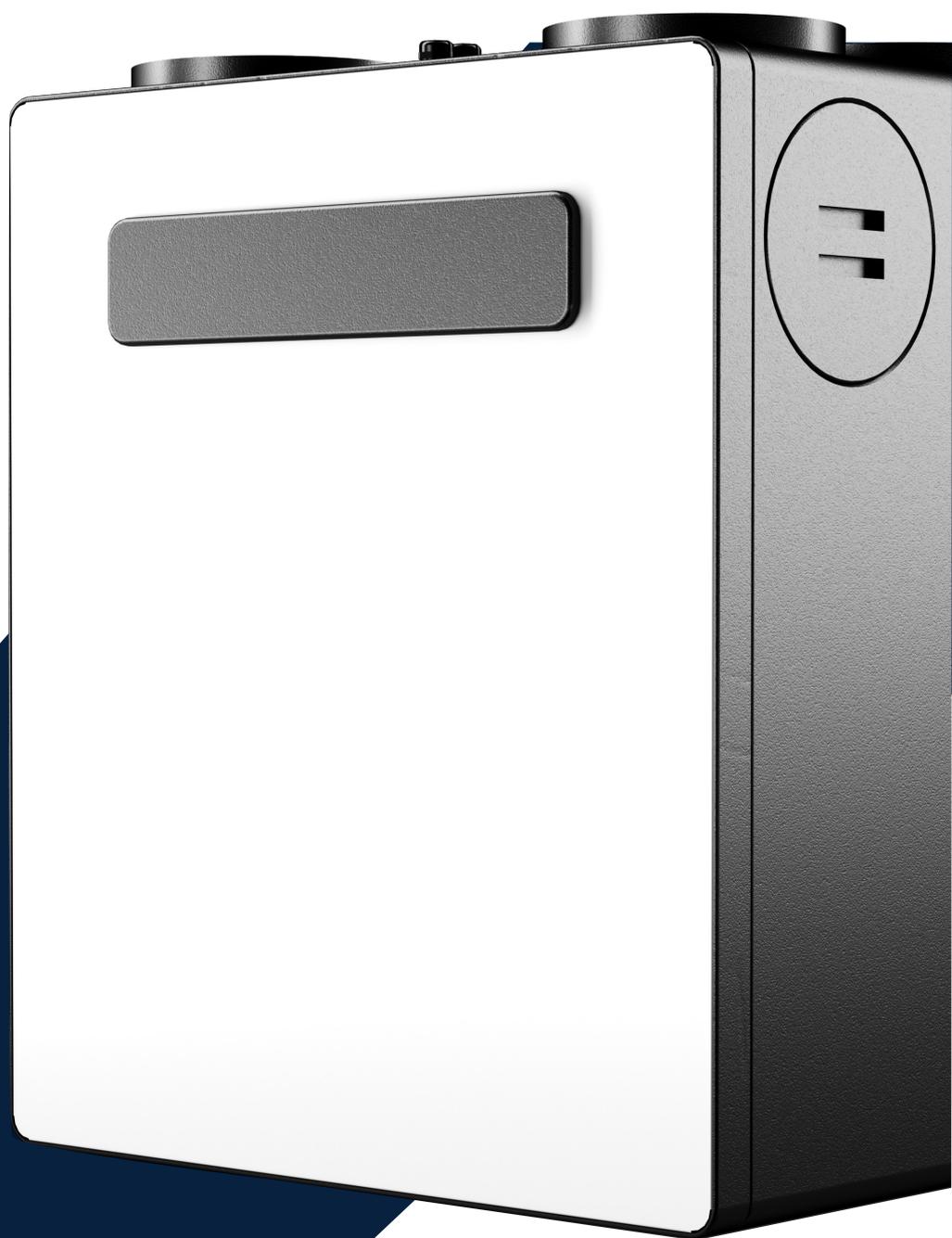


# XHOUSE 350|500

## Technical datasheet



MADE IN CZECH REPUBLIC



**Xvent**

[www.xvent.cz](http://www.xvent.cz)

# For larger apartments and houses

## Heat and moisture recovery exchanger

### High flexibility

### Integrated preheater

The **Xhouse 350/500** is a compact and highly efficient heat recovery unit designed for modern family homes and larger apartments. Thanks to the **MultiFlow** system, it offers two air outputs in one unit (350/300 m<sup>3</sup>/h or 500/400 m<sup>3</sup>/h), so it adapts perfectly to the needs of the property.

The unit uses a counter-flow heat exchanger (HRV) or enthalpy heat exchanger (ERV) to recover both heat and moisture. An **integrated Wi-Fi module**, the possibility of connection to a smart home (Modbus RTU) and automatic bypass ensure maximum comfort and easy operation.

2 PERFORMANCE VARIANTS

#### Xhouse 350

two possible nominal flow rates:  
300 or 350 m<sup>3</sup>/h

#### Xhouse 500

two possible nominal flow rates:  
400 or 500 m<sup>3</sup>/h

Removable metal sheet cover (RAL9016)

Low SFP =  
Low energy consumption



**Integrated preheater + possibility of an external afterheater.** Afterheater is activated automatically and only when the unit is in operation.



**Wi-Fi module** integrated in unit (Xvent web-app available)  
**Smart Home systems connectivity (Modbus RTU protocol)**

**Great performance**  
**Left and right version in one**  
**MultiFlow**  
**300–350 and 400–500 m<sup>3</sup>/h**  
**Light weight (Only 35 kg)**

**EPP insulated sockets** for connecting pipes from the front and side.

**Long-life filters** - filtration classes M5 (ePM 10 55%), alt. F7 (ePM1 50%)



## MULTIFLEX system

makes the unit **extremely versatile**  
Switching between left and right versions with a button on the unit body.



