

## Series

# PD-VUT VB EC A11 PD-VUE VB EC A11



Heat recovery air handling units in sound- and heat-insulated casings.  
Air capacity up to **750 m³/h**.  
Heat recovery efficiency up to **98 %**

## Description

The air handling units are the fully featured ventilation units with heat recovery for air filtration, fresh air supply and stale air extract. During operation the extract air heat is transferred to the supply air stream by the highly efficient plate heat exchanger. The units are designed for energy efficient ventilation of cottages and flats and are compatible with round air ducts (Ø 125, 160 and 200 mm).

## Casing

Made of high-quality polymer coated steel, internally filled with 20, 30 or 40 mm (depending on the unit model) mineral wool layer for heat and sound insulation.

## Filter

Supply and exhaust air flows are purified through panel filters with filtering class G4 and F7, respectively. Supply air flows in the VUT/VUE 250 VB EC units are purified through G4 and F7 filters. Exhaust air flows are purified through G4 filters.

## Fans

The units are equipped with high-efficient EC motors with an external rotor with backward curved blades. These state-of-the-art motors offer the very best in energy efficiency today.

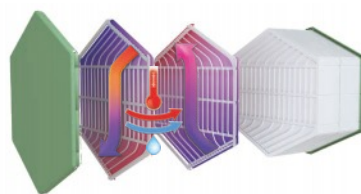
The high efficiency (up to 90 %) is a definite advantage of EC motors.

## Heat exchanger

The **PD-VUT VB EC** units are equipped with a counter-flow polystyrene heat exchanger. In the cold season the extract air heat is captured and transferred to the supply air stream which reduces the ventilation-generated heat losses. This can lead to formation of condensate that is collected in a special drain pan and discharged into the sewage system. In the warm season the ambient air heat is transferred to the exhaust air stream. This allows for a considerable reduction of the supply air temperature which, in turn, reduces the air conditioning load.



The **PD-VUE VB EC** units are equipped with a counter-flow enthalpy heat exchanger. In the cold season the extract air heat and moisture are transferred to the supply air stream through the enthalpy membrane reducing the heat losses from ventilation. The ambient air heat and moisture are transferred to the exhaust air stream through the enthalpy membrane in the warm season. This allows for a considerable reduction of the supply air temperature and humidity which, in turn, reduces the air conditioning load.



## Bypass

The **PD-VUT VB EC** and **PD-VUE VB EC** models are equipped with a bypass which can be opened if there is a need to cool down the ventilated area with cool intake air without heat recovery.

## Control and automation

The **PD-VUT VB EC A11** and **PD-VUE VB EC A11** units have an LC D sensor control panel PU SENS 01.



Two ways of freeze protection are available:

1. Supply fan stopping.
2. Preheating: when the outdoor air temperature drops below -3 °C, the heat exchanger freeze protection algorithm is activated by the NKP electric heater that heats the intake air.

The heater power is continuously adjusted by the automation system in order to prevent condensate freezing in the heat exchanger.

## Mounting

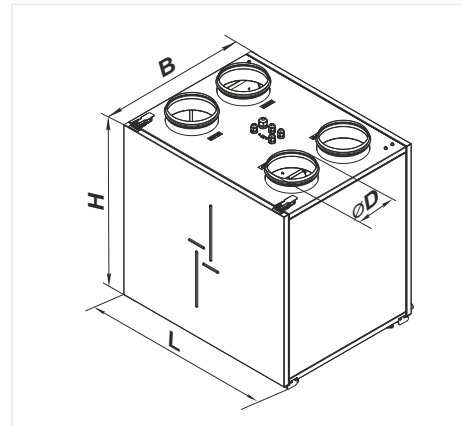
The units are designed for wall or floor mounting. The access for unit and filter maintenance is available from the front panel. During mounting stage the front and the back panels can be reversed providing either left-handed or right-handed unit mounting.

## Designation key

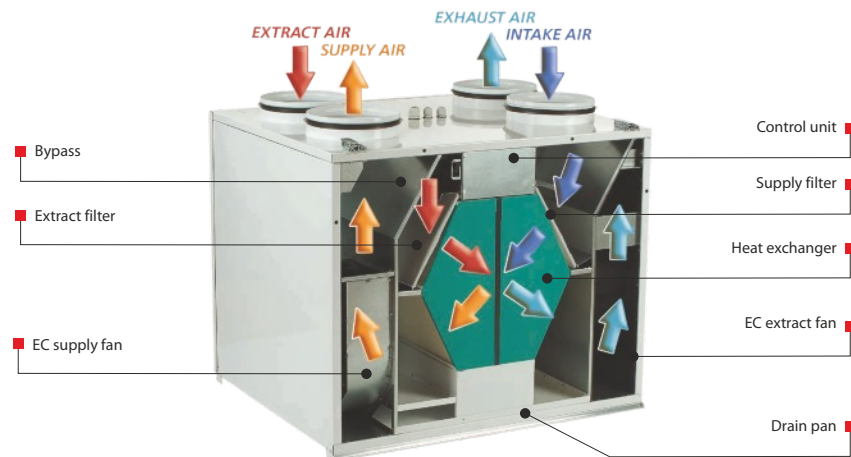
| Series                                                                                           | Rated air flow<br>[m³/h]   | Installation features | Casing design                                                                      | Bypass                                       | Motor type                                              | Control    |
|--------------------------------------------------------------------------------------------------|----------------------------|-----------------------|------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------|------------|
| <b>PD-VUT:</b> ventilation with heat recovery<br><b>PD-VUE:</b> ventilation with energy recovery | 160; 250; 300;<br>350; 550 | <b>V</b> : vertical   | _ : default value<br><b>1</b> : casing modification<br><b>2</b> : 20 mm insulation | _ : without bypass<br><b>B</b> : with bypass | <b>EC</b> : synchronous electronically commutated motor | <b>A11</b> |

