



Cert. n° 0545/5

Compliant
with
ERP 2013 Regulation (EU)
No. 327/2011



Heating / Air Conditioning
Atlas ECM Unit Heaters



SABIANA
IL CLIMA AMICO

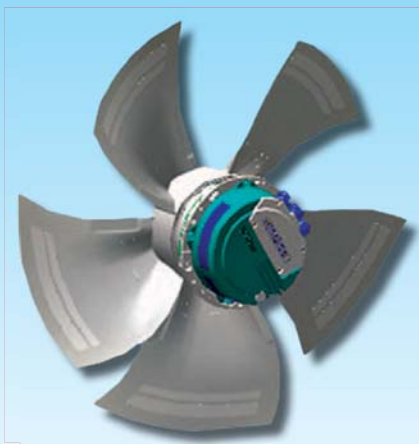
A leading brand of  **AFG**



IL CLIMA AMICO

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HELICOIDAL FAN

ELECTRONIC MOTOR



Since 1950 Sabiana has been manufacturing hot water, high temperature hot water and steam unit heaters for heating industrial and commercial environments, with proprietary manufacturing technology and a wide range of solutions.

In all the European countries the most common heating system for industrial environments uses hot water unit 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 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.

A further development is proposed in this catalogue: every model is provided with an electronic motor controlled by a built-in inverter. The ECM motors allow electric energy saving if compared to traditional asynchronous motors and they enable to continuously adjust the air flow and control the ambient temperature with precision, with further benefits in terms of very low noise levels.

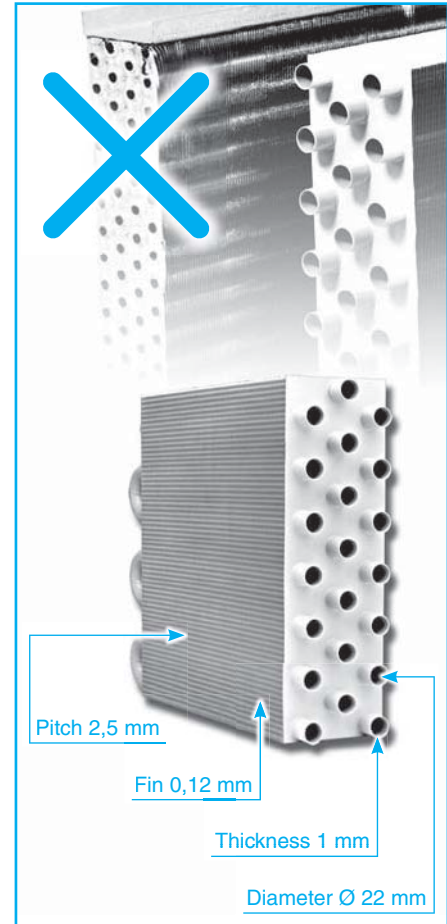
All range is compliant with the new ERP 2013 Regulation (EU) No. 327/2011 which requires very low electric consumption ratings in relation to performances provided.

Sabiana is the leading manufacturer of unit heaters, and competes worldwide providing the latest technology in environmental comfort.



Coil

- The coil of Sabiana **Atlas ECM** unit heaters with steel tubes \varnothing 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 output: this gives a low resistance to the air flow and consequently an optimum leaving air temperature and a very long throw.
- With a greater spacing between the fins as well as their thickness this facilitates cleaning and maintenance operations, which is essential to keep the unit heater efficient.
The steel tube coil is the ideal choice for installations 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 paint coating makes the coil long lasting and increases the thermal output.
- The Sabiana coil can be used with hot water.
Each coil is submitted to two tests at 30 bars.
- However, in order to meet any design or installation needs Sabiana 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 higher mass than the coils normally used for unit heaters.
- The wide range of products consists of **6 different sizes** with **1, 2 or 3 rows** each.



Electronic motor

Single phase permanent magnet brushless electronic motor, IP 54 protection and class B insulation.
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 air flow is uniformly distributed through the whole coil and consequently the unit is very quiet.

Electric fan support

The finger proof guard in galvanized steel also acts as the main support and fixing frame.
This frame is mounted onto the main casing via residually anti-vibration rubber mountings.

Casing

The main casing is manufactured from galvanized pre-painted steel finished in a light grey colour (RAL 9002) and is assembled from three component parts. The steel is 1 mm thick and pre-painted before manufacture to prevent the material being subjected to oxidation. The use of steel with 200 gr/m². (according to Euronorm 142-79) and pre-painting guarantees a perfect finish and superior protection against corrosion. The component parts are held together by anti vibration screws that allow easy and fast access and maintenance of the unit and coil.



Louvres

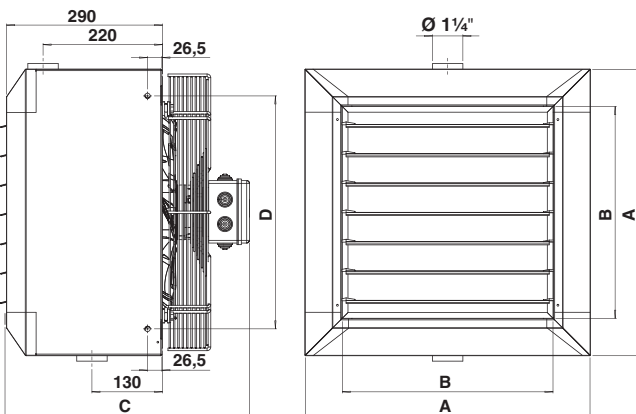
Louvres are made from a profiled pre-painted steel sheet with a design that allows excellent direction of air flow. The adjustable louvres are held in place by spring loaded pivots which allow the rotation of every single louvre in the desired position without vibrations. Fourway distribution is achieved by the addition of a second set of louvres to the front of the unit, generally for downward application.

Identification code

Reference: A-ECM42

A-ECM	4	2	SX
Atlas ECM RANGE	SIZE 4	ROWS 2	COIL STEEL TUBE
			SP
			COIL COPPER TUBE

Dimensions, Weight, Water content



SIZE	Dimensions (mm)				Weight (kg)			Water content (liters)		
	A	B	C	D	1R	2R	3R	1R	2R	3R
1	472	336	460	375	19	22	24	1,3	2,6	3,9
2	526	390	460	429	22	25	27	1,6	3,2	4,8
3	580	444	460	483	26	30	33	1,9	3,8	5,7
4	634	498	460	537	30	34	38	2,3	4,6	6,9
5	688	552	500	591	33	40	44	3,0	6,0	9,0
6	742	606	500	645	38	46	51	3,5	7,0	10,5

Operation limits

WATER

Maximum water temperature = max. 90°C

Maximum working pressure = 1600 kPa (16 bars)

Motor electrical data (max. absorption)

MODEL		1	2	3	4	5	6
230/1 50Hz	W	78,2	122,0	166,0	166,0	265,0	246,0
	A	0,69	1,05	1,39	1,39	1,78	1,66

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	
Emission:	water temp. 85/75°C	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
	E.A.T. +15°C	L.A.T. °C	28	29	30	32	33	35	38	39	41	43	45	47	45	46	48	50	53	55
Emission:	water temp. 85/70°C	kW	4,84	4,58	4,32	4,05	3,73	3,42	7,85	7,53	6,99	6,52	5,91	5,39	9,85	9,39	8,64	7,99	7,21	6,52
	E.A.T. +15°C	L.A.T. °C	26	27	28	29	31	32	35	36	37	39	41	43	41	42	44	46	48	50
Emission:	water temp. 80/60°C	kW	3,49	3,31	3,13	2,95	2,73	2,52	5,74	5,51	5,14	4,81	4,39	4,02	7,28	6,97	6,42	5,97	5,42	4,92
	E.A.T. +15°C	L.A.T. °C	23	24	24	25	26	28	30	30	31	33	34	36	34	35	37	38	40	41
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 power	dB(A)	64,0	62,5	60,5	57,5	53,7	49,5	64,0	62,5	60,5	57,5	53,7	49,5	64,0	62,5	60,5	57,5	53,7	49,5	
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	
Emission:	water temp. 85/75°C	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
	E.A.T. +15°C	L.A.T. °C	29	30	31	32	34	36	39	40	42	44	46	49	46	48	50	52	55	57
Emission:	water temp. 85/70°C	kW	7,26	6,82	6,42	6,08	5,55	4,98	11,76	11,05	10,26	9,46	8,53	7,63	14,84	13,84	12,73	11,63	10,35	9,13
	E.A.T. +15°C	L.A.T. °C	27	28	29	30	32	34	36	37	39	41	43	45	42	44	46	48	50	53
Emission:	water temp. 80/60°C	kW	5,51	5,18	4,89	4,64	4,25	3,83	9,00	8,46	7,90	7,31	6,61	5,93	11,45	10,68	9,88	9,05	8,09	7,17
	E.A.T. +15°C	L.A.T. °C	24	25	26	26	28	29	31	32	33	35	37	39	36	37	39	41	43	45
Fan	W	122	92,5	67	49	34	21,5	122	92,5	67	49	34	21,5	122	92,5	67	49	34	21,5	
Sound power	dB(A)	69,0	67,5	65,5	62,5	58,7	54,5	69,0	67,5	65,5	62,5	58,7	54,5	69,0	67,5	65,5	62,5	58,7	54,5	
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	
Emission:	water temp. 85/75°C	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
	E.A.T. +15°C	L.A.T. °C	28	29	30	32	33	35	39	40	42	43	46	48	47	48	50	51	54	57
Emission:	water temp. 85/70°C	kW	10,53	10,03	9,49	8,82	8,17	7,35	16,50	15,78	14,93	13,96	12,51	11,26	20,41	19,40	18,20	16,90	14,88	13,24
	E.A.T. +15°C	L.A.T. °C	27	28	29	30	31	33	37	38	39	40	43	45	44	45	46	48	51	53
Emission:	water temp. 80/60°C	kW	8,22	7,86	7,43	6,93	6,43	5,81	13,00	12,44	11,79	11,04	9,93	8,96	16,16	15,38	14,50	13,48	11,91	10,64
	E.A.T. +15°C	L.A.T. °C	24	25	26	27	28	29	32	33	34	35	37	39	38	39	40	41	44	46
Fan	W	166	136	101	73	50	31,5	166	136	101	73	50	31,5	166	136	101	73	50	31,5	
Sound power	dB(A)	66,0	66,0	63,5	61,0	57,7	53,0	66,0	66,0	64,0	62,0	58,0	54,0	66,0	66,0	64,0	62,0	58,0	54,0	
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	-	-	-	

