Digital version

SALDA

Rotor

Counter-flow

NON-RESIDENTIAL SMART COMPACT AIR HANDLING UNITS

AmberAir Compact | RIS EKO 3.0 | RIRS EKO 3.0

RELIABLE SMART COMPACT AIR HANDLING UNITS

We have developed a wide range of compact air handling units over the 27 years in operation. You will enjoy the large number of variations, short delivery periods, user-friendly installation, maintenance, and cleaning. We offer a number of innovations each year: in 2017 we presented a new range of compact air handling units with a counter-flow heat exchanger. A rigorous quality assurance system and extensive testing enable us to offer you a reliable air handling equipment for your projects.

WHY SALDA COMPACT AIR HANDLING UNITS?

- A wide range of available options: 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 air handling units are certified by Eurovent.

A WIDE RANGE OF AVAILABLE OPTIONS

NOMINAL AIR FLOWS:

1200-9000m³/h

INSTALLATION METHOD:

vertical horizontal ceiling

HEATERS:

H_2O water electric

HEAT EXCHANGERS:

rotor counter-flow plate-type

INSTALLATION PLACE:

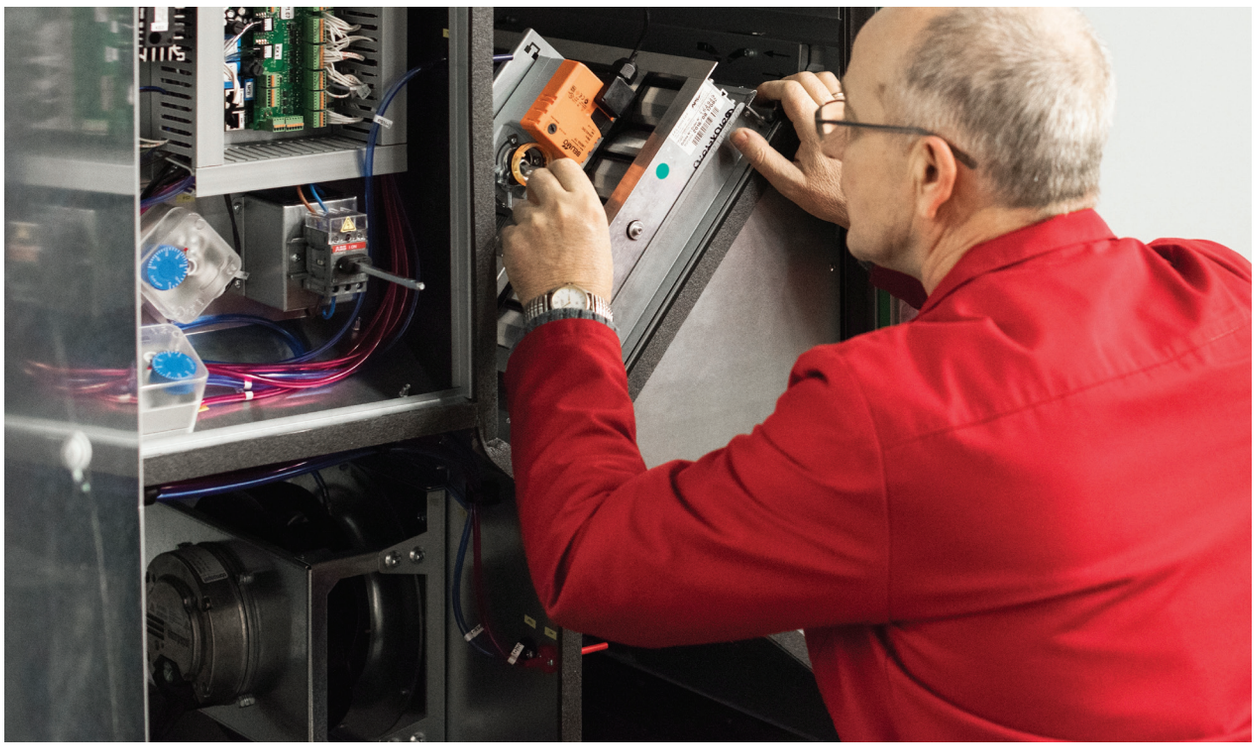
outdoors indoors

ACCESSORIES:

