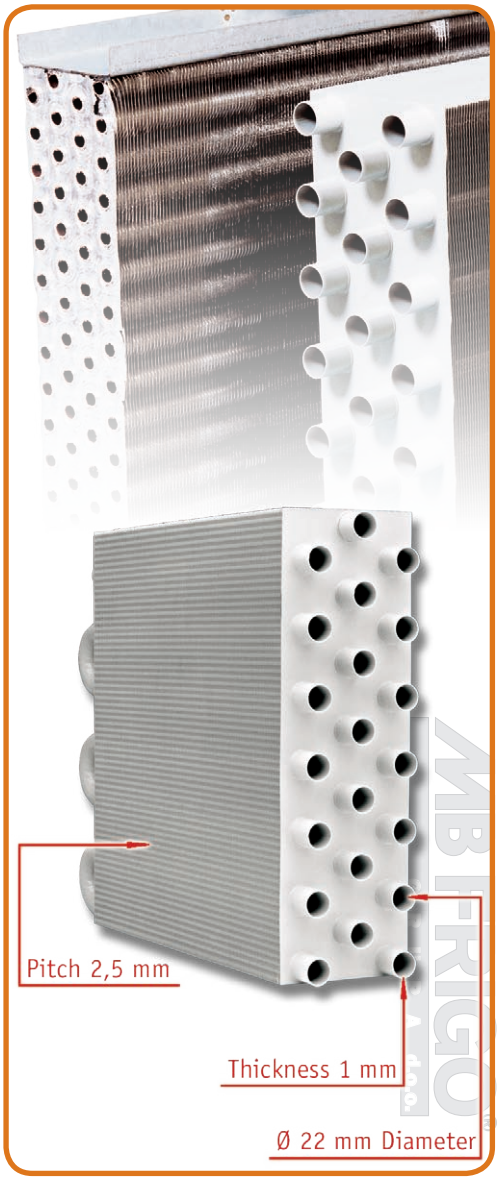
Atlas Unit Heaters

The ***Atlas Sabiana unit heaters*** have a big "heart": a battery, which has been developed, studied and constructed expressly for heating industrial environments. The high thickness of the tubes (1mm steel tube, 0,7mm 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 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.

Atlas heat exchanger

Thanks to its heart Sabiana is a leader in the sales of unit heaters in Europe. The battery 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 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 avaids 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 wotking 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, atc.) 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 10 different sizes with 1, 2 or 3 rows each.



Main components:

- **Casing**
  Made from galvanized prepainted steel finished in dove grey, and assembled from three component parts.
- **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.
- **On request:**
  - IP 55 motor protection
  - Flame proof motor
  - Ambient thermostat
  - Special voltage

Atlas 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		Mounting heights: Vertical discharge	
	r.p.m.		m^3/h	dB(A)	KCal/h	W	°C	H m	TROW m	MAX H m	COVER m^2
1	1400	4 A11	1670	56	-	-	-	2,5÷3,5	8	4	50
		4 A12	1560	56	9600	11170	38				
		4 A13	1450	56	11120	12940	44				
2	1400	4 A21	2370	59	-	-	-	3÷4	11	4,5	60
		4 A22	2200	59	13410	15600	38				
		4 A23	2100	59	15210	17700	42				
3	1400	4 A31	3400	61	-	-	-	3÷4	14	5	70
		4 A32	3300	61	20500	23850	38				
		4 A33	3200	61	23810	27700	43				
4	1400	4 A41	4250	64	-	-	-	3,5÷4,5	16	5,5	80
		4 A42	3980	64	26510	30840	40				
		4 A43	3800	64	30310	35260	45				
5	1400	4 A51	5600	66	-	-	-	4÷5	20	6	100
		4 A52	5500	66	34900	40600	39				
		4 A53	5400	66	39800	46310	43				
6	1400	4 A61	7400	69	-	-	-	4÷5,5	25	7	130
		4 A62	7200	69	44510	51780	38				
		4 A63	7000	69	51210	59380	43				
7	900	6 A71	5800	65	-	-	-	4÷5	24	7	120
		6 A72	5400	65	38000	44200	41				
		6 A73	5200	65	46000	53500	48				
8	900	6 A81	8500	67	-	-	-	4÷5,5	26	9	160
		6 A82	7600	67	54100	62900	42				
		6 A83	7000	67	62500	72700	48				
9	900	6 A91	10600	68	-	-	-	4÷6	28	11	200
		6 A92	10000	68	70000	81400	41				
		6 A93	9500	68	85000	98800	48				
10	900	6 A101	12500	71	-	-	-	4÷6	30	12	220
		6 A102	11900	71	84100	97800	42				
		6 A103	11400	71	102000	118600	47				

