

TECHNICAL DATA SHEET

VALSIR® HRV SYSTEMS

ARIA EVO H/V



valsir®
QUALITY FOR PLUMBING

Aria EVO H/V

Heat recovery unit



Casing and cover panel made from expandend polypropylene, fitted with external reinforcement plates for airtight closing and for ceiling/wall mounting; internal aerodynamic shape able to minimize air pressure drops and rustles.

ISO 16890 ePM10>50% (ex G4) efficiency panel filters on both air intakes; as an option, additional ISO 16890 ePM1>70% (ex F7) compact filter in polypropylene with low air pressure drop; filter removal by independent ergonomic plug doors.

Air-to-air counterflow polystyrene heat recovery with very high efficiency (up to 95%), easily removable for cleaning, equipped with motorised by-pass device.

Supply and exhaust plenum fans with plastic impeller and housing, direct driven by EC technology motors, each fully controllable by unit electronics; optimized layout of each fan section in order to reduce noise to the room.

Plastic collars fitted with additional airtight rubber gasket.

Electronic control complete with temperature sensors inside the unit for the management of ventilation, free-cooling/free-heating mode, heat recovery defrost and possible preheating/reheating systems.

Plug-in or remote control panel with built-in room temperature senso.

Approvals:

The approvals of Valsir® HRV systems are available on the website: www.valsir.com

Table Aria EVO H/V Technical data

MODEL		Aria EVO H/V 170	Aria EVO H/V 260
Max airflow rate	m ³ /h	170	260
Nominal airflow rate	m ³ /h	155	200
Nominal external static pressure	Pa	150	170
Noise level	dB	51	55
Working limits	°C	-15 ÷ 45	
Power supply ⁽²⁾	V/ph/Hz	230 / 1 / 50	
Max current ⁽²⁾	A	0.52	1.5
Maximum electric power input	W	54	170

ENERGETIC DATA AS PER UE 1253/2014		Aria EVO H/V 170	Aria EVO H/V 260
Declared typology		UVR-B	
Type of drive installed or intended to be installed		>3 Multispeed	>3 Multispeed
Type of HRS		Recuperative	Recuperative
SEC class average climate		A	A
Specific energy consumption average climate (SEC)	kWh/(m ² a)	-34,5	-34.3
SEC class cold climate		A+	A+
Specific energy consumption cold climate (SEC)	kWh/(m ² a)	-71,7	-70.8
SEC class warm climate		E	E
Specific energy consumption warm climate (SEC)	kWh/(m ² a)	-10,6	-10.7
Thermal dry efficiency of heat recovery	%	85,0	83.0
Max airflow rate	m ³ /h	170	260
Reference flow rate	m ³ /s	0,033	0.051
Specific fan power (SPL)	W/(m ³ /h)	0,336	0.308
Reference pressure	Pa	50	50
Control factor and control typology (CTRL)	Timer	0.95	0.95
Annual electricity consumption of 100m ² floor area	kWh/a	4,25	4.11
Annual heating saved average climate (AHS)	kWh	44,5	43.9
Annual heating saved cold climate (AHS)	kWh	87,0	85.8
Heating saved warm climate (AHS)	kWh	21,0	19.8
Declared maximum external leakage rates of the casing of ventilation units	%	< 3,8	< 3,8
Declared maximum internal leakage rates for bidirectional ventilation units or carry over	%	< 3	< 3
Casing sound power level (LWA) ⁽¹⁾	dB (A)	51	55

⁽¹⁾ The reference flow rate equal to 70% of the maximum value and 50 Pa useful

⁽²⁾ Maximum total value of the two fans

Table Aria EVO H/V technical data

HEAT RECOVERY UNIT		Aria EVO H/V 170	Aria EVO H/V 260
Dimensions			
A	mm	874	874
A1	mm	972	972
B	mm	240	300
C	mm	655	655
C1	mm	360	360
D	mm	125	125
D1	mm	16	16
Weight	kg	12	17
Box dimensions		150	280
A1'	mm	1030	1030
B'	mm	330	330
C'	mm	690	690
Weight	kg	15	20

