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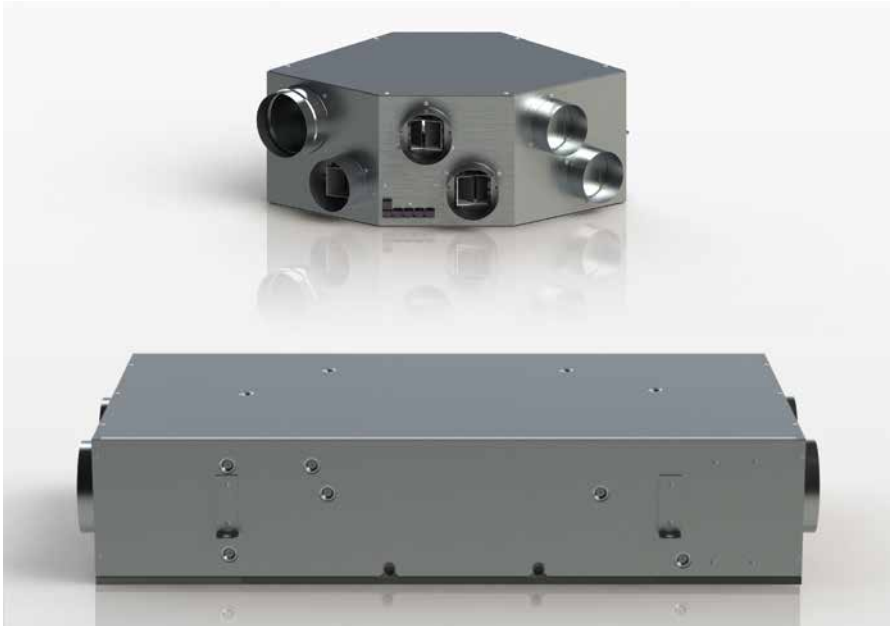


DXR

Room-by-room demand controlled heat recovery

DCV Adapts exhaust and supply airflows according to the specific needs of each room to maximise indoor air quality.

Very low energy losses by combining demand control of airflows and heat recovery.

Optimises power consumption.

Quiet operation through efficient EC-motors and low pressure (only 25 Pa for the supply air).

Free cooling mode.

Easy installation in ceiling spaces thanks to its small thickness (only 26 cm).

Easy maintenance of the filters through compact bottom trapdoors.

Interface for control, settings, and maintenance.

High-quality manufacture with main parts made of metal.

Energy performance and indoor air quality with an innovative concept

While most systems on the market offer constant or globally controlled airflows, the DXR stands out as the first residential heat recovery ventilation system to automatically adjust ventilation according to the specific needs of each room. A distribution box (DXR Hub) adjusts supply airflows through CO_2-controlled dampers in the dry rooms. Demand controlled exhaust units in the wet rooms dispatch the exhaust airflow according to their specific needs; indoor air quality is then optimised in all rooms.

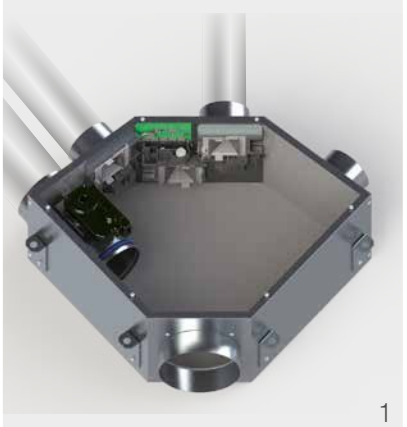
Comfort is ensured by supplying air at a milder temperature: it is preheated by the heat exchanger in the unit. Energy performance is also greatly improved by the automatic airflow control: the DXR delivers 92 % heat recovery efficiency, and saves about 50 % of power consumption.

