

## Series RECOM SR EC R/L



Air handling units in heat- and sound-insulated casing.  
Air flow up to **747 m³/h**.  
Heat recovery efficiency up to 89 %.

### Description

The **RECOM SR EC** air handling units are the fully-featured ventilation units that ensure air filtration, fresh air supply and stale air extraction. Used in ventilation that require an economical solution and a controlled ventilation system.

### Casing

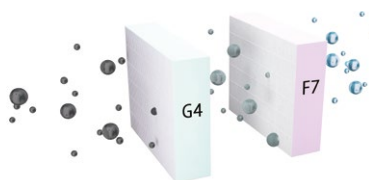
Made of polymer-coated steel, internally filled with a mineral wool heat- and sound-insulating layer.

**RECOM SR EC L** – left-handed version.

**RECOM SR EC R** – right-handed version.

### Filter

Two built-in Coarse 90% (G4) filters provide efficient air filtration. ePM1 65% (F7) supply filter can be installed as an option.



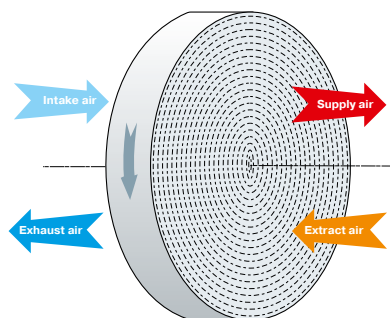
### Fans

The units are equipped with high-efficiency EC motors with an external rotor and a centrifugal impeller.

### Rotary heat exchanger

The units are equipped with a rotary heat exchanger. **SR** units are equipped with condensing rotary heat exchanger.

**SRS** units are equipped with sorption rotary heat exchanger.



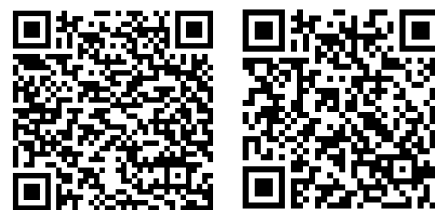
Rotary heat exchanger operation principle

### Heater

The units **SR/SRS** are equipped with an electric heater.

### Automation

The units are equipped with an integrated control system. The **REC** controller allows to integrate the unit into the **Smart Home system** or **BMS (Building Management System)**. To control the unit via Wi-Fi, download the **Blauberg** smartphone app.