H_2O CO_2

pre-heaters, coolers, control equipment, sensors, dampers, actuators for dampers

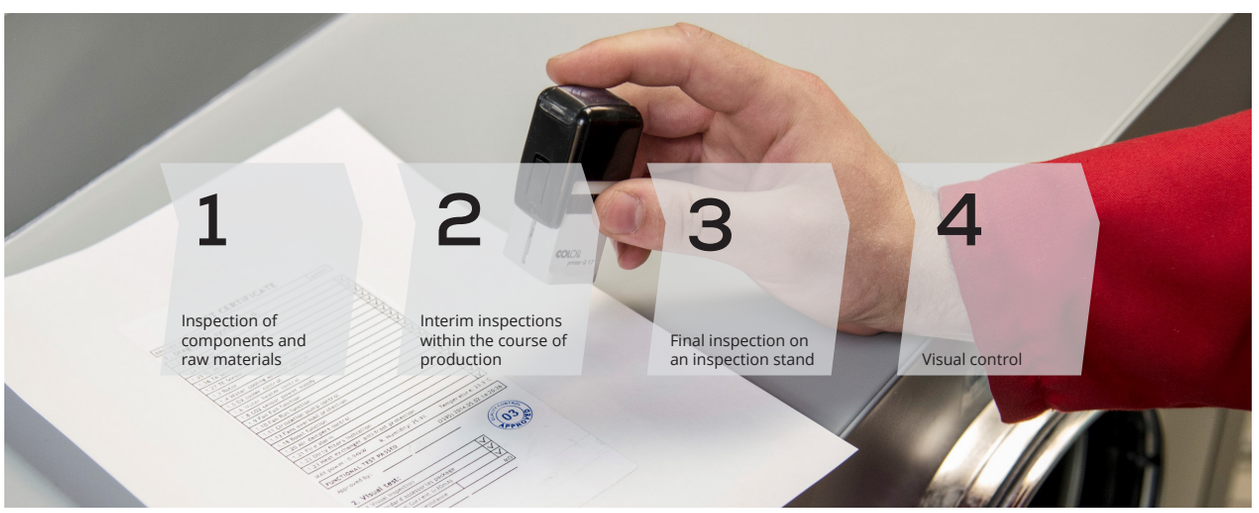
EXCEPTIONAL QUALITY



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: fans: ebm-papst, ZIEHL-ABBEG, heat exchangers: Klingenburg, Recutech, Hoval, gears: Belimo. The expected lifetime of fans exceeds 15 years!

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



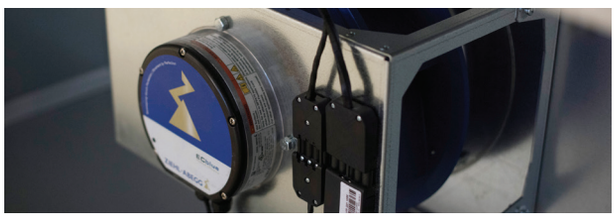
› High-quality assemblage ensures high-level tightness of the product, low heat loss, and durability. AmberAir Compact air handling unit housing SD50+ has the best characteristics on the market.

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

HIGH ENERGY EFFICIENCY RESULTS IN MINIMUM ENERGY CONSUMPTION

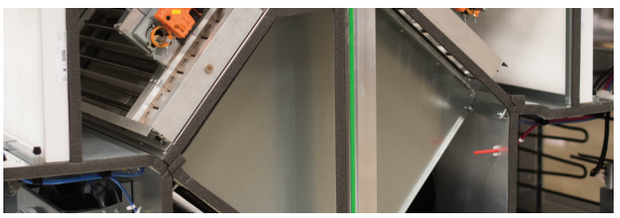
High energy efficiency of SALDA compact-class air handling units is determined by a whole range of components: cost-saving fans, efficient heat exchangers, high-level tightness, and smart control of ventilation equipment.

RELIABLE EC FANS



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

EFFICIENT HEAT-EXCHANGERS: ROTOR AND COUNTER-FLOW PLATE-TYPE



The installed rotor or counter-flow plate-type fans are certified by Eurovent Certita Certification and manufactured by leading European manufacturers. High heat recovery level based on calculations made in accordance with EU 1253/2014[1]:

› **Up to 85% with a counter-flow heat exchanger;**
› **Up to 84% with a rotor heat exchanger.**

HIGH-LEVEL EXTERNAL TIGHTNESS

High-quality assemblage of a AHU results in characteristic high-level external tightness. External tightness of air handling units within series AmberAir Compact CXV/H is 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.

SMART CONTROL OF AN ELECTRIC HEATER

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

SMART CONTROL

Automatic control equipment of the unit is an equally important element when it comes to minimizing energy consumption. Smart SALDA AHU 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 AHU regulates fans based on the algorithm simultaneously maintaining an optimum temperature of the supplied air. In addition to this, the electric heater is used less, thus significantly reducing electricity consumption.

