CIVIC EC DB V.2

Single-room air handling units

Features

- The **CIVIC EC DB V.2** units for singleroom ventilation of schools, offices, public and commercial premises. Simple and efficient ventilation solution for renovated buildings, with no ductwork required.
- Low-noise operation.
- Easy mounting.

Air flow:
up to 1000 m³/h
278 l/s

Heat recovery efficiency:
up to 96 %



Design

- Made of polymer coated steel, internally lined with heat- and sound insulation.
- Available modifications with an integrated preheater and reheater for cold climate applications.

Motors

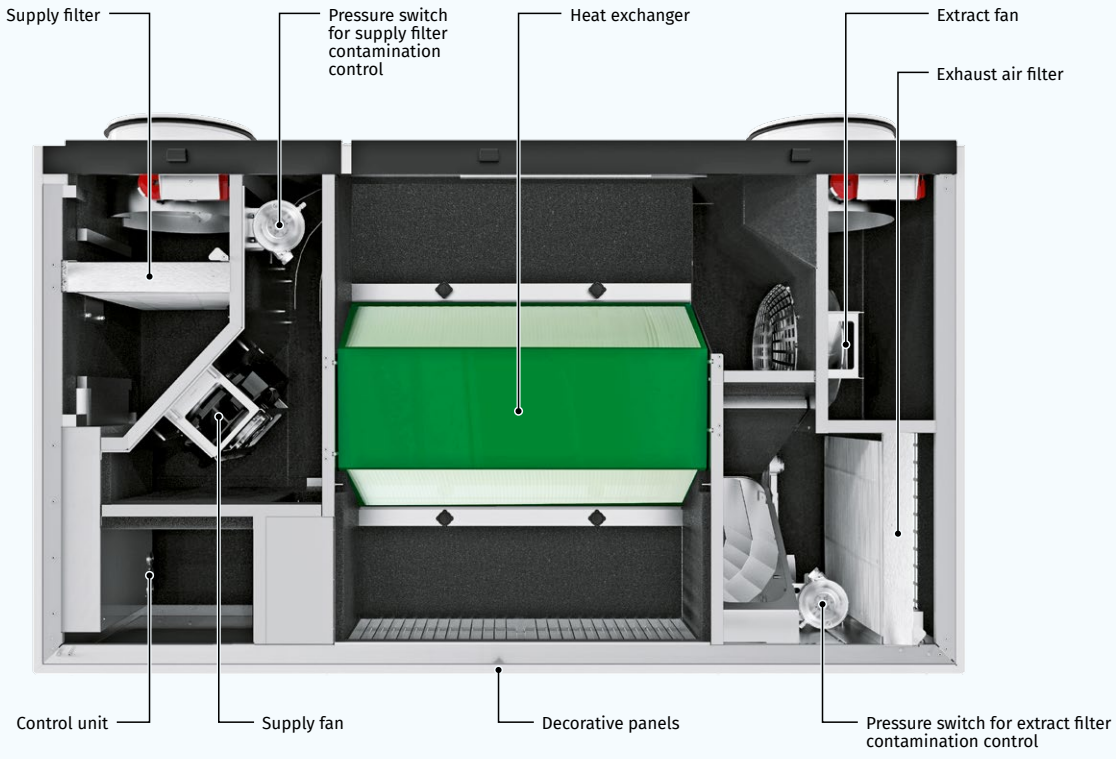
- The units are equipped with high-efficiency EC motors.
- EC motors provide an energy-efficient solution with high performance and full speed control.

Air filtration

- Exhaust cassette filter: **ISO Coarse >60 % (G4)**.
- Supply cassette filter: **ISO ePM1 60 % (F7)**.

Bypass

- The units are equipped with a bypass. The bypass damper opens for free cooling ventilation mode in summer.



Air dampers

- The automatic supply and extract air dampers are used to prevent uncontrollable air draughts during the unit standstill.

Heaters

- **CIVIC EC DBE V.2** and **CIVIC EC DBE2 V.2** units are equipped with an electric preheater.
- **CIVIC EC DBE2 V.2** units feature an electric reheater.

Heat exchanger

- The **CIVIC EC DB V.2** unit has a counter-flow heat exchanger made of polystyrene.