SCAN FOR MORE INFORMATION

**Automatic 2-flap bypass channel**

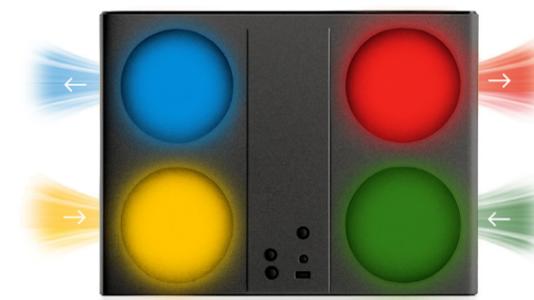
**The nom. flow rate setting** from 300 to 350 m<sup>3</sup>/h or from 400 to 500 m<sup>3</sup>/h can be switched by a button on the unit body.

**The unit body** is made of black EPP (expanded polypropylene) with metal cover on top.



**Wall mounted control panel** as optional accessory.

LEFT EXECUTION



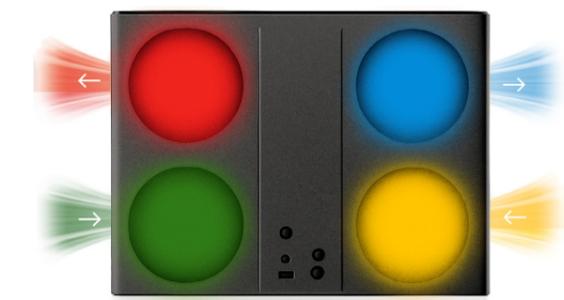
SUP

SUP  
Supply air

EHA

EHA  
Exhaust air

RIGHT EXECUTION



ETA

ETA  
Extract air

ODA

ODA  
Outdoor air

### General data Xhouse350

		XHOUSE 350			
		XH3-035-ECS0HR XXX-1A0	XH3-035-ECS0ER XXX-1A0	XH3-035-ECS0HR XXX-1A0	XH3-035-ECS0ER XXX-1A0
HEAT RECOVERY EXCHANGER TYPE	-	HRV	ERV	HRV	ERV
NOM. AIRFLOW (EPD 200 Pa) *	m³/h	300	300	350	350
EFFICIENCY EN 13141-7 HEAT ****	%	92,2	83,5	91,3	81,6
EFFICIENCY EN 13141-7 MOISTURE ****	-	-	71,3	-	68
NOISE LEVEL **	dB(A)	37,2	37,2	39,8	39,8
NOMINAL INPUT	W	70	73	99	102
DIMENSIONS / CONNECTIONS	mm	830x760x550 / Ø 200 internal, 250 external			
POWER SUPPLY	V/Hz	1 ~ 230 / 50-60			
IP RATING	IP	20			
WEIGHT ***	kg	35			
ENERGY EFFICIENCY CLASS (SEC)		A+ / A+ / E			

\* Nom. flow rate is given at an external pressure loss of 200Pa

\*\* LpA in free space at a distance of 3m, Q2, nominal airflow

\*\*\* Unit weight without packaging

\*\*\*\* Efficiency stated at 70% nom. flow rate according to EN 308

### General data Xhouse500

		XHOUSE 500			
		XH3-050-ECS0HR XXX-1A0	XH3-050-ECS0ER XXX-1A0	XH3-050-ECS0HR XXX-1A0	XH3-050-ECS0ER XXX-1A0
HEAT RECOVERY EXCHANGER TYPE	-	HRV	ERV	HRV	ERV
NOM. AIRFLOW (EPD 200 Pa) *	m³/h	400	400	500	500
EFFICIENCY EN 13141-7 HEAT ****	%	90,5	80	88,8	77
EFFICIENCY EN 13141-7 MOISTURE ****	-	-	65	-	59,9
NOISE LEVEL **	dB(A)	35,6	35,6	37,3	37,3
NOMINAL INPUT	W	225	232	352	360
DIMENSIONS / CONNECTIONS	mm	830x760x550 / Ø 200 internal, 250 external			
POWER SUPPLY	V/Hz	1 ~ 230 / 50-60			
IP RATING	IP	20			
WEIGHT ***	kg	35			
ENERGY EFFICIENCY CLASS (SEC)		A+ / A+ / E			

\* Nom. flow rate is given at an external pressure loss of 300Pa

\*\* LpA in free space at a distance of 3m, Q2, nominal airflow

\*\*\* Unit weight without packaging

\*\*\*\* Efficiency stated at 70% nom. flow rate according to EN 308

### SFP / SPI Xhouse350|500

	SFP	Nominal airflow - ECODESIGN (m³/h)	Power consumption - fan (W)	Power consumption - control (W)	Power consumption - complete unit (W)	SPI
XH3-035 (300m³/h)	0,240	210	50	3	53	0,25
XH3-035 (350m³/h)	0,270	245	66	3	69	0,28
XH3-050 (400m³/h)	0,271	280	76	3	79	0,28
XH3-050 (500m³/h)	0,370	350	130	3	133	0,38

