

**AIR1 RH 1500**

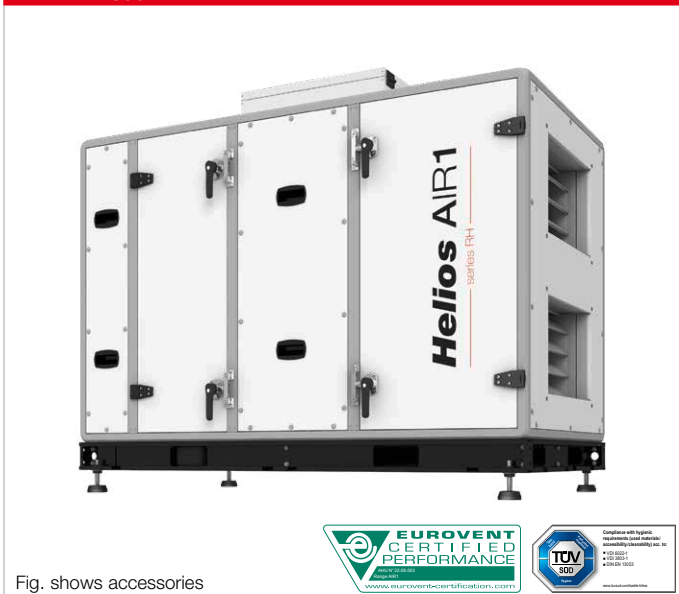
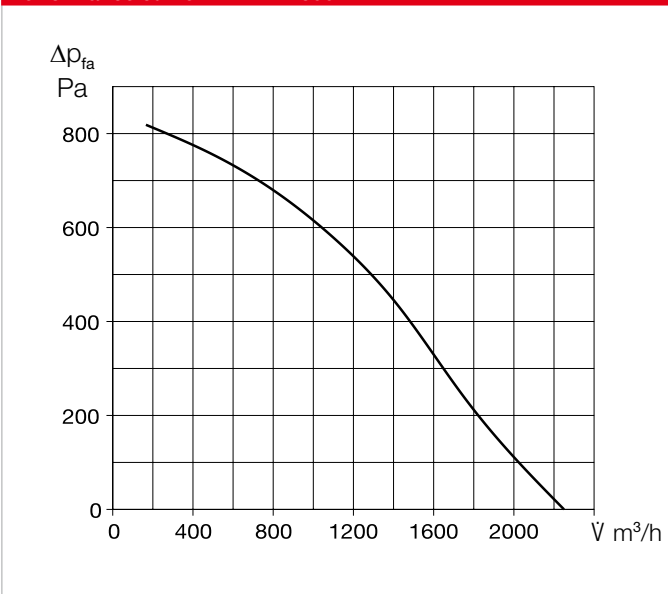


Fig. shows accessories

**Performance curve AIR1 RH 1500**



**Unit types**

	<b>AIR1 RH 1500</b>	<b>AIR1 RH 1500/SO</b>
Ref. no.	04343	04352
Heat exchanger	Condensation rotor	Adsorption rotor <sup>(4)</sup>

**Technical data**

<b>Mechanical data</b>	
Area of application	Inside/outside
Installation position	Standing
Maintenance access	Side, both sides
Min. air volume	330 m <sup>3</sup> /h
Max. air volume ERP	1,600 m <sup>3</sup> /h <sup>(1)</sup> (1,520 m <sup>3</sup> /h <sup>(5)</sup> )
Max. air volume (free blowing)	2,250 m <sup>3</sup> /h
Weight, unit operational	315 kg (320 kg <sup>(5)</sup> )
Delivery unit	1-part
Unit segments	1
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 500 W
Nominal current	
– Ventilation unit	2.2 / 2.2 / 1.3 A
– Electrical auxiliary heater	6.1 / 6.1 / 6.1 A <sup>(3)</sup>
– max. total	8.3 / 8.3 / 7.4 A
Connection (wiring diagram no.)	1317

(1) = at 250 Pa external pressure loss ERP-compliant  
 (2) = other filter classes see optional accessories  
 (3) = Optional accessories  
 (4) = with increased humidity recovery  
 (5) = AIR RH 1500/SO

**Sound data AIR1 RH 1500**

<b>Sound power level L<sub>WA</sub> dB(A) at 250 Pa external pressure</b>			
	450 m <sup>3</sup> /h	1,200 m <sup>3</sup> /h	1,600 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	71	74	77
Extract air (L <sub>WA</sub> )	59	60	62
Outside air (L <sub>WA</sub> )	62	57	59
Exhaust air (L <sub>WA</sub> )	69	72	76
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	450 m <sup>3</sup> /h	1,200 m <sup>3</sup> /h	1,600 m <sup>3</sup> /h
Housing rad. 1 m	41	41	44
Housing rad. 3 m	31	32	34
Housing rad. 5 m	27	27	30

