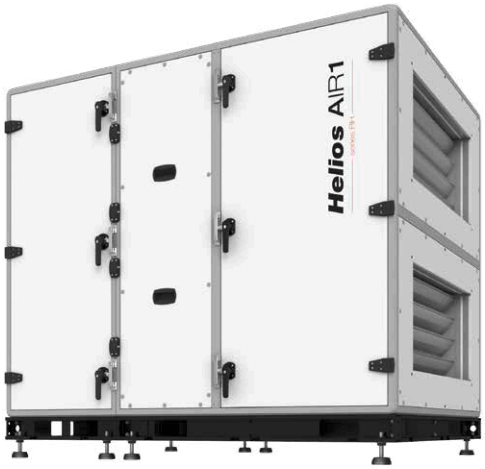
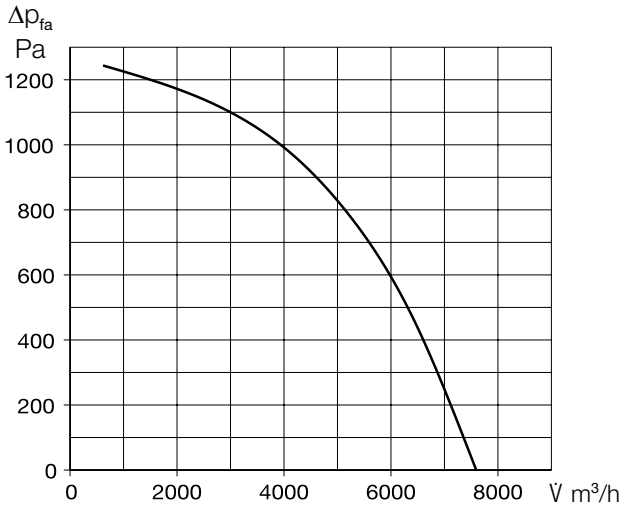
AIR1 RH 6000



Separable casing design

Fig. shows accessories

Performance curve AIR1 RH 6000



Unit types

	AIR1 RH 6000	AIR1 RH 6000/SO
Ref. no.	04347	04356
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	845 m³/h
Max. air volume ERP	6,100 m³/h (1) (5,950 m³/h (4))
Max. air volume (free blowing)	7,600 m³/h
Weight, unit operational	775 kg (787 kg (4))
Delivery unit	2-part
Unit segments	2
Housing class (DIN 1886)	T2 / TB2 / D2
Filter Outside air	ISO ePM₁ 55% (F7) (2)
Filter Extract air	ISO ePM₁₀ 50% (M5) (2)
Media temperature (air)	-20 to +40 °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 2,400 W
Nominal current	7.3 / 7.3 / 8.8 A (7.3 / 7.3 / 9.3 A (4))
Connection (wiring diagram no.)	1321

(1) = at 400 Pa external pressure loss ERP-compliant
(2) = other filter classes see optional accessories
(3) = with increased humidity recovery
(4) = AIR RH 6000/SO

Sound data AIR1 RH 6000

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

	1,900 m³/h	4,400 m³/h	6,100 m³/h
Supply air (L_{WA})	77	80	87
Extract air (L_{WA})	63	64	70
Outside air (L_{WA})	67	61	66
Exhaust air (L_{WA})	76	79	85

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

	1,900 m³/h	4,400 m³/h	6,100 m³/h
Housing rad. 1 m	46	47	53
Housing rad. 3 m	37	37	44
Housing rad. 5 m	32	33	39

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 6000/SO

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

	1,900 m³/h	4,400 m³/h	5,950 m³/h
Supply air (L_{WA})	77	81	86
Extract air (L_{WA})	64	64	70
Outside air (L_{WA})	67	61	65
Exhaust air (L_{WA})	76	79	85

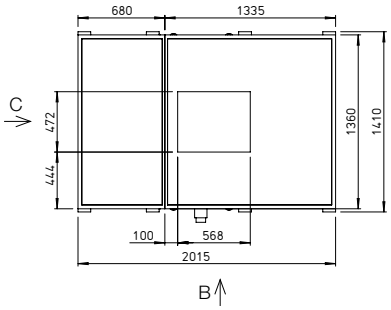
Sound pressure level L_{PA} dB(A) of sound radiated from housing

	1,900 m³/h	4,400 m³/h	5,950 m³/h
Housing rad. 1 m	47	47	53
Housing rad. 3 m	37	38	43
Housing rad. 5 m	33	33	39

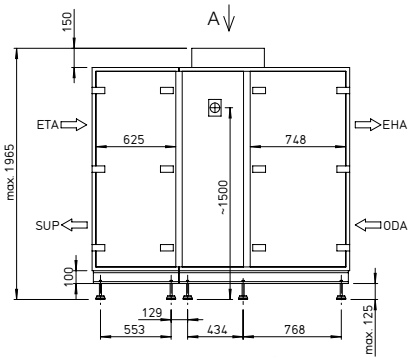
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.

