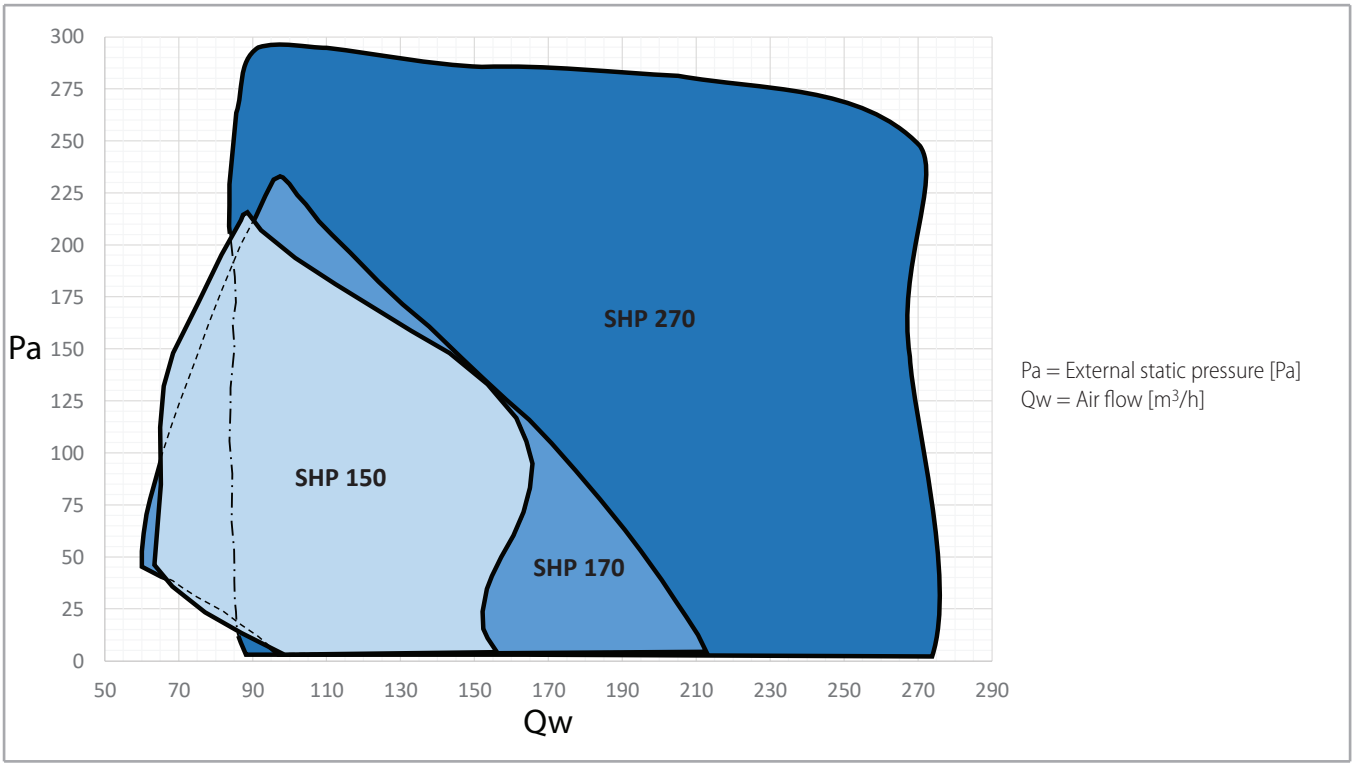
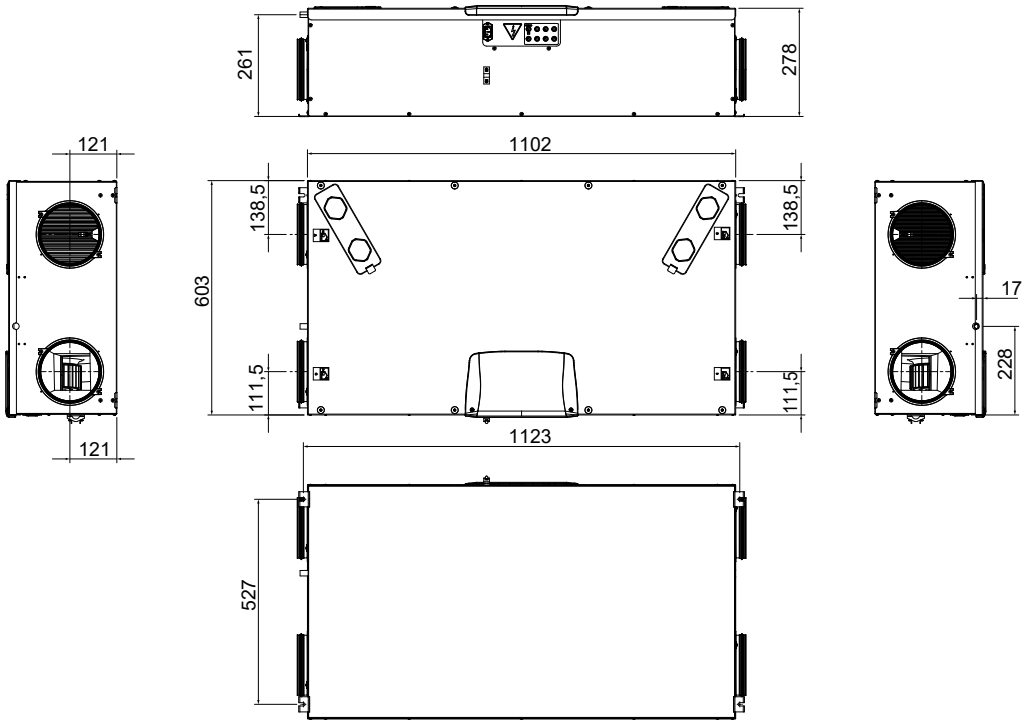
ENY-SHP Pro Version



