

AIR1 RH 3000

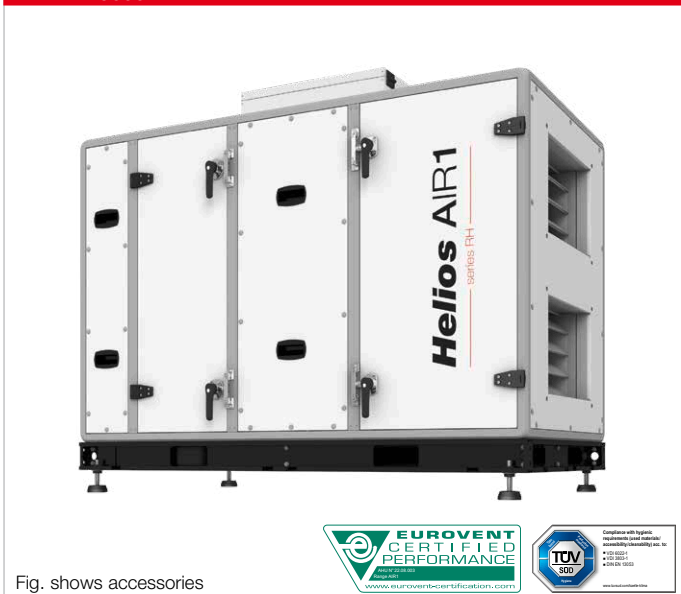
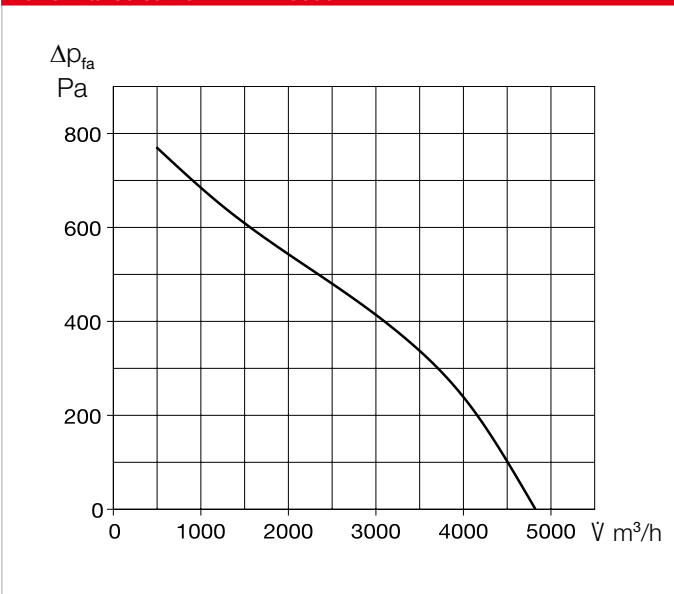


Fig. shows accessories



Performance curve AIR1 RH 3000



Unit types

	AIR1 RH 3000	AIR1 RH 3000/SO
Ref. no.	04345	04354
Heat exchanger	Condensation rotor	Adsorption rotor ⁽⁴⁾

Technical data

Mechanical data	
Area of application	Inside/outside
Installation position	Standing
Maintenance access	Side, both sides
Min. air volume	790 m ³ /h
Max. air volume ERP	3,000 m ³ /h ⁽¹⁾ (2,770 m ³ /h ⁽⁵⁾)
Max. air volume (free blowing)	4,800 m ³ /h
Weight, unit operational	438 kg (450 kg ⁽⁵⁾)
Delivery unit	1-part
Unit segments	1
Housing class (DIN 1886)	T2 / TB2 / D2
Filter Outside air	ISO ePM ₁ , 55% (F7) ⁽²⁾
Filter Extract air	ISO ePM ₁₀ 50% (M5) ⁽²⁾
Media temperature (air)	-20 to +50 °C
Ambient temperature (operation)	-20 to +50 °C
Protection class	IP31
Electrical data	
Central building control system	BACnet, Modbus TCP/IP
Voltage / Frequency	400 V 3N -, 50 Hz
Max. output Fans	2 x 1,500 W
Nominal current	
- Ventilation unit	4.6 / 4.6 / 5.8 A
- Electrical auxiliary heater	13.1 / 13.1 / 13.1 A ⁽³⁾
- max. total	17.7 / 17.7 / 18.9 A
Connection (wiring diagram no.)	1319

(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 3000/SO

Sound data AIR1 RH 3000

Sound power level L_{WA} dB(A) at 250 Pa external pressure			
	900 m ³ /h	2,200 m ³ /h	3,000 m ³ /h
Supply air (L _{WA})	80	83	84
Extract air (L _{WA})	67	69	68
Outside air (L _{WA})	68	70	67
Exhaust air (L _{WA})	79	82	82
Sound pressure level L_{pA} dB(A) of sound radiated from housing			
	900 m ³ /h	2,200 m ³ /h	3,000 m ³ /h
Housing rad. 1 m	48	50	50
Housing rad. 3 m	39	41	40
Housing rad. 5 m	34	37	36

