

**AIR1 XH 8500**



**Separable casing design**



Fig. shows accessories

**Unit type**

	<b>AIR1 XH 8500</b>
Ref. no.	04342
Heat exchanger	Cross-counterflow

**Technical data**

<b>Mechanical data</b>	
Area of application	Inside/outside
Installation position	standing
Maintenance access	Side, both sides
Min. air volume	1,380 m <sup>3</sup> /h
Max. air volume ERP	8,300 m <sup>3</sup> /h <sup>(1)</sup>
Max. air volume (free blowing)	11,000 m <sup>3</sup> /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 <sub>1</sub> , 55% (F7) <sup>(2)</sup>
Filter Extract air	ISO ePM <sub>10</sub> 50% (M5) <sup>(2)</sup>
Media temperature (air)	-20 to +50 °C
Ambient temperature (operation)	-20 to +50 °C
Protection class	IP31
<b>Electrical data</b>	
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 <sup>(3)</sup>
- Electrical auxiliary heater	31.8 / 31.8 / 31.8 A <sup>(4)</sup>
- max. total	74.2 / 74.2 / 75.2 A
Connection (wiring diagram no.)	1333

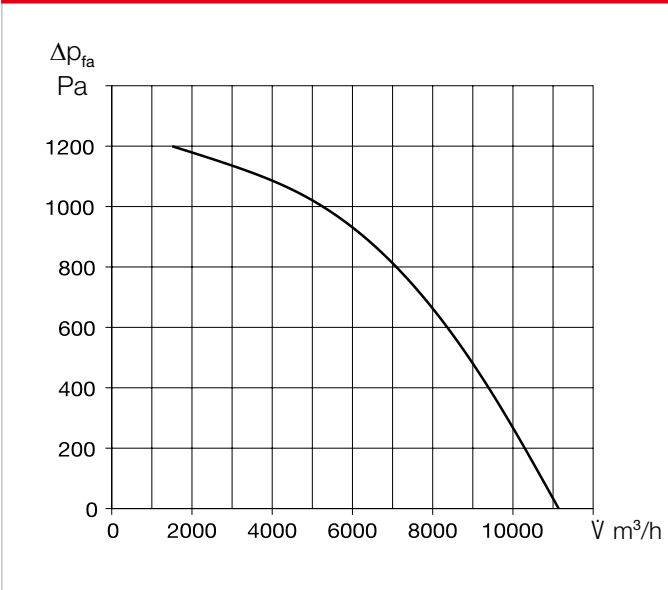
(1) = at 250 Pa external pressure loss ERP-compliant

