually operated damper

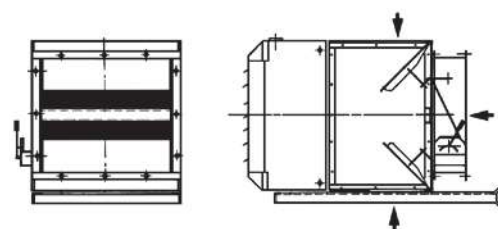
(can be motorized by the customer)

Prepainted steel thickness 1 mm.



AM Internal/external air mixing box manually controlled

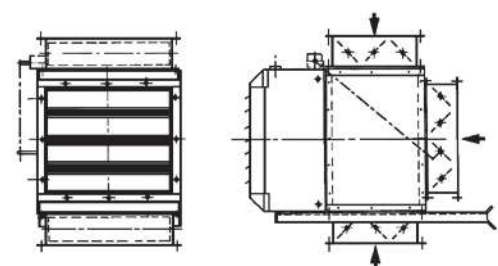
Prepainted steel thickness 1 mm.



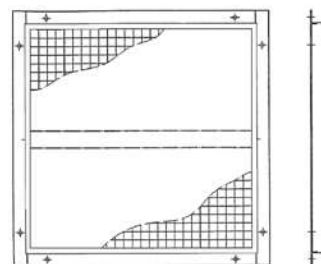
AMS Internal/external air mixing box, manually controlled

(can be motorized by customer)

Prepainted steel thickness 1 mm

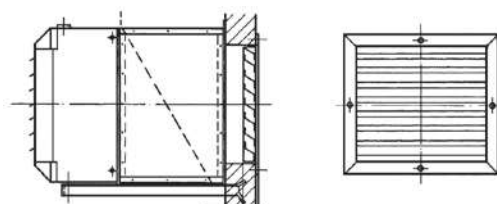


APP Ball protection grid



AG External air intake grille suitable with AE and AES air boxes

Prepainted steel thickness 1 mm



Controls

DSS Delta-Star switch for two speed Delta-Star motors, 4/6 or 6/8 poles



BS 3-ST Manual three-position switch with thermostat for two speed Delta-Star motors, 4/6 or 6/8 poles, with klixon thermic protection



Elegant ECM

Ceiling Air Conditioner



Elegant ECM air conditioners allow to heat and cool very economically small and medium areas, like shops, show rooms, workshops, supermarkets.

The range is made up of 12 models:

RE-ECM version, for heating only, is made up of **8 models**, and **PE-ECM** version, for heating and cooling, is made up of **4 models**.

All models are for ceiling installation and for hot/chilled water supply.

The **Elegant ECM** series uses an innovative brushless synchronous permanent magnet electric motor controlled by an inverter card that is directly installed on the unit.

The intake of the air is from the bottom side of the unit and the air supply is from the 4 lateral grids which have individually controllable louvers for the best distribution of the air.

The condensate drain is made through an electronically controlled micro-pump, supplied on every standard PE-ECM model.

Different remote controls of the air flow and of the room temperature are available and it is possible to control up to 8 units with only one remote control.

All the **Elegant ECM** units can be supplied with a wide range of controls using the **Modbus RTU - RS 485** communication protocol.



Beside the low installation and running cost, the **Elegant ECM Sabiana** air conditioners offer the following advantages:

- they take up a small amount of the valuable space in the room, there is not any ducting system and the walls are free.
- they are versatile and provide flexibility of installation: also where there is no false ceiling it is possible to distribute the air evenly.
- they provide easy control and are easily installed.

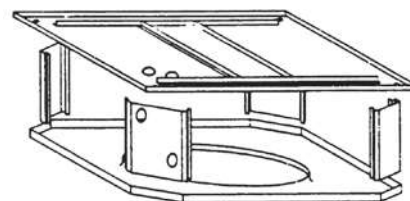


Casing

Made of steel on both top and bottom sections and it is then finished with an epoxy-polyester powder coating dried at 180°, in white RAL 9016.

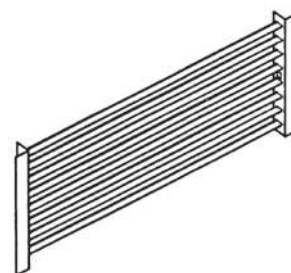
The lower casing is also the condensate collection tray.

The components are assembled with screws and so it is possible to quickly dismantle it for inspection when needed.



Outlet grids

The discharge of the air is obtained through 4 grids on the 4 lateral sides. They are comprised by a frame in which the louvres are individually adjustable. It is very easy to take off these grids, allowing for easy maintenance of the coil and of the condensate tray.



Electronic motor

Three phase permanent magnet brushless electronic motor.

The inverter board that controls the motor operation is powered by 230 Volt, single-phase and it generates a frequency modulated wave form power supply. The electric power supply required for the machine is therefore single-phase with voltage of 230-240V and frequency of 50-60Hz.



Helicoidal fan

The fan is made with statically and dynamically balanced plastic blades. Its rational high-capacity profile provides the maximum air volume with the minimum energy consumption. The fan hub is secured onto the motor shaft and it is protected by a safety guard.



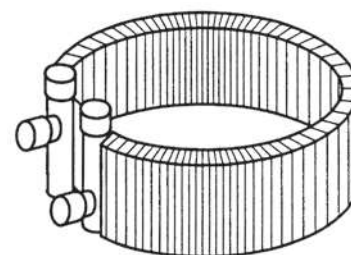
Coil

The coil is constructed of copper tubes with aluminium fins and steel headers.

The supply and return connections have a female threading, 1" diameter, and they allow the connection either vertically from above or horizontally from a side.

The coil is supplied in two versions: with 1 row and with 2 rows.