### Controls

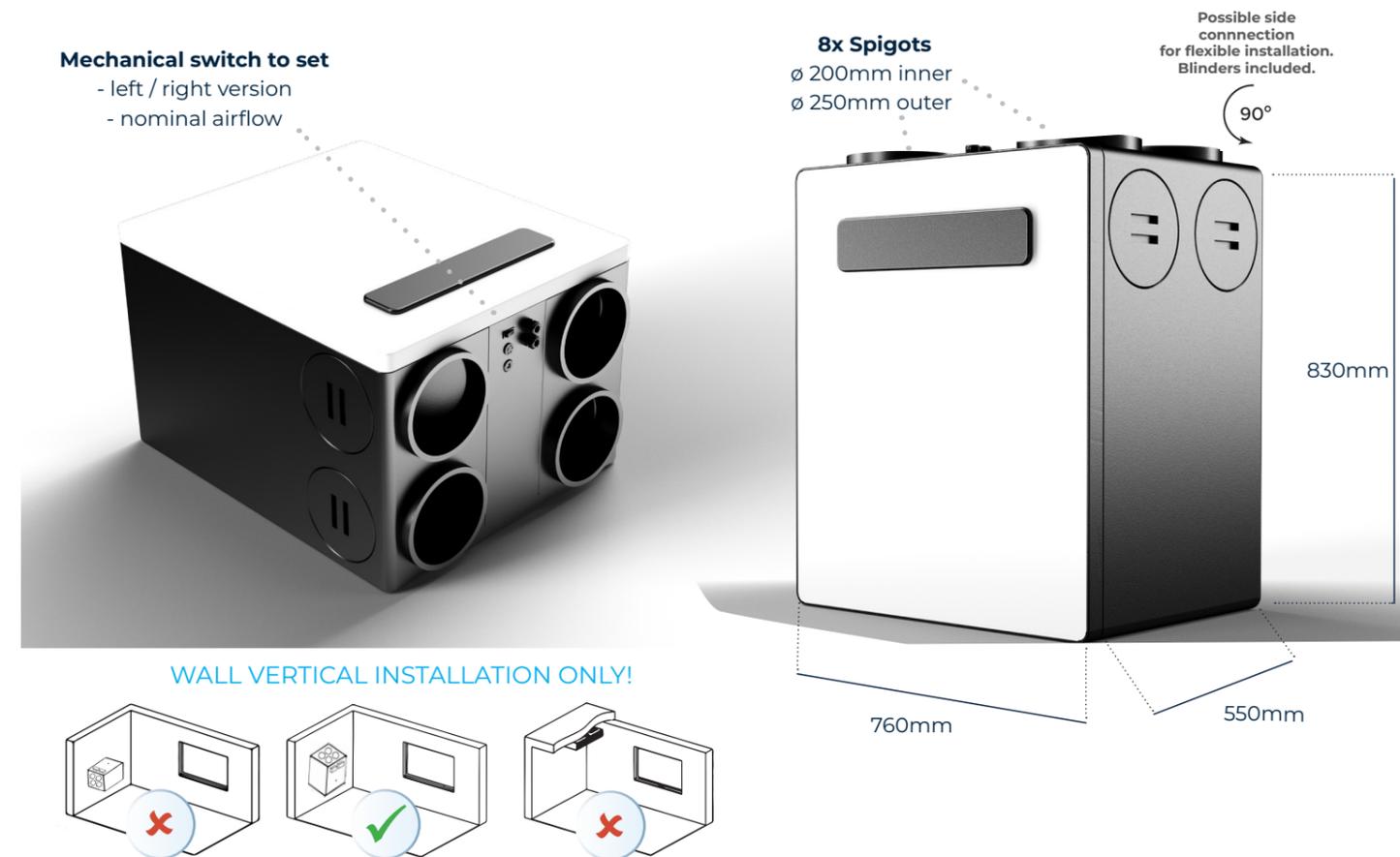
Xhouse350|500

	WI-FI MODULE	WIRED WALL TOUCH-CONTROLLER	RF CONTROLLER
CONTROL TYPE	WIFI	EXTERNAL ACCESSORY OPTIONAL	EXTERNAL ACCESSORY OPTIONAL
CONNECTION	via Web-App	LAN CABLE (10m in delivery)	RF (wireless)
MODE SETTING AUTOMATIC / MANUAL	✓	✓	✓
FILTER / ERROR INDICATION	✓	✓	✓
BOOST ACTIVATION	✓	✓	✓
BY-PASS (FREECOOLING) ACTIVATION	✓ automatic	✓ automatic	✗
OFFSET SETTING (FANS DISBALANCE)	✓	✓	✗
TIMER SETTING	✓	✓	✗
BMS	MODBUS RTU	MODBUS RTU	-

### Dimensions Xhouse350|500

Product code	Unit weight		Pallette size (W x L x H)*	Pieces on EUR pallet	
	Brutto	Netto			
	kg		mm	max. pcs	
Xhouse 350 500	XH3-035... XH3-050...	37	35	1200x800x2460	4

\* Package contains: Xhouse unit, quick manual and safety instructions



WALL VERTICAL INSTALLATION ONLY!

**Technical data**  
Xhouse350  
setting 300m<sup>3</sup>/h

SPEED LEVEL NO.	HEAT EXCHANGER (HRV)				ENTHALPIC EXCHANGER (ERV)				
	XH3-035-ECS0HRXAS-0A0				XH3-035-ECS0ERXAS-0A0				
	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	HUMIDITY EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)
MIN	50	95,5	0,14	13	50	90,3	84,2	0,15	13
MID	200	92,5	0,39	43	200	84	72,3	0,43	45
MAX	300	90	1,05	144	300	79,1	63,5	1,10	147
SFP point	210	92,2	0,39	49	210	83,5	71,3	0,41	50

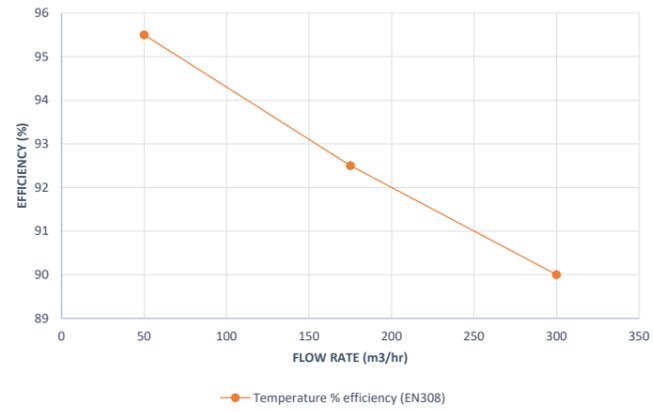
\* BOOST mode - intensive ventilation for a set period of time (ventilation intensity and ventilation time can be set in the customer menu)

