

# XHOUSE300

## Technical datasheet



# For apartments and smaller houses

## Heat and moisture recovery exchanger

### Easy installation

### Wi-Fi controls

### Constant flow EC fans

The **Xhouse 300** is a modern heat recovery unit designed for apartments and smaller family houses, providing continuous air exchange without heat loss. High efficiency **counter-flow heat exchanger (HRV) or enthalpy heat exchanger (ERV) recovers up to 89% of the heat** while significantly improving the quality of the indoor environment.

The unit may be equipped with **integrated PTC preheater**, high quality **M5/F7/F9 filtration** and **smart Wi-Fi control**, so you can control your ventilation from anywhere. Smart home support via **Modbus RTU** allows interfacing with other systems. The automatic mode with **CO<sub>2</sub>** and humidity sensors ensures optimal performance according to the current needs of your home.

**Lightweight EPP construction**, easy installation and quiet operation make the Xhouse 300 the ideal solution for modern healthy living where the emphasis is on energy saving, comfort and clean air.

**Xhouse 300 - smart ventilation with maximum efficiency.**

#### 01

Possibility to connect **external afterheater (up to 1kW)**. The unit will only allow afterheater when it is in operation. **After-cooling function** after unit shut-down (3min).

#### 02

The controls offer the **option of remote control via Wi-Fi module** or **Smart Home systems (via Modbus RTU)**.

#### 03

**Energy class A** qualifies Xhouse300 for subsidy programs.

#### 04

Automatic ventilation with **CO<sub>2</sub>** and/or **RH sensor**.

#### 05

**Electronic** or **mechanical** bypass.



**Built-in Wi-Fi module** is used to control the unit via Xvent web-app

**Integrated preheater** consisting of safe PTC elements and automatic power regulation.

**Insulated spigots** for simple and safe connection of air ducts.

**Long-life filters** filtration class **M5** (alt. **F7,F9, carbon G4**)

**Heat recovery or heat and moisture recovery** (enthalpy recovery).

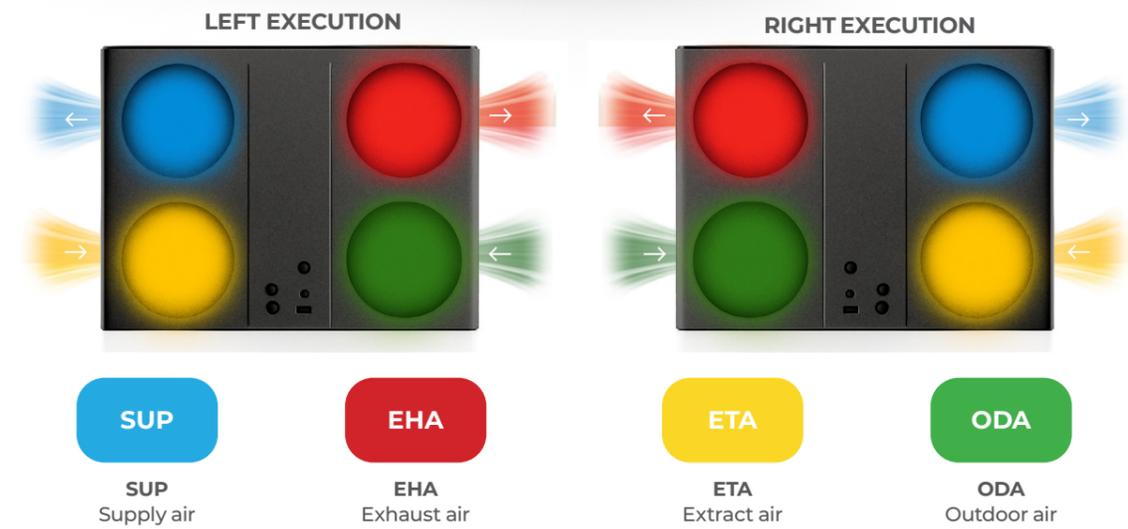
The **casing** is made of black **EPP** (expanded polypropylene).



Very low power consumption = **low SFP.**

The **front metal cover** is removable and secured with screws.

