Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

PRODUKT Z ATESTEM

CERTIFIED COMPONENT
Passive House Institute

works with Loxone

Description

The HRU-SlimAIR heat recovery units are designed for residential buildings. The HRVs have capacities of 250/300/350/400/500/800/1000 m3/h @ 100 Pa, generated by energy-efficient EC fans. Thanks to a counterflow heat exchanger made of a plastic (PET), it achieves up to 90% heat recovery An ERV version with an enthalpy exchanger that recovers moisture is also available. Built-in electric preheater (except the 1000 model) protects heat exchanger against freezing, built-in RH sensors regulates indoor humidity level, wireless radio communication connects controllers and sensors, and all of it is enclosed inside a self-supporting, insulating EPP casing. HRU-SlimAIR can be installed in up to 3 positions (models 250, 300, 350 and 400), thanks to a special condensate drain system. The 250 and 300 models are also available in a left-hand version, i.e. with a mirror image of the duct connections in relation to the standard version.

HRU-SlimAIR-250 is certified by **Passive House Institute** and can be used as a certified component in passive houses.

Heat recovery selector

Product code examples

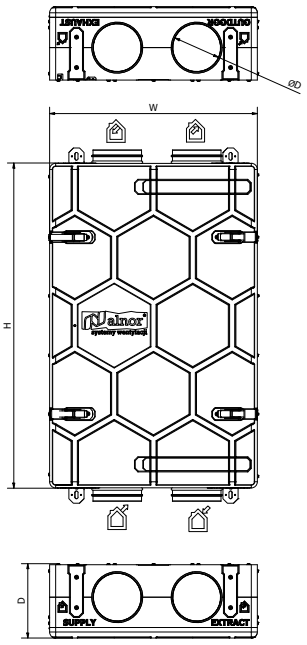
Product code:

HRU-SlimAIR - L - 250E - H - CF - P

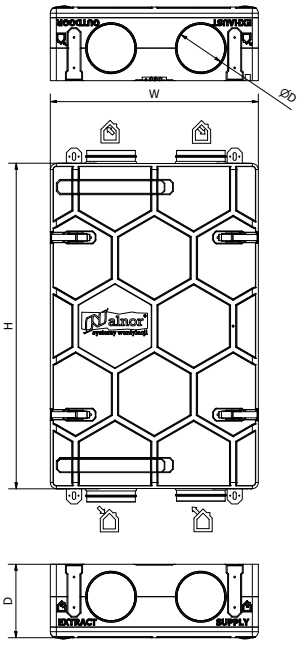
- type
- version
- air flow [m³/h]
- enthalpic heat exchanger
- pre-heater
- constant flow
- wired control

Dimensions

HRU-SlimAIR



HRU-SlimAIR-L (only 250 and 300 models)



OUTDOOR
SUPPLY
EXHAUST
EXTRACT

	ØD [mm]	D [mm]	W [mm]	H [mm]
SlimAIR-250	160	242	685	1070
SlimAIR-250-L	160	242	685	1070
SlimAIR-300	160	242	685	1070
SlimAIR-300-L	160	242	685	1070
SlimAIR-350	200	300	735	1180
SlimAIR-400	200	300	735	1180
SlimAIR-500	200	300	898	1300
SlimAIR-800	250	387	1081	1397
SlimAIR-1000	250	387	1081	1397

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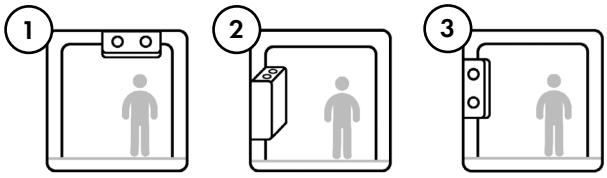
Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Installation

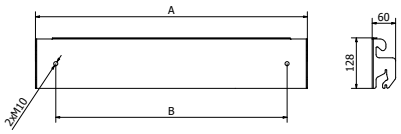


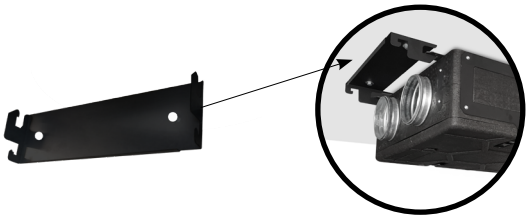
Installation/ Model	HRU-SlimAIR-250 HRU-SlimAIR-L-250	HRU-SlimAIR-300 HRU-SlimAIR-L-300	HRU-SlimAIR-350	HRU-SlimAIR-400	HRU-SlimAIR-500	HRU-SlimAIR-800	HRU-SlimAIR-1000
Suspended	√	√	√	√	√	√	√
Vertical	√	√	√	√	√	√	√
Horizontal	√*	√*	√*	√*	X	X	X

*only models with an enthalpy exchanger

HRQ-SlimAIR-HANG

With the optional **HRQ-SlimAIR-HANG** mounting rack, the HRV unit can be suspended from the ceiling and mounted on the wall vertically. A single person can hang the unit using the mounting rack.