## Overall dimensions

| Model                     | Dimensions [mm] |     |     |     |
|---------------------------|-----------------|-----|-----|-----|
|                           | Ø D             | B   | H   | L   |
| PD-VUT/VUE 160 V EC A11   | 124             | 330 | 550 |     |
|                           | 600             |     |     |     |
| PD-VUT/VUE 160 V1 EC A11  | 124             | 370 | 590 |     |
|                           | 640             |     |     |     |
| PD-VUT/VUE 160 VB EC A11  | 124             | 330 | 580 | 600 |
| PD-VUT/VUE 160 V1B EC A11 | 124             | 370 | 620 | 640 |
| PD-VUT/VUE 250 V EC A11   | 159             | 489 | 881 | 567 |
| PD-VUT/VUE 250 VB EC A11  | 159             | 489 | 881 | 567 |
| PD-VUT/VUE 350 VB EC A11  | 159             | 592 | 675 | 730 |
| PD-VUT/VUE 350 V1B EC A11 | 159             | 475 | 673 | 730 |
| PD-VUT/VUE 550 VB EC A11  | 198             | 722 | 675 | 828 |



## Unit design\*:



\*Unit design may vary depending on the models

## Technical data

|                                            | PD-VUT 160 V EC A11                            | PD-VUE 160 V EC A11 | PD-VUT 160 VB EC A11 | PD-VUE160 VB EC A11 |
|--------------------------------------------|------------------------------------------------|---------------------|----------------------|---------------------|
| Unit voltage [V/50 (60) Hz]                | 1~230                                          |                     |                      |                     |
| Maximum power [W]                          | 51                                             |                     |                      |                     |
| Maximum current [A]                        | 0.4                                            |                     |                      |                     |
| Maximum air flow [m³/h]                    | 180 RPM                                        |                     |                      |                     |
| [min⁻¹]                                    | 3770                                           |                     |                      |                     |
| Sound pressure level at 3 m distance [dBA] | 24 Transported air                             |                     |                      |                     |
| temperature [°C]                           | from -25 up to +40                             |                     |                      |                     |
| Casing material                            | painted steel Insulation<br>20 mm mineral wool |                     |                      |                     |
| Extract filter                             | G4                                             |                     |                      |                     |
| Supply filter                              | F7 (optionally G4)                             |                     |                      |                     |
| Connected air duct diameter [mm]           | Ø125                                           |                     |                      |                     |
| Weight [kg]                                | 42                                             |                     | 44                   |                     |
| Heat recovery efficiency [%]               | from 88 up to 98                               | from 80 up to 94    | from 88 up to 98     | from 80 up to 94    |
| Heat exchanger type                        | counter-flow                                   |                     |                      |                     |
| Heat exchanger material                    | polystyrene                                    | enthalpy            | polystyrene          | enthalpy            |
| SEC class A A A                            |                                                |                     |                      |                     |

**Technical data**

|                                            | PD-VUT 160 V1 EC A11<br>PD-VUT 160 V1B EC | PD-VUE 160 V1 EC A11<br>PD-VUE 160 V1B EC A11 |
|--------------------------------------------|-------------------------------------------|-----------------------------------------------|
| Unit voltage [V/50 (60) Hz]                | 1~230                                     |                                               |
| Maximum power [W]                          | 51                                        |                                               |
| Maximum current [A]                        | 0.4                                       |                                               |
| Maximum air flow [m³/h]                    | 180                                       |                                               |
| RPM [min⁻¹]                                | 3770                                      |                                               |
| Sound pressure level at 3 m distance [dBA] | 22                                        |                                               |
| Transported air temperature [°C]           | from -25 up                               |                                               |
| to +40                                     |                                           |                                               |
| Casing material                            | painted steel                             |                                               |
| Insulation                                 | 40 mm mineral                             |                                               |
| wool                                       |                                           |                                               |
| Extract filter                             | G4                                        |                                               |
| Supply filter                              | F7 (G4                                    |                                               |
| optionally)                                |                                           |                                               |
| Connected air duct diameter [mm]           | Ø125                                      |                                               |
| Weight [kg]                                | 47                                        |                                               |
| Heat recovery efficiency [%]               | from 88 up to 98                          | from 80 up to 94                              |
| Heat exchanger type                        | counter-flow                              |                                               |
| Heat exchanger material                    | polystyrene                               | enthalpy                                      |
| SEC class                                  | A                                         | A                                             |

