

DATA SHEET

Sentinel Kinetic Advance S



Main features	
Description	HRV unit with integrated controller, equipped with an electronic controlled motor and a touchscreen, summer bypass, protection against freezing and humidity sensor
Application	central HRV unit designed for ventilation of residential houses of living area up to 280 sqm
Controller	integrated in the unit, control panel located on its front
Bypass	automatic, based on the outdoor and indoor temperatures; it helps cool down inner space in the summer
Code	16487 – without enthalpy heat exchanger 17601 – with enthalpy heat exchanger

Performance data	
Max. air flow rate ^{*)}	414 m ³ /h
Heat recovery efficiency	max. 93 %

^{*)} Flow rates for specific installations shall be modified according to performance diagrams.

Electric data	
Power supply	220–240 V AC, 50 Hz
Power supply fuse	3 A (external fuse)
Unit fuse	2 A (internal fuse)
Nominal power input	max. 190 W
IP rating	IPX2

Dimensions, weight and installation	
Height x width x depth	760 x 660 x 443 (without necks)
Spigot diameter	125 mm
Condensate hose	Ø 22 or 32 mm
Weight	27 kg
Mounting manner	on horizontal surface or wall hung

Ambient conditions	
Temperature (operation, storing)	–20 to 45 °C
Humidity (operation, storing)	up to 95 % r. v.

Accessories	
Control module 0–10 V	code 16607
Docking station for control module	code 16609
Extension module, 4 inputs	code 16610
Extension module, 2 inputs	code 16611
WiFi Module	code 16608

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Values of sound power levels and sound pressure levels at various air flow rates												
Speed	Test mode		Octave band frequency [Hz]									
			63	125	250	500	1000	2000	4000	8000		
20%	supply	Sound power level [dB]	50.3	49.0	36.0	31.5	23.6	16.1	18.9	25.3	Sound pressure level [dB]*)	18.9
	extract		52.9	50.9	46.8	43.0	34.6	27.1	19.2	25.4		26.4
	breakout		34.6	34.8	35.7	34.9	29.6	25.1	21.0	25.3		15.5
40%	supply		51.9	51.3	50.4	41.2	35.0	25.3	19.8	25.4		27.3
	extract		59.5	56.5	59.4	55.0	48.2	42.6	31.8	26.1		38.4
	breakout		40.2	42.6	46.5	45.4	41.0	36.2	25.5	25.3		26.0
60%	supply		60.6	60.3	54.2	49.5	44.4	36.2	27.9	26.3		34.2
	extract		66.9	62.4	63.3	62.0	57.9	53.5	43.4	34.2		45.7
	breakout		45.5	49.8	52.5	53.1	49.7	46.7	36.2	26.9		34.0
80%	supply		75.5	68.6	59.3	56.0	48.3	44.2	36.9	31.3		41.1
	extract		82.4	67.6	65.2	67.6	64.2	60.8	50.8	43.2		51.7
	breakout		59.2	55.0	56.8	60.0	55.4	53.9	44.4	33.4		40.5
100%	supply	72.4	70.5	60.5	56.4	49.8	46.3	39.0	33.4	42.0		
	extract	79.4	69.6	66.6	75.1	64.9	63.6	53.4	45.7	56.2		
	breakout	63.0	57.1	58.5	63.7	56.8	55.9	46.4	36.2	43.0		

*) At 3 m.

Dependence of power input on volumetric air flow rate					
Q [m ³ /h]	102	170	203	305	406
P [W]	18.0	34.0	43.1	91.1	179.5

Product fiche according to the European Commission Regulation (EC) No. 1254/2014		
a)	Supplier's name or trade mark	– Regulus
b)	Supplier's model identifier	– Kinetic Advance S
c)	Specific energy consumption (SEC) for warm / Average / cold climate	[kWh/(m ² .a)]
		class
		–18.25 / –43.85 / –89.33
d)	Declared typology in accordance with Article 2 of this Regulation	– RVU / BVU
e)	Type of drive installed or intended to be installed	– variable speed
f)	Type of heat recovery system	– recuperative
g)	Thermal efficiency of heat recovery	[%] 93
h)	Maximum flow rate*)	[m ³ /h] 378
i)	Electric power input of the fan drive, including any motor control equipment, at maximum flow rate	[W] 190
j)	Sound power level	[dB] 50
k)	Reference flow rate	[m ³ /h] 0.0735
l)	Reference pressure difference	[Pa] 50
m)	SPI	[W/(m ³ /h)] 0.25
n)	Control factor / control typology	– 0.65 / local demand con.
o)	Declared maximum internal / external leakage rates	[%] < 5 / < 5
q)	Position and description of visual liter warning	– refer to user instructions
s)	Internet address for pre-/dis-assembly instructions	– www.regulus.eu
v)	The annual electricity consumption (AEC)	[kWh/a] 1.75
w)	The annual heating saved (AHS) for warm / average / cold climate	[kWh/a]**) 21.50 / 47.56 / 93.03

*) Value measured at 100 Pa static pressure as per the European Commission Regulation No. 1254/2014.

