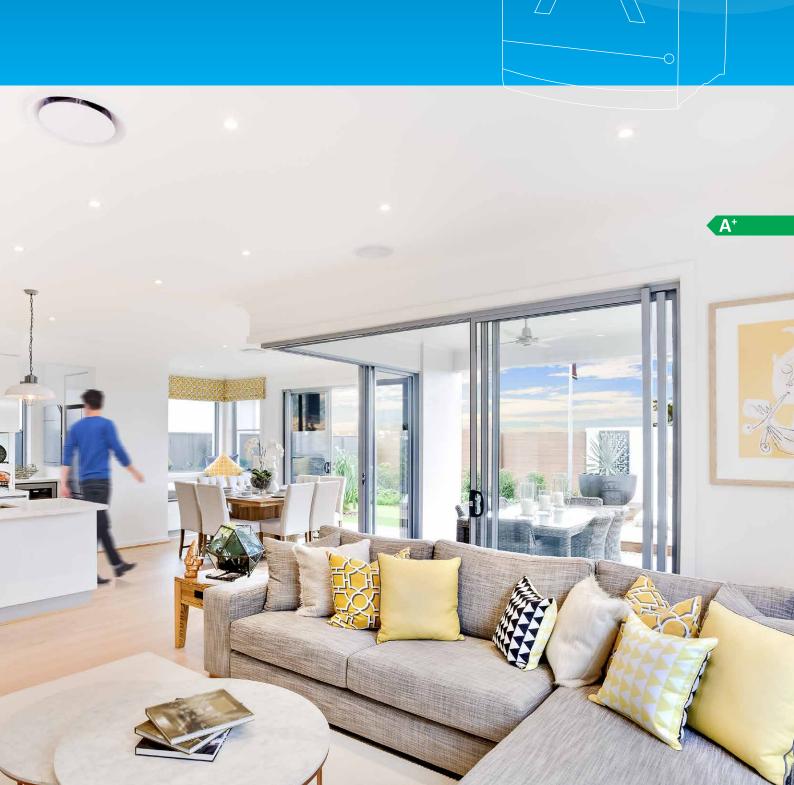
ORCON

HRC EcoMax and MaxComfort

Most economical balanced ventilation system



HEALTHLINE

HRC EcoMax and MaxComfort

Balanced ventilation with heat recovery









OUR NEW HRC ECOMAX AND MAXCOMFORT ARE THE BALANCE VENTILATION SYSTEMS WITH HEAT RECOVERY FOR EVERY APPLICATION. THE BALANCE IS ACHIEVED BY REPLACING POLLUTED INDOOR AIR EXTRACTED FROM THE KITCHEN, BATHROOM AND CLOAKROOM WITH AN EQUAL VOLUME OF FRESH, FILTERED OUTDOOR AIR SUPPLIED TO THE LIVING AREAS AND BEDROOMS. DURING THIS PROCESS THE HEAT FROM THE DISCHARGED POLLUTED AIR IS RECOVERED (UP TO 90% EN13141-7) AND TRANSFERRED TO THE INCOMING FILTERED OUTDOOR AIR. THIS INTELLIGENT SYSTEM ALWAYS PROVIDES OPTIMUM VENTILATION TO MEET THE CURRENT CONDITIONS. THE RESULT: A LOWER ENERGY BILL AND AN EXCEPTIONALLY HEALTHY, COMFORTABLE INDOOR CLIMATE AT ALL TIMES.

Smart, extremely economical and whisper silent

The HRC EcoMax and MaxComfort, part of the HealthLine, are the textbook example of economic efficiency and are fully ready for the stricter Dutch requirements for nearly Zero Energy Buildings (nZEB). The low energy consumption of the unit in combination with the high thermal efficiency result in a perfect EPBD rating. Energy consumption has even been reduced by 60% compared to the previous generation, which is due to the fact that the device has been completely redesigned and equipped with the latest ventilation technologies. Examples of this include: Extra-long Recair Ultimate heat exchanger for maximum performance and minimal loss. Best balancing technique, with up to 1% accuracy, always perfectly balanced.