## AIRFLOW DIAGRAM



## General data Xhouse300

		XH3-030-ECS0HR XXX-XA0	XH3-030-ECS0ER XXX-XA0
HEAT RECOVERY EXCHANGER TYPE		HRV	ERV
PREHEATER (INTERNAL)		electric 1,2 kW (+12°C)	electric 1,2 kW (+12°C)
NOMINAL AIRFLOW @ EPD 200 Pa	m <sup>3</sup> /h	<b>300</b>	
NOISE LEVEL LWA (LPA) *	dB(A)	56,8 (35,3)	
WEIGHT **	kg	24	25
POWER SUPPLY	V/Hz	1 - 230 / 50-60	
NOMINAL INPUT ****	W	180	180
NOMINAL CURRENT ****	A	1,3	1,3
EFFICIENCY EN 13141-7 HEAT / MOISTURE ***	%	89,7 / —	78,0 / 54,0
IP RANGE	IP	20	
ENERGY EFFICIENCY CLASS (SEC)	-	-39,6 (A) / -42,8 (A+)	-36,6 (A) / -40,5 (A)

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

\*\* Unit weight without packaging

\*\*\* Efficiency stated at 70% of nominal flow rate according to EN 308

\*\*\*\* Power consumption, current (at nominal airflow/200Pa)

## SFP / SPI Xhouse300

	SFP (W/m <sup>3</sup> /h)	Nominal airflow - ECODESIGN (m <sup>3</sup> /h)	Power consumption - fan (W)	Power consumption - control (W)	Power consumption - complete unit (W)	SPI (W/m <sup>3</sup> /h)
XH3-030 (300M <sup>3</sup> /H)	0,24	210	50	3	53	0,25