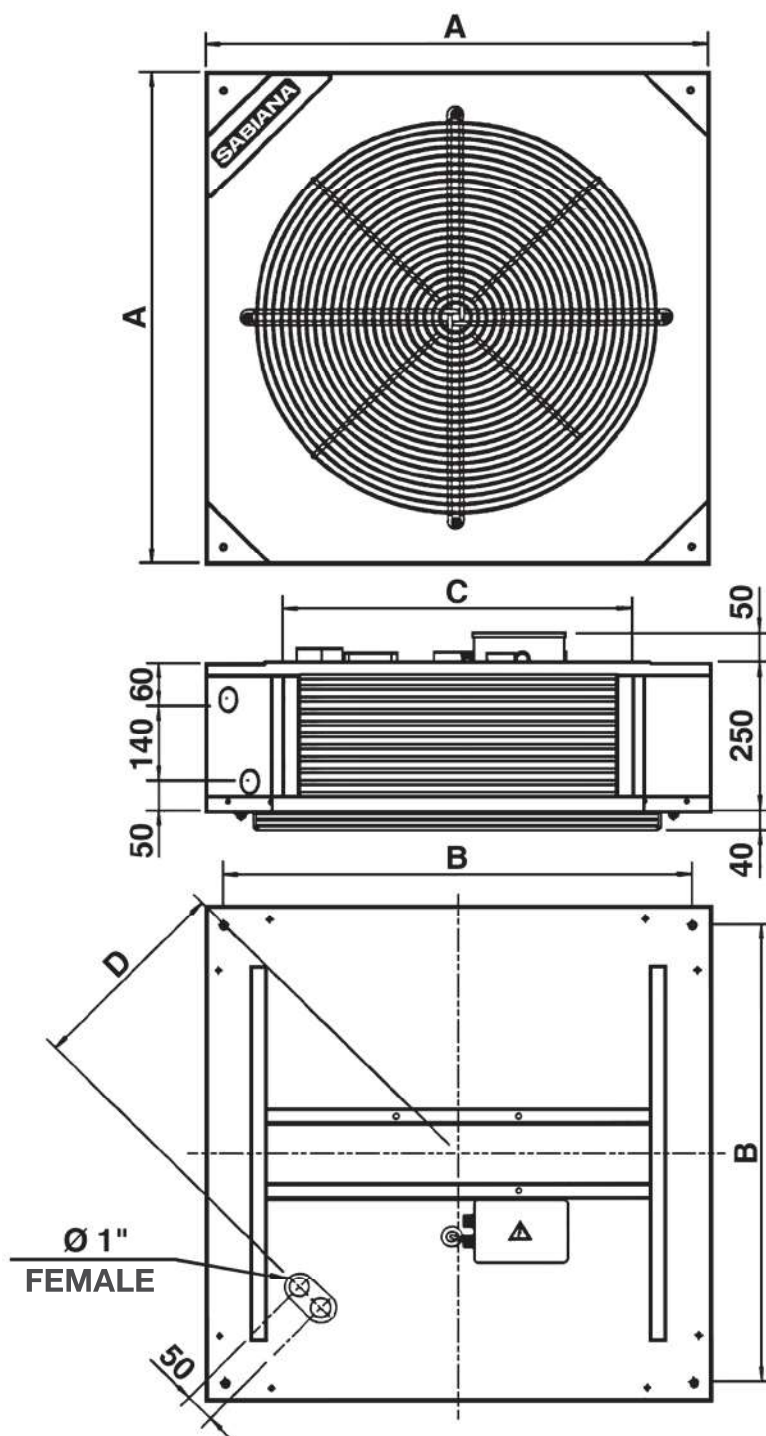
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.



Condensate micro-pump

The PE-ECM model for cooling is always supplied with an integral micropump (discharge head 3m, water flow 6l/h). The pump is installed in the condensate collected tray. This pump controls the level of the condensate collected in the tray and drain it when necessary.





with 1 row coil (only heating)

Model		RE-ECM			
		11	21	31	41
Dimensions (mm)	A	600	750	750	830
	B	540	690	690	770
	C	330	480	480	560
	D	220	287	300	344
Weight (kg)		26	31	32	38
Water content (Liters)		0,8	1,1	1,1	1,3

with 2 row coil (heating and cooling)

Model		RE-ECM / PE-ECM			
		12	22	32	42
Dimensions (mm)	A	600	750	750	830
	B	540	690	690	770
	C	330	480	480	560
	D	220	287	300	344
Weight (kg)		28	34	35	40
Water content (Liters)		1,8	2,4	2,4	2,7

RE-ECM units (heating only)

The following standard rating conditions are used:

HEATING (winter mode)

Entering air temperature: +20°C

Water temperature: +70/60°C

Model		RE-ECM 11						RE-ECM 12					
Inverter Power (V)		5	6	7	8	9	10	5	6	7	8	9	10
Air flow	m³/h	1045	1265	1465	1635	1805	1890	1005	1215	1410	1570	1735	1820
Heating	kW	5,88	6,60	7,20	7,67	8,14	8,36	9,56	10,88	12,01	12,88	13,74	14,15
Dp Heating	kPa	11,2	13,8	16,2	18,1	20,2	21,1	6,90	8,80	10,5	11,9	13,3	14,1
Sound power Lw	dB(A)	44	48	52	54	56	57	44	48	52	54	56	57
Sound pressure Lp (*)	dB(A)	35	39	43	45	47	48	35	39	43	45	47	48
Sound pressure Lp (**)	dB(A)	31	35	39	41	43	44	31	35	39	41	43	44
Fan	W	16	24	37	51	69	81	16	24	37	51	69	81

Model		RE-ECM 21						RE-ECM 22					
Inverter Power (V)		5	6	7	8	9	10	5	6	7	8	9	10
Air flow	m³/h	1380	1645	1925	2175	2415	2600	1325	1580	1850	2090	2320	2500
Heating	kW	7,59	8,46	9,32	10,03	10,68	11,18	12,64	14,26	15,81	17,13	18,31	19,20
Dp Heating	kPa	7,9	9,6	11,4	13,0	14,6	15,9	13,0	16,2	19,5	22,5	25,4	27,7
Sound power Lw	dB(A)	48	51	54	57	60	62	48	51	54	57	60	62
Sound pressure Lp (*)	dB(A)	39	42	45	48	51	53	39	42	45	48	51	53
Sound pressure Lp (**)	dB(A)	35	38	41	44	47	49	35	38	41	44	47	49
Fan	W	23	36	55	75	104	136	23	36	55	75	104	136

