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Non-residential

Smart compact air handling units

Largest selection of compact air handling units

Speed and quality are one of the core values in modern business. We are constantly investing in production modernization, laboratory equipment and research, so we can offer your projects a wide range of reliable compact air handling units while guaranteeing short manufacturing period.

Why SALDA compact air handling units?

> Large selection: more than 4000 variations;

> Quality: components supplied only by reliable EU manufacturers;

 > Energy efficiency: EC fans, efficient heat exchangers, smart control;

> Testing: new equipment is tested in a climatic chamber;

> Reliability: all AmberAir Compact series units are certified by Eurovent.

Exceptional quality

The quality of our compact air handling units is determined by our business philosophy and investments in manufacturing equipment, as well as in-service training of our employees. Rigorous regulation of processes in accordance with Standard ISO 9001:2015 starting with designing and testing of the product, purchase of raw materials and components, production and ending with final inspection ensure that our customers are provided with air handling units meeting the top standards. Components of compact AHU equipment are purchased only from leading EU manufacturers such as fans: ebm-papst, ZIEHL-ABBEG; heat exchangers: ERI, Recutech, Hoval; gears: Belimo. The expected lifetime of fans exceeds 15 years!

Production of ventilation equipment is subject to a 4-step control system:



High-quality assemblage ensures high-level tightness of the product, low heat loss, and durability. AmberAir Compact air handling unit casing SD50+ has the best characteristics on the market.

Model	Casing strength class	Casing air leakage class at -400 Pa	Casing air leakage class at +700 Pa	Filter bypass leakage class	Thermal bridge	Temperatūros tiltelis
SD50+	D1(M)	L1(M)	L1(M)	F9(M)	T2	TB1

High energy efficiency results in minimum energy consumption

High energy efficiency of SALDA compact-class air handling units is determined by a whole range of components: cost-saving fans, efficient heat exchangers, high-level tightness, and smart control of ventilation equipment.

Reliable EC fans

The air handling units are equipped with energy saving EC type fans made in German (ebm-papst, ZIEHL-ABEGG).

Reliable external tightness

High-quality assemblage of air handling unit results in characteristic reliable external tightness. AmberAir Compact CXV/H series air handling units are in conformity with class L1 and leakage is less than 1.5%, thus there is no need for extra consumption of electricity in order to compensate for air losses.

Efficient heat exchangers: rotor and counter-flow plate type

The installed rotor or counter-flow plate-type fans are manufactured by leading European manufacturers. High heat recovery level based on calculations made in accordance with EU 1253/2014¹: > Up to 87% at nominal operation point.

Smart control of an electric heater

In a temperate climate zone, e.g., in Berlin, an air handling unit with an electric heater consumes only 15-30% of energy for ventilation, the remaining part of electricity is consumed for pre-heating of air taken from outside and heating of supplied air. Automation of AmberAir Compact air handling units controls electric heaters on the basis of temperature sensor data by using the 0-10V method, thus resulting in reduced electricity consumption up to 30%.

Smart control

Automatic control equipment is important when it comes to minimizing energy consumption. Smart SAL-DA air handling units have a number of control algorithms, which enable to reduce energy consumption up to 30%. Some of them are as follows:

Night time cooling significantly reduces costs on account of air cooling in summer. The air handling unit supplies cool summer night air based on the set algorithm and the data of temperature sensors, in this way reducing the indoor temperature on the premises.

Temperature compensation optimizes operation of the electric heater. The air handling unit adjusts fans according to the algorithm and also maintains an optimum temperature of the supplied air. Therefore, electric heater is used less, thus significantly reducing electricity consumption.

Smart anti-frost protection. Pressure relay determines freezing moment; thus, defrosting is performed at lower temperatures. AmberAir Compact air handling unit's heat exchanger is thawed by segmental by-pass damper without using pre-heater even with the temperature up to -30°C.

