

NEW SMARTY 4X



**50% MORE AIR
IN THE SAME SIZE!**

SMARTY X SERIES

AIR HANDLING UNITS

Smarty X series air handling units with their EPP casing, A1 airtightness and up to 91% heat/cold recovery rate (EU 1253/2014) have proved to be one of the most advanced and efficient residential units on the market. Due to their compact size and universal construction, it's easy to find a place under the ceilings, on the wall or on the ground with a horizontal or vertical connection.

Smarty 2X units are the ideal solution for apartments up to 100 sq.m., while Smarty 3X units are the ideal solution for houses and villas up to 200 sq.m.

What about bigger houses or even small offices and retail stores?

Smarty 4X units are just perfect for heated premises up to 320 sq.m.



A max air flow of up to 595 m³/h AHU is reached with a new boosted fan, however, the size remains the same as the Smarty 3X units!

Unit	Dimensions L/W/H mm, without flanges and legs	Mounting position	Weight, kg
Smarty 4X P	1225/685/324	Ceiling, horizontal	53
Smarty 4X V	599/538/810	Vertical	39

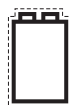
THEIR COMPACT SIZE PROVIDES THE FOLLOWING BONUSES:

- › Smarty 4X P is designed with the lowest height, which allows it to be placed under ceilings.
- › Smarty 4X V unit length is 599 mm, which allows it to be mounted in place of a standard 600 mm cabinet.

TOGETHER WITH THEIR COMPACT SIZE, SMARTY 4X UNITS OFFER:



Up to 82%* heat recovery



A1 class: External leakage < 1%



MCB board with a demand level control

* EU 1253/2014.

The company reserves the right to make changes of technical data without prior notice

THE SMART CONTROL REDUCES ENERGY COSTS UP TO 50%, UP TO 700 kWh ANNUALLY OR UP TO 1540€ OVER 10 YEARS!



> Demand control ventilation with optional RH, CO2 or presence sensors optimizes ventilation according to real-time needs;



> Schedule modes: weekly or holiday – minimizes energy consumption and adjusts it to your daily life;



> Filter pollution timer reminds you to change the filter on time in order to eliminate excessive pressure drops;



> PC connection via MB-Gateway allows you to control indoor climate from any location and to reduce it if you've changed your plans;



> Night cooling: uses cool night air to reduce the inside temperature, saving energy instead of expensive air-conditioning;



> Intelligent Anti-Frost protection system reduces air preheating costs by using the air flow imbalance at outside air temperatures up to -15°C;



> Smart external 0-10V electrical heater control minimizes the heating costs of supplied air.

ONE PERSON MAINTENANCE



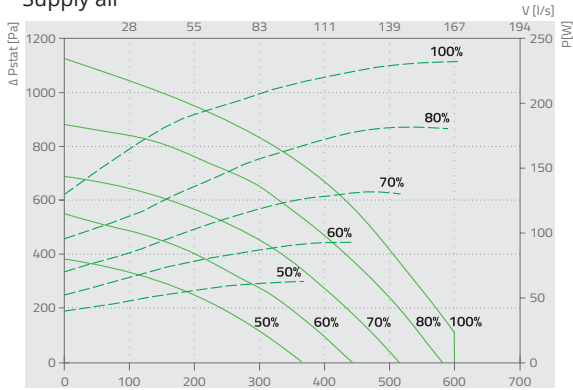
Our approach is to simplify all the necessary maintenance work. The easy access to internal components, quick filter change and ordering system enable you to save time and money on expensive maintenance services.

Contaminated filters increase pressure losses, which lead to higher electricity consumption. A visual warning of a filter change helps you avoid unnecessary expenses.

