



"Simplicity is the most difficult thing to secure in this world; it is the last limit of experience and the last effort of genius"

George Sand









WHY AIREKA

AIREKA is the new brand under which Stima S.p.A. has decided to gather a series of diverse products that share the common feature of being simple and yet innovative solutions to long-standing and complex issues, for which we believe the market does not offer adequate answers. The simplicity is the result of creative work, know-how, and extensive experience that the designers instilled in these products. So, special features make them one-of-a-kind.

Always with a great focus on customers' demands.



Simian Project S.r.l. was started in 2007 as a result of the business flair and experience of Leonardo Lombardi as a designer in the automotive and packaging industries. Creativity, dynamism, and efficiency are the qualities that characterise both the products and the work methods of the company, by offering customers tailor-made solutions with quick turnaround time and high added value.

Made in italy







SERIES VR - VORTEX COOLERS

Excellent performances, optimised technical features, wide range, and customised versions

VORTEX COOLERS

_operation == "MIRROR_Z": mirror_mod.use_x = False mirror_mod.use_y = False mirror_mod.use_z = True

#selection at the end -add back the deselected mirror modifier object
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modifier_ob.select=1
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The VR SERIES coolers are stateof-the-art solutions for compressedair cooling based on the principle of the Vortex Tube. The excellent performances of flow-rate and ΔT generated, the design, the fastenings that make them extremely versatile to mount, and the possibility to combine them in a patented system with the air amplifiers (to use the hot air flow). offer customers an innovative. effective, and inexpensive solution to cool down metal and plastic parts, electric and electronic control cabinets, and mechanical applications. All this with a simple connection to the compressed-air line.

- ΔT up to -40°C for the cold flow and +60°C for the hot flow, in comparison to the temperature of air at inlet
- Easy to install, thanks to flanges and magnetic supports
- Patented system of hot air's recovery to actuate an amplifier/conveyor
- Made of corrosion-resistant materials
- No moving part, so not subject to wear and tear
- No electricity or chemical substances required
- They do not cause either sparkles or interferences
- Instant operation
- Reliable and maintenance-free







Ranque-Hilsch tube (Vortex tube)

VORTEX COOLERS



The Ranque-Hilsch tube, in the industrial sector better known as "Vortex tube", is a device that splits a compressed-air flow in 2 separate streams: one of cold air, and one of hot air.

The core of the system is the vortex chamber, which is connected to 2 opposed tubes, one of which features a valve. When the compressed air is injected tangentially in the chamber, this causes the rotary movement of air towards one of the exits. This vortex moves rotating at high speed and brushing against the inner side of the tube, increasing in temperature; the valve placed at the hot air outlet enables some of it to be exhausted. The remaining part goes back, creating a low pressure vortex moving towards the other exit and giving away heat to the first vortex. So, this flow is much colder.

The ΔT generated is inversely proportional to the volume of the flow. The differences in temperature are considerable and can reach -40°C for the cold flow and 60°C for the hot flow.

In the industrial field the Vortex tubes have been employed for a long time and have found a variety of applications in which they offer a major added value. They have great cooling performances, are very easy to install and have instant operation, have no moving part and therefore are maintenance-free. Plus, they do not require electric power, so they are suitable for dangerous environments and humid areas.

If the application enables their use, they are price-worthier than electric coolers. Our coolers SERIES VR and VRX, beside the excellent performances in comparison to the other products in the market, were designed to be easily customised according to customers' demands.