**Technical data**

|                                            | PD-VUT 250 V EC A11<br>PD-VUT 250 VB EC A11 | PD-VUE 250 V EC A11<br>PD-VUE 250 VB EC |
|--------------------------------------------|---------------------------------------------|-----------------------------------------|
| Unit voltage [V/50 (60) Hz]                | 1~230                                       |                                         |
| Maximum power [W]                          | 115                                         |                                         |
| Maximum current [A]                        | 0.9                                         |                                         |
| Maximum air flow [m³/h]                    | 290                                         |                                         |
| RPM [min⁻¹]                                | 2050                                        |                                         |
| Sound pressure level at 3 m distance [dBA] | 25                                          |                                         |
| Transported air temperature [°C]           | from -25 up                                 |                                         |
| to +40                                     |                                             |                                         |
| Casing material                            | painted steel                               |                                         |
| Insulation                                 | 30 mm mineral                               |                                         |
| wool                                       |                                             |                                         |
| Extract filter                             | G4                                          |                                         |
| Supply filter                              | G4, F7                                      |                                         |
| Connected air duct diameter [mm]           | Ø160                                        |                                         |
| Weight [kg]                                | 51                                          |                                         |
| Heat recovery efficiency [%]               | from 85 up to 94                            | from 78 up to 90                        |
| Heat exchanger type                        | counter-flow                                |                                         |
| Heat exchanger material                    | polystyrene                                 | enthalpy                                |
| SEC class                                  | A                                           | A                                       |

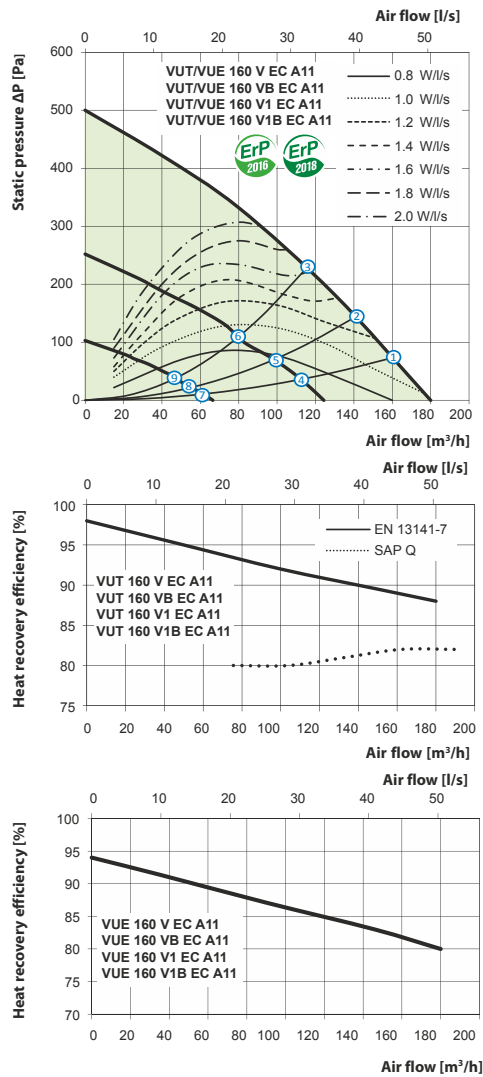
**Technical data**

|                                            |           | PD-VUT 350 V1B EC A11 | PD-VUE 350 V1B EC A11 | PD-VUT 350 VB EC A11 | PD-VUE 350 VB EC A11 |             |
|--------------------------------------------|-----------|-----------------------|-----------------------|----------------------|----------------------|-------------|
| Unit voltage [V/50 (60) Hz]                |           | 1~230                 |                       |                      |                      |             |
| Maximum power [W]                          |           | 170 Maximum           |                       |                      |                      |             |
| current [A]                                |           | 1.3                   |                       |                      |                      |             |
| Maximum air flow [m³/h]                    |           | 380                   | 415                   |                      |                      |             |
| RPM [min <sup>-1</sup> ]                   |           | 3200                  |                       |                      |                      |             |
| Sound pressure level at 3 m distance [dBA] |           | 28                    |                       |                      |                      |             |
| Transported air temperature [°C]           |           | from -25 up to +40    | from -25 up to +40    |                      |                      |             |
| Casing material                            |           | painted steel         |                       |                      |                      |             |
| Insulation                                 |           | 40 mm mineral wool    |                       |                      |                      |             |
| Extract filter                             |           | G4                    |                       |                      |                      |             |
| Supply filter                              |           | F7 (G4 optionally)    |                       |                      |                      |             |
| Connected air duct diameter [mm]           |           | Ø160                  |                       |                      |                      |             |
| Weight [kg]                                |           | 55                    |                       | 66                   |                      |             |
| Heat recovery efficiency [%]               |           | from 84 up to 94      | from 74 up to 90      | from 80 up to 89     | from 76 up to 89     |             |
| Heat exchanger type                        |           | counter-flow          |                       |                      |                      |             |
| Heat                                       | exchanger | material              | polystyrene           | enthalpy             |                      | polystyrene |
|                                            | enthalpy  | SEC                   | class                 | A                    | A                    | A           |