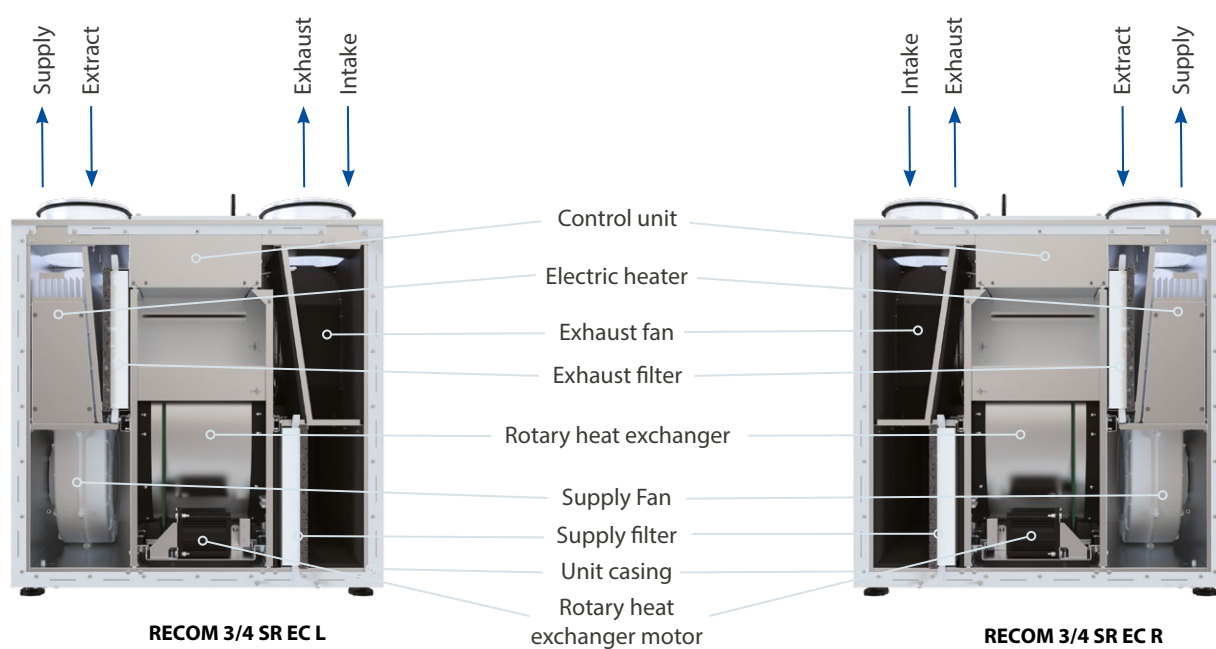
### Control and automation

| Functions                                    | REC                                                    |
|----------------------------------------------|--------------------------------------------------------|
|                                              | FPD (option)                                           |
| Wired remote control panel                   |                                                        |
| Control via a wired remote LCD control panel | A25 (option)                                           |
|                                              |                                                        |
| Wireless remote control panel                | FP (22) Wi-Fi (option)                                 |
|                                              |                                                        |
| BMS                                          | ModBus RTU (RS-485)<br>ModBus TCP/IP (Wi-Fi, Ethernet) |
| Recom Cloud Server service                   | +                                                      |
| Control via Wi-Fi using a smartphone app     | +                                                      |
| Frost protection                             | +                                                      |
| Bypass                                       | Auto, manual                                           |
| Week-scheduled operation                     | +                                                      |
| Filter replacement indication                | Filter timer                                           |
| Alarm indication                             | +                                                      |
| Speed selection                              | +                                                      |
| Timer                                        | +                                                      |
| RH% sensor                                   | Option                                                 |
| CO <sub>2</sub> sensor                       | Option                                                 |
| VOC sensor                                   | Option                                                 |
| PM2.5 sensor                                 | Option                                                 |
| Boost mode                                   | +                                                      |
| Fireplace mode                               | +                                                      |
| Cooler connection                            | +                                                      |
| Fire alarm sensor connection                 | +                                                      |
| Minimum supply air temperature control       | +                                                      |

### Designation key

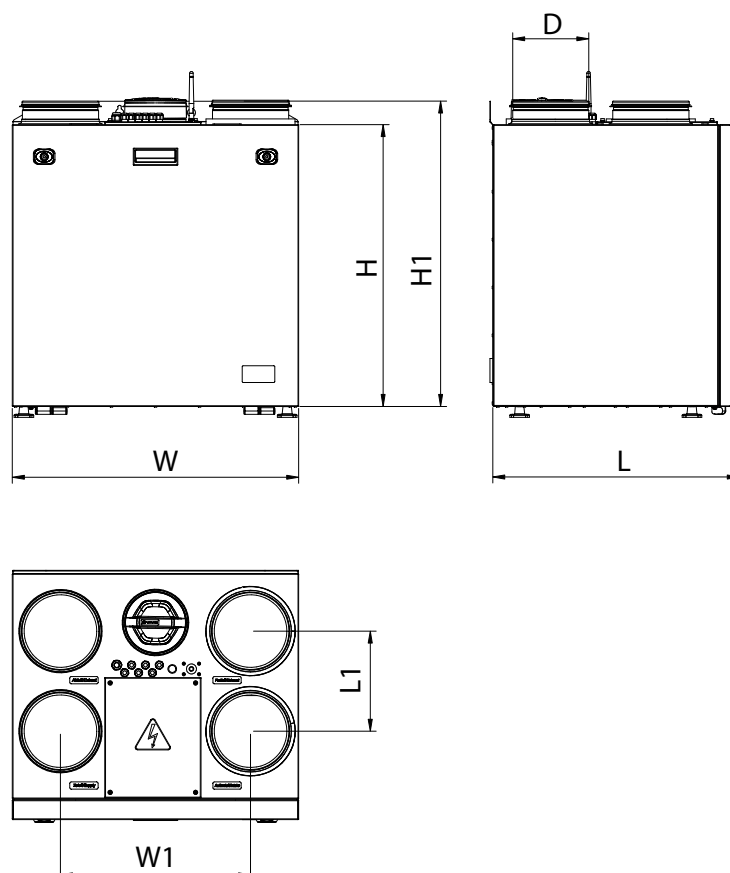
| TM           | Series                                                                                                            | Size [m³/h/10] | Modification | Mounting            | Heater                                         | Motor                | Service Side                        | Control panel |
|--------------|-------------------------------------------------------------------------------------------------------------------|----------------|--------------|---------------------|------------------------------------------------|----------------------|-------------------------------------|---------------|
| <b>RECOM</b> | <b>SR</b> : unit with condensation rotary heat exchanger<br><b>SRS</b> : unit with sorption rotary heat exchanger | 28,40,60       | 0, 1, 2...   | <b>V</b> : vertical | –: w/o heater<br><b>E</b> : electric re-heater | <b>EC</b> : EC-motor | <b>R</b> : right<br><b>L</b> : left | <b>REC</b>    |