UNIT SIZE	Velocità di rotazione	Model Ref.	Leaving air volume	Noise level at 5 m	Emission		Leaving air temp.	Mounting heights: Horizontal discharge		Mounting heights: Vertical discharge	
	r.p.m.		m^3/h	dB(A)	KCal/h	W	°C	H m	TROW m	MAX H m	COVER m^2
1	900	6 A11	1140	48	-	-	-	2,5÷3	5,5	3	36
		6 A12	1040	48	7310	8500	41				
		6 A13	960	48	8410	9790	48				
2	900	6 A21	1560	51	-	-	-	2,5÷3,5	7,5	3,5	45
		6 A22	1440	51	10210	11880	41				
		6 A23	1380	51	11510	13390	46				
3	900	6 A31	2230	52	-	-	-	2,5÷3,5	10	4	50
		6 A32	2170	52	15420	17940	42				
		6 A33	2100	52	17800	20710	47				
4	900	6 A41	2910	54	-	-	-	3÷4	12	4,5	60
		6 A42	2720	54	20020	23290	42				
		6 A43	2600	54	22890	26630	48				
5	900	6 A51	3630	56	-	-	-	3,5÷4,5	15	5	75
		6 A52	3560	56	26570	30910	43				
		6 A53	3500	56	30300	35250	48				
6	900	6 A61	4790	60	-	-	-	4÷5	18	6	110
		6 A62	4670	60	34720	40390	43				
		6 A63	4550	60	39910	46430	48				
7	700	8 A71	4400	60	-	-	-	3,5÷4	18	6	100
		8 A72	4100	60	31900	37100	44				
		8 A73	3800	60	37700	43800	52				
8	700	8 A81	6000	61	-	-	-	3,5÷4,5	20	7	130
		8 A82	5500	61	44900	52200	45				
		8 A83	5000	61	51300	59700	52				
9	700	8 A91	8000	62	-	-	-	3,5÷5	21	8	150
		8 A92	7500	62	58100	67600	44				
		8 A93	7000	62	69700	81100	52				
10	700	8 A101	9500	65	-	-	-	4÷5	22	9	160
		8 A102	8800	65	68100	79200	44				
		8 A103	8450	65	83700	97300	52				

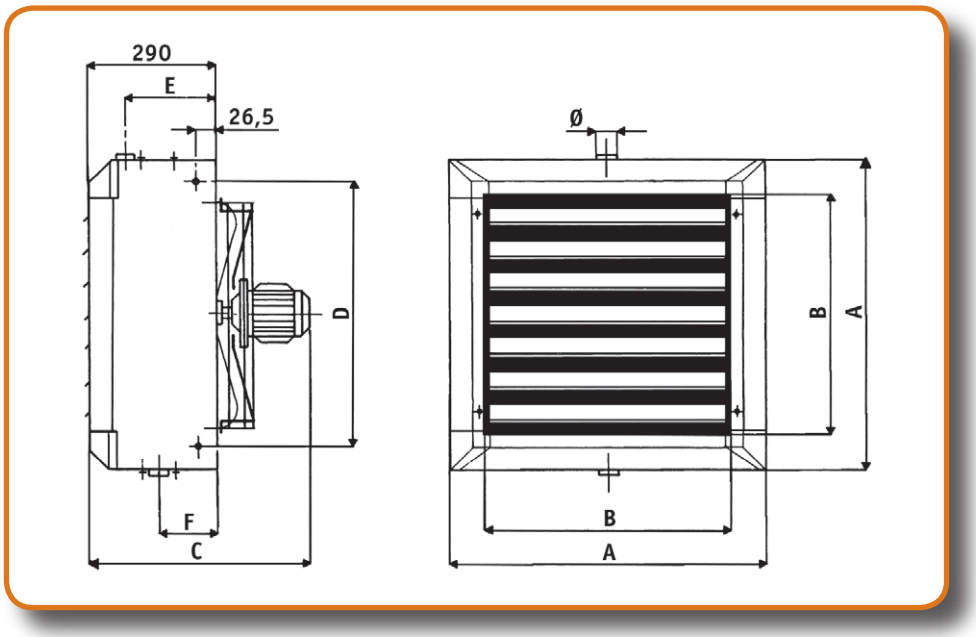
Atlas identification code

Reference: 6A42 - SX

6	A	4	2	SX
MOTOR 6 POLE (900 r.p.m.)	RANGE ATLAS	SIZE 4	ROWS 2	BATTERY STEEL TUBE

SP
BATTERY COPPER TUBE

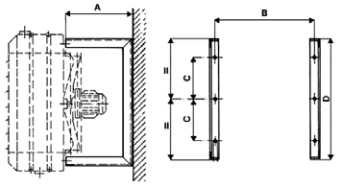
Dimensions, weight and water content



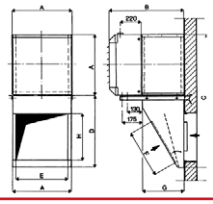
SIZE	A	B	C	D	E	F	Ø	WEIGHT (kg)			WATER CONTENT (litres)		
								1R	2R	3R	1R	2R	3R
1	472	336	465	375	220	130	1 1/4"	19	22	24	1,3	2,6	3,9
2	526	390	465	429	220	130	1 1/4"	22	25	27	1,6	3,2	4,8
3	580	444	465	483	220	130	1 1/4"	26	30	33	1,9	3,8	5,7
4	634	498	488	537	220	130	1 1/4"	30	34	38	2,3	4,6	6,9
5	688	552	488	591	220	130	1 1/4"	33	40	44	3,0	6,0	9,0
6	742	606	513	645	220	130	1 1/4"	38	46	51	3,5	7,0	10,5
7	793	657	560	696	210	140	1 1/2"	46	55	61	4,3	8,2	12,3
8	900	764	575	803	210	140	1 1/2"	55	66	73	5,8	11,1	16,6
9	1010	874	595	913	210	140	1 1/2"	65	79	88	7,6	14,5	21,8
10	1117	980	640	1020	210	140	2"	79	95	106	9,6	18,2	27,3