**Technical data**

|                                            | PD-VUT 550 VB EC A11 | PD-VUE 550 VB EC A11 |
|--------------------------------------------|----------------------|----------------------|
| Unit voltage [V/50 (60) Hz]                | 1~230                |                      |
| Maximum power [W]                          | 333                  |                      |
| Maximum current [A]                        | 2.3                  |                      |
| Maximum air flow [m³/h]                    | 750                  |                      |
| RPM [min <sup>-1</sup> ]                   | 3230                 |                      |
| Sound pressure level at 3 m distance [dBA] | 26                   |                      |
| Transported air temperature [°C]           | from -25 up          |                      |
| to +40                                     |                      |                      |
| Casing material                            | painted steel        |                      |
| Insulation                                 | 40 mm mineral wool   |                      |
| Extract filter                             | G4                   |                      |
| Supply filter                              | F7 (G4               |                      |
| optionally)                                |                      |                      |
| Connected air duct diameter [mm]           | Ø200                 |                      |
| Weight [kg]                                | 83                   |                      |
| Heat recovery efficiency [%]               | from 85 up to 88     | from 72 up to 92     |
| Heat exchanger type                        | counter-flow         |                      |
| Heat exchanger material                    | polystyrene          |                      |
|                                            | enthalpy             |                      |
| SEC class                                  | A                    | A                    |

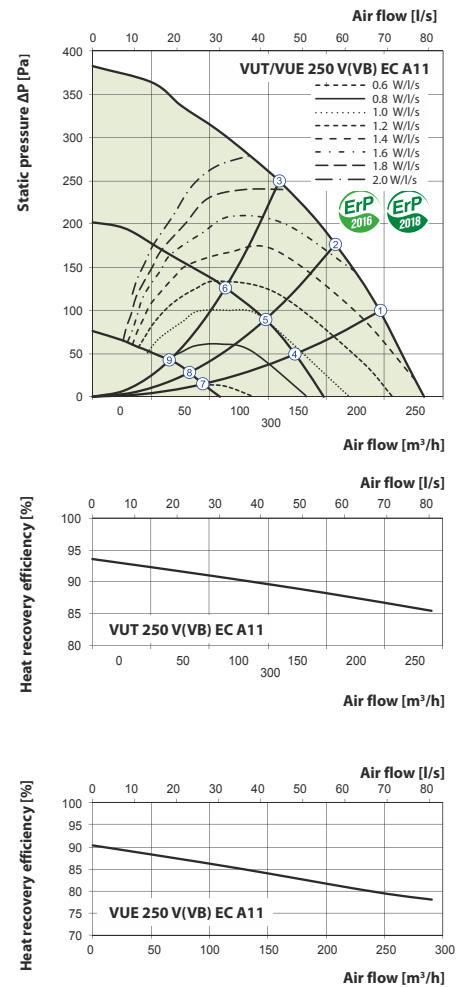
## PD-VUT/VUE



| A-weighted sound powerlevel |     | General | Octave frequency band [Hz] |     |     |     |      |      |      |      | LpA, 3<br>m<br>dBA | LpA, 1 m<br>dBA |
|-----------------------------|-----|---------|----------------------------|-----|-----|-----|------|------|------|------|--------------------|-----------------|
|                             |     | dBA     | 63                         | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |                    |                 |
| air inlet                   | dBA | 52      | 28                         | 46  | 49  | 41  | 35   | 33   | 36   | 29   |                    |                 |
| LWA to supply air outlet    | dBA | 60      | 32                         | 52  | 58  | 47  | 37   | 36   | 41   | 35   |                    |                 |
| LWA to exhaust air inlet    | dBA | 51      | 27                         | 45  | 49  | 41  | 36   | 32   | 35   | 29   |                    |                 |
| LWA to exhaust air outlet   | dBA | 60      | 31                         | 50  | 59  | 48  | 36   | 36   | 41   | 32   |                    |                 |
| LWA to environment          | dBA | 45      | 25                         | 41  | 42  | 34  | 31   | 28   | 27   | 22   | 24                 | 34              |

\*Data provided for point 1 of the air flow diagram

## PD-VUT/VUE



| A-weighted sound powerlevel           |     | General |    | Octave frequency band [Hz] |     |     |      |      |      |      | LpA, 3 m<br>dBA | LpA, 1 m<br>dBA |
|---------------------------------------|-----|---------|----|----------------------------|-----|-----|------|------|------|------|-----------------|-----------------|
|                                       |     | dBA     | 63 | 125                        | 250 | 500 | 1000 | 2000 | 4000 | 8000 |                 |                 |
| air inlet                             | dBA | 52      | 28 | 46                         | 50  | 41  | 36   | 33   | 36   | 29   |                 |                 |
| L <sub>WA</sub> to supply air outlet  | dBA | 61      | 33 | 53                         | 60  | 48  | 38   | 37   | 43   | 36   |                 |                 |
| L <sub>WA</sub> to exhaust air inlet  | dBA | 52      | 28 | 46                         | 50  | 42  | 36   | 33   | 35   | 30   |                 |                 |
| L <sub>WA</sub> to exhaust air outlet | dBA | 62      | 32 | 51                         | 61  | 49  | 37   | 37   | 42   | 33   |                 |                 |
| L <sub>WA</sub> to environment        | dBA | 45      | 25 | 41                         | 42  | 35  | 32   | 28   | 27   | 22   | 25              | 35              |