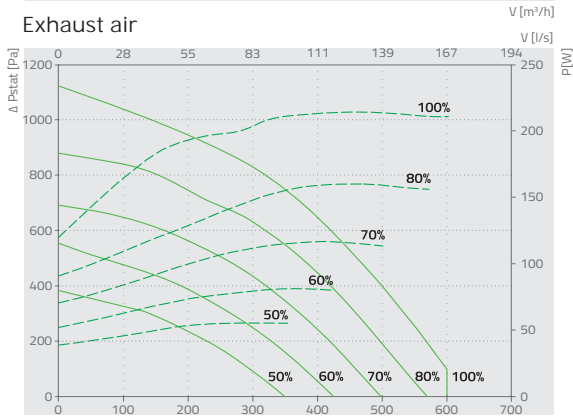
TECHNICAL DATA SMARTY 4X P

— Performance
- - Power consumption

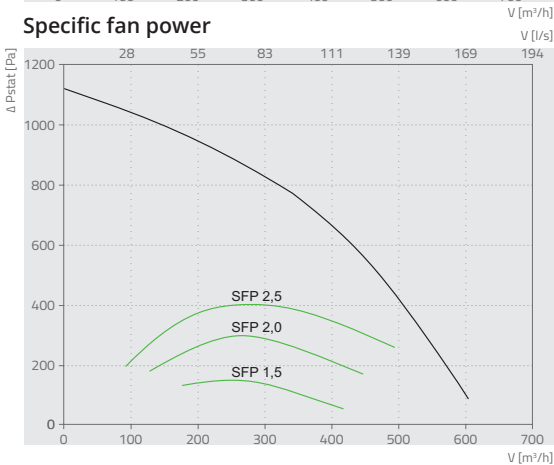
Supply air



Exhaust air

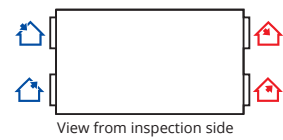
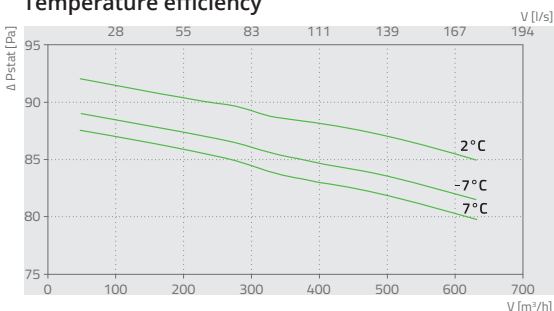


Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency



View from inspection side

Exhaust air Extract air outdoor air Supply air

Smarty 4X P

EC fans	phase/voltage/frequency	[f/VAC/Hz]	1~/230/50
exhaust	power/current	[kW/A]	0,21/0,92
	fan speed	[min ⁻¹]	4400
supply	power/current	[kW/A]	0,21/0,92
	fan speed	[min ⁻¹]	4400
Thermal efficiency*			82%
Max power consumption		[kW/A]	0,42/1,89
Filter class	exhaust/supply		G4/G4 (F7 optional)
Housing insulation, Elastic Polyether Polyurethane		[mm]	30
Colour	RAL	white	9016
Weight (net, without packing)		[kg]	53
Comply with ERP			2018
Operation			indoors
Dimension (LxWxH)**		[mm]	1225/685/324
Housing protection class	IP		34

* - EU 1253/2014

** - Legs and flanges are not included in the dimensions.

Temperature efficiency (balanced mass flow):
Extract air = 20°C/39%RH, 20°C/60%RH, 20°C/39%RH
Outdoor air = 7°C/80%RH, 2°C/80%RH, -7°C/80%RH