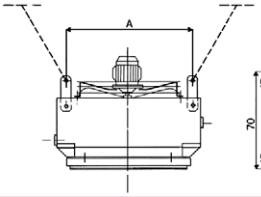
Accessories

AMP
Wall bracket.

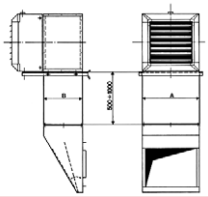


AMC
Double intake hood
with internal/external air mixing,
damper manually controlled.
Prepainted steel thickness 1 mm.



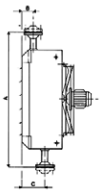


AS
Suspension plate
for ceiling
installation.

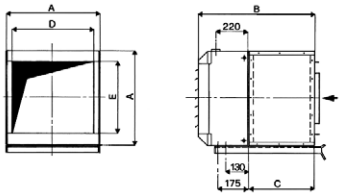


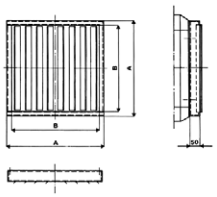
AP
Intermediate section
for ARC and AMC air boxes.
Prepainted steel thickness 1 mm.

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

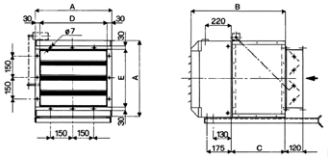


AE
Fresh box.
Prepainted
steel thickness 1 mm.



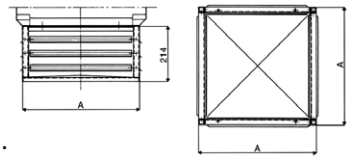


4 way diffuser AD
To be used when discharging downflow
to create a 4 way discharge pattern.
For normal heights of installation.

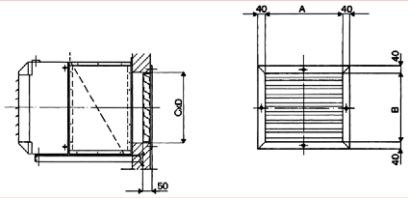


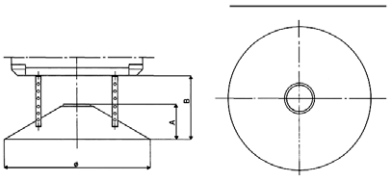
AES
Fresh air box with
manually operated damper
(can be motorized
by the customer).
Prepainted steel thickness 1 mm.

AW4
To be used when discharging
downflow to create
a 4 way discharge pattern.
For low heights of installation.

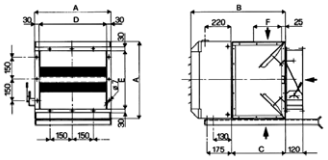


AG
External air intake grille
suitable with
AE-AES-AMC air boxes.
Prepainted
steel thickness 1 mm.



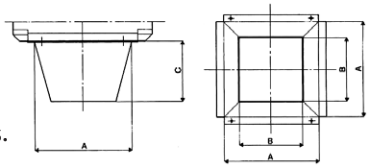


ACD
Cone diffuser
recommended
for low-level
ceiling installations.

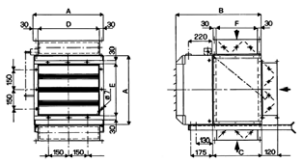


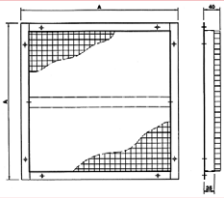
AM
Internal/external air mixing box
manually controlled.
Prepainted
steel thickness 1 mm.

ATP
Blast nozzle
hight level diffuser.
Recommended
for high ceiling installations.

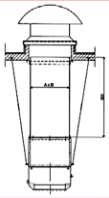


AMS
Internal/external air mixing box
manually controlled (can be
motorized by the customer).
Prepainted steel thickness 1 mm.



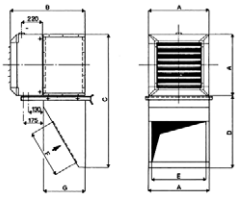


APP
Ball protection grid.

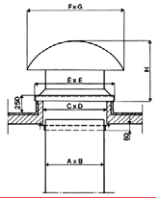


AC
Intermediate section
for AE-AES-AM-AMS air boxes.

ARC
Simple intake hood fitted underneath.
Prepainted steel thickness 1 mm.



AT
Roof-mounted air intake
suitable with AE-AES-AM-AMS air boxes.



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