

ATTIC AND WALL-MOUNTED UNITS

RCV 320



The RCV 320 is a highly efficient and very compact residential ventilation unit for houses, villas, and apartments. Based on patent-pending technology and an ingenious design, it is delivered as a true plug and play solution with a built-in control panel and all necessary parts for on-site wall installation.

All units come with an Aluzinc surface finish and will be packaged four units on a pallet at a time to ease handling at building sites. In addition to speeding up your installation work, this reduces the amount of packaging materials for you to get rid of while also benefitting the environment.

- Demand-controlled ventilation with integrated humidity sensor, reducing power consumption at times with low ventilation demands
- Summer mode in which the supply fan is stopped and any open window will supply cooler outside air, lowering the room temperature
- Automatic free-cooling features, including the possibility of increasing the air flow automatically, lets in cool night air following hot days to help maintain a comfortable temperature throughout the day
- Fireplace mode, creating a temporary inside overpressure to enhance chimney functionality
- High-efficiency heat recovery
- EC fan motors with extremely low energy consumption (low SPI)
- Highly customisable units with the option to add a high variety of internal as well as external accessories
- Ducts can be connected through the top of the unit, either side or the bottom as preferred
- Compact design
- Internal pre-heater as accessory

Third party testing and certification

Code	Description
ErP	Compliant with EU regulations for Eco-design
Nordic Swan Ecolabel	Listed in the Nordic Swan database for products suitable for Ecolabelled buildings
PHi	Pending Passivhaus certification

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TECHNICAL DATA

Specifications	Units		RCV 320 _{p2}
Maximum flow at 100Pa	V_{100Pa}	m ³ /h	320
Maximum rated flow at 100Pa	$V_{max. nom.}$	m ³ /h	200
Operating range DIBt	V_{DIBt}	m ³ /h	70 - 200
Operating range Passivhaus at 100Pa	V_{PHI}	m ³ /h	70 - 160
EN 13141-7 reference flow at 50Pa	V_{REF}	m ³ /h	140
Performance			
Thermal efficiency in accordance with EN13141-7	h_{SUP}	%	90
Leakage (external and internal) in accordance with EN 13141-7			<2% (Class A1)
Filters in accordance with ISO16890	-	-	ISO Coarse 75% (optional on supply: ePM1>50%)
Filters in accordance with EN779			G4 (optional on supply: F7)
Installation surrounding temperature	t_{SURR}	°C	+12 to +45
Outdoor temperature without preheater installed	t_{ODA}	°C	-12* to +40
Outdoor temperature with preheater installed	t_{ODA}	°C	-20 to +40
Maximum absolute humidity of extract air	x	g/kg	10
Cabinet			
Dimensions (without bracket)	w x h x d	mm	600 x 603 x 526**
Spigots/ducts connections	∅	mm	8 pcs ∅125 and 2 pcs oval (68 x 163) – female
Weight		kg	32
Thermal conductivity – polystyrene insulation	l	W/mK	0.031
Heat transition figures – polystyrene insulation	U	W/m ² K	$U < 1$
Fire classification of the polystyrene insulation	-	-	DIN 4102-1 class B2 EN 13501 class E
Drainage hose included	∅/length	"/m	∅ ³ / ₄ " – 1m
Cabinet colour	RAL	-	no paint/raw Alu-zinc
Electrical			
Voltage	U	V	230
Maximum power consumption (without/with preheater)	P	W	170/1070
Frequency	f	Hz	50
Protection class	-	-	IP21