SERIES VR-100 VORTEX COOLERS





GENERAL FEATURES - VR-100

Materials	Body and cover: Nylon 6.6
	Air connections and nozzles: brass
Air inlet port	G-1/8" F
Outlet port (cold flow)	G-1/8" F
Exhaust port (hot flow)	G-1/8" F
Recommended hose	Ø-8x1
Air supply pressure	3 ÷ 7 bar
Cooling power*	120 W - 100 Kcal/h - 400 BTUH
Optional magnetic support	KACM-VR100

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
3	-15	74
4	-21,5	94
5	-24,5	115
6	-26,5	135
7	-28	154

SERIES VR-200 VORTEX COOLERS

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modifier_ob.select=1
bpy.context.scene.objects.active
print("Select_it







GENERAL FEATURES - VR-200

VR 299

Materials	Body and cover: Nylon 6.6
	Air connections and nozzles: brass
Air inlet port	Push-in fitting Ø-8x6
Outlet port (cold flow)	2 x G-1/8" F
Exhaust port (hot flow)	2 x G-1/8" F
Recommended hose	Ø-8x1
Air supply pressure	3 ÷ 7 bar
Cooling power*	240 W - 200 Kcal/h - 800 BTUH
Optional magnetic support	KACM-VR200

COOLER

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
1	-15	64
2	-8	106
3	-15	148
4	-21,5	196
5	-24,5	230
6	-26,5	270
7	-28	308

SERIES VR-300T • 3 OUTLETS VORTEX COOLERS







GENERAL FEATURES - VR-300T

Materials	Body and cover: Nylon 6.6
	Air connections and nozzles: brass
Air inlet port	G-1/4" F
Outlet port (cold flow)	3 x G-1/8" F
Exhaust port (hot flow)	3 x G-1/8" F
Recommended hose	Ø-8x1
Air supply pressure	3 ÷ 7 bar
Cooling power*	360 W - 300 Kcal/h - 1200 BTUH
Optional magnetic support	KACM-VR300

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
1	-15	96
2	-8	159
3	-15	222
4	-21,5	282
5	-24,5	345
6	-26,5	405
7	-28	462

SERIES VR-300U . SINGLE OUTLET VORTEX COOLERS

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GENERAL FEATURES - VR-300U

Materials	Body and cover: Nylon 6.6
	Air connections and nozzles: brass
Air inlet port	G-1/4" F
Outlet port (cold flow)	1 x G-1/2" F
Exhaust port (hot flow)	3 x G-1/8" F
Recommended hose	Ø-8x1
Air supply pressure	3 ÷ 7 bar
Cooling power*	360 W - 300 Kcal/h - 1200 BTUH
Optional magnetic support	KACM-VR300

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
1	-15	96
2	-8	159
3	-15	222
4	-21,5	282
5	-24,5	345
6	-26,5	405
7	-28	462

SERIES VR-600 • TO COOL DOWN BLADES, BELTS, AND BANDS VORTEX COOLERS









GENERAL FEATURES - VR-600

Materials

	Clamps: ABS (other materials on request)
	Inner spindles: brass
Air inlet port	G-3/8" F
Clamps width (cold flow)	11 mm (customised dimensions on request)
Outlet port (hot flow)	G-3/8" F
Recommended hose	Ø-10x1
Air supply pressure	Max 7 bar
Cooling power*	720 W - 600 Kcal/h - 2400 BTUH
Fastening	By means of two M6 threads on body

Body: Delrin

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
1	-15	192
2	-8	318
3	-15	444
4	-21,5	564
5	-24,5	690
6	-26,5	810
7	-28	924

SERIES VRX-100 VORTEX COOLERS









GENERAL FEATURES - VRX-100

Materials	Sleeve: anodized aluminium
	Ends: Delrin 100
Air inlet port	G-1/8" F
Outlet port (cold flow)	G-1/8" F
Exhaust port (hot flow)	G-1/8" F
Recommended hose	Ø-8x1
Air supply pressure	1 ÷ 7 bar
Cooling power*	132 W - 110 Kcal/h - 440 BTUH
Optional magnetic support	KACM-VRX-100

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
1	-2	32
2	-12	53
3	-18	74
4	-23	94
5	-26	115
6	-28	135
7	-31	154