Measurement performed at 5 meter from the source
 Room volume of 500 m³ - Reverberation period of 2 s - Directional factor Q=2 (hemisphere sound emission).

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	
Emission:	water temp. 85/75°C	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
	E.A.T. +15°C	L.A.T. °C	28	29	30	31	32	34	40	42	44	46	49	52	48	51	53	55	58	61
Emission:	water temp. 85/70°C	kW	14,03	13,63	13,00	12,16	11,25	10,19	21,58	19,87	18,26	16,58	14,75	13,17	25,95	23,58	21,43	19,19	16,76	14,73
	E.A.T. +15°C	L.A.T. °C	27	27	28	29	31	33	37	39	41	43	46	48	45	48	50	52	55	57
Emission:	water temp. 80/60°C	kW	11,20	10,90	10,42	9,74	9,03	8,20	17,35	16,01	14,74	13,43	11,94	10,71	20,97	19,14	17,39	15,65	13,72	12,09
	E.A.T. +15°C	L.A.T. °C	25	25	26	27	28	29	33	35	36	38	40	42	40	41	43	45	48	50
Fan	W	166	131	98,5	70	48	30	166	131	98,5	70	48	30	166	131	98,5	70	48	30	
Sound power	dB(A)	67,0	67,0	64,5	62,0	58,7	54,0	67,0	67,0	64,5	62,0	58,7	54,0	67,0	67,0	64,5	62,0	58,7	54,0	
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	
Emission:	water temp. 85/75°C	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
	E.A.T. +15°C	L.A.T. °C	27	27	28	29	30	33	38	38	39	41	43	47	47	47	48	51	53	57
Emission:	water temp. 85/70°C	kW	19,30	19,30	18,44	17,49	16,12	14,32	29,33	29,33	28,19	26,20	24,02	20,70	35,04	35,04	33,49	30,66	27,82	23,44
	E.A.T. +15°C	L.A.T. °C	26	26	27	28	29	31	36	36	37	39	41	44	45	45	46	48	50	54
Emission:	water temp. 80/60°C	kW	15,64	15,64	14,97	14,20	13,08	11,68	23,93	23,93	23,01	21,36	19,66	16,99	28,71	28,71	27,44	25,20	22,90	19,34
	E.A.T. +15°C	L.A.T. °C	24	24	25	25	26	28	32	32	33	35	36	39	39	39	40	42	44	47
Fan	W	265	265	219	156	104	59	265	265	219	156	104	59	265	265	219	156	104	59	
Sound power	dB(A)	69,0	69,0	68,5	66,0	62,0	57,0	69,0	69,0	68,5	66,0	62,0	57,0	69,0	69,0	68,5	66,0	62,0	57,0	
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	
Emission:	water temp. 85/75°C	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
	E.A.T. +15°C	L.A.T. °C	28	28	28	30	31	34	40	40	40	42	45	48	49	49	50	52	55	58
Emission:	water temp. 85/70°C	kW	23,35	23,35	22,40	21,00	19,27	17,10	35,08	35,08	34,05	31,21	28,23	24,86	41,24	41,24	39,74	35,88	31,92	27,62
	E.A.T. +15°C	L.A.T. °C	27	27	27	28	30	32	38	38	38	40	43	46	46	46	47	50	52	55
Emission:	water temp. 80/60°C	kW	19,12	19,12	18,42	17,26	15,85	14,08	28,93	28,93	28,01	25,71	23,31	20,62	34,13	34,13	32,90	29,75	26,58	23,03
	E.A.T. +15°C	L.A.T. °C	24	24	25	26	27	29	34	34	34	36	38	40	41	41	42	44	46	49
Fan	W	246	246	211	148	96	59	246	246	211	148	96	59	246	246	211	148	96	59	
Sound power	dB(A)	70,0	70,0	69,5	67,0	63,0	58,0	70,0	70,0	69,5	67,0	63,0	58,0	70,0	70,0	69,5	67,0	63,0	58,0	
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	-	-	

Measurement performed at 5 meter from the source
 Room volume of 500 m³ - Reverberation period of 2 s - Directional factor Q=2 (hemisphere sound emission).

Emission table of Atlas ECM units with 1 row coil

Entering air temperature: 15°C

Atlas Mod.	Vdc	WT: 90/70 °C				WT: 90/75 °C			WT: 85/75 °C		
		Qv m³/h	Ph kW	Qw l/h	LAT °C	Ph kW	Qw l/h	LAT °C	Ph kW	Qw l/h	LAT °C
A-ECM11	10	1260	4,64	199	25,8	5,41	310	27,6	5,67	487	28,2
	9	1100	4,38	188	26,6	5,11	293	28,6	5,35	460	29,2
	8	965	4,14	178	27,6	4,83	277	29,6	5,04	433	30,3
	7	835	3,90	168	28,7	4,53	260	30,9	4,72	406	31,5
	6	695	3,58	154	30,1	4,16	238	32,5	4,33	372	33,2
	5	580	3,30	142	31,7	3,82	219	34,3	3,96	341	35,0
A-ECM21	10	1790	7,10	305	26,6	8,04	461	28,1	8,26	710	28,5
	9	1545	6,67	287	27,6	7,56	434	29,3	7,74	666	29,7
	8	1350	6,29	270	28,6	7,13	409	30,5	7,29	627	30,8
	7	1190	5,96	256	29,6	6,73	386	31,6	6,88	592	31,9
	6	980	5,45	234	31,3	6,15	352	33,3	6,29	541	33,8
	5	780	4,89	210	33,3	5,51	316	35,7	5,61	483	36,1
A-ECM31	10	2620	10,41	448	26,6	11,61	666	28,0	11,76	1011	28,1
	9	2340	9,93	427	27,4	11,07	635	28,8	11,21	964	29,0
	8	2050	9,39	404	28,4	10,45	599	29,9	10,59	911	30,1
	7	1740	8,74	376	29,7	9,72	557	31,3	9,82	845	31,5
	6	1475	8,11	349	31,1	9,01	517	32,9	9,10	783	33,0
	5	1180	7,30	314	33,1	8,10	464	35,1	8,16	702	35,2
A-ECM41	10	3440	14,00	602	26,9	15,42	884	28,1	15,48	1331	28,2
	9	3210	13,62	586	27,4	14,99	859	28,7	15,04	1294	28,7
	8	2875	12,99	559	28,2	14,29	819	29,5	14,34	1234	29,6
	7	2460	12,13	522	29,4	13,34	765	30,9	13,39	1152	30,9
	6	2075	11,25	484	30,9	12,34	707	32,4	12,37	1063	32,4
	5	1680	10,20	439	32,8	11,19	642	34,5	11,19	962	34,5
A-ECM51	10	5130	19,36	833	26,0	21,13	1211	27,0	21,10	1815	27,0
	9	5130	19,36	833	26,0	21,13	1211	27,0	21,10	1815	27,0
	8	4600	18,54	797	26,8	20,21	1159	27,9	20,18	1736	27,8
	7	4045	17,57	756	27,7	19,19	1100	28,9	19,14	1646	28,8
	6	3340	16,18	696	29,2	17,65	1012	30,5	17,60	1514	30,4
	5	2575	14,41	620	31,4	15,67	898	32,8	15,62	1343	32,7
A-ECM61	10	5895	23,54	1012	26,7	25,54	1464	27,7	25,35	2180	27,6
	9	5895	23,54	1012	26,7	25,54	1464	27,7	25,35	2180	27,6
	8	5355	22,66	974	27,4	24,54	1407	28,4	24,34	2093	28,3
	7	4585	21,24	913	28,5	22,96	1316	29,6	22,77	1958	29,5
	6	3765	19,47	837	30,1	21,07	1208	31,4	20,90	1797	31,2
	5	2910	17,30	744	32,4	18,69	1072	33,8	18,53	1594	33,6

