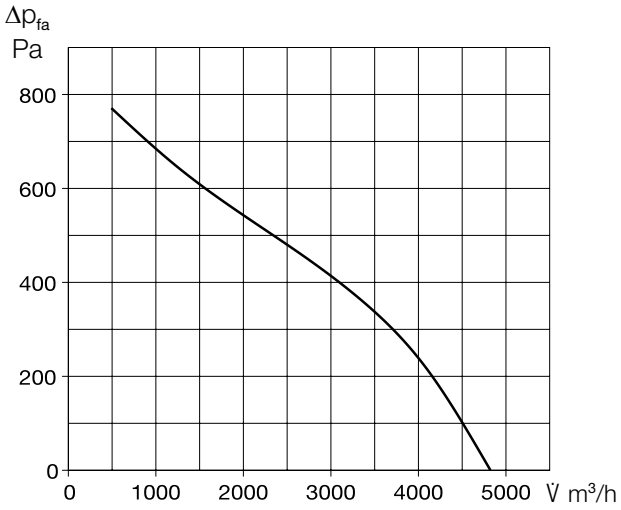
## AIR1 RH 3000




Fig. shows accessories

## Performance curve AIR1 RH 3000




### Unit types

| | AIR1 RH 3000 | AIR1 RH 3000/SO |
|---|---|---|
| Ref. no. | 04345 | 04354 |
| Heat exchanger | Condensation rotor | Adsorption rotor (4) |

### Technical data

| | |
|---|---|
| **Mechanical data** | |
| Area of application | Inside/outside |
| Installation position | Standing |
| Maintenance access | Side, both sides |
| Min. air volume | 790 m³/h |
| Max. air volume ERP | 3,000 m³/h (1) (2,770 m³/h (5)) |
| Max. air volume (free blowing) | 4,800 m³/h |
| Weight, unit operational | 438 kg (450 kg (5)) |
| Delivery unit | 1-part |
| Unit segments | 1 |
| 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 |
| Nominal current | |
| – Ventilation unit | 4.6 / 4.6 / 5.8 A |
| – Electrical auxiliary heater | 13.1 / 13.1 / 13.1 A (3) |
| – max. total | 17.7 / 17.7 / 18.9 A |
| Connection (wiring diagram no.) | 1319 |

(1) = at 250 Pa external pressure loss ERP-compliant
(2) = other filter classes see optional accessories
(3) = Optional accessories
(4) = with increased humidity recovery
(5) = AIR RH 3000/SO

### Sound data AIR1 RH 3000

| Sound power level $L_{WA}$ dB(A) at 250 Pa external pressure | | | |
|---|---|---|---|
| | 900 m³/h | 2,200 m³/h | 3,000 m³/h |
| Supply air ($L_{WA}$) | 80 | 83 | 84 |
| Extract air ($L_{WA}$) | 67 | 69 | 68 |
| Outside air ($L_{WA}$) | 68 | 70 | 67 |
| Exhaust air ($L_{WA}$) | 79 | 82 | 82 |
| **Sound pressure level $L_{PA}$ dB(A) of sound radiated from housing** | | | |
| | 900 m³/h | 2,200 m³/h | 3,000 m³/h |
| Housing rad. 1 m | 48 | 50 | 50 |
| Housing rad. 3 m | 39 | 41 | 40 |
| Housing rad. 5 m | 34 | 37 | 36 |

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.