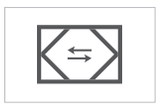
› **Smart anti-frost protection.** Automation controls air flows based on the data of temperature sensors, thus, for instance, AmberAir Compact air handling units with segmental by-pass damper may not use a pre-heater for air taken from the outside with temperature ranging even up to -30^{0}C.

› **Calendar mode** is a standard feature of SALDA AHU automation. Ventilation is adjusted based on time limits set in advance, thus optimizing energy consumption for ventilation.

› **Ventilation based on sensors.** 1 or 2 demand sensors may be connected to all SALDA air handling units: presence detectors, CO_2, 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 and AmberAir Compact CXP air handling units.

[1] - Efficiency of the heat exchanger increases, if lower air flows are used in comparison to the ones used in this Directive

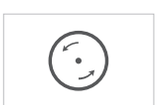
SERIES RIS EKO 3.0



More details are available online

Unit	Ecodesign data			Dimensions (LxWxH), mm	Fan power input, W	Heater, kW		Filter class	Version for installation outdoors
	Nominal air flow at 250Pa, m³/h	Heat recovery efficiency, %	Sound power level, dBA			Electric	Water		
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	F7/M5	-
RIS 1900 PE/PW EKO 3.0	1656	80.5	59	1710x1955x399	485x2	3.0/6.0/12.0	Accessory installed on the duct	F7/M5	-
RIS 2500 PE/PW EKO 3.0	2304	80.4	61	1850x2055x499	675x2	4.5/9.0/18.0	Accessory installed on the duct	F7/M5	-
VERTICAL									
RIS 1200 VE/VW EKO 3.0	1188	83.8	60	1350x760x1326	430x2	2.0	Accessory installed on the duct	F7/M5	-
RIS 1900 VE/VW EKO 3.0	1620	83.9	57	2000x802x1740	490x2	3.0	Accessory installed on the duct	F7/M5	-
RIS 2200 VE/VW EKO 3.0	2052	82.8	62	2000x802x1740	715x2	3.0	Accessory installed on the duct	F7/M5	-
HORIZONTAL									
RIS 1200 HE/HW EKO 3.0	1188	83.9	57	1500x760x1210	400x2	2.0	Accessory installed on the duct	F7/M5	+
RIS 1900 HE/HW EKO 3.0	1512	84.3	58	1800x802x1492	480x2	3.0	Accessory installed on the duct	F7/M5	+
RIS 2200 HE/HW EKO 3.0	2016	82.9	63	1800x802x1492	720x2	3.0	Accessory installed on the duct	F7/M5	+
RIS 2500 HE/HW EKO 3.0	2664	79.7	62	2100x900x1643	880x2	3.6	Accessory installed on the duct	F7/M5	+
RIS 3500 HE/HW EKO 3.0	3564	79.6	67	2756x946x1909	1160x2	6.0	Accessory installed on the duct	F7/M5	+
RIS 5500 HE/HW EKO 3.0	4896	83.4	73	2644x1670x1780	1840x2	12.0	Accessory installed on the duct	F7/M5	+

SERIES RIRS EKO 3.0



More details are available online

Unit	Ecodesign data			Dimensions (LxWxH), mm	Fan power input, W	Heater, kW		Filter class	Version for installation outdoors
	Nominal air flow at 250Pa, m³/h	Heat recovery efficiency, %	Sound power level, dBA			Electric	Water		
VERTICAL									
RIRS 1200 VE/VW EKO 3.0	1296	75.3	57	1500x855x1220	408x2	4.0	Accessory installed on the duct	F7/M5	-
RIRS 1900 VE/VW EKO 3.0	1476	73.0	58	1500x855x1220	470x2	9.0	Accessory installed on the duct	F7/M5	-
RIRS 2500 VE/VW EKO 3.0	2376	74.8	60	1600x900x1410	750x2	9.0	Accessory installed on the duct	F7/M5	+
RIRS 3500 VE/VW EKO 3.0	3204	73.9	67	1930x1010x1310	1330x2	12.0	Accessory installed on the duct	F7/M5	+
RIRS 5500 VE/VW EKO 3.0	4788	74.2	71	2117x1541x1590	1900x2	18.0	Accessory installed on the duct	F7/M5	+
HORIZONTAL									
RIRS 1200 HE/HW EKO 3.0	1296	75.2	53	1350x855x1110	435x2	4.0	Accessory installed on the duct	F7/M5	+
RIRS 1900 HE/HW EKO 3.0	1476	73.0	59	1350x855x1110	490x2	9.0	Accessory installed on the duct	F7/M5	+
RIRS 2500 HE/HW EKO 3.0	2484	84.1	59	1608x1110x1387	710x2	9.0	Accessory installed on the duct	F7/M5	+
RIRS 3500 HE/HW EKO 3.0	3996	81.3	63	1901x1205x1620	1300x2	12.0	Accessory installed on the duct	F7/M5	+
RIRS 5500 HE/HW EKO 3.0	5616	81.7	69	1908x1404x1775	1980x2	15.0	Accessory installed on the duct	F7/M5	+