Model		RE-ECM 31						RE-ECM 32					
Inverter Power (V)		5	6	7	8	9	10	5	6	7	8	9	10
Air flow	m³/h	1880	2245	2560	2890	3140	3180	1810	2160	2460	2780	3020	3060
Heating	kW	8,70	9,71	10,50	11,29	11,85	11,95	14,97	16,80	18,24	19,68	20,71	20,89
Dp Heating	kPa	10,5	12,7	14,7	16,7	18,2	18,5	14,2	17,5	20,2	23,2	25,4	25,8
Sound power Lw	dB(A)	50	53	56	59	61	61	50	53	56	59	61	61
Sound pressure Lp (*)	dB(A)	41	44	47	50	52	52	41	44	47	50	52	52
Sound pressure Lp (**)	dB(A)	37	40	43	46	48	48	37	40	43	46	48	48
Fan	W	37	59	86	121	162	164	37	59	86	121	162	164

Model		RE-ECM 41						RE-ECM 42					
Inverter Power (V)		5	6	7	8	9	10	5	6	7	8	9	10
Air flow	m³/h	2475	3090	3515	3995	4450	4680	2380	2970	3380	3840	4280	4500
Heating	kW	10,40	11,84	12,75	13,72	14,57	14,99	17,49	20,08	21,71	23,44	25,00	25,73
Dp Heating	kPa	6,4	8,1	9,2	10,5	11,7	12,4	4,8	6,2	7,1	8,2	9,2	9,7
Sound power Lw	dB(A)	47	51	54	57	59	60	47	51	54	57	59	60
Sound pressure Lp (*)	dB(A)	38	42	45	48	50	51	38	42	45	48	50	51
Sound pressure Lp (**)	dB(A)	34	38	41	44	46	47	34	38	41	44	46	47
Fan	W	32	54	77	108	150	174	32	54	77	108	150	174

(*) = Measurement performed at 3 meter from the source,
room volume of 500m³, reverberation period of 2 s, directional factor Q=2 (hemisphere sound emission).

(**) = Measurement performed at 3 meter from the source,
room volume of 1500m³, reverberation period of 2 s, directional factor Q=2 (hemisphere sound emission).

PE-ECM units (heating and cooling)

The following standard rating conditions are used:

COOLING (summer mode)

Entering air temperature: +27°C bulbo secco 50% U.R.

Water temperature: +7°C entrata +12°C uscita

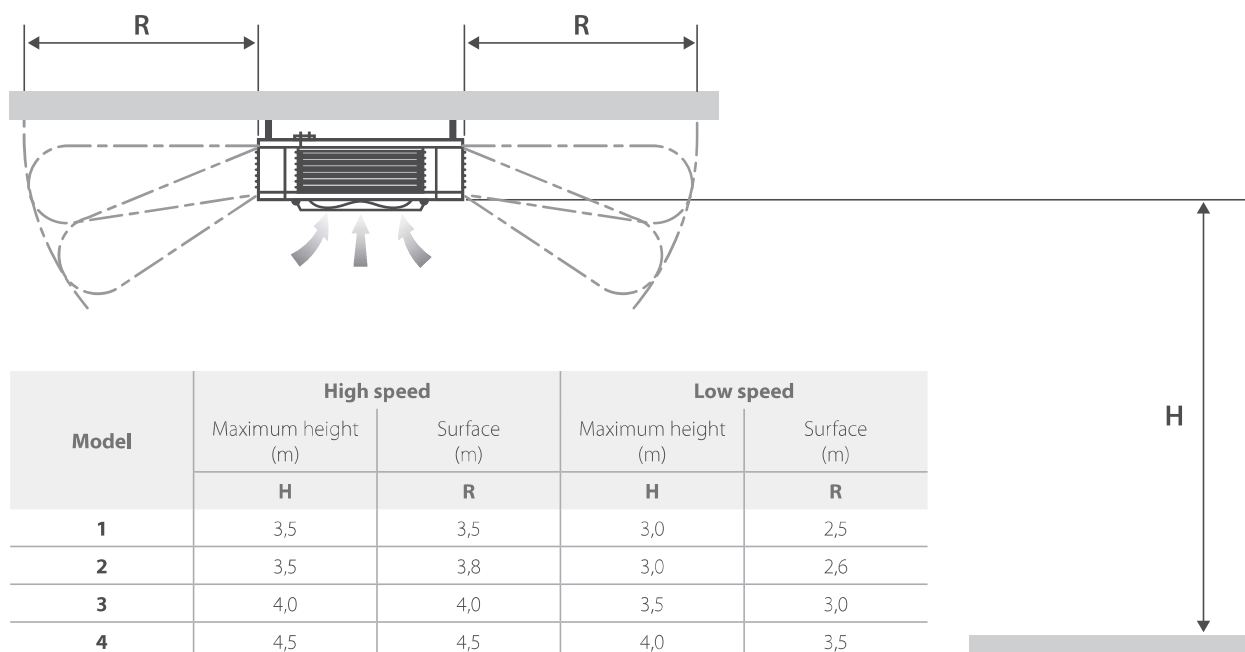
HEATING (winter mode)