Latest ebm-papst 3D scrolls with Radical impellers and intelligent anemometer technology. Intelligent sensors for fully automatic, highly accurate demand-driven operation.

Ease of installation

The HRC EcoMax and MaxComfort not only excel in efficiency but certainly also in ease of installation. Thanks to eight different connection options, no fewer than sixteen connection combinations are possible. The unit is also suitable for use as a left- or right-hand version, allowing it to be installed anywhere. Moreover, the HRC EcoMax and MaxComfort are suitable for both wired and RF-control. This literally means one model for all applications. Easy for the contractor and installer, and lower inventory costs for the wholesaler.

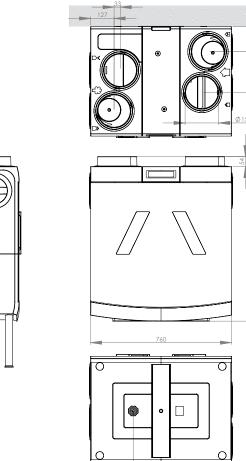
Simple maintenance

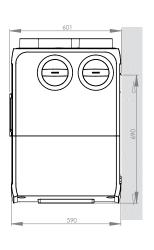
The HRC EcoMax and MaxComfort also offer tremendous ease of maintenance. Careful thought was given to service efficiency during development, for example; all important service components are easily accessible for cleaning or replacement. There is also no need to remove the unit from the wall during maintenance work and there are replaceable modules. This saves time and money.

WHAT MAKES THE HRC ECOMAX AND MAXCOMFORT SPECIAL?

- Capacity 400 m³/h or 500 m³/h at 200 Pa
- Thermal efficiency HRC 350 90%, HRC 450 89% (EN13141-7)
- Suitable for new construction (nZE and passive houses)
- Efficient EC fans with constant volume regulation and modbus
- Automatically balancing, 1% accuracy
- Whisper silent
- Modulating 100% bypass
- Fitted with 8 top and side connections
- Easy to expand with RF sensors and/or RF controls, up to 20 elements
- Left and right mounting option with same unit
- Suitable for wall mounting or floor placement (with frame)
- Standard integrated humidity sensors
- Insulating EPP housing
- Filter indication
- Frost protection

Dimensions





Energy passport EPBD				
Product	Orcon HRC-350	Automatic regulation		Yes
Type motor	EC	Summer bypass		100%
Max. power / Fan	73 watt	Efficiency	Volume 250 m³/h 350 m³/h 450 m³/h 500 m³/h	Efficiency 89% 88% 87% 86%

SPECIFICATIONS

Specifications	HRC-350 EcoMax	HRC-350 MaxComfort	HRC-450 EcoMax	HRC-450 MaxComfort
European Union energy label	A+	A+	A+	A+
Air flow [m3/h] at 200 Pa	400	400	500	500
Max. allowable duct resistance [Pa]	200	200	200	200
Resistance, nominal [Pa]	100	100	100	100
Thermal efficiency¹ EN13141-7	90	90	89	89
Electrical connection	230V	230V	230V	230V
Suitable for wire control	0	0	0	0
Suitable for RF control	Yes	Yes	Yes	Yes
Duct connection [mm]	160	150	180	180
Modulating bypass	Yes, 100%	Yes, 100%	Yes, 100%	Yes, 100%
Frost protection	Imbalance	Imbalance + preheater	Imbalance	Imbalance + preheater
Filter class (ISO16890)	Supply: ePM1 70%	Supply: ePM1 65%	Supply: ePM1 70%	Supply: ePM1 65%
	Disposal: Coarse 65%	Disposal: Coarse 65%	Disposal: Coarse 65%	Disposal: Coarse 65%
Constant volume control	Yes, up to 1% accuracy			