**) kWh of primary energy per year.

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Inlet / outlet marking

Left hand connection



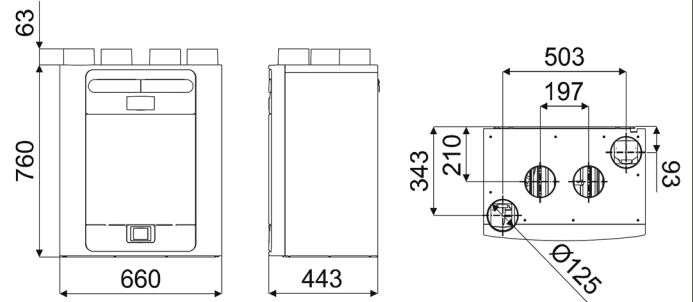
- a) to atmosphere
- b) from atmosphere
- c) extract from dwelling
- d) supply to dwelling

Right hand connection

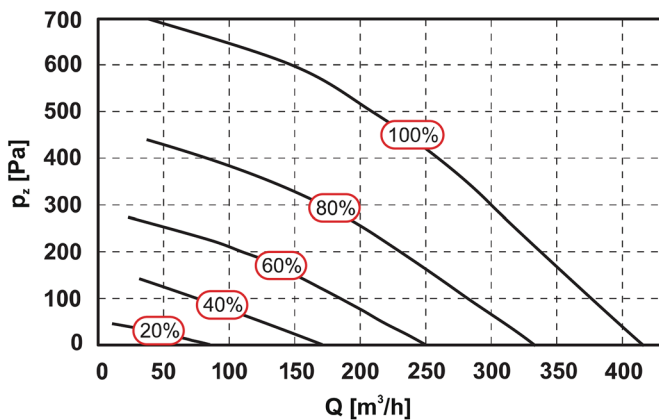


- a) to atmosphere
- b) from atmosphere
- c) extract from dwelling
- d) supply to dwelling

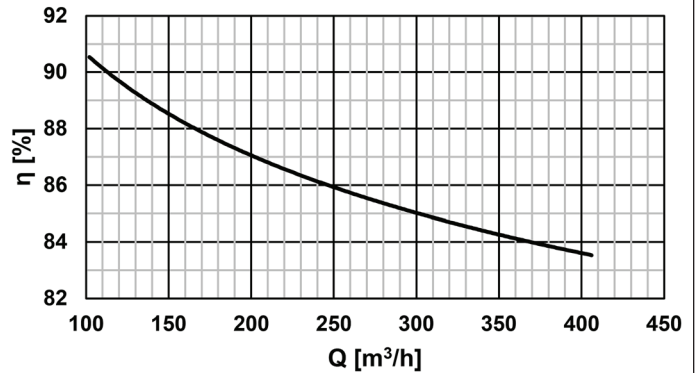
Dimensions



Graph of performance data

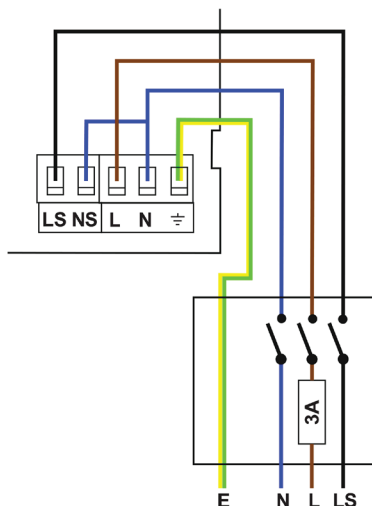


Graph of efficiency depending on airflow (EN 308)



For $t_e = +5\text{ }^\circ\text{C}$ and $t_i = +25\text{ }^\circ\text{C}$.

Wiring of terminals and switches



- LS** ... mains live, 220 - 240 V AC, 50 Hz
- NS** ... mains neutral, 220 - 240 V AC, 50 Hz
- L** ... switched live, 220 - 240 V AC, 50 Hz
- N** ... switched neutral, 220 - 240 V AC, 50 Hz
- E** ... mains earth