## Unit design

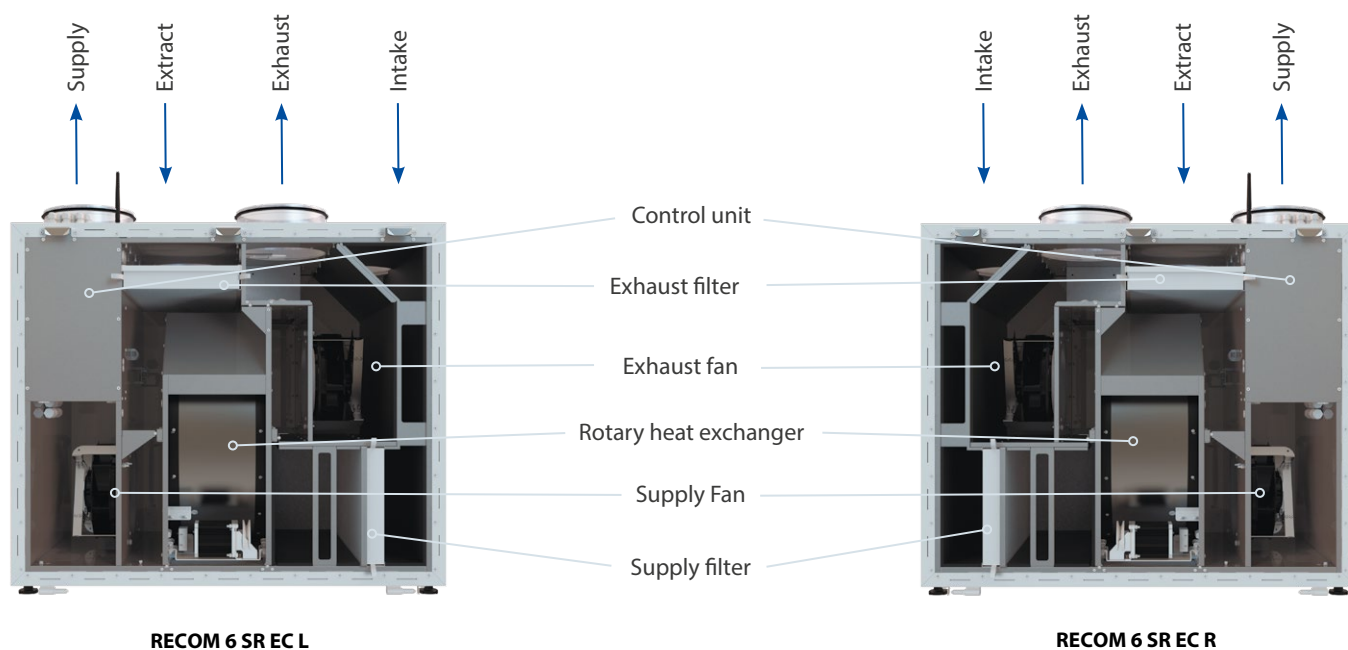


## Overall dimensions

| Model                   | Dimensions [mm] |     |     |     |     |     |     |
|-------------------------|-----------------|-----|-----|-----|-----|-----|-----|
|                         | H               | W   | L   | H1  | W1  | L1  | D   |
| <b>RECOM 3/4 EC L/R</b> | 588             | 598 | 515 | 638 | 397 | 209 | 160 |