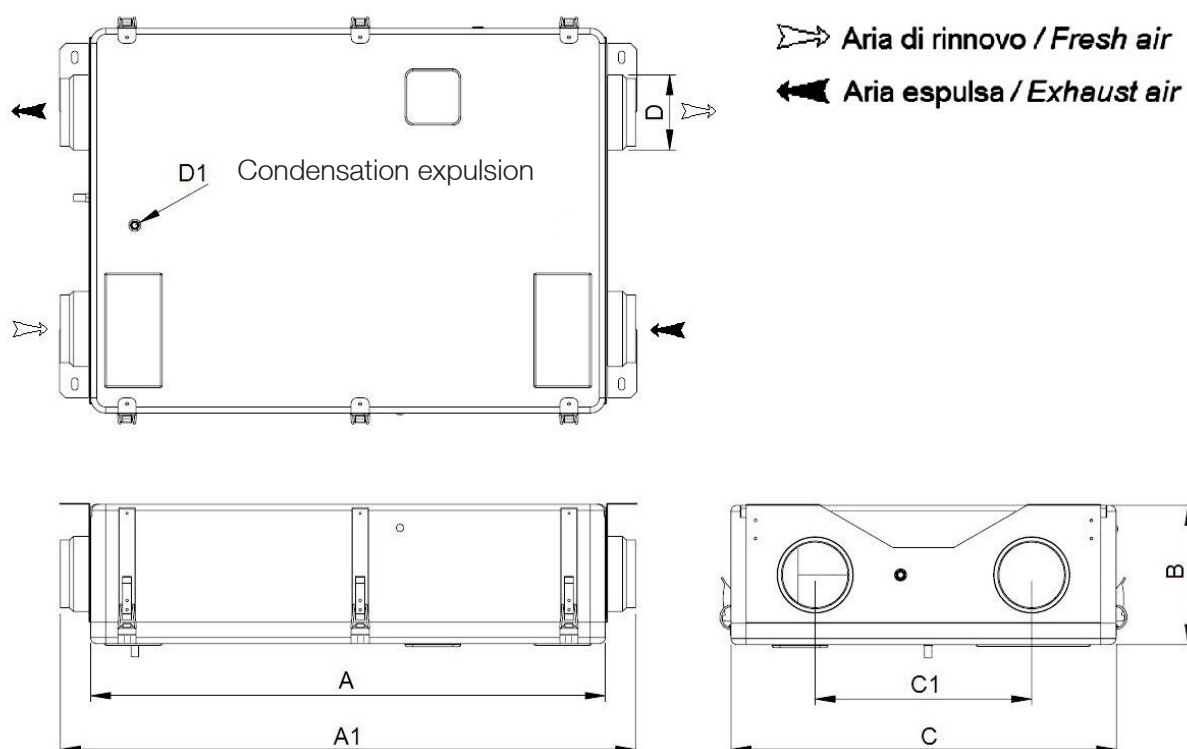


Figure Installations

