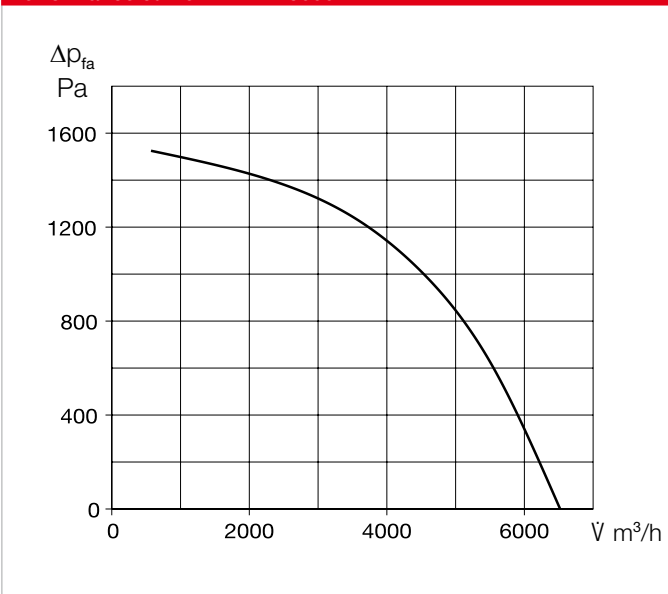


**AIR1 RH 5000**



**Performance curve AIR1 RH 5000**



**Unit types**

	<b>AIR1 RH 5000</b>	<b>AIR1 RH 5000/SO</b>
Ref. no.	04346	04355
Heat exchanger	Condensation rotor	Adsorption rotor <sup>(3)</sup>

**Technical data**

<b>Mechanical data</b>	
Area of application	Inside/outside
Installation position	Standing
Maintenance access	Side, both sides
Min. air volume	665 m <sup>3</sup> /h
Max. air volume ERP	5,150 m <sup>3</sup> /h <sup>(1)</sup> (4,950 m <sup>3</sup> /h <sup>(4)</sup> )
Max. air volume (free blowing)	6,500 m <sup>3</sup> /h
Weight, unit operational	629 kg (645 kg <sup>(4)</sup> )
Delivery unit	2-part
Unit segments	2
Housing class (DIN 1886)	T2 / TB2 / D2
Filter Outside air	ISO ePM <sub>1</sub> , 55% (F7) <sup>(2)</sup>
Filter Extract air	ISO ePM <sub>10</sub> 50% (M5) <sup>(2)</sup>
Media temperature (air)	-20 to +50 °C
Ambient temperature (operation)	-20 to +50 °C
Protection class	IP31
<b>Electrical data</b>	
Central building control system	BACnet, Modbus TCP/IP
Voltage / Frequency	400 V 3N -, 50 Hz
Max. output Fans	2 x 2,500 W
Nominal current	7.6 / 7.6 / 8.9 A (7.6 / 7.6 / 9.5 A <sup>(4)</sup> )
Connection (wiring diagram no.)	1320

(1) = at 400 Pa external pressure loss ERP-compliant  
 (2) = other filter classes see optional accessories  
 (3) = with increased humidity recovery  
 (4) = AIR RH 5000/SO

**Sound data AIR1 RH 5000**

<b>Sound power level L<sub>WA</sub> dB(A) at 400 Pa external pressure</b>			
	1,500 m <sup>3</sup> /h	3,700 m <sup>3</sup> /h	5,150 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	76	81	87
Extract air (L <sub>WA</sub> )	63	64	69
Outside air (L <sub>WA</sub> )	67	61	65
Exhaust air (L <sub>WA</sub> )	75	80	86
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	1,500 m <sup>3</sup> /h	3,700 m <sup>3</sup> /h	5,150 m <sup>3</sup> /h
Housing rad. 1 m	46	47	52
Housing rad. 3 m	36	38	42
Housing rad. 5 m	32	33	38

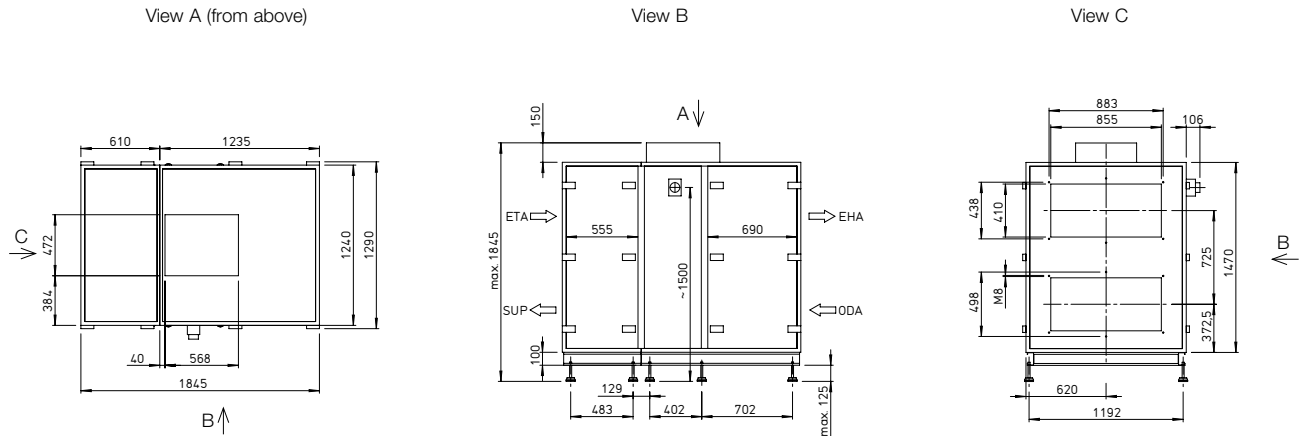
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

