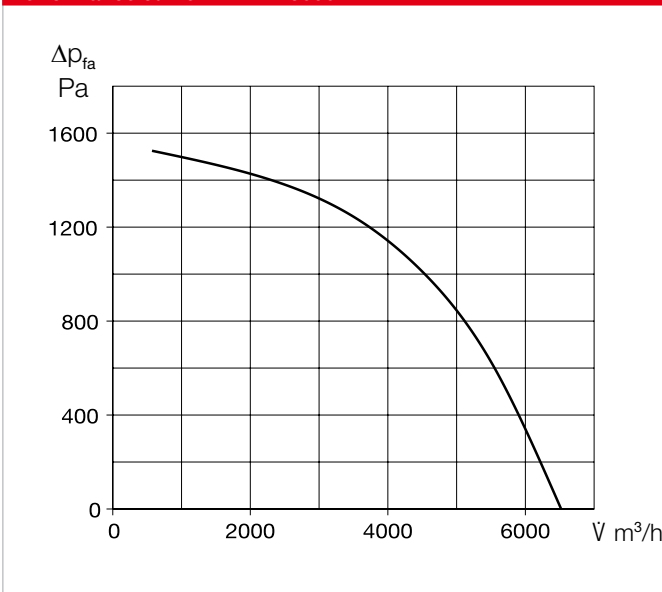


AIR1 RH 5000



Performance curve AIR1 RH 5000



Unit types

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

Technical data

Mechanical data

Area of application	Inside/outside
Installation position	Standing
Maintenance access	Side, both sides
Min. air volume	665 m³/h
Max. air volume ERP	5,150 m³/h ⁽¹⁾ (4,950 m³/h ⁽⁴⁾)
Max. air volume (free blowing)	6,500 m³/h
Weight, unit operational	629 kg (645 kg ⁽⁴⁾)
Delivery unit	2-part
Unit segments	2
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 2,500 W
Nominal current	7.6 / 7.6 / 8.9 A (7.6 / 7.6 / 9.5 A ⁽⁴⁾)
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

Sound power level L_{WA} dB(A) at 400 Pa external pressure

	1,500 m³/h	3,700 m³/h	5,150 m³/h
Supply air (L_{WA})	76	81	87
Extract air (L_{WA})	63	64	69
Outside air (L_{WA})	67	61	65
Exhaust air (L_{WA})	75	80	86

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

	1,500 m³/h	3,700 m³/h	5,150 m³/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

Sound power level L_{WA} dB(A) at 400 Pa external pressure

	1,500 m³/h	3,700 m³/h	4,950 m³/h
Supply air (L_{WA})	77	81	86
Extract air (L_{WA})	63	65	69
Outside air (L_{WA})	67	62	65
Exhaust air (L_{WA})	75	80	85

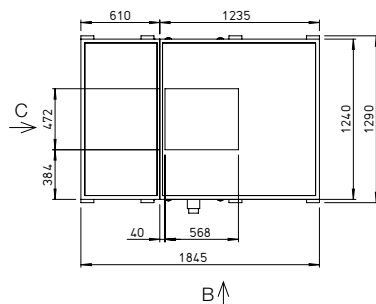
Sound pressure level L_{pA} dB(A) of sound radiated from housing

	1,500 m³/h	3,700 m³/h	4,950 m³/h
Housing rad. 1 m	46	47	52
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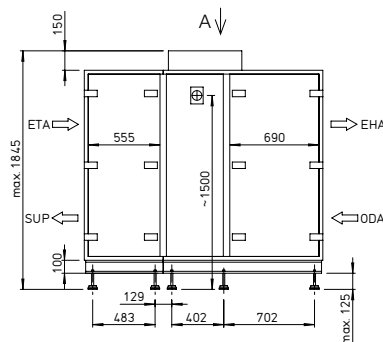
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