Correction factors

Air temperature	WT: 20°C Drop					WT: 15°C Drop					WT: 10°C Drop				
	90/70	85/65	80/60	75/55	70/50	90/75	85/70	80/65	75/60	70/55	85/75	80/70	75/65	70/60	65/55
-5	1,40	1,30	1,20	1,10	1,00	1,40	1,30	1,20	1,10	1,00	1,40	1,30	1,20	1,10	1,00
0	1,30	1,20	1,10	1,00	0,88	1,30	1,20	1,10	1,00	0,90	1,30	1,20	1,10	1,00	0,91
5	1,20	1,10	1,00	0,88	0,76	1,20	1,10	1,00	0,90	0,80	1,20	1,10	1,00	0,91	0,82
10	1,10	1,00	0,88	0,76	0,64	1,10	1,00	0,90	0,80	0,70	1,10	1,00	0,92	0,85	0,77
15	1,00	0,88	0,76	0,64	0,52	1,00	0,90	0,80	0,70	0,60	1,00	0,91	0,82	0,72	0,62
20	0,90	0,78	0,66	0,54	0,42	0,90	0,80	0,70	0,60	0,50	0,91	0,82	0,72	0,62	0,53
25	0,78	0,66	0,54	0,43	0,32	0,80	0,70	0,60	0,60	0,40	0,82	0,72	0,62	0,53	0,45

LEGEND:

WT = Water temperature Ph = Emission Qw = Water flow

LAT = Leaving air temperature Vdc = Inverter Power Qv = Air flow

Emission table of Atlas ECM units with 2 row coil

Entering air temperature: 15°C

Atlas Mod.	Vdc	WT: 90/70 °C				WT: 90/75 °C			WT: 85/75 °C			WT: 60/55 °C		
		Qv	Ph	Qw	LAT	Ph	Qw	LAT	Ph	Qw	LAT	Ph	Qw	LAT
		m³/h	kW	l/h	°C	kW	l/h	°C	kW	l/h	°C	kW	l/h	°C
A-ECM12	10	1155	7,55	325	34,1	8,76	502	37,2	9,12	785	38,1	6,04	1039	30,3
	9	1060	7,25	312	35,0	8,39	481	38,1	8,74	752	39,1	5,78	994	31,0
	8	915	6,75	290	36,6	7,79	447	39,9	8,10	697	40,9	5,36	922	32,1
	7	800	6,31	271	38,1	7,27	417	41,6	7,53	648	42,5	4,99	858	33,2
	6	665	5,73	246	40,2	6,58	377	43,9	6,81	585	44,9	4,50	773	34,8
	5	565	5,23	225	42,1	6,00	344	46,1	6,19	533	47,1	4,09	704	36,2
A-ECM22	10	1650	11,55	497	35,5	13,03	747	38,1	13,34	1147	38,7	8,80	1514	30,6
	9	1450	10,86	467	36,9	12,24	701	39,7	12,47	1072	40,2	8,23	1416	31,6
	8	1255	10,09	434	38,5	11,34	650	41,4	11,58	996	42,0	7,64	1313	32,8
	7	1080	9,33	401	40,3	10,49	602	43,4	10,68	918	43,9	7,04	1211	34,1
	6	890	8,40	361	42,6	9,40	539	45,9	9,57	823	46,4	6,31	1085	35,7
	5	735	7,53	324	45,0	8,43	483	48,5	8,55	736	49,0	5,63	969	37,4
A-ECM32	10	2235	16,40	705	36,5	18,19	1043	38,8	18,36	1579	39,0	12,09	2079	30,8
	9	2040	15,68	674	37,5	17,37	996	39,9	17,54	1509	40,2	11,55	1987	31,6
	8	1830	14,85	638	38,7	16,45	943	41,3	16,59	1427	41,5	10,91	1877	32,4
	7	1610	13,87	596	40,2	15,36	881	42,9	15,50	1333	43,2	10,21	1756	33,5
	6	1315	12,45	535	42,7	13,76	789	45,6	13,86	1192	45,8	9,13	1570	35,3
	5	1090	11,22	482	45,1	12,36	709	48,2	12,43	1069	48,4	8,19	1408	37,0
A-ECM42	10	2815	21,57	927	37,4	23,68	1358	39,6	23,68	2037	39,6	15,60	2684	31,2
	9	2395	19,91	856	39,3	21,77	1248	41,6	21,83	1877	41,7	14,36	2469	32,5
	8	2040	18,29	786	41,2	20,02	1148	43,7	20,02	1722	43,7	13,18	2267	33,9
	7	1710	16,66	716	43,5	18,20	1043	46,1	18,18	1564	46,1	11,95	2055	35,4
	6	1390	14,79	636	46,1	16,15	926	49,0	16,11	1386	48,9	10,61	1825	37,3
	5	1150	13,25	570	48,7	14,40	825	51,6	14,35	1234	51,5	9,43	1622	39,0
A-ECM52	10	4010	29,52	1269	36,5	32,13	1842	38,4	32,00	2752	38,3	21,02	3616	30,3
	9	4010	29,52	1269	36,5	32,13	1842	38,4	32,00	2752	38,3	21,02	3616	30,3
	8	3695	28,40	1221	37,5	30,90	1772	39,5	30,74	2644	39,3	20,21	3475	31,0
	7	3185	26,40	1135	39,2	28,63	1641	41,3	28,51	2452	41,2	18,76	3226	32,2
	6	2705	24,25	1043	41,2	26,28	1507	43,4	26,17	2251	43,3	17,19	2957	33,6
	5	2060	20,89	898	44,7	22,64	1298	47,2	22,53	1938	47,0	14,79	2544	36,0
A-ECM62	10	4535	35,48	1526	37,9	38,38	2200	39,8	38,05	3272	39,5	24,97	4295	31,1
	9	4535	35,48	1526	37,9	38,38	2200	39,8	38,05	3272	39,5	24,97	4295	31,1
	8	4260	34,45	1481	38,7	37,17	2131	40,5	36,83	3168	40,3	24,19	4161	31,6
	7	3590	31,55	1357	40,7	34,07	1953	42,8	33,73	2900	42,5	22,17	3813	33,1
	6	2975	28,53	1227	43,1	30,84	1768	45,3	30,45	2619	44,9	20,02	3444	34,7
	5	2375	25,21	1084	46,1	27,18	1558	48,5	26,86	2310	48,1	17,63	3032	36,7

Correction factors

Air temperature	WT: 20°C Drop					WT: 15°C Drop					WT: 10°C Drop					WT: 5°C Drop				
	90/70	85/65	80/60	75/55	70/50	90/75	85/70	80/65	75/60	70/55	85/75	80/70	75/65	70/60	65/55	60/55	55/50	50/45	45/40	40/35
-5	1,40	1,30	1,20	1,10	1,00	1,40	1,30	1,20	1,10	1,00	1,40	1,30	1,20	1,10	1,00	1,60	1,45	1,30	1,15	1,00
0	1,30	1,20	1,10	1,00	0,88	1,30	1,20	1,10	1,00	0,90	1,30	1,20	1,10	1,00	0,91	1,45	1,30	1,15	1,00	0,86
5	1,20	1,10	1,00	0,88	0,76	1,20	1,10	1,00	0,90	0,80	1,20	1,10	1,00	0,91	0,82	1,30	1,15	1,00	0,86	0,72
10	1,10	1,00	0,88	0,76	0,64	1,10	1,00	0,90	0,80	0,70	1,10	1,00	0,92	0,85	0,77	1,15	1,00	0,86	0,72	0,58
15	1,00	0,88	0,76	0,64	0,52	1,00	0,90	0,80	0,70	0,60	1,00	0,91	0,82	0,72	0,62	1,00	0,86	0,72	0,58	0,44
20	0,90	0,78	0,66	0,54	0,42	0,90	0,80	0,70	0,60	0,50	0,91	0,82	0,72	0,62	0,53	0,86	0,72	0,58	0,44	0,30
25	0,78	0,66	0,54	0,43	0,32	0,80	0,70	0,60	0,60	0,40	0,82	0,72	0,62	0,53	0,45	0,72	0,58	0,44	0,30	0,20

LEGEND:

WT = Water temperature Ph = Emission Qw = Water flow
 LAT = Leaving air temperature Vdc = Inverter Power Qv = Air flow

