

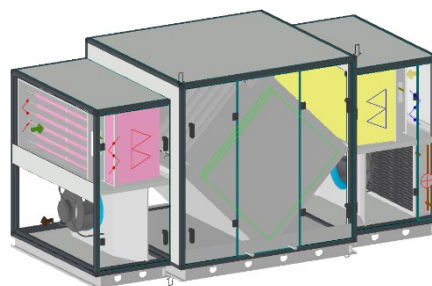
Release Notes. C2023-03.24.H7

Updated in the latest SystemairCAD includes:

- In Geniox-1 the Eco counterflow heat exchanger can now be selected. It will change the Counterflow heat exchanger to one unit size bigger.
- A new combined filter function is added, so a panel filter can now be selected in the bag filter function. This will make the combined bag and panel filter 100 mm shorter than if it is added as 2 separate functions.
- Duct Dampers available in Geniox-1 also for Size 22 to 31
- DX changeover coils is added.
- New louvers that is clicked on to the duct connections are added for all Geniox types in size 10 to 20. (It was already in Geniox Core from last release)
- Updated table layout in the short technical description.
- Internal cooling coils in Geniox Core outdoor models will no longer select the 300 mm inspection before if there is no internal heating coil.
- SFP values for each fan on the result page
- Damper pressure drop corrected for mixing dampers.
- The drain pipe is shown on drawings for coils with drip tray
- Requested torque and number of shafts is added for dampers in printout.
- A new filter wall is added so the door handles can be in the front of the filter wall. That will for many units turn the door around.
- Printout for the new "Access control system 2.0" is rearranged so there is a better flow in the printout.
- Max coils are removed in Geniox-1
- Coil face velocity is corrected. Heating and cooling coils with same face area will now give same face velocity.
- EU Declaration of conformity and new UKCA declaration is update to new Systemair layout.
- The DBM coil DLL is updated.
- Hoval DLL for some of the rotary heat exchangers is updated.
- Recuperator DLL for cross flow heat exchangers is updated.

ECO counterflow heat exchangers

The Eco counterflow option provide an option to enhance the performance of the heat exchanger section. The pressure drop and efficiency of the heat exchanger section are improved, by inserting the heat exchanger section from the unit size above.

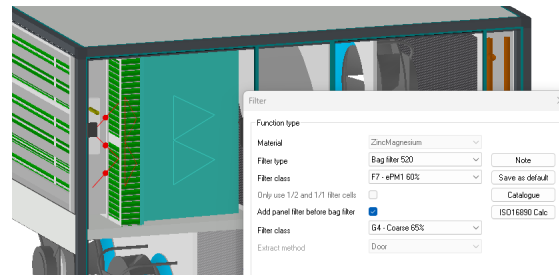


Geniox 16 - ECO version.

The new ECO option can provide an efficiency increase between 0,8 – 1,5 % and reduce the pressure drop up to 100 Pa, depending on the air flow.

Combined filter

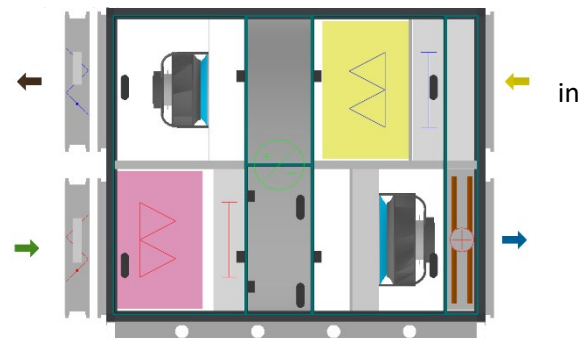
By combining the panel pre-filter and the main bag filter in one and the same function, you can reduce the length of the unit by 100 mm. The panel pre-filter is selected in the bag filter dialog in SystemairCAD.



Duct dampers Geniox 10 to Geniox 31

SystemairCAD now offers the option to insert damper the duct for Geniox-1 and Geniox-2.

It is also possible to find the minimum required damper motor torque in the technical specification



Duct dampers.

DX change over coil calculation.

It is now possible to calculate DX change over coils in SystemairCAD.

Select a combination with a changeover coil and change the Coil type to “DX changeover coil” in the coil dialog.

The changeover coils are dimensioned in cooling mode. The required condensation temperature in heating mode, is calculated from the coil defined by the cooling mode.

The internal volume pr external coil circuit is calculated, to validate the calculated changeover coil against specified requirements. It is possible to selected up to 4 external circuits to adjust the internal coil volume pr external circuit, to meet any requirement.

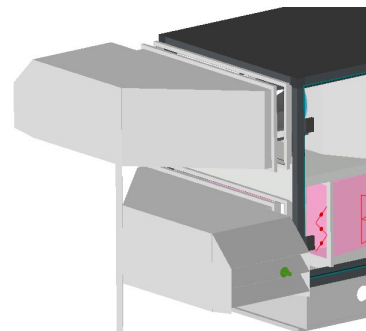
	Amount	Description
1	1	Water trap
2	1	Tap for frost guard
3	1	Frost protection, water sensor

Duct sound attenuators for all unit sizes

The range of duct sound attenuators is extended, to cover units sizes from Geniox 10 to Geniox 31.

New louvre for Geniox-1 and Geniox-2

The new louvre we introduced in December 2022 for Geniox Core, is now available in Geniox-1 and Geniox-2. The louvre angles the air stream 90 degrees towards front and back of the unit to avoid contamination of the outdoor air inlet. The louvre is designed to have a minimum distance from outdoor air inlet to Exhaust air of 1500 mm's. The louvre is only available for units sizes Geniox 10 to Geniox 20.



