

**AIR1 RH 8000**

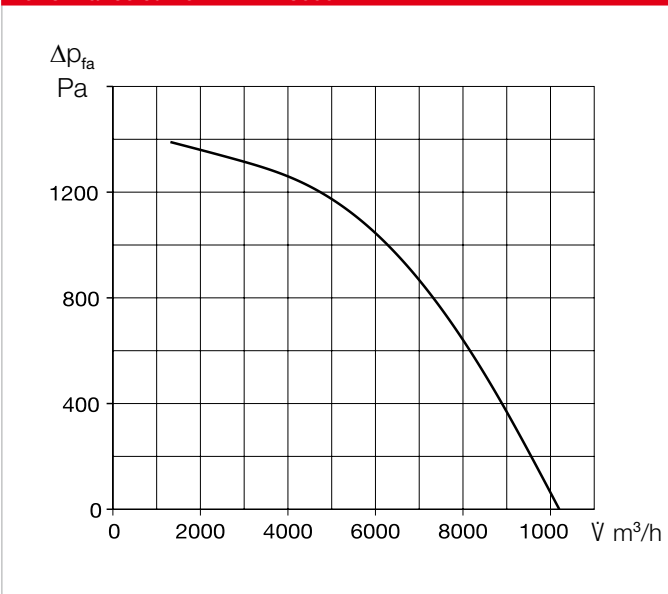


**Separable casing design**



Fig. shows accessories

**Performance curve AIR1 RH 8000**



**Unit types**

	<b>AIR1 RH 8000</b>	<b>AIR1 RH 8000/SO</b>
Ref. no.	04348	04357
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	1,080 m <sup>3</sup> /h
Max. air volume ERP	8,000 m <sup>3</sup> /h <sup>(1)</sup> (7,650 m <sup>3</sup> /h <sup>(4)</sup> )
Max. air volume (free blowing)	10,100 m <sup>3</sup> /h
Weight, unit operational	888 kg (905 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 (place of installation)	-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 3,600 W
Nominal current	11 / 11 / 12.4 A (11 / 11 / 14.1 A <sup>(4)</sup> )
Connection (wiring diagram no.)	1322

(1) = at 400 Pa external pressure loss ERP-compliant  
 (2) = other filter classes see optional accessories  
 (3) = with increased humidity recovery  
 (4) = AIR RH 8000/SO

**Sound data AIR1 RH 8000**

<b>Sound power level L<sub>WA</sub> dB(A) at 400 Pa external pressure</b>			
	2,400 m <sup>3</sup> /h	5,800 m <sup>3</sup> /h	8,000 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	78	85	91
Extract air (L <sub>WA</sub> )	63	67	74
Outside air (L <sub>WA</sub> )	67	64	71
Exhaust air (L <sub>WA</sub> )	77	83	90
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	2,400 m <sup>3</sup> /h	5,800 m <sup>3</sup> /h	8,000 m <sup>3</sup> /h
Housing rad. 1 m	47	51	57
Housing rad. 3 m	37	41	47
Housing rad. 5 m	33	37	43

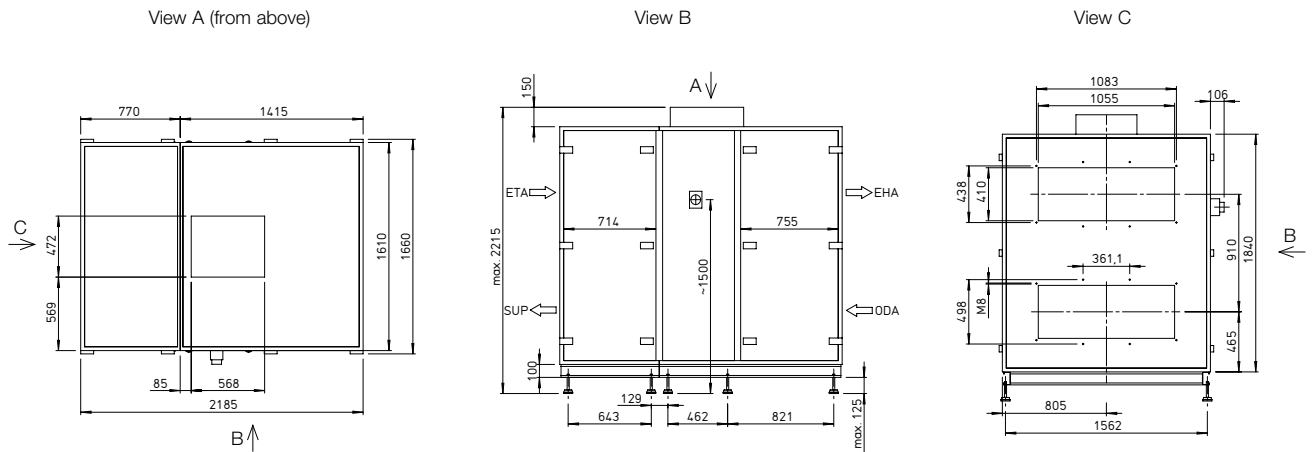
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