\*Data provided for point 1 of the air flow diagram

## Calculation of air temperature downstream of the heat exchanger:

$$t_{\text{outd}} = t_{\text{hr}} + k_{\text{hr}} * (t_{\text{extr}} - t_{\text{outd}}) / 100,$$

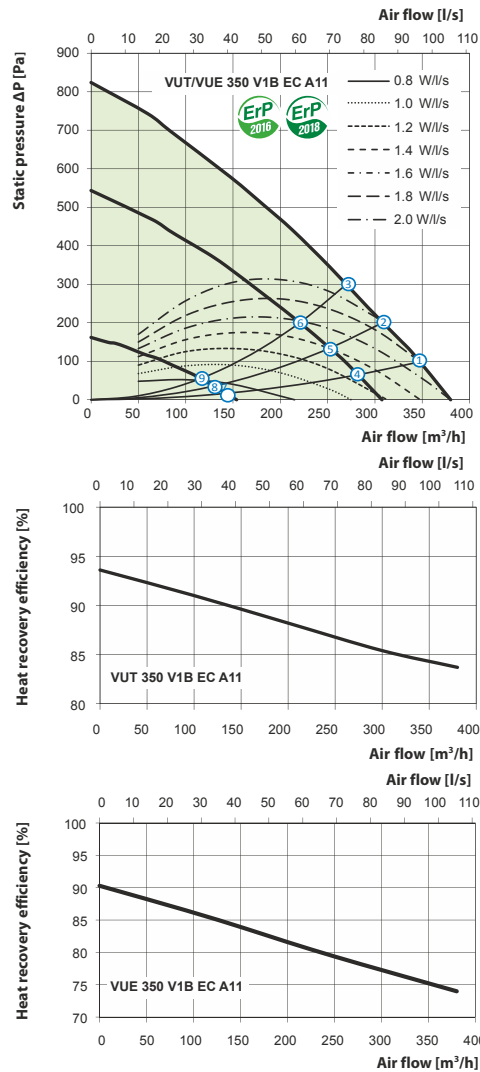
where

$t_{\text{outd}}$  – outdoor air temperature [°C]

$t_{\text{extr}}$  – extract air temperature [°C]

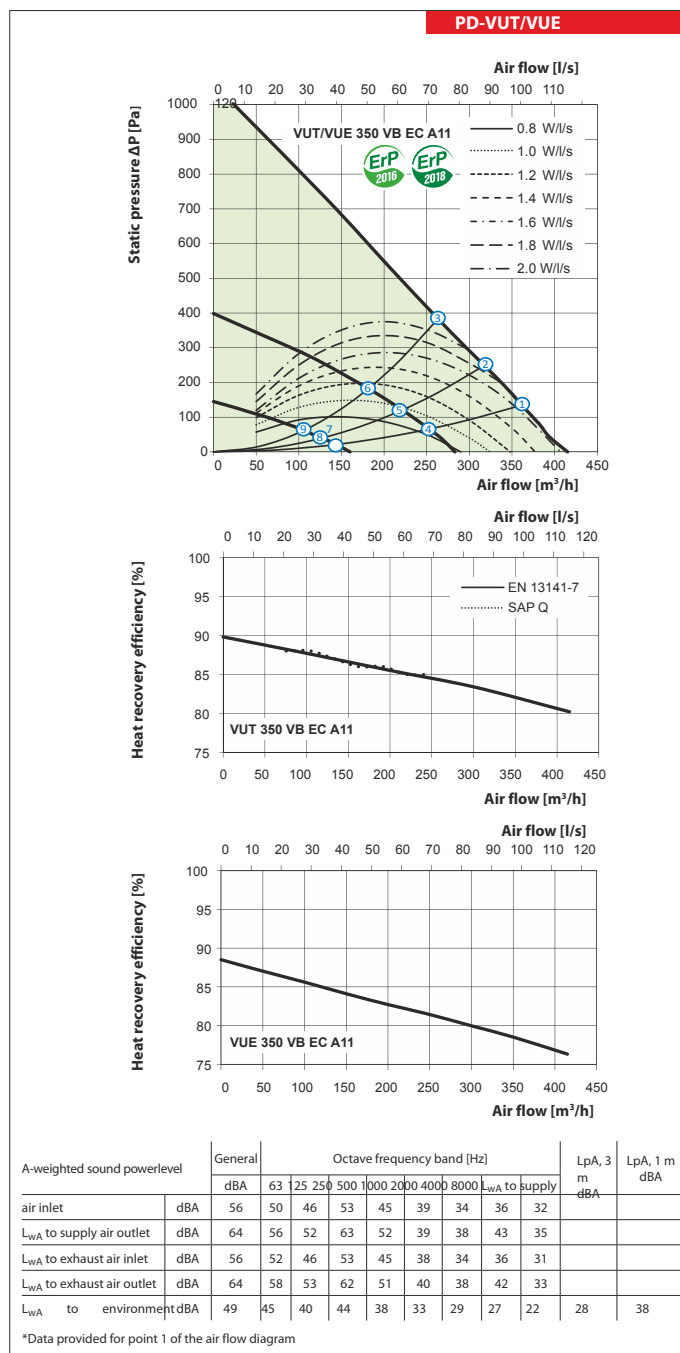
$k_{\text{hr}}$  – heat exchanger efficiency (according to the diagram) [%]