SERIES VRX-300 VORTEX COOLERS







GENERAL FEATURES - VRX-300

Materials	Sleeve: anodized aluminium
	Ends: Delrin 100
Air inlet port	G-1/4" F
Outlet port (cold flow)	G-1/2" F
Exhaust port (hot flow)	G-1/4" F
Recommended hose	Ø-10x1
Air supply pressure	5 ÷ 7 bar
Cooling power*	600 W - 523 Kcal/h - 2075 BTUH
Optional magnetic support	KACM-VRX500
*	

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
5	-16	525
6	-17	650
7	-19	750

SERIES VRX-500 VORTEX COOLERS

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bpy.context.scene.objects.active
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Materials	Sleeve: anodized aluminium
	Ends: Delrin 100
Air inlet port	G-1/4" F
Outlet port (cold flow)	G-1/2" F
Exhaust port (hot flow)	G-1/4" F
Recommended hose	Ø-10x1
Air supply pressure	5 ÷ 7 bar
Cooling power*	730 W - 630 Kcal/h - 2500 BTUH
Optional magnetic support	KACM-VRX500
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*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
5	-16	1075
6	-17	1330
7	-19	1500

SERIES VRX-1000 VORTEX COOLERS





GENERAL FEATURES - VRX-1000

Materials	Sleeve: anodized aluminium
	Ends: Delrin 100
Air inlet port	G-1/4" F
Outlet port (cold flow)	G-1/2" F
Exhaust port (hot flow)	G-1/4" F
Recommended hose	Ø-12x1
Air supply pressure	5 ÷ 7 bar
Cooling power*	1650 W - 1417 Kcal/h - 5600 BTUH
Optional magnetic support	KACM-VRX1000

*with inlet pressure 7 Bar and inlet temperature 20°C

Pressure [bar]	Outlet temperature cold flow [°C]	Consumption [NL/min]
5	-16	1425
6	-17	1760
7	-19	2025

ACCESSORIES VORTEX COOLERS











MAGNETIC SUPPORT	
Part-number	Item
KACM-VR100	KACM-VR100
KACM-VR200	KACM-VR200
KACM-VR300	KACM-VR300
KACM-VRX100	KACM-VRX100
KACM-VRX500	KACM-VRX500
KACM-VRX1000	KACM-VRX1000

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ADJUSTABLE NOZZLE FOR COLD OUTLET				
Part-number	Port	Nozzle	No. modules	Length
K82021/8 1/8-3	1/8"	Ø-3	8	155
K82021/8 1/8-27	1/8"	Flat 25 mm	8	155
K84041/6 1/2-9	1/8"	Ø-9	6	170
K84041/6 1/2-27	1/8"	Flat 30 mm	6	172

Other configurations available on request

Part-number	Size	Item
6512	8-1/8	VR-100/200/300; VRX-100
6512	10-1/4	VRX-300/500
6512	12-1/4	VRX-1000
6512	10-3/8	VR-600
Mala parallal with O Dir	20	

Male parallel with O-Ring

ELBOW PUSH-IN FITTING FOR AIR SUPPLY			
Part-number	Size	ltem	
6522	8-1/8	VR-100/200/300; VRX-100	
6522	10-1/4	VRX-300/500	
6522	12-1/4	VRX-1000	
6512	10-3/8	VR-600	
Survival mala parallal with O Ding			

Swivel male, parallel with O-Ring

SILENCER FOR HOT FLOW EXHAUST				
Part-number	Thread BSP	Noise at 6 bar [db(A)]		
SC 1/8	1/8"	70		
SC 1/4	1/4"	67		
SC 3/8	1/4"	67		

In sintered bronze.