		ENY-SHP-150	ENY-SHP-170	ENY-SHP-270
Q_{max}	[m³/h]	150	170	270
Q_{rif}	[m³/h]	105	120	190
P_{el}	[W]	56	23	47,8
ηt_{rvu}	[%]	87%	92,1%	84,4%
SPI	[W/m³/h]	0,227	0,193	0,24
CTRL	-	0,85	0,85	0,85
SEC	[kWh/m²a]	-39,90	-42,05	-38,9
Energy class	-	A	A+	A
Filter efficiency	-	ePM_1 55% - F7		
		ePM_{10} 50% - M5		
L_{WA}	[dBa]	38,0	44,9	41,3
LK_I	[%]	1,8%	0,5%	0,4%
LK_E	[%]	0,8%	2,3%	1,1%
HEP	[W]	-	600	900

LEGEND | all terms must be considered in compliance with Standard EU 1253/2014
Q_{max}: Maximum flow rate, at max. motor speed and external static pressure of 100 Pa
Q_{rif}: Reference flow rate - 70% di Q_{max}
P_{el}: Power supply at Q_{rif} and external static pressure of 50 Pa
ηt_{rvu}: Thermal efficiency at Q_{rif}
SPI: Specific power input
CTRL: Control factor - Centralised automatic control
SEC: Specific energy consumption
L_{WA}: Sound power level emitted by structure
LK_I: Internal leakage at 100 Pa compared to Q_{rif}
LK_E: External leakage at 250 Pa compared to Q_{rif}
HEP: Pre-heater power (only mod. SHPEL and SHPER)

ENY-SHP-270 Pro Version



	Weight with packaging	Weight without packaging
ENY-SHP-270	38 kg	31 kg

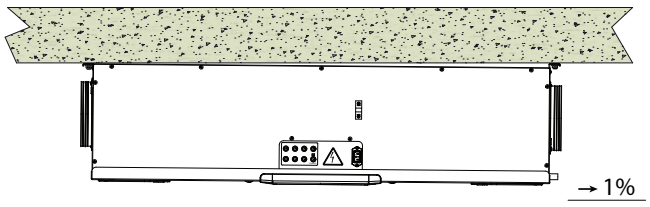
Installation

The ENY-SHP-270 unit can easily be installed both horizontally and vertically.
Special support brackets are provided to install the unit horizontally on the ceiling and to install the unit vertically (especially in gaps between plasterboard walls and load-bearing walls).

The instruction manual indicates the appropriate maintenance clearance for each type of installation.

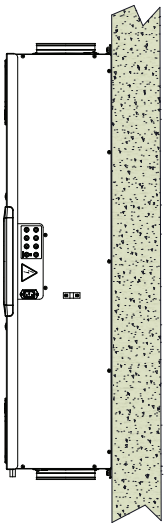
Horizontal installation

Spacer bars can be used to adjust the distance from the ceiling. It is recommended to install the unit tilted towards the side where the ePM_1 55% - F7 filter and the condensate drain pipe are placed, in order to facilitate condensate drainage (provide a slope of 2% towards the F7 filter and of 1% towards the condensate drain pipe).