**Technical data**  
Xhouse350  
setting 350m<sup>3</sup>/h

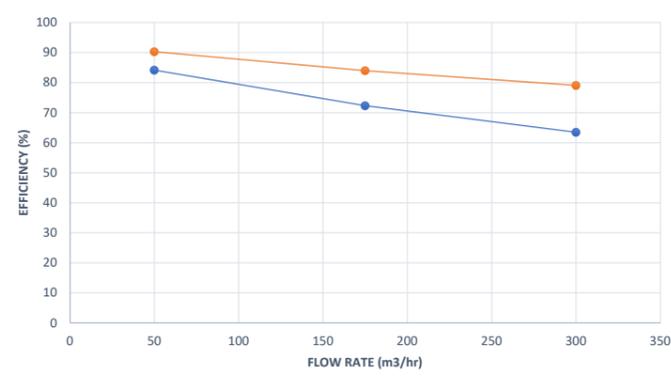
SPEED LEVEL NO.	HEAT EXCHANGER (HRV)				ENTHALPIC EXCHANGER (ERV)				
	XH3-035-ECS0HRXAS-0A0				XH3-035-ECS0ERXAS-0A0				
	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	HUMIDITY EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)
MIN	50	95,5	0,14	13	50	90,3	84,2	0,15	13
MID	240	91,5	0,45	58	240	81,9	68,5	0,5	60
MAX	350	88,8	1,37	194	350	77	59,9	1,40	197
SFP point	245	91,3	0,50	65	245	81,6	68	0,52	67

\* BOOST mode - intensive ventilation for a set period of time (ventilation intensity and ventilation time can be set in the customer menu)

