

Single room
heating and
ventilation unit
with heat and
moisture recovery

www.xvent.cz

2in1



Beauty in simplicity

Unique solution

electric or water exchanger recovery exchanger of heat and moisture easy installation design fits in to each interior available in two sizes

...is unique product containing **ventilation unit and heating unit in one** . Both systems work independently.

Xroom is manufactured in two sizes **Xroom 100** and **Xroom 250**. These units have wide range of usage in commercial and residential sector f.a.: in hotels, offices, schools, hospitals, apartments, family houses, ...

Xroom is very silent.

The unit matches **Energy class A+**

The unit comes with **CO₂** sensor as standard and enables also **RH** and **Radon** sensors.

Removable **front cover** secured by screws. Available in flat white or anthracite color.

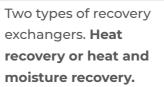


Body of the unit is made from black **EPP**. (expanded polypropylene).

Water exchanger is controlled by thermostatic water valve.

Electric exchanger is controlled by controls of the unit.

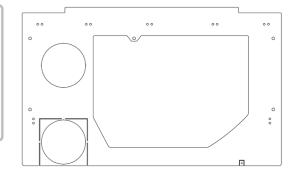
EPP filter covers



Pleated filters are easy accessible. Unit comes with filters class M5. Filters class F7 are available as accessories.

Filter reset button

Metal template enables easy installation. It ensures correct position for drilling of the holes for intake and exhaust and it is also used for hanging of the unit to the wall.



Integrated controls is used for airflow management, heating performance and switching of the operation modes.





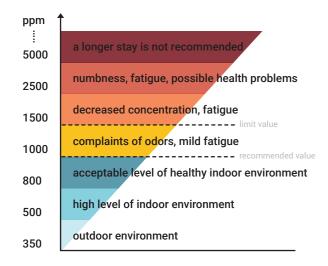
2 | Xroom - ventilation and heating in one





Xroom is designed to be ventilation unit and the heating unit as well. The **ventilation operation** and the **heating operation** works independently one on each other. This means, that during ventilation request the heating does not have to work and oppositely. Both systems can operate at same time as well. The water and electric heater do not operate as the post heaters only, they operate as solid-regular air heaters.

...Xroom unit 2in1 can replace the radiator (or electric convector) and save the space...

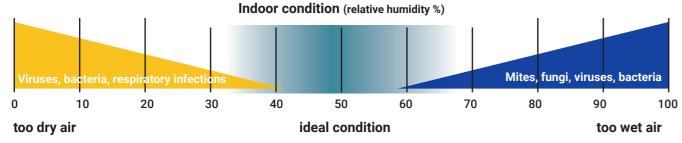


Effect CO₂ on human - CO₂ sensor in standard - simple solution

Sensors enable **automatic operation** of the unit. The unit operates only, when the inside quality of the air is worse than requested. When fulfilling the air quality request, such a solution generate only minimum ventilation **costs in the real operations!** This also means lower operation costs and faster paid back of the investment to ventilation unit purchase...

Effect of relative moisture of air on human - enthalpy regeneration

Enthalpic regeneration (ERV) means backwards gaining of the moisture from the extract air. The supplied air is so dry in the winter, that it can reduce the indoor relative humidity in the air below 20%. Such a low relative humidity cause drying-off the skin, mucous membrane and wood-made furniture and floors. Dry mucous membrane makes breathing less comfortable and cause respiratory diseases. Dehydration of the skin makes wrinkles and the drying-off the wood can damage furniture or floors. Ideal relative humidity inside should be around 50%. The solution is usage of **Enthalpic Recovery Exchanger** (Xvent recommends)