Vertical installation

Place the side ePM_1 55% - F7 downwards the unit.



Pro ENY-SHP-270 Version with advanced air flow control

Model		ENY-SHP-270
Depth	mm	1102
Width	mm	773
Height	mm	315
Duct connection	-	160
Weight[1]	kg	31
Maximum flow rate	m^3/h	270
External static pressure at maximum flow rate	Pa	100
Reference flow rate	m^3/h	190
External static pressure at reference flow rate	Pa	50
Minimum flow rate	m^3/h	88
Maximum supply external static pressure	Pa	200
Thermal efficiency at reference flow rate EN 13141-7	%	85,5%
Filtering efficiency ISO 16890	-	ePM_1 55% - F7 supply / ePM_{10} 50% - M5 extraction
Fan type	-	Centrifugal fan with EC brushless motor and forward curved blades
Maximum power absorbed by controls and fans	W	184
Maximum current absorbed by controls and fans	A	1,58
Power supply	-	Single phase - 230 V – 50 Hz via 1.5 m cable with Schuko CEE 7/7 connection
Standby power		< 1 W
Safety features		IP protection rating: IP21
		CE compliance[2]
Components and general materials	-	T-EP capacitive touch pad integrated control.
		Main power board with Modbus interface.
		Maximum defrost pre-heater power: hot filament electric heater with reinforced metal lining, controlled by PWM signal (optional).
		Main structure: Polystyrene.
		External covering: Painted galvanized steel plate.
		Recovery unit: Counterflow plate heat recovery unit - PET.
		Fan blades and housings: PA6 in plastic, reinforced fibreglass
		Filters: Micro-pleated type - Synthetic Bypass damper with louvers made of ABS and steel.
		Temperature sensors NTC10k.
		Double humidity Sensor Central Demand Control for Supply and Extract Air.
		Condensate drain pipe L=800 mm.
Accessories	-	Internal hot filament Defrost Electric Pre-Heater with reinforced metal lining, controlled by PWM signal.
		External Electric Heater.
Maximum Defrost Pre-Heater power	W	600
Maximum electric heater current	A	4

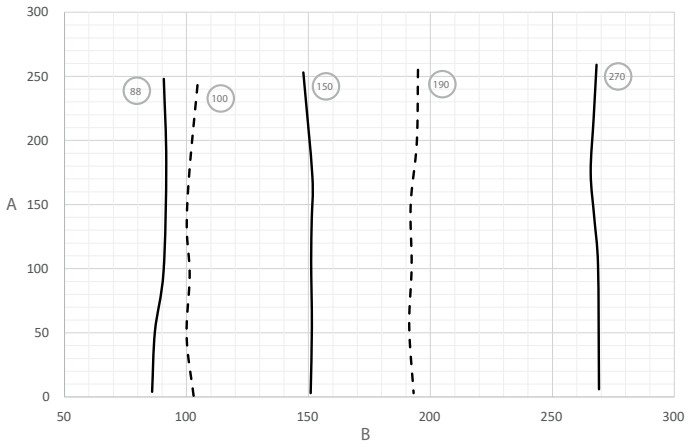
[1] Without packaging
[2] EN 60335-1, EN 60335-2-80, EN 62233, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3, EN 50581, Reg. 1253/14, Reg. 1254/14 (EU Directives: 2014/35/EU, 2014/30/EU, 2006/42/EU, 2011/65/EU)

ENY-SHP-270

All mechanical efficiency curves are measured in standard air conditions (1 atm, 20 °C)

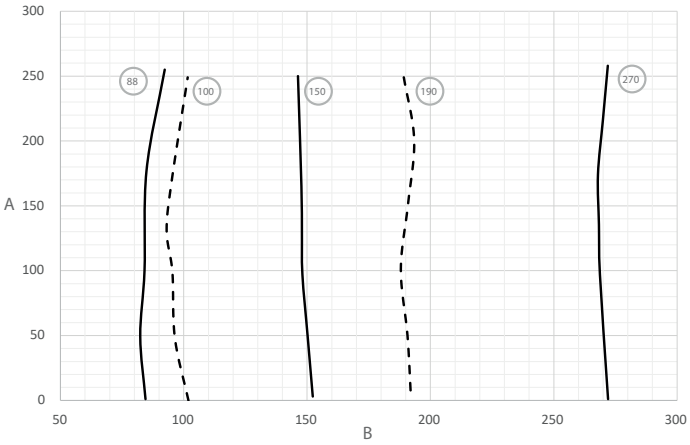
- Air flow: min. 88 m^3/h, max. 270 m^3/h.
- Curves with nominal flow rate 88, 100, 150, 190, 270 m^3/h.

