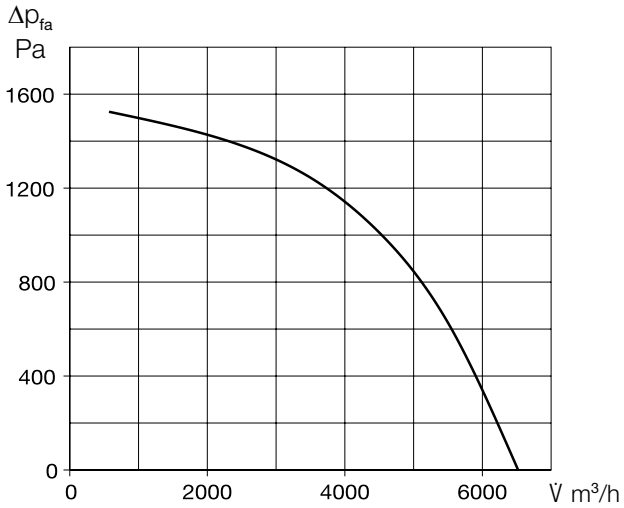
AIR1 RH 5000



Separable casing design

Fig. shows accessories

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.

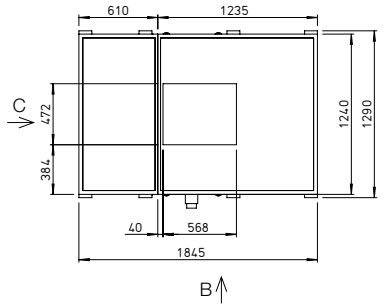
Sound data AIR1 RH 5000/SO

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
Housing rad. 3 m	36	38	42
Housing rad. 5 m	32	33	38

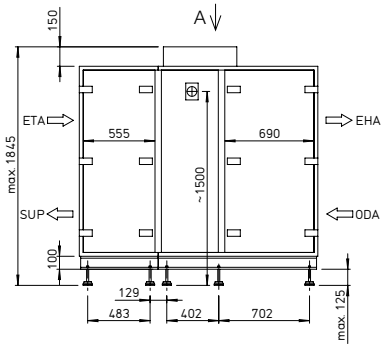
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

Dimensions AIR1 RH 5000

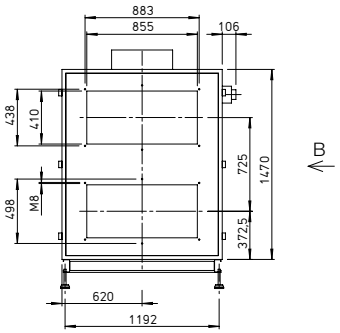
View A (from above)



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
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		
WHSH HE 24 V (0 – 10 V) M	Ref. no. 06310	Page 96
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 for use with floor-mounted units and cooling register	Ref. no. 07169	Page 114

Air routing		
Multi-leaf damper		
AIR1-JVK XH 5500/RH 5000-6000	Ref. no. 06010	Page 111
Recirculation module		
AIR1-ULM RH 5000	Ref. no. 06040	Page 110
Flexible connector		
AIR1-VS 85/41	Ref. no. 04375	Page 113
Potential equalisation cable		
PAK M8	Ref. no. 40812	Page 113
Adapter square-round		
AIR1-ÜS XH 5500/RH 5000-6000 (DN 630)	Ref. no. 04370	Page 112

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.		

(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 5000 Weather protection cover for the unit	Ref. no. 06433	Page 117
AIR1-AAD RH 5000/ULM Weather protection cover for the unit incl. recirculation module	Ref. no. 06439	Page 117
AIR1-AAD KR KW + DX RH 5000 Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06470	Page 118
AIR1-AAD NH EL + WW RH 5000 Weather protection cover for aux. heater	Ref. no. 06445	Page 118
Terminal box heater		
AIR1-AAHK	Ref. no. 07064	Page 114
Hoods		
AIR1-AAHA XH 5500/RH 5000-6000 Intake hood outside air	Ref. no. 06496	Page 115
AIR1-AAHF XH 5500/RH 5000-6000 Discharge hood exhaust air	Ref. no. 06648	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