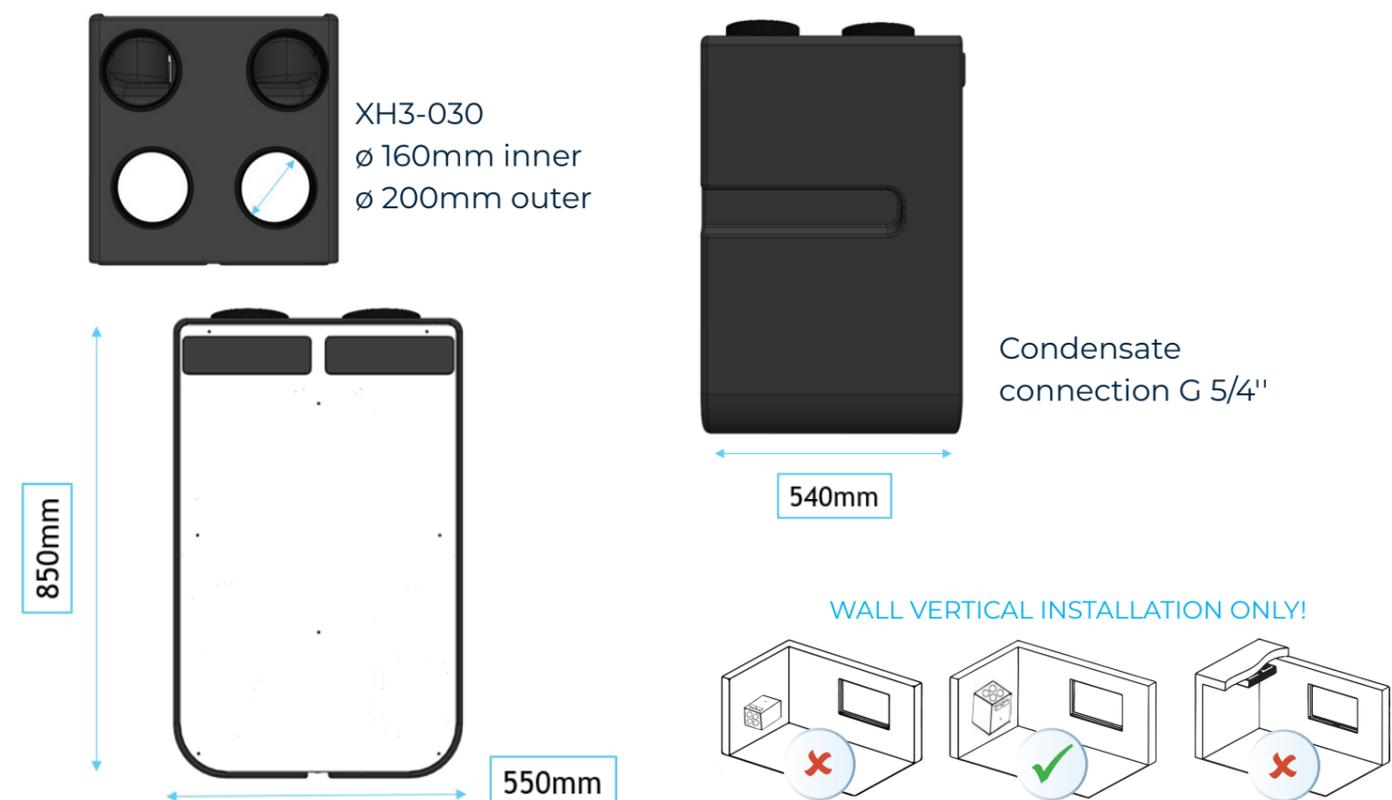
## Controls Xhouse300

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

## Dimensions Xhouse300

	Product code	Weight		Pallet size (W x L x H)*	Pieces on EUR pallet
		Brutto	Netto		
		kg		mm	max. pcs
<b>Xhouse 300</b>	XH3-030-ECS0HRXXX-XA0	25	24	1200x1000x2200	8
	XH3-030-ECS0ERXXX-XA0	26	25	1200x1000x2200	8

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



## Technical data Xhouse300

SPEED LEVEL NO.	HEAT EXCHANGER (HRV)				ENTHALPIC EXCHANGER (ERV)				
	XH3-030-ECS0HRxxx-xA0				XH3-030-ECS0ERxxx-xA0				
	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	CURRENT (A)	POWER SUPPLY (W)	FLOW RATE (m <sup>3</sup> /h)	TEMPERATURE % EFFICIENCY (EN308)	HUMIDITY EFFICIENCY (EN308)	CURRENT (A)	POWER SUPPLY (W)
1	49	92,3	0,11	8	49	87,6	63,9	0,11	8
2	90	91,7	0,15	17	90	85,2	61,6	0,15	17
3	125	91	0,20	25	125	82,6	59,2	0,20	25
4	166	90,4	0,35	45	166	80,6	57,1	0,35	45
5	211	89,7	0,60	75	211	78,3	54,8	0,60	75
6	253	89,1	0,87	116	253	76,2	52,7	0,87	116
7**	300	88,4	1,30	180	300	73	50	1,30	180
Boost *	300	88,4	1,30	180	300	73	50	1,30	180
ECODESIGN***	210	89,7	0,50	50	210	78	54	0,50	50

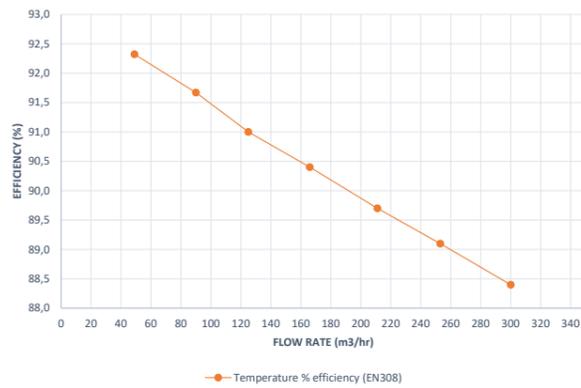
\* BOOST mode - intensive ventilation for a set period of time (ventilation intensity and ventilation time can be set in the customer menu)

\*\* EPD = 200Pa

\*\*\* 70% of nominal airflow

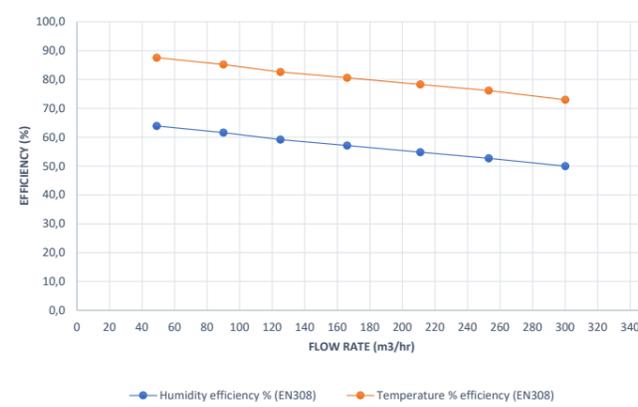
### RECOVERY EFFICIENCY (HRV)