- The **CIVIC EC DB... -E V.2** unit is equipped with a counter-flow heat exchanger made of enthalpy membrane.



Control and automation

- The S21 controller allows integrating the unit into the **BMS (Building Management System)**.
- The unit can be controlled by the **Blauberg Home** mobile application via Wi-Fi.

Download the **Blauberg Home** app for Android

Download the **Blauberg Home** app for iOS

Modbus

Hey Google

Automation functions

Functions	Description
Unit control via Wi-Fi using the mobile application	+
Unit control via remote control panel	S22 control panel (option) 
Unit control via remote wireless control panel	S22 Wi-Fi control panel (option) 
Unit control via a wired remote LCD control panel	S25 control panel (option) 
BMS (Building Management System)	RS-485
	Wi-Fi
	Ethernet
	MODBUS (RTU, TCP)
Speed switch	+
Filter replacement indication	by filter timer
Alarm indication	full alarm description in the mobile application
Week scheduled operation	+
Bypass	automatic
	manual
Timer	+
Boost mode	+
Fireplace mode	+
Freeze protection	using cyclical stops of the supply fan
	using preheating (option)
Reheater connection	option
Cooler connection	option
Minimum supply air temperature control	+
Humidity control	option
CO_2 control	option
VOC control	option
PM2.5 control	option
Fire alarm sensor connection	option

Option: the functionality is available when purchasing the appropriate accessory (see the "Accessories" section)

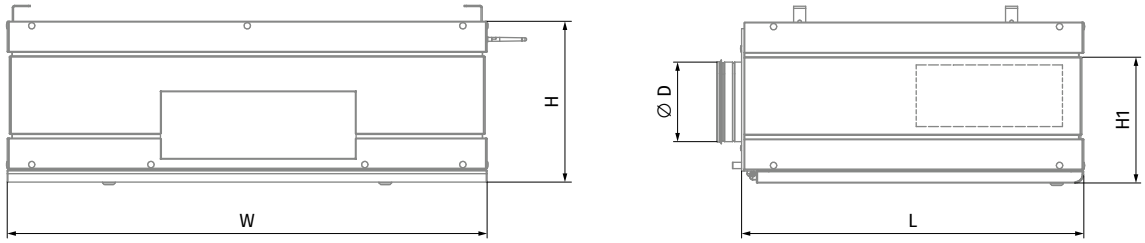
Designation key

Model	Motor type	Mounting	Bypass	Heater	Drain pump*	Rated air flow [m³/h]	Control	Modernization
CIVIC	**EC:** synchronous electronically commutated motor	**D:** Suspended mounting, horizontally oriented spigots; **D1:** Suspended mounting, vertically oriented spigots	**B:** with bypass	**_:** without heater **E:** preheating **E2:** preheating + reheating	**_:** without drain pump **CP:** with drain pump	**300; 500; 800; 1000**	**S21**	**V.2:** second modernized generation

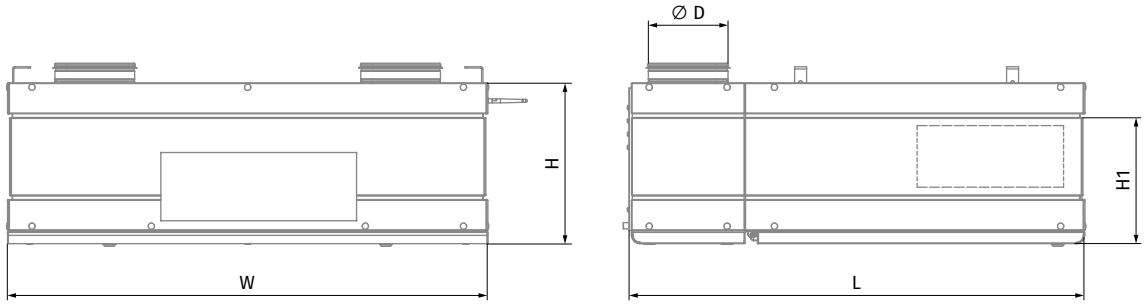
* The CIVIC EC DB... 1000 S21 V.2 units are equipped with a drain pump by default.