¹ Measurement according to EN13141-7 O Optional

measurement according to EN13141 7 O Optional				
Physical characteristics	HRC-350 EcoMax	HRC-350 MaxComfort	HRC-450 EcoMax	HRC-450 MaxComfort
Dimensions (WxDxH) [mm]	760x600x830	760x600x830	760x600x830	760x600x830
Weight [kg]	34	34	35	35
Housing material	EPP/PMMA/PP	EPP/PMMA/PP	EPP/PMMA/PP	EPP/PMMA/PP
Colour, enclosure	Black	Black	Black	Black
Colour, front panel	White	White	White	White
Connection, condensate drain [mm]	ø32 (1¼")	ø32 (1¼")	ø32 (1¼")	ø32 (1¼")
Length, heat exchanger [mm]	560	560	560	560
Material, heat exchanger	ABS/PS	ABS/PS	ABS/PS	ABS/PS
Protection rating [IP]	31	31	31	31

Electrical characteristics	HRC-350 EcoMax	HRC-350 MaxComfort	HRC-450 EcoMax	HRC-450 MaxComfort
Connection voltage [V/Hz]	230/50	230/50	230/50	230/50
Maximum current [A]	0.65	5	1.5	5.8
Nominal power [W] ²³	25	25	39	39
Total power consumption [W] ³	76	76	115	115
Inputs	2x digital in, 230V			
Lead length [m]	2	2	2	2
Type of fan	EC	EC	EC	EC
Max. power, fan [W]	73	73	170	170
Control, fan	MOD-bus	MOD-bus	MOD-bus	MOD-bus
Max. power, preheater [W]	1000	1000	1000	1000

² Measured at 60% of 300 m³/h air volume

A SELECTION OF THE ACCESSORIES

















Remote control 15RF Item no.: 21800000 CO₂ Room Sensor 15RF Item no.: 21800040

CO₂ Control Sensor 15RF Item no.: 21800045 Support frame Item no.: 22700080 Filter set HRC MaxComfort 2x Coarse 65% Item no.: 22700009 Filter set HRC MaxComfort Coarse 65% & ePM1 70% Item no.: 22700006

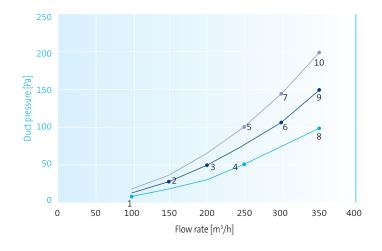
Perilex lead HRC EcoMax Item no.: 29190405 CV-3 position switch Item no.: 28000000

³ Excluding pre-heater

TECHNICAL DATA

HRC-350 EcoMax/MaxComfort

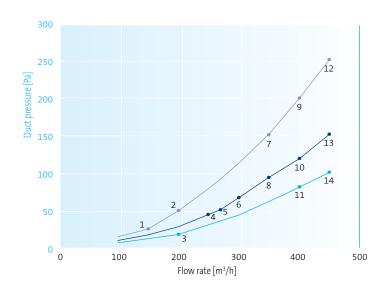
Working point	Reference flow rate	Duct pressure	Total power consumption	SFN total
	[m³/h]	[Pa]	[W]	[Wh/m³]
1	100	16	11	0.11
2	150	27	16	0.11
3	200	50	25	0.13
4	245	50	34	0.14
5	250	100	49	0.2
6	300	111	67	0.22
7	300	145	76	0.25
8	350	100	84	0.24
9	350	150	100	0.29
10	350	200	118	0.34