	A [mm]	B [mm]
HRQ-SlimAIR-250-HANG	509.5	386.5
HRQ-SlimAIR-350-HANG	587	464
HRQ-SlimAIR-500-HANG	689.5	586.6

Technical data

	HRU-SlimAIR-250-H HRU-SlimAIR-L-250-H	HRU-SlimAIR-250E-H HRU-SlimAIR-L-250E-H	HRU-SlimAIR-300-H HRU-SlimAIR-L-300-H	HRU-SlimAIR-300E-H HRU-SlimAIR-L-300E-H	HRU-SlimAIR-350-H
Air flow [m³/h] @ 100 Pa	250	250	300	300	350
Maximal efficiency %[1]	93,6	85,6	91	83,0	94,0
Efficiency % (acc. 1254/2014)[2]	85,0	75,3	82.3	73,4	85,6
Maximal moisture efficiency %	-	63,3	-	72	-
Heat exchanger	counterflow PET	counterflow enthalpy	counterflow PET	counterflow enthalpy	counterflow PET
Voltage [V/Hz]	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50
Maximum power consumption [W]	115,0	115,0	148,0	148,0	123,0
Sound power level L_{WA}[dB (A)]	50	50	49	49	49
Weight [kg]	25,5	25,5	25,5	25,5	36,0
Filters	ISO Coarse 70% / ISO ePM1 55% (optional)				
Built-in pre-heater	√	√	√	√	√
Pre-heater power [W]	1800	1800	1800	1800	1800
Built-in RH sensor	√	√	√	√	√

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

	HRU-SlimAIR-350E-H	HRU-SlimAIR-400-H	HRU-SlimAIR-400E-H	HRU-SlimAIR-500-H	SlimAIR-500E-H
Air flow [m³/h] @ 100 Pa	350	400	400	500	500
Maximal efficiency %[1]	91,0	86,4	84,8	95,2	89,0
Efficiency % (acc. 1254/2014)[2]	76,9	83,1	75,1	85,0	75,4
Maximal moisture efficiency %	87	-	76,4	-	85,0
Heat exchanger	counterflow enthalpy	counterflow PET	counterflow enthalpy	counterflow PET	counterflow enthalpy
Voltage [V/Hz]	230 / 50	230 / 50	230 / 50	230 / 50	230 / 50
Maximum power consumption [W]	146,0	218	226	207,0	247,0
Sound power level L_{WA}[dB (A)]	49	47	47	51	51
Weight [kg]	36,0	36,0	36,0	44,0	44,0
Filters	ISO Coarse 70% / ISO ePM1 55% (optional)				
Built-in pre-heater	√	√	√	√	√
Pre-heater power [W]	1800	2000	2000	2200	2200
Built-in RH sensor	√	√	√	√	√

	SlimAIR-800-H	SlimAIR-800E-H	SlimAIR-1000	SlimAIR-1000E
Air flow [m³/h] @ 100 Pa	800	800	1000	1000
Maximal efficiency %[1]	94,7	83,8	94,2	85,7
Efficiency % (acc. 1254/2014)[2]	86,6	76,9	86,8	76,8
Maximal moisture efficiency %	-	62,6	-	58,0
Heat exchanger	counterflow PET	counterflow enthalpy	counterflow PET	counterflow enthalpy
Voltage [V/Hz]	230 / 50	230 / 50	230 / 50	230 / 50
Maximum power consumption [W]	366,0	366,0	542,0	542,0
Sound power level L_{WA}[dB (A)]	54	54	57	57
Weight [kg]	65,0	65,0	75,00	75,00
Filters	ISO Coarse 70% / ISO ePM1 55% (optional)			
Built-in pre-heater	√	√	X	X
Pre-heater power [W]	3000	3000	-[3]	-[3]
Built-in RH sensor	√	√	√	√

[1] Maximal thermal efficiency acc. to EN13141-7 at minimum air flow
[2] Thermal efficiency in reference point acc. to EN 13141-7, in compliance with UE 1254/2014
[3] The HRU-SlimAIR-1000 can be equipped with an external three-phase pre-heater rated at 4.5 kW, in a wireless-control version (HRQ-PRE-HDE-250-4,5) or a wired-control version (HRQ-PRE-P-HDE-250-4,5).