Dimensions [mm]

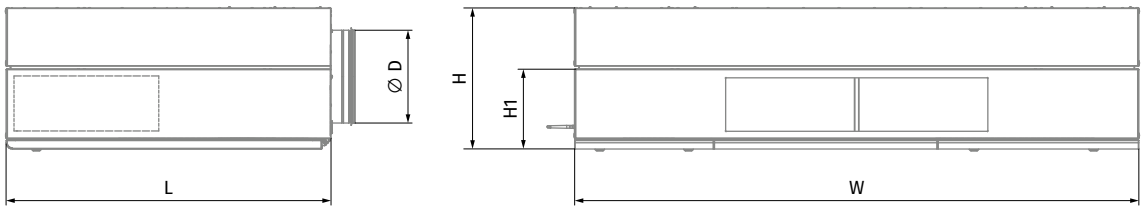
Model	∅ D	H	H1	L	W
CIVIC EC DB 300 V.2	200	402	315	850	1200
CIVIC EC DB 500 V.2	250	458	371	850	1500



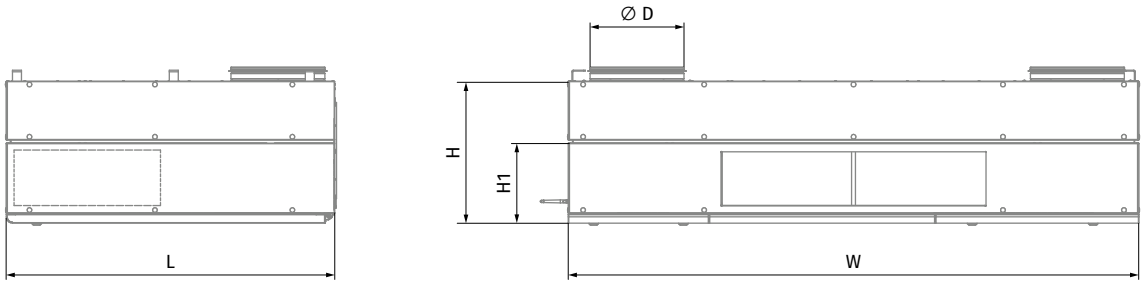
Model	∅ D	H	H1	L	W
CIVIC EC D1B 300 V.2	200	402	315	1139	1200
CIVIC EC D1B 500 V.2	250	458	371	1186	1500



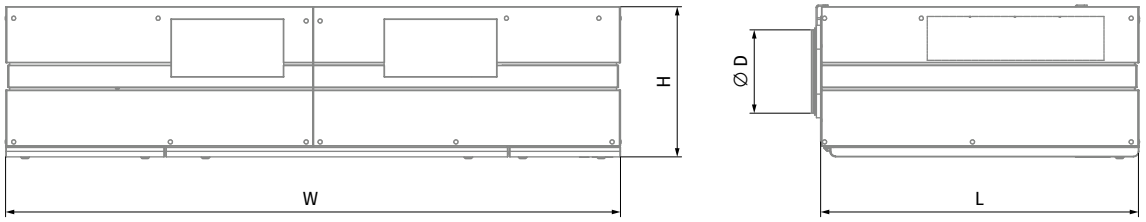
Model	∅ D	H	H1	L	W
CIVIC EC DB 800 V.2	315	475	270	1100	1910



