

Series  
**VENTS VUT V mini**



Speed controller RS-1-400

Air handling units with the air capacity up to **300 m<sup>3</sup>/h** in the compact sound- and heat-insulated casing with vertical duct connections

Series  
**VENTS VUT H mini**



Speed controller RS-1-400

Air handling units with the air capacity up to **300 m<sup>3</sup>/h** in the compact sound- and heat-insulated casing with horizontal duct connections

### ■ Description

Air handling units VUT (H) mini are the complete ventilation units designed for air filtration, heating and supply to the premises and removal of exhaust air. The heat of the exhausted air is transferred to the supply air through the plate heat exchanger. All the models are compatible with 100 and 125 mm round ducts.

### ■ Modifications

**VUT V mini** – the models with vertical duct connections, fans with AC motors.

**VUT H mini** – the models with horizontal duct connections, fans with AC motors.

### ■ Casing

The casing is made of aluzink with 20 mm mineral wool internal heat and sound insulation.

### ■ Filter

Two G4 built-in filters ensure supply and exhaust air filtration.

### ■ Fans

The unit is equipped with supply and exhaust centrifugal fans with backward curved blades and built-in thermal overheating protection with automatic restart. The electric motors and the impellers are dynamically balanced in two planes.

### ■ Heat exchanger

The plate heat exchanger is made of aluminium plates. Whenever heat recovery is not required for unit operation the heat exchanger block can be easily replaced by a "summer" block. The unit is also equipped with the drain pan for condensate drainage as well as with built-in icing protecting system. During operation of the heat exchanger in the winter time the heat from the warm exhaust air is transferred to the cold supply air. During extract air heat energy extraction some condensate can be generated. If the temperature of the intake air is below -5 °C the condensate can get frozen. To prevent the heat exchanger freezing electronic protection system is applied. It switches the supply fan off as the

temperature sensor requires. Warm extract air defrosts the heat exchanger, then the supply fan switches on and the unit continues operating under rated conditions.

### ■ Control

Switching the unit on and its capacity control is performed with thyristor speed controller (RS-1-400) which provides smooth motor speed control over the range of 0-100%.

### ■ Mounting

Air handling unit is mounted on the floor and suspended to the ceiling by means of a seat angle with inserted vibration-damping element or attached to a wall with brackets. The unit can be mounted either in service spaces or in main premises above the suspended ceiling, in the pocket or the unit can be placed directly in the room. Mounting position shall provide correct condensate drainage. Access for maintenance and filter cleaning shall be reserved on the side of the removable side panel on the left from supply air side.

### Designation key:

| Series           | Rated air capacity [m <sup>3</sup> /h] | Duct connection                              | Type        |
|------------------|--|--|-------------|
| <b>VENTS VUT</b> | 200; 300                               | <b>V</b> – vertical<br><b>H</b> – horizontal | <b>mini</b> |

### Accessories



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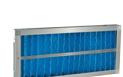
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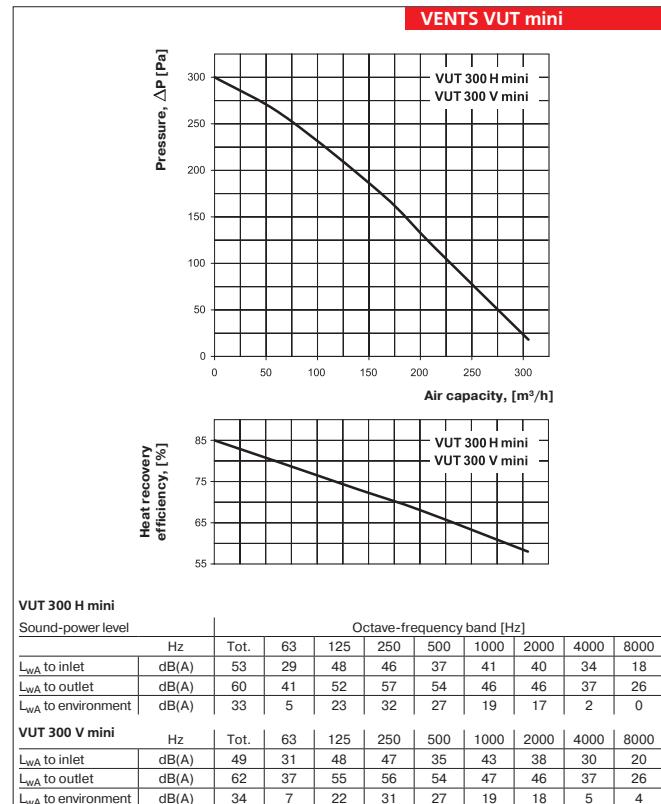
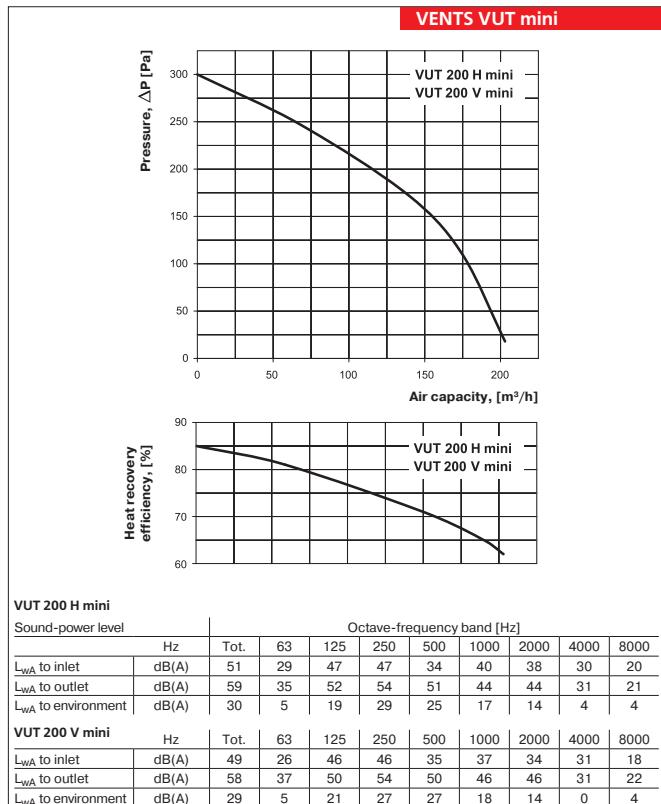