**Sound data AIR1 RH 5000/SO**

<b>Sound power level L<sub>WA</sub> dB(A) at 400 Pa external pressure</b>			
	1,500 m <sup>3</sup> /h	3,700 m <sup>3</sup> /h	4,950 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	77	81	86
Extract air (L <sub>WA</sub> )	63	65	69
Outside air (L <sub>WA</sub> )	67	62	65
Exhaust air (L <sub>WA</sub> )	75	80	85
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	1,500 m <sup>3</sup> /h	3,700 m <sup>3</sup> /h	4,950 m <sup>3</sup> /h
Housing rad. 1 m	46	47	52
Housing rad. 3 m	36	38	42
Housing rad. 5 m	32	33	38

The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

Dimensions AIR1 RH 5000



Dimensions in mm

ODA: Outside air    EHA: Exhaust air    ETA: Extract air    SUP: Supply air

■ Accessories

■ Heating and cooling registers

Pre-heater

<b>AIR1-EVH RH 5000</b> Electrical, external	Ref. no. 01791	Page 126
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Auxiliary heater

<b>AIR1-ENH RH 5000</b> Electrical, external	Ref. no. 03618	Page 127
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<b>AIR1-NH WW RH 5000</b> Hot water, external	Ref. no. 03825	Page 128
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Hydraulic unit for hot water heater register

<b>WHS H HE 24 V (0 – 10 V) M</b>	Ref. no. 06310	Page 129
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Cooling register

<b>AIR1-KR KW RH 5000 L <sup>(1)</sup></b> Cold water, external	Ref. no. 03971	Page 130
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<b>AIR1-KR KW RH 5000 R <sup>(1)</sup></b> Cold water, external	Ref. no. 04287	Page 130
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<b>AIR1-CO DX RH 5000 L <sup>(1)</sup></b> Change-over, external	Ref. no. 40393	Page 132
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<b>AIR1-CO DX RH 5000 R <sup>(1)</sup></b> Change-over, external	Ref. no. 40402	Page 132
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<b>AIR1-SM DX <sup>(2)</sup></b> Control module	Ref. no. 40408	Page 134
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■ Air routing

Multi-leaf damper

<b>AIR1-JVK XH 5500/RH 5000-6000</b>	Ref. no. 06010	Page 134
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Recirculation module

<b>AIR1-ULM RH 5000</b>	Ref. no. 06040	Page 134
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Flexible connector

<b>AIR1-VS 85/41</b>	Ref. no. 04375	Page 135
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Adapter square-round

<b>AIR1-ÜS XH 5500/RH 5000-6000</b>	Ref. no. 04370	Page 135
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■ Air filters

Spare air filter and other filter classes

<b>ELF-AIR1 RH 5000/ePM10 50%/48 (M5)</b>	Ref. no. 02196	Page 143
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<b>ELF-AIR1 RH 5000/ePM10 50%/96 (M5)</b>	Ref. no. 02214	Page 143
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<b>ELF-AIR1 RH 5000/ePM1 55%/96 (F7)</b>	Ref. no. 02239	Page 143
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<b>ELF-AIR1 RH 5000/ePM1 80%/96 (F9)</b>	Ref. no. 02446	Page 143
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The use of original spare air filters is mandatory to guarantee the specified technical data and air volumes.

■ External installation

Cover for external installation

<b>AIR1-AAD RH 5000</b> Weather protection cover for the unit	Ref. no. 06433	Page 136
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<b>AIR1-AAD RH 5000/ULM</b> Weather protection cover for the unit incl. recirculation module	Ref. no. 06439	Page 137
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<b>AIR1-AAD KR KW + DX RH 5000</b> Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06470	Page 138
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<b>AIR1-AAD NH EL + WW RH 5000</b> Weather protection cover for aux. heater	Ref. no. 06445	Page 138
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Terminal box heater

<b>AIR1-AAHK</b>	Ref. no. 07064	Page 139
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Hoods

<b>AIR1-AAHA XH 5500/RH 5000-6000</b> Intake hood outside air	Ref. no. 06496	Page 139
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<b>AIR1-AAHF XH 5500/RH 5000-6000</b> Discharge hood exhaust air	Ref. no. 06648	Page 140
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■ Controls

Controllers

<b>AIR1-BE ECO</b>	Ref. no. 06186	Page 141
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<b>AIR1-BE TOUCH</b>	Ref. no. 06187	Page 141
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Controller connection cable

<b>AIR1-SL 4/10</b> 10 m	Ref. no. 07073	Page 141
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<b>AIR1-SL 4/20</b> 20 m	Ref. no. 07121	Page 141
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Sensors

<b>AIR1/KWL-VOC 0-10V</b> Mixed gas sensor	Ref. no. 20250	Page 141
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<b>AIR1/KWL-CO2 0-10V</b> Carbon dioxide sensor	Ref. no. 20251	Page 141
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<b>AIR1/KWL-FTF 0-10V</b> Humidity-temperature sensor	Ref. no. 20252	Page 141
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<b>AIR1-CO2 K</b> Carbon dioxide sensor duct	Ref. no. 07124	Page 142
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Signal converter for sensors

<b>AIR1-SK</b>	Ref. no. 06019	Page 142
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Extension kit for constant pressure control

<b>AIR1-CAP</b>	Ref. no. 06756	Page 142
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(1) = When looking at the cooling register from the air flow direction, the service side is on the right for the R version and on the left for the L version.

(2) = Necessary accessory in connection with an AIR1-CO DX change-over register for connecting an AIR1 ventilation unit of the XC, XH and RH series to the control of an on-site cooling system.