Calendar mode is a standard feature of SALDA air handling unit automation. Ventilation is adjusted based on time limits set in advance thus optimizing energy consumption for ventilation.

Ventilation based on air quality sensors. 2 sensors can be connected to all SALDA air handling units: presence detectors, CO2, relative humidity (RH) and the data thereof may be used as the basis for automatic adjustment of ventilation intensity. RH sensor is a standard feature of RIS/RIRS EKO 3.0 AmberAir Compact CXP air handling units.

* - Calculated at 70% of the maximum airflow at 250 Pa.

1 – Efficiency of the heat exchanger increases if lower air flows are used in comparison to the ones used in this Directive.



⇐ RIS EK0 3.0

	Ecodesign data					I	Heater, kW		Version for
Unit	Maximum air flow at 250 Pa,m³/h	Heat recovery efficiency, %	Sound power level, dBA	Dimensions (LxWxH), mm	Fan power input, W	Electric	Water	Filter class	installation outdoors
Ceiling									
RIS 1200 PE/PW EKO 3.0	1152	80.2	56	1750x1500x390	370x2	3.0/6.0/9.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
RIS 1900 PE/PW EKO 3.0	1656	80.5	59	1710x1955x399	485x2	3.0/6.0/12.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
RIS 2500 PE/PW EKO 3.0	2304	80.4	61	1850x2055x499	675x2	4.5/9.0/18.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
Vertical									
RIS 1200 VE/VW EKO 3.0	1188	83.8	60	1350x760x1326	430x2	2.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
RIS 1900 VE/VW EKO 3.0	1620	83.9	57	2000x802x1740	490x2	3.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
RIS 2200 VE/VW EKO 3.0	2052	82.8	62	2000x802x1740	715x2	3.0	3.0 Accessory installed on the duct		-
Horizontal									
RIS 1200 HE/HW EKO 3.0	1188	83.9	57	1500x760x1210	400x2	2.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIS 1900 HE/HW EKO 3.0	1512	84.3	58	1800x802x1492	480x2	3.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIS 2200 HE/HW EKO 3.0	2016	82.9	63	1800x802x1492	720x2	3.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIS 2500 HE/HW EKO 3.0	2664	79.7	62	2100x900x1643	880x2	3.6	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIS 3500 HE/HW EKO 3.0	3564	79.6	67	2756x946x1909	1160x2	6.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+

③ RIRS EKO 3.0

	Ecodesign data						Heater, kW		Version for
Unit	Maximum air flow at 250 Pa,m³/h	Heat recovery efficiency, %	Sound power level, dBA	Dimensions (LxWxH), mm	Fan power input, W	Electric	Water	Filter class	installation outdoors
Vertical									
RIRS 1200 VE/VW EKO 3.0 RHX	1296	75.3	57	1500x855x1220	408x2	4.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
RIRS 1900 VE/VW EKO 3.0 RHX	1476	73.0	58	1500x855x1220	470x2	9.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	-
RIRS 2500 VE/VW EKO 3.0 RHX	2376	74.8	60	1600x900x1410	750x2	9.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIRS 3500 VE/VW EKO 3.0 RHX	3204	73.9	67	1930x1010x1310	1330x2	12.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIRS 5500 VE/VW EKO 3.0 RHX	4788	74.2	71	2117x1541x1590	1900x2	18.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
Horizontal									
RIRS 1200 HE/HW EKO 3.0 RHX	1296	75.2	53	1350x855x1110	435x2	4.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIRS 1900 HE/HW EKO 3.0 RHX	1476	73.0	59	1350x855x1110	490x2	9.0	9.0 Accessory installed on the duct		+
RIRS 2500 HE/HW EKO 3.0 RHX	2484	84.1	59	1608x1110x1387	710x2	9.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIRS 3500 HE/HW EKO 3.0 RHX	3996	81.3	63	1901x1205x1620	1300x2	12.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+
RIRS 5500 HE/HW EKO 3.0 RHX	5616	81.7	69	1908x1404x1775	1980x2	15.0	Accessory installed on the duct	ePM1 70%/ ePM10 50%	+