# PD-VUT/VUE



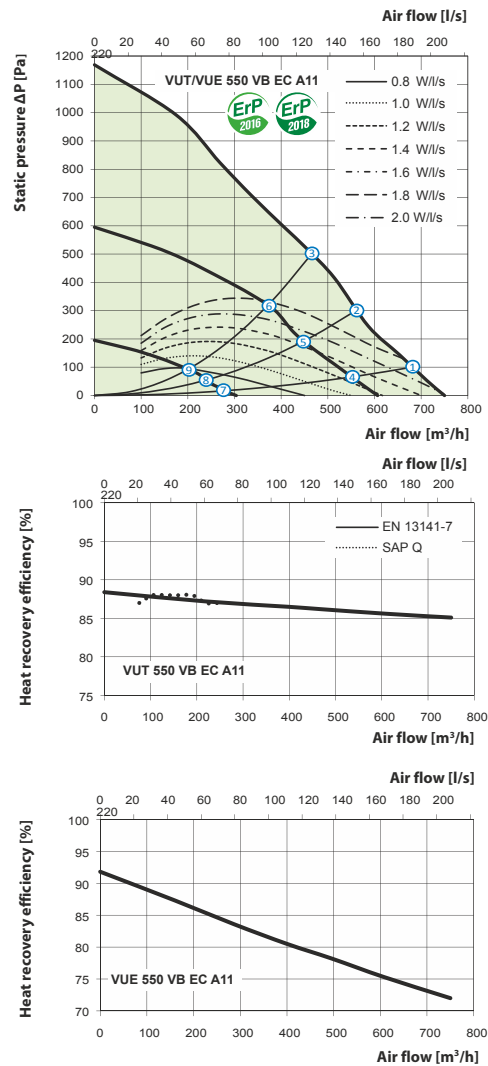
| A-weighted sound powerlevel           |     | General | Octave frequency band [Hz] |     |     |     |      |      |      |      |                           | LpA, 3<br>m<br>dB | LpA, 1 m<br>dB |
|---------------------------------------|-----|---------|----------------------------|-----|-----|-----|------|------|------|------|---------------------------|-------------------|----------------|
|                                       |     | dBA     | 63                         | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | L <sub>WA</sub> to supply |                   |                |
| air inlet                             | dBA | 55      | 51                         | 45  | 51  | 44  | 37   | 33   | 35   | 30   |                           |                   |                |
| L <sub>WA</sub> to supply air outlet  | dBA | 65      | 59                         | 54  | 63  | 52  | 41   | 39   | 43   | 34   |                           |                   |                |
| L <sub>WA</sub> to exhaust air inlet  | dBA | 55      | 50                         | 45  | 51  | 44  | 37   | 33   | 35   | 31   |                           |                   |                |
| L <sub>WA</sub> to exhaust air outlet | dBA | 66      | 57                         | 53  | 64  | 53  | 39   | 38   | 43   | 35   |                           |                   |                |
| L <sub>WA</sub> to environment        | dBA | 49      | 45                         | 40  | 44  | 38  | 33   | 29   | 27   | 22   | 28                        | 38                |                |

\*Data provided for point 1 of the air flow diagram



| Point | Power [W]                                                                                                                                                    |                                                                      |                                        |                                      |                                      |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------|--------------------------------------|--------------------------------------|
|       | PD-VUT 160 V EC<br>PD-VUT 160 VB EC<br>PD-VUT 160 V1 EC<br>PD-VUT 160 V1B EC<br>PD-VUE 160 V EC<br>PD-VUE 160 VB EC<br>PD-VUE 160 V1 EC<br>PD-VUE 160 V1B EC | PD-VUT 250 V EC<br>PD-VUE 250 V EC<br>PD-VUT 250 VB<br>PD-EC VUE 250 | PD-VUT 350 V1B EC<br>PD-VUE 350 V1B EC | PD-VUT 350 VB EC<br>PD-VUE 350 VB EC | PD-VUT 550 VB EC<br>PD-VUE 550 VB EC |
| 1     | 50                                                                                                                                                           | 106                                                                  | 168                                    | 148                                  | 332                                  |
| 2     | 51                                                                                                                                                           | 95                                                                   | 167                                    | 147                                  | 331                                  |
| 3     | 50                                                                                                                                                           | 82                                                                   | 165                                    | 145                                  | 332                                  |
| 4     | 22                                                                                                                                                           | 44                                                                   | 101                                    | 56                                   | 133                                  |
| 5     | 22                                                                                                                                                           | 40                                                                   | 99                                     | 55                                   | 129                                  |
| 6     | 21                                                                                                                                                           | 36                                                                   | 97                                     | 54                                   | 126                                  |
| 7     | 9                                                                                                                                                            | 16                                                                   | 27                                     | 19                                   | 32                                   |
| 8     | 9                                                                                                                                                            | 15                                                                   | 27                                     | 18                                   | 31                                   |
| 9     | 9                                                                                                                                                            | 15                                                                   | 26                                     | 18                                   | 30                                   |