Emission table of Atlas ECM units with 3 row coil

Entering air temperature: 15°C

Atlas Mod.	Vdc	WT: 90/70 °C				WT: 90/75 °C			WT: 85/75 °C			WT: 60/55 °C		
		Qv m³/h	Ph kW	Qw l/h	LAT °C	Ph kW	Qw l/h	LAT °C	Ph kW	Qw l/h	LAT °C	Ph kW	Qw l/h	LAT °C
A-ECM13	10	1100	9,53	410	40,3	10,99	630	44,2	11,39	979	45,3	7,52	1293	35,0
	9	1010	9,10	391	41,4	10,47	600	45,3	10,83	932	46,4	7,16	1232	35,7
	8	870	8,39	361	43,2	9,63	552	47,4	9,94	855	48,4	6,57	1131	37,1
	7	760	7,76	334	44,9	8,89	510	49,2	9,16	788	50,3	6,05	1041	38,3
	6	640	7,02	302	47,1	8,00	458	51,5	8,23	707	52,6	5,44	936	39,9
	5	545	6,36	273	49,1	7,23	415	53,8	7,41	637	54,8	4,90	842	41,3
A-ECM23	10	1580	14,60	628	42,0	16,42	941	45,4	16,73	1438	46,0	11,04	1898	35,4
	9	1390	13,61	585	43,6	15,28	876	47,2	15,56	1338	47,7	10,25	1764	36,6
	8	1205	12,55	540	45,5	14,06	806	49,1	14,31	1230	49,7	9,43	1622	37,9
	7	1035	11,51	495	47,5	12,85	737	51,3	13,04	1121	51,8	8,58	1476	39,3
	6	855	10,23	440	50,0	11,39	653	54,0	11,55	993	54,5	7,60	1308	41,0
	5	705	9,06	389	52,6	10,06	577	56,7	10,15	873	57,1	6,69	1151	42,8
A-ECM33	10	2075	20,31	874	43,6	22,44	1287	46,6	22,60	1943	46,9	14,90	2563	36,0
	9	1895	19,31	830	44,8	21,35	1224	48,0	21,48	1847	48,2	14,15	2434	36,8
	8	1700	18,13	780	46,2	20,01	1147	49,4	20,14	1732	49,7	13,25	2280	37,8
	7	1500	16,90	727	48,0	18,59	1066	51,3	18,68	1607	51,4	12,30	2116	39,0
	6	1220	14,91	641	50,7	16,37	939	54,3	16,42	1412	54,4	10,81	1860	40,9
	5	1015	13,27	570	53,2	14,54	833	56,9	14,56	1252	57,0	9,58	1647	42,6
A-ECM43	10	2490	26,00	1118	45,5	28,43	1630	48,4	28,40	2442	48,4	18,67	3211	36,9
	9	2120	23,73	1020	47,7	25,90	1485	50,7	25,81	2220	50,6	16,98	2920	38,4
	8	1805	21,56	927	49,9	23,50	1347	53,1	23,41	2013	52,9	15,40	2649	40,0
	7	1515	19,35	832	52,4	21,01	1205	55,6	20,96	1803	55,5	13,77	2368	41,6
	6	1230	16,88	726	55,1	18,36	1052	58,7	18,22	1567	58,3	11,97	2060	43,5
	5	1020	14,89	640	57,7	16,14	925	61,3	16,02	1378	60,9	10,51	1808	45,1
A-ECM53	10	3455	35,30	1518	44,9	38,32	2197	47,4	38,11	3277	47,3	25,02	4303	36,2
	9	3455	35,30	1518	44,9	38,32	2197	47,4	38,11	3277	47,3	25,02	4303	36,2
	8	3185	33,73	1451	46,0	36,60	2099	48,6	36,40	3130	48,4	23,92	4115	37,0
	7	2745	31,00	1333	48,0	33,54	1923	50,7	33,36	2869	50,5	21,90	3766	38,3
	6	2330	28,12	1209	50,3	30,45	1746	53,2	30,17	2594	52,9	19,81	3408	39,9
	5	1775	23,73	1021	54,1	25,60	1468	57,2	25,34	2180	56,8	16,64	2862	42,4
A-ECM63	10	3845	41,78	1797	46,8	44,96	2578	49,2	44,48	3825	48,8	29,23	5027	37,2
	9	3845	41,78	1797	46,8	44,96	2578	49,2	44,48	3825	48,8	29,23	5027	37,2
	8	3610	40,31	1733	47,7	43,39	2488	50,2	42,86	3686	49,7	28,15	4841	37,8
	7	3040	36,38	1565	50,0	39,12	2243	52,6	38,65	3324	52,2	25,39	4368	39,4
	6	2520	32,43	1395	52,6	34,83	1997	55,4	34,39	2958	54,9	22,60	3887	41,2
	5	2010	28,03	1205	55,8	30,10	1725	58,8	29,69	2553	58,2	19,48	3350	43,3

Correction factors

Air temperature	WT: 20°C Drop					WT: 15°C Drop					WT: 10°C Drop					WT: 5°C Drop				
	90/70	85/65	80/60	75/55	70/50	90/75	85/70	80/65	75/60	70/55	85/75	80/70	75/65	70/60	65/55	60/55	55/50	50/45	45/40	40/35
-5	1,40	1,30	1,20	1,10	1,00	1,40	1,30	1,20	1,10	1,00	1,40	1,30	1,20	1,10	1,00	1,60	1,45	1,30	1,15	1,00
0	1,30	1,20	1,10	1,00	0,88	1,30	1,20	1,10	1,00	0,90	1,30	1,20	1,10	1,00	0,91	1,45	1,30	1,15	1,00	0,86
5	1,20	1,10	1,00	0,88	0,76	1,20	1,10	1,00	0,90	0,80	1,20	1,10	1,00	0,91	0,82	1,30	1,15	1,00	0,86	0,72
10	1,10	1,00	0,88	0,76	0,64	1,10	1,00	0,90	0,80	0,70	1,10	1,00	0,92	0,85	0,77	1,15	1,00	0,86	0,72	0,58
15	1,00	0,88	0,76	0,64	0,52	1,00	0,90	0,80	0,70	0,60	1,00	0,91	0,82	0,72	0,62	1,00	0,86	0,72	0,58	0,44
20	0,90	0,78	0,66	0,54	0,42	0,90	0,80	0,70	0,60	0,50	0,91	0,82	0,72	0,62	0,53	0,86	0,72	0,58	0,44	0,30
25	0,78	0,66	0,54	0,43	0,32	0,80	0,70	0,60	0,60	0,40	0,82	0,72	0,62	0,53	0,45	0,72	0,58	0,44	0,30	0,20

LEGEND:

WT = Water temperature Ph = Emission Qw = Water flow

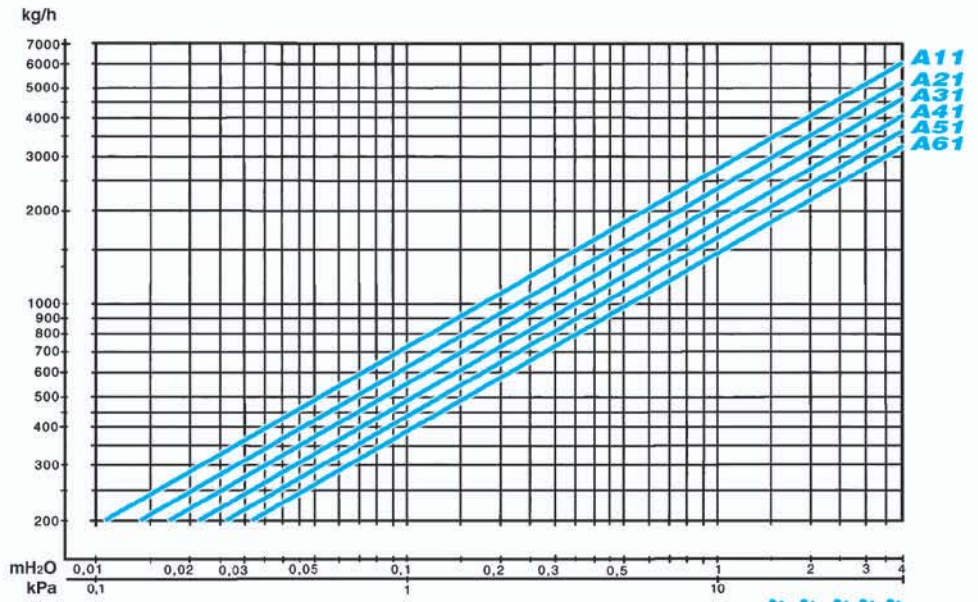
LAT = Leaving air temperature Vdc = Inverter Power Qv = Air flow

The following tables indicate the pressure drop in m/wg for each **Atlas ECM** model for a mean water temperature of 80°C.