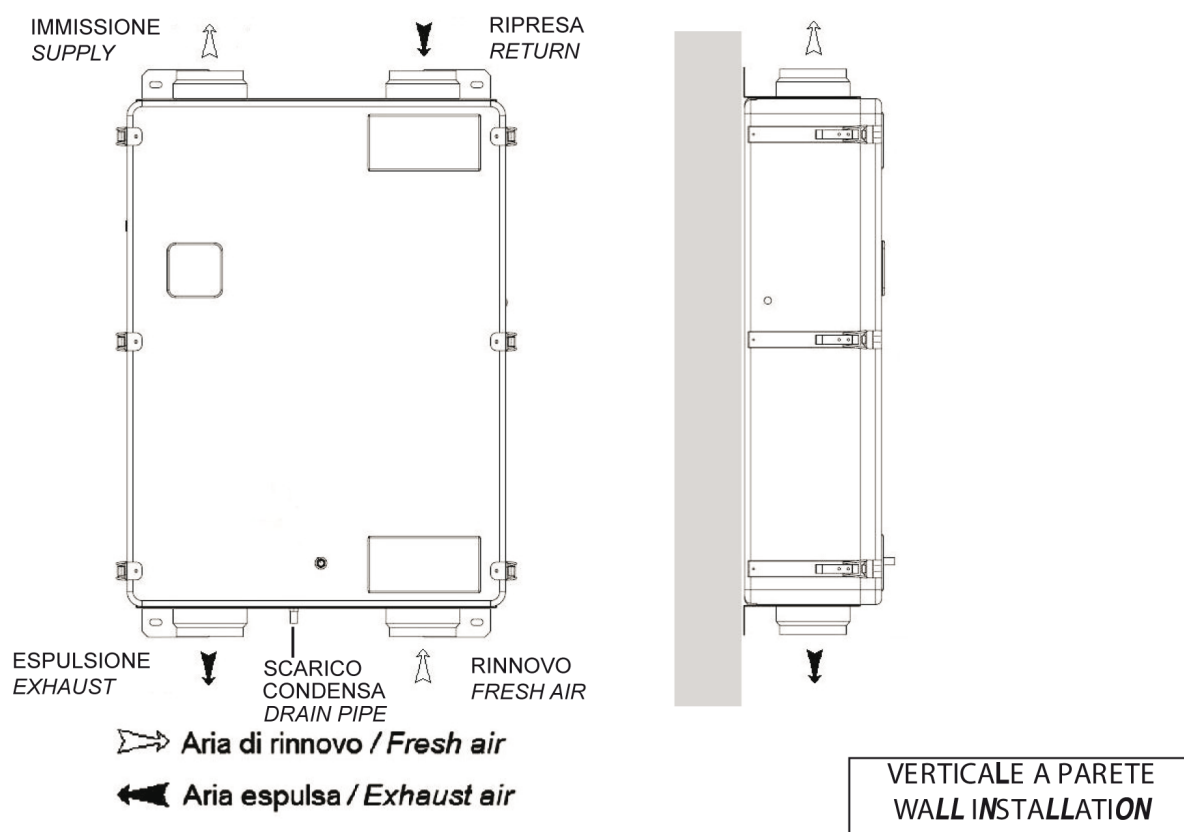
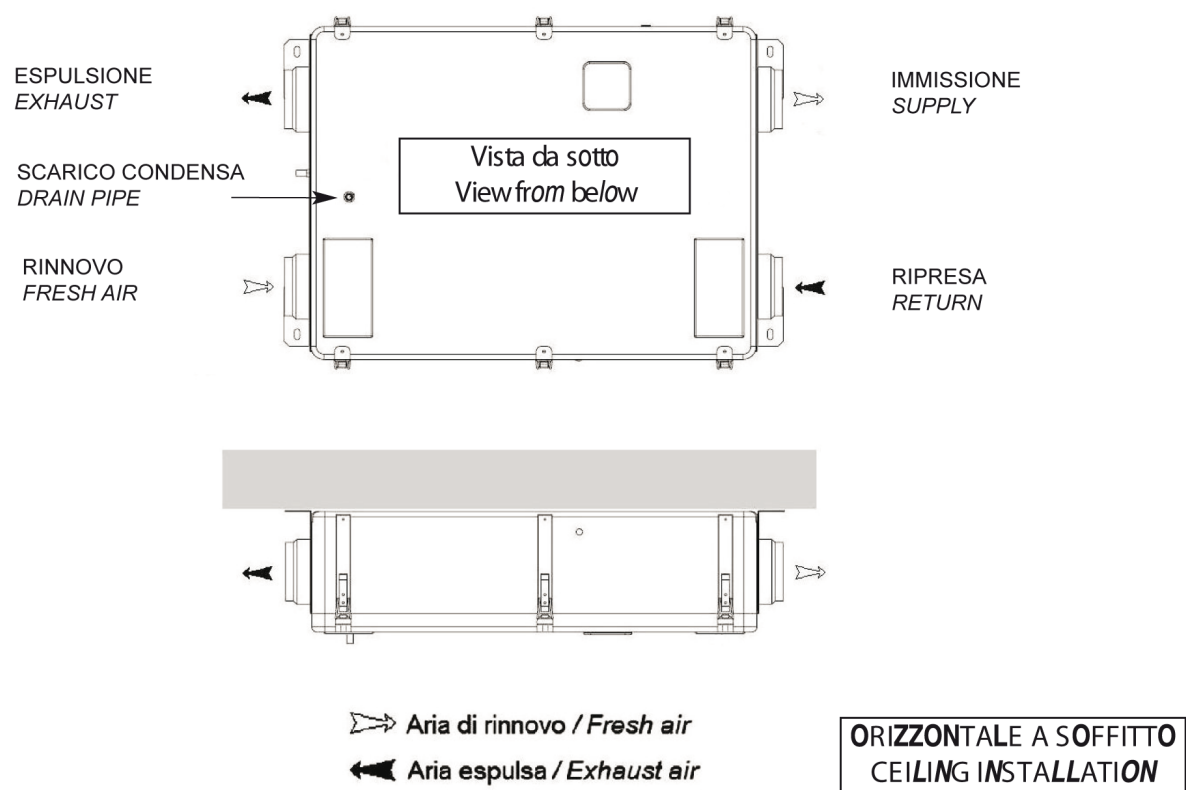