Modulates exhaust and supply airflows according to the specific needs of each room (1)

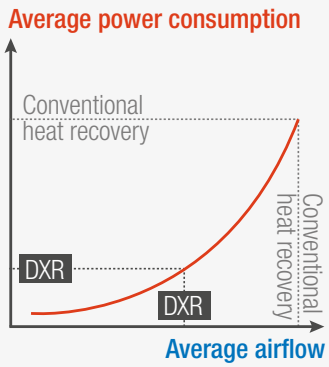
Unlike most “demand controlled” systems, which actually adjust only global airflows, the DXR system adapts airflows room-by-room based on specific needs, while balancing supply and exhaust. A distribution box (DXR Hub) adjusts supply airflows through dampers controlled by CO_2 sensors in the main rooms. The exhaust airflows are controlled by humidity sensors or presence detectors or other activators in the exhaust units.

Outstanding energy performance all year (2, 3)

By combining the benefits of demand control of airflows and heat recovery, DXR delivers outstanding energy performance. The system halves the statistical airflows, and its 85 % recovery efficiency translates to energy savings of about 92 % compared with a constant airflow mechanical exhaust ventilation system, for the same indoor air quality.



1



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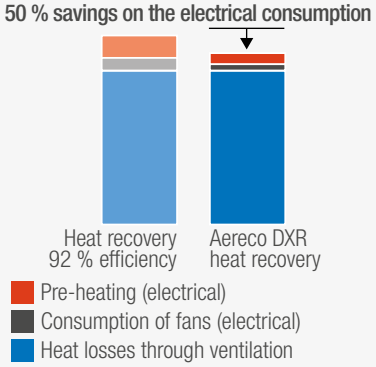

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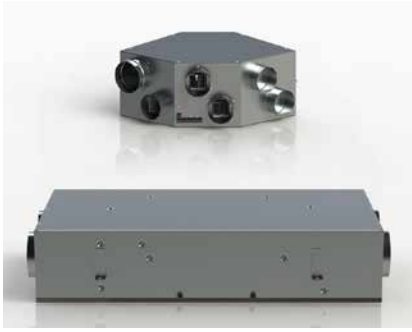

DXR Room-by-room demand controlled heat recovery

		DXR Unit
Standard code		DXR1093
Airflow characteristics		
Max. airflow	m^3/h	170
Pressure at supply	Pa	25
Pressure at exhaust	Pa	60
Airflow compensation (filter clogging)		automatic
Airflow balance (supply and exhaust)		automatic
Acoustics		
Sound power level Lw @ 165 m^3/h	dB(A)	46.3
Electrics		
Power supply		230 VAC, 50 Hz
Motor type		EC (x2)
Power @ 112 m^3/h	W	30
Power @ 160 m^3/h	W	42
Connection DXR Hub - DXR Unit		RJ45
Electrical connections (sensors)		5 x RJ11
Characteristics		
Exchanger		aluminium / counter flow type / 85 % efficiency
Filters		on supply air: G4 + F7 / on exhaust air: G4
Weight	kg	40
Colour		metal
Material (main)		galvanised steel with phonic and thermal insulation
Dimensions	mm	with connectors: 260 x 650 x 1 240 without connectors: 260 x 650 x 1 160
Certifications		CE, VDE
Installation		
Max. number of main rooms		5
Max. number of wet rooms		4
Duct connections		2 x (2 x ø160 mm)
Installation		horizontal only, to the ceiling / 4 points of attachment
Other functions		
Bypass		supply: 100 % / controlled by outdoor and indoor temperatures / also used for *free cooling*
Pre-heating		resistance in fresh air ductwork from outside (accessory controlled by specific strategy)
Anti-frost		supply airflow regulation strategy
Condensation management		exhaust through lateral tube ø16 mm / optional pump (ø6 mm)

		DXR Hub
Standard code		DXR1094
Weight	kg	11
Colour		metal
Material (main)		galvanised steel with phonic and thermal insulation
Electrical connections (sensors)		5 x RJ11
Duct connections	mm	room supply: 5 x ø100 mm compensation / balance: 1 x ø125 mm DXR Unit: 1 x ø160 mm

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