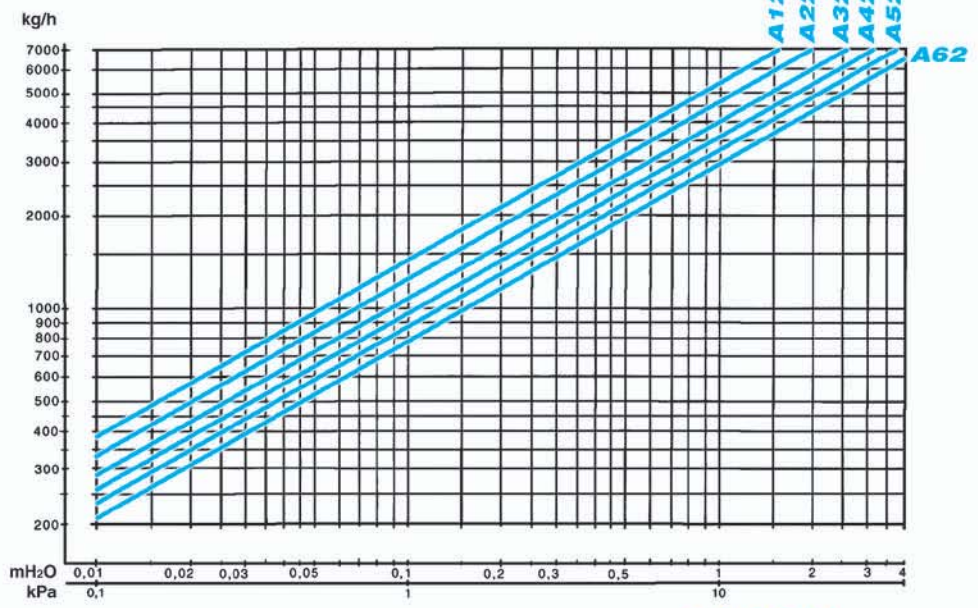
CORRECTION FACTORS FOR DIFFERENT TEMPERATURES

°C	K
50	1.15
60	1.10
70	1.05
90	0.95
100	0.89
110	0.83
120	0.78
130	0.72
140	0.67
150	0.61

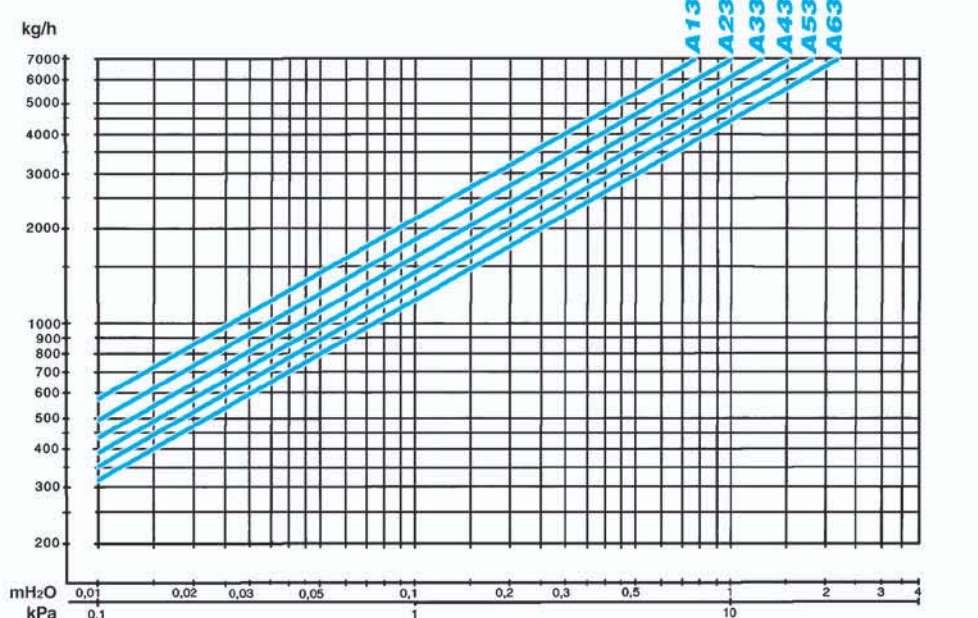
1 row



2 rows



3 rows



Construction features



The **Jetstream** induction flow optimizer allows the reduction of the mean leaving air temperature from the Atlas ECM Sabiana unit heaters and to increase the throw of the equipment with considerable advantages both in terms of energy saving and environment comfort. The **Jetstream** induction flow optimizers increase the air speed thanks to the special shape of its deflecting louvers which allow the creation of various streams of hot air at the unit heater outlet. The depression created between the layers induces a lateral aspiration of ambient air that mixes with the air heated by the unit, thus reducing the leaving air temperature and increasing the throw. The leaving air temperature from the units has a decisive influence on hot air stratification and consequently on energy saving: for each degree of decrease in ambient temperature there is a 1.5% decrease in energy consumption.

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

a) Energy saving:

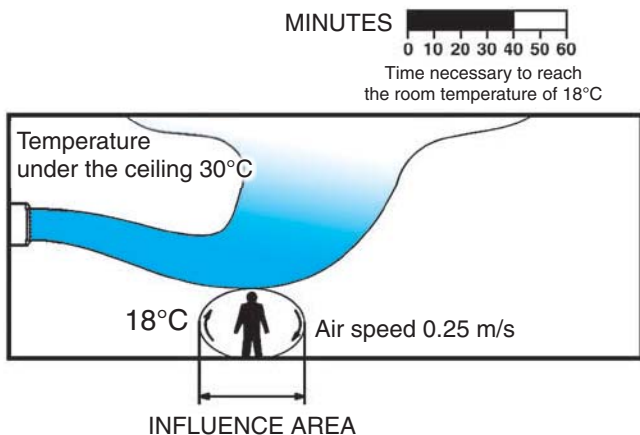
- reduced hot air stratification within the building;
- reduced operating time of the units with the same ambient temperature.

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

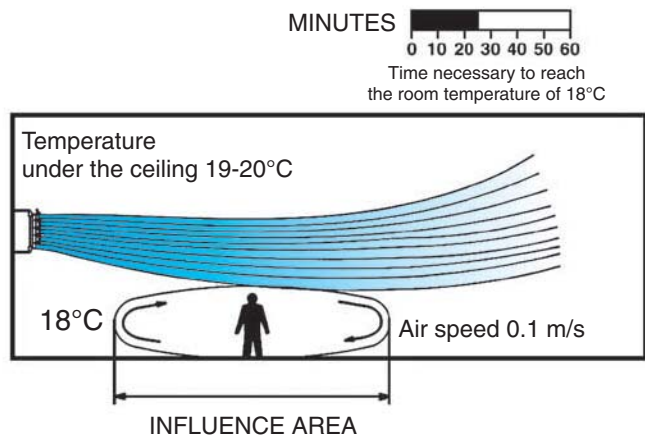
b) Environmental comfort advantages:

- 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



Available versions

Four versions are available:

- **Manual** for wall installation
- **Manual** for ceiling installation
- **Motorized** for wall installation
- **Motorized** for ceiling installation

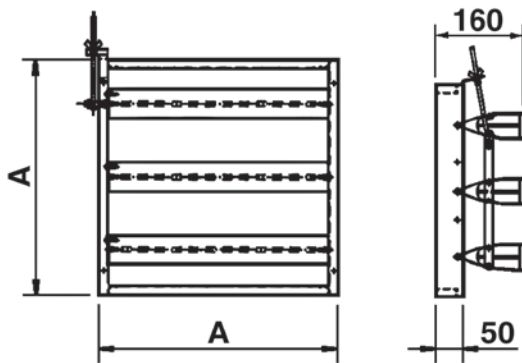
The **manually controlled** version calls for manual orientation of the louvres and for them to be locked using a special threaded rod.

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



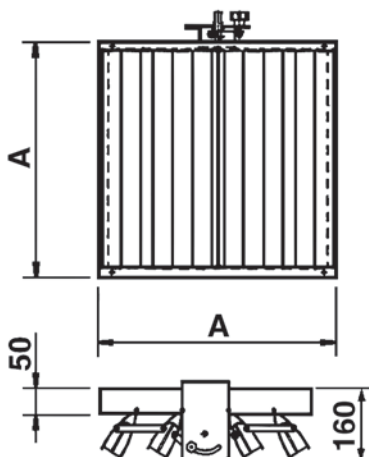
Dimensions and Weight

O (HORIZONTAL DISCHARGE)



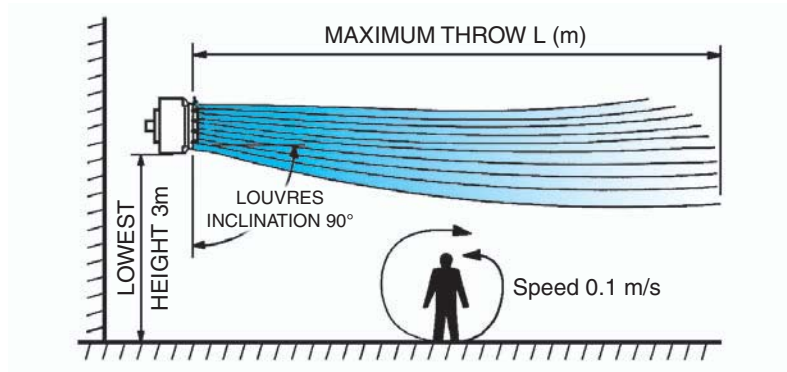
MODEL		A (mm)	Weight (kg)
O - 1	V - 1	368	1,4
O - 2	V - 2	422	1,7
O - 3	V - 3	476	1,8
O - 4	V - 4	530	2,0
O - 5	V - 5	584	2,2
O - 6	V - 6	638	2,4

V (VERTICAL DISCHARGE)

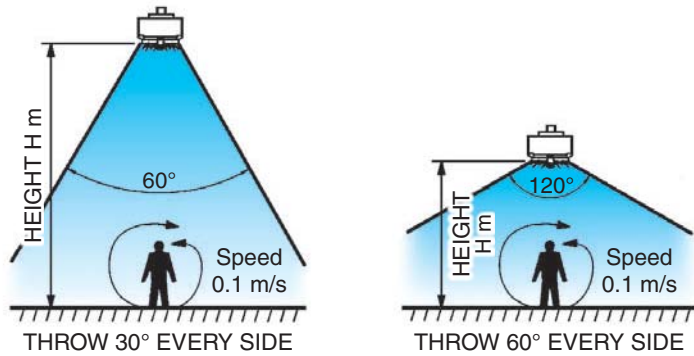


Mounting heights and air throw

a) Wall installation for horizontal discharge:



b) Ceiling installation for vertical discharge:



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	
a) Maximum throw L	WITHOUT Jetstream	m	6,5	6	5,5	5	4,5	4	6	5,5	5	5	4,5	4	6	5,5	5	4,5	4,5	4
	WITH Jetstream	m	10,5	9,5	8,5	8	7	6,5	9,5	9	8	8	7	6	9,5	8,5	8	7	7	6
b) Installation height	WITHOUT Jetstream	m	3,5	3	2,5	-	-	-	3	3	2,5	-	-	-	3	3	2,6	-	-	-
	WITH Jetstream at 60°	m	4,5	4	3	-	-	-	4	4	3	-	-	-	4	4	3	-	-	-
	WITH Jetstream at 120°	m	3,5	3	2,5	-	-	-	3	3	2,5	-	-	-	3	3	2,6	-	-	-

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	
a) Maximum throw L	WITHOUT Jetstream	m	8	7	6,5	6	5,5	5	7,5	7	5,7	5,5	5	4,5	7	6,5	6	5,5	5	4,5
	WITH Jetstream	m	12,5	11	10,5	9,5	8,5	8	12	11	9	8,5	8	7	11	10	9,5	8,5	8	7
b) Installation height	WITHOUT Jetstream	m	4	3,5	3	-	-	-	3,5	3,5	3	-	-	-	3,5	3	3	-	-	-
	WITH Jetstream at 60°	m	6,5	5,5	4,5	-	-	-	5,5	5,5	4,5	-	-	-	5,5	4,5	4,5	-	-	-
	WITH Jetstream at 120°	m	4,3	3,7	3,2	-	-	-	3,7	3,7	3,2	-	-	-	3,7	3,2	3,2	-	-	-

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	
a) Maximum throw L	WITHOUT Jetstream	m	12	11	10	8,5	7,5	6,5	10,5	10	9	8	7	6,5	10	9,5	8,5	8	7	6
	WITH Jetstream	m	16	14,5	13,5	11	10	8,5	14	13,5	12	10,5	9	8,5	13,5	12,5	11	10,5	9	8
b) Installation height	WITHOUT Jetstream	m	4,5	4	4	3,5	-	-	4	4	3,5	3,5	-	-	4	3,5	3,5	-	-	-
	WITH Jetstream at 60°	m	7,5	6,5	6,5	5,5	-	-	6,5	6,5	5,5	5,5	-	-	6,5	5,5	5,5	-	-	-
	WITH Jetstream at 120°	m	5,5	5	5	4	-	-	5	5	4	4	-	-	5	4	4	-	-	-

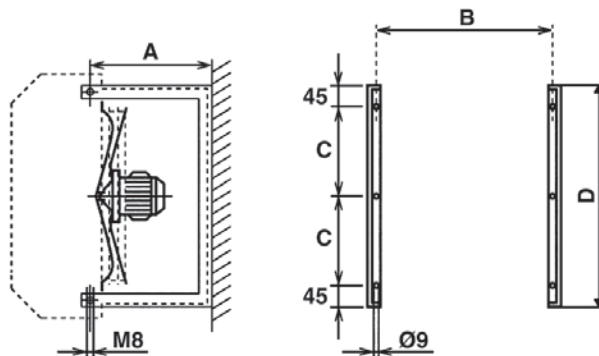
MODEL		Atlas A-ECM41						Atlas A-ECM42						Atlas A-ECM43						
Inverter Power	V	10	9	8	7	6	5	10	9	8	7	6	5	10	9	8	7	6	5	
Speed	r.p.m.	1059	979	893	798	692	588	1059	979	893	798	692	588	1059	979	893	798	692	588	
Air flow	m³/h	3440	3210	2875	2460	2075	1680	2815	2395	2040	1710	1390	1150	2490	2120	1805	1515	1230	1020	
a) Maximum throw L	WITHOUT Jetstream	m	14,5	14	12,5	11	9,5	8,5	12,5	11	9,6	8,5	7	6,5	11	10	9	8	6,5	6
	WITH Jetstream	m	18,5	18	16	14	12	11	16	14	12	11	9	8	14	13	11,5	10	8	7,5
b) Installation height	WITHOUT Jetstream	m	5	5	4,5	4	-	-	4,5	4	4	3,5	-	-	4	4	3,5	-	-	-
	WITH Jetstream at 60°	m	9	9	8	7	-	-	8	7	7	6	-	-	7	7	6	-	-	-
	WITH Jetstream at 120°	m	6	6	5	4,5	-	-	4	4,5	4,5	4	-	-	4,5	4,5	4	-	-	-

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	
a) Maximum throw L	WITHOUT Jetstream	m	19	19	17	15	12,6	10	15	15	14	12	10,5	8	13	13	12	10,5	9	7
	WITH Jetstream	m	24	24	21	18	15	11	18	18	16,5	14,5	12	8,5	15,5	15,5	14,5	12	10	7
b) Installation height	WITHOUT Jetstream	m	6	6	5,5	5	-	-	5	5	5	4,5	-	-	5	5	4,5	4	-	-
	WITH Jetstream at 60°	m	10,5	10,5	9,5	9	-	-	9	9	9	8	-	-	9	9	8,1	7,2	-	-
	WITH Jetstream at 120°	m	7	7	6,5	5,5	-	-	5,5	5,5	5,5	5	-	-	5,5	5,5	5	4,5	-	-

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	
a) Maximum throw L	WITHOUT Jetstream	m	22	22	20	17	14	11	17	17	16	13,5	11,5	9	14,5	14,5	13,5	11,5	9,5	8
	WITH Jetstream	m	27,5	27,5	25	21	17	12,5	21	21	19,5	16	13	10	17,5	17,5	16	13	11	8,5
b) Installation height	WITHOUT Jetstream	m	6,5	6,5	6	5,5	-	-	5,5	5,5	5	5	-	-	5	5	5	4,5	-	-
	WITH Jetstream at 60°	m	11,5	11,5	10,5	9,5	-	-	9,5	9,5	9	9	-	-	9	9	9	8	-	-
	WITH Jetstream at 120°	m	7,5	7,5	6,5	6	-	-	6	6	5,5	5,5	-	-	5,5	5,5	5,5	5	-	-

“AMP”

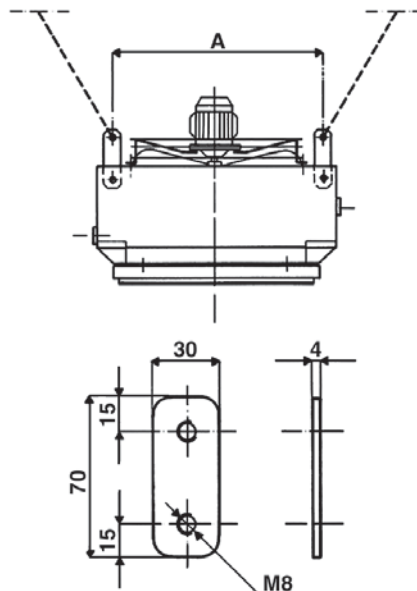
Wall brackets.
Horizontal discharge.



SIZE	A	B	C	D
1	340	442	157.5	405
2	340	496	184.5	459
3	340	550	211.5	513
4	390	604	238.5	567
5	390	658	265.5	621
6	390	712	292.5	675

“AS”

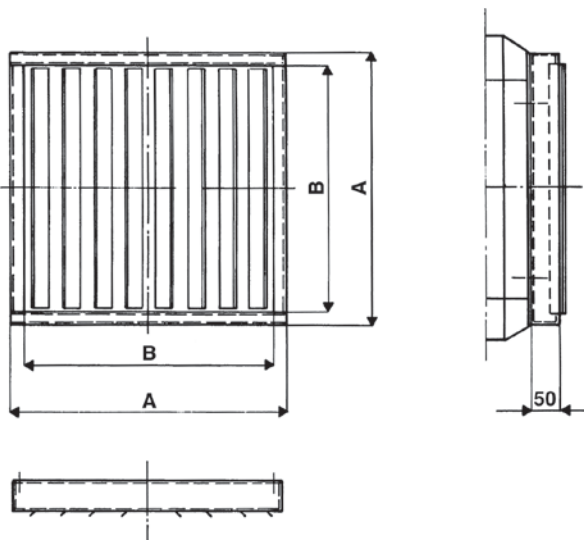
Suspension brackets for ceiling installation.
Vertical discharge.