Table Aria EVO H/V 170 energy yields

Flow rate	Room air		Renewal air		Supplied air	Efficiency	Recovered power
m³/h	°C	U.R. %	°C	U.R. %	°C	%	W
50	20	50	-10	(*)	188	960	486
50	20	50	-7	(*)	189	959	437
50	20	50	-5	(*)	189	958	404
50	20	50	0	(*)	191	953	322
50	22	50	-10	(*)	208	962	517
50	22	50	-7	(*)	209	961	468
50	22	50	-5	(*)	209	960	435
50	22	50	0	(*)	210	957	353
50	26	50	30	(**)	263	932	62
50	26	50	32	(**)	264	932	93
50	26	50	34	(**)	266	932	124
100	20	50	-10	(*)	178	926	938
100	20	50	-7	(*)	179	923	843
100	20	50	-5	(*)	180	921	778
100	20	50	0	(*)	182	913	617
100	22	50	-10	(*)	198	930	1000
100	22	50	-7	(*)	199	928	904
100	22	50	-5	(*)	200	926	840
100	22	50	0	(*)	202	919	679
100	26	50	30	(**)	265	875	116
100	26	50	32	(**)	268	875	174
100	26	50	34	(**)	270	875	232
150	20	50	-10	(*)	170	908	1380
150	20	50	-7	(*)	175	905	1238
150	20	50	-5	(*)	172	902	1143
150	20	50	0	(*)	175	890	902
150	22	50	-10	(*)	189	903	1455
150	22	50	-7	(*)	191	900	1314
150	22	50	-5	(*)	192	897	1220
150	22	50	0	(*)	195	886	982
150	26	50	30	(**)	266	845	168
150	26	50	32	(**)	267	845	252
150	26	50	34	(**)	272	845	336