# PD-VUT/VUE



| A-weighted sound power level          | General | Octave frequency band [Hz] |    |     |     |     |      |      |      | LpA, 3 m<br>dBA | LpA, 1 m<br>dBA |
|---------------------------------------|---------|----------------------------|----|-----|-----|-----|------|------|------|-----------------|-----------------|
|                                       |         | dBA                        | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |                 |                 |
| air inlet                             | dBA     | 54                         | 47 | 42  | 50  | 44  | 41   | 39   | 39   | 31              |                 |
| L <sub>WA</sub> to supply air outlet  | dBA     | 69                         | 63 | 56  | 65  | 59  | 55   | 50   | 52   | 46              |                 |
| L <sub>WA</sub> to exhaust air inlet  | dBA     | 54                         | 47 | 41  | 51  | 43  | 33   | 31   | 34   | 30              |                 |
| L <sub>WA</sub> to exhaust air outlet | dBA     | 65                         | 61 | 50  | 61  | 55  | 46   | 43   | 46   | 40              |                 |
| L <sub>WA</sub> to environment        | dBA     | 47                         | 42 | 37  | 43  | 36  | 31   | 28   | 26   | 21              | 36              |

\*Data provided for point 1 of the air flow diagram

| Point | Sound pressure level at 3 m distance [dBA]                                                                           |                                                                            |                                        |                                      |                                      |
|-------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------|--------------------------------------|--------------------------------------|
|       | PD-VUT 160 V EC<br>PD-VUT 160 VB EC<br>PD-VUT 160 V1B EC<br>PD-VUE 160 V EC<br>PD-VUE 160 VB EC<br>PD-VUE 160 V1B EC | PD-VUT 250 V EC<br>PD-VUE 250 V EC<br>PD-VUT 250 VB EC<br>PD-VUE 250 VB EC | PD-VUT 350 V1B EC<br>PD-VUE 350 V1B EC | PD-VUT 350 VB EC<br>PD-VUE 350 VB EC | PD-VUT 550 VB EC<br>PD-VUE 550 VB EC |
| 1     | 24 (34)                                                                                                              | 25 (35)                                                                    | 28 (38)                                | 28 (38)                              | 26 (36)                              |
| 2     | 23 (33)                                                                                                              | 24 (34)                                                                    | 27 (37)                                | 27 (37)                              | 26 (36)                              |
| 3     | 23 (33)                                                                                                              | 24 (34)                                                                    | 27 (37)                                | 27 (37)                              | 25 (35)                              |
| 4     | 20 (30)                                                                                                              | 20 (30)                                                                    | 23 (33)                                | 23 (33)                              | 25 (35)                              |
| 5     | 20 (30)                                                                                                              | 19 (29)                                                                    | 22 (32)                                | 22 (32)                              | 24 (34)                              |
| 6     | 20 (30)                                                                                                              | 19 (29)                                                                    | 22 (32)                                | 22 (32)                              | 22 (32)                              |
| 7     | 13 (23)                                                                                                              | 13 (23)                                                                    | 15 (25)                                | 15 (25)                              | 15 (25)                              |
| 8     | 13 (23)                                                                                                              | 12 (22)                                                                    | 14 (24)                                | 14 (24)                              | 14 (24)                              |
| 9     | 13 (23)                                                                                                              | 12 (22)                                                                    | 14 (24)                                | 14 (24)                              | 13 (23)                              |

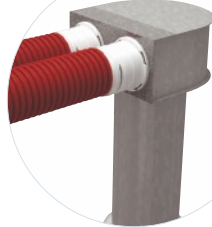
| Model                 | G4 supply filter                                                                  | F7 supply filter                                                                  | Indoor humidity sensor                                                            | Electric heater for pre-heating                                                   | Hydraulic U-trap                                                                   | Air damper                                                                          | Electric actuator                                                                   | Summer block                                                                        |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |  |  |  |  |  |  |  |  |
| PD-VUT 160 V EC       | SF 285x195x10 G4                                                                  | SF 285x195x10 F7                                                                  | HV1                                                                               | NKP-125                                                                           |                                                                                    | KRV 125                                                                             | LF230                                                                               | VL C6 366/285                                                                       |
| PD-VUE 160 V EC A11   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | -                                                                                   |
| PD-VUT 160 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | VL C6 366/285                                                                       |
| PD-VUE 160 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | -                                                                                   |
| PD-VUT 160 V1 EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | VL C6 366/384                                                                       |
| PD-VUE 160 V1 EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | -                                                                                   |
| PD-VUT 160 V1B EC A11 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | VL C6 366/384                                                                       |
| PD-VUE 160 V1B EC A11 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| PD-VUT 250 V EC A11   | SF 417x200x18 G4                                                                  | SF 417x184x18 F7                                                                  |                                                                                   | NKP-160                                                                           | SH-32                                                                              | KRV 160                                                                             |                                                                                     | VL C6 366/384                                                                       |
| PD-VUT 250 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | -                                                                                   |
| PD-VUE 250 V EC A11   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | VL C6 366/384                                                                       |
| PD-VUE 250 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| PD-VUT 350 V1B EC A11 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | -                                                                                   |
| PD-VUE 350 V1B EC A11 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| PD-VUT 350 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| PD-VUE 350 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| PD-VUT 550 VB EC A11  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| PD-VUE 550 VB EC A11  | SF 630x198x40 G4                                                                  | SF 630x198x40 F7                                                                  | NKP-200                                                                           |                                                                                   | KRV 200                                                                            |                                                                                     |                                                                                     |                                                                                     |