SIZE	A
1	375
2	429
3	483
4	537
5	591
6	645

“AD” 4 way diffuser for

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

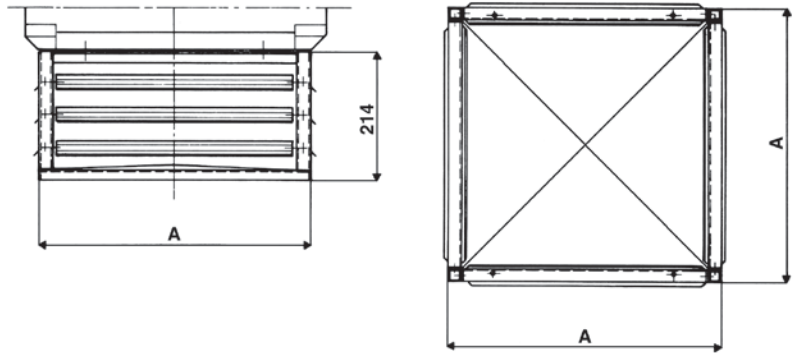


SIZE	A	B	WEIGHT
			kg
1	372	336	1,2
2	426	390	1,3
3	480	444	1,5
4	534	498	1,8
5	588	552	1,9
6	642	606	2,1

“AW4”

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

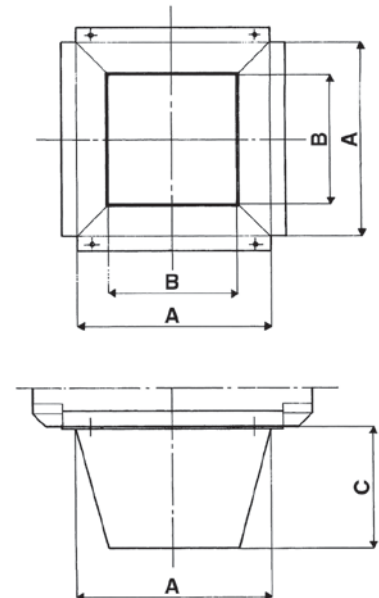
SIZE	A	WEIGHT
		kg
1	376	2,4
2	430	3,0
3	484	3,4
4	538	4,1
5	592	4,6
6	646	5,3



“ATP”

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

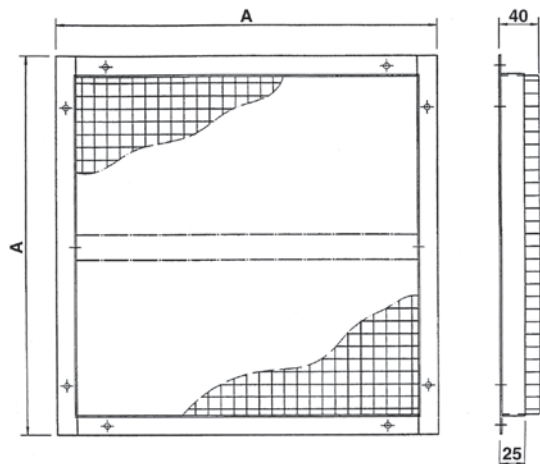
SIZE	A	B	C	MOUNTING HEIGHTS	WEIGHT
				m	kg
1	336	250	250	3.5 ÷ 4.5	2,9
2	390	250	250	4.5 ÷ 5	3,1
3	444	300	300	5 ÷ 5.5	3,9
4	498	300	300	6 ÷ 6.5	4,7
5	552	350	350	6.5 ÷ 7	5,5
6	606	350	350	7 ÷ 8	6,0



“APP”

Ball protection grid.

SIZE	A	WEIGHT
		kg
1	372	2,8
2	426	3,4
3	480	4,2
4	534	5,1
5	588	6,1
6	642	7,0



“2 way valve”

Composed by:

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

Technical data:

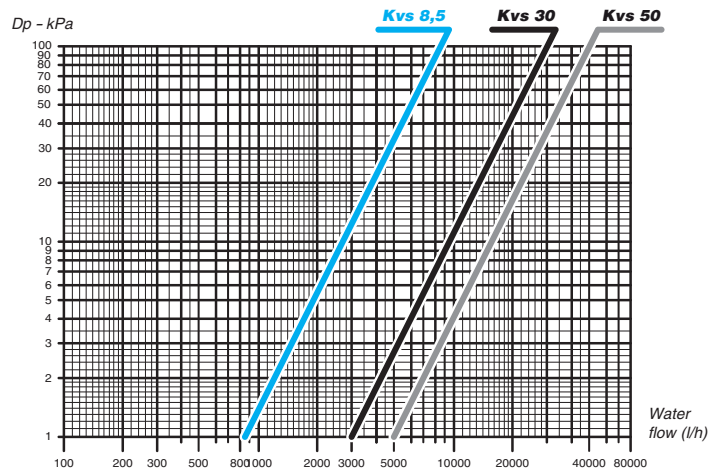
- Min. water flow temperature: 15°C
- Max. water flow temperature: 90°C

VALVE		TYPE	CODE
(Ø)	Kvs		
3/4"	30	VA2V - 3/4"	9008110
1"	50	VA2V - 1"	9008111

2 WAY VALVE



ON-OFF 230V ACTUATOR



“3 way valve”

Composed by:

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

Technical data:

- Min. water flow temperature: 15°C
- Max. water flow temperature: 90°C

VALVE		TYPE	CODE
(Ø)	Kvs		
3/4"	8,5	VA3V - 3/4"	9008112



3 WAY VALVE

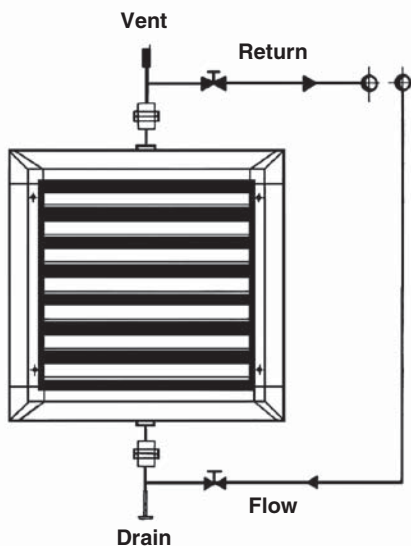


ON-OFF 230V ACTUATOR

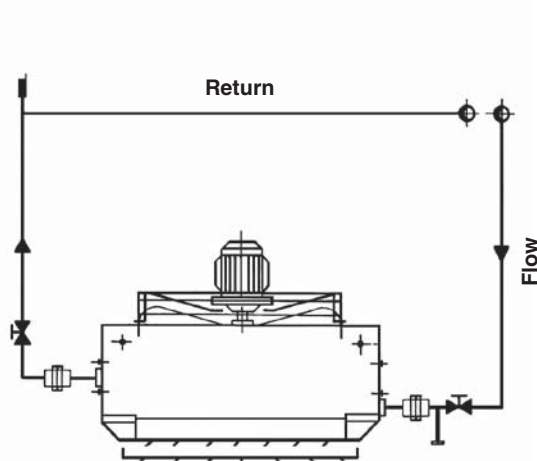
Hydraulic connections

Hot water connections

Horizontal discharge



Downflow discharge

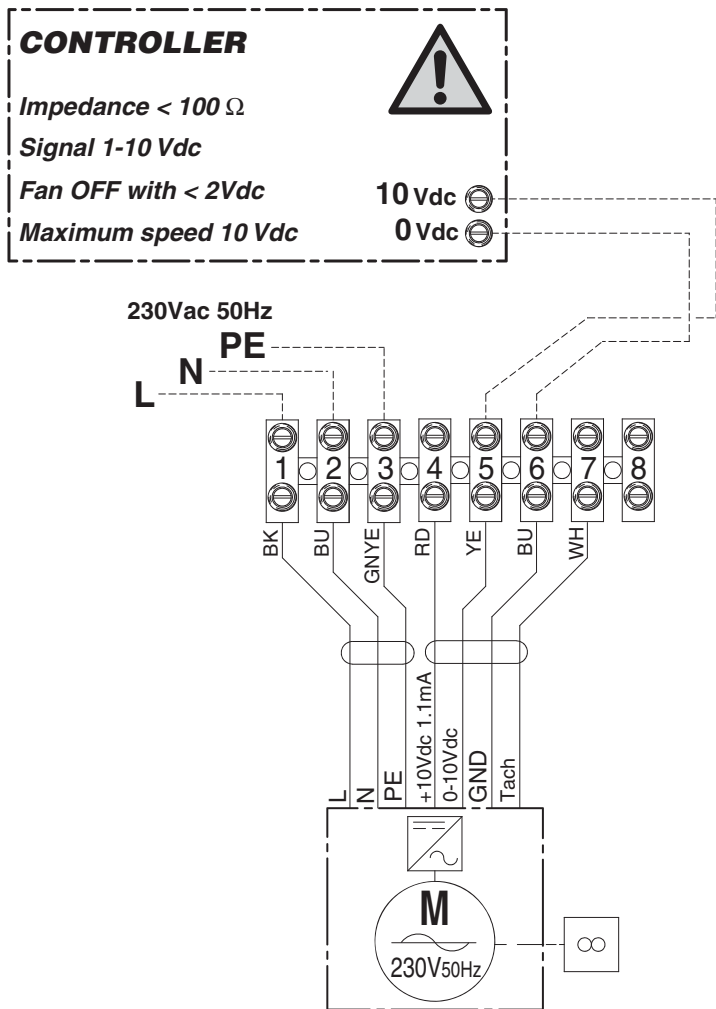


For **Atlas ECM**, the 1-10 Vdc signal, which controls the inverter, must be supplied by a controller with the following signal specifications:

- Impedance < 100 Ω;
- Maximum speed 10Vdc;
- Fan OFF with V < 2Vdc.