(*) UR external air from 50 to 90%

(**) UR external air from 40 to 60%

Table Aria EVO H/V 170 energy yields

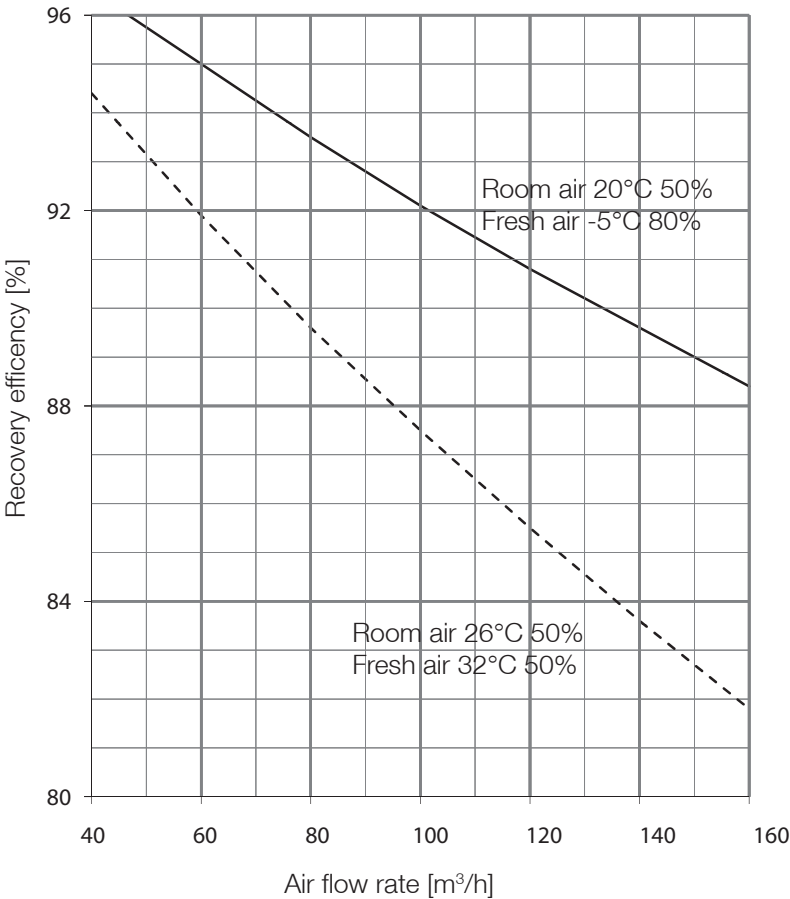


Table Aria EVO H/V 260 energy yields

Flow rate	Room air		Renewal air		Supplied air	Efficiency	Recovered power
m³/h	°C	U.R. %	°C	U.R. %	°C	%	W
100	20	50	-10	(*)	183	944	957
100	20	50	-7	(*)	184	943	860
100	20	50	-5	(*)	185	941	795
100	20	50	0	(*)	187	935	632
100	22	50	-10	(*)	203	948	1018
100	22	50	-7	(*)	204	946	921
100	22	50	-5	(*)	205	945	857
100	22	50	0	(*)	207	940	694
100	26	50	30	(**)	264	906	120
100	26	50	32	(**)	266	906	180
100	26	50	34	(**)	268	906	240
200	20	50	-10	(*)	171	903	1830
200	20	50	-7	(*)	173	902	1644
200	20	50	-5	(*)	174	900	1520
200	20	50	0	(*)	177	886	1197
200	22	50	-10	(*)	191	910	1955
200	22	50	-7	(*)	193	907	1766
200	22	50	-5	(*)	194	904	1640
200	22	50	0	(*)	197	894	1321
200	26	50	30	(**)	267	839	222
200	26	50	32	(**)	270	839	334
200	26	50	34	(**)	273	839	445
300	20	50	-10	(*)	159	863	2625
300	20	50	-7	(*)	162	858	2348
300	20	50	-5	(*)	163	853	2162
300	20	50	0	(*)	167	834	1690
300	22	50	-10	(*)	179	871	2809
300	22	50	-7	(*)	181	867	2533
300	22	50	-5	(*)	183	863	2347
300	22	50	0	(*)	186	847	1876
300	26	50	30	(**)	269	774	308
300	26	50	32	(**)	274	774	462
300	26	50	34	(**)	278	774	616