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**Technical data:**

|                                  | VUT 200 H mini     | VUT 200 V mini     | VUT 300 H mini     | VUT 300 V mini     |
|----------------------------------|--------------------|--------------------|--------------------|--------------------|
| Voltage [V / 50 Hz]              | 1~ 230             | 1~ 230             | 1~ 230             | 1~ 230             |
| Maximum fan power [W]            | 2pcs. x 58         | 2pcs. x 58         | 2pcs. x 58         | 2pcs. x 58         |
| Fan current [A]                  | 2pcs. x 0.26       | 2pcs. x 0.26       | 2pcs. x 0.26       | 2pcs. x 0.26       |
| Total unit power [W]             | 116                | 116                | 116                | 116                |
| Total unit current [A]           | 0.52               | 0.52               | 0.52               | 0.52               |
| Air capacity [m³/h]              | 200                | 300                | 300                | 300                |
| RPM                              | 2500               | 2500               | 2500               | 2500               |
| Noise level at 3m [dBA]          | 24-45              | 24-45              | 28-47              | 28-47              |
| Transported air [°C]             | -25 up to +50      |
| Casing material                  | aluzink            | aluzink            | aluzink            | aluzink            |
| Insulation                       | 20 mm mineral wool |
| Filter: extract / supply         | panel filter G4    | panel filter G4    | panel filter G4    | panel filter G4    |
| Replaceable filter*              | SF VUT mini G4     |
| Summer block*                    | VL VUT mini        | VL VUT mini        | VL VUT mini        | VL VUT mini        |
| Connected air duct diameter [mm] | Ø 100              | Ø 100              | Ø 125              | Ø 125              |
| Weight [kg]                      | 30                 | 30                 | 30                 | 30                 |
| Heat recovery efficiency         | up to 85%          | up to 85%          | up to 85%          | up to 85%          |
| Heat exchanger type              | cross-flow type    | cross-flow type    | cross-flow type    | cross-flow type    |
| Heat exchanger material          | aluminum           | aluminum           | aluminum           | aluminum           |

\*option


**Unit overall dimensions:**

| Type           | Dimensions, [mm] |     |     |     |     |     |    |     |     |     |     |  |
|----------------|------------------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|--|
|                | ØD               | B   | B1  | B2  | B3  | H1  | H2 | H3  | L   | L1  | L2  |  |
| VUT 200 H mini | 99               | 278 | 200 | 121 | 192 | 431 | 84 | 107 | 699 | 640 | 600 |  |
| VUT 300 H mini | 124              | 278 | 200 | 139 | 139 | 431 | 89 | 207 | 699 | 640 | 600 |  |

| Type           | Dimensions, [mm] |     |     |     |     |     |     |     |     |      |     |     |     |
|----------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
|                | ØD               | B   | B1  | B2  | B3  | H   | H1  | L1  | L2  | L3   | L4  | L5  | L6  |
| VUT 200 V mini | 99               | 278 | 200 | 109 | 169 | 450 | 431 | 640 | 600 | 73,5 | 204 | 396 | 529 |
| VUT 300 V mini | 124              | 278 | 200 | 100 | 178 | 450 | 431 | 640 | 600 | 74   | 210 | 390 | 526 |