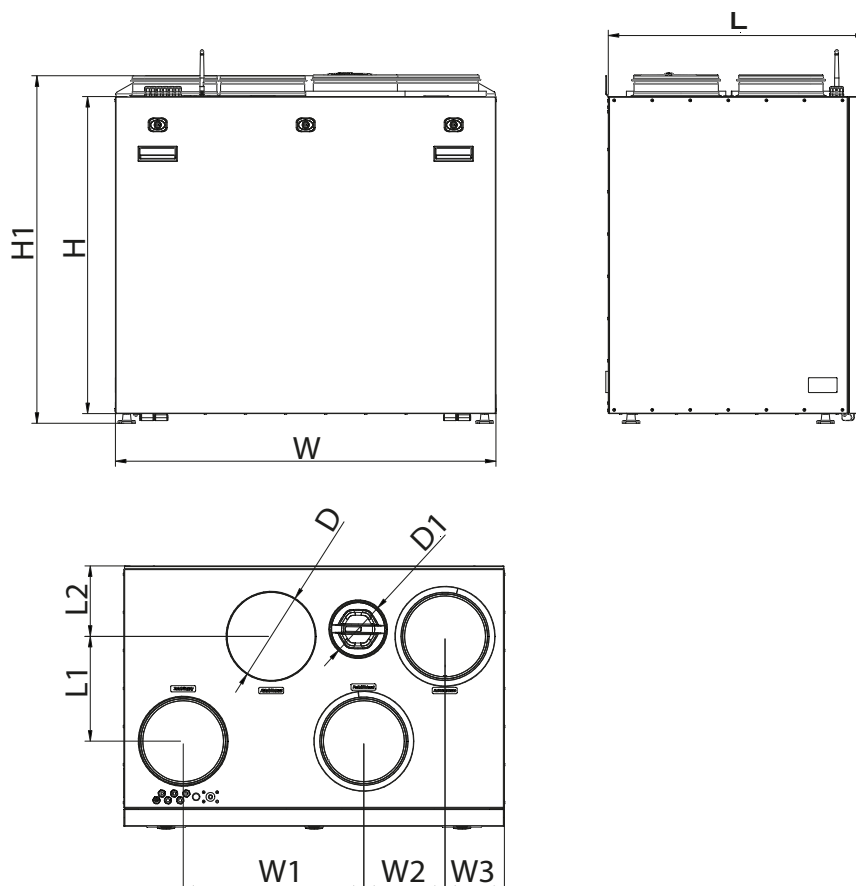


## Unit design



## Overall dimensions

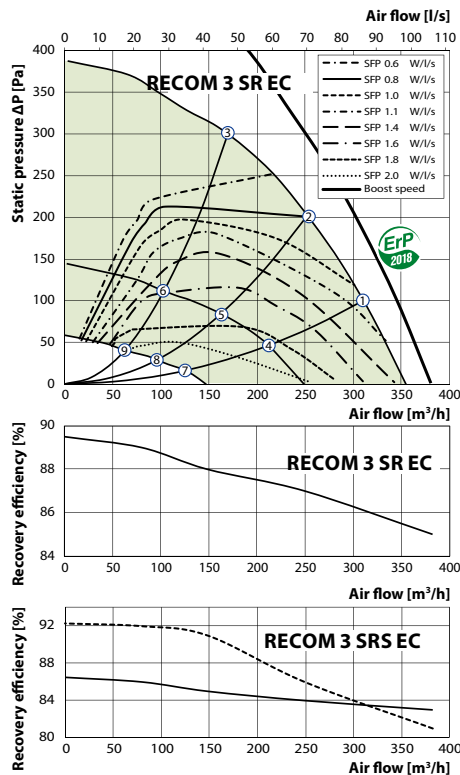
| Model                    | Dimensions [mm] |     |     |     |     |     |     |     |     |     |     |
|--------------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                          | H               | W   | L   | H1  | W1  | W2  | W3  | L1  | L2  | D   | D1  |
| <b>RECOM 6 SR EC L/R</b> | 750             | 900 | 609 | 828 | 427 | 192 | 140 | 248 | 167 | 200 | 125 |