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Wireless control

HRQ-BUT-LCD-A5

HRQ-SW3-I

HRQ-BUT-LM11

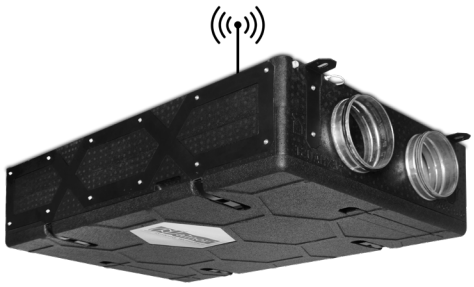
HRQ-BUT-LM04

HRQ-BUT-LCD

HRQ-MODBUS

Modbus

works with Loxone



HRQ-2ZONE

HRQ-4ZONE

HRQ-SENS-CO2

HRQ-SENS-I-CO2

HRQ-SENS-RH

HRQ-SENS-PIR

HRQ-GATE

alnor control AIR

Wired control

Modbus

works with Loxone

LOXONE SMART HOME

HRQ-BUT-PG15

HRQ-BUT-LCD-P5

HRQ-SENS-CO2RH-P

HRQ-BUT-CLOUD

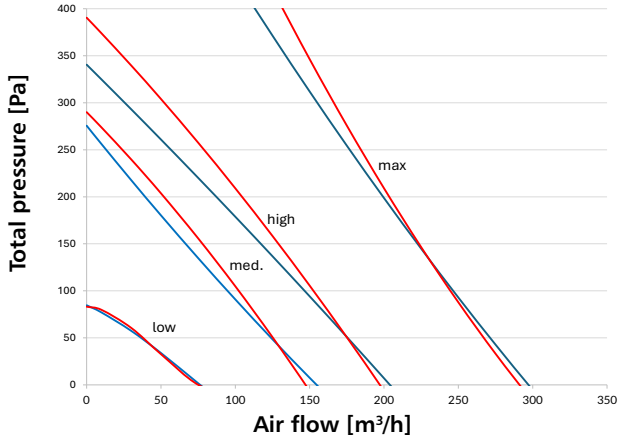
Heat recovery selector

air.alnor.com.pl

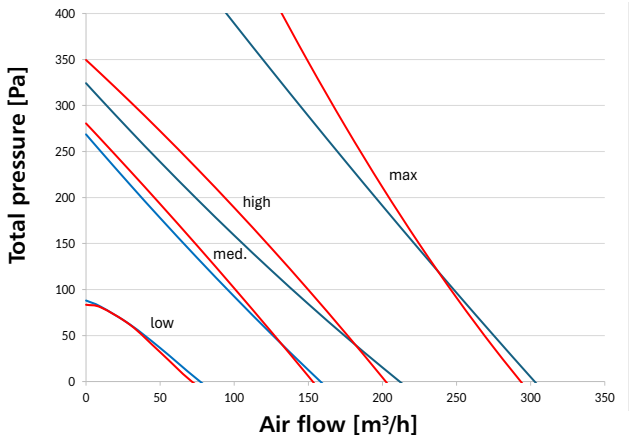
alnor AIR

Air flow

HRU-SlimAIR-250-H — SUPPLY — EXHAUST



HRU-SlimAIR-250E-H — SUPPLY — EXHAUST



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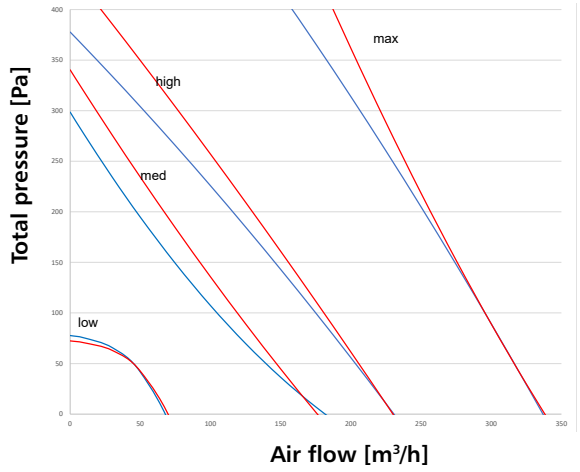
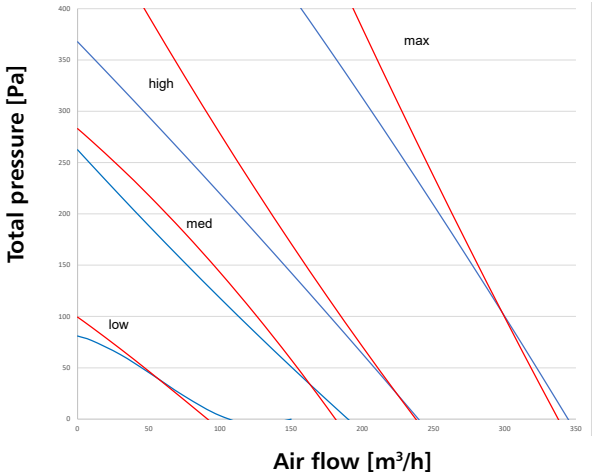
Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

HRU-SlimAIR-300-H SUPPLY EXHAUST



HRU-SlimAIR-300E-H SUPPLY EXHAUST



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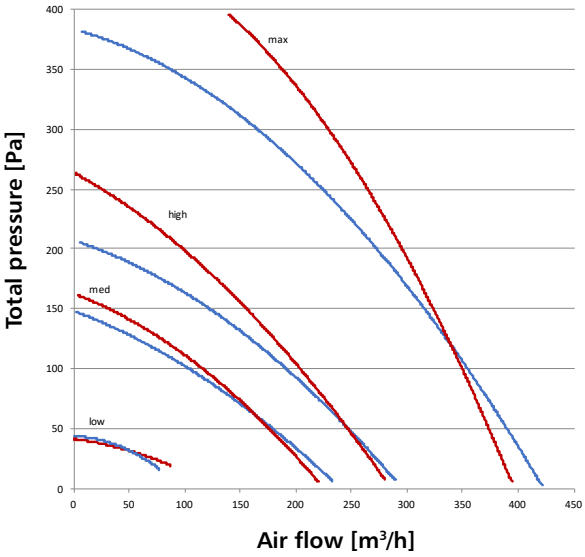