Supply air



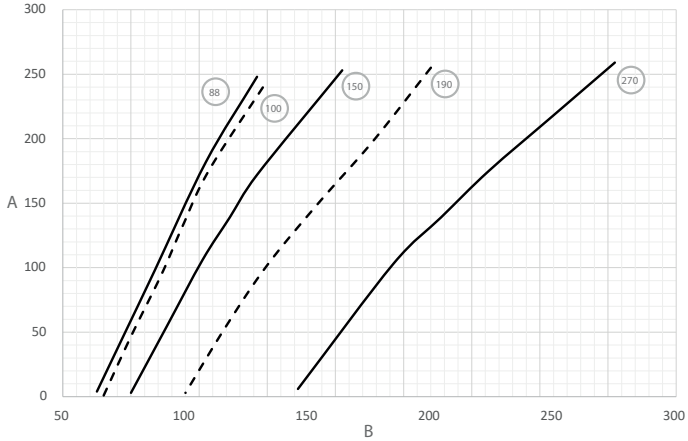
(X) = Nominal flow rate
A = Available static pressure [Pa]
B = Air flow [m^3/h]

Extract air



(X) = Nominal flow rate
A = Available static pressure [Pa]
B = Air flow [m^3/h]

Electrical power input



(X) = Nominal flow rate
A = Available static pressure [Pa]
B = Power absorbed [W]

The curves apply in the event of balanced flow rates.

The minimum voltage indicated only refers to a minimum value that can be configured during the nominal flow rate calibration procedure.

In fact, during normal operation the motors can operate at lower voltages.

Table of compliance with Regulations EU 1254/14 Annex IV - Energy Smart

Supplier name or brand	Sabiana SpA								
Supplier model identification	ENY-SHP-150			ENY-SHP-170			ENY-SHP-270		
Specific energy consumption SEC in [kWh/(m²a)] for each applicable climate zone (temperate, hot, cold, climate)	-39,90	-15,4	-78,0	-42,05	-16,8	-81,5	-38,90	-14,8	-76,4
SEC class - temperate climatic zone	A			A+			A		
Type declared according to EU 1253/14	BVU			BVU			BVU		
Type of drive installed	Continuous speed variator								
Type of heat recovery system	Static sensitive heat recovery unit								
Thermal efficiency	87,0%			92,1%			84,4%		
Max. flow rate [m³/h]	150			170			270		
Power absorbed by the fan drive, including all motor control devices, at maximum flow rate [W]	59			50			105		
Sound power level (LWA) in [dB(A)]	38,0			44,9			41,3		
Reference flow rate [m³/h]	105			120			190		
Reference pressure difference [Pa]	50			50			50		
SPI [W/(m³/h)]	0,227			0,193			0,240		
Control factor and type of control	0,85 Centralised ambient control with humidity sensor			0,85 Centralised ambient control with humidity sensor			0,85 Centralised ambient control with humidity sensor		
Maximum percentages declared [%] of internal and external leakage	Internal leakage: 1,8%			Internal leakage: 0,5%			Internal leakage: 0,4%		
	External leakage: 0,8%			External leakage: 2,3%			External leakage: 1,1%		
Position and description of the visual warning signal relating to the filter for RVUs intended for use with filters, including a text that emphasizes the importance of replacing the filter at regular intervals in order to safeguard unit performance and energy efficiency.	Please refer to the following parts of the brochure: - T-EP control description; - recommendations for filter replacement: filters clogging could result into relevant flow rate reduction, which implies the need of frequent windows opening and consequent thermal demand increase. Proper replacement period depends on background air quality, which can broadly vary between city centers and countryside. In order to prevent filters clogging, optimum average period for filters replacement is 3 month. However, due to normal dust collection and spring pollens, maximum suggested period should not exceed 6 months. Filters replacement period can be modified by maintainer with a precision of days (min 30, max 360).								
Internet address with the disassembly instructions	https://www.sabiana.it/en								
AEC (Annual Energy Consumption) [kWh/a]	250	205	787	220	175	757	262	217	799
AHS - (Annual Heating Energy Savings) [kWh/a]	4548	2057	8898	4690	2120	9170	4478	2025	8760