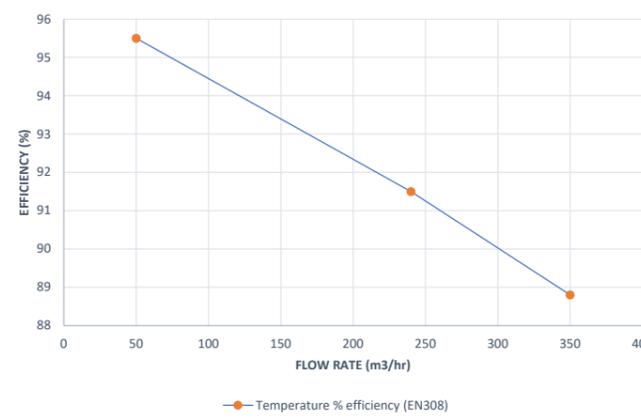
**RECOVERY EFFICIENCY (HRV)**  
XH3-035-ECS0HRXXX-1A0



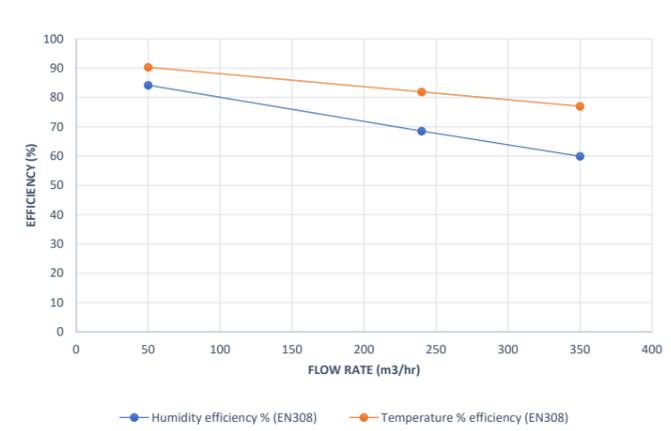
**RECOVERY EFFICIENCY (ERV)**  
XH3-035-ECS0ERXXX-1A0



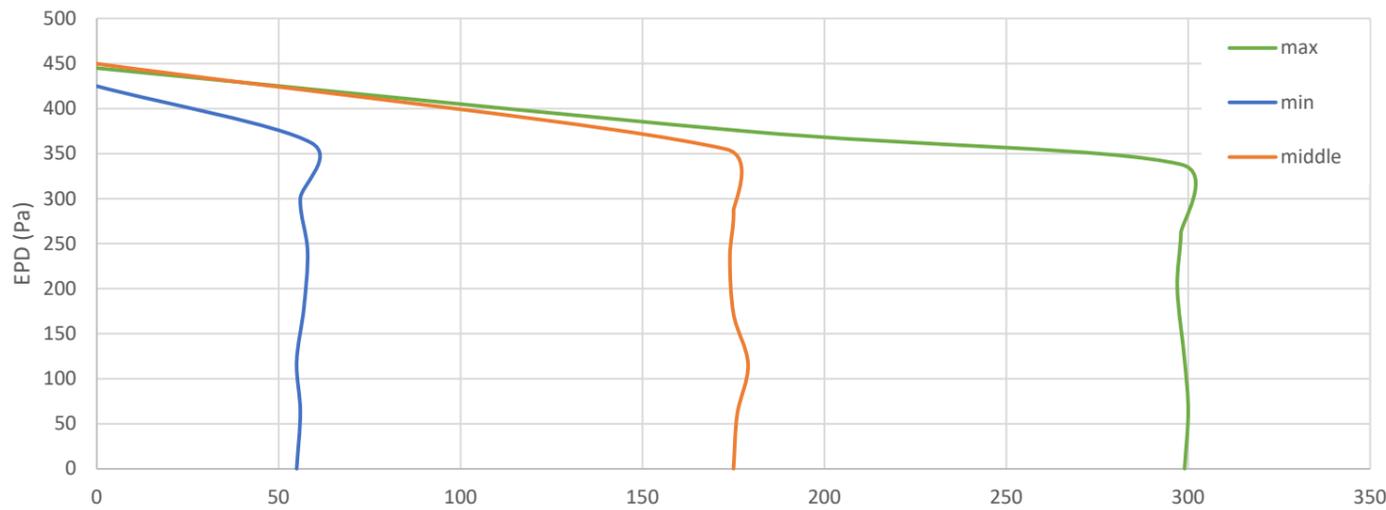
**RECOVERY EFFICIENCY (HRV)**  
XH3-035-ECS0HRXAS-0A0



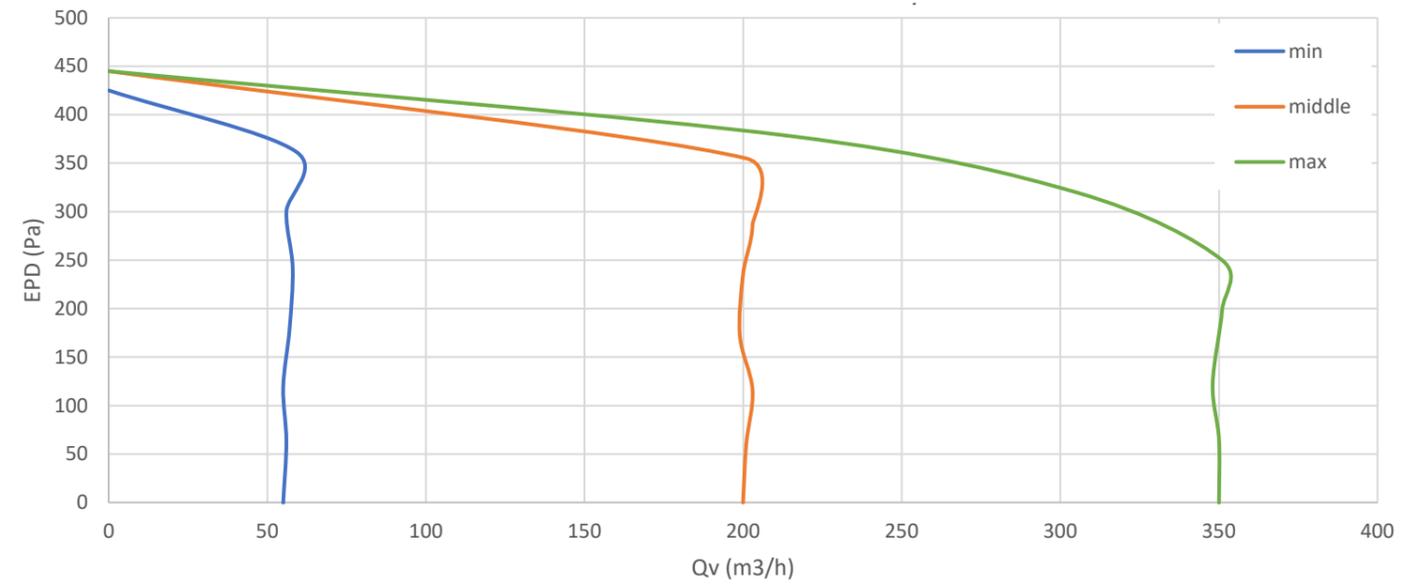
**RECOVERY EFFICIENCY (ERV)**  
XH3-035-ECS0ERXAS-0A0



**AIRFLOW / PRESSURE CHARACTERISTIC (HRV, ERV)**



**AIRFLOW / PRESSURE CHARACTERISTIC (HRV, ERV)**



**Technical data**  
Xhouse500  
setting 400m<sup>3</sup>/h

SPEED LEVEL NO.	HEAT EXCHANGER (HRV)				ENTHALPIC EXCHANGER (ERV)				
	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	HUMIDITY EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)
MIN	110	93,6	0,24	18	110	86,3	76,5	0,26	19
MID	225	91	0,59	75	225	82	67	0,6	77
MAX	400	87,8	1,60	227	400	75,2	57	1,62	230
SFP point	280	90,5	0,57	71	280	80	65	0,58	72

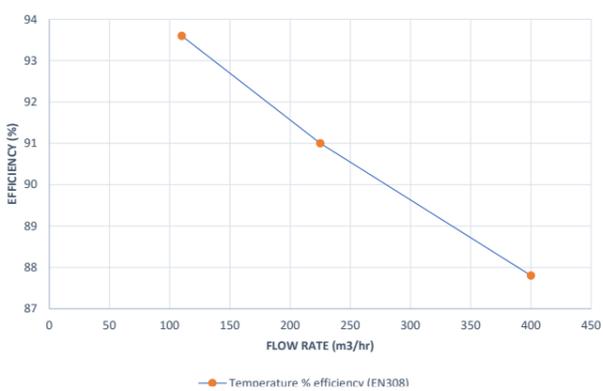
\* BOOST mode - intensive ventilation for a set period of time (ventilation intensity and ventilation time can be set in the customer menu)

**Technical data**  
Xhouse500  
setting 500m<sup>3</sup>/h

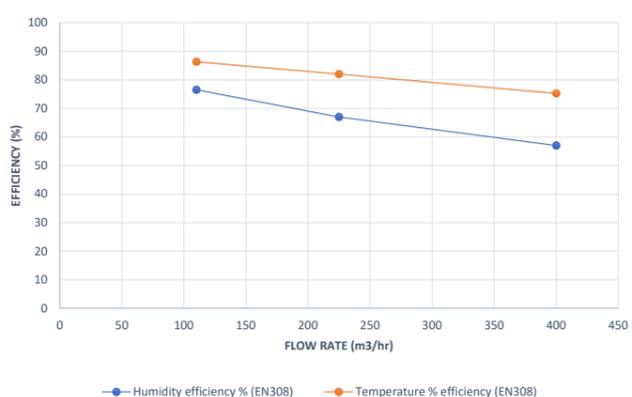
SPEED LEVEL NO.	HEAT EXCHANGER (HRV)				ENTHALPIC EXCHANGER (ERV)				
	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	HUMIDITY EFFICIENCY (EN308)	CURRENT (A)	POWER INPUT (W)
MIN	110	93,6	0,24	18	110	83,3	76,5	0,26	19
MID	360	88,6	0,78	75	360	76,6	59,3	0,8	77
MAX	500	85,9	2,60	387	500	72,3	52,9	2,65	392
SFP point	350	88,8	0,90	124	350	77	59,9	0,93	127