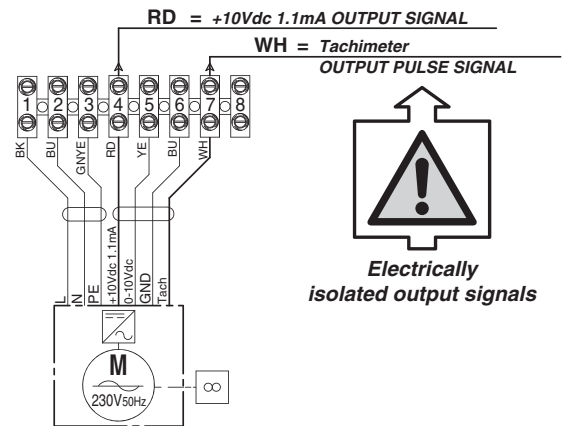
Atlas ECM electric wiring diagram

GENERAL SCENARIOS

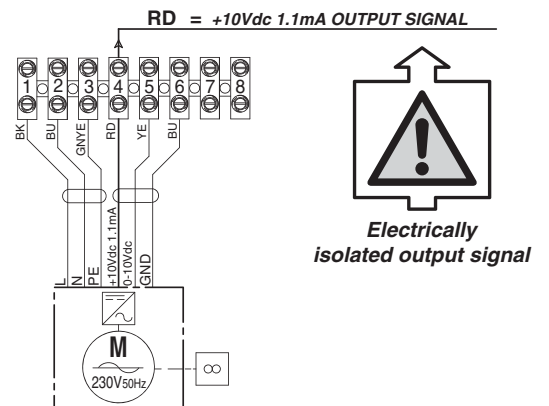


FURTHER WIRES (NOT CONNECTED)

Mod. 2 - 4



Mod. 6



LEGEND:

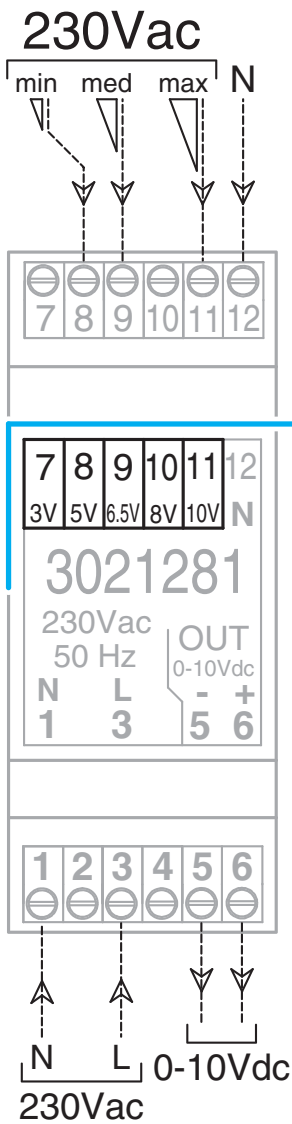
BLAC = Inverter circuit board **M** = Electronic motor **CONTROLLER** = Controller

DESCRIPTION	IDENTIFICATION	CODE
ADC signal converter for wall controls fitted on the unit	ADCA-M	9008100
ADC signal converter for wall controls supplied with separate packaging	ADC-S	9041072

It is a signal converter that transforms a 230 volt input in 3/10 volt signal. This allows the use of 230V wall controls to control the fan speed for inverter motors. ADC converter is wired between 3 speeds control 230V outputs and the inverter. According to the ADC wiring, the converter will provide different voltage values ranging between 3/10 volt showed in the wiring diagram.



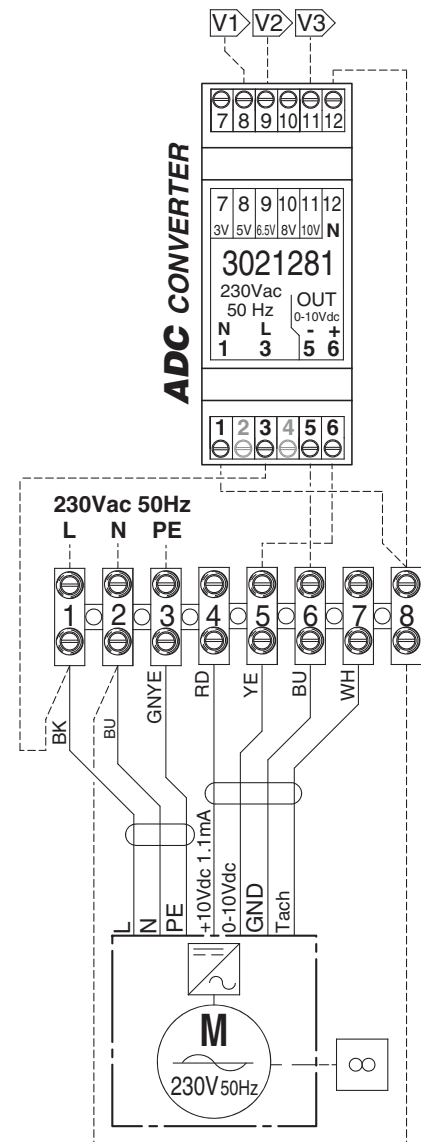
Electric wiring diagram with ADC converter



- 7 = 3 Vdc
- 8 = 5 Vdc
- 9 = 6.5 Vdc
- 10 = 8 Vdc
- 11 = 10 Vdc



ADC CONVERTER
input signal
related to output voltage



IDENTIFICATION	CODE
MO-3V	9060160



- Manual 3 speed switch.
- Without thermostatic control.
- To be used with ADC converter only.

Dimensions: 133x93x37 mm

IDENTIFICATION	CODE
CR-T	9066330



- ON-OFF switch.
- Manual 3 speed switch.
- Manual Summer/Winter switch.
- Electronic room thermostat for fan control (ON-OFF).
- To be used with ADC converter only.

Dimensions: 133x93x37 mm

The minimum required configuration consists of:

- an **EC Base Control** to be used with max 8 units;
- a **4-20 mA / 0-10V signal converter** for every unit;
- a **Potentiometer to control the speed of the motor** or an **NTC Probe with a box** for every EC Base Control.

DESCRIPTION	IDENTIFICATION	CODE
EC Base Control	UH-ECM	9008121

The EC Base Control adjusts the speed of ECM motors with a 4-20 mA output control modulated on the base of the set parameters. The converter located on the unit, or on the first unit if there are several units connected in series, must be connected to these terminals. The EC Base Control can control up to 8 ECM units simultaneously. The fixing brackets are included in the packaging.

Moreover, the EC Base Control has the following features:

- a relay output to control a valve or an alarm signal (for instance a broken probe);
- a digital input for remote ON/OFF control;
- a digital input to reduce the SET POINT value (temperature reduction);
- a digital input for an antifreeze thermostat if required.

On the EC Base Control board there are 5 trimmers used to:

- limit the max operating speed;
- limit the min operating speed;
- set the SET POINT value;
- set the SET POINT ADJ value end;
- set the proportional band with the NTC probe.



DESCRIPTION	IDENTIFICATION	CODE
4-20 mA / 0-10V signal converter	UH-ECM-CNV	9008132

There must be a 4-20 mA / 0-10V signal converter for every unit that needs to be controlled. The signal converter turns the 4-20 mA signal generated by the EC Base Control into a 0-10V signal that operates on the motor's Inverter board. Every converter must be placed inside the motor's junction box. Several units connected in series to one EC Base Control will all operate in the same way (they cannot be controlled individually); to manage several units in a different way, there must be more EC Base Controls.



DESCRIPTION	IDENTIFICATION	CODE
Potentiometer to control the speed of the motor	UH-ECM-RLP	9008133

The potentiometer must be connected to the EC Base Control to modulate the speed of the motor based on the input signal of the potentiometer.



DESCRIPTION	IDENTIFICATION	CODE
NTC probe with box	UH-ECM-NTC	9008141

When it is delivered, the NTC Probe is mounted inside an air-tight plastic box. The NTC Probe must be connected to the EC Base control and detects the ambient temperature. The ambient temperature can be kept within the set limits by setting the set point value on the EC Base Control and adjusting the PB proportional band on the EC Base Control.





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CERTIFICATO n. 0545/5
CERTIFICATE No. _____

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITA' DI
WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY

SABIANA S.p.A.

UNITA' OPERATIVE
OPERATIVE UNITS

Sede e Unità Operativa
Via Piave, 53 - 20011 Corbetta (MI)
Unità Operativa
Via Virgilio, 2 - 20013 Magenta (MI)
Italia

E' CONFORME ALLA NORMA
IS IN COMPLIANCE WITH THE STANDARD

UNI EN ISO 9001:2008

PER LE SEGUENTI ATTIVITA'
FOR THE FOLLOWING ACTIVITIES

EA: 18

Progettazione, produzione e assistenza di apparecchiature per il riscaldamento e il condizionamento dell'aria (aerotermi, termostrisce radianti, ventilconvettori e unità trattamento aria) e canne fumarie.

Design, production and service of heating and air conditioning equipment (unit heaters, radiant panels, fan coil units and air handling units) and chimneys.

Riferirsi al Manuale della Qualità per l'applicabilità dei requisiti della norma di riferimento.
Refer to Quality Manual for details of application to reference standard requirements.

Il presente certificato è soggetto al rispetto del regolamento per la certificazione dei sistemi di gestione per la qualità delle aziende.
The use and the validity of this certificate shall satisfy the requirements of the rules for the certification of company quality management systems.

Data emissione
First issue
10/06/1996

Emissione corrente
Current issue
10/04/2012

Data di scadenza
Expiring date
09/04/2015

ICIM S.p.A.

Piazza Don Enrico Mapelli, 75 - 20099 Sesto San Giovanni (MI)

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