(*) UR external air from 50 to 90%

(**) UR external air from 40 to 60%

Table Aria EVO H/V 260 energy yields

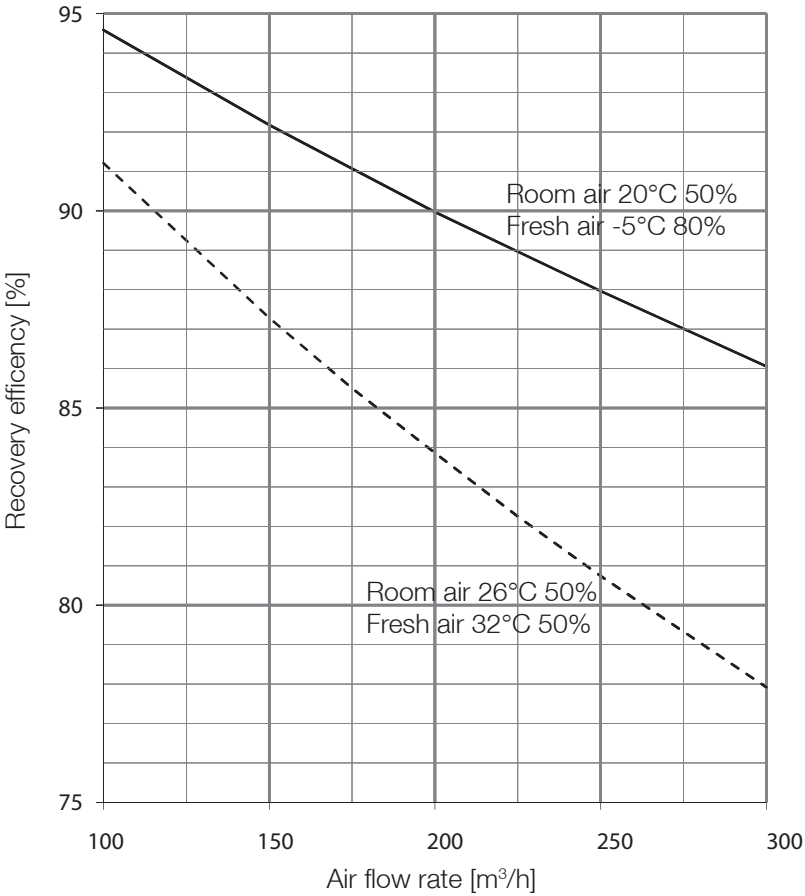


Figure Aria EVO H/V 170 characteristic graph

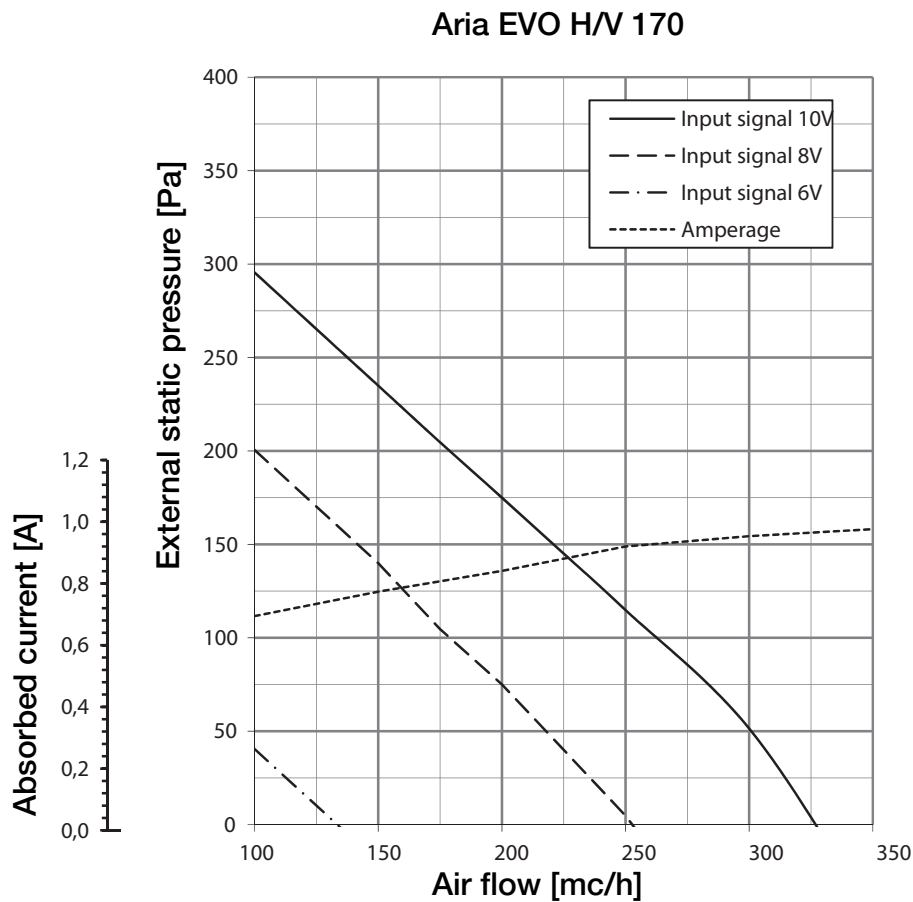


Figure Aria EVO H/V 260 characteristic graph

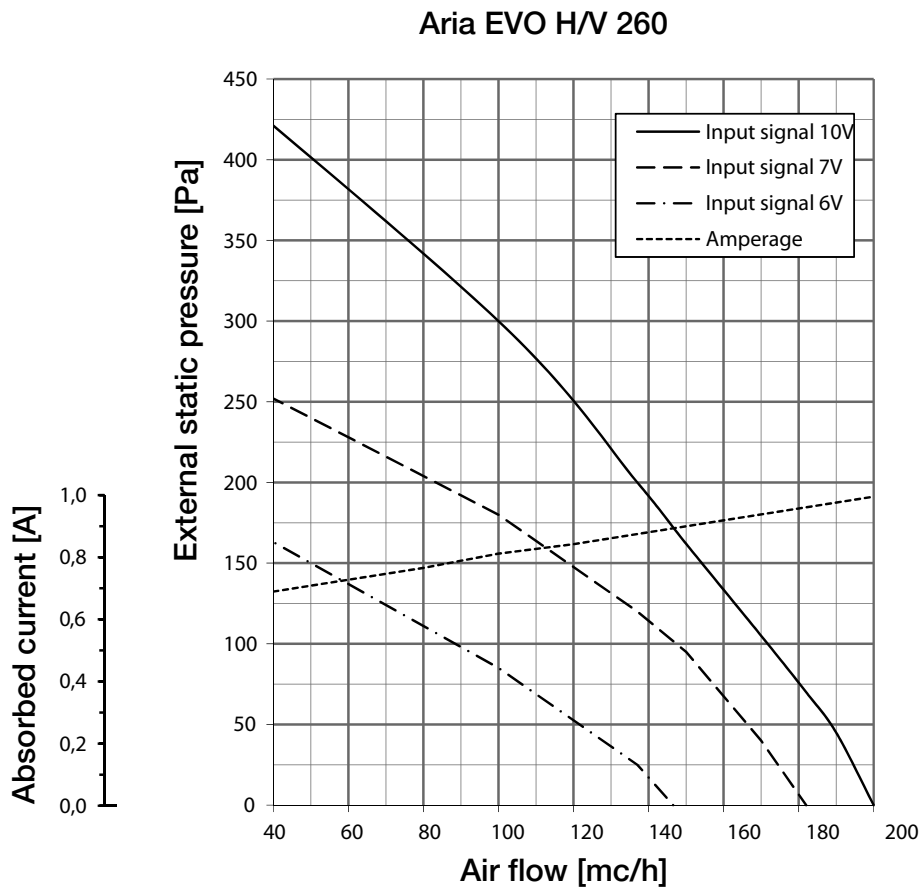
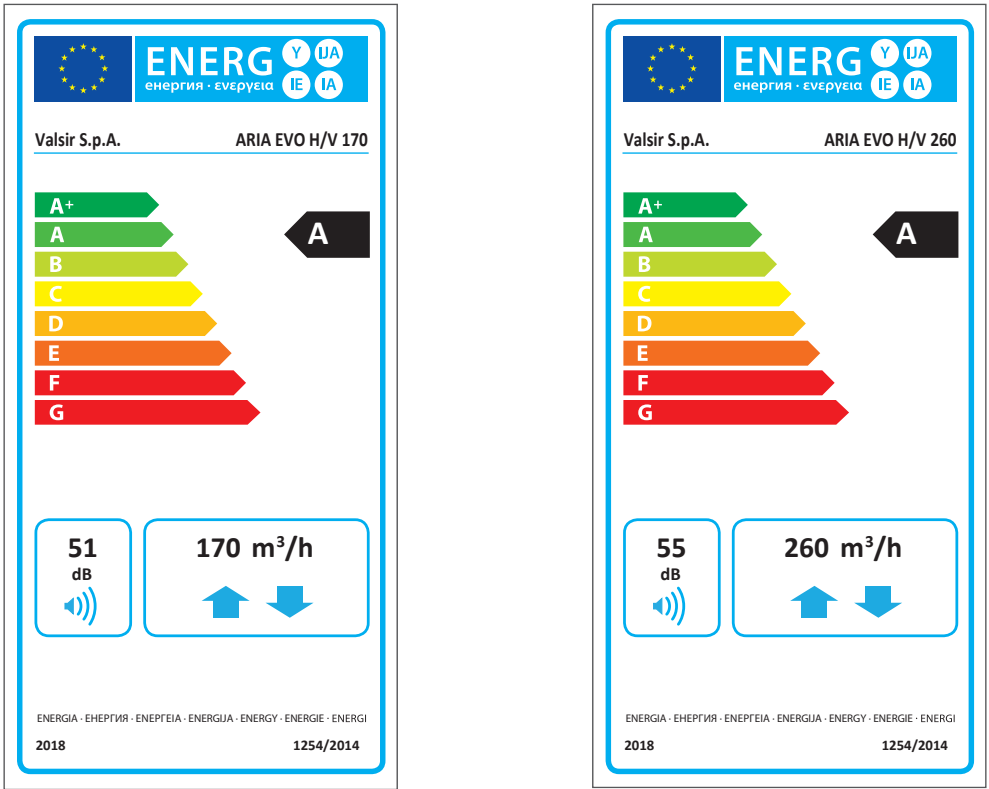


Figure Aria EVO H/V energy label referred to UE 1254/2014 Regulation



PLUMBING

WASTE SYSTEMS



SUPPLY SYSTEMS



GAS SYSTEMS



FLUSH SYSTEMS



BATHROOM SYSTEMS



TRAPS



RADIANT SYSTEMS



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HRV SYSTEM



ACADEMY



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WATER TREATMENT



BUILDING

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QUALITY FOR PLUMBING

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