\* BOOST mode - intensive ventilation for a set period of time (ventilation intensity and ventilation time can be set in the customer menu)

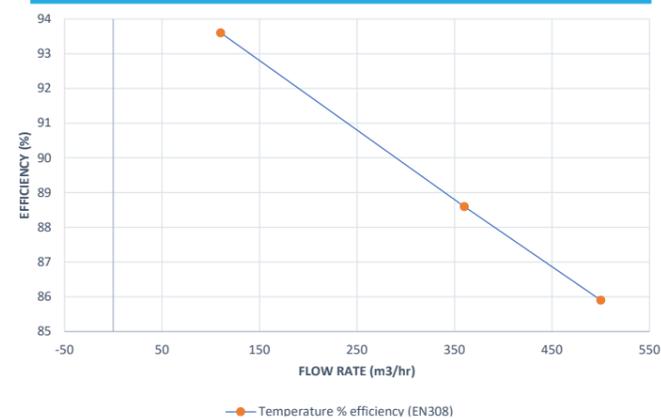
**RECOVERY EFFICIENCY (HRV)**  
XH3-050-ECS0HRXAS-0A0



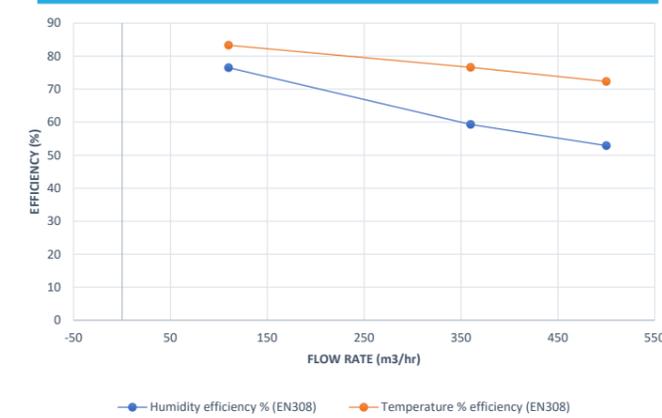
**RECOVERY EFFICIENCY (ERV)**  
XH3-050-ECS0ERXAS-0A0



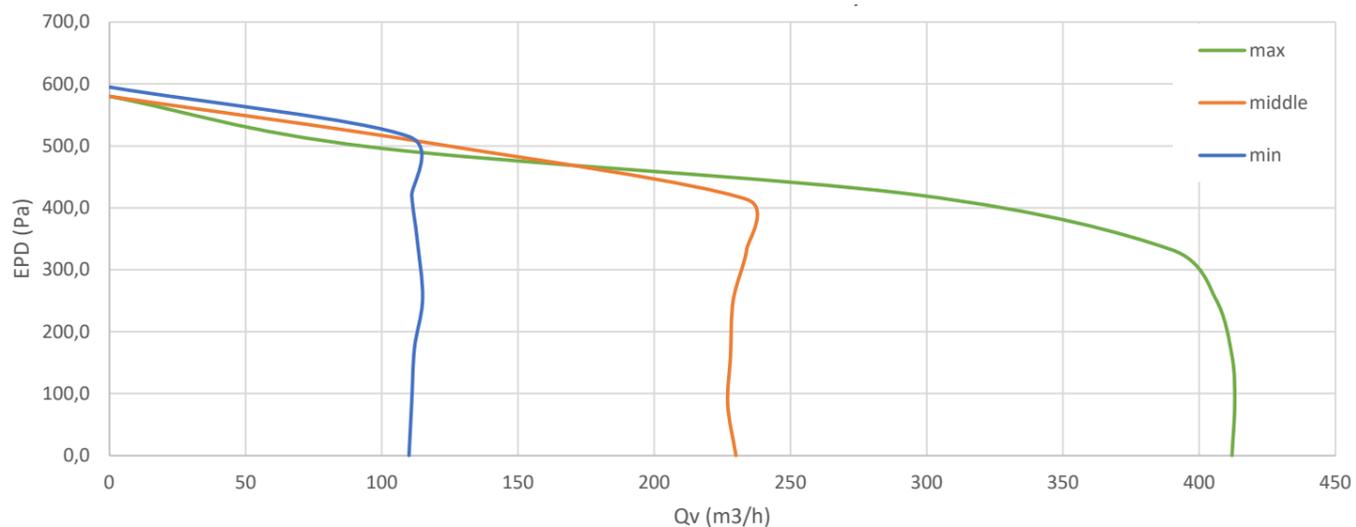
**RECOVERY EFFICIENCY (HRV)**  
XH3-050-ECS0HRXAS-0A0