Model	∅ D	H	H1	L	W
CIVIC EC D1B 800 V.2	315	475	270	1100	1910



Model	∅ D	H	L	W
CIVIC EC DB 1000 V.2	315	569	1205	2327



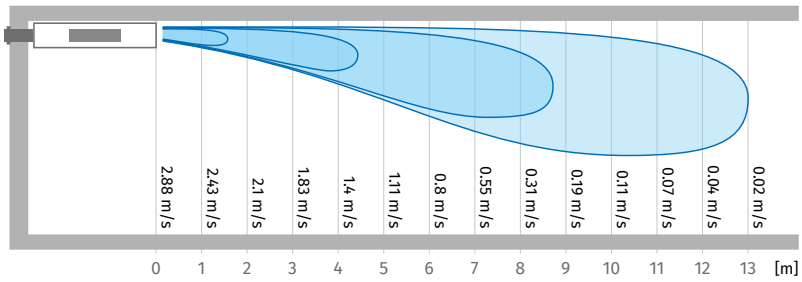
Technical data

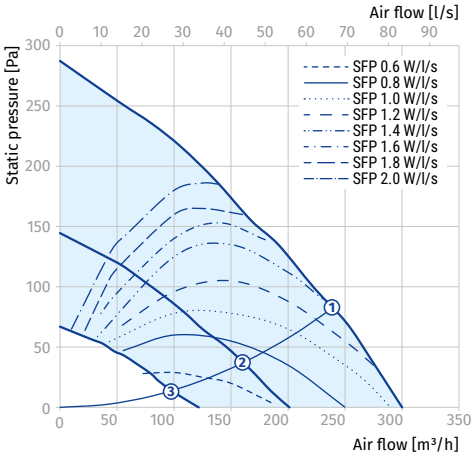
Parameters	CIVIC EC D(1)B 300 V.2	CIVIC EC D(1)BE 300 V.2	CIVIC EC D(1)BE2 300 V.2
Voltage [V / 50-60 Hz]	1~230	1~230	1~230
Max. unit power without electric heater [W]	204	204	204
Integrated electric preheater power [W]	–	1050	1050
Integrated electric reheater power [W]	–	–	700
Max. unit power [W]	204	1254	1954
Max. unit current [A]	1.5	7.7	11.7
Air flow [m³/h]	300	300	300
Transported air temperature [°C]	–25...+40	–25...+40	–25...+40
Casing material	polymer coated steel	polymer coated steel	polymer coated steel
Insulation, mm	25 mm, EPDM	25 mm, EPDM	25 mm, EPDM
Extract filter	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)
Supply filters	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)
Connected air duct diameter [mm]	200	200	200
Weight [kg]	78	79	80
Heat recovery efficiency [%]	92%	92%	92%
Heat exchanger type	counter–flow	counter–flow	counter–flow
Heat exchanger material	polystyrene	polystyrene	polystyrene
SEC class	A+	A+	A+

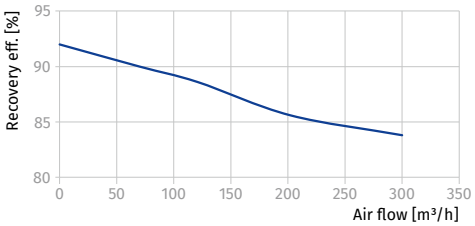
*Heat recovery efficiency is specified in compliance with EN 13141-8.

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L_{WA} to environment, point 1 [dBA]	**55**	40	48	47	46	40	42	27	25	**34**	**44**
L_{WA} to environment, point 2 [dBA]	**48**	28	36	35	34	31	31	20	23	**27**	**37**
L_{WA} to environment, point 3 [dBA]	**37**	23	31	30	27	23	20	18	23	**16**	**26**

