

**SABIANA**

ENVIRONMENTAL COMFORT



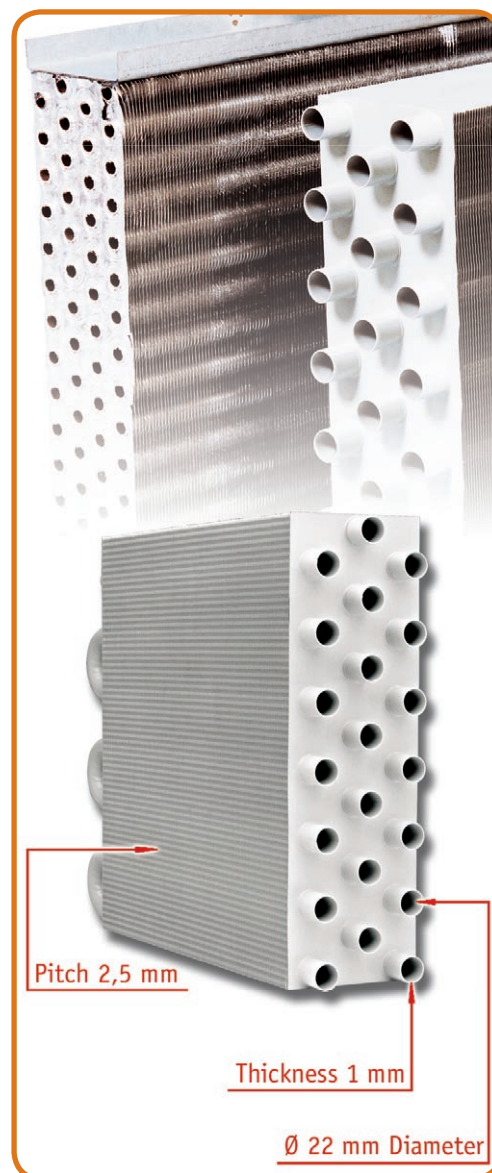
Helios Unit Heaters

The **Helios unit heater** with its futuristic polished aluminium and contoured design is rather special. This smart new concept in commercial heating units will accommodate all architects who are looking for something new and different. The **Helios unit heaters** are produced in 6 sizes from 5 to 60 kW and are available with a 1-row battery for steam and high temperature hot water installations, a 2-row battery for hot water installations and a 3-row battery for low temperature hot water installations.

Thanks to its heart Sabiana is a leader in the sales of unit heaters in Europe. The battery of **Sabiana Helios unit heaters** with steel tubes \varnothing 22 mm and aluminium fins has the following advantages compared with the copper-aluminium small diameter tube batteries. The material used for the steel tube, which is very thick (1 mm instead of 0,3 - 0,4 mm), makes the Sabiana battery extremely sturdy and long lasting. The tube 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 battery 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 battery 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 battery long lasting and increases the thermal output. The Sabiana battery can be used with hot water and high temperature hot water with a working pressure up to 16 bar and with steam up to 10 bar. As a matter of fact each battery 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 cooper tubes and aluminium fins. This battery has the same features (tube diameter, fin pitch, etc.) of the steel battery 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 batteries normally used for unit heaters. The wide range of products includes 6 different sizes with 1, 2 or 3 rows each.

Main components:

- **CASING**
Made from 4 angular diecast aluminium components and lateral elements made of extruded, anodized aluminium in a silver colour.
- **HEAT EXCHANGER**
The heat exchanger 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.
- **FAN ASSEMBLY**
It is made up of three components: the fan, the motor and the finger proof guard, which also acts as the main support.
- **ELECTRIC MOTOR**
The standard motor fitted is a hermetically sealed motor which is maintenance free. The motor is supplied as standard for a three phase 230/400 V 50 Hz available in accordance to the size at 4, 6, 8 pole and at 4/8, 4/6, 6/8 two speed version.





Helios Technical Characteristics

HEATING EMISSION WT 85-75°C / 10°C DROP / Δtm 65°C / EAT 15°C

UNIT SIZE	Motor speed	Model Ref.	Leaving air volume	Noise level at 5 m	Emission	Leaving air temp.	Mounting heights				
							Horizontal discharge		Vertical discharge		
							H	TROW	MAX H	COVER	
r.p.m.	m ³ /h	dB(A)	KCal/h	W	°C	m	m	m	m ²		
1		4 H11	1670	56	-	-	-	-	-	-	
	1400	4 H12	1560	56	9600	11170	38	2,5÷3,5	8	4	50
		4 H13	1450	56	11120	12940	44	-	-	-	-
2		4 H21	2370	59	-	-	-	-	-	-	
	1400	4 H22	2200	59	13410	15600	38	3÷4	11	4,5	60
		4 H23	2100	59	15210	17700	42	-	-	-	-
3		4 H31	3400	61	-	-	-	-	-	-	
	1400	4 H32	3300	61	20500	23850	38	3÷4	14	5	70
		4 H33	3200	61	23810	27700	43	-	-	-	-
4		4 H41	4250	64	-	-	-	-	-	-	
	1400	4 H42	3980	64	26510	30840	40	3,5÷4,5	16	5,5	80
		4 H43	3800	64	30310	35260	45	-	-	-	-
5		4 H51	5600	66	-	-	-	-	-	-	
	1400	4 H52	5500	66	34900	40600	39	4÷5	20	6	100
		4 H53	5400	66	39800	46310	43	-	-	-	-
6		4 H61	7400	69	-	-	-	-	-	-	
	1400	4 H62	7200	69	44510	51780	38	4÷5,5	25	7	130
		4 H63	7000	69	51210	59380	43	-	-	-	-