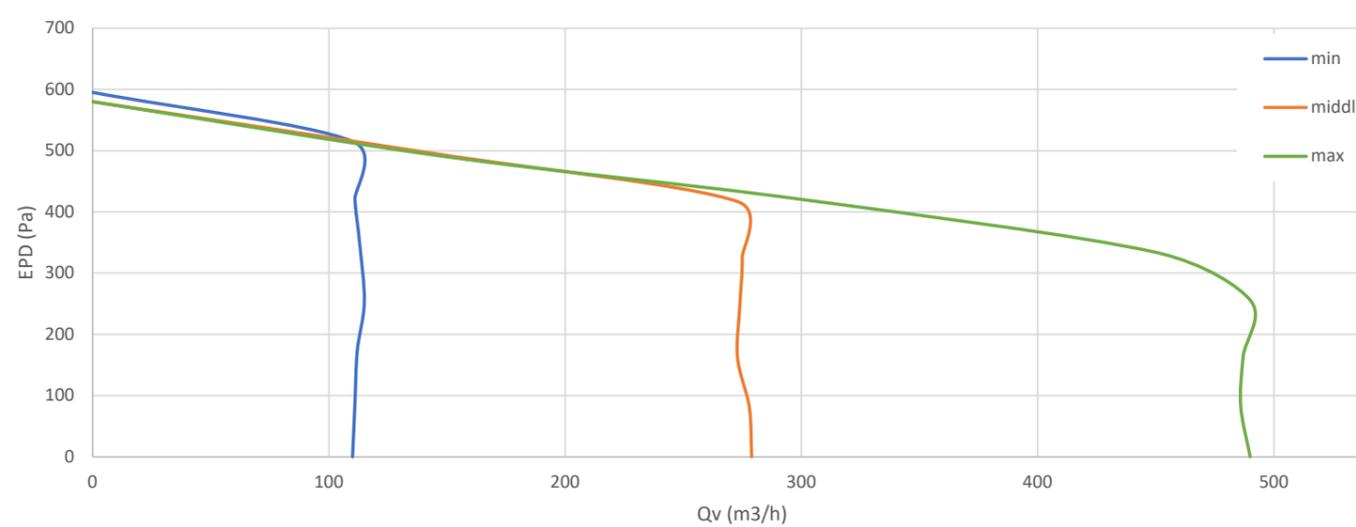
**RECOVERY EFFICIENCY (ERV)**  
XH3-050-ECS0ERXAS-0A0



**AIRFLOW / PRESSURE CHARACTERISTIC (HRV, ERV)**



**AIRFLOW / PRESSURE CHARACTERISTIC (HRV, ERV)**



**Acoustic data**  
Xhouse350  
setting 300m<sup>3</sup>/h

AIRFLOW LEVEL (m <sup>3</sup> )	XHOUSE 350 (HRV, ERV)								SOUND POWER LEVEL	SOUND PRESSURE LEVEL		
	XH3-035-ECS0xRXAS-xA0									(in the open field on the reflection plane)		
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]	LPA (dB) in 1m	LPA (dB) in 3m
MIN	dB	5,4	20,3	27,2	28,4	25,7	17,4	11,0	11,2	39,2	25,1	<20
MIDDLE	dB	21,0	37,7	39,2	37,9	39,5	34,5	25,3	18,6	49,3	35,1	27,7
MAX	dB	24,5	47,6	49,3	46,0	51,1	42,6	37,6	30,6	58,8	44,7	37,2
SFP POINT	dB	25,3	37,8	38,9	37,5	39,3	34,7	25,2	18,2	49,6	35,4	28,0

AIRFLOW CHANNEL	XHOUSE 350 (HRV, ERV)								SOUND POWER LEVEL	
	XH3-035-ECS0xRXAS-xA0									
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]
ODA	dB	39,4	44,8	46,5	31,8	38,0	32,9	34,0	22,6	55,0
SUP	dB	48,8	60,3	50,4	50,2	49,9	48,0	45,4	36,9	66,1
ETA	dB	41,4	41,0	46,7	34,7	35,7	33,8	33,9	26,2	55,4
EHA	dB	49,9	57,0	51,3	47,6	55,4	50,6	49,8	42,2	66,0

**Acoustic data**  
Xhouse350  
setting 350m<sup>3</sup>/h

AIRFLOW LEVEL (m <sup>3</sup> )	XHOUSE 350 (HRV, ERV)								SOUND POWER LEVEL	SOUND PRESSURE LEVEL		
	XH3-035-ECS0xRXAS-xA0									(in the open field on the reflection plane)		
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]	LPA (dB) in 1m	LPA (dB) in 3m
MIN	dB	5,4	20,3	27,2	28,4	25,7	17,4	11,0	11,2	39,2	25,1	<20
MIDDLE	dB	19,4	38,4	41,7	38,9	40,3	36,0	27,6	20,6	50,8	25,1	<20
MAX	dB	25,3	47,9	51,8	48,4	54,0	45,2	40,6	34,1	61,4	36,7	29,2
SFP POINT	dB	22,7	42,2	42,5	40,3	41,8	37,3	30,0	22,4	52,6	38,5	31,0

AIRFLOW CHANNEL	XHOUSE 350 (HRV, ERV)								SOUND POWER LEVEL	
	XH3-035-ECS0xRXAS-xA0									
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]
ODA	dB	39,4	46,5	48,7	34,3	42,2	36,1	35,8	25,2	57,0
SUP	dB	48,9	59,7	53,1	53,9	52,0	51,1	48,8	39,8	67,7
ETA	dB	40,1	43,4	48,7	37,5	39,7	36,2	37,0	29,5	56,9
EHA	dB	48,4	57,5	53,5	50,4	56,7	52,8	51,5	44,7	67,7

**Acoustic data**  
Xhouse500  
setting 400m<sup>3</sup>/h

AIRFLOW LEVEL (m <sup>3</sup> )	XHOUSE 500 (HRV, ERV)								SOUND POWER LEVEL	SOUND PRESSURE LEVEL		
	XH3-050-ECS0xRXAS-xA0									(in the open field on the reflection plane)		
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]	LPA (dB) in 1m	LPA (dB) in 3m
MIN	dB	14,6	26,5	31,9	35,1	32,2	22,8	16,5	12,2	43,8	29,7	22,2
MIDDLE	dB	19,3	37,7	44,2	46,1	45,6	38,6	29,0	24,4	55,4	41,2	33,8
MAX	dB	25,3	46,9	52,4	53,8	52,5	47,2	39,2	35,3	63,3	49,1	41,7
SFP POINT	dB	19,9	38,2	43,5	44,3	44,1	37,1	27,6	23,0	54,0	39,9	32,4

AIRFLOW CHANNEL	XHOUSE 500 (HRV, ERV)								SOUND POWER LEVEL	
	XH3-050-ECS0xRXAS-xA0									
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]
ODA	dB	38,5	42,8	49,1	41,9	39,5	38,0	34,7	31,1	56,3
SUP	dB	46,7	58,3	54,4	52,4	54,5	51,5	48,9	41,8	67,2
ETA	dB	37,4	45,6	51,0	39,5	40,8	37,0	35,6	30,0	56,9
EHA	dB	45,8	58,3	54,0	56,3	50,6	50,5	45,2	37,3	67,1