SERIES ABT - ABX

Modular air knives, with double flow for unbeatable power

AIR KNIVES



ABT 200

AJK5545001J-JK

INLET PRESSURE

The air knives **SERIES AB** are one of a kind, thanks to their high blowing power, which is a result of the air flow on both sides of the blade, and thanks to their easy installation, by means of two neodymium magnets and of brackets, which make it possible to direct the knife according to all demands. These products are very effective for cleaning, drying, and cooling.

simion project

- Design geometries optimised to maximise the Coanda effect
- Double blow-off flow (both sides of the blade)
- Powerful, uniform flow, suitable for cleaning small and large surfaces

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- Modular design and possibility of customisation
- No moving parts, so maintenance-free







AIR KNIVES



DESCRIPTION OF THE COANDA EFFECT

The air amplifiers and the air knives exploit the Coanda effect.

This phenomenon can be explained as the tendency of a fluid to follow the contour of a surface nearby. It is named after the pioner of aerodynamics Henri Coanda, who in 1936 patented some instruments that exploited the capacity to deviate a flow.

The compressed air introduced in an amplifier or in an air knife is forced to pass through a reduced section, from 0.02 mm to 0.08 mm, and, by lapping the surface nearby, the surrounding air is attracted towards the flow's direction, so that the volume of air becomes from 5 to 20 times bigger than it was at the inlet.



SERIES ABT-030 AIR KNIVES









GENERAL FEATURES - ABT-030			
Materials	Anodized aluminium		
Air supply port	Fitting Ø-8		
Fastening	Optional angular bracket		
Blade length	32 mm		
Slot size	0,1 mm on each side		
Air supply pressure	Max 7 bar		
Optional magnetic support	KACM-ABT030		

Pressure [bar]	CONSUMPTION [NI/min]	THRUST [at 200 mm in g]
1	142	61
2	250	123
3	352	200
4	442	280
5	508	355
6	612	445

SERIES ABT-030 PLUS AIR KNIVES

AJK5545001J-JK

INLET PRESSURE MAN 7 BAR







GENERAL FEATURES - ABT-030 PLUS		
Materials	Anodized aluminium	
Air inlet port	Fitting Ø-10	
Fastening	Optional angular bracket	

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Blade length	32 mm
Slot size	0,15 mm on each side
Air supply pressure	Max 7 bar
Optional magnetic support	KACM-ABT030 PLUS

PERFORMANCES AND CONSUMPTION TABLE

Pressure [bar]	AIR CONSUMP- TION [NI/min]	AIR CONSUMP- TION [m³/h]	THRUST [at 200 mm in g]
1	213*	12.8*	90
2	375*	22.5*	190
3	528*	33.2*	300
4	663*	31.8*	420
5	762*	45.8*	532
6	918*	54.8*	668

Size of double slot: 0,15 mm

SERIES ABT-200 AIR KNIVES







GENERAL FEATURES - ABT200MaterialsAnodized aluminiumAir inlet portFitting Ø-10FasteningIntegrated feetBlade length172 mmAir supply pressureMax 7 barOptional magnetic supportKACM-ABT200

Pressure [bar]	CONSUMPTION [NI/min]	THRUST [at 150 mm in g]
1	765	42
2	978	238
3	1360	595
4	1573	722
5	1955	1105
6	2380	1490
7	2663	1900

SERIES ABX (LENGTHS ON REQUEST) LARGE AIR KNIVES



Available on request with heated flow

ALL DUDING

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ACCESSORIES AIR KNIVES







MAGNETIC SUPPORT	
Part-number	Item
KACM-ABT030	ABT-030
KACM-ABT200	ABT-200
BRACKET FASTENING	
Part-number	Item
ABT-05	ABT-030
CONNECTION NIPPLE	
Part-number	Item

By means of the connection nipple it is possible to connect 2 or 3 items ABT-200 so that to obtain knives with length 400 or 600 mm.

N.B. For these lengths the air supply from both sides is recommended.







SERIES AM

Powerful, adjustable, and easy to connect to vortex coolers (patented system)

AIR AMPLIFIERS

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The **AM Series** air amplifiers offer excellent performance for both suction and blow-off. The quality of design and construction optimises the Coanda effect, so they use a small amount of compressed air to generate a powerful, high-speed flow.