FRESH AIR FLOW DISTANCE





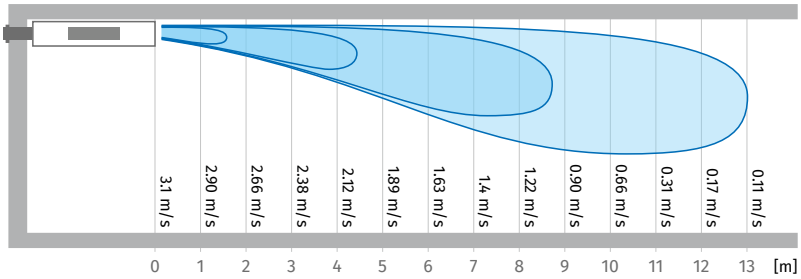


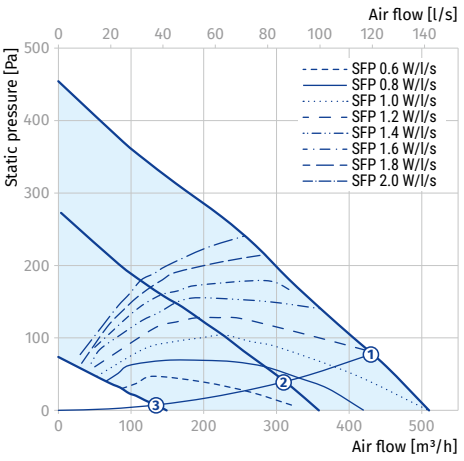
Parameters	CIVIC EC D(1)B 500 V.2	CIVIC EC D(1)BE 500 V.2	CIVIC EC D(1)BE2 500 V.2
Voltage [V / 50-60 Hz]	1~230	1~230	1~230
Max. unit power without electric heater [W]	238	238	238
Integrated electric preheater power [W]	–	1050	1050
Integrated electric reheater power [W]	–	–	700
Max. unit power [W]	238	1288	1988
Max. unit current without electric heater [A]	1.7	1.7	1.7
Max. unit current [A]	1.7	9.3	12.6
Air flow [m³/h]	510	510	510
Max. operating temperature [°C]	–25...+40	–25...+40	–25...+40
Case material	polymer coated steel	polymer coated steel	polymer coated steel
Insulation	25 mm, EPDM	25 mm, EPDM	25 mm, EPDM
Extract filter	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)
Supply filter	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)
Connected air duct diameter [mm]	250	250	250
Weight [kg]	94	95	96
Heat recovery efficiency [%]	94%	94%	94%
Heat exchanger type	counter–flow	counter–flow	counter–flow
Heat exchanger material	polystyrene	polystyrene	polystyrene
SEC class	A+	A+	A+

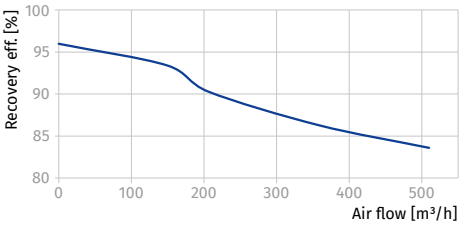
*Heat recovery efficiency is specified in compliance with EN 13141-8.

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L_{WA} to environment, point 1 [dBA]	**54**	42	50	49	41	40	40	28	26	**34**	**44**
L_{WA} to environment, point 2 [dBA]	**48**	31	39	38	33	33	31	21	23	**27**	**37**
L_{WA} to environment, point 3 [dBA]	**33**	15	23	22	18	17	17	18	23	**13**	**22**