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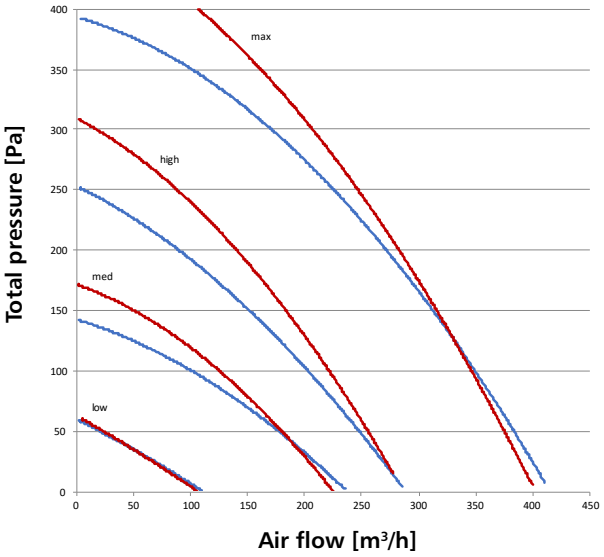
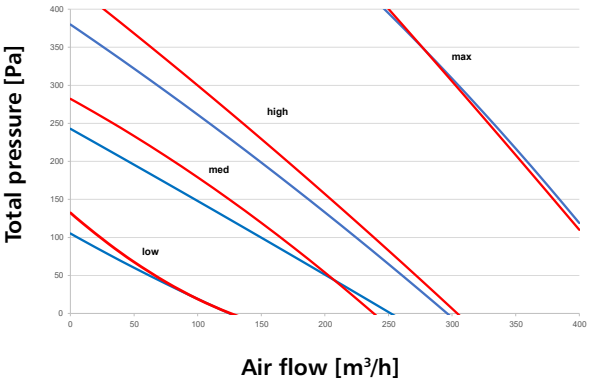
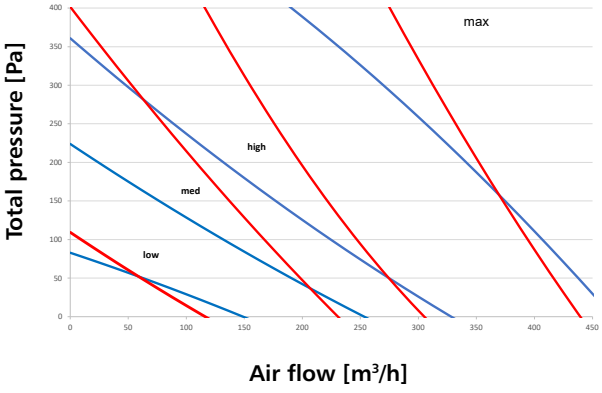


HRU-SlimAIR-400-H SUPPLY EXHAUST



HRU-SlimAIR-400E-H SUPPLY EXHAUST



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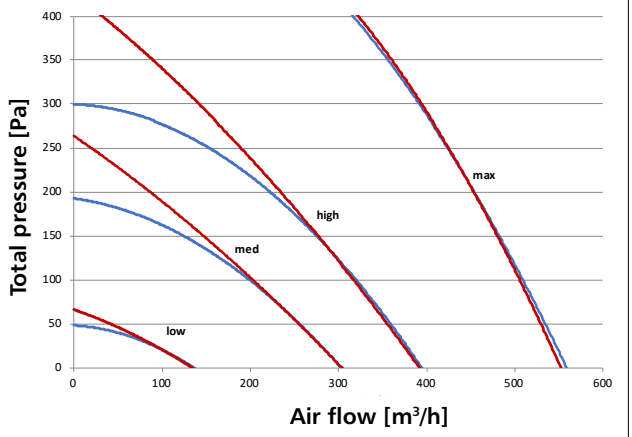
Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

HRU-SlimAIR-500-H SUPPLY EXHAUST



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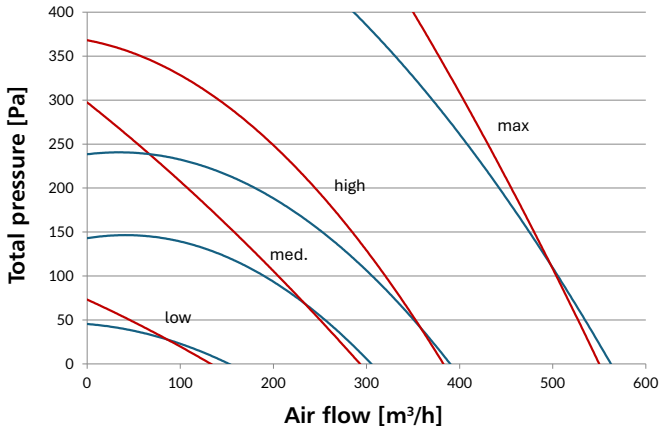
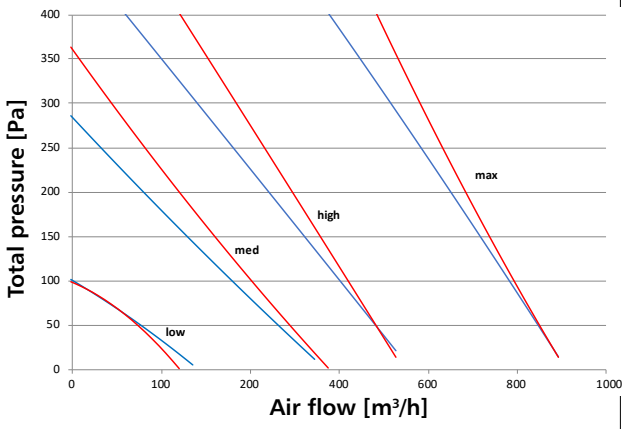