Their capability to perform both functions of suction and blow-off make them useful for many applications, including ventilating electric cabinets, conveying fumes and lightweight particles produced by machining, conveying and handling of light parts, drying, and cooling. When combined with the VR Series coolers, they create an effective patented system where, by conveying the hot air flow exhausted by the cooler to actuate an AM Series amplifier, the cooling power is optimised, so that to make it possible to drawn hot air out of enclosures and ventilate closed areas to be cooled. The flow-rate can be adjusted by simply turning the nut.

- Design geometries optimised to maximise the Coanda effect
- Adjustable flow-rate
- Wide section for suction and blow-off, suitable for a variety of applications
- Instant operation
- No moving part, so not subject to wear and tear
- No electricity or chemical substances required
- More efficient than venturis and ejectors
- It does not cause neither sparks nor interferences
- Reliable and maintenance-free



SERIES AM-10ES AIR AMPLIFIERS







GENERAL FEATURES - AM10ES

Materials	Anodized aluminium
Air inlet port	Fitting G-1/8" F
Inlet diameter	Ø-19
Outlet diameter	Ø-19
Air supply pressure	Max. 7 bar
Recommended hose	Ø-6x1 - Ø-8x1

SUPPLY PRESSURE (BAR)	OPENING ADJUSTMENT	VACUUM AT INLET [m bar]	FLOW- (Stm3/h)	·RATE [l/min]	AIR CONSUMPTION [I/min]	AMPLIFICATION RATIO
	MIN	-80	33,5	558.3	78,3	7,1
2	INTERMEDIATE	-91,5	46	766.7	158,3	4,8
	MAX	-98	46	766.7	220,0	3,5
	MIN	-120	38	633.3	110,0	5,8
3	INTERMEDIATE	-139	48	800.0	220,0	3,6
	MAX	-156	50	833.3	305,0	2,7
	MIN	-160	42	700.0	138,3	5,1
4	INTERMEDIATE	-180	50	833.3	283,3	2,9
	MAX	-194	52	866.7	383,3	2,3
5	MIN	-187	46	766.7	163,3	4,7
	INTERMEDIATE	-219	52	866.7	343,3	2,5
	MAX	-333	56	933.3	461,7	2,0
	MIN	-224	47	783.3	191,7	4,1
6	INTERMEDIATE	-249	56	933.3	403,3	2,3
	MAX	-360	60	1000.0	543,3	1,8
7	MIN	-256	49	816.7	223,3	3,7
	INTERMEDIATE	-345	58	966.7	456,7	2,1
	MAX	-377	65	1083.3	620,0	1,7

SERIES AM-20ES AIR AMPLIFIERS







GENERAL FEATURES - AM20ES

Materials	Anodized aluminium
Air inlet port	G-1/4" F
Inlet diameter	Ø-32
Outlet diameter	Ø-32
Fastening	M25x1,5 with nut
Air supply pressure	Max. 7 bar
Recommended hose	Ø-8x1

SUPPLY PRESSURE	OPENING	VACUUM	FLOW-RATE		AIR CONSUMPTION	AMPLIFICATION
(BAR)	ADJUSTMENT	AT INLET [m bar]	(Stm3/h)	[l/min]	[l/min]	RATIO
	MIN	-8,5	32	533.3	58,3	9,1
1	INTERMEDIATE	-17	60	1000.0	116,7	8,6
	MAX	-14	50	833.3	333,3	2,5
	MIN	-18	72	1200.0	125,0	9,6
	INTERMEDIATE	-39	106	1766.7	283,3	6,2
	MAX	-44	100	1666.7	533,3	3,1
	MIN	-30	95	1583.3	200,0	7,9
3	INTERMEDIATE	-59	134	2233.3	416,7	5,4
	MAX	-68	136	2266.7	700,0	3,2
	MIN	-43	112	1866.7	283,3	6,6
4	INTERMEDIATE	-79	158	2633.3	650,0	4,1
	MAX	-93	160	2666.7	883,3	3,0
5	MIN	-55	126	2100.0	325,0	6,5
	INTERMEDIATE	-128	180	3000.0	783,3	3,8
	MAX	-177	195	3250.0	1066,7	3,0
6	MIN	-66	140	2333.3	416,7	5,6
	INTERMEDIATE	-138	210	3500.0	950,0	3,7
	MAX	-141	210	3500.0	1183,3	3,0
7	MIN	-79	152	2533.3	516,7	4,9
	INTERMEDIATE	-147	240	4000.0	1083,3	3,7
	MAX	-171	240	4000.0	1333,3	3,0