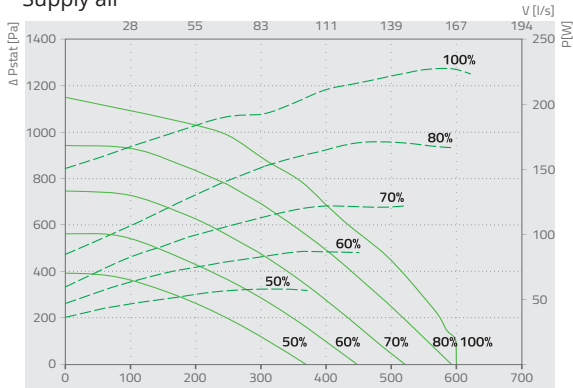
Smarty 4X P	L _{wa} total, dB(A)	L _{wat} dB(A)							
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	60	45	49	55	54	53	49	43	37
Extract	53	43	44	50	45	43	41	35	31
Surrounding	52	32	36	49	47	43	38	30	27

Measured at 416 m³/h, 50 Pa

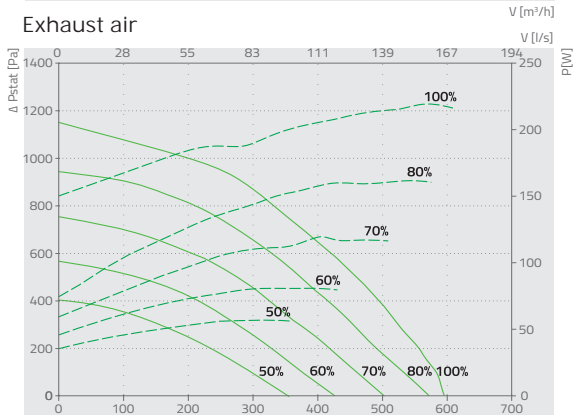
TECHNICAL DATA SMARTY 4X V

— Performance
- - Power consumption

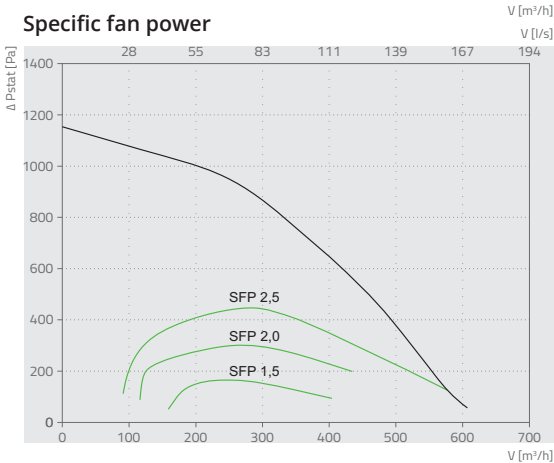
Supply air



Exhaust air

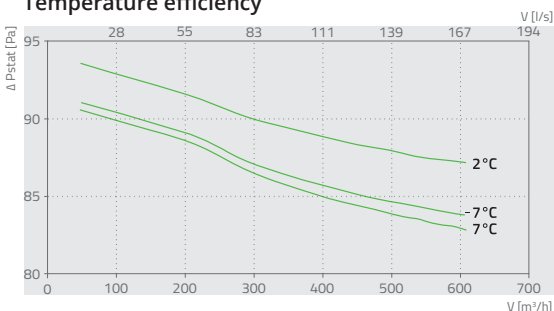


Specific fan power

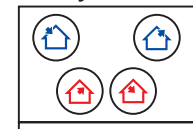


$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency



Smarty 4X V



View from inspection side

Exhaust air Extract air outdoor air Supply air

Smarty 4X V

EC fans	phase/voltage/frequency	[f/VAC/Hz]	1~/230/50
exhaust	power/current	[kW/A]	0,21/0,92
	fan speed	[min ⁻¹]	4400
supply	power/current	[kW/A]	0,21/0,92
	fan speed	[min ⁻¹]	4400
Pre-heater**	power/current	[kW/A]	1.2/5.5
Max power consumption 1.1 V		[kW/A]	1.62/7.09
Max power consumption 1.2 V		[kW/A]	0.42 /1.89
Thermal efficiency*			82%
Filter class	exhaust/supply		G4/G4 (F7 optional)
Housing insulation, Elastic Polyether Polyurethane		[mm]	30
Colour	RAL	white	9016
Weight (net, without packing)		[kg]	39
Comply with ERP			2018
Operation			indoors
Dimension (LxWxH)***		[mm]	599x538x810
Housing protection class	IP		34

