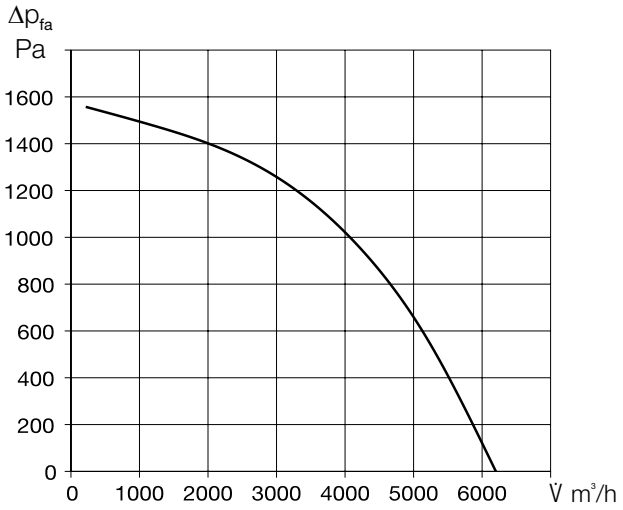
## AIR1 XH 4500




**Separable** casing design

Fig. shows accessories

## Performance curve AIR1 XH 4500




### Unit type

| | AIR1 XH 4500 |
|---|---|
| Ref. no. | 04339 |
| Heat exchanger | Cross-counterflow |

### 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 | 4,150 m³/h (1) |
| Max. air volume (free blowing) | 6,100 m³/h |
| Weight, unit operational | 750 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 2,500 W |
| Max. output elec. pre-heater | 12,900 W |
| Nominal current | |
| – Ventilation unit | 26.3 / 26.3 / 27 A (3) |
| – Electrical auxiliary heater | 18.6 / 18.6 / 18.6 A (4) |
| – max. total | 44.9 / 44.9 / 45.6 A |
| Connection (wiring diagram no.) | 1330 |

(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**

| | 1,300 m³/h | 2,900 m³/h | 4,150 m³/h |
|---|---|---|---|
| Supply air ($L_{WA}$) | 71 | 76 | 82 |
| Extract air ($L_{WA}$) | 48 | 59 | 67 |
| Outside air ($L_{WA}$) | 62 | 58 | 63 |
| Exhaust air ($L_{WA}$) | 70 | 75 | 81 |

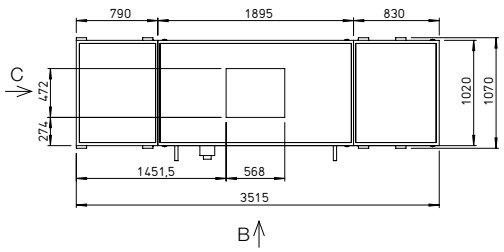
**Sound pressure level $L_{PA}$ dB(A) of sound radiated from housing**

| | 1,300 m³/h | 2,900 m³/h | 4,150 m³/h |
|---|---|---|---|
| Housing rad. 1 m | 41 | 42 | 48 |
| Housing rad. 3 m | 31 | 33 | 39 |
| Housing rad. 5 m | 27 | 28 | 34 |

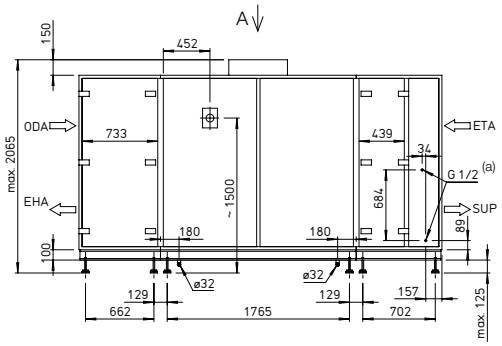
The sound power at the connectors is calculated for the simultaneous operation of both fans. The sound pressure level is determined for the simultaneous operation of both fans at distances of 1, 3 and 5 m.

## Dimensions AIR1 XH 4500

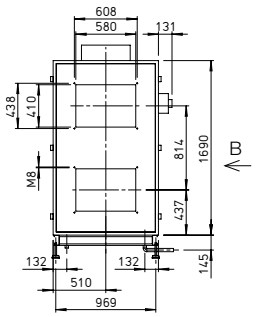
View A (from above)




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 4500** Electrical, internal | Ref. no. 03593 | Page 94 |
| **AIR1-NH WW XH 4500** Hot water, internal | Ref. no. 03684 | 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 4500 L** (1) Cold water, external | Ref. no. 03919 | Page 100 |
| **AIR1-KR KW XH 4500 R** (1) Cold water, external | Ref. no. 04278 | Page 100 |
| **AIR1-CO DX XH 4500 L** (1) Change-over, external | Ref. no. 04409 | Page 106 |
| **AIR1-CO DX XH 4500 R** (1) Change-over, external | Ref. no. 04879 | 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 4500** | Ref. no. 06026 | 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** (DN 500) | Ref. no. 04369 | Page 112 |

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

| External installation | | |
|---|---|---|
| **Cover for external installation** | | |
| **AIR1-AAD XH 4500** Weather protection cover for the unit | Ref. no. 06347 | Page 116 |
| **AIR1-AAD KR KW + DX XH 4500** Weather protection cover for cooling register cold water or direct evaporator | Ref. no. 06463 | Page 118 |
| **Terminal box heater** | | |
| **AIR1-AAHK** | Ref. no. 07064 | Page 114 |
| **Hoods** | | |
| **AIR1-AAHA XH 3500-4500/RH 3000** Intake hood outside air | Ref. no. 06487 | Page 115 |
| **AIR1-AAHF XH 3500-4500/RH 3000** Discharge hood exhaust air | Ref. no. 06647 | 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 |

| Air filters | | |
|---|---|---|
| **Spare air filter and other filter classes** | | |
| **ELF-AIR1 XH 4500/ePM10 50%/48** (M5) | Ref. no. 02182 | Page 122 |
| **ELF-AIR1 XH 4500/ePM10 50%/96** (M5) | Ref. no. 02207 | Page 122 |
| **ELF-AIR1 XH 4500/ePM1 55%/96** (F7) | Ref. no. 02231 | Page 122 |
| **ELF-AIR1 XH 4500/ePM1 80%/96** (F9) | Ref. no. 02292 | 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.