SERIES AM-30ES AIR AMPLIFIERS







GENERAL FEATURES - AM30ES

Materials	Anodized aluminium
Air inlet port	Fitting G-1/4
Inlet diameter	Ø-38
Outlet diameter	Ø-38
Air supply pressure	Max. 7 bar
Recommended hose	Ø-10x1 - Ø-12x1

SUPPLY PRESSURE (BAR)	OPENING ADJUSTMENT	VACUUM AT INLET [m bar]	FLOW- (Stm3/h)	RATE [l/min]	AIR CONSUMPTION [I/min]	AMPLIFICATION RATIO
	MIN	-6.0	136	2264	283	8
1	INTERMEDIATE	-15,0	272	4536	567	8
	MAX	-10	174	2901	967	3
	MIN	-15.0	224	3736	467	8
	INTERMEDIATE	-35.0	392	6531	933	7
	MAX	-40	285	4749	1583	3
	MIN	-30.0	330	5600	700	8
3	INTERMEDIATE	-60.0	504	8400	1400	6
	MAX	-65	429	7149	2383	3
	MIN	-40.0	378	6300	1060	6
4	INTERMEDIATE	-70.0	504	8400	2100	4
	MAX	-80	531	8850	2950	3
	MIN	-50.0	450	7500	1250	6
5	INTERMEDIATE	-120.0	600	10000	2500	4
	MAX	-110	630	10500	3500	3
6 7	MIN	-60.0	485	8085	1617	5
	INTERMEDIATE	-130.0	582	9699	3233	3
	MAX	-135	726	12099	4033	3
	MIN	-70	580	9665	1933	5
	INTERMEDIATE	-140	696	11601	3867	3
	MAX	-130	870	14499	4833	3

SERIES AM-40ES







GENERAL FEATURES - AM40ES

Materials	Anodized aluminium
Air inlet port	G-3/8
Inlet diameter	Ø-50
Outlet diameter	Ø-50
Air supply pressure	Max. 7 bar
Recommended hose	Ø-12x1 - Ø-14x1

SUPPLY PRESSURE (BAR)	OPENING ADJUSTMENT	VACUUM AT INLET [m bar]	FLOW- (Stm3/h)	RATE [l/min]	AIR CONSUMPTION [I/min]	AMPLIFICATION RATIO
	MIN	-6.0	328	5464	683	8
1	INTERMEDIATE	-15.0	656	10036	1367	8
	MAX	-10	417	6951	2317	3
	MIN	-15.0	520	8864	1083	8
	INTERMEDIATE	-35.0	910	15189	2167	7
	MAX	-40	663	11049	3683	3
	MIN	-30.0	680	11336	1417	8
3	INTERMEDIATE	-60.0	1020	16998	2833	6
	MAX	-65	867	14451	4817	3
	MIN	-40.0	636	10502	1767	6
4	INTERMEDIATE	-70.0	848	14132	3533	4
	MAX	-80	891	14850	4950	3
	MIN	-50.0	744	12402	2067	6
5	INTERMEDIATE	-120.0	992	16532	4133	4
	MAX	-110	1041	17349	5783	3
6	MIN	-60.0	750	12500	2500	5
	INTERMEDIATE	-130.0	900	15000	5000	3
	MAX	-135	1125	18750	6250	3
7	MIN	-70	900	15000	3000	5
	INTERMEDIATE	-140	1080	18000	6000	3
	MAX	-130	1350	22500	7500	3

COOLER AIR SAVING PATENTED SYSTEM



VR Series coolers and **AM Series** amplifiers used together to introduce cold air and extract hot air from electrical cabinets at the same time, using a single compressed air supply.