* - EU 1253/2014

** - version 1.1 only.

*** - Legs and flanges are not included in the dimensions.

Temperature efficiency (balanced mass flow):
Extract air = 20°C/39%RH, 20°C/60%RH, 20°C/39%RH
Outdoor air = 7°C/80%RH, 2°C/80%RH, -7°C/80%RH

Smarty 4X V	L _{wa} total, dB(A)	L _{wAF} dB(A)							
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	62	47	53	58	56	54	51	46	41
Extract	54	44	45	50	47	45	43	38	35
Surrounding	51	30	35	48	46	40	35	27	24

Measured at 406 m³/h, 50 Pa

OPTIONAL ACCESSORIES



FUNCTION LIST

Description of the functions	MiniMCB	MiniMCB
	version	basic version
FUNCTIONS		
Date and time settings	✓	✓
System modes for easy and user-friendly control: Stand-by, Building protection, Economy, Comfort. (<i>Specific air flows are used in the system</i>)	✓	✓
BOOST function	✓	✓
Comfortable air temperature function	✓	✓
Cold/heat recovery	✓	✓
Fireplace function	✓	
Heating season (<i>from a selected date, 3-day temperature average or manually</i>)	✓	✓
Dryness protection	✓*	✓*2
Weekly schedule	✓	✓
Holiday schedule	✓	✓
User and service control levels	✓	✓
Automatic air flow balancing (<i>using integrated pressure transducers</i>)	✓	
Manual air flow balancing	✓	✓
CO ₂ level indication and reduction function	✓*	✓*2
Light cooling function	✓	✓2
Relative humidity (RH) level indication and reduction function	✓*	✓*
Software and configuration update possibility	✓	✓
Supply air temperature control according to the extract air sensor	✓	✓
Monitoring function (<i>all sensors and I/O</i>)	✓	✓
Mode switch (<i>start/stop</i>)	✓	✓
Manual components control	✓	✓

2. Mini MCB Basic have only CO₂ or humidity sensor. Mini MCB is prepared for the RH Sensor in factory. * With optional sensor.

FUNCTION LIST

Description of the functions	MiniMCB version	MiniMCB basic version
FUNCTIONAL UNITS		
ELECTRIC HEATER		
On/Off/PWM control	✓	✓ 1
Manual protection	✓	✓ 1
Automatic protection	✓	✓ 1
Overheat protection <i>(Additional protection software)</i>	✓	✓
ELECTRIC PRE-HEATER		
On/Off/PWM control	✓	✓ 1
Pre-heater manual/automatic protection <i>(NC)</i>	✓	✓ 1
AIR DAMPERS (Supply/exhaust air dampers control)		
Open/Close	✓	✓
BYPASS DAMPER		
3-position actuator control	✓	✓
Step motor control	✓	✓
FILTER POLLUTION MONITORING		
By filter timer	✓	✓
SENSORS		
Temperature sensor input calibration <i>(Calibration is carried out by standard)</i>	✓	✓
Temperature sensor failure protection <i>(with emergency mode)</i>	✓	✓
EMERGENCY SIGNALS AND INPUTS/OUTPUTS		
Fire protection input	✓	✓
Working indication output	✓	
Alarm indication output	✓	
Fireplace protection <i>(NC)</i>	✓	
REMOTE CONTROLLERS		
Stouch	✓	✓
BMS connection	✓	✓
MB-Gateway	✓	✓
1. A MiniMCB basic can only control the pre-heater or heater. A MiniMCB basic only has protection for the pre-heater or heater.		