## Technical data

| Model                                         | RECOM<br>3 SR EC L/R                     | RECOM<br>3 SRS EC L/R | RECOM<br>4 SR EC L/R | RECOM<br>4 SRS EC L/R |
|-----------------------------------------------|------------------------------------------|-----------------------|----------------------|-----------------------|
| Voltage [V / 50-60 Hz]                        | 230                                      |                       |                      |                       |
| Max. unit power without electric heater [W]   | 179                                      |                       | 179                  |                       |
| Integrated electric heater power [W]          | 1200                                     | 1200                  | 1200                 | 1200                  |
| Max. unit power [W]                           | 1379                                     | 1379                  | 1457                 | 1457                  |
| Max. unit current without electric heater [A] | 1,34                                     | 1,34                  | 1,76                 | 1,76                  |
| Integrated electric heater current [A]        | 5,32                                     | 5,32                  | 5,32                 | 5,32                  |
| Max. unit current [A]                         | 6,66                                     | 6,66                  | 7,08                 | 7,08                  |
| Max air flow [m³/h]                           | 382                                      | 382                   | 447                  | 447                   |
| Sound pressure level at 3 m distance [dBA]    | 26                                       | 26                    | 28                   | 28                    |
| Max. operating temperature [°C]               | - 25...+40                               |                       |                      |                       |
| Case material                                 | painted steel                            |                       |                      |                       |
| Insulation                                    | 40                                       |                       |                      |                       |
| Extract filter                                | G4 / Coarse > 60%                        |                       |                      |                       |
| Supply filters                                | G4 / Coarse > 60% (option F7 / ePM1 60%) |                       |                      |                       |
| Connected air duct diameter [mm]              | 160                                      |                       |                      |                       |
| Weight [kg]                                   | 57                                       |                       | 58                   |                       |
| Heat recovery efficiency [%]                  | 89                                       | 86                    | 89                   | 85                    |
| Heat exchanger type                           | condensing                               | sorption              | condensing           | sorption              |
| SEC class                                     | A+                                       | A+                    | A+                   | A                     |

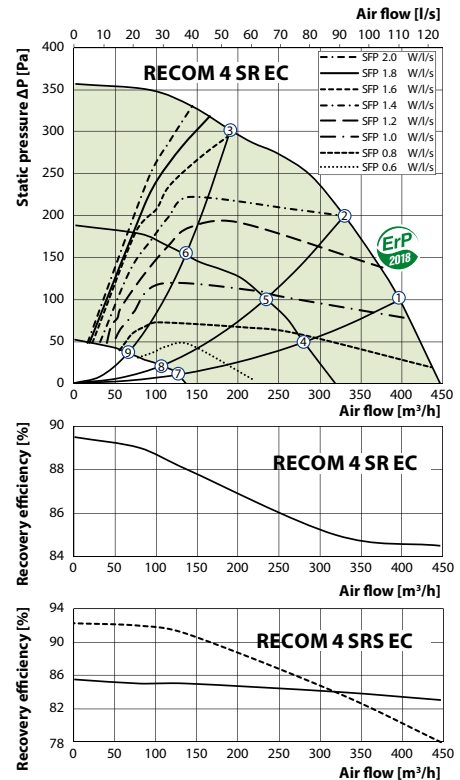
\*Sound pressure level at 3 m distance is specified at point 4 [dBA]



| RECOM 3 SR EC                                     |       | Gen.  | Octave frequency band, Hz |     |     |     |      |      |      |      | LpA, 3m dB(A) | LpA, 1m dB(A) |
|---------------------------------------------------|-------|-------|---------------------------|-----|-----|-----|------|------|------|------|---------------|---------------|
| A-weighted sound power level (p.1 on the diagram) |       | dB(A) | 63                        | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |               |               |
| LwA to supply inlet                               | dB(A) | 67    | 43                        | 46  | 49  | 53  | 58   | 54   | 50   | 51   | 47            | 56            |
| LwA to supply outlet                              | dB(A) | 70    | 45                        | 48  | 52  | 56  | 61   | 57   | 53   | 54   | 49            | 59            |
| LwA to exhaust inlet                              | dB(A) | 50    | 29                        | 32  | 36  | 40  | 41   | 32   | 28   | 26   | 29            | 39            |
| LwA to exhaust outlet                             | dB(A) | 48    | 28                        | 30  | 34  | 38  | 39   | 30   | 27   | 25   | 28            | 37            |
| LwA to environment                                | dB(A) | 54    | 30                        | 38  | 37  | 41  | 44   | 42   | 38   | 34   | 33            | 43            |