Entering air temperature: +20°C

Water temperature: +70/60°C

Model		PE-ECM 12						PE-ECM 22					
Inverter Power (V)		5	6	7	8	9	10	5	6	7	8	9	10
Air flow	m³/h	1005	1215	1410	1570	1735	1820	1325	1580	1850	2090	2320	2500
Cooling total emission	kW	3,89	4,30	4,65	4,80	5,17	5,20	5,31	5,83	6,33	6,74	7,13	7,38
Cooling sensible emission	kW	3,14	3,58	3,98	4,23	4,61	4,71	4,14	4,68	5,22	5,68	6,12	6,44
Heating	kW	9,56	10,88	12,01	12,88	13,74	14,15	12,64	14,26	15,81	17,13	18,31	19,20
Dp Raffreddamento	kPa	6,3	7,6	8,8	9,3	10,6	10,7	12,7	15,0	17,4	19,4	21,5	22,9
Dp Heating	kPa	6,9	8,8	10,5	11,9	13,3	14,1	13,0	16,2	19,5	22,5	25,4	27,7
Sound power Lw	dB(A)	44	48	52	54	56	57	48	51	54	57	60	62
Sound pressure Lp (*)	dB(A)	35	39	43	45	47	48	39	42	45	48	51	53
Sound pressure Lp (**)	dB(A)	31	35	39	41	43	44	35	38	41	44	47	49
Fan	W	16	24	37	51	69	81	23	36	55	75	104	136

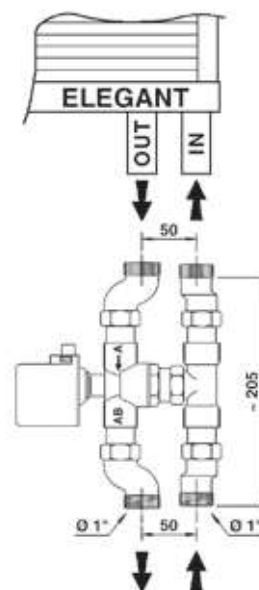
Model		PE-ECM 32						PE-ECM 42					
Inverter Power (V)		5	6	7	8	9	10	5	6	7	8	9	10
Air flow	m³/h	1810	2160	2460	2780	3020	3060	2380	2970	3380	3840	4280	4500
Cooling total emission	kW	6,43	7,01	7,51	7,99	8,41	8,52	7,19	8,09	8,84	9,32	9,83	10,07
Cooling sensible emission	kW	5,21	5,87	6,44	7,02	7,50	7,60	6,40	7,53	8,40	9,15	9,83	10,07
Heating	kW	14,97	16,80	18,24	19,68	20,71	20,89	17,49	20,08	21,71	23,44	25,00	25,73
Dp Raffreddamento	kPa	16,3	19,0	21,5	24,1	26,4	27,0	7,6	9,4	11,0	12,1	13,4	14,0
Dp Heating	kPa	14,2	17,5	20,2	23,2	25,4	25,8	4,8	6,2	7,1	8,2	9,2	9,7
Sound power Lw	dB(A)	50	53	56	59	61	61	47	51	54	57	59	60
Sound pressure Lp (*)	dB(A)	41	44	47	50	52	52	38	42	45	48	50	51
Sound pressure Lp (**)	dB(A)	37	40	43	46	48	48	34	38	41	44	46	47
Fan	W	37	59	86	121	162	164	32	54	77	108	150	174



3-way valve kit

Comprised of:

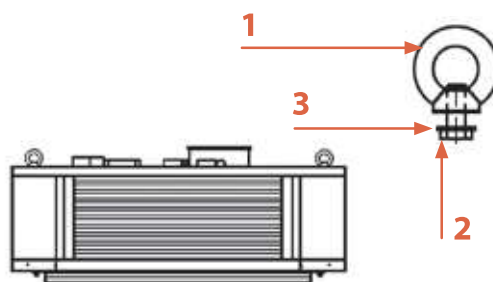
- one 3-way valve 3/4" Kvs 4,7
- one actuator
- pipe connections



Hanging brackets

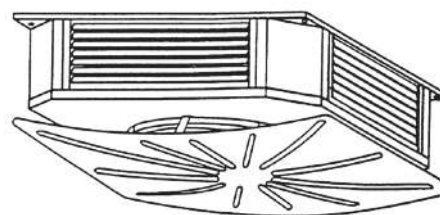
Comprised of 4 eye bolts and screws.

- 1** Washer for screw M8
- 2** Screw M8 x 16
- 3** Eye bolt female M8



Cover panel

To be mounted on the fan guard.



Wall electronic controls

For each unit must be provided the ADC converter or the UPE-AU power unit for wall controls

WM-3V	3 speed control (to be used with ADC-M or ADC-S only)
WM-T	3 speed control with electronic thermostat and summer/winter switch (to be used with ADC-M or ADC-S only)
WM-TQR	3 speed control with electronic thermostat and centralized/manual summer/winter switch (to be used with ADC-M or ADC-S only)
WM-AU	Automatic speed control with electronic thermostat and summer/winter switch (to be used with UPEM-AU or UPE-AU only)
T-MB	Wall control (to be used with UPEM-AU or UPE-AU only)
T2T	Electromechanical thermostat with summer/winter switch (only for 2 pipe units) (to be used with ADC-M or ADC-S only)
ADC-M	ADC signal converter for wall controls fitted on the unit, for WM-3V, WM-T, WM-TQR and T2T controls
ADC-S	ADC signal converter for wall controls supplied with separate packaging, for WM-3V, WM-T, WM-TQR and T2T controls
UPEM-AU	Power unit for WM-AU and T-MB remote controls, fitted on the unit
UPE-AU	Power unit for WM-AU and T-MB remote controls, not fitted on the unit

Electronic controls for MBE boards

MBE-M	MBE electronic board fitted on the unit
MBE-S	MBE electronic board supplied with separate packaging
T-MB	Wall control (to be used with MBE board only)
PSM-DI	Multifunction control (to be used with MBE board only)

Sabianet management system for a network of Elegant ECM

Sabianet	Hardware/software supervisory system (to be used with MBE board only)
Router-S	Router for Sabianet (default) or for BMS systems not provided by Sabiana
SIOS	Relay output board for Sabianet

NOTE: for more information about Controls and for full list of main Accessories, please see the dedicated pages.

Meltemi

Door Curtain



The range of **Meltemi Sabiana** door curtains offers the maximum flexibility in the protection of doors and open access compartments.

The door curtains are available in the air ventilation version, with hot water coil and with electric resistance, the **3 different versions** are supplied in **35 different models** with lengths from 1125 mm to 2185 mm that are suitable for door heights from 2,5 m to 4,5 m in commercial installations.