RIS/RIRS units are selected on a network program. Select an optimum solution!
http://salda.lt/en/selection/index/showahu/

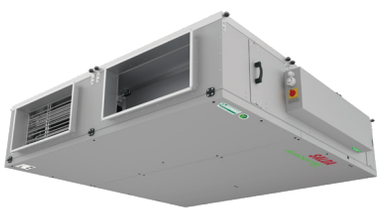
AmberAir COMPACT CXP

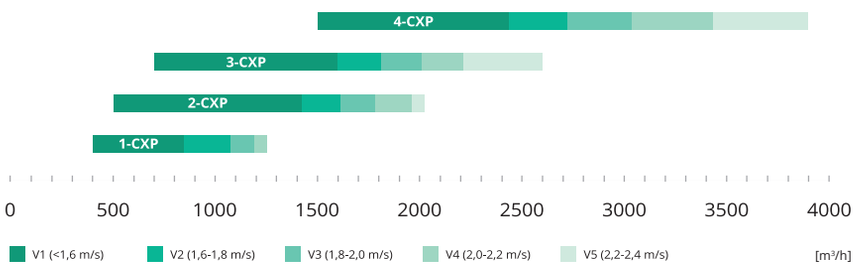
Tested -35°C - +40°C

More details are available online

Unit	Ecodesign data			Dimensions (LxWxH), mm	Fan power input, W	Heater, kW		Filter class (panel integrated/ pocket on the duct)	Version for installation outdoors
	Nominal air flow at 250Pa, m³/h	Heat recovery efficiency, %	Sound power level, dBA			Electric	Water		
1-CXP F1	1152	80.2	50	1750x1534x385	380x2	2.0/3.6	int*	F7/M5/G4	+
2-CXP F1	1908	79.2	51	1850x1975x400	760x2	3.0/6.0	int*	F7/M5/G4	+
3-CXP F1	2350	79.5	53	1950x2185x400	1050x2	4.5/9.0	int*	F7/M5/G4	+
4-CXP F1	3025	79.9	59	2250x2370x500	2100x2	6.0/12.0	int*	F7/M5/G4	+

* - Integrated, selected automatically.





AmberAir Compact CXP has 3 installation positions.

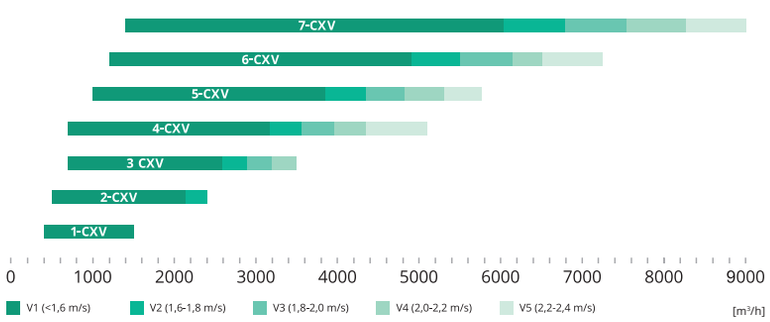
AmberAir COMPACT CXV/CXH

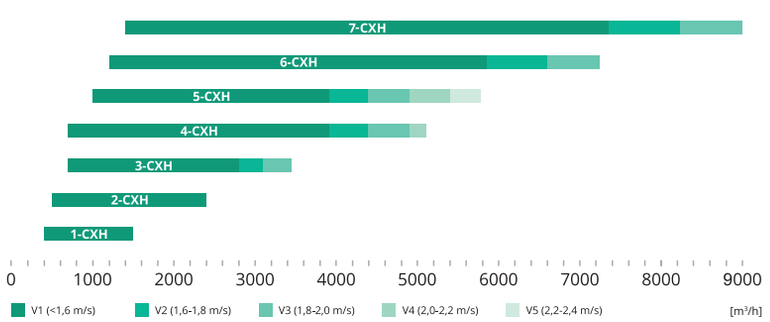
D1>L1>F9>T2>TB1 | Tested -35°C - +40°C | >4000 over 4000+ combinations | ErP READY | EUROVENT CERTIFIED PERFORMANCE