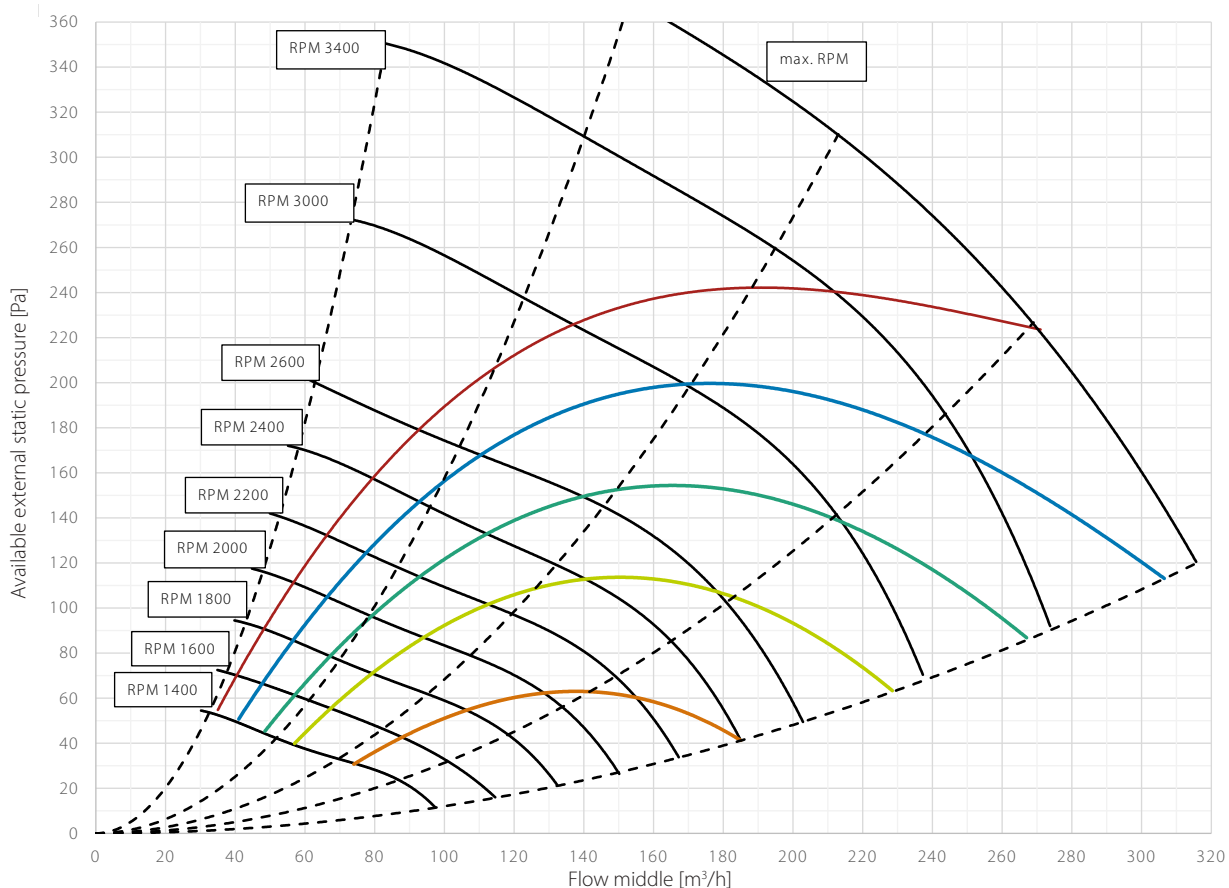
* The use of preheating coil is recommended at outdoor temperature -3°C to ensure balanced operation.

** +20mm fitting.

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CAPACITY AND SPI CURVES WITH G4/G4 FILTERS



SFP/SPI/SEL*	0.45 W/m ³ /h	0.39 W/m ³ /h	0.33 W/m ³ /h	0.28 W/m ³ /h	0.22 W/m ³ /h
	1620 J/m ³	1400 J/m ³	1200 J/m ³	1000 J/m ³	800 J/m ³
	1.62 W/l/s	1.40 W/l/s	1.20 W/l/s	1.0 W/l/s	0.80 W/l/s

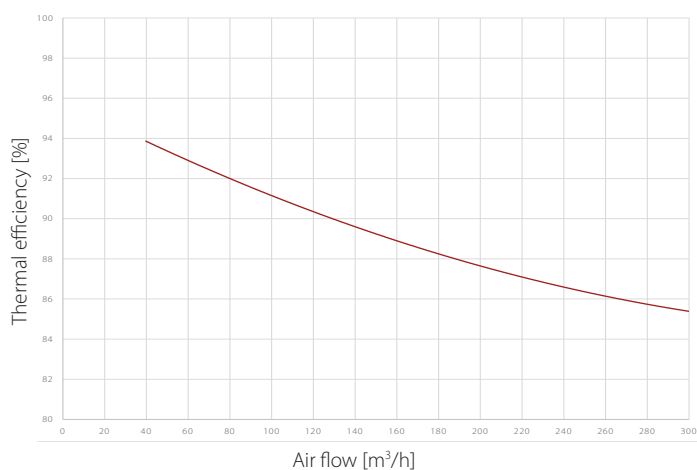
* SFP/SPI/SEL includes power consumption of both fans and the control.