HRU-SlimAIR-800-H SUPPLY EXHAUST



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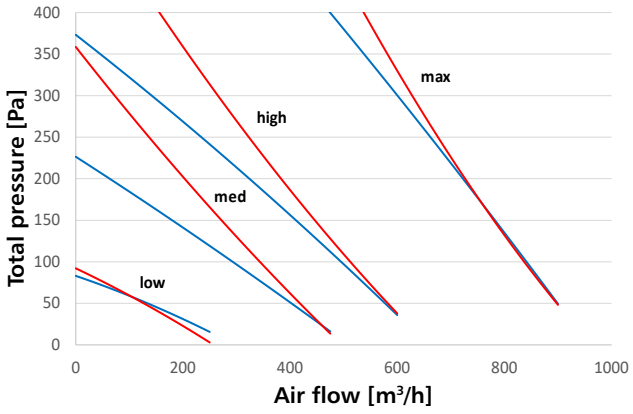
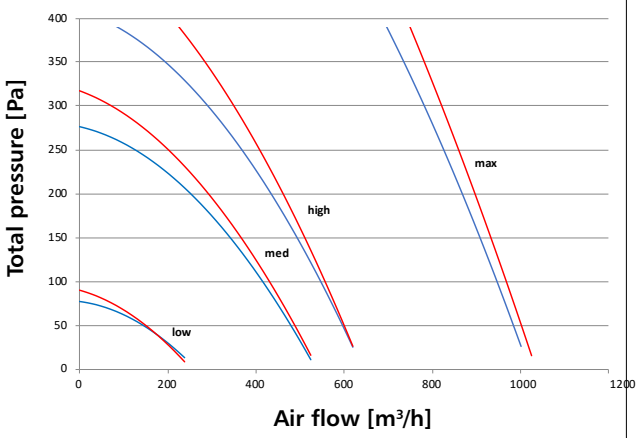
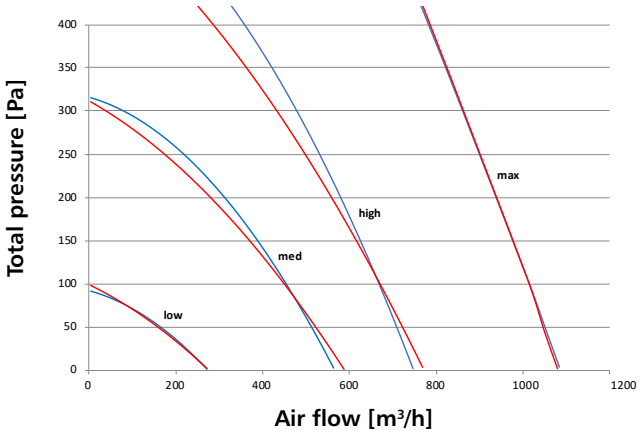


HRU-SlimAIR-1000 SUPPLY EXHAUST



HRU-SlimAIR-1000E SUPPLY EXHAUST



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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Filters

Alnor's heat recovery unit code	Filters code	ISO filtration class 16890	Filtration class in accordance with EN 779:2012	Dimensions [mm]
HRU-SlimAIR-250/300	HRF-SlimAIR-G4-334-172-23	ISO coarse 70%	G4	334x172x23
HRU-SlimAIR-350/400	HRF-SlimAIR-G4-314-220-23	ISO coarse 70%	G4	314x220x23
HRU-SlimAIR-500	HRF-SlimAIR-G4-432-218-23	ISO coarse 70%	G4	432x218x23
HRU-SlimAIR-800/1000	HRF-SlimAIR-G4-438-254-46	ISO coarse 70%	G4	438x254x46
HRU-SlimAIR-250/300	HRF-SlimAIR-F7-334-172-23	ISO ePM1 55%	F7	334x172x23
HRU-SlimAIR-350/400	HRF-SlimAIR-F7-314-220-23	ISO ePM1 55%	F7	314x220x23
HRU-SlimAIR-500	HRF-SlimAIR-F7-432-218-23	ISO ePM1 55%	F7	432x218x23
HRU-SlimAIR-800/1000	HRF-SlimAIR-F7-438-254-46	ISO ePM1 55%	F7	438x254x46

Pleated panel filter creates a larger media surface area for air filtration and ensures lower pressure drops.
The filter is classified as in the ISO Coarse 70% or ISO ePM_1 55% according to ISO 16890 standards.

Filter replacement:
bottom access

side access

Constant Flow (CF)

SlimAIR air handling units optionally can be equipped with the Constant Flow system, whose task is to maintain a constant air flow in the installation. CF works by reading the difference between the dynamic pressure around the fan and the static pressure in the duct in front of the fan. The CF system constantly monitors the pressure in the ducts and if the resistance increases, it increases the speed of the fans to maintain a constant flow, such as on the first day when the ventilation unit was commissioned. During exploitation, the installation pressure is naturally disrupted (dirty filters, condensation of water in the heat exchanger, temperature difference changing the air mass). CF counteracts to those changes, thanks to which the airflows remain sustainable, and only a sustainable system takes full advantage of the air handling unit's capabilities.

Connecting the ground heat exchanger

Heat recovery unit has a possibility to connect the ground heat exchanger. This function allows you to control a valve that optionally supply air through the ground-to-air heating system. To do this, install a dedicated damper with the actuator (DATVTML).

Additional devices

Heat recovery units in the HRU-PremAIR series can optionally be equipped with a dedicated external electric preheater HRQ-PRE-HDE-250-4,5 / HRQ-PRE-P-HDE-250-4,5, power 4500W.

The HRQ-REPEATER signal booster is used to increase the communication range between the air handling unit and wireless controllers and sensors.

Cooperation with the kitchen hood

The cooker hood can be connected to the MVHR system via the X25 contact on the main board of the SlimAIR heat recovery units. It is a potential-free contact. Short-circuits of contact inputs will result in an exhaust fan stopping completely during the period the contact is closed.

