

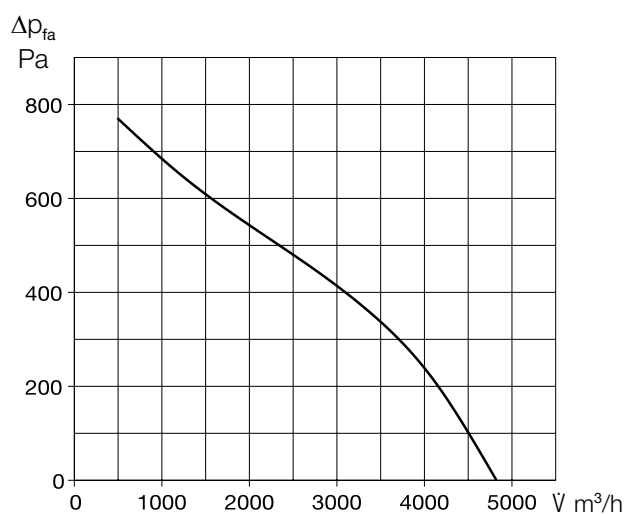
AIR1 RH 3000



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 m³/h
Max. air volume ERP	3,000 m³/h ⁽¹⁾ (2,770 m³/h ⁽⁵⁾)
Max. air volume (free blowing)	4,800 m³/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 (place of installation)	-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 m³/h	2,200 m³/h	3,000 m³/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 m³/h	2,200 m³/h	3,000 m³/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

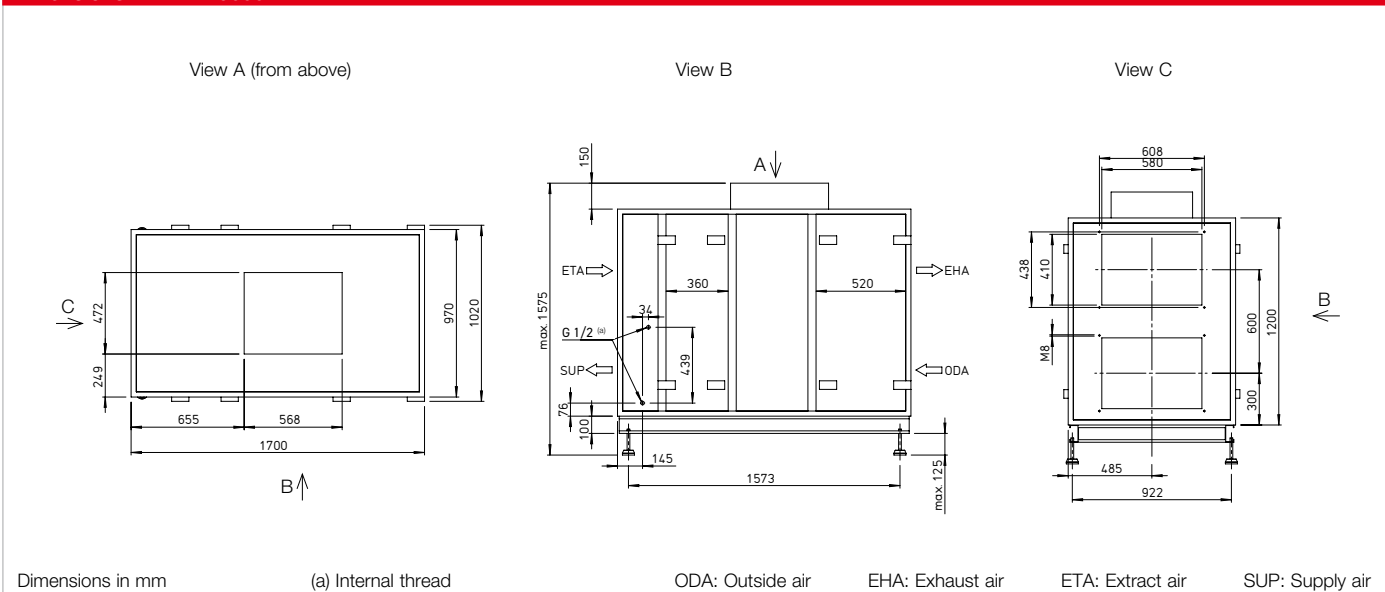
	900 m³/h	2,200 m³/h	2,770 m³/h
Supply air (L _{WA})	81	85	84
Extract air (L _{WA})	67	70	68
Outside air (L _{WA})	69	72	68
Exhaust air (L _{WA})	79	83	82