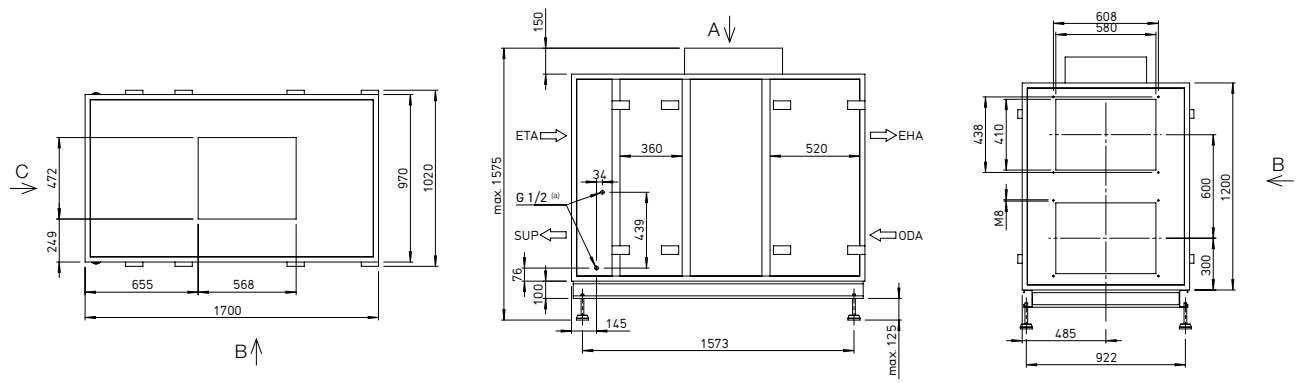
### Sound data AIR1 RH 3000/SO

| Sound power level $L_{WA}$ dB(A) at 250 Pa external pressure | | | |
|---|---|---|---|
| | 900 m³/h | 2,200 m³/h | 2,770 m³/h |
| Supply air ($L_{WA}$) | 81 | 85 | 84 |
| Extract air ($L_{WA}$) | 67 | 70 | 68 |
| Outside air ($L_{WA}$) | 69 | 72 | 68 |
| Exhaust air ($L_{WA}$) | 79 | 83 | 82 |
| **Sound pressure level $L_{PA}$ dB(A) of sound radiated from housing** | | | |
| | 900 m³/h | 2,200 m³/h | 2,770 m³/h |
| Housing rad. 1 m | 49 | 52 | 50 |
| Housing rad. 3 m | 39 | 42 | 41 |
| Housing rad. 5 m | 35 | 38 | 36 |

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 3000

View A (from above) | View B | View C




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

## Accessories

| Heating and cooling registers | | |
|---|---|---|
| **Pre-heater** | | |
| **AIR1-EVH RH 3000** Electrical, external | Ref. no. 01711 | Page 93 |
| **Auxiliary heater** | | |
| **AIR1-ENH RH 3000** Electrical, internal | Ref. no. 03617 | Page 95 |
| **AIR1-NH WW RH 3000** Hot water, internal | Ref. no. 03824 | Page 97 |
| **Hydraulic unit for hot water heater register** | | |
| **WHSH HE 24 V (0 – 10 V)** | Ref. no. 08318 | Page 96 |
| **Cooling register** | | |
| **AIR1-KR KW RH 3000 L** (1) Cold water, external | Ref. no. 03967 | Page 102 |
| **AIR1-KR KW RH 3000 R** (1) Cold water, external | Ref. no. 04286 | Page 102 |
| **AIR1-CO DX RH 3000 L** (1) Change-over, external | Ref. no. 40392 | Page 108 |
| **AIR1-CO DX RH 3000 R** (1) Change-over, external | Ref. no. 40401 | Page 108 |
| **AIR1-SM DX** (2) Control module | Ref. no. 40408 | Page 110 |
| **Cooling register accessories** | | |
| **AIR1-KS B** for use with floor-mounted units and cooling register | Ref. no. 07169 | Page 114 |

| Air routing | | |
|---|---|---|
| **Multi-leaf damper** | | |
| **AIR1-JVK XH 3500-4500/RH 3000** | Ref. no. 06009 | Page 111 |
| **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 |

| External installation | | |
|---|---|---|
| **Cover for external installation** | | |
| **AIR1-AAD RH 3000** Weather protection cover for the unit | Ref. no. 06432 | Page 117 |
| **AIR1-AAD KR KW + DX RH 3000** Weather protection cover for cooling register cold water or direct evaporator | Ref. no. 06469 | 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 RH 3000/ePM10 50%/48** (M5) | Ref. no. 02194 | Page 123 |
| **ELF-AIR1 RH 3000/ePM10 50%/96** (M5) | Ref. no. 02213 | Page 123 |
| **ELF-AIR1 RH 3000/ePM1 55%/96** (F7) | Ref. no. 02238 | Page 123 |
| **ELF-AIR1 RH 3000/ePM1 80%/96** (F9) | Ref. no. 02425 | Page 123 |
| 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.