Dimensions AIR1 RH 5000

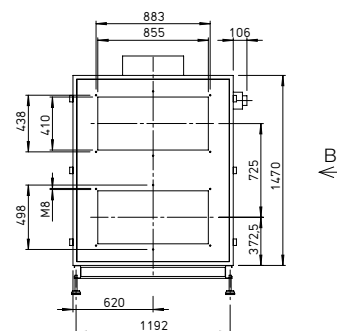
View A (from above)



View B



View C



Dimensions in mm

ODA: Outside air

EHA: Exhaust air

ETA: Extract air

SUP: Supply air

Accessories

Heating and cooling registers

Pre-heater

AIR1-EVH RH 5000	Electrical, external	Ref. no. 01791	Page 93
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Auxiliary heater

AIR1-ENH RH 5000	Electrical, external	Ref. no. 03618	Page 95
AIR1-NH WW RH 5000	Hot water, external	Ref. no. 03825	Page 97

Hydraulic unit for hot water heater register

WHSB HE 24 V (0 – 10 V) M		Ref. no. 06310	Page 96
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Cooling register

AIR1-KR KW RH 5000 L ⁽¹⁾	Cold water, external	Ref. no. 03971	Page 102
AIR1-KR KW RH 5000 R ⁽¹⁾	Cold water, external	Ref. no. 04287	Page 102
AIR1-CO DX RH 5000 L ⁽¹⁾	Change-over, external	Ref. no. 40393	Page 108
AIR1-CO DX RH 5000 R ⁽¹⁾	Change-over, external	Ref. no. 40402	Page 108
AIR1-SM DX ⁽²⁾	Control module	Ref. no. 40408	Page 110

Cooling register accessories

AIR1-KS B		Ref. no. 07169	Page 114
for use with floor-mounted units and cooling register			

Air routing

Multi-leaf damper

AIR1-JVK XH 5500/RH 5000-6000		Ref. no. 06010	Page 111
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Recirculation module

AIR1-ULM RH 5000		Ref. no. 06040	Page 110
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Flexible connector

AIR1-VS 85/41		Ref. no. 04375	Page 113
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Potential equalisation cable

PAK M8		Ref. no. 40812	Page 113
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Adapter square-round

AIR1-ÜS XH 5500/RH 5000-6000 (DN 630)		Ref. no. 04370	Page 112
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Air filters

Spare air filter and other filter classes

ELF-AIR1 RH 5000/ePM10 50%/48 (M5)		Ref. no. 02196	Page 123
ELF-AIR1 RH 5000/ePM10 50%/96 (M5)		Ref. no. 02214	Page 123
ELF-AIR1 RH 5000/ePM1 55%/96 (F7)		Ref. no. 02239	Page 123
ELF-AIR1 RH 5000/ePM1 80%/96 (F9)		Ref. no. 02446	Page 123

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

External installation

Cover for external installation

AIR1-AAD RH 5000		Ref. no. 06433	Page 117
Weather protection cover for the unit			

AIR1-AAD RH 5000/ULM		Ref. no. 06439	Page 117
Weather protection cover for the unit incl. recirculation module			

AIR1-AAD KR KW + DX RH 5000		Ref. no. 06470	Page 118
Weather protection cover for cooling register cold water or direct evaporator			

AIR1-AAD NH EL + WW RH 5000		Ref. no. 06445	Page 118
Weather protection cover for aux. heater			

AIR1-AAD KR KW + DX RH 5000		Ref. no. 06470	Page 118
Weather protection cover for cooling register cold water or direct evaporator			

AIR1-AAHK		Ref. no. 07064	Page 114
Terminal box heater			

AIR1-AAHA XH 5500/RH 5000-6000		Ref. no. 06496	Page 115
Intake hood outside air			

AIR1-AAHF XH 5500/RH 5000-6000		Ref. no. 06648	Page 115
Discharge hood exhaust air			

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
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Extension kit for constant pressure control

AIR1-CAP		Ref. no. 06756	Page 120
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Duct smoke detector with VdS approval

RMK		Ref. no. 04982	Page 120
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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

(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.