Thanks to their modularity, the door curtain units **can be connected together** to give a continual air barrier of the desired length to protect large doors.

Cabinet

It consists of cold galvanised steel plate panels painted with oven-dried epoxy powders, colour RAL 9003. The side closures are made of plastic.

Fan assembly

LU/LU-ECM Models: made up of plastic tangential fans installed on a rubber support with rolling bearing and coupled with the electric motor mounted on the structure side.

LC/LI Models: it consists of double inlet centrifugal fans directly fitted on the motor shaft.

Electric motor

LU/LC/LI Models: single-phase motor with capacitor inserted permanently, automatic reset internal thermal protection, class of protection IP 20. Power supply 230V - 50Hz. Two speeds are available.

LU-ECM Model: three phase permanent magnet brushless electronic motor that is controlled with reconstructed current according to a BLAC sinusoidal wave. The inverter board that controls the motor operation is powered by 230 Volt, single-phase and, with a switching system, it generates a three-phase frequency modulated, wave form power supply. The electric power supply required for the unit is therefore single-phase 230 - 240 V and 50 - 60 Hz.

Coil (W versions with hot water)

The **"W series"** units are complete with a water coil (for heating only), made with copper pipes with aluminium fins bonded to the pipes by mechanical expansion.

LU/LU-ECM models are equipped with 1 row coil, **LC/LI** models are equipped with 2 row coils. Maximum water temperature 80°C, maximum operating pressure 10 bar.

Electric resistance (E versions)

The **"E series"** units come with filament electric resistances supported by mica spacers, with external bearing structure made of galvanised sheet.

Electronic controls

The units come with integrated control system specifically designed for every type of operation (see Electronic controls page).





The **LU** series door curtains have been designed for installation **near small entrances of offices and commercial environments**.

The unit comes with integrated control system specifically designed for every type of operation:

LU-A: air ventilation only, it is equipped with a control located on board, which can be easily accessed from the bottom. This includes a step-by-step control button to switch the device on and off and select the air speed.

LU-W/E: operation with hot water or electric coil. It is equipped with a remote control system (supplied with the unit) or it can be combined with a wall mounted T-MB control with display (optional).

Recommended installation height: 2.5 metres

Installation: horizontal

Lengths available: 1 and 1.5 metres

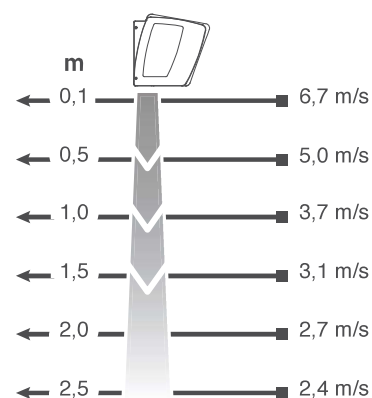
Electric resistance:

LU-10E 3 kW 230V 1 Ph or 400V 3 Ph

LU-15E 6 kW 400V 3Ph

1 row hot water coil

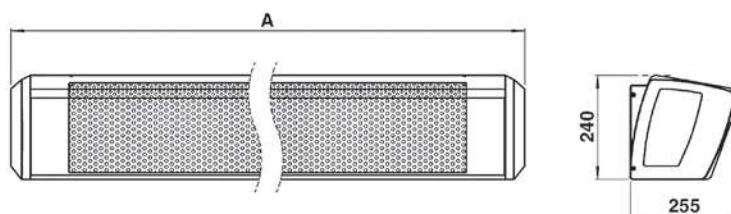
Complete with electrical connection cable with Schuko CEE 7/7 plug



Dimensions, weigh, water content

Dimensions (mm)

Model	LU-10	LU-15
A	1144	1644



Weight (kg)

Model	Weight with packaging		Weight without packaging	
	LU-10	LU-15	LU-10	LU-15
LU-A	16,4	23,1	14	20
LU-W	18,4	26,1	16	23
LU-E	18,4	26,1	16	23

Water content (litres)

Model	LU-10	LU-15
	0,65	0,95

ventilation only

Model		LU-10A		LU-15A	
Speed		max	min	max	min
Installation height	m	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644
Air flow	m ³ /h	1260	760	1900	1090
Sound pressure (***)	dB(A)	49	39	50	39
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	86	63	134	86
	A	0,37	0,27	0,58	0,39
Weight	kg	14	14	20	20

with hot water coil

Model		LU-10W		LU-15W	
Speed		max	min	max	min
Installation height	m	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644
Air flow	m ³ /h	1150	740	1750	1050
Heating (*)	kW	5,87	4,56	8,94	6,65
Heating (**)	kW	3,36	2,63	5,06	3,79
Sound pressure (***)	dB(A)	49	39	50	39
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	86	63	134	86
	A	0,37	0,27	0,58	0,39
Weight	kg	16	16	23	23

with electric resistance

Model		LU-10E-230		LU-10E-400		LU-15E	
Speed		max	min	max	min	max	min
Installation height	m	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1144	1144	1644	1644
Air flow	m ³ /h	1260	760	1260	760	1900	1090
Electric resistance - 1 st stage	kW	2	2	2	2	3	3
Electric resistance - 2 nd stage	kW	3	3	3	3	6	6
Sound pressure (***)	dB(A)	49	39	49	39	50	39
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Electric resistance voltage	V	230 V ~	230 V ~	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph
Motor absorption	W	86	63	86	63	134	86
	A	0,37	0,27	0,37	0,27	0,58	0,39
Electric resistance absorption – 1 st stage	A	8,7	8,7	3,0	3,0	4,5	4,5
Electric resistance absorption – 2 nd stage	A	13,1	13,1	4,5	4,5	9,0	9,0
Weight	kg	16	16	16	16	23	23

(*) = Air temperature 18 °C – Water temperature 80/60 °C.

(**) = Air temperature 18 °C – Water temperature 60/40 °C.

(***) = The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744..