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Connecting the ground heat exchanger

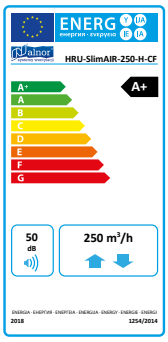
Heat recovery unit has a possibility to connect the ground

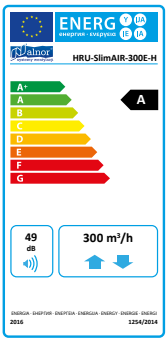
Suspended heat recovery unit with a plate heat exchanger

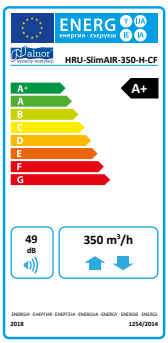
HRU-SlimAIR

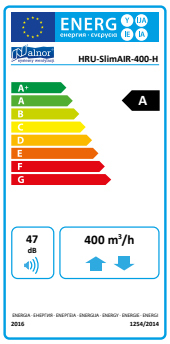
Energy class

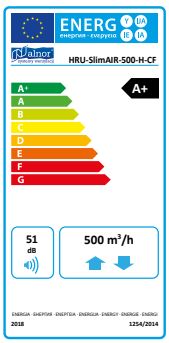
Model	*Sound power level L_{WA} dB(A)* [dB]*	*Air flow rate [m³/h]*	*Energy class*			
			Manual control	*Clock control*	*Central demand control (1 sensor)*	*Local demand control (2 sensors)*
HRU-SlimAIR-250-H	50	250	A	A	A	A+
HRU-SlimAIR-250-H-CF	50	250	A	A	A	A+
HRU-SlimAIR-250E-H	50	250	A	A	A	A
HRU-SlimAIR-250E-H-CF	50	250	A	A	A	A
HRU-SlimAIR-300-H	49	300	B	A	A	A
HRU-SlimAIR-300-H-CF	49	300	B	A	A	A
HRU-SlimAIR-300E-H	49	300	B	B	A	A
HRU-SlimAIR-300E-H-CF	49	300	B	B	A	A
HRU-SlimAIR-350-H	49	350	A	A	A	A+
HRU-SlimAIR-350-H-CF	49	350	A	A	A	A+
HRU-SlimAIR-350E-H	49	350	A	A	A	A
HRU-SlimAIR-350E-H-CF	49	350	A	A	A	A
HRU-SlimAIR-400-H	48	400	B	B	A	A
HRU-SlimAIR-400-H-CF	48	400	B	B	A	A
HRU-SlimAIR-400E-H	48	400	B	B	B	A
HRU-SlimAIR-400E-H-CF	48	400	B	B	B	A
HRU-SlimAIR-500-H	51	500	A	A	A	A+
HRU-SlimAIR-500-H-CF	51	500	A	A	A	A+
HRU-SlimAIR-500E-H	51	500	B	A	A	A
HRU-SlimAIR-500E-H-CF	51	500	B	A	A	A
HRU-SlimAIR-800-H	54	800	A	A	A	A+
HRU-SlimAIR-800-H-CF	54	800	A	A	A	A+
HRU-SlimAIR-800E-H	54	800	B	A	A	A
HRU-SlimAIR-800E-H-CF	54	800	B	A	A	A
HRU-SlimAIR-1000	57	1000	B	A	A	A
HRU-SlimAIR-1000-CF	57	1000	B	A	A	A
HRU-SlimAIR-1000E	57	1000	B	B	B	A
HRU-SlimAIR-1000E-CF	57	1000	B	B	B	A

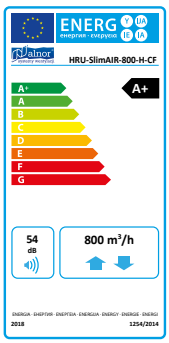


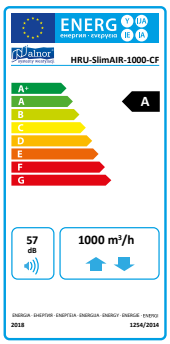












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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-250

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-250-H, HRU-SlimAIR-L-250-H, HRU-SlimAIR-250-H-CF, HRU-SlimAIR-L-250-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-72,65	**-33,72**	-11,95	-73,90	**-36,75**	-12,84	-76,28	**-38,67**	-14,50	-80,57	**-42,05**	-17,35
SEC class	A+	**A**	E	A+	**A**	E	A+	**A**	E	A+	**A+**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	904	367	322	873	336	291	815	278	233	718	181	136
The annual heating saved (AHS) [kWh/a/100m²]	8652	4423	2000	8699	4447	2011	8792	4494	2032	8979	4590	2075
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	85,00%											
Maximum flow rate [m³/h][2]	250											
Maxium electric power input [W]	115,0											
Sound power LWA [dB(A)]	50											
Reference flow rate [m³/s][3]	0,049											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,26											
Declared maxiumum leakages[6]	External: 2,68% Internal: 2,34%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-250E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-250E-H, HRU-SlimAIR-L-250E-H, HRU-SlimAIR-250E-H-CF, HRU-SlimAIR-L-250E-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-66,69	**-32,72**	-10,64	-68,24	**-33,89**	-11,59	-71,21	**-36,11**	-13,38	-76,68	**-40,08**	-16,48
SEC class	A+	**A**	E	A+	**A**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	901	364	319	869	332	287	812	275	230	717	180	135
The annual heating saved (AHS) [kWh/a/100m²]	8683	4439	2007	8728	4462	2018	8819	4508	2038	8999	4600	2080
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	75,30%											
Maximum flow rate [m³/h][2]	250											
Maxium electric power input [W]	115,0											
Sound power LWA [dB(A)]	50											
Reference flow rate [m³/s][3]	0,049											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,25											
Declared maxiumum leakages[6]	External: 2,68% Internal:0,79%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-300

