VOLTVENT®
VENTILATION SYSTEMS



**VHRU SERIES**

# Ceiling mounted heat recovery units

# VHRU

**ALUMINIUM PLATE HEAT EXCHANGER**

**CIRCULAR DUCT CONNECTIONS**



| 1000-6000 | 05 | 50 Hz |
|---|---|---|
| Nominal airflow / $m^3/h$ | Models in the range | Single-phase AC |

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01 / PRODUCT OVERVIEW

# Fresh air. Recovered heat.



### 01 Separate supply and extract paths

An aluminium plate exchanger transfers heat between separate air streams. Model-specific thermal recovery percentages are not published in the verified data.

### 02 A casing for ceiling installation

Galvanized sheet steel, circular duct connections and service access form the series configuration. Provide suitable supports and access to filters, fans and the exchanger.

### 03 AC external-rotor fans

The verified range uses 230 V single-phase AC fans at 50 Hz, Class F insulation and IP44 motor protection. Optional electric duct heating is specified separately.

FIVE VERIFIED CONFIGURATIONS

# Size the unit around your duty.

| Selection parameter | Series reference |
|---|---|
| **Nominal listed airflow** | 1000 / 2000 / 3000 / 4000 / 6000 $m^3/h$ |
| **Fan electrical supply** | 230 V / 1 phase / 50 Hz |
| **Motor insulation / protection** | Class F / IP44 |
| **Published operating range** | -20 to +50 °C |
| **Optional electric heater** | 3 / 6 / 9 / 12 / 15 kW, by model |

The product photograph is the current FSP image. It illustrates the series construction; use the dimensional table for the selected size. Ratings and curves follow the listed configuration.

02 / TECHNICAL DATA

# Compare the unit ratings.

### FAN SUPPLY 230 V / 1 PHASE / 50 Hz

| Model | Airflow $m^3/h$ | Stated power W | Speed rpm | Weight kg | Sound pressure dB(A) | Optional heater kW |
|---|---|---|---|---|---|---|
| **VHRU 1000** | 1000 | 250 | 2668 | 65 | 50 | 3 |
| **VHRU 2000** | 2000 | 400 | 2396 | 85 | 48 | 6 |
| **VHRU 3000** | 3000 | 780 | 1465 | 126 | 49 | 9 |
| **VHRU 4000** | 4000 | 1300 | 1410 | 140 | 51 | 12 |
| **VHRU 6000** | 6000 | 1700 | 1380 | 150 | 58 | 15 |

### NOMINAL AIRFLOW

Nominal airflow values are listed for each model. VHRU 3000: 3000 $m^3/h$. The pressure curves on page 4 retain the published data. Select the unit for the required airflow and system resistance.

### FAN POWER AND OPTIONAL HEATING

Stated electrical power is the published catalogue rating. A separate two-fan total is not given, so the values are not doubled. These are not duty-dependent input-power curves. Optional electric heater ratings are additional and are shown separately.

### ACOUSTIC AND OPERATING REFERENCES

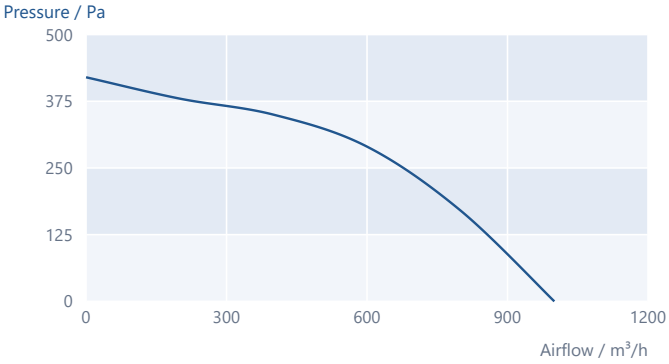
Sound pressure is a catalogue reference; its measurement distance is not stated. No octave-band spectrum or installation correction is inferred. Motor Class F / IP44; published operating range -20 to +50 °C. Model-specific current and thermal recovery percentage are not supplied.

03 / AIR PERFORMANCE

# Fan Performance Curves

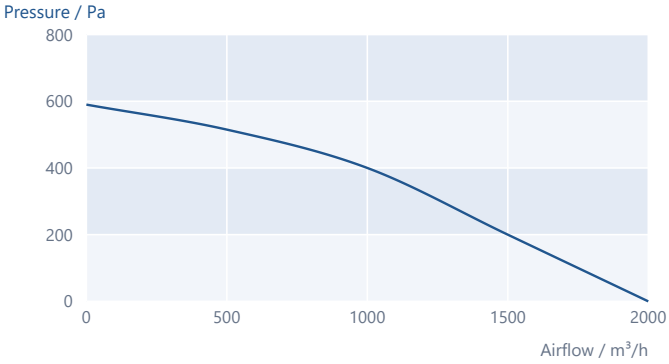
## VHRU 1000

230 V / 50 Hz / published curve



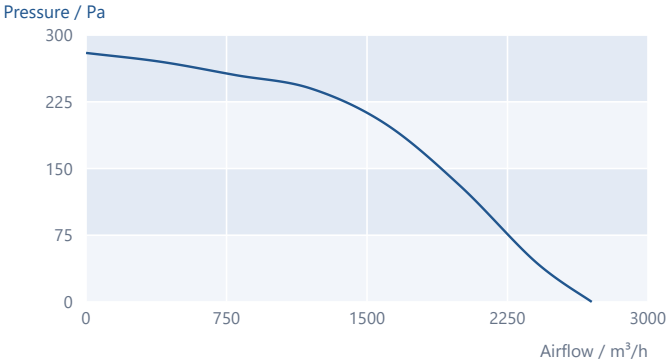

## VHRU 2000

230 V / 50 Hz / published curve



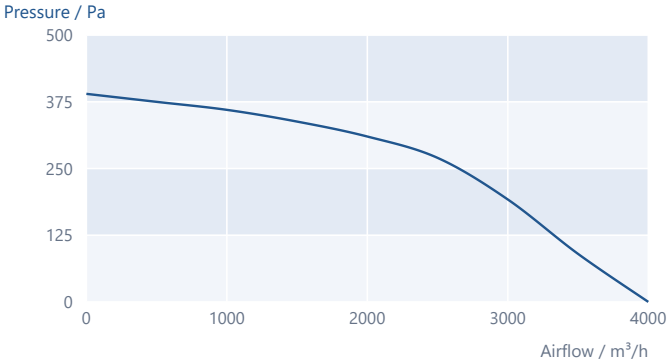

## VHRU 