## Application options

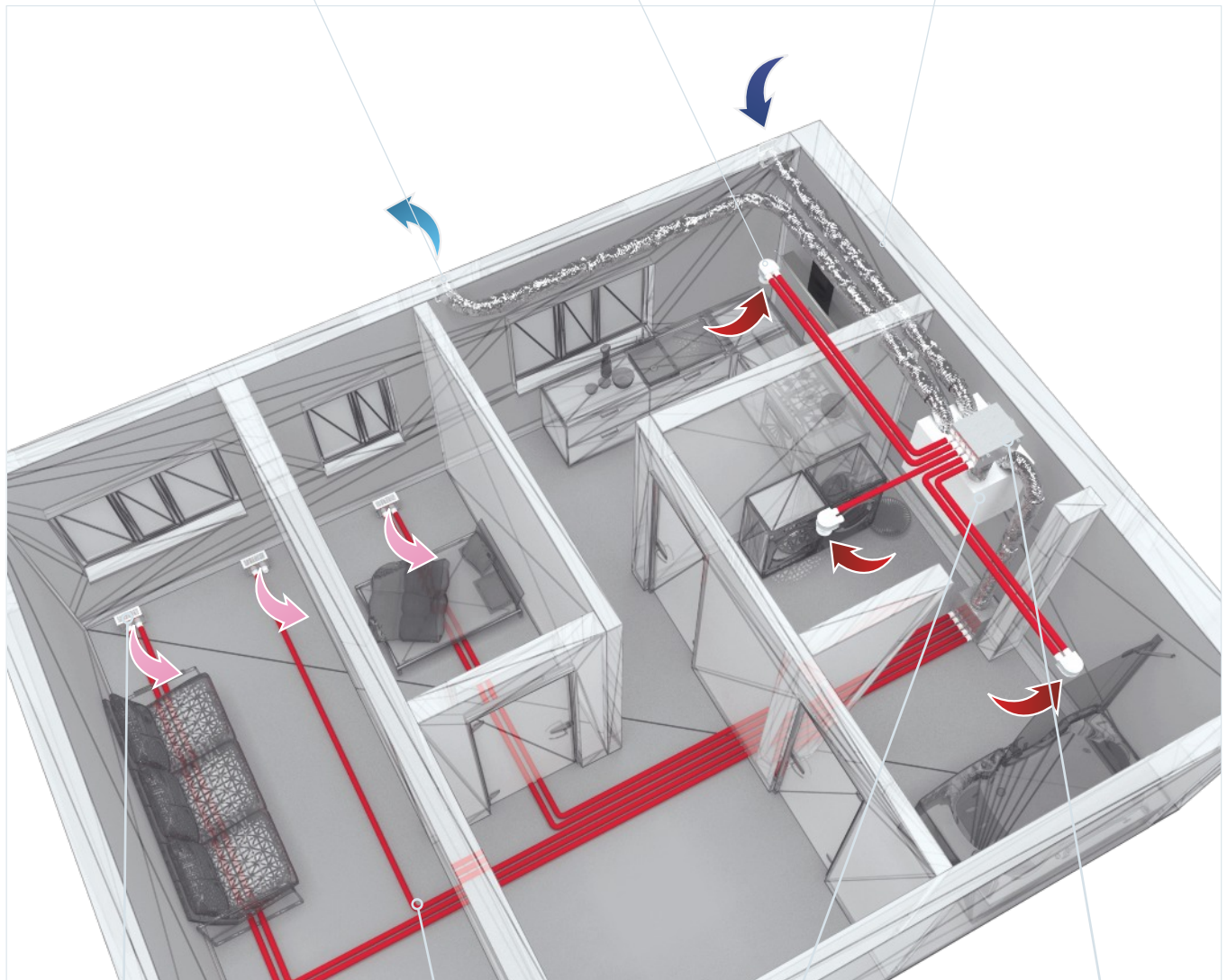
Ventilation hood



Ceiling connector with a disk valve



Isovent 150 insulated air duct



Floor connector with a grille



FlexiVent air duct



Air handling unit



Collector