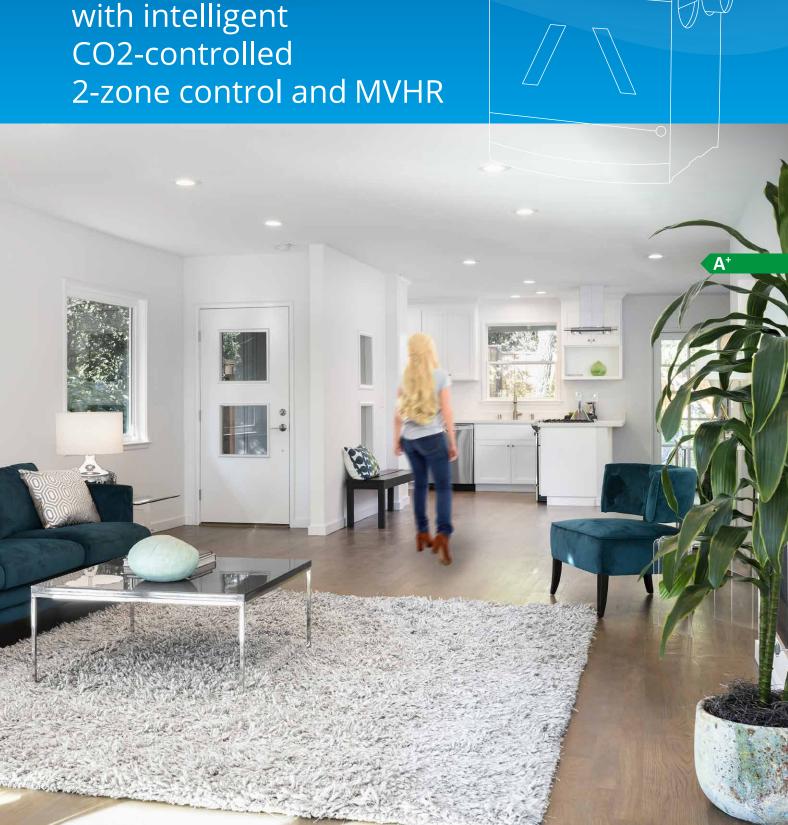


HRC 425/570 **EcoSmart/SmartComfort**

Demand-controlled Balance ventilation system with intelligent CO2-controlled



HRC 425/570 **EcoSmart/SmartComfort**

Demand-controlled balance ventilation system with intelligent CO2 control 2 zones and MVHR













THE HRC ECOSMART AND SMARTCOMFORT ARE DEMAND-CONTROLLED TWO-ZONE VENTILATION SYSTEMS WITH INTELLIGENT CO2-CONTROLLED TWO-ZONE REGULATION BASED ON WIRELESSLY COMMUNICATING VALVES. THE SMARTCOMFORT HAS THE ADDED BENEFIT OF PRE-HEATING FOR OPTIMUM COMFORT IN WINTER.

EcoSmart with intelligent zone control

The HRC-EcoSmart ensures that 2 living zones, such as the living room and bedroom, are ventilated on demand based on the CO2 measurement. A CO2 sensor is installed in the living room and master bedroom, which communicates wirelessly with the zone valve. In this way, the exact air flow required is blown to the right place in the house at any time of day. The zone valves communicate wirelessly with the unit, so they can also be installed between the ducts later during installation. Thanks to the RF connection, they can also be installed later during installation between two ducts.

Complete EcoSmart set

The unit is supplied in a set consisting of the following components:

- · HRC unit
- 4x 160 or 180 mm flanges
- · 2x 160 mm zone valves
- 7x sealing rings
- · Power supply unit with USB connection for the valves (2 metre cable)

Choice from 3 options*:

- CO2 control sensor and CO2 room sensor 15RF
- 2x CO2 control sensor 15RF
- 2x CO2-Built-in control sensor 15RF
- * At least 2 CO2 sensors are required for the operation of a CO2controlled system.

Lowest active power

Thanks to the new Peutz equivalence declarations, when using this 2zone system with 2 or more Orcon

CO2 sensors, a very sharp freg and freg fan factor can be used:

- Orcon D.5a system with 2 CO2 sensors: freg 0.42 and freg,fan 0.159
- Orcon D.5a system with additional CO2 sensors: freg 0.41 and freg, fan 0.144 The effective power is therefore 5 to 7 watts.