- Effective ventilation of the electrical cabinet
- Reduction of compressed air consumption
- Optimisation of cooling results

No matter how much cold air is introduced into an electrical cabinet, the effectiveness and efficiency of cooling will never be optimal unless the hot air generated by the electrical components is properly ventilated at the same time. With ventilation we mean both the creation of convection flows inside the cabinet which effectively distribute the air around the components, and the actual extraction of hot air from the cabinet itself.

By using the Cooler Air Saving patented system by Simian Project, two results are obtained: the first, using the VR Series coolers, is the prompt and precise cooling of the components that heat the cabinet the most. This thanks to the flexibility of installation (brackets and magnets) and the fact that the flow of cold air can be precisely directed on the main heat sources (by using adjustable nozzles). The second result is the proper ventilation of the electrical cabinet, thanks to the extraction power generated by the AM Series air amplifier, which is actuated by the hot air exhausted from the cooler.

The picture shows the system set up inside an electrical cabinet:



The VRX-500 cooler (fig.1) is actuated with compressed air from outside; the flow of cold air is directed, by using adjustable nozzles, on the electrical components that give off the most heat, while the exhaust of hot air is channelled by the red hose (fig. 3) to actuate the AM Series amplifier

The amplifier (fig.2) is mounted on the top right-hand side of the electrical cabinet; the pass-through installation allows it to suction and extract air from the cabinet; in the example of the picture, its position in the upper part of the cabinet ensures that the extraction occurs where most of the hot air accumulates and that even the electrical components located on the opposite side of the source of cold air remain at a temperature suitable for optimal functioning.

Even where pass-through mounting is not possible (for example in the event of installations in cabinets where IP protection must be guaranteed), the fitting of the amplifier inside the cabinet ensures forced recycling of air, which eliminates the concentration of hot air in the areas located furthest away from sources of cold air.

ACCESSORIES AIR AMPLIFIERS



- Large electrical cabinets where the cold air generated by the airconditioner has trouble in reaching all parts of the cabinet;
- Electrical cabinets with electrical components laid out in such a way that the convection of air around the components is tricky;
- Electrical cabinets where the heat is generated by a few components that are located far from the area where the air-conditioner introduces the cold air.

N.B.: The Cooler Air Saving system works with VRX-300, VRX-500, and VRX-1000 coolers together with AM-20 and AM-40 amplifiers.





STRAIGHT PUSH-IN FITTING FOR AIR SUPPLY			
Part-number	Size	ltem	
6512	6-1/8	AM-10ES	
6512	8-1/8	AM-10ES	
6512	8-1/4	AM-20ES	
6512	12-3/8	AM-40ES	
Male parallel with O-Ring			

ELBOW PUSH-IN FITTING FOR AIR SUPPLY			
Part-number	Size	ltem	
6522	6-1/8	6-1/8	
6522	8-1/8	8-1/8	
6522	8-1/4	8-1/4	
6522	12-3/8	12-3/8	
Male parallel with O-Ring			