UNIT SIZE	Velocità di rotazione	Model Ref.	Leaving air volume	Noise level at 5 m	Emission	Leaving air temp.	Mounting heights				
							Horizontal discharge		Vertical discharge		
							H	TROW	MAX H	COVER	
r.p.m.	m ³ /h	dB(A)	KCal/h	W	°C	m	m	m	m ²		
1		6 H11	1140	48	-	-	-	-	-	-	
	900	6 H12	1040	48	7310	8500	41	2,5÷3	5,5	3	36
		6 H13	960	48	8410	9790	48	-	-	-	-
2		6 H21	1560	51	-	-	-	-	-	-	
	900	6 H22	1440	51	10210	11880	41	2,5÷3,5	7,5	3,5	45
		6 H23	1380	51	11510	13390	46	-	-	-	-
3		6 H31	2230	52	-	-	-	-	-	-	
	900	6 H32	2170	52	15420	17940	42	2,5÷3,5	10	4	50
		6 H33	2100	52	17800	20710	47	-	-	-	-
4		6 H41	2910	54	-	-	-	-	-	-	
	900	6 H42	2720	54	20020	23290	42	3÷4	12	4,5	60
		6 H43	2600	54	22890	26630	48	-	-	-	-
5		6 H51	3630	56	-	-	-	-	-	-	
	900	6 H52	3560	56	26570	30910	43	3,5÷4,5	15	5	75
		6 H53	3500	56	30300	35250	48	-	-	-	-
6		6 H61	4790	60	-	-	-	-	-	-	
	900	6 H62	4670	60	34720	40390	43	4÷5	18	6	110
		6 H63	4550	60	39910	46430	48	-	-	-	-

Helios identification code

Reference: 6H53 - SX

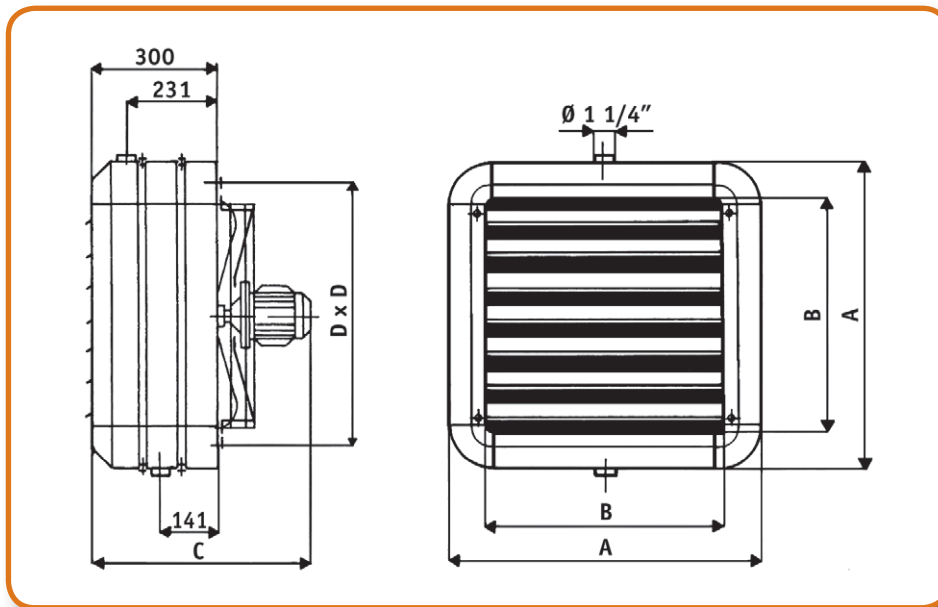
6	H	5	3	SX
MOTOR 6 POLE (900 r.p.m.)	RANGE HELIOS	SIZE 5	ROWS 3	BATTERY STEEL TUBE
				SP
				BATTERY COPPER TUBE

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Dimensions, weight and water content

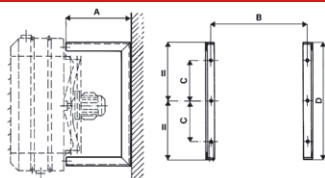


SIZE	A	B	C	D	WEIGHT (kg)			WATER CONTENT (litres)		
					1R	2R	3R	1R	2R	3R
1	486	330	477	406	19	22	24	1,3	2,6	3,9
2	540	384	477	460	22	25	27	1,6	3,2	4,8
3	594	438	477	514	26	30	33	1,9	3,8	5,7
4	648	492	500	568	30	34	38	2,3	4,6	6,9
5	702	546	500	622	33	40	44	3,0	6,0	9,0
6	756	600	525	676	38	46	51	3,5	7,0	10,5

Accessories

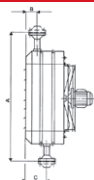
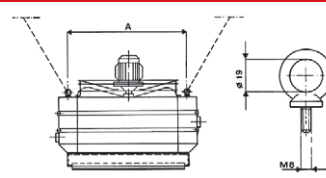
HMP

Wall bracket.



HS

Suspension plate for ceiling installation.



HF

Water > 140°C - Steam > 3 bar
Flanged connections.
PN 16 flanges are fitted as standard
however any flange can be fitted on request.

4 way diffuser AD

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

HPP

Ball protection grid.

