

| ∆p <sub>fa</sub><br>Pa ┌─ |    |   |    |    | ı | ı   |    |  | 1        |  |
|---------------------------|----|---|----|----|---|-----|----|--|----------|--|
| 800                       |    |   |    |    |   |     |    |  |          |  |
| 600                       |    | _ |    |    |   |     |    |  |          |  |
| 400                       |    |   |    |    |   |     |    |  |          |  |
| 200                       |    |   |    |    |   |     |    |  |          |  |
| 0                         | 00 |   | 00 | 00 |   | 500 | 20 |  | ļ<br>V m |  |

| Unit types     |                    |                      |
|----------------|--------------------|----------------------|
|                | AIR1 RH 1500       | AIR1 RH 1500/S0      |
| Ref. no.       | 04343              | 04352                |
| 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                             | 330 m³/h   |
| Max. air volume ERP                         | 1,600 m <sup>3</sup> /h <sup>(1)</sup> (1,520 m <sup>3</sup> /h <sup>(5)</sup> ) |
| Max. air volume (free blowing)              | 2,250 m³/h   |
| Weight, unit operational                    | 315 kg (320 kg <sup>(5)</sup> )  |
| Delivery unit                               | 1-part   |
| Unit segments                               | 1  |
| Housing class (DIN 1886)                    | T2 / TB2 / D2  |
| Filter Outside air                          | ISO ePM <sub>1</sub> 55% (F7) (2)  |
| Filter Extract air                          | ISO ePM <sub>10</sub> 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 500 W  |
| Nominal current                             |  |
| - Ventilation unit                          | 2.2 / 2.2 / 1.3 A  |
| - Electrical auxiliary heater               | 6.1 / 6.1 / 6.1 A <sup>(3)</sup>   |
| - max. total                                | 8.3 / 8.3 / 7.4 A  |
| Connection (wiring diagram no.)             | 1317   |
| \ -+ 000 D+                                 |  |

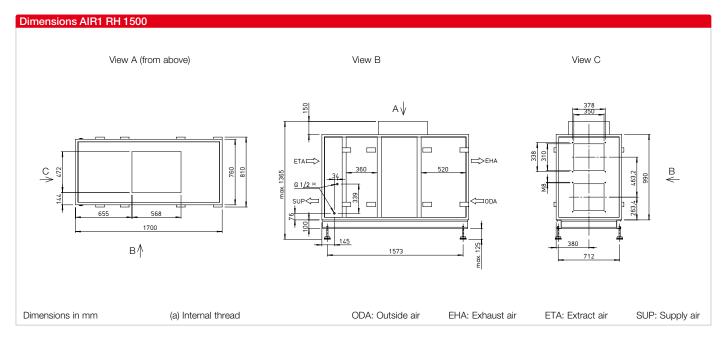
- (1) = at 250 Pa external pressure loss ERP-compliant
- (2) = other filter classes see optional accessories
- (3) = Optional accessories
- (4) = with increased humidity recovery
- (5) = AIR RH 1500/S0

| Sound power level L <sub>WA</sub> dB(A) at 250 Pa external pressure       |                       |            |                         |  |  |  |
|---|-----------------------|------------|-------------------------|--|--|--|
|   | 450 m³/h              | 1,200 m³/h | 1,600 m³/h              |  |  |  |
| Supply air (L <sub>WA</sub> )   | 71                    | 74         | 77                      |  |  |  |
| Extract air (LwA)   | 59                    | 60         | 62                      |  |  |  |
| Outside air (L <sub>WA</sub> )  | 62                    | 57         | 59                      |  |  |  |
| Exhaust air (L <sub>WA</sub> )  | 69                    | 72         | 76                      |  |  |  |
| Sound pressure level L <sub>PA</sub> dB(A) of sound radiated from housing |                       |            |                         |  |  |  |
|   | 450 m <sup>3</sup> /h | 1,200 m³/h | 1,600 m <sup>3</sup> /h |  |  |  |
| Housing rad. 1 m  | 41                    | 41         | 44                      |  |  |  |
| Housing rad. 3 m  | 31                    | 32         | 34                      |  |  |  |
| Housing rad. 5 m  | 27                    | 27         | 30                      |  |  |  |
| The sound power at the consound pressure level is determined and 5 m.     |                       | ·          |                         |  |  |  |

| Sound data AIR1 RH 1  | 500/S0                |                         |            |  |  |  |
|---|-----------------------|-------------------------|------------|--|--|--|
| Sound power level $L_{\text{WA}}$ d                                       | B(A) at 250 Pa extern | al pressure             |            |  |  |  |
|   | 450 m³/h              | 1,200 m³/h              | 1,520 m³/h |  |  |  |
| Supply air (L <sub>WA</sub> )   | 71                    | 74                      | 77         |  |  |  |
| Extract air (L <sub>WA</sub> )  | 59                    | 61                      | 62         |  |  |  |
| Outside air (L <sub>WA</sub> )  | 62                    | 58                      | 60         |  |  |  |
| Exhaust air (L <sub>WA</sub> )  | 70                    | 73                      | 76         |  |  |  |
| Sound pressure level L <sub>PA</sub> dB(A) of sound radiated from housing |                       |                         |            |  |  |  |
|   | 450 m³/h              | 1,200 m <sup>3</sup> /h | 1,520 m³/h |  |  |  |
| Housing rad. 1 m  | 41                    | 42                      | 44         |  |  |  |
| Housing rad. 3 m  | 32                    | 33                      | 34         |  |  |  |
| Housing rad. 5 m  | 27                    | 28                      | 30         |  |  |  |
| The sound power at the cor  |                       |                         |            |  |  |  |

sound pressure level is determined for the simultaneous operation of both fans at distances of 1.3 and 5 m.