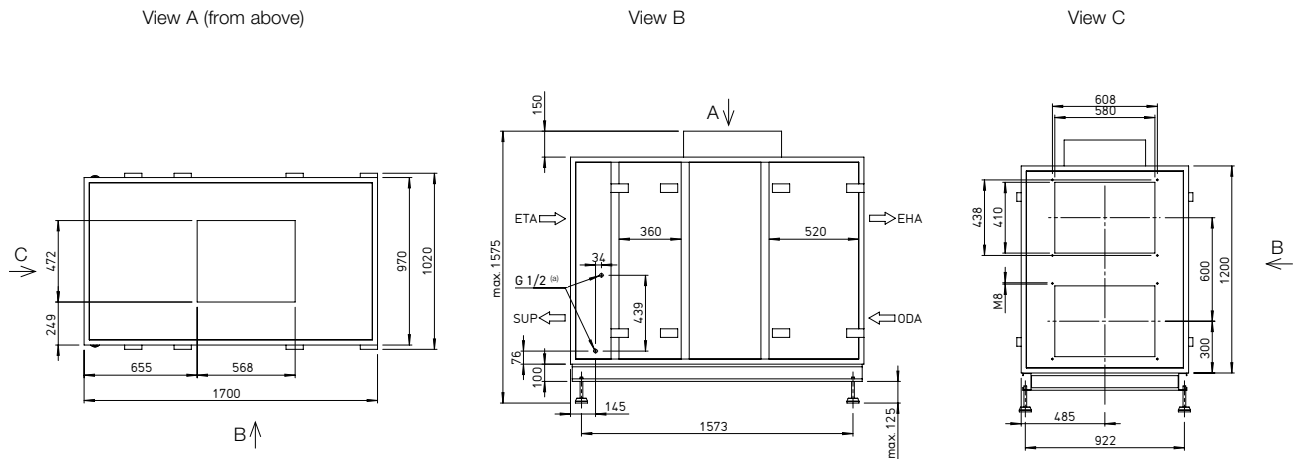
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

Sound data AIR1 RH 3000/SO

Sound power level L_{WA} dB(A) at 250 Pa external pressure			
	900 m ³ /h	2,200 m ³ /h	2,770 m ³ /h
Supply air (L _{WA})	81	85	84
Extract air (L _{WA})	67	70	68
Outside air (L _{WA})	69	72	68
Exhaust air (L _{WA})	79	83	82
Sound pressure level L_{pA} dB(A) of sound radiated from housing			
	900 m ³ /h	2,200 m ³ /h	2,770 m ³ /h
Housing rad. 1 m	49	52	50
Housing rad. 3 m	39	42	41
Housing rad. 5 m	35	38	36

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 3000



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		
AIR1-EVH RH 3000 Electrical, external	Ref. no. 01711	Page 126
Auxiliary heater		
AIR1-ENH RH 3000 Electrical, internal	Ref. no. 03617	Page 127
AIR1-NH WW RH 3000 Hot water, internal	Ref. no. 03824	Page 128
Hydraulic unit for hot water heater register		
WHSH HE 24 V (0 – 10 V)	Ref. no. 08318	Page 129
Cooling register		
AIR1-KR KW RH 3000 L ⁽¹⁾ Cold water, external	Ref. no. 03967	Page 130
AIR1-KR KW RH 3000 R ⁽¹⁾ Cold water, external	Ref. no. 04286	Page 130
AIR1-CO DX RH 3000 L ⁽¹⁾ Change-over, external	Ref. no. 40392	Page 132
AIR1-CO DX RH 3000 R ⁽¹⁾ Change-over, external	Ref. no. 40401	Page 132
AIR1-SM DX ⁽²⁾ Control module	Ref. no. 40408	Page 134

■ Air routing

Multi-leaf damper		
AIR1-JVK XH 3500-4500/RH 3000	Ref. no. 06009	Page 134
Flexible connector		
AIR1-VS 58/41	Ref. no. 04374	Page 135
Adapter square-round		
AIR1-ÜS XH 3500-4500/RH 3000	Ref. no. 04369	Page 135

(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.

■ External installation

Cover for external installation		
AIR1-AAD RH 3000 Weather protection cover for the unit	Ref. no. 06432	Page 136
AIR1-AAD KR KW + DX RH 3000 Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06469	Page 138
Terminal box heater		
AIR1-AAHK	Ref. no. 07064	Page 139
Hoods		
AIR1-AAHA XH 3500-4500/RH 3000 Intake hood outside air	Ref. no. 06487	Page 139
AIR1-AAHF XH 3500-4500/RH 3000 Discharge hood exhaust air	Ref. no. 06647	Page 140

■ Controls

Controllers		
AIR1-BE ECO	Ref. no. 06186	Page 141
AIR1-BE TOUCH	Ref. no. 06187	Page 141
Controller connection cable		
AIR1-SL 4/10 10 m	Ref. no. 07073	Page 141
AIR1-SL 4/20 20 m	Ref. no. 07121	Page 141
Sensors		
AIR1/KWL-VOC 0-10V Mixed gas sensor	Ref. no. 20250	Page 141
AIR1/KWL-CO2 0-10V Carbon dioxide sensor	Ref. no. 20251	Page 141
AIR1/KWL-FTF 0-10V Humidity-temperature sensor	Ref. no. 20252	Page 141
AIR1-CO2 K Carbon dioxide sensor duct	Ref. no. 07124	Page 142
Signal converter for sensors		
AIR1-SK	Ref. no. 06019	Page 142
Extension kit for constant pressure control		
AIR1-CAP	Ref. no. 06756	Page 142

■ Air filters

Spare air filter and other filter classes		
ELF-AIR1 RH 3000/ePM10 50%/48 (M5)	Ref. no. 02194	Page 143
ELF-AIR1 RH 3000/ePM10 50%/96 (M5)	Ref. no. 02213	Page 143
ELF-AIR1 RH 3000/ePM1 55%/96 (F7)	Ref. no. 02238	Page 143
ELF-AIR1 RH 3000/ePM1 80%/96 (F9)	Ref. no. 02425	Page 143

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