SPECIFICATIONS

Preliminary specifications	HRC-425 EcoSmart	HRC-425 SmartComfort	HRC-570 EcoSmart	HRC-570 SmartComfort
Article number	22001090	22001095	22001100	22001105
Maximum input range m3/h at supply air demand	425	425	570	570
Energy label	A+	A+	A+	A+
Exhaust air flow rate [m3/h] at 200l	Pa 300	300	400	400
Max. permissible duct resistance [Pa] 200	200	200	200
Nominal resistance [Pa]	100	100	100	100
Thermal efficiency 1 NEN 5138 [%].	99,3	99,3	99,7	99,7
Electrical connection	Grounding	Grounding	Grounding	Grounding
Suitable for Perilex control	0	0	0	0
Suitable for RF control	Yes	Yes	Yes	Yes
Duct connection [mm]	5 x 160	5 x 160	3x 180 & 2 x 160	3x 180 & 2 x 160
Modulating bypass	Yes, 100%	Yes, 100%	Yes, 100%	Yes, 100%
Antifreeze	Unbalance	Preheater	Unbalance	Preheater
Humidity sensor	Yes	Yes	Yes	Yes
Filter class (ISO16890)	Supply: Coarse 65%	Supply: ePM1 70%	Supply: Coarse 65%	Supply: ePM1 70%
	Exhaust: Coarse 65%	Exhaust: Coarse 65%	Exhaust: Coarse 65%	Exhaust: Coarse 65%
Constant volume control	Yes, up to 1% accuracy	Yes, up to 1% accuracy	Yes, up to 1% accuracy Yes, up to 1% ac	

¹ Compliant NEN 5138	Optional
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Physical properties	HRC-425 EcoSmart	HRC-425 SmartComfort	HRC-570 EcoSmart	HRC-570 SmartComfort
Dimensions (WxDxH) [mm]	760x600x830	760x600x830	760x600x830	760x600x830
Weight [kg]	35	35	35	35
Housing material	EPP/PMMA/PP	EPP/PMMA/PP	EPP/PMMA/PP	EPP/PMMA
Housing colour	Black	Black	Black	Black
Colour front cover	White	White	White	White
Condensate drain connection [mm]	ø32 (1 ¼")	ø32 (1 ¼")	ø32 (1 ¼")	ø32 (1 ¼")
Length of the heat exchanger [mm]	560	560	560	560
Heat exchanger material	ABS/PS	ABS/PS	ABS/PS	ABS/PS
Protection class [IP]	31	31	31	31

Electrical properties	ical properties HRC-425 EcoSmart		HRC-570 EcoSmart HRC-570 SmartComfo	
Supply voltage [V/Hz]	230/50	230/50	230/50	230/50
Maximum current [A]	0,65	5	1,5	5,8
Rated power [W] 2 3	26,7	26,7	40,4	40,4
Total power consumption [W] 3	65	65	108	108
Inputs	2x Digital input, 230V	2x Digital input, 230V	2x Digital input, 230V	2x Digital input, 230V
Cord length [m]	2	2	2	2
Type fan	EC	EC	EC	EC
Max. Fan power [W]	73	73	170	170
Fan control	Fan control MOD-bus		MOD-bus	MOD-bus
Max. Preheater power [W]		1000	-	1000

² Measured at 60 % of the maximum flow, in accordance with NEN 5138 ³Without preheater, max. flow rate 100 pa

A SELECTION OF THE ACCESSORIES

















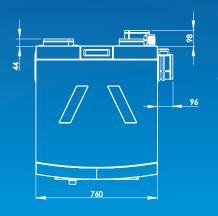
Filter set HRC MaxComfort Coarse 65% & ePM1 70%Art. Nr. 22700006

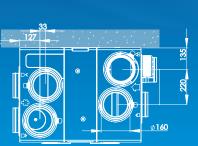
Perilex cable HRC EcoMax Art.Nr: 29190405

CV-3 Flush-mounted operating mode switch Art.Nr: 28000000

TECHNICAL DATA

Dimensions HRC 425/570 EcoSmart/SmartComfort









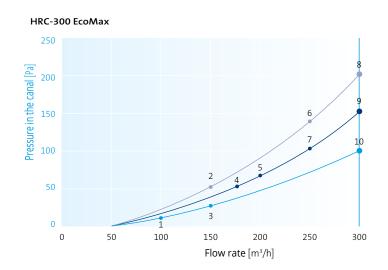
HRC-425 EcoSmart/SmartComfort

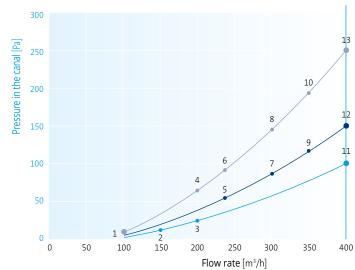
Operating point		External pressure	Power consumption per fan	Total power consumption	SPF total
	[m³/h]	[Pa]	[W]	[W]	[Wh/m³]
1	100	20	4	11	0,11
2	150	50	9	20	0,13
3	150	25	7	16	0,11
4	180	53	11	25	0,14
5	200	65	14	30	0,15
6	250	141	28	59	0,24
7	250	105	24	51	0,20
8	300	200	46	94	0,31
9	300	150	38	79	0,26
10	300	100	31	65	0,22