The **LU-ECM** series door curtains have been designed for installation **near small entrances of offices and commercial environments**.

The unit comes with integrated control system specifically designed for every type of operation:

LU-ECM-A: air ventilation only. It is equipped with a remote control system (supplied with the unit) or it can be combined with a wall mounted T-MB control with display (optional).

LU-ECM-W/E: operation with hot water or electric coil. It is equipped with a remote control system (supplied with the unit) or it can be combined with a wall mounted T-MB control with display (optional).

Recommended installation height: 2,5 metri

Installation: horizontal

Lengths available: 1 and 1.5 and 2 metres

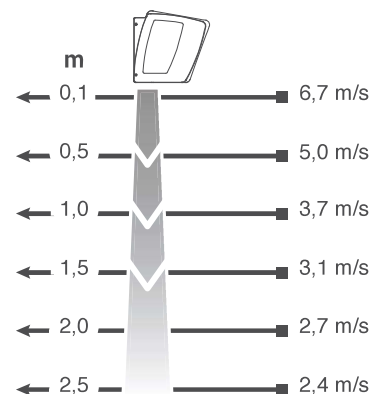
Electric resistance:

LU-ECM-10E 3 kW 230V 1 Ph or 400V 3 Ph

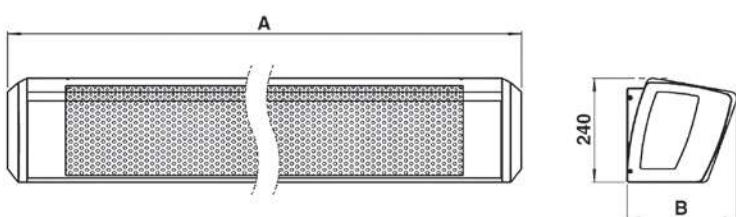
LU-ECM-15E / LU-ECM-20E 6 kW 400V 3Ph

1 row hot water coil

Complete with electrical connection cable with Schuko CEE 7/7 plug



Dimension, weight, water content



Dimension (mm)

Model	LU-ECM-10	LU-ECM-15	LU-ECM-20
A	1144	1644	2150
B	255	255	275

Water content (litres)

Model	LU-ECM-10	LU-ECM-15	LU-ECM-20
	0,65	0,95	1,30

Weight (kg)

Model	Weight with packaging			Weight without packaging		
	LU-ECM-10	LU-ECM-15	LU-ECM-20	LU-ECM-10	LU-ECM-15	LU-ECM-20
LU-A	16,4	23,1	33,0	14	20	29
LU-W	18,4	26,1	36,0	16	23	32
LU-E	18,4	26,1	37,0	16	23	33

ventilation only

Model		LU-ECM-10A		LU-ECM-15A		LU-ECM-20A	
Speed		max	min	max	min	max	min
Installation height	m	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644	2150	2150
Air flow	m ³ /h	1260	760	1900	1090	2560	1450
Sound pressure (***)	dB(A)	49	39	50	39	52	41
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	64,8	25,5	113,0	49,8	165,0	53,5
	A	0,55	0,22	0,92	0,42	1,30	0,46
Weight	kg	14	14	20	20	29	29

with hot water coil

Model		LU-ECM-10W		LU-ECM-15W		LU-ECM-20W	
Speed		max	min	max	min	max	min
Installation height	m	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644	2150	2150
Air flow	m ³ /h	1150	740	1750	1050	2250	1310
Heating (*)	kW	5,87	4,56	8,94	6,65	12,19	8,81
Heating (**)	kW	3,36	2,63	5,06	3,79	7,02	5,11
Sound pressure (***)	dB(A)	49	39	50	39	52	41
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	46,9	19,8	81,2	36,4	120,5	38,5
	A	0,39	0,18	0,69	0,32	0,97	0,35
Weight	kg	16	16	23	23	32	32

with electric resistance

Model		LU-ECM-10E-230		LU-ECM-10E-400		LU-ECM-15E		LU-ECM-20E	
Speed		max	min	max	min	max	min	max	min
Installation height	m	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1144	1144	1644	1644	2150	2150
Air flow	m ³ /h	1260	760	1260	760	1900	1090	2310	1305
Electric resistance - 1 st stage	kW	2	2	2	2	3	3	3	3
Electric resistance - 2 nd stage	kW	3	3	3	3	6	6	6	6
Sound pressure (***)	dB(A)	49	39	49	39	50	39	52	41
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Electric resistance voltage	V	230 V ~	230 V ~	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph
Motor absorption	W	52	22	52	22	89	40	132	42,4
	A	0,43	0,19	0,43	0,19	0,75	0,35	1,06	0,39
Electric resistance absorption – 1 st stage	A	8,7	8,7	3,0	3,0	4,5	4,5	4,5	4,5
Electric resistance absorption – 2 nd stage	A	13,1	13,1	4,5	4,5	9,0	9,0	9,0	9,0
Weight	kg	16	16	16	16	23	23	33	33

(*) = Air temperature 18 °C – Water temperature 80/60 °C.

(**) = Air temperature 18 °C – Water temperature 60/40 °C.

(***) = The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.



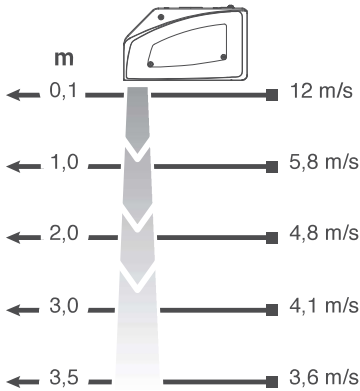
The **LC** door curtains are intended to be installed **near entrances of shops or shopping centres**.

