

TECHNICAL CARD

Horizontal ventilation unit

reQ H.400/500

Available versions:

reQ H.400 HRV

reQ H.400 ERV

reQ H.500 HRV

reQ H.500 ERV

counterflow with heat recovery

enthalpy counterflow with heat and moisture recovery



Click on the link or scan the QR code, to visit the product page

<https://reqnet.eu/en/products/req/h/>



Description

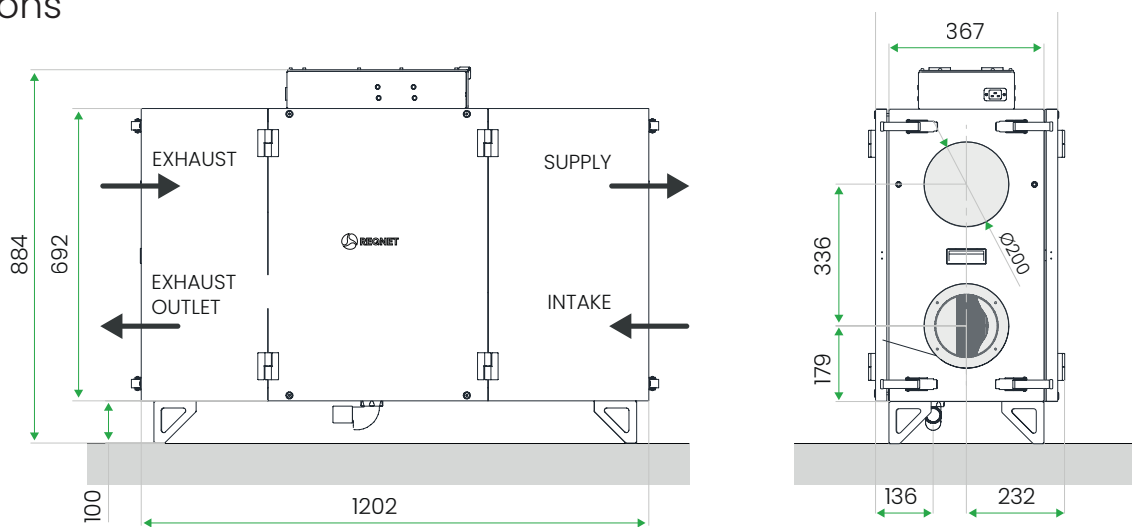
REQNET recuperators of the reQ series provide maximum climate comfort in the building with the highest comfort of use using **minimal amounts of primary energy**. Built-in **CO2 and humidity sensors** as well as a **constant flow sensor** create an **intelligent control system** that allows for automatic adjustment of the AHU operation to the air quality inside the building. The built-in **Wi-Fi module** allows you to control the recuperator with a mobile device from anywhere in the world.

The use of an **enthalpy exchanger** with an innovative polymer membrane allows to recover thermal energy and humidity from the air extracted from the building, thus increasing the overall efficiency of the device. The H-series units are installed as floor-standing units that can be hung on the wall.

The connection spigots are led to the sides, which makes it possible to hang the control panel close to the ceiling. Durable casing, thermal insulation, and the location of connection spigots do not exclude the use of this type of units in low attics. The **counterflow exchanger** with an area of **35 m²** is one of the largest heat exchangers used in this class of recuperators on the Polish market.

The H series recuperators are available in two capacities: **400 and 500 m³/h** and can optionally be equipped with an exchanger with **ERV** moisture recovery. Extensive automation allows you to connect the reQ H series air handling units with the smart home system, and **double air filtration** ensures the highest quality of air inside the building.

Dimensions



Standard equipment of **REQNET** recuperators



Wi-fi module



Anti-smog filter



Constant flow system



Built-in CO₂ sensor



Built-in humidity sensor



PTC pre - heater



EC fans



automatic by-pass 100%



Mobile app



Extensive automation



Assembly system



Dry siphon

Model	reQ H.400 HRV / ERV		reQ H.500 HRV / ERV	
Maximum air flow	400 m ³ /h*		500 m ³ /h*	
		at 150 Pa (HRV)		at 150 Pa (HRV)
		at 200 Pa (ERV)		at 200 Pa (ERV)
Heat recovery efficiency	up to 95% (HRV) / up to 85% (ERV)**			
Exchanger type	counter-current			
Exchanger variant	HRV: with heat recovery			
	ERV: with heat and moisture recovery (enthalpy)			
Exchanger Material	HRV: plastic			
	ERV: plastic + polymer membrane			
Moisture recovery efficiency	No (HRV) / up to 65% (ERV)			
Energy consumption	100 m ³ /h (50 Pa)	23 W (HRV)	200 m ³ /h (50 Pa)	42 W (HRV)
		21 W (ERV)		39 W (ERV)
	250 m ³ /h (100 Pa)	68 W (HRV)	400 m ³ /h (100 Pa)	143 W (HRV)
		65 W (ERV)		140 W (ERV)
	400 m ³ /h (150 Pa)	170 W (HRV)	500 m ³ /h (150 Pa)	267 W (HRV)
		167 W (ERV)		261 W (ERV)
The sound power level emitted by the casing at a distance of 1 meter	100 m ³ /h (50 Pa)	30 db(A)	200 m ³ /h (50 Pa)	38 db(A)
	250 m ³ /h (100 Pa)	41 db(A)	400 m ³ /h (100 Pa)	47 db(A)
	400 m ³ /h (150 Pa)	48 db(A)	500 m ³ /h (150 Pa)	51 db(A)
Sound power level - nominal value	41 db(A)		45 db(A)	
Fans	radial with EC DC motors (ebm - papst)			
Energy efficiency class	A***			
Bypass	automatic, 100% supply air bypass			
Communication	built-in wi-fi module control via a mobile application (iOS 12.0 and Android 6.0 or newer) or web browser			
Cooperation with the smart home system	YES (REST API)			
Diameter of connection spigots	4 x Ø200 mm			
Filters	pleated class M5*** / ePM10 75% **** (optionally air vent: anti-smog F9*** / ePM1 80%****)			
Pre-heater	built-in, smoothly controlled PTC			
Constant Flow System	YES			
Humidity sensor	YES, built-in			
CO2 Sensor	YES, built-in			
Casing Material	stainless			
Dimensions (H x W x D)	784 x 1202 x 432 mm			

* with an M5 class filter

** Due to the enthalpy exchanger, reQnet H ERV recuperator does not meet the requirements of the „Clean Air 2019“ program for applications submitted before 15.05.2020. The statement for the „Clean Air 2020“ program for applications submitted after May 15, 2020, can be found on the cennik24.pl website under the product tab.

*** for a temperate climate in accordance with Directive 2009/125/EC and European Commission Regulation No. 1254/2014

**** according to EN779

***** according to ISO 16890

Two ways to communicate

1. Wireless



2. Via the Internet



Flow characteristics