**Acoustic data**  
Xhouse500  
setting 500m<sup>3</sup>/h

AIRFLOW LEVEL (m <sup>3</sup> )	XHOUSE 500 (HRV, ERV)								SOUND POWER LEVEL	SOUND PRESSURE LEVEL		
	XH3-050-ECS0xRXAS-xA0									(in the open field on the reflection plane)		
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]	LPA (dB) in 1m	LPA (dB) in 3m
MIN	dB	14,6	26,5	31,9	35,1	32,2	22,8	16,5	12,2	43,8	29,7	22,2
MIDDLE	dB	20,8	40,7	46,3	47,9	47,2	41,1	31,9	27,8	57,3	43,2	35,7
MAX	dB	29,2	49,5	56,8	59,4	56,2	52,0	44,4	40,2	67,7	53,6	46,1
SFP POINT	dB	23,1	42,9	49,3	49,9	47,9	42,5	33,9	29,6	59,2	45,1	37,6

AIRFLOW CHANNEL	XHOUSE 500 (HRV, ERV)								SOUND POWER LEVEL	
	XH3-050-ECS0xRXAS-xA0									
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]
ODA	dB	41,0	45,1	52,6	46,7	42,8	42,0	39,0	35,7	59,7
SUP	dB	48,1	60,8	59,3	58,7	59,1	57,3	54,1	46,9	71,6
ETA	dB	39,9	48,5	55,8	43,5	44,1	41,2	40,7	34,9	60,9
EHA	dB	47,8	61,1	58,6	60,7	55,0	56,5	50,7	42,0	70,8

## Accessories

### Xhouse350|500

**Wall controller**  
XCONT-TR-CENT-COMFORT

**Wall controller (incl. 10m cable)** - possibility to control the airflow (7 speeds), ventilation mode, bypass, boost and free-cooling mode. Filter and error indication diode (LED)



**RF controller**  
RF-REMOTE-CONTROLLER

**RF controller** - possibility to control the airflow and boost. Filter and error indication diode. Battery powered (batteries included). Receiver already in-built in heat recovery unit.



SPARE FILTERS (set of 2pcs)			
<b>M5 - Coarse 90% ISO 16890</b>	<b>F7 - ePM1 50 % ISO 16890</b>	<b>F9 - ePM1 80 % ISO 16890</b>	<b>G4 with Active Carbon ePM2,5 60% ISO 16890</b>
XH3-035/050-FILTER-M5	XH3-035/050-FILTER-F7	XH3-035/050-FILTER-F9	XH3-035/050-FILTER-G4/AC



AQS SENSORS				
	Wall mounted - wired	Wall in-built	Duct	Wall mounted - wireless
<b>CO<sub>2</sub></b>	NL-ECO-CO2-P111	NL-ECO-CO2-MINI-D-P111	NL-ECO-CO2-D-P111	NLB-CO2-5-MRF-P111
<b>RH</b>	NL-ECO-RH-P111	NL-ECO-RH-MINI-D-P111	NL-ECO-RH-D-P111	NLB-RH+T-MRF-P111
<b>CO<sub>2</sub> + RH</b>	NLII-CO2+RH-D-P111	-	-	NLB-CO2+RH+T-5-MRF-P111
<b>RECEIVER FOR WIRELESS SENSORS</b>	-	-	-	NL-MRF-RX-CO2+RH-P111

- after switching the unit to automatic mode, the air flow is regulated based on the CO<sub>2</sub> / RH concentration in the room. Combined sensor always records the highest value.

**Radon sensor**  
NL-ADS-RN3

**Radon sensor** - Wired sensor for real-time monitoring of radon activity and ventilation control. After switching the unit to automatic mode, the air flow is regulated based on the Radon concentration in the room.



**AQS Extension**  
PRO-SUM-08-D-P111

**AQS extension** - allows to connect up to 8 pcs of air quality sensors (of same type, not combinable).



**Duct pre-heater**  
EK-PH-200-1,0-1F

**Duct pre-heater** - external duct air preheater with a power of 1,0 kW as additional anti-freeze protection.



**Duct after-heater**  
EK-AH-200-1,2-1F

**Duct after-heater** - external duct afterheater with a power of 1,2 kW with integrated thermostat and external temperature sensor.



**Duct water-heater/cooler**  
CWC-160-3

**Duct water-heater/cooler (ø 160mm)** - external duct water coil heater/cooler.

## Coding

### Xhouse350|500

**035**  
Airflow  
300-350 m³/h

**050**  
Airflow  
400-500 m³/h

**S0**  
Without  
afterheater

**X**  
Without  
preheater

**P**  
With  
preheater

**W**  
Wi-Fi  
controls

**A**  
Standard  
color

# XH3-035-EC S0 HR X R W-1 A 0

**XH3**  
Xhouse unit

**EC**  
Ventilator  
with EC motor

**HR**  
Heat  
recovery

**ER**  
Heat and moisture  
recovery

**R**  
Right execution  
(standard)

**L**  
Left  
execution

**U**  
Universal  
execution

**1**  
Mechanic  
bypass

**0**  
Reserve



**Xhouse has to be operated in indoor and dry space with temperature between +5°C up to +40°C.**

The unit can be installed on both the wall (horizontally, vertically) and the ceiling.

Fastening is done with self-tapping screws and washers into the prepared holes in the EPP body.

**Xhouse equipped with heat exchanger (HRV) may produce condensate and so it is necessary to cut off the relevant condensate drain and connect condensate tubes!**

**Xvent** | Beauty in simplicity

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

+420 467 070 233  
office@xvent.cz  
www.xvent.cz