Dimensions AIR1 RH 6000

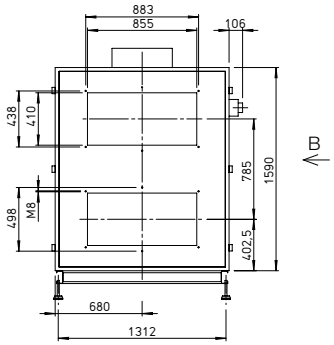
View A (from above)



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 6000 Electrical, external	Ref. no. 01792	Page 122
Auxiliary heater		
AIR1-ENH RH 6000 Electrical, external	Ref. no. 03625	Page 123
AIR1-NH WW RH 6000 Hot water, external	Ref. no. 03826	Page 124
Hydraulic unit for hot water heater register		
WHSH HE 24 V (0 – 10 V) M	Ref. no. 06310	Page 125
Cooling register		
AIR1-KR KW RH 6000 L (1) Cold water, external	Ref. no. 03976	Page 126
AIR1-KR KW RH 6000 R (1) Cold water, external	Ref. no. 04288	Page 126
AIR1-CO DX RH 6000 L (1) Change-over, external	Ref. no. 40394	Page 128
AIR1-CO DX RH 6000 R (1) Change-over, external	Ref. no. 40403	Page 128
AIR1-SM DX (2) Control module	Ref. no. 40408	Page 130

Air routing		
Multi-leaf damper		
AIR1-JVK XH 5500/RH 5000-6000	Ref. no. 06010	Page 130
Recirculation module		
AIR1-ULM RH 6000	Ref. no. 06160	Page 130
Flexible connector		
AIR1-VS 85/41	Ref. no. 04375	Page 131
Adapter square-round		
AIR1-ÜS XH 5500/RH 5000-6000	Ref. no. 04370	Page 131

Air filters		
Spare air filter and other filter classes		
ELF-AIR1 RH 6000/ePM10 50%/48 (M5)	Ref. no. 02220	Page 139
ELF-AIR1 RH 6000/ePM10 50%/96 (M5)	Ref. no. 02215	Page 139
ELF-AIR1 RH 6000/ePM1 55%/96 (F7)	Ref. no. 02240	Page 139
ELF-AIR1 RH 6000/ePM1 80%/96 (F9)	Ref. no. 02451	Page 139

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 6000 Weather protection cover for the unit	Ref. no. 06434	Page 132
AIR1-AAD RH 6000/ULM Weather protection cover for the unit incl. recirculation module	Ref. no. 06440	Page 133
AIR1-AAD KR KW + DX RH 6000 Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06471	Page 134
AIR1-AAD NH EL + WW RH 6000 Weather protection cover for aux. heater	Ref. no. 06446	Page 134
Terminal box heater		
AIR1-AAHK	Ref. no. 07064	Page 135
Hoods		
AIR1-AAHA XH 5500/RH 5000-6000 Intake hood outside air	Ref. no. 06496	Page 135
AIR1-AAHF XH 5500/RH 5000-6000 Discharge hood exhaust air	Ref. no. 06648	Page 136

Controls		
Controllers		
AIR1-BE ECO	Ref. no. 06186	Page 137
AIR1-BE TOUCH	Ref. no. 06187	Page 137
Controller connection cable		
AIR1-SL 4/10 10 m	Ref. no. 07073	Page 137
AIR1-SL 4/20 20 m	Ref. no. 07121	Page 137
Sensors		
AIR1/KWL-VOC 0-10V Mixed gas sensor	Ref. no. 20250	Page 137
AIR1/KWL-CO2 0-10V Carbon dioxide sensor	Ref. no. 20251	Page 137
AIR1/KWL-FTF 0-10V Humidity-temperature sensor	Ref. no. 20252	Page 137
AIR1-CO2 K Carbon dioxide sensor duct	Ref. no. 07124	Page 138
Signal converter for sensors		
AIR1-SK	Ref. no. 06019	Page 138
Extension kit for constant pressure control		
AIR1-CAP	Ref. no. 06756	Page 138

(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.