SERIES HSC

Effective, maintenance-free, and suitable for any flow-rate and application

CONDENSATE SEPARATORS



The main strengths of the condensate separators Series HSC are effectiveness, reliability, and versatility. The effectiveness in the removal of condensate is obtained through the particular design of the **DRYVOLUTION** system: thanks to a series of concentric flanges, assembled with a precise angle of incidence with respect to the direction of inlet flow, they generate a compressed air expansion (which takes place inside a chamber downstream of the flanges) that brings about a considerable decrease in the temperature and consequently the condensation of humidity. This is then directed to the bottom of the bowl. The reliability derives from the fact that no electric power and no chemical

substance is used, and moreover there is no moving part (with the exception of the sole automatic drain): the performance is steady and maintenance is practically zero. The versatility is guaranteed by the performances and the technical features: the range covers a wide spectrum of flow-rates and the materials used, together with the assembly, make it a very sturdy product. Therefore, it perfectly suits many different applications: upstream of coalescing filters (cleaning of air inside clean rooms), downstream of big compressors for air distribution inside factories, on board of trucks and agricultural machines, upstream of pneumatic tools, etc.

- Water separation through the decrease in the temperature of compressed air
- No moving part, except for the automatic drain
- Easy to install
- Made in technopolymer and brass OT58
- One size, with 3 possible flow-rate settings
- Maintenance-free
- No electricity or chemical substances required
- No sparks or interferences caused
- Instant operation
- Possibility of combination with cooler VR50 to further lower temperatures



SERIES - HSC - T2 - HIGH SEPARATOR CONDENSE

THERMODYNAMIC DRYER

HSC .T2





Type of functioningThermodynamicMaterialsTechnopolymerPorts1/2" G (with bushings in brass)Weight500 gInstallationVerticalOperating temperature-10°C + 50°CCondensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)126* at max. openingFactory settingIntermediate opening (1100 NI/min)	GENERAL FEATURES - HSC	
MaterialsTechnopolymerPorts1/2" G (with bushings in brass)Weight500 gInstallationVerticalOperating temperature-10°C + 50°CCondensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Type of functioning	Thermodynamic
Ports1/2" G (with bushings in brass)Weight500 gInstallationVerticalOperating temperature-10°C + 50°CCondensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Materials	Technopolymer
Weight500 gInstallationVerticalOperating temperature-10°C + 50°CCondensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Ports	1/2" G (with bushings in brass)
InstallationVerticalOperating temperature-10°C + 50°CCondensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Weight	500 g
Operating temperature-10°C + 50°CCondensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Installation	Vertical
Condensate drainAutomatic, by floatMediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Operating temperature	-10°C + 50°C
MediumCompressed airOperating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Condensate drain	Automatic, by float
Operating pressureMax. 12 barMax. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Medium	Compressed air
Max. flow-rate (3 possible settings)1266* at max. openingFactory settingIntermediate opening (1100 NI/min)	Operating pressure	Max. 12 bar
Factory setting Intermediate opening (1100 NI/min)	Max. flow-rate (3 possible settings)	1266* at max. opening
	Factory setting	Intermediate opening (1100 NI/min)

*values at P1= 6 Bar and Delta P= 0.5 Bar.



*HSC-02-38-SCC **HSC-02-12-SCC

ACCESSORIES THERMODYNAMIC DRYER

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93%



WALL BRACKET	
PART-NUMBER	DIMENSIONS
HSC-13	150 x 30 x 2,50



ANTI-VIBRATION SUPPORT	
PART-NUMBER	DIMENSIONS
HSC-17	15 x 15 M5

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TABLE OF CONTENTS

PART-NUMBER	PAGE
VORTEX COOLERS	5
VR-100	8
VR-200	9
VR-300T	10
VR-300U	11
VR-600	12
VRX-100	13
VRX-300	14
VRX-500	15
VRX-1000	16
ACCESSORIES	17
AIR KNIVES	19
ABT-030	22
ABT-030 PLUS	23
ABT-200	24
ABX	25
ACCESSORIES	26
AIR AMPLIFIERS	29
AM-10ES	30
AM-20ES	31
AM-30ES	32
AM-40ES	33
COOLER AIR SAVING	34
ACCESSORIES	35
CONDENSATE SEPARATORS	37
HSC-T2	38
ACCESSORIES	39







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