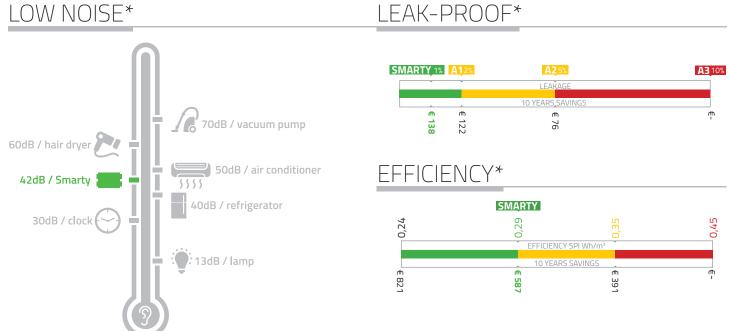
# **Smarty**

Compact ventilation unit Smarty for residential buildings. Exclusive models characterized by efficiency up to 94 % and lowest leakage parameters. Tested and certified by independent EU laboratories. Advanced control system ensures comfortable and efficient operation of the unit. Designed for Passivehaus, DIBt, Appendix Q, EN BE308; EN 13141-7 certification!



\* Euro area (EA-17) 0,211 € kW/h: Eurostat statistics data; www.passiv.de: reference point 220m³/h efficiency, 333 m³/h leakage;



# > Apartments

APPLICATION:

- > Private houses
- > Villas

#### CASING:

- > Advanced casing insulation EPP (λ 0.02 W/K m²)
- > The highest possible internal and external leakage class A1/A1 (EN13141-7)
- > Extremely low noise level within the housing LwA 42dB (EN 13141-7)
- > External side of the casing powder coated in white RAL 9016 (Corrosion C3)
- > The casing is made of two layers of galvanized steel and EPP
- > Hygienic condensate tray
- > Designed in accordance with hygiene requirements VDI 6022-1

#### FILTERS:

- > High-efficiency panel filters G4/G4, optional F7
- > Large filtering area long service period (~ 6 months)
- > Easy and quick filters' change
- > Filter type corresponds requirements of EN 779: 2013 directive

#### FANS:

- > The new generation EC fans EMB-papst radical
- > Specific power input of the unit SPI (efficiency) 0,29W m³/h
- > Minimal power consumption (SFP).
- > 10 years exploitation time (40,000 hours) > Fans additionally protected with covers

### HEAT EXCHANGER:

- > Cross counter flow, plastic
- > Efficiency 94% (DIBt) > Efficiency up to 94% (70% 50Pa EN 13141-7; + 2°C)

#### > Efficiency 85% (Passive haus)

- > 100% of the bypass damper (night-cooling)
- > By-pass monitoring sensor for smooth operation

#### CONTROL:

- Integrated pressure switches for balanced and constant airflow
- Switching power supply 1,3W (standby mode)
- > Pre-heater control 0-10V (0-100%) up to 1kW (by DIBt) Optional duct heater controlled by automatics of the unit
- Extensive remote control possibilities: Stouch; Ptouch; Flex; MB-Gateway

#### AIR FLOW RANGE (DEFAULT SETTINGS)

- Operating range DIBt
- > Operating range Passivehaus

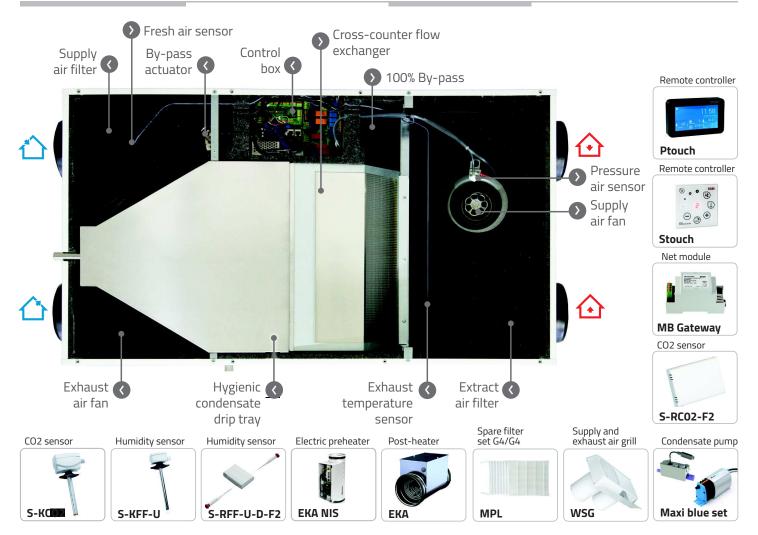
#### MOUNTING AND OPERATION:

- > Easy and convenient filter and heat exchanger maintenance
- > Anti-vibration materials for silent operation as a standard
- > Fresh air temperature up to -15°C \*
- > Ambient temperature +5/+40°C
- > Supply air 17.5°C air without additional heaters \*\*
- Balanced air flows (by DIBt requirement) \*\*\*
- > Plastic flanges protection from cold bridges
- \*Operation in lower outdoor temperatures (up to -30  $^{\circ}$  C) available with more powerful pre-heater; \*\* Optional electric duct heater with autonomic control;
- \*\*\* Remote percentage balance of air flows;

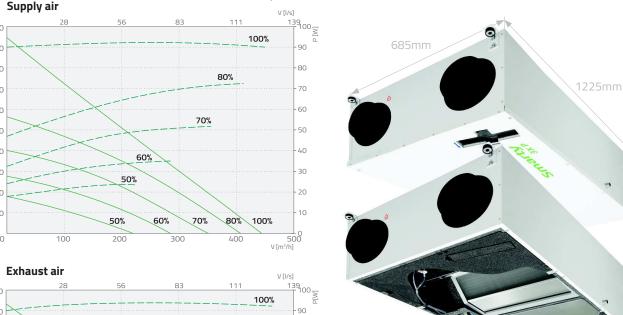
## CONSTRUCTION

protection 95 m³/h. 233 m³/h. 333 m³/h.

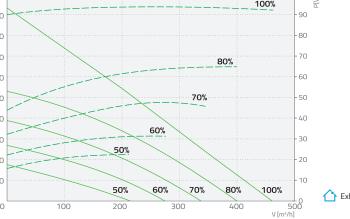
### ACCESSORIES

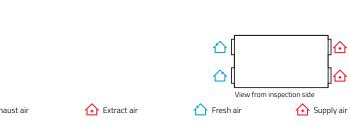


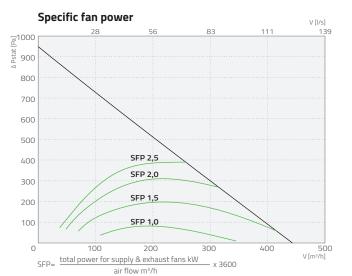
### Available from II quarter, 2015



Power consumption







		Smarty 3X P
phase/voltage	[50Hz/VAC]	1,230
power/current	[kW/A]	0,084/0,75
fan speed	[min <sup>-1</sup> ]	3200
power/current	[kW/A]	0,084/0,75
fan speed	[min <sup>-1</sup> ]	3200
		94%
	[kW/A]	0,168/1,5
exhaust/supply		G4/G4 (F7 optional)
Polyether Polyuretha	ane [mm]	30
RAL	white	9010
ing)	[kg]	53
		2015
		indoors
	[mm]	1225x685x318
IP		34
	power/current fan speed power/current fan speed exhaust/supply Polyether Polyureth RAL ing)	power/current [kW/A] fan speed [min¹¹] power/current [kW/A] fan speed [min¹¹]  [kW/A] exhaust/supply Polyether Polyurethane [mm] RAL white ing) [kg]

Temp	erature eff	iciency			V [l/s]
100	28	56	83	111	139
95				7	'°C
90				2	°C
85				-7	'°C
80					
75					
0	100	200	300	400	500 V [m³/b]

Smarty 3X P	Lwa total,	LWA, dB(A)						
•	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	57	49	50	53	48	47	45	40
Extract	50	41	43	44	42	39	37	34
Surrounding	42	34	35	36	34	32	31	27
Measured at 230 m³/h, 99 Pa								
	Temperature efficiency (balanced mass flow): Extract air = 20°C/60%RH							

Outdoor air = -7°C / 2°C / 7°C Certifications EUROVENT certified heat exchanger performance