Technical parameters

XROOM-100			XR1-010-ECS0X		XR1-010-ECV1X		XR1-010-ECE1X		XR1-010-ECS0P		XR1-010-ECV1P		XR1-010-ECE1P		
Type of recovery exchanger			HRV	ERV	HRV	ERV	HRV	ERV	HRV	ERV	HRV	ERV	HRV	ERV	
preheater			-		-		-		electric (0,27kW)						
Unit equipment	heating		-		water		electric		-		water		electric		
Nominal heating output / boost*		m3/h	100 / 215 (HRV) , 90 / 205 (ERV)												
Heating output range**		kW	-		0,33 - 1,38		0,5				0,33 - 1,38		0,5		
Noise level***		dB (A)	32,1												
Weight****		kg	16,3		18,3		19,3		16,8		18,8		19,8		
Volume of water in the exchanger		I	-		0,51		-		-		0,51		-		
Power supply		V/Hz	1 ~ 230 / 50-60												
Nominal power input / boost*		W	30 / 167		30 / 165		530 / 667		300 / 437		300 / 437		800 / 937		
Nominal current / boost*		Α	0,3	/ 1,32	0,3 / 1,32		2,5 / 3,5		1,5 / 2,5		1,5 / 2,5		3,7 / 4,7		
Recovery effici-	heat	%	87	90	87	90	87	90	87	90	87	90	87	90	
ency EN308	moisture	%	-	85	-	85	-	85	-	85	-	85	-	85	
Protection		IP	20												
Energy efficiency class (SEC)		-	cold climate A + (-47 HRV, -45,9 ERV); medium climate A (-40,4 HRV, -38,9 ERV); warm climate A (-34,1 HRV), warm climate B(-33,1 ERV)												

XROOM-250			XR1-025-ECS0X		XR1-025-ECV1X		XR1-025-ECE1X		XR1-025-ECS0P		XR1-025-ECV1P		XR1-025-ECE1P		
Type of recovery exchanger			HRV	ERV	HRV	ERV	HRV	ERV	HRV	ERV	HRV	ERV	HRV	ERV	
preheater			-		-		-		electric (0,54kW)						
Unit equipment	heating		-		water		electric		-		water		electric		
Nominal heating output / boost*		m3/h	250/ 350 (HRV) , 240 / 335 (ERV)												
Heating output range**		kW	-		1,34 - 3,49		1				1,34 - 3,49		1		
Noise level***		dB (A)	32,6												
Weight****		kg	36		39,4		41,2		37		40,4		42,2		
Volume of water in the exchanger		I	-		1,17		-		-		1,17		-		
Power supply		V/Hz	1 ~ 230 / 50-60												
Nominal power input / boost*		W	61 /	/ 169	61 / 169		1061 / 1169		479 / 709		480 / 709		1480 / 1709		
Nominal current / boost*		Α	061	/ 1,42	0,61 / 1,42		5 / 5,8		3 / 3,8		3 / 3,8		7,3 / 8,2		
Recovery effici-	heat	%	87	86	87	86	87	86	87	86	87	86	87	86	
ency EN308	moisture	%	-	75	-	75	-	75	-	75	-	75	-	75	
Protection		IP	20												
Energy efficiency class (SEC)		-	cold climate A+ (-47,5 HRV, -47,2 ERV); medium climate A (-40,5 HRV, -40,2 ERV); warm climate A (-34,6 HRV, -34,4 ERV)												

^{*} BOOST(intensive ventilation - 10mi



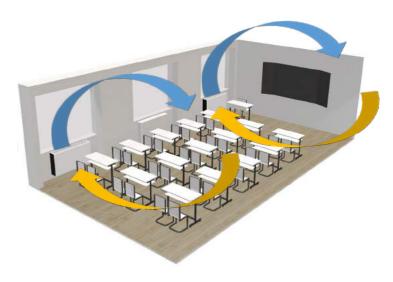




Basic dimensions



Room ventilation scheme



^{**} water temperature 75/60°C, inlet air temperature 20°C,

^{***} sound pressure level in 3m (free space),

^{****} unit weight (without water and packaging)

In offices... ...for higher productivity...



In schools... ...for better concentration...



In hotels... ...for healthier sleep...

In living rooms... ...for better air quality...



In hospitals... ...fresh air without opening windows...







+420 467 070 233 office@xvent.cz

Xvent s.r.o. Poděbradská 289 53009 Pardubice Czech Republic