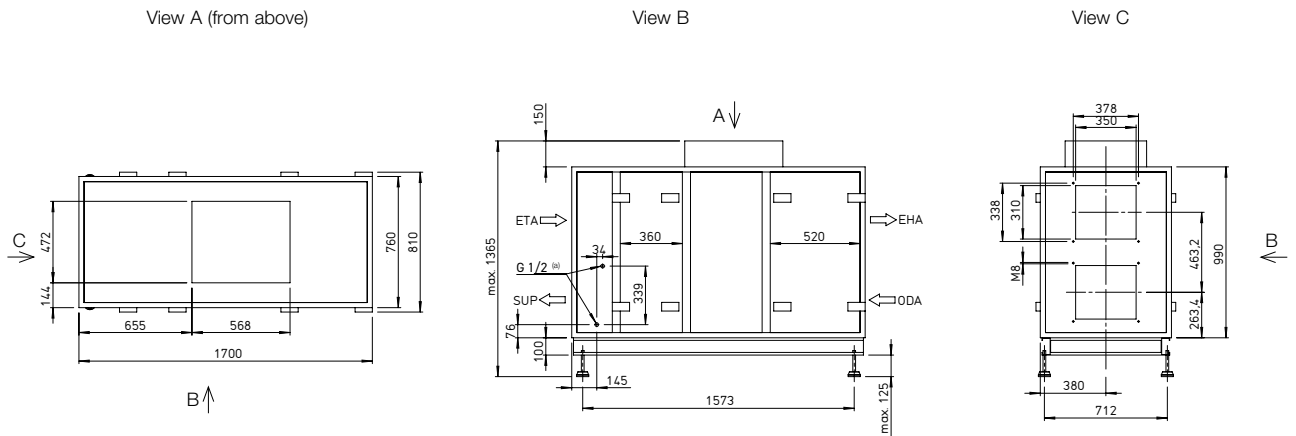
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

**Sound data AIR1 RH 1500/SO**

<b>Sound power level L<sub>WA</sub> dB(A) at 250 Pa external pressure</b>			
	450 m <sup>3</sup> /h	1,200 m <sup>3</sup> /h	1,520 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	71	74	77
Extract air (L <sub>WA</sub> )	59	61	62
Outside air (L <sub>WA</sub> )	62	58	60
Exhaust air (L <sub>WA</sub> )	70	73	76
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	450 m <sup>3</sup> /h	1,200 m <sup>3</sup> /h	1,520 m <sup>3</sup> /h
Housing rad. 1 m	41	42	44
Housing rad. 3 m	32	33	34
Housing rad. 5 m	27	28	30

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 1500



Dimensions in mm

(a) Internal thread

ODA: Outside air

EHA: Exhaust air

ETA: Extract air

SUP: Supply air

■ Accessories

■ Heating and cooling registers

Pre-heater

<b>AIR1-EVH RH 1500</b> Electrical, external	Ref. no. 01262	Page 126
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Auxiliary heater

<b>AIR1-ENH RH 1500</b> Electrical, internal	Ref. no. 03605	Page 127
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<b>AIR1-NH WW RH 1500</b> Hot water, internal	Ref. no. 03805	Page 128
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Hydraulic unit for hot water heater register

<b>WHSH HE 24 V (0 – 10 V)</b>	Ref. no. 08318	Page 129
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Cooling register

<b>AIR1-KR KW RH 1500 L <sup>(1)</sup></b> Cold water, external	Ref. no. 03958	Page 130
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<b>AIR1-KR KW RH 1500 R <sup>(1)</sup></b> Cold water, external	Ref. no. 04283	Page 130
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<b>AIR1-CO DX RH 1500 L <sup>(1)</sup></b> Change-over, external	Ref. no. 40390	Page 132
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<b>AIR1-CO DX RH 1500 R <sup>(1)</sup></b> Change-over, external	Ref. no. 40399	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 1500/RH 1500</b>	Ref. no. 06006	Page 134
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Flexible connector

<b>AIR1-VS 35/31</b>	Ref. no. 04372	Page 135
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Adapter square-round

<b>AIR1-ÜS XH 1500/RH 1500</b>	Ref. no. 04367	Page 135
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■ External installation

Cover for external installation

<b>AIR1-AAD RH 1500</b> Weather protection cover for the unit	Ref. no. 06382	Page 136
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<b>AIR1-AAD KR KW + DX RH 1500</b> Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06467	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 1500/RH 1500</b> Intake hood outside air	Ref. no. 06484	Page 139
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<b>AIR1-AAHF XH 1500/RH 1500</b> Discharge hood exhaust air	Ref. no. 06643	Page 140
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■ Controls

Controllers

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

Controller connection cable

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

Sensors

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

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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■ Air filters

Spare air filter and other filter classes

<b>ELF-AIR1 RH 1500/ePM10 50%/48 (M5)</b>	Ref. no. 02192	Page 143
<b>ELF-AIR1 RH 1500/ePM10 50%/96 (M5)</b>	Ref. no. 02211	Page 143
<b>ELF-AIR1 RH 1500/ePM1 55%/96 (F7)</b>	Ref. no. 02236	Page 143
<b>ELF-AIR1 RH 1500/ePM1 80%/96 (F9)</b>	Ref. no. 02374	Page 143

The use of original spare air filters is mandatory to guarantee the specified technical data and air volumes.

(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.