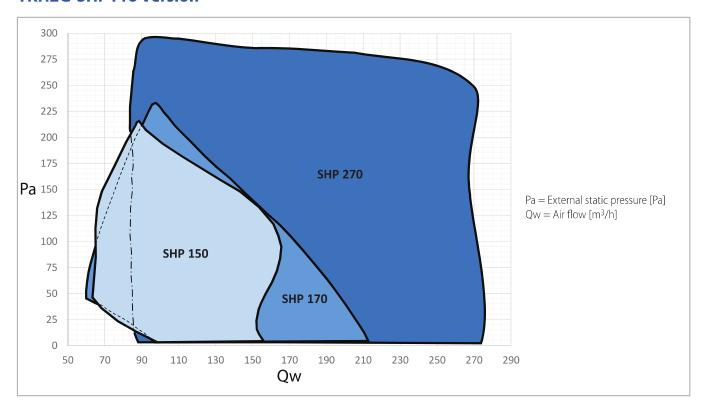


## **YKH2G-SHP Pro Version**

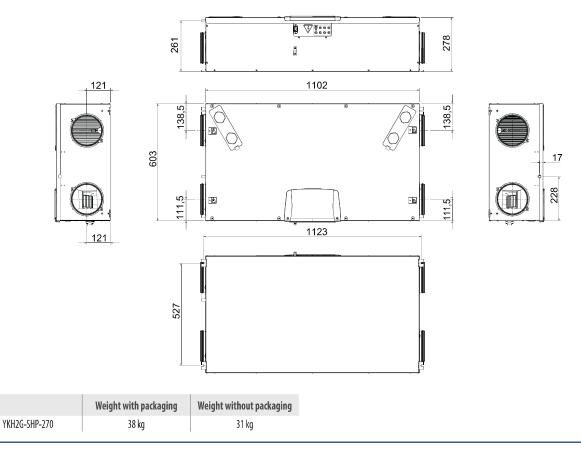


		YKH2G-SHP-150	YKH2G-SHP-170	YKH2G-SHP-270				
Q <sub>max</sub>	[m <sup>3</sup> /h]	150	170	270				
Q <sub>rif</sub>	[m <sup>3</sup> /h]	105	120	190				
Pel	[W]	56	23	47,8				
ηt_rvu	[%]	87%	92,1%	84,4%				
SPI	[W/m <sup>3</sup> /h]	0,227	0,193	0,24				
CTRL	-	0,85	0,85	0,85				
SEC	[kWh/m²a]	-39,90	-42,05	-38,9				
Energy class	-	A	A+	A				
Filter efficiency		ePM <sub>1</sub> 55% - F7						
	-	ePM <sub>10</sub> 50% - M5						
L <sub>WA</sub>	[dBa]	38,0	44,9	41,3				
LKI	[%]	1,8%	0,5%	0,4%				
LK <sub>E</sub>	[%]	0,8%	2,3%	1,1%				
HEP	[W]	-	600	900				

LEGEND | all terms must be considered in compliance with Standard EU 1253/2014 LEGEND | all terms must be considered in compliance with Standard EU 1253/2014 Q<sub>max</sub>: Maximum flow rate, at max. motor speed and external static pressure of 100 Pa Q<sub>rif</sub>: Reference flow rate - 70% di Q<sub>max</sub> P<sub>et</sub>: Power supply at Q<sub>rif</sub> and external static pressure of 50 Pa ηt\_rwi. Thermal efficiency at Q<sub>rif</sub> SPI: Specific power input CTRL: Control factor - Centralised automatic control SEC: Specific energy consumption L<sub>Wi</sub>: Sound power level emitted by structure LK<sub>I</sub>: Internal leakage at 100 Pa compared to Q<sub>rif</sub> LK<sub>E</sub>: External leakage at 250 Pa compared to Q<sub>rif</sub> HEP: Pre-heater power (only mod. SHPEL and SHPER)



## YKH2G-SHP-270 Pro Version



### Installation

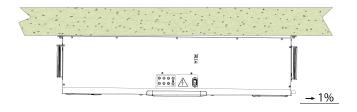
The YKH2G-SHP-270 unit can easily be installed both horizontally and vertically.

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.





# TECHNICAL DATA | YKH2G | horizontal version

## Pro YKH2G-SHP-270 version with advanced air flow control

Model		YKH2G-SHP-270						
Depth	mm	1102						
Width	mm	773						
Height	mm	315						
Duct connection	-	160						
Weight <sup>1</sup>	kg	31						
Maximum flow rate	m³/h	270						
External static pressure at maximum flow rate	Pa	100						
Reference flow rate	m³/h	190						
External static pressure at reference flow rate	Pa	50						
Minimum flow rate	m³/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 <sub>1</sub> 55% - F7 supply / ePM <sub>10</sub> 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		<1W						
		IP protection rating: IP21						
Safety features		CE compliance <sup>2</sup>						
		T-EP capacitive touch pad integrated control.						
		Main power board with Modbus interface.						
		laximum 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.						
Components and general materials	-	Recovery unit: Counterflow plate heat recovery unit - PET.						
		an 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		600						
Maximum electric heater current	A	4						

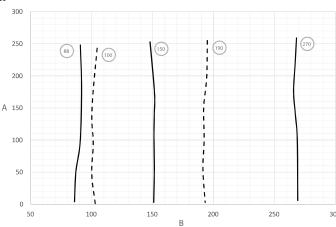
<sup>&</sup>lt;sup>1</sup> Without packaging <sup>2</sup> EN 60335-1, EN 60335-2-80, EN 62233, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3, EN 50581, Reg. 1253/14, Reg. 1254/14 (EU Directives: 2014/35/EU, 2014/30/EU, 2006/42/EU, 2011/65/EU)

## YKH2G-SHP-270

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

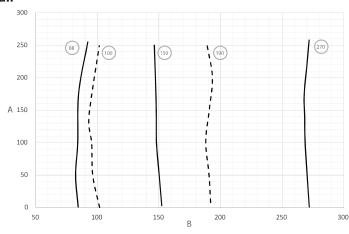
- Air flow: min. 88 m<sup>3</sup>/h, max. 270 m<sup>3</sup>/h.
- Curves with nominal flow rate 88, 100, 150, 190, 270 m<sup>3</sup>/h.

## Supply air



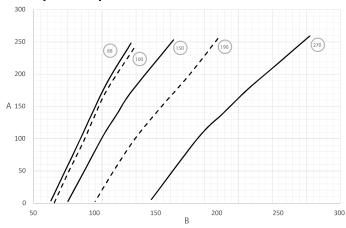
(X) = Nominal flow rate A = Available static pressure [Pa] B = Air flow [m<sup>3</sup>/h]

## **Extract air**



 $\bigotimes$  = Nominal flow rate A = Available static pressure [Pa] B = Air flow [m<sup>3</sup>/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.

## \* YUKK

## Table of compliance with Regulations EU 1254/14 Annex IV - YKH2G

Supplier name or brand	York								
Supplier model identification	YKH2G-SHP-150			YKH2G-SHP-170			YKH2G-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 $[\textbf{W}]$	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		
	0,85			0,85			0,85		
Control factor and type of control	Centralised ambient control with humidity sensor			Centralised ambient control with humidity sensor			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%		
maximum percentages decialed [70] of internal and external leakage	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, it 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	www.york.com								
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