More details are available online

Unit	Ecodesign data			Dimensions (LxWxH), mm	Fan power input, W	Heater, kW		Filter class (panel integrated/ pocket on the duct)	Version for installation outdoors
	Nominal air flow at 250Pa, m³/h	Heat recovery efficiency, %	Sound power level, dBA			Electric	Water		
VERTICAL									
1-CXV F1	1224	84.3	60	1740x850x1478	380x2	2/3	int*	F7/M5/G4	+
1-CXV F2	1350	83.8	61	1740x850x1478	470x2	2/3	int*	F7/M5/G4	+
2-CXV F1	1728	83.6	59	1937x855x1538	470x2	3/4	int*	F7/M5/G4	+
2-CXV F2	2232	82.2	65	1937x855x1538	715x2	3/4	int*	F7/M5/G4	+
3-CXV F1	2232	84.8	64	2070x895x1593	715x2	4/6	int*	F7/M5/G4	+
3-CXV F2	2988	83.6	63	2070x895x1593	1280x2	4/6	int*	F7/M5/G4	+
4-CXV F1	3600	82.3	65	2070x1220x1593	1280x2	6/7	int*	F7/M5/G4	+
4-CXV F2	3650	82.2	65	2070x1220x1593	1900x2	6/7	int*	F7/M5/G4	+
5-CXV F1	4284	84.2	68	2220x1290x1638	1900x2	7/9	int*	F7/M5/G4	+
5-CXV F2	4650	83.9	64	2220x1290x1638	2275x2	7/9	int*	F7/M5/G4	+
6-CXV F1	5616	84.6	68	2715x1595x1848	2275x2	9/9	int*	F7/M5/G4	+
6-CXV F2	6100	84.3	65	2715x1595x1848	2840x2	9/9	int*	F7/M5/G4	+
7-CXV F1	7236	84.9	68	2785x1960x1888	2840x2	12/15	int*	F7/M5/G4	+
7-CXV F2	7700	84.7	65	2785x1960x1888	3405x2	12/15	int*	F7/M5/G4	+
HORIZONTAL									
1-CXH F1	1224	84.3	60	1796x850x1080	380x2	2/3	int*	F7/M5/G4	+
1-CXH F2	1404	83.7	60	1796x850x1080	470x2	2/3	int*	F7/M5/G4	+
2-CXH F1	1728	83.6	59	2195x860x1340	470x2	3/4	int*	F7/M5/G4	+
2-CXH F2	2232	82.2	64	2195x860x1340	715x2	3/4	int*	F7/M5/G4	+
3-CXH F1	2232	84.8	64	2350x895x1415	715x2	4/6	int*	F7/M5/G4	+
3-CXH F2	2988	83.6	63	2350x895x1415	1280x2	4/6	int*	F7/M5/G4	+
4-CXH F1	3600	82.3	65	2350x1220x1415	1280x2	6/7	int*	F7/M5/G4	+
4-CXH F2	3708	82.1	65	2350x1220x1415	1900x2	6/7	int*	F7/M5/G4	+
5-CXH F1	4284	84.2	68	2350x1290x1415	1900x2	7/9	int*	F7/M5/G4	+
5-CXH F2	4450	84.0	63	2350x1290x1415	2275x2	7/9	int*	F7/M5/G4	+
6-CXH F1	5616	84.6	68	3147x1596x1690	2275x2	9/9	int*	F7/M5/G4	+
6-CXH F2	6050	84.4	65	3147x1596x1690	2840x2	9/9	int*	F7/M5/G4	+
7-CXH F1	7236	84.9	68	3215x1961x1690	2840x2	12/15	int*	F7/M5/G4	+
7-CXH F2	7800	84.6	65	3215x1961x1690	3405x2	12/15	int*	F7/M5/G4	+

* - Integrated, selected automatically.





AmberAir Compact units are simulated by using program VentMaster.
Download your copy: http://salda.lt/en/products/category/download_page/

ARE YOU LOOKING FOR AN OPTIMUM AIR HANDLING UNIT? YOU ARE WELCOME TO USE LCC CALCULATIONS!

AHU selection programs (VentMaster and network) have an integrated product Life Cycle Cost (LCC) calculator. You would choose the most economic solution by taking into consideration not only investment to ventilation equipment but also heating and cooling costs on account of supplied air.

TESTS PERFORMED AT EXTERNAL LABORATORIES

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

› In a climatic chamber – efficiency and performance as well as functioning of anti-frost protection, when the temperature is -35^{0}C – +40^{0}C, RH – 90%;
› In a 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.

2-YEAR WARRANTY

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 a 2-year warranty.

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