(2) = other filter classes see optional accessories

(3) = includes electrical pre-heater

(4) = Optional accessories

**Performance curve AIR1 XH 8500**

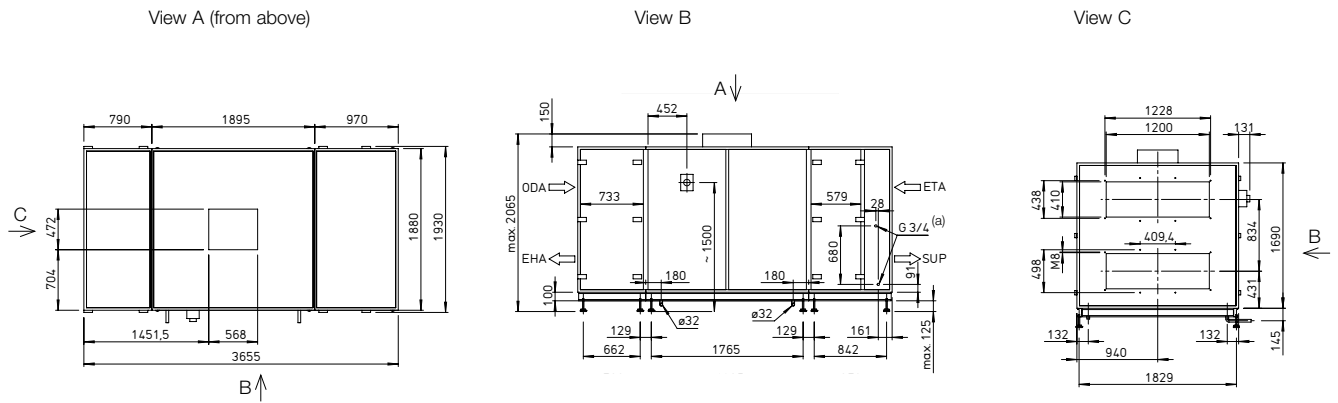


**Sound data**

<b>Sound power level L<sub>WA</sub> dB(A) at 400 Pa external pressure</b>			
	2,800 m <sup>3</sup> /h	5,800 m <sup>3</sup> /h	8,300 m <sup>3</sup> /h
Supply air (L <sub>WA</sub> )	78	80	87
Extract air (L <sub>WA</sub> )	64	65	71
Outside air (L <sub>WA</sub> )	67	67	68
Exhaust air (L <sub>WA</sub> )	77	79	85
<b>Sound pressure level L<sub>pA</sub> dB(A) of sound radiated from housing</b>			
	2,800 m <sup>3</sup> /h	5,800 m <sup>3</sup> /h	8,300 m <sup>3</sup> /h
Housing rad. 1 m	47	49	54
Housing rad. 3 m	38	39	45
Housing rad. 5 m	33	35	40

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



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

<b>AIR1-ENH XH 8500</b> Electrical, internal	Ref. no. 03604	Page 88
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<b>AIR1-NH WW XH 8500</b> Hot water, internal	Ref. no. 03793	Page 89
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Hydraulic unit for hot water heater register

<b>WHSH HE 24 V (0 – 10 V) M</b>	Ref. no. 06310	Page 89
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Cooling register

<b>AIR1-KR KW XH 8500 L</b> <sup>(1)</sup> Cold water, external	Ref. no. 03946	Page 90
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<b>AIR1-KR KW XH 8500 R</b> <sup>(1)</sup> Cold water, external	Ref. no. 04282	Page 90
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<b>AIR1-CO DX XH 8500 L</b> <sup>(1)</sup> Change-over, external	Ref. no. 04415	Page 92
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<b>AIR1-CO DX XH 8500 R</b> <sup>(1)</sup> Change-over, external	Ref. no. 03052	Page 92
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<b>AIR1-SM DX</b> <sup>(2)</sup> Control module	Ref. no. 40408	Page 94
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■ Air routing

Multi-leaf damper

<b>AIR1-JVK XH 8500/RH 9500</b>	Ref. no. 06013	Page 94
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Recirculation kit

<b>AIR1-ULK XH 8500</b>	Ref. no. 06029	Page 95
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Flexible connector

<b>AIR1-VS 120/41</b>	Ref. no. 04377	Page 95
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■ Condensate drainage

Ball siphon

<b>AIR1-KS B</b> for use with floor-mounted units and cooling register	Ref. no. 07169	Page 96
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■ External installation

Cover for external installation

<b>AIR1-AAD XH 8500</b> Weather protection cover for the unit	Ref. no. 06378	Page 97
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<b>AIR1-AAD KR KW + DX XH 8500</b> Weather protection cover for cooling register cold water or direct evaporator	Ref. no. 06466	Page 98
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Terminal box heater

<b>AIR1-AAHK</b>	Ref. no. 07064	Page 99
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Hoods

<b>AIR1-AAHA XH 8500/RH 9500</b> Intake hood outside air	Ref. no. 06499	Page 99
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<b>AIR1-AAHF XH 8500/RH 9500</b> Discharge hood exhaust air	Ref. no. 06864	Page 100
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■ Controls

Controllers

<b>AIR1-BE ECO</b>	Ref. no. 06186	Page 101
<b>AIR1-BE TOUCH</b>	Ref. no. 06187	Page 101

Controller connection cable

<b>AIR1-SL 4/10</b> 10 m	Ref. no. 07073	Page 101
<b>AIR1-SL 4/20</b> 20 m	Ref. no. 07121	Page 101

Sensors

<b>AIR1/KWL-VOC 0-10V</b> Mixed gas sensor	Ref. no. 20250	Page 101
<b>AIR1/KWL-CO2 0-10V</b> Carbon dioxide sensor	Ref. no. 20251	Page 101
<b>AIR1/KWL-FTF 0-10V</b> Humidity-temperature sensor	Ref. no. 20252	Page 101
<b>AIR1-CO2 K</b> Carbon dioxide sensor duct	Ref. no. 07124	Page 102

Signal converter for sensors

<b>AIR1-SK</b>	Ref. no. 06019	Page 102
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Extension kit for constant pressure control

<b>AIR1-CAP</b>	Ref. no. 06756	Page 102
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■ Air filters

Spare air filter and other filter classes

<b>ELF-AIR1 XH 8500/ePM10 50%/48</b> (M5)	Ref. no. 02189	Page 103
<b>ELF-AIR1 XH 8500/ePM10 50%/96</b> (M5)	Ref. no. 02210	Page 103
<b>ELF-AIR1 XH 8500/ePM1 55%/96</b> (F7)	Ref. no. 02235	Page 103
<b>ELF-AIR1 XH 8500/ePM1 80%/96</b> (F9)	Ref. no. 02334	Page 103

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.