THERMAL EFFICIENCY CURVES

Legend

- Thermal efficiency according to EN 13141-7 (dry)
Operational conditions: outdoor air: 7°C, 85% RH; extract air: 20°C, 37% RH

All values at balanced flow



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SOUND POWER LEVEL (L_w) – DUCTS

RPM	Duct	[dB(A)]								
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Total
1200	supply/exhaust	23.6	33.1	32.8	34.0	30.0	20.8	13.3	18.5	39
	extract/outdoor	20.2	26.0	26.0	30.0	23.9	15.5	6.9	13.0	33
1400	supply/exhaust	26.2	36.1	37.0	37.2	34.4	24.6	19.0	18.6	42
	extract/outdoor	21.9	28.5	30.1	33.7	28.3	21.5	18.1	21.4	37
1600	supply/exhaust	27.8	36.7	41.0	40.2	37.6	28.8	22.0	19.1	45
	extract/outdoor	23.9	29.0	35.6	36.3	31.7	25.5	17.3	21.5	40
1800	supply/exhaust	30.2	38.1	46.1	43.1	40.6	32.1	24.9	13.3	49
	extract/outdoor	26.8	30.4	38.2	38.9	34.7	28.8	18.8	21.7	43
2000	supply/exhaust	32.0	39.8	49.4	45.8	43.5	35.2	28.5	13.0	52
	extract/outdoor	30.2	31.5	41.9	41.3	37.5	31.6	18.1	20.3	46
2200	supply/exhaust	34.2	40.9	51.0	48.1	46.0	38.1	31.8	12.7	54
	extract/outdoor	32.3	33.0	43.4	43.6	39.9	34.1	21.5	21.5	48
2500	supply/exhaust	35.4	42.3	54.4	50.1	47.6	40.6	34.7	18.7	57
	extract/outdoor	33.9	34.2	44.5	45.8	42.0	36.2	20.7	14.9	49
2700	supply/exhaust	38.6	43.9	55.8	52.4	49.7	43.1	37.5	19.7	58
	extract/outdoor	36.6	35.8	47.7	47.8	43.8	38.4	24.8	23.3	52
2900	supply/exhaust	40.1	45.6	59.0	62.5	53.1	47.0	41.9	26.9	65
	extract/outdoor	37.7	37.5	47.7	53.3	47.3	42.5	28.3	23.3	55

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SOUND PRESSURE LEVEL (L_p) – CABINET

1m distance

RPM	[dB(A)]								
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Total
1200	-	2.8	11.4	14.7	11.7	10.6	2.7	3.0	19
1400	-	4.1	16.7	15.9	16.4	13.0	9.7	4.9	22
1600	-	7.3	18.5	19.6	17.7	13.2	10.0	4.9	24
1800	-	9.5	22.5	21.0	19.3	13.3	10.3	4.9	26
2000	-	10.3	24.6	24.5	22.2	18.1	11.1	5.6	29
2200	-	11.7	26.7	26.8	24.3	19.3	11.8	6.3	31
2600	-	13.5	30.6	29.5	26.7	21.9	14.7	6.3	34
3000	-	18.6	30.9	32.2	30.3	25.3	18.3	6.3	36
3400	11.1	20.2	34.0	35.0	31.3	26.5	20.5	7.3	39
3400	11.1	20.2	34.0	35.0	31.3	26.5	20.5	7.3	39

2m distance

RPM	[dB(A)]								
	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Total
1000	-	2.6	9.5	12.9	9.6	5.8	1.4	3.0	17
1200	-	4.0	11.1	15.8	16.3	12.6	9.4	4.1	21
1400	-	7.1	13.9	17.6	16.4	12.6	5.3	1.7	22
1600	-	8.5	18.0	20.8	17.7	13.2	6.0	-0.1	24
1800	-	10.0	21.9	23.6	20.2	16.3	9.4	4.9	27
2000	-	11.5	22.4	25.7	22.2	18.3	11.6	5.6	29
2200	-	13.3	26.5	28.2	24.6	20.7	13.3	5.6	32
2400	-	18.5	28.1	30.9	27.7	24.4	17.5	5.6	35
2600	11.0	20.1	29.9	34.6	29.5	25.6	18.9	5.6	37
3000	11.1	20.2	32.3	37.9	32.1	29.0	22.8	9.0	40

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DIMENSIONS

On the RCV 320, it is possible to connect the supply duct to the bottom if the ducts are to run beneath the floor.