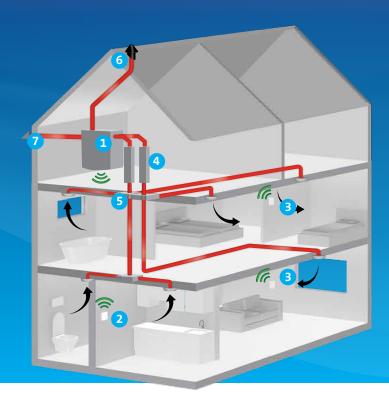
TECHNICAL DATA

HRC-450 EcoMax/MaxComfort

Working point	Reference flow rate	Duct pressure	Total power consumption	SFN total
	[m³/h]	[Pa]	[W]	[Wh/m³]
1	150	25	17	0.113
2	200	50	29	0.145
3	200	30	25	0.125
4	250	47	39	0.156
5	270	50	45	0.167
6	300	67	58	0.193
7	350	150	101	0.289
8	350	92	82	0.234
9	400	200	143	0.358
10	400	120	115	0.288
11	400	80	99	0.248
12	450	250	202	0.449
13	450	150	155	0.344
14	450	100	133	0.296



- 1 HRC heat recovery unit
- Remote control 15RF
- 3 CO₂ room sensor 15RF
- 4 Noise dampers
- 5 Air distribution system
- 6 Roof pass-through incl. airtight connection
- 7 Façade pass-through





Humidity sensor (H)

The humidity sensor is integrated as standard and measures the moisture content in the return air extracted from the kitchen, bathroom and cloakroom. In automatic mode, the fan runs at the lowest speed and the humidity sensor is active. If the integrated humidity sensor detects an increase in humidity, during cooking or showering for example, the unit switches to a higher speed. Fifteen minutes after showering or cooking the unit switches back to the low speed.



Remote control 15RF

The RF remote control is included with the HRC EcoMax and MaxComfort from the HealthLine and is simple and clear for the end-user to use.

The end-user uses the six buttons to select the unit's mode of operation.

The RF remote control is easy to install; the use of a battery eliminates the need for installation of cables.





CO₂ Room Sensor 15RF

CO₂ Control Sensor 15RF

Ease of use and comfort; that is what the CO₂ Control Sensor RF provides. With just one control, the end-user is able to provide the house with an exceptional indoor climate. This way the occupant enjoys air (CO₂)-regulated operation and can manually select the desired fan speed. An additional advantage is the possibility for expansion with additional CO₂ Room Sensors RF and Remote Controls RF.

KEY FEATURES

- Automatic humidity control
- Built into the HRC EcoMax and MaxComfort from the HealthLine, no additional components required
- Adjustable run-on time (15 or 30 min.)
- Selectable run-on speed (medium or high)

KEY FEATURES

- 4 operating modes:
 High/medium/low/away
- Timer function: 15, 30 or 60 min.
- Automatic mode
- Two-colour LED indicates system status
- · Long-life battery

KEY FEATURES

- 2-in-1: healthy air and ease of operation
- Displays mode and ventilation system status
- Wireless communication, 230V powered
- · LEDs dim automatically

Want to learn more about an extraordinary indoor climate?

Our goal is to offer everyone the most comfortable and healthy indoor climate possible. An environment in which one feels comfortable and functions optimally. Because we never lose sight of this objective we have become the leading supplier of ventilation systems for residential and commercial construction.



Orcon Academy

Being a leader in products also means leading the way in providing knowledge. Orcon closely monitors technological developments and laws and regulations and integrates them into various training courses.

Visit our website for more information or to register for training.



Green Igloo

'Green Igloo' is Orcon and sister company Thercon's green label. 'Green Igloo' stands for an efficient ventilation system and sustainable heating system in a well insulated low energy home, school or office. Read more about Green Igloo at www.greenigloo.nl

The Orcon and Thercon office building in Veenendaal is a perfect example of a modern, energy-efficient office building, fully climate controlled in keeping with the Green Igloo label. Closely follow the energy consumption of our property with the energy monitor at www.greenigloo.nl/energiemonitor.



Corporate social responsibility

An extraordinary indoor climate also means consideration for the outdoor climate. We therefore feel responsible for people and the environment. For this reason we use as many recyclable materials as possible in the development of our products and we employ workers who need a sheltered employment setting in our production process.