XH3-030-ECS0HRxxx-xA0



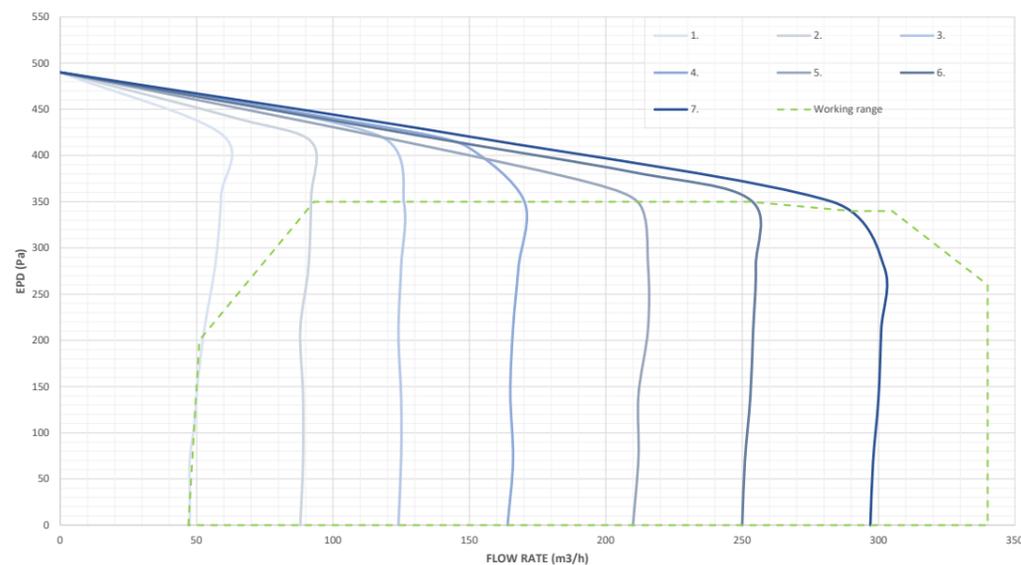
### RECOVERY EFFICIENCY (ERV)

XH3-030-ECS0ERxxx-xA0



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

XH3-030-ECS0xxxx-xA0



## Acoustic data Xhouse300

AIRFLOW LEVEL (m <sup>3</sup> )	XH3-030-ECS0xxxx-xA0 (unit radiating in the interior)									SOUND POWER LEVEL	SOUND PRESSURE LEVEL (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 1,5m	LPA (dB) in 3m
MIN	dB	0,0	0,2	14,4	25,0	16,4	6,8	0,2	0,0	28,6	<20	<20
MID	dB	23,0	34,7	36,4	34,4	42,2	35,8	28,4	21,5	49,5	35,5	27,9
MAX *	dB	25,7	38,6	42,4	39,9	50,8	43,1	37,8	30,2	56,8	42,8	35,3
SPF point **	dB	28,9	33,6	32,8	33,5	41,2	37,0	27,6	20,3	49,5	35,5	28,0