| RECOM 3 SRS EC                                    |       | Gen.  | Octave frequency band, Hz |     |     |     |      |      |      |      | LpA, 3m dB(A) | LpA, 1m dB(A) |
|---------------------------------------------------|-------|-------|---------------------------|-----|-----|-----|------|------|------|------|---------------|---------------|
| A-weighted sound power level (p.4 on the diagram) |       | dB(A) | 63                        | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |               |               |
| LwA to supply inlet                               | dB(A) | 63    | 38                        | 41  | 45  | 49  | 54   | 48   | 45   | 46   | 43            | 52            |
| LwA to supply outlet                              | dB(A) | 65    | 40                        | 43  | 47  | 52  | 57   | 51   | 47   | 48   | 44            | 54            |
| LwA to exhaust inlet                              | dB(A) | 46    | 24                        | 27  | 31  | 34  | 37   | 26   | 23   | 24   | 25            | 35            |
| LwA to exhaust outlet                             | dB(A) | 48    | 25                        | 28  | 33  | 36  | 39   | 27   | 24   | 25   | 26            | 37            |
| LwA to environment                                | dB(A) | 47    | 24                        | 32  | 31  | 34  | 41   | 33   | 30   | 26   | 26            | 36            |



| RECOM 4 SR EC                                     |       | Gen.  | Octave frequency band, Hz |     |     |     |      |      |      |      | LpA, 3m dB(A) | LpA, 1m dB(A) |
|---------------------------------------------------|-------|-------|---------------------------|-----|-----|-----|------|------|------|------|---------------|---------------|
| A-weighted sound power level (p.1 on the diagram) |       | dB(A) | 63                        | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |               |               |
| LwA to supply inlet                               | dB(A) | 61    | 42                        | 45  | 48  | 51  | 52   | 45   | 42   | 44   | 42            | 50            |
| LwA to supply outlet                              | dB(A) | 64    | 44                        | 47  | 51  | 54  | 55   | 47   | 44   | 46   | 44            | 53            |
| LwA to exhaust inlet                              | dB(A) | 56    | 38                        | 41  | 45  | 46  | 47   | 39   | 35   | 29   | 36            | 45            |
| LwA to exhaust outlet                             | dB(A) | 53    | 36                        | 39  | 43  | 44  | 45   | 37   | 33   | 28   | 34            | 43            |
| LwA to environment                                | dB(A) | 57    | 35                        | 43  | 42  | 45  | 44   | 44   | 43   | 38   | 37            | 46            |

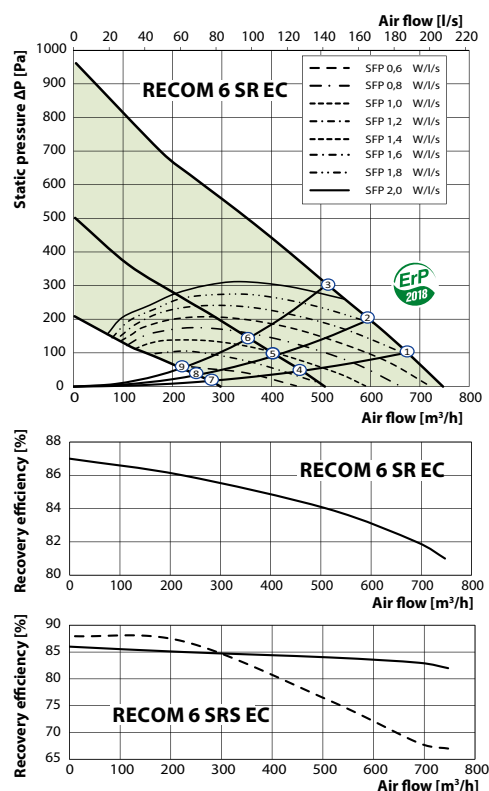
| RECOM 4 SRS EC                                    |       | Gen.  | Octave frequency band, Hz |     |     |     |      |      |      |      | LpA, 3m dB(A) | LpA, 1m dB(A) |
|---------------------------------------------------|-------|-------|---------------------------|-----|-----|-----|------|------|------|------|---------------|---------------|
| A-weighted sound power level (p.4 on the diagram) |       | dB(A) | 63                        | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |               |               |
| LwA to supply inlet                               | dB(A) | 56    | 33                        | 36  | 40  | 44  | 51   | 36   | 32   | 31   | 37            | 46            |
| LwA to supply outlet                              | dB(A) | 58    | 35                        | 38  | 42  | 46  | 54   | 38   | 34   | 33   | 38            | 47            |
| LwA to exhaust inlet                              | dB(A) | 47    | 28                        | 31  | 35  | 37  | 40   | 26   | 23   | 24   | 26            | 36            |
| LwA to exhaust outlet                             | dB(A) | 49    | 29                        | 33  | 37  | 39  | 42   | 27   | 24   | 25   | 27            | 38            |
| LwA to environment                                | dB(A) | 48    | 29                        | 37  | 36  | 38  | 37   | 35   | 33   | 26   | 28            | 37            |