FRESH AIR FLOW DISTANCE





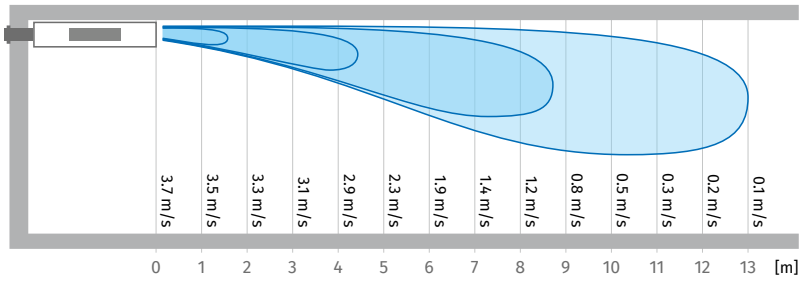


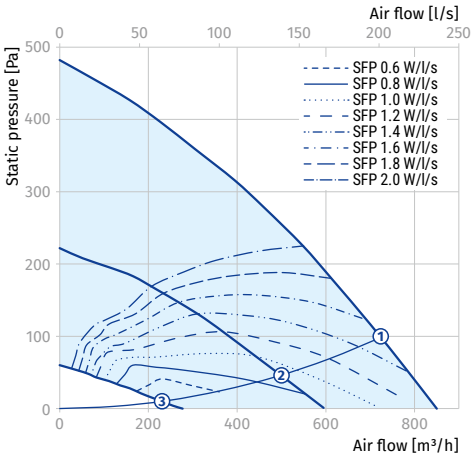
Parameters	Civic EC D(1)B 800 V.2	Civic EC D(1)BE 800 V.2	Civic EC D(1)BE2 800 V.2	Civic EC D(1)B 800-E V.2	Civic EC D(1)BE 800-E V.2	Civic EC D(1)BE2 800-E V.2
Voltage [V / 50-60 Hz]	1~230	1~230	1~230	1~230	1~230	1~230
Max. unit power without electric heater [W]	314	314	314	314	314	314
Integrated electric preheater power [W]	–	1600	1600	–	1600	1600
Integrated electric reheater power [W]	–	–	1050	–	–	1050
Max. unit power [W]	314	1914	2964	314	1914	2964
Max. unit current [A]	2.2	9.3	14	2.2	9.3	14
Air flow [m³/h]	850	850	850	850	850	850
Transported air temperature [°C]	−25...+40	−25...+40	−25...+40	−25...+40	−25...+40	−25...+40
Case material	polymer coated steel	polymer coated steel	polymer coated steel	polymer coated steel	polymer coated steel	polymer coated steel
Insulation	40 mm, EPDM	40 mm, EPDM	40 mm, EPDM	40 mm, EPDM	40 mm, EPDM	40 mm, EPDM
Extract filter	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)
Supply filter	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)
Connected air duct diameter [mm]	315	315	315	315	315	315
Weight [kg]	195	196	197	197	198	199
Heat recovery efficiency [%]	88	88	88	81	81	81
Heat exchanger type	counter–flow	counter–flow	counter–flow	counter–flow	counter–flow	counter–flow
Heat exchanger material	polystyrene	polystyrene	polystyrene	enthalpy membrane	enthalpy membrane	enthalpy membrane
SEC class	A	A	A	A	A	A

*Heat recovery efficiency is specified in compliance with EN 13141-8.

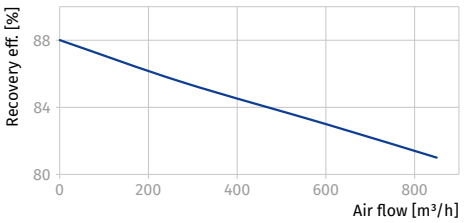
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L_{WA} to environment, point 1 [dBA]	**55**	37	45	44	45	43	38	33	31	**34**	**44**
L_{WA} to environment, point 2 [dBA]	**47**	32	40	39	35	34	28	24	24	**27**	**35**
L_{WA} to environment, point 3 [dBA]	**33**	16	24	23	21	17	17	18	23	**13**	**22**

