



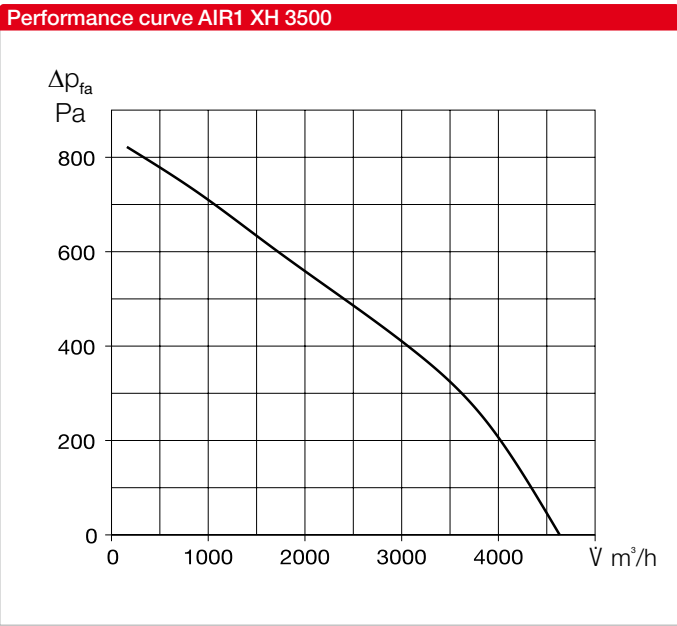
AIR1 XH 3500

Separable casing design

Fig. shows accessories

EUROVENT CERTIFIED PERFORMANCE

TCM 300



Unit type	
	AIR1 XH 3500
Ref. no.	04338
Heat exchanger	Cross-counterflow

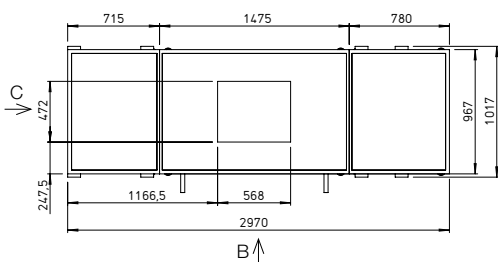
Technical data	
Mechanical data	
Area of application	Inside/outside
Installation position	standing
Maintenance access	Side, both sides
Min. air volume	825 m³/h
Max. air volume ERP	3,150 m³/h ⁽¹⁾
Max. air volume (free blowing)	4,650 m³/h
Weight, unit operational	687 kg
Delivery unit	3-part
Unit segments	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 1,500 W
Max. output elec. pre-heater	9,600 W
Nominal current	
– Ventilation unit	18.5 / 18.5 / 19.2 A ⁽³⁾
– Electrical auxiliary heater	13.9 / 13.9 / 13.9 A ⁽⁴⁾
– max. total	32.4 / 32.4 / 33.1 A
Connection (wiring diagram no.)	1329

(1) = at 250 Pa external pressure loss ERP-compliant
(2) = other filter classes see optional accessories
(3) = includes electrical pre-heater
(4) = Optional accessories

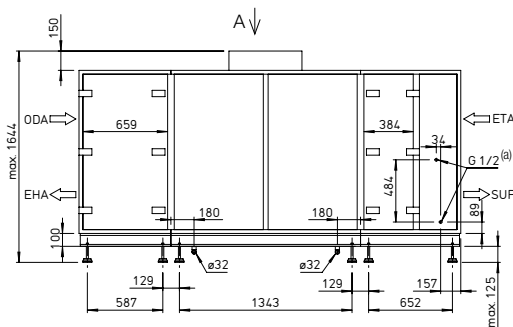
Sound data			
Sound power level L _{WA} dB(A) at 250 Pa external pressure			
	1,000 m³/h	2,200 m³/h	3,150 m³/h
Supply air (L _{WA})	77	79	82
Extract air (L _{WA})	64	65	66
Outside air (L _{WA})	65	66	64
Exhaust air (L _{WA})	79	81	83
Sound pressure level L _{pA} dB(A) of sound radiated from housing			
	1,000 m³/h	2,200 m³/h	3,150 m³/h
Housing rad. 1 m	42	44	45
Housing rad. 3 m	33	34	35
Housing rad. 5 m	28	30	31
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 3500

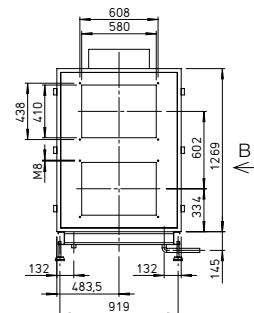
View A (from above)



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 3500 Electrical, internal	Ref. no. 03592	Page 94
AIR1-NH WW XH 3500 Hot water, internal	Ref. no. 03683	Page 96
Hydraulic unit for hot water heater register		
WHSH HE 24 V (0 – 10 V)	Ref. no. 08318	Page 96
Cooling register		
AIR1-KR KW XH 3500 L ⁽¹⁾ Cold water, external	Ref. no. 03910	Page 100
AIR1-KR KW XH 3500 R ⁽¹⁾ Cold water, external	Ref. no. 04268	Page 100
AIR1-CO DX XH 3500 L ⁽¹⁾ Change-over, external	Ref. no. 04408	Page 106
AIR1-CO DX XH 3500 R ⁽¹⁾ Change-over, external	Ref. no. 04878	Page 106
AIR1-SM DX ⁽²⁾ Control module	Ref. no. 40408	Page 110

- **Air routing**

Multi-leaf damper		
AIR1-JVK XH 3500-4500/RH 3000	Ref. no. 06009	Page 111
Recirculation kit		
AIR1-ULK XH 3500	Ref. no. 06025	Page 110
Flexible connector		
AIR1-VS 58/41	Ref. no. 04374	Page 113
Potential equalisation cable		
PAK M8	Ref. no. 40812	Page 113
Adapter square-round		
AIR1-ÜS XH 3500-4500/RH 3000	Ref. no. 04369	Page 112

■ Condensate drainage

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

■ External installation

Cover for external installation		
AIR1-AAD XH 3500	Ref. no. 06316	Page 116
Weather protection cover for the unit		
AIR1-AAD KR KW + DX XH 3500	Ref. no. 06462	Page 118
Weather protection cover for cooling register cold water or direct evaporator		
Terminal box heater		
AIR1-AAHK	Ref. no. 07064	Page 114
Hoods		
AIR1-AAHA XH 3500-4500/RH 3000	Ref. no. 06487	Page 115
Intake hood outside air		
AIR1-AAHF XH 3500-4500/RH 3000	Ref. no. 06647	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

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

■ **Air filters**

Spare air filter and other filter classes

ELF-AIR1 XH 3500/ePM10 50%/48 (M5)	Ref. no. 02180	Page 122
ELF-AIR1 XH 3500/ePM10 50%/96 (M5)	Ref. no. 02206	Page 122
ELF-AIR1 XH 3500/ePM1 55%/96 (F7)	Ref. no. 02230	Page 122
ELF-AIR1 XH 3500/ePM1 80%/96 (F9)	Ref. no. 02291	Page 122

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.