Sound pressure level L_{PA} dB(A) of sound radiated from housing

	900 m³/h	2,200 m³/h	2,770 m³/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



Accessories

Heating and cooling registers

Pre-heater			
AIR1-EVH RH 3000	Electrical, external	Ref. no. 01711	Page 93
Auxiliary heater			
AIR1-ENH RH 3000	Electrical, internal	Ref. no. 03617	Page 95
AIR1-NH WW RH 3000	Hot water, internal	Ref. no. 03824	Page 97
Hydraulic unit for hot water heater register			
WHSB HE 24 V (0 – 10 V)		Ref. no. 08318	Page 96
Cooling register			
AIR1-KR KW RH 3000 L ⁽¹⁾	Cold water, external	Ref. no. 03967	Page 102
AIR1-KR KW RH 3000 R ⁽¹⁾	Cold water, external	Ref. no. 04286	Page 102
AIR1-CO DX RH 3000 L ⁽¹⁾	Change-over, external	Ref. no. 40392	Page 108
AIR1-CO DX RH 3000 R ⁽¹⁾	Change-over, external	Ref. no. 40401	Page 108
AIR1-SM DX ⁽²⁾	Control module	Ref. no. 40408	Page 110
Cooling register accessories			
AIR1-KS B	for use with floor-mounted units and cooling register	Ref. no. 07169	Page 114

Air routing

Multi-leaf damper			
AIR1-JVK XH 3500-4500/RH 3000		Ref. no. 06009	Page 111
Flexible connector			
AIR1-VS 58/41		Ref. no. 04374	Page 113
Potential equalisation cable			
PAK M8		Ref. no. 40812	Page 113
Adapter square-round			
AIR1-ÜS XH 3500-4500/RH 3000 (DN 500)		Ref. no. 04369	Page 112

External installation

Cover for external installation			
AIR1-AAD RH 3000	Weather protection cover for the unit	Ref. no. 06432	Page 117
AIR1-AAD KR KW + DX RH 3000	Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06469	Page 118
Terminal box heater			
AIR1-AAHK		Ref. no. 07064	Page 114
Hoods			
AIR1-AAHA XH 3500-4500/RH 3000	Intake hood outside air	Ref. no. 06487	Page 115
AIR1-AAHF XH 3500-4500/RH 3000	Discharge hood exhaust air	Ref. no. 06647	Page 115

Controls

Controllers			
AIR1-BE ECO		Ref. no. 06186	Page 119
AIR1-BE TOUCH		Ref. no. 06187	Page 119
Controller connection cable			
AIR1-SL 4/10	10 m	Ref. no. 07073	Page 119
AIR1-SL 4/20	20 m	Ref. no. 07121	Page 119
Sensors			
AIR1/KWL-VOC 0-10V	Mixed gas sensor	Ref. no. 20250	Page 119
AIR1/KWL-CO2 0-10V	Carbon dioxide sensor	Ref. no. 20251	Page 119
AIR1/KWL-FTF 0-10V	Humidity-temperature sensor	Ref. no. 20252	Page 119
AIR1-CO2 K	Carbon dioxide sensor duct	Ref. no. 07124	Page 119
Signal converter for sensors			
AIR1-SK		Ref. no. 06019	Page 120
Extension kit for constant pressure control			
AIR1-CAP		Ref. no. 06756	Page 120
Duct smoke detector with VdS approval			
RMK		Ref. no. 04982	Page 120
Duct smoke detector with DIBt approval			
KRM		Ref. no. 40825	Page 120
KRM-MK	Mounting bracket for KRM	Ref. no. 40826	Page 120
KRM-G	Protective housing	Ref. no. 40847	Page 120
KRM-MKG	Mounting bracket for protective housing	Ref. no. 40848	Page 120

Air filters

Spare air filter and other filter classes			
ELF-AIR1 RH 3000/ePM10 50%/48 (M5)		Ref. no. 02194	Page 123
ELF-AIR1 RH 3000/ePM10 50%/96 (M5)		Ref. no. 02213	Page 123
ELF-AIR1 RH 3000/ePM1 55%/96 (F7)		Ref. no. 02238	Page 123
ELF-AIR1 RH 3000/ePM1 80%/96 (F9)		Ref. no. 02425	Page 123

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.