## AIR HANDLING UNITS WITH HEAT RECOVERY

### Technical data

| Model                                         | RECOM 6 SR EC LR                         | REECOM 6 SRS EC L/R |
|-----------------------------------------------|------------------------------------------|---------------------|
| Voltage [V / 50-60 Hz]                        | 230                                      |                     |
| Max. unit power without electric heater [W]   | 336                                      |                     |
| Integrated electric heater power [W]          | 1400                                     | 1400                |
| Max. unit power [W]                           | 1736                                     | 1736                |
| Max. unit current without electric heater [A] | 2,3                                      | 2,3                 |
| Integrated electric heater current [A]        | 6,21                                     | 6,21                |
| Max. unit current [A]                         | 8,51                                     | 8,51                |
| Max air flow [m³/h]                           | 747                                      |                     |
| Sound pressure level at 3 m distance [dBA]    | 29                                       |                     |
| Max. operating temperature [°C]               | - 25...+40                               |                     |
| Case material                                 | painted steel                            |                     |
| Insulation                                    | 40                                       |                     |
| Extract filter                                | G4 / Coarse > 60%                        |                     |
| Supply filters                                | G4 / Coarse > 60% (option F7 / ePM1 60%) |                     |
| Connected air duct diameter [mm]              | 200                                      |                     |
| Weight [kg]                                   | 90                                       |                     |
| Heat recovery efficiency [%]                  | 87                                       | 86                  |
| Heat exchanger type                           | condensing                               | sorption            |
| SEC class                                     | A+                                       | A+                  |

\*Sound pressure level at 3 m distance is specified at point 4 [dBA]