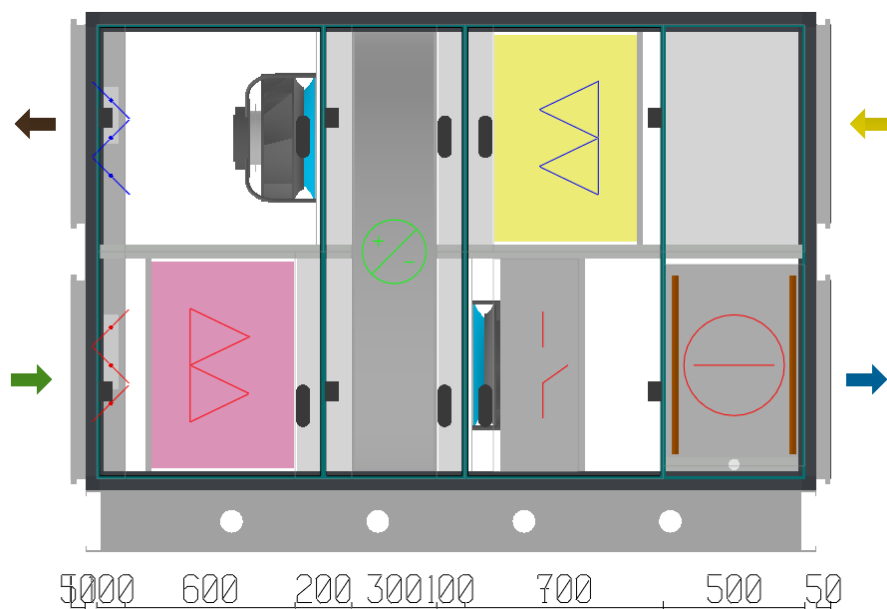
Updated table layout in the short technical description.

The short technical descript is updated with more information about casing configuration, control system and power supply. We rearranged the technical data in 4 groups to make it more easy on the eye as well. In the top of table we have general unit information, followed by supply air, extract air and Energy data. We implemented a “|” as separator in the table to increase the readability of the table.

Unit			
Unit color Insulation Hygienic		ZincMagnesium 60 mm mineral wool / Density 60 kg/m ³ Standard	
Control system		Without control system	
Power supply Unit		L1 + L2 + L3 + N + PE (3x400V) 50 Hz / 5.9 A	
Sound break out Supply air		54 dB(A) 72 dB(A)	
Supply Air/fan data		Air density 1.205 kg/m ³	
Airflow Face velocity Ext. Δp		3600 m ³ /h 1.14 m/s 400 Pa	
Supply air, Winter Summer		22.0°C / RH 35% 27.5°C / RH 58%	
Filter ISO 16890 Stages		ePM1 95.06 F7 - ePM1 60% + F9 - ePM1 85%	
Fan Voltage Rated current RPM		1.35 kW 1x230 V 5.87 A 2271 RPM	
Heating, water Fluid		7.7 kW ; 15.6/22.0°C Fluid 70/50°C ; 4.2 kPa ; 0.10 l/s ; Ø 3/4" / 3/4"	
Extract Air/fan data		Air density 1.205 kg/m ³	
Airflow Face velocity Ext. Δp		3600 m ³ /h 1.14 m/s 400 Pa	
Filter Stages		M5 - ePM10 60% + M5 - ePM10 60%	
Fan Voltage Rated current RPM		1.35 kW 1x230 V 5.87 A 2172 RPM	
Energy	Dimensioning	Average	Fans [8760 hours]
Heat Recovery EN308 (Dry)	83.7 % 83.7 %	83.7 % 83.7 %	
SFPv *)	1.80 kW/(m ³ /s)	1.80 kW/(m ³ /s)	15751 kWh
SFPe *)	1.99 kW/(m ³ /s)	1.99 kW/(m ³ /s)	17432 kWh
Ecodesign approved (2018)	Yes		
Air handling unit location		Koebenhavns Kastrup, Denmark	
		(t _{dry} - bulb 26.2 °C, t _{dew} - point 14.1 °C, t _{dry} - bulbW -5.2 °C)	
*) Values include speed control; SFPv = clean - and SFPe = dimensional-filter pressure drop			

Section length of internal cooling coils in Geniox Core outdoor

In Geniox Core outdoor models without internal heating coils, the cooling coil will no longer be added a 300 mm inspection before it, as inspection can be done from the fan section.



SFP values for each fan on the result page

On the result page the SFP values for each fan can now be seen

	Supply	Extract			Supply	Extract	
Air flow	2.00	2.00	m³/s	Sound power level	76	65	dB(A)
Unit size	16	16		Fan efficiency	71.9	71.7	%
Face velocity (unit)	1.72	1.72	m/s	Fan speed	1472	1438	RPM
Temperature efficiency of the heat recovery	80.9	%		Operation frequency	-	-	Hz
				Motor power	3.50	3.50	kW
Supply air temperature	Winter	Summer		SFPv, clean filters *)	0.70	0.66	kW/(m³/s)
	22.0	27.3	°C				
Humidity supply air	30.5	58.8	%	Unit			
		Dimensions		SFPv, clean filters *)		1.36	kW/(m³/s)
Length	2282	0	mm	Energy class Winter / Summer		A+ / A+	
Width	1682	0	mm	fs - Pref		0.76 / 0.76	
Height	1800	0	mm				
Weight	784	0	kg				
							*) Values include speed control