S AmberAir Compact CXP/CXV/CXH

		Dimensions	Fan nower	Heater, kW			Version for			
Unit	Maximum air flow at 250 Pa, m³/h	Nominal air flow at 250 Pa, m³/h	Heat recovery efficiency, %	Sound power level, dBA	(LxWxH), mm input, W		Electric	Water	Filter class	installation outdoors
Ceiling										
1-CXP	1100	770	80.6	59	1750x1534x385	380x2	2.0/3.6	int*	ePM1 70%/ ePM10 50%	+
2-CXP	1950	1350	79.3	55	1850x1975x400	760x2	3.0/6.0	int*	ePM1 70%/ ePM10 50%	+
3-CXP	2550	1800	79.3	58	1950x2185x400	1050x2	4.5/9.0	int*	ePM1 70%/ ePM10 50%	+
4-CXP	3650	2550	79.2	65	2250x2370x500	2100x2	6.0/12.0	int*	ePM1 70%/ ePM10 50%	+
Vertical										
1-CXV F1	1200	840	86.2	61	1740x850x1478	380x2	2/3	int*	ePM1 70%/ ePM10 50%	+
1-CXV F2	1350	950	85.5	64	1740x850x1478	470x2	2/3	int*	ePM1 70%/ ePM10 50%	+
2-CXV F1	1650	1150	86.2	61	1937x855x1538	470x2	3/4	int*	ePM1 70%/ ePM10 50%	+
2-CXV F2	2100	1470	84.7	70	1937x855x1538	715x2	3/4	int*	ePM1 70%/ ePM10 50%	+
3-CXV F1	2200	1540	84.9	69	2070x895x1593	715x2	4/6	int*	ePM1 70%/ ePM10 50%	+
3-CXV F2	3350	2350	82.6	67	2070x895x1593	1280x2	4/6	int*	ePM1 70%/ ePM10 50%	+
4-CXV F1	3600	2520	83.8	66	2070x1220x1593	1280x2	6/7	int*	ePM1 70%/ ePM10 50%	+
4-CXV F2	4800	3360	82.1	70	2070x1220x1593	1900x2	6/7	int*	ePM1 70%/ ePM10 50%	+
5-CXV F1	5000	3530	82.6	71	2220x1290x1638	1900x2	7/9	int*	ePM1 70%/ ePM10 50%	+
5-CXV F2	5500	3880	82.2	67	2220x1290x1638	2275x2	7/9	int*	ePM1 70%/ ePM10 50%	+
6-CXV F1	5900	4130	83.3	67	2715x1595x1848	2275x2	9/9	int*	ePM1 70%/ ePM10 50%	+
6-CXV F2	7050	4930	82.4	66	2715x1595x1848	2840x2	9/9	int*	ePM1 70%/ ePM10 50%	+
7-CXV F1	7700	5390	83.0	66	2785x1960x1888	2840x2	12/15	int*	ePM1 70%/ ePM10 50%	+
7-CXV F2	8700	6090	82.5	66	2785x1960x1888	3405x2	12/15	int*	ePM1 70%/ ePM10 50%	+
Horizontal										
1-CXH F1	1150	805	86.5	61	1796x850x1080	380x2	2/3	int*	ePM1 70%/ ePM10 50%	+
1-CXH F2	1350	945	85.5	63	1796x850x1080	470x2	2/3	int*	ePM1 70%/ ePM10 50%	+
2-CXH F1	1750	1220	85.9	61	2195x860x1340	470x2	3/4	int*	ePM1 70%/ ePM10 50%	+
2-CXH F2	2200	1540	84.4	68	2195x860x1340	715x2	3/4	int*	ePM1 70%/ ePM10 50%	+
3-CXH F1	2300	1610	84.6	68	2350x895x1415	715x2	4/6	int*	ePM1 70%/ ePM10 50%	+
3-CXH F2	3200	2240	82.9	66	2350x895x1415	1280x2	4/6	int*	ePM1 70%/ ePM10 50%	+
4-CXH F1	3700	2590	83.7	66	2350x1220x1415	1280x2	6/7	int*	ePM1 70%/ ePM10 50%	+
4-CXH F2	4600	3220	82.3	69	2350x1220x1415	1900x2	6/7	int*	ePM1 70%/ ePM10 50%	+
5-CXH F1	5100	3570	82.6	71	2350x1290x1415	1900x2	7/9	int*	ePM1 70%/ ePM10 50%	+
5-CXH F2	5500	3880	82.2	67	2350x1290x1415	2275x2	7/9	int*	ePM1 70%/ ePM10 50%	+
6-CXH F1	6000	4200	83.2	67	3147x1596x1690	2275x2	9/9	int*	ePM1 70%/ ePM10 50%	+
6-CXH F2	7100	4970	82.3	66	3147x1596x1690	2840x2	9/9	int*	ePM1 70%/ ePM10 50%	+
7-CXH F1	8000	5600	82.9	67	3215x1961x1690	2840x2	12/15	int*	ePM1 70%/ ePM10 50%	+
7-CXH F2	8900	6230	82.3	66	3215x1961x1690	3405x2	12/15	int*	ePM1 70%/ ePM10 50%	+