## Accessories

| <ul> <li>Heating and cooling registers</li> <li>Pre-heater</li> </ul> |                   |          |
|---|-------------------|----------|
|   |                   |          |
| AIR1-EVH RH 1500  | Ref. no. 01262    | Page 122 |
| Electrical, external  |                   |          |
| Auxiliary heater  |                   |          |
| AIR1-ENH RH 1500  | Ref. no. 03605    | Page 123 |
| Electrical, internal  |                   |          |
| AIR1-NH WW RH 1500<br>Hot water, internal                             | Ref. no. 03805    | Page 124 |
| Hydraulic unit for hot water heater regis                             | ntor              |          |
| WHSH HE 24 V (0 – 10 V)   | Ref. no. 08318    | Page 125 |
| Cooling register  | INGI. IIU. UUJ 10 | raye 120 |
| AIR1-KR KW RH 1500 L (1)  |                   |          |
| Cold water, external  | Ref. no. 03958    | Page 126 |
| AIR1-KR KW RH 1500 R (1)  |                   |          |
| Cold water, external  | Ref. no. 04283    | Page 126 |
| AIR1-CO DX RH 1500 L (1)  |                   |          |
| Change-over, external   | Ref. no. 40390    | Page 128 |
| AIR1-C0 DX RH 1500 R (1)  | D ( 10000         | D 400    |
| Change-over, external   | Ref. no. 40399    | Page 128 |
| AIR1-SM DX (2)  | D. ( 40.400       | D 400    |
| Control module  | Ref. no. 40408    | Page 130 |
|   |                   |          |
| Air routing   |                   |          |
| Multi-leaf damper   |                   |          |
| AIR1-JVK XH 1500/RH 1500  | Ref. no. 06006    | Page 130 |
| Flexible connector  |                   |          |
| AIR1-VS 35/31   | Ref. no. 04372    | Page 131 |
| Adapter square-round  |                   |          |
| AIR1-ÜS XH 1500/RH 1500   | Ref. no. 04367    | Page 131 |

| <ol> <li>When looking at the cooling register from the air flow direction, the service side is on the right for</li> </ol> | or |
|--|----|
| the R version and on the left for the L version.   |    |

<sup>(2) =</sup> Necessary accessory in connection with an AIR1-C0 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 RH 1500 Weather protection cover for the unit   | Ref. no. 06382 | Page 132 |
| AIR1-AAD KR KW + DX RH 1500  Weather protection cover for cooling register cold water or direct evaporator | Ref. no. 06467 | Page 134 |
| Terminal box heater  |                |          |
| AIR1-AAHK  | Ref. no. 07064 | Page 135 |
| Hoods  |                |          |
| AIR1-AAHA XH 1500/RH 1500<br>Intake hood outside air   | Ref. no. 06484 | Page 135 |
| <b>AIR1-AAHF XH 1500/RH 1500</b> Discharge hood exhaust air  | Ref. no. 06643 | Page 136 |

| ■ Controls                                     |                |          |
|--|----------------|----------|
| Controllers                                    |                |          |
| AIR1-BE ECO                                    | Ref. no. 06186 | Page 137 |
| AIR1-BE TOUCH                                  | Ref. no. 06187 | Page 137 |
| Controller connection cable                    |                |          |
| <b>AIR1-SL 4/10</b> 10 m                       | Ref. no. 07073 | Page 137 |
| <b>AIR1-SL 4/20</b> 20 m                       | Ref. no. 07121 | Page 137 |
| Sensors  |                |          |
| AIR1/KWL-VOC 0-10V Mixed gas sensor            | Ref. no. 20250 | Page 137 |
| AIR1/KWL-CO2 0-10V Carbon dioxide sensor       | Ref. no. 20251 | Page 137 |
| AIR1/KWL-FTF 0-10V Humidity-temperature sensor | Ref. no. 20252 | Page 137 |
| AIR1-CO2 K Carbon dioxide sensor duct          | Ref. no. 07124 | Page 138 |
| Signal converter for sensors                   |                |          |
| AIR1-SK  | Ref. no. 06019 | Page 138 |
| Extension kit for constant pressure control    |                |          |
| AIR1-CAP                                       | Ref. no. 06756 | Page 138 |

| ■ Air filters   |                             |                |
|---|-----------------------------|----------------|
| Spare air filter and other filter classes                   |                             |                |
| ELF-AIR1 RH 1500/ePM10 50%/48 (M5)                          | Ref. no. 02192              | Page 139       |
| ELF-AIR1 RH 1500/ePM10 50%/96 (M5)                          | Ref. no. 02211              | Page 139       |
| ELF-AIR1 RH 1500/ePM1 55%/96 (F7)                           | Ref. no. 02236              | Page 139       |
| ELF-AIR1 RH 1500/ePM1 80%/96 (F9)                           | Ref. no. 02374              | Page 139       |
| The use of original spare air filters is mandatory to guara | ntee the specified technica | I data and air |

volumes.