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-300-H, HRU-SlimAIR-300-H-CF, HRU-SlimAIR-L-300-H, HRU-SlimAIR-L-300-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-70,07	**-33,97**	-10,66	-71,49	**-35,12**	-11,66	-74,21	**-37,30**	-13,53	-79,10	**-41,11**	-16,72
SEC class	A+	**B**	E	A+	**A**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	940	403	358	905	368	323	841	304	259	733	196	151
The annual heating saved (AHS) [kWh/a/100m²]	8484	4337	1961	8539	4365	1974	8649	4421	1999	8870	4534	2050
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	82,30%											
Maximum flow rate [m³/h][2]	300											
Maxium electric power input [W]	148											
Sound power LWA [dB(A)]	49											
Reference flow rate [m³/s][3]	0,058											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,29											
Declared maxiumum leakages[6]	External: 1,34% Internal: 3,70%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-300E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-300E-H, HRU-SlimAIR-300E-H-CF, HRU-SlimAIR-L-300E-H, HRU-SlimAIR-L-300E-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-64,52	**-31,13**	-9,38	-66,22	**-32,43**	-10,44	-69,49	**-34,89**	-12,44	-75,49	**-39,27**	-15,89
SEC class	A+	**B**	F	A+	**B**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	940	403	358	905	368	323	841	304	259	733	196	151
The annual heating saved (AHS) [kWh/a/100m²]	7929	4053	1833	8012	4096	1852	8178	4180	1890	8509	4350	1967
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	73,40%											
Maximum flow rate [m³/h][2]	300											
Maxium electric power input [W]	148											
Sound power LWA [dB(A)]	49											
Reference flow rate [m³/s][3]	0,058											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,29											
Declared maxiumum leakages[6]	External: 1,34% Internal: 1,91%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-350

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-350-H, HRU-SlimAIR-350-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-74,43	**-37,32**	-13,44	-75,52	**-38,20**	-14,19	-77,62	**-39,85**	-15,59	-81,40	**-42,76**	-18,00
SEC class	A+	**A**	E	A+	**A**	E	A+	**A**	E	A+	**A+**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	848	311	266	822	285	240	774	237	192	694	157	112
The annual heating saved (AHS) [kWh/a/100m^2]	8689	4442	2009	8734	4465	2019	8824	4511	2040	9003	4602	2081
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	85,60%											
Maximum flow rate [m^3/h][2]	350											
Maxium electric power input [W]	123											
Sound power LWA [dB(A)]	49											
Reference flow rate [m^3/s][3]	0,068											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,21											
Declared maxiumum leakages[6]	External: 1,18% Internal:2,74%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-350E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-350E-H, HRU-SlimAIR-350E-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-68,49	**-34,04**	-11,67	-69,91	**-35,10**	-12,54	-72,64	**-37,13**	-14,16	-77,66	**-40,75**	-16,97
SEC class	A+	**A**	E	A+	**A**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	868	331	286	840	303	258	789	252	207	703	166	121
The annual heating saved (AHS) [kWh/a/100m^2]	8147	4165	1883	8219	4201	1900	83,63	4275	1933	8651	4422	2000
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	76,90%											
Maximum flow rate [m^3/h][2]	350											
Maxium electric power input [W]	146											
Sound power LWA [dB(A)]	49											
Reference flow rate [m^3/s][3]	0,068											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,23											
Declared maxiumum leakages[6]	External: 0,71% Internal: 2,66%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-400

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-400-H, HRU-SlimAIR-400-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-68,72	**-32,38**	-8,93	-70,30	**-33,70**	-10,11	-73,30	**-36,18**	-12,29	-78,64	**-40,50**	-16,02
SEC class	A+	**B**	F	A+	**B**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	1014	477	432	972	435	390	894	357	312	764	227	182
The annual heating saved (AHS) [kWh/a/100m^2]	8533	4362	1972	8586	4389	1985	8691	4443	2009	8902	4551	2058
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	83,10%											
Maximum flow rate [m^3/h][2]	400											
Maxium electric power input [W]	218											
Sound power LWA [dB(A)]	47											
Reference flow rate [m^3/s][3]	0,078											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,34											
Declared maxiumum leakages[6]	External: 2,28% Internal:1,71%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-400E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-400E-H, HRU-SlimAIR-400E-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-63,68	**-29,77**	-7,72	-65,51	**-31,23**	-8,96	-69,02	**-33,97**	-11,27	-75,38	**-38,82**	-15,24
SEC class	A+	**B**	F	A+	**B**	F	A+	**B**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	1016	479	434	974	437	392	896	359	314	765	228	183
The annual heating saved (AHS) [kWh/a/100m^2]	8035	4107	1857	8113	4147	1875	8268	4226	1911	8578	4385	1983
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	75,10%											
Maximum flow rate [m^3/h][2]	400											
Maxium electric power input [W]	226											
Sound power LWA [dB(A)]	47											
Reference flow rate [m^3/s][3]	0,078											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,35											
Declared maxiumum leakages[6]	External: 2,28% Internal:2,33%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-500

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-500-H, HRU-SlimAIR-500-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-73,54	**-36,62**	-12,84	-74,71	**-37,56**	-13,65	-76,93	**-39,32**	-15,15	-80,95	**-42,42**	-17,73
SEC class	A+	**A**	E	A+	**A**	E	A+	**A**	E	A+	**A+**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	869	331	286	840	303	258	789	252	207	703	166	121
The annual heating saved (AHS) [kWh/a/100m²]	8652	4423	2000	8699	4447	2011	8792	4494	2032	8979	4590	2075
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	85,00%											
Maximum flow rate [m³/h][2]	500											
Maxium electric power input [W]	207											
Sound power LWA [dB(A)]	51											
Reference flow rate [m³/s][3]	0,097											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,23											
Declared maxiumum leakages[6]	External: 1,30% Internal: 2,98%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-500E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-500E-H, HRU-SlimAIR-500E-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-67,02	**-33,02**	-10,92	-68,54	**-34,17**	-11,85	-71,46	**-36,33**	-13,59	-76,83	**-40,21**	-16,60
SEC class	A+	**B**	E	A+	**A**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	900	353	308	860	323	278	804	267	222	712	175	130
The annual heating saved (AHS) [kWh/a/100m^2]	8054	4117	1862	8130	4156	1879	8284	4234	1915	8590	4391	1986
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	75,40%											
Maximum flow rate [m^3/h][2]	500											
Maxium electric power input [W]	247											
Sound power LWA [dB(A)]	51											
Reference flow rate [m^3/s][3]	0,097											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,25											
Declared maxiumum leakages[6]	External: 1,18% Internal: 2,74%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-800