AmberAir Compact CXP has 3 installation positions.



AmberAir Compact CXP

AmberAir Compact CXV

AmberAir Compact CXH

Airflow*

Airflow conforms the requirements of the Ecodesign Directive*

*The ePM1 Supply Air Filter 70% was used in the calculations, while the lower efficiency ePM10 50% and Coarse 65% filters have a larger air flow range.

AmberAir Compact 7-RH

Unit		Ecodesign	Dimensione	F	Heater, kW			Version for		
	Maximum air flow at 250 Pa, m³/h	Nominal air flow at 250Pa, m³/h	Heat recovery efficiency, %	Sound power level, dBA	(LxWxH), mm	input, W	Electric	Water	Filter class	installation outdoors
Horizontal/Vertical										
7-RH F1	6200	4340	84.2	67	2272x1905x2355	2500x2		i1 int*	Coarse 65%/ ePM10 65% / ePM1 55% / ePM1 85%	
7-RH F2	8400	5880	83.7	65	2272x1905x2355	2900x2	27/20/51			+
7-RH F3	10800	7560	82.4	62	2272x1905x2355	3400x2	- 27/30/51			
7-RH F4	13000	10080	81.9	64	2272x2105x2355	(2x2900)x2				

* - integrated, selected automatically

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*The ePM1 Supply Air Filter 70% was used in the calculations, while the lower efficiency ePM10 50% and Coarse 65% filters have a larger air flow range.

AmberAir Compact units are simulated by using VentMaster software. http://salda.lt/lt/products/category/download_page

Looking for optimal air handling unit? Take advantage of LCC calculations!

Air handling unit's selection software (VentMaster and network) has an integrated product LifeCycle Cost (LCC) calculator. You will choose the most economical solution by taking into consideration not only investment to ventilation equipment but also costs of ventilation, heating and cooling of supplied air.

Tests performed in independent laboratories

All air handling units developed by SALDA undergo a long testing process:

> In climatic chamber – efficiency and performance as well as functioning of anti-frost protection, with temperature between -350C and+400 C, RH – 90%;

> In multi-tube air flow measurement chamber - measurement of the aerodynamic properties of fans;

> In a noise chamber – measurement of sound emitted from the housing and spreading to the air ducts.

Using only reliable components and modern equipment for assembling the products enables us to guarantee an exceptional operation period thereof. All SALDA air handling units are provided with 2-year warranty.

Ragainės g. 100 Šiauliai, LT-78109, LIETUVA +370 41 540 415 office@salda.lt Distributor