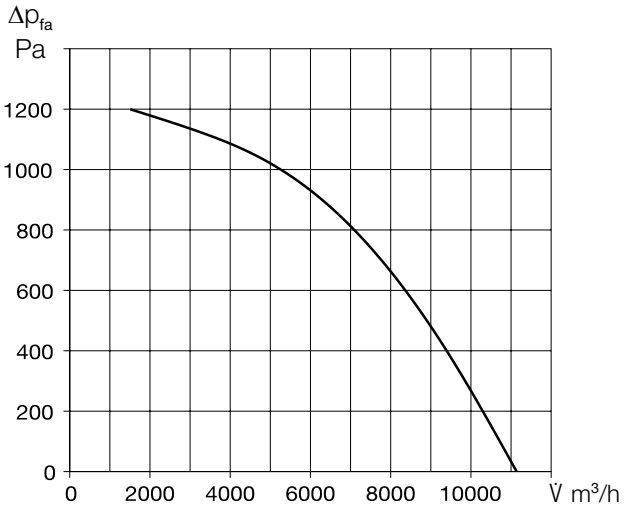
AIR1 XH 8500

Separable casing design

Fig. shows accessories

Performance curve AIR1 XH 8500



Unit type

	AIR1 XH 8500
Ref. no.	04342
Heat exchanger	Cross-counterflow

Technical data

Mechanical data	
Area of application	Inside/outside
Installation position	standing
Maintenance access	Side, both sides
Min. air volume	1,380 m³/h
Max. air volume ERP	8,300 m³/h (1)
Max. air volume (free blowing)	11,000 m³/h
Weight, unit operational	1,260 kg
Delivery unit	3-part
Unit segments	3
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 3,600 W
Max. output elec. pre-heater	22,000 W
Nominal current	
– Ventilation unit	42.4 / 42.4 / 43.4 A (3)
– Electrical auxiliary heater	31.8 / 31.8 / 31.8 A (4)
– max. total	74.2 / 74.2 / 75.2 A
Connection (wiring diagram no.)	1333

(1) = at 400 Pa external pressure loss ERP-compliant
(2) = other filter classes see optional accessories
(3) = includes electrical pre-heater
(4) = Optional accessories

Sound data

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

	2,800 m³/h	5,800 m³/h	8,300 m³/h
Supply air (L_{WA})	78	80	87
Extract air (L_{WA})	64	65	70
Outside air (L_{WA})	67	67	67
Exhaust air (L_{WA})	76	79	85

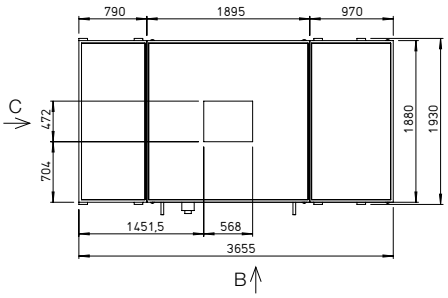
Sound pressure level L_{PA} dB(A) of sound radiated from housing

	2,800 m³/h	5,800 m³/h	8,300 m³/h
Housing rad. 1 m	47	49	53
Housing rad. 3 m	38	39	44
Housing rad. 5 m	33	35	39

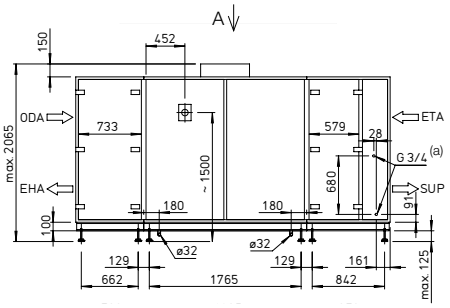
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1, 3 and 5 m.

Dimensions AIR1 XH 8500

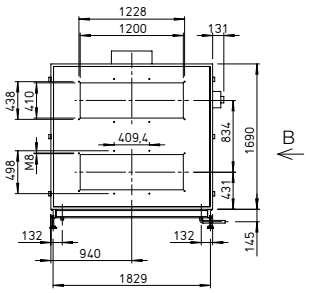
View A (from above)



View B



View C



Dimensions in mm | (a) External thread | ODA: Outside air | EHA: Exhaust air | ETA: Extract air | SUP: Supply air

Accessories

Heating and cooling registers

Auxiliary heater		
AIR1-ENH XH 8500 Electrical, internal	Ref. no. 03604	Page 84
AIR1-NH WW XH 8500 Hot water, internal	Ref. no. 03793	Page 85
Hydraulic unit for hot water heater register		
WHSH HE 24 V (0 – 10 V) M	Ref. no. 06310	Page 85
Cooling register		
AIR1-KR KW XH 8500 L (1) Cold water, external	Ref. no. 03946	Page 86
AIR1-KR KW XH 8500 R (1) Cold water, external	Ref. no. 04282	Page 86
AIR1-CO DX XH 8500 L (1) Change-over, external	Ref. no. 04415	Page 88
AIR1-CO DX XH 8500 R (1) Change-over, external	Ref. no. 03052	Page 88
AIR1-SM DX (2) Control module	Ref. no. 40408	Page 90

Air routing

Multi-leaf damper		
AIR1-JVK XH 8500/RH 9500	Ref. no. 06013	Page 90
Recirculation kit		
AIR1-ULK XH 8500	Ref. no. 06029	Page 91
Flexible connector		
AIR1-VS 120/41	Ref. no. 04377	Page 91

Condensate drainage

Ball siphon		
AIR1-KS B for use with floor-mounted units and cooling register	Ref. no. 07169	Page 92

(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 XH 8500 Weather protection cover for the unit	Ref. no. 06378	Page 93
AIR1-AAD KR KW + DX XH 8500 Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06466	Page 94
Terminal box heater		
AIR1-AAHK	Ref. no. 07064	Page 95
Hoods		
AIR1-AAHA XH 8500/RH 9500 Intake hood outside air	Ref. no. 06499	Page 95
AIR1-AAHF XH 8500/RH 9500 Discharge hood exhaust air	Ref. no. 06864	Page 96

Controls

Controllers		
AIR1-BE ECO	Ref. no. 06186	Page 97
AIR1-BE TOUCH	Ref. no. 06187	Page 97
Controller connection cable		
AIR1-SL 4/10 10 m	Ref. no. 07073	Page 97
AIR1-SL 4/20 20 m	Ref. no. 07121	Page 97
Sensors		
AIR1/KWL-VOC 0-10V Mixed gas sensor	Ref. no. 20250	Page 97
AIR1/KWL-CO2 0-10V Carbon dioxide sensor	Ref. no. 20251	Page 97
AIR1/KWL-FTF 0-10V Humidity-temperature sensor	Ref. no. 20252	Page 97
AIR1-CO2 K Carbon dioxide sensor duct	Ref. no. 07124	Page 98
Signal converter for sensors		
AIR1-SK	Ref. no. 06019	Page 98
Extension kit for constant pressure control		
AIR1-CAP	Ref. no. 06756	Page 98

Air filters

Spare air filter and other filter classes		
ELF-AIR1 XH 8500/ePM10 50%/48 (M5)	Ref. no. 02189	Page 99
ELF-AIR1 XH 8500/ePM10 50%/96 (M5)	Ref. no. 02210	Page 99
ELF-AIR1 XH 8500/ePM1 55%/96 (F7)	Ref. no. 02235	Page 99
ELF-AIR1 XH 8500/ePM1 80%/96 (F9)	Ref. no. 02334	Page 99

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