FRESH AIR FLOW DISTANCE

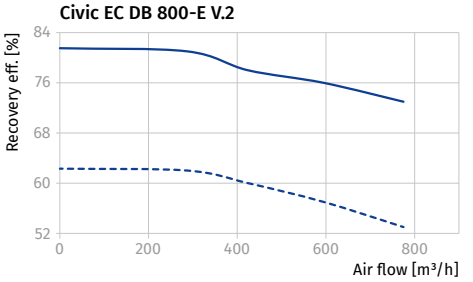




Civic EC DB 800 V.2



Civic EC DB 800-E V.2

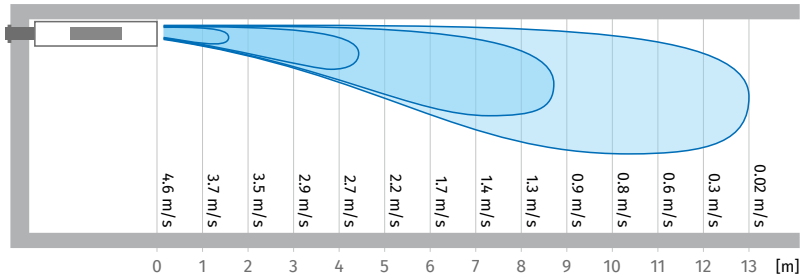


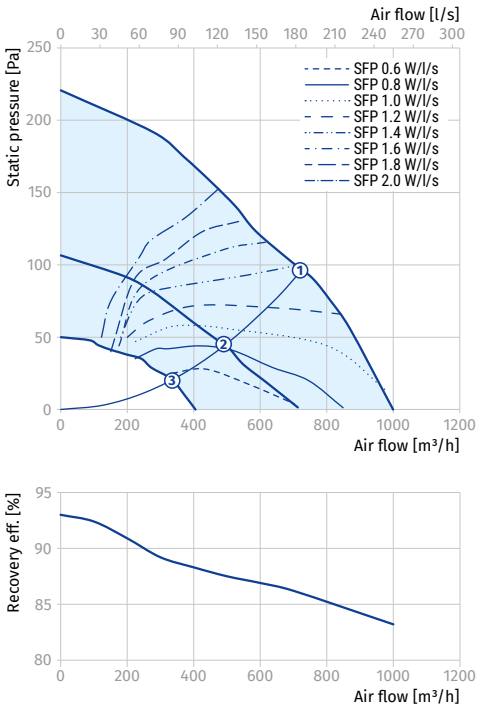
Parameters	CIVIC EC DB 1000 V.2	CIVIC EC DBE 1000 V.2	CIVIC EC DBE2 1000 V.2
Voltage [V / 50-60 Hz]	1~230	3~400	3~400
Max. unit power without electric heater [W]	267	267	267
Integrated electric preheater power [W]	–	3150	3150
Integrated electric reheater power [W]	–	–	2100
Max. unit power [W]	267	3417	5517
Max. unit current without electric heater [A]	1.85	1.85	1.85
Max. unit current [A]	1.85	12	18
Air flow [m³/h]	1000	1000	1000
Transported air temperature [°C]	–25...+40	–25...+40	–25...+40
Case material	polymer coated steel	polymer coated steel	polymer coated steel
Insulation	45 mm, EPDM	45 mm, EPDM	45 mm, EPDM
Extract filter	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)	ISO Coarse >60% (G4)
Supply filter	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)	ISO ePM1 70% (F7)
Connected air duct diameter [mm]	315	315	315
Weight [kg]	252	257	268
Heat recovery efficiency [%]	88	88	88
Heat exchanger type	counter–flow	counter–flow	counter–flow
Heat exchanger material	polystyrene	polystyrene	polystyrene
SEC class	A+	A+	A+

*Heat recovery efficiency is specified in compliance with EN 13141-8.

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L_{WA} to environment, point 1 [dBA]	**45**	31	37	40	37	36	36	29	18	**24**	**34**
L_{WA} to environment, point 2 [dBA]	**37**	26	29	32	29	29	29	24	15	**17**	**27**
L_{WA} to environment, point 3 [dBA]	**32**	21	26	20	25	19	20	25	18	**11**	**21**

FRESH AIR FLOW DISTANCE





Accessories

		CIVIC EC DB 300 S21 V.2 CIVIC EC DBE 300 S21 V.2 CIVIC EC DBE2 300 S21 V.2	CIVIC EC DB 500 S21 V.2 CIVIC EC DBE 500 S21 V.2 CIVIC EC DBE2 500 S21 V.2	CIVIC EC DB 800 S21 V.2 CIVIC EC DBE 800 S21 V.2 CIVIC EC DBE2 800 S21 V.2	CIVIC EC DB 1000 S21 V.2 CIVIC EC DBE 1000 S21 V.2 CIVIC EC DBE2 1000 S21 V.2
Extract filter ISO Coarse >60 % (G4)		FP 320x373x48 G4	FP 379x334x48 G4	FP 397x390x48 G4	FP 654x480x48 G4
Supply filter ISO ePM1 60 % (F7)		FP 320x211x48 F7	FP 379x254x48 F7	FP 397x390x48 F7	FP 654x480x48 F7
Outer grill		VDA 200 CFn Al	VDA 250 CFn Al	VDA 315 CFn Al	VDA 315 CFn Al
Control panel		S22	S22	S22	S22
Wi-Fi control panel		S22 Wi-Fi	S22 Wi-Fi	S22 Wi-Fi	S22 Wi-Fi
LCD Control panel		S25	S25	S25	S25
VOC sensor		DPWQ30600	DPWQ30600	DPWQ30600	DPWQ30600
CO_2 sensor		CD-3	CD-3	CD-3	CD-3
Internal humidity sensor		FS2	FS2	FS2	FS2
Syphon kit		SFK 20x32	SFK 20x32	SFK 20x32	SFK 20x32
Drain pump		CP-2	CP-2	CP-2	CP-2