The unit comes with integrated control system specifically designed for every type of operation:

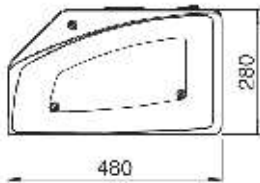
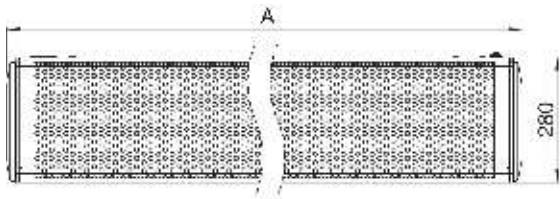
LC-A: air ventilation only, it is provided with wall mounted remote control. The control allows to switch the door barrier on and off and to set the speed required (high or low) by pressing a step-by-step button.

LC-W/E: operation with hot water or electric coil. The unit comes with remote control with T-MB wall mounted display.

Recommended installation height: 3.5 metres
Installation: horizontal
Lengths available: 1, 1.5, and 2 metres
Electric resistance:
 LC-10E 8 kW 400V 3Ph
 LC-15E 12 kW 400V 3Ph
 LC-20E 16 kW 400V 3Ph
2 row hot water coil



Dimension, weight, water content



Dimension (mm)

Model	LC-10	LC-15	LC-20
A	1125	1625	2160

Water content (litres)

Model	LC-10	LC-15	LC-20
	1,40	2,10	2,85

Weight (kg)

Model	Weight with packaging			Weight without packaging		
	LC-10	LC-15	LC-20	LC-10	LC-15	LC-20
LC-A	34,5	45,6	78,5	31	41	60
LC-W	39,5	51,6	86,5	36	47	68
LC-E	37,5	49,6	83,5	34	45	65

ventilation only

Model		LC-10A		LC-15A		LC-20A	
Speed		max	min	max	min	max	min
Installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	2100	1200	3150	1500	4200	2400
Sound pressure (***)	dB(A)	52	38	56	38	54	38
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	330	230	540	200	660	460
	A	1,57	1,15	2,35	1,00	3,14	2,30
Weight	kg	31	31	41	41	60	60

with hot water coil

Model		LC-10W		LC-15W		LC-20W	
Speed		max	min	max	min	max	min
Installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1900	1100	3000	1500	4000	2200
Heating (*)	kW	18,46	12,44	27,59	17,49	38,59	26,21
Heating (**)	kW	10,29	7,07	15,51	10,04	22,26	15,34
Sound pressure (***)	dB(A)	52	38	56	38	54	38
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	330	230	540	200	660	460
	A	1,57	1,15	2,35	1,00	3,14	2,30
Weight	kg	36	36	47	47	68	68

with electric resistance

Model		LC-10E		LC-15E		LC-20E	
Speed		max	min	max	min	max	min
Installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	2100	1200	3150	1500	4200	2400
Electric resistance - 1 st stage	kW	4	4	6	6	8	8
Electric resistance - 2 nd stage	kW	8	8	12	12	16	16
Sound pressure (***)	dB(A)	52	38	56	38	54	38
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Electric resistance voltage	V	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph
Motor absorption	W	330	230	540	200	660	460
	A	1,57	1,15	2,35	1,00	3,14	2,30
Electric resistance absorption – 1 st stage	A	6	6	9	9	12	12
Electric resistance absorption – 2 nd stage	A	12	12	18	18	24	24
Weight	kg	34	34	45	45	65	65

(*) = Air temperature 18 °C – Water temperature 80/60 °C.

(**) = Air temperature 18 °C – Water temperature 60/40 °C.

(***) = The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.



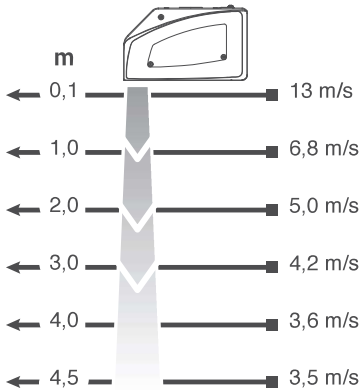
The **LI** door curtains are intended to be installed **near industrial entrances or doors**, i.e. wherever the installation height must be up to 4.5 metres (maximum).

The unit comes with integrated control system specifically designed for every type of operation:

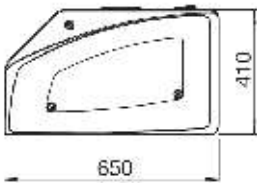
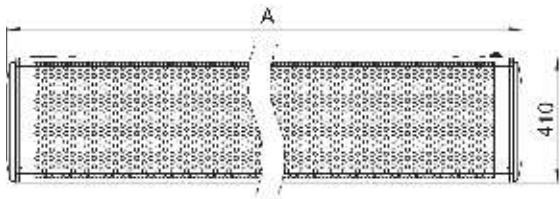
LI-A: air ventilation only, it is provided with wall mounted remote control. The control allows to switch the door barrier on and off and to set the speed required (high or low) by pressing a step-by-step button.

LI-W/E: operation with hot water or electric coil. The unit comes with remote control with T-MB wall mounted display.

- Recommended installation height:** 4.5 metres
- Installation:** horizontal
- Lengths available:** 1, 1.5, and 2 metres
- Electric resistance:**
 - LI-10E** 11 kW 400V 3Ph
 - LI-15E** 18 kW 400V 3Ph
 - LI-20E** 22 kW 400V 3Ph
- 2 row hot water coil**



Dimension, weight, water content



Dimension (mm)

Model	LI-10	LI-15	LI-20
A	1150	1650	2185

Water content (litres)

Model	LI-10	LI-15	LI-20
	1,65	2,55	3,40

Weight (kg)