\* 300m<sup>3</sup>/h / 200Pa EPD

\*\* 70% of nominal airflow / 50 Pa

### XH3-030-ECS0xxxx-xA0 (unit radiating in the duct)

AIRFLOW CHANNEL		XH3-030-ECS0xxxx-xA0 (unit radiating in the duct)									SOUND POWER LEVEL
			63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	LWA [dB (A)]
ODA	MIN	dB	0,0	7,8	10,4	15,4	6,2	0,0	0,0	0,0	21,4
	MID	dB	35,1	34,5	29,4	28,9	28,3	25,6	17,8	15,4	44,8
	MAX*	dB	42,2	46,9	41,4	40,3	38,8	36,2	30,5	28,9	56,2
	SFP*	dB	35,1	37,1	31,9	30,4	30,3	27,1	17,4	13,9	45,2
SUP	MIN	dB	8,6	16,7	13,7	23,1	25,5	14,7	8,8	0,1	31,4
	MID	dB	36,5	44,1	44,3	38,7	35,1	16,6	3,3	16,0	55,6
	MAX*	dB	43,1	54,0	57,1	50,0	42,7	28,5	16,9	31,0	65,9
	SFP*	dB	36,2	44,4	45,2	39,8	35,7	17,6	4,2	17,3	56,0
ETA	MIN	dB	7,1	4,2	9,2	4,9	3,6	0,0	0,0	0,0	21,2
	MID	dB	36,5	34,7	30,8	27,5	28,2	25,1	16,4	12,3	43,9
	MAX*	dB	42,1	46,7	41,2	37,8	38,9	34,1	31,7	27,2	54,7
	SFP*	dB	34,4	32,9	32,1	28,9	31,1	27,5	18,5	14,2	44,1
EHA	MIN	dB	19,5	17,9	17,5	20,5	21,6	13,7	3,8	0,0	31,9
	MID	dB	39,7	43,1	42,8	37,8	33,3	16,8	2,3	14,9	55,3
	MAX*	dB	45,9	53,8	56,9	49,3	43,4	28,9	16,4	31,1	66,2
	SFP**	dB	38,0	43,7	44,0	39,0	34,5	18,0	3,5	16,4	55,8

\* 300m<sup>3</sup>/h / 200Pa EPD

\*\* 70% of nominal airflow / 50 Pa

## Accessories

### Xhouse300

**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>
XH3-030-FILTER-M5	XH3-030-FILTER-F7	XH3-030-FILTER-F9	XH3-030-FILTER-G4/AC



AQS SENSORS				
	Wall mounted	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 a highest value.

**Radon sensor**  
NL-ADS-RN3

**Radon sensor** - 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-160-09-1F

**Duct pre-heater** - external duct air preheater with a power of 0,9 kW as additional anti-freeze protection



**Duct after-heater**  
EK-AH-160-0,6-1F

**Duct after-heater** - external duct afterheater with a power of 0,6 kW with integrated thermostat and external temperature sensor.

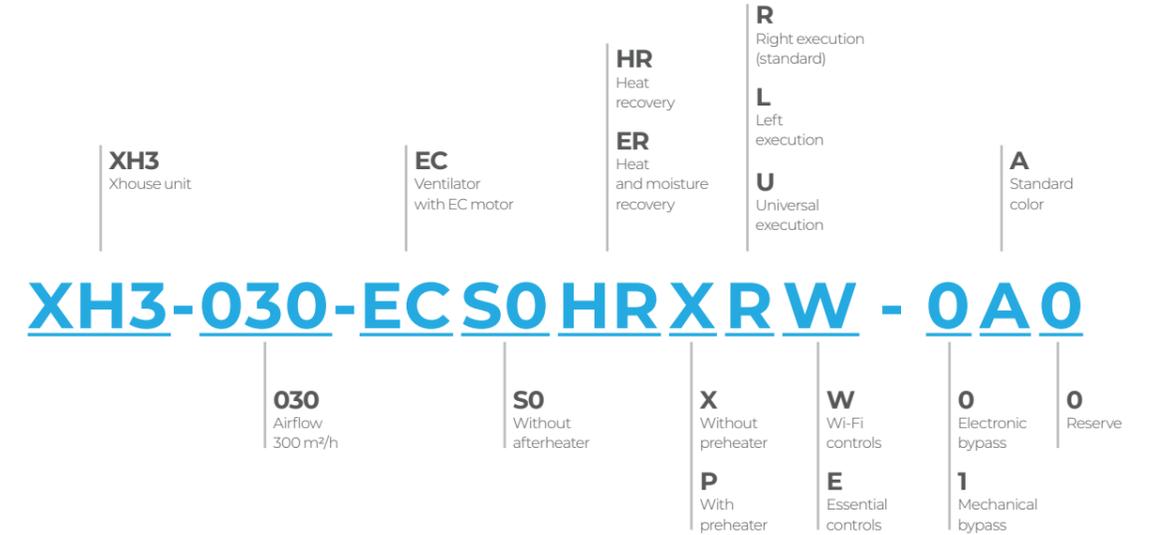


**Duct water-heater/cooler**  
CWC-160-3

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

## Coding

### Xhouse300



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

The unit can be **installed only in vertical position**. When breaking the security distances the unit can operate improperly and the fans might come damaged, the noise level might increase or the service access might get blocked off.

**Xhouse equipped with heat exchanger (HRV) may produce condensate and so it is necessary to connect condensate outlets!**



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