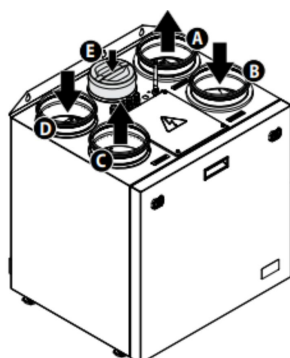
| RECOM 6 SR EC<br>A-weighted sound power level<br>(p.1 on the diagram)  | Gen.<br>dB(A) | Octave frequency band, Hz |     |     |     |      |      |      | LpA,<br>3m<br>dB(A) | LpA,<br>1m<br>dB(A) |
|------------------------------------------------------------------------|---------------|---------------------------|-----|-----|-----|------|------|------|---------------------|---------------------|
|                                                                        |               | 63                        | 125 | 250 | 500 | 1000 | 2000 | 4000 |                     |                     |
| LwA to supply inlet                                                    | 68            | 43                        | 46  | 49  | 55  | 55   | 55   | 52   | 46                  | 57                  |
| LwA to supply outlet                                                   | 72            | 45                        | 48  | 52  | 58  | 58   | 58   | 55   | 48                  | 61                  |
| LwA to exhaust inlet                                                   | 57            | 38                        | 41  | 45  | 42  | 44   | 41   | 36   | 28                  | 46                  |
| LwA to exhaust outlet                                                  | 54            | 36                        | 39  | 43  | 40  | 42   | 39   | 34   | 27                  | 43                  |
| LwA to environment                                                     | 61            | 38                        | 46  | 45  | 44  | 49   | 47   | 40   | 36                  | 50                  |
| RECOM 6 SRS EC<br>A-weighted sound power level<br>(p.4 on the diagram) | Gen.<br>dB(A) | Octave frequency band, Hz |     |     |     |      |      |      | LpA,<br>3m<br>dB(A) | LpA,<br>1m<br>dB(A) |
|                                                                        |               | 63                        | 125 | 250 | 500 | 1000 | 2000 | 4000 |                     |                     |
| LwA to supply inlet                                                    | 59            | 42                        | 45  | 48  | 50  | 48   | 44   | 40   | 33                  | 48                  |
| LwA to supply outlet                                                   | 61            | 44                        | 47  | 51  | 53  | 50   | 46   | 42   | 35                  | 50                  |
| LwA to exhaust inlet                                                   | 50            | 39                        | 42  | 46  | 37  | 37   | 33   | 25   | 24                  | 39                  |
| LwA to exhaust outlet                                                  | 53            | 41                        | 44  | 48  | 39  | 39   | 35   | 26   | 25                  | 42                  |
| LwA to environment                                                     | 50            | 36                        | 44  | 43  | 35  | 37   | 39   | 29   | 27                  | 39                  |

## Accessories for air handling units

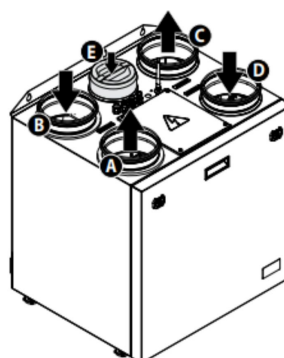
|                    | Filter G4                                                                         | Supply filter F7                                                                  | Control panel                                                                     | Control panel                                                                      | WiFi Control panel                                                                  | Internal humidity sensor                                                            | Internal CO <sub>2</sub> sensor                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |  |
| RECOM 3 SR EC L/R  | SF 428 x 220 x 40<br>Coarse 90% G4                                                | SF 428 x 220 x 40<br>ePM1 60% F7                                                  | FPD                                                                               | FP (22)                                                                            | FP (22) Wi-Fi                                                                       | HV2                                                                                 | CO2-3                                                                               |
| RECOM 3 SRS EC L/R |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| RECOM 4 SR EC L/R  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| RECOM 4 SRS EC L/R | SF 522x240x48<br>Coarse 90% G4                                                    | SF 522x240x48<br>ePM1 60% F7                                                      |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| RECOM 6 SR EC L/R  |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| RECOM 6 SRS EC L/R |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |

## MOUNTING AND SET-UP

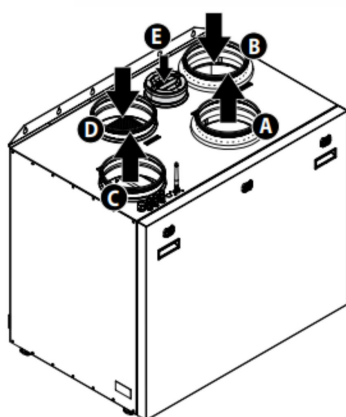
RECOM 3/4 SR (SRS) EC L



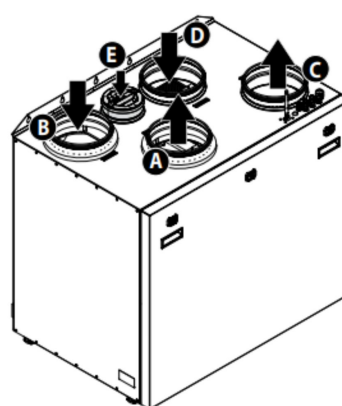
RECOM 3/4 SR (SRS) EC R



RECOM 6 SR (SRS) EC L



RECOM 6 SR (SRS) EC R



A – exhaust air, B – intake air, C – supply air, D – extract air, E – from the range hood

While mounting the unit provide the minimum required access to the unit for maintenance and repair. The recommended minimum distances from the unit to the walls are shown below.