Model	Weight with packaging			Weight without packaging		
	LI-10	LI-15	LI-20	LI-10	LI-15	LI-20
LI-A	45,9	67,1	110,0	42	62	88
LI-W	51,9	74,1	120,0	48	69	98
LI-E	50,9	73,1	118,0	47	68	96

ventilation only

Model		LI-10A		LI-15A		LI-20A	
Speed		max	min	max	min	max	min
Installation height	m	4,5	4,5	4,5	4,5	4,5	4,5
Length	mm	1150	1150	1650	1650	2185	2185
Air flow	m ³ /h	3500	2600	5500	3250	7000	5200
Sound pressure (***)	dB(A)	58	49	58	50	60	51
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	600	400	940	520	1200	800
	A	2,63	1,80	4,20	2,40	5,26	3,60
Weight	kg	42	42	62	62	88	88

with hot water coil

Model		LI-10W		LI-15W		LI-20W	
Speed		max	min	max	min	max	min
Installation height	m	4,5	4,5	4,5	4,5	4,5	4,5
Length	mm	1150	1150	1650	1650	2185	2185
Air flow	m ³ /h	3500	2600	5500	3250	7000	5200
Heating (*)	kW	27,32	23,06	42,03	30,96	57,65	48,47
Heating (**)	kW	15,25	12,95	22,94	17,16	32,49	27,57
Sound pressure (***)	dB(A)	58	49	58	50	60	51
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Motor absorption	W	600	400	940	520	1200	800
	A	2,63	1,80	4,20	2,40	5,26	3,60
Weight	kg	48	48	69	69	98	98

with electric resistance

Model		LI-10E		LI-15E		LI-20E	
Speed		max	min	max	min	max	min
Installation height	m	4,5	4,5	4,5	4,5	4,5	4,5
Length	mm	1150	1150	1650	1650	2185	2185
Air flow	m ³ /h	3500	2600	5500	3250	7000	5200
Electric resistance - 1 st stage	kW	7	7	12	12	14	14
Electric resistance - 2 nd stage	kW	11	11	18	18	22	22
Sound pressure (***)	dB(A)	58	49	58	50	60	51
Motor voltage	V	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~	230 V ~
Electric resistance voltage	V	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph	400 V 3 Ph
Motor absorption	W	600	400	940	520	1200	800
	A	2,63	1,80	4,20	2,40	5,26	3,60
Electric resistance absorption – 1 st stage	A	10,2	10,2	17,5	17,5	20,5	20,5
Electric resistance absorption – 2 nd stage	A	16,0	16,0	26,1	26,1	32,0	32,0
Weight	kg	47	47	68	68	96	96

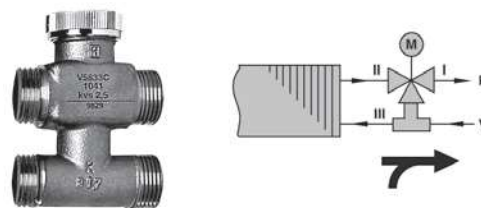
(*) = Air temperature 18 °C – Water temperature 80/60 °C.

(**) = Air temperature 18 °C – Water temperature 60/40 °C.

(***) = The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

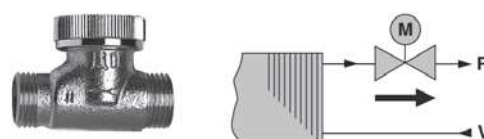
3 way valve

Three way ON-OFF valves with electric control.



2 way valve

Two way ON-OFF valves with electric control.



DSC

Door contact sensor kit

As soon as the door is open, the DSC door switch provides the consent for the air curtain operation (ventilation, valve opening, internal resistance supply) and denies it as soon as the door is closed.

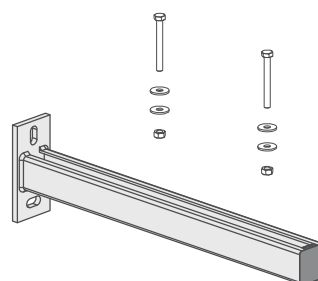


ST

Suspension brackets kit

(LC and LI models only, included for LU model)

The Kit consists of brackets and of the fixing elements (except wall fixing plugs).

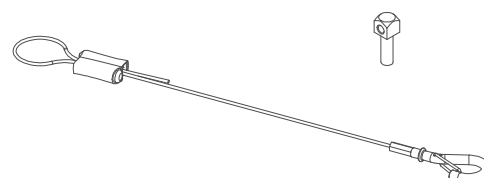


CAV

Suspension bracket kit with wires

(LC and LI models only)

The Kit consists of steel wires with hook and of fixing eye-bolts (except ceiling fixing elements).



PR-LC

Plenum for concealed installation with aesthetic frame (LC model only)

The plenum with aesthetic frame allows the concealed installation of the LC Curtain model. Thanks to this option, the Air Curtains do not interfere with the harmony of the ambient where they are installed.



LU and LU-ECM models

**LU-A Control system**

The units are equipped, as standard, with electronic board to manage:

- High/Low speed ON button.
- ON indication and failure LED.
- Terminals for "Door Contact" external connection.
- Terminals for connecting a remote ON/OFF switch.
- Dip switch to set the post-ventilation delay time of the door closure fan.

**LU-W/E and LU-ECM-A/W/E Control systems**

The units are equipped, as standard, with electronic board, receiver unit for remote control and **RR03-LU** remote control to manage:

- ON/OFF unit.
- Fan speed selection.
- Water valve ON/OFF actuator ("W" version).
- Activation of the electric resistance 1st and 2nd stage ("E" version).
- Door interlock.
- Remote ON/OFF interlock.



Several units can be controlled in Master/Slave mode.

**Control (accessory) for LU-W/E and LU-ECM-A/W/E versions**

The units can be managed by the **T-MB** control.

LC and LI models

**LC-A and LI-A Control systems**

Wall-mounted remote control (provided as standard):

- High/Low speed-Standby ON button.
- ON indication or Standby LED.
- "Door Contact" external connection terminals.
- Terminals for connecting a remote ON/OFF switch.
- Dip switch to set the post-ventilation delay time of the door closure fan.

**LC-W/E and LI-W/E Control systems**

The units are equipped, as standard, with electronic board and T-MB control to manage:

- ON/OFF unit.
- Fan speed selection.
- Operating mode selection (ventilation only or with heating coil).
- Air temperature set-point configuration.
- Water valve ON/OFF actuator ("W" version).
- Activation of the electric resistance 1st and 2nd stage ("E" version).
- Door interlock.
- Remote ON/OFF interlock.

Several units can be controlled in Master/Slave mode.