**Sound data AIR1 RH 8000/SO**

<b>Sound power level L<sub>WA</sub> dB(A) at 400 Pa external pressure</b>			
	2,400 m <sup>3</sup> /h	5,800 m <sup>3</sup> /h	7,650 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	78	85	91
Extract air (L <sub>WA</sub> )	64	67	74
Outside air (L <sub>WA</sub> )	67	64	71
Exhaust air (L <sub>WA</sub> )	77	84	89
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	2,400 m <sup>3</sup> /h	5,800 m <sup>3</sup> /h	7,650 m <sup>3</sup> /h
Housing rad. 1 m	47	51	57
Housing rad. 3 m	38	41	48
Housing rad. 5 m	33	37	43

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 8000



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 8000</b> Electrical, external	Ref. no. 01819	Page 122
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Auxiliary heater

<b>AIR1-ENH RH 8000</b> Electrical, external	Ref. no. 03626	Page 123
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<b>AIR1-NH WW RH 8000</b> Hot water, external	Ref. no. 03827	Page 124
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Hydraulic unit for hot water heater register

<b>WHS HE 24 V (0 – 10 V) M</b>	Ref. no. 06310	Page 125
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Cooling register

<b>AIR1-KR KW RH 8000 L <sup>(1)</sup></b> Cold water, external	Ref. no. 03983	Page 126
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<b>AIR1-KR KW RH 8000 R <sup>(1)</sup></b> Cold water, external	Ref. no. 04382	Page 126
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<b>AIR1-CO DX RH 8000 L <sup>(1)</sup></b> Change-over, external	Ref. no. 40395	Page 128
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<b>AIR1-CO DX RH 8000 R <sup>(1)</sup></b> Change-over, external	Ref. no. 40404	Page 128
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<b>AIR1-SM DX <sup>(2)</sup></b> Control module	Ref. no. 40408	Page 130
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■ Air routing

Multi-leaf damper

<b>AIR1-JVK XH 7000/RH 8000</b>	Ref. no. 06012	Page 130
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Recirculation module

<b>AIR1-ULM RH 8000</b>	Ref. no. 06184	Page 130
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Flexible connector

<b>AIR1-VS 105/41</b>	Ref. no. 04376	Page 131
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■ Air filters

Spare air filter and other filter classes

<b>ELF-AIR1 RH 8000/ePM10 50%/48 (M5)</b>	Ref. no. 02199	Page 139
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<b>ELF-AIR1 RH 8000/ePM10 50%/96 (M5)</b>	Ref. no. 02216	Page 139
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<b>ELF-AIR1 RH 8000/ePM1 55%/96 (F7)</b>	Ref. no. 02241	Page 139
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<b>ELF-AIR1 RH 8000/ePM1 80%/96 (F9)</b>	Ref. no. 02460	Page 139
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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 8000</b> Weather protection cover for the unit	Ref. no. 06435	Page 132
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<b>AIR1-AAD RH 8000/ULM</b> Weather protection cover for the unit incl. recirculation module	Ref. no. 06441	Page 133
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<b>AIR1-AAD KR KW + DX RH 8000</b> Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06472	Page 134
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<b>AIR1-AAD NH EL + WW RH 8000</b> Weather protection cover for aux. heater	Ref. no. 06447	Page 134
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Terminal box heater

<b>AIR1-AAHK</b>	Ref. no. 07064	Page 135
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Hoods

<b>AIR1-AAHA XH 7000/RH 8000</b> Intake hood outside air	Ref. no. 06497	Page 135
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<b>AIR1-AAHF XH 7000/RH 8000</b> Discharge hood exhaust air	Ref. no. 06841	Page 136
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■ Controls

Controllers

<b>AIR1-BE ECO</b>	Ref. no. 06186	Page 137
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<b>AIR1-BE TOUCH</b>	Ref. no. 06187	Page 137
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Controller connection cable

<b>AIR1-SL 4/10</b> 10 m	Ref. no. 07073	Page 137
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<b>AIR1-SL 4/20</b> 20 m	Ref. no. 07121	Page 137
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Sensors

<b>AIR1/KWL-VOC 0-10V</b> Mixed gas sensor	Ref. no. 20250	Page 137
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<b>AIR1/KWL-CO2 0-10V</b> Carbon dioxide sensor	Ref. no. 20251	Page 137
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<b>AIR1/KWL-FTF 0-10V</b> Humidity-temperature sensor	Ref. no. 20252	Page 137
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<b>AIR1-CO2 K</b> Carbon dioxide sensor duct	Ref. no. 07124	Page 138
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Signal converter for sensors

<b>AIR1-SK</b>	Ref. no. 06019	Page 138
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Extension kit for constant pressure control

<b>AIR1-CAP</b>	Ref. no. 06756	Page 138
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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.