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-800-H, HRU-SlimAIR-800-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-73,64	**-36,23**	-12,18	-74,85	**-37,23**	-13,06	-77,13	**-39,11**	-14,70	-81,22	**-42,38**	-17,50
SEC class	A+	**A**	E	A+	**A**	E	A+	**A**	E	A+	**A+**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	904	367	322	873	336	291	815	278	233	718	181	136
The annual heating saved (AHS) [kWh/a/100m²]	8752	4474	2023	8793	4495	2033	8877	4538	2052	9044	4623	2090
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	86,60%											
Maximum flow rate [m³/h][2]	800											
Maxium electric power input [W]	366											
Sound power LWA [dB(A)]	54											
Reference flow rate [m³/s][3]	0,156											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,26											
Declared maxiumum leakages[6]	External: 1,70% Internal: 3,10%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-800E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-800E-H, HRU-SlimAIR-800E-H-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-68,21	**-33,76**	-11,39	-69,66	**-34,85**	-12,29	-72,44	**-36,93**	-13,96	-77,55	**-40,63**	-16,85
SEC class	A+	**B**	E	A+	**A**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m²]	880	343	298	851	314	269	797	260	215	708	171	126
The annual heating saved (AHS) [kWh/a/100m²]	8752	4474	2023	8793	4495	2033	8877	4538	2052	9044	4623	2090
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	76,90%											
Maximum flow rate [m³/h][2]	800											
Maxium electric power input [W]	366											
Sound power LWA [dB(A)]	54											
Reference flow rate [m³/s][3]	0,156											
Reference pressure difference [Pa][4]	50											
SPI [W/m³/h][5]	0,24											
Declared maxiumum leakages[6]	External: 1,70% Internal: 3,10%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-1000

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-1000, HRU-SlimAIR-1000-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-71,44	**-33,97**	-9,88	-72,86	**-35,19**	-10,99	-75,55	**-37,48**	-13,04	-80,31	**-41,44**	-16,54
SEC class	A+	**B**	F	A+	**A**	E	A+	**A**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	997	460	415	957	420	375	882	345	300	757	220	175
The annual heating saved (AHS) [kWh/a/100m^2]	8764	4480	2026	8805	4501	2035	8887	4543	2054	9052	4627	2092
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	86,80%											
Maximum flow rate [m^3/h][2]	1000											
Maxium electric power input [W]	542											
Sound power LWA [dB(A)]	57											
Reference flow rate [m^3/s][3]	0,194											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,31											
Declared maxiumum leakages[6]	External: 1,70% Internal: 3,10%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
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[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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Suspended heat recovery unit with a plate heat exchanger

HRU-SlimAIR

Product fiche HRU-SlimAIR-1000E

Commission Regulation (UE) Nr 1253/2014, 1254/2014, Annex IV

Supplier's name or trade mark	ALNOR Ventilation Systems											
Model identifier	HRU-SlimAIR-1000E, HRU-SlimAIR-1000E-CF											
Control	Manual control			Clock control			Central demand control			Local demand control		
Control facotr	1			0,95			0,85			0,65		
Climat	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm	Cold	**Average**	Warm
Specific energy consuption (SEC) [kWh/(m2.a)]	-64,05	**-29,62**	-7,27	-65,89	**-31,12**	-8,57	-69,42	**-33,93**	-10,98	-75,77	**-38,87**	-15,11
SEC class	A+	**B**	F	A+	**B**	F	A+	**B**	E	A+	**A**	E
The annual electricity consumption (AEC) [kWh/a/100m^2]	1044	507	462	999	462	417	916	379	334	777	240	195
The annual heating saved (AHS) [kWh/a/100m^2]	8141	4161	1882	8213	4198	1898	8358	4272	1932	8647	4420	1999
Declared typology	Bidirectional											
Type of drive	Variable											
Type of heat recovery system	Recuperative											
Thermal efficiency[1]	76,80%											
Maximum flow rate [m^3/h][2]	1000											
Maxium electric power input [W]	551											
Sound power LWA [dB(A)]	57											
Reference flow rate [m^3/s][3]	0,194											
Reference pressure difference [Pa][4]	50											
SPI [W/m^3/h][5]	0,37											
Declared maxiumum leakages[6]	External: 0,50% Internal: 2,60%											
Position and description of visual filter warning	Visual on status LED light on unit and on status LED light on controller											
Internet address	www.ventilation-alnor.co.uk											

[1] According to EN 13141-7:2021+A1:2025
[2] According to EN 13141-7:2021+A1:2025 with at pressure diference 100 Pa
[3] According to EN 13141-7:2021+A1:2025 at 70% of maximum flow at static pressure diference 50 Pa
[4] According to EN 13141-7:2021+A1:2025
[5] According to EN 13141-7:2021+A1:2025 at reference point - 70% of maxiumum air flow
[6] According to EN 13141-7:2021+A1:2025

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