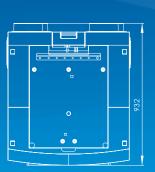
HRC-570 EcoSmart/SmartComfort

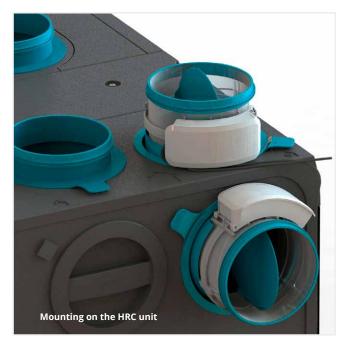
Operating point	Reference Flow rate	External pressure	Power consumption per fan	Total power consumption	SPF total
	[m³/h]	[Pa]	[W]	[W]	[Wh/m³]
1	100	20	5	13	0,13
2	150	20	7	17	0,11
3	200	25	11	25	0,13
4	200	62,5	15	32	0,16
5	240	53	18	39	0,16
6	240	89	21	44	0,18
7	300	85	29	60	0,20
8	300	140	37	77	0,26
9	350	115	44	90	0,26
10	350	190	55	112	0,32
11	400	100	53	108	0,27
12	400	150	62	126	0,32
13	400	250	79	160	0,40

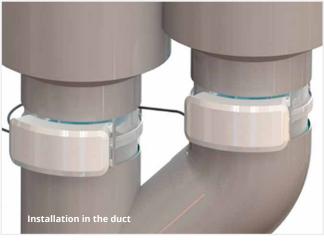
HRC-400 EcoMax











WHAT MAKES THE ECOSMART SPECIAL?

- Available in 425 and 570
- Up to 5db noise reduction compared to HRC EcoMax/ MaxComfort
- Available in the SmartComfort version with preheater and Epm 70% supply filter
- A+ Energy label
- Intelligent modulating 2-zone control including humidity control
- Wireless communication device/zone valves and zone valves/CO2 sensors
- Suitable for an inlet flow of 425 or 570 m3/h
- Highest efficiency (more than 99%) and lowest power consumption on the market
- Flexible installation (8 connection options; 2-zone valves can be mounted directly in the unit)
- Simple adjustment via the zone valve menu (optimum balance by setting at constant volume)
- Efficient and very quiet

In addition to the HRC 425/570 EcoSmart/SmartComfort, the HRC series also consists of the HRC 300/400/500 EcoMax/MaxComfort, which ventilate according to demand. Request or download this brochure at occon.nl

- 1 HRC balanced ventilation system with 2-zone control
- 2 Remote control 15RF or HRC display built-in 15RF
- 3 CO2 room or flush-mounted sensor 15RF
- 4 Silencer
- **5** Air distribution system
- **6** Roof duct incl. airtight connection
- 7 Facade penetration including airtight connection





Remote control 15RF

Art. Nr. 21800000

The 15RF remote control is very userfriendly. With 6 buttons, you select in which position the unit should operate. This surface-mounted RF control is easy to install: The use of the battery eliminates the need to install cables.



CO₂ Control sensor 15RF

Art. Nr. 21800045

With this handy surface-mounted controller with built-in CO2 sensor, you can ensure an exceptional indoor climate in your home. You can control for CO2 and manually select the desired ventilation setting. Expandable with additional CO2 room sensors and RF remote controls.



CO. Room sensor 15RF

Art. Nr. 21800040

You can expand your ventilation system with one or more surface-mounted room sensors. The sensor is in the same housing as the sensor for CO2 control, but has two options: an eco mode (1150 ppm CO2) and a comfort control (950 ppm) that controls for CO2. You can quickly and easily view the status with one button.



HRC Display built in 15RF Art. Nr. 21800060

With this user-friendly built-in RF controller with display, you can control the fan speed of the HRS unit easily and precisely. The LCD screen clearly displays the status and operating information. Such as measured air flow, temperature and humidity. The setting for night ventilation can also be precisely adjusted.



CO₂ control sensor flushmounted 15RF

Art. Nr. 21800080

Kombiniert die Funktionalitäten der 15RF CO2-Sensors and controls in one. This allows you to automatically control the CO2 air quality or manually select the desired ventilation setting. This controller has an energy-efficient and "extra good" CO2 mode and can be installed in the wall with a 55 mm flush cover frame.



Humidity sensor

In automatic mode, the fan runs at the lowest level and the humidity sensor built into the HRC as standard is active. If this sensor detects that the air humidity is humidity rises rapidly, the unit switches to a higher setting. 15 or 30 minutes after showering or cooking, the unit switches back to the low setting.

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Would you like to learn more about an exceptional indoor climate?

Our goal is to provide everyone with the most pleasant and healthy indoor climate possible. An environment in which people feel comfortable and function optimally. With this vision in mind, we have become the leading supplier of ventilation systems for residential and commercial buildings.



Orcon Academy

Being a leader in products also means being a leader in knowledge. Orcon closely follows technological developments laws and regulations and incorporates them into various training courses. Visit our website for more information or to register for a training. for a training course.



Green Igloo totaaloplossingen

Green Igloo is Orcon / Thercon's green label and encompasses our sustainable total solutions for all-electric living, working and learning. An approach where we manage the entire process from calculation to installation. And we can give clear climate guarantees. The focus is on an efficient ventilation system together with a sustainable heating system in a well-insulated building. Do you want to know how we do it? Then get in touch with us!



Corporate social responsibility

An exceptional indoor climate also means paying attention to the outdoor climate. We feel responsible for people and the environment. For example, we use recyclable materials as much as possible in the development of our products and we employ people from sheltered employment in our production process.