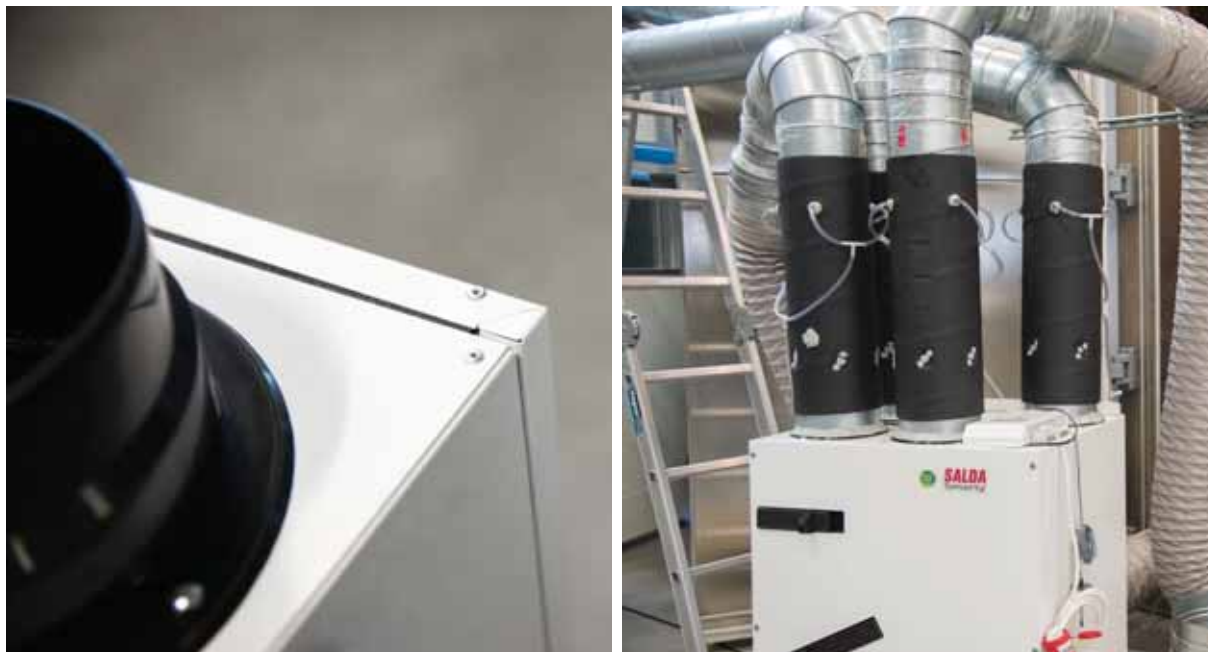
VERSIONS

Save on equipment: select the unit according to the climate zone and project requirements.

PRODUCT NAME	Control board	Version	Heat recovery	Temp. control	Bypass damper	Pressure sensor constant air flow	Integrated pre-heater	Duct based pre-heater	Duct based heater
Smarty 4X V 1.1	Mini MCB	Premium	✓	✓	✓	✓	✓		✓
Smarty 4X V 1.2	Mini MCB Basic	Advanced	✓	✓	✓			✓*	✓*
Smarty 4X P 1.1	Mini MCB	Premium	✓	✓	✓	✓		✓	✓
Smarty 4X P 1.2	Mini MCB Basic	Advanced	✓	✓	✓			✓*	✓*

* - only with pre-heater or heater.

YOUR UNIT WILL BE TESTED FOR AIRTIGHTNESS!




Tested in independent Laboratory "Siventa", according EN ISO/IEC 17025.

Performed tests

- Aerodynamic,
- Thermal;
- Acoustic
- Electrical performance
- Sound power level
- Sound energy level determination.


SALDA UAB
Ragainės g. 100
LT-78109 Šiauliai, Lithuania


+370 41 54 04 15
+370 41 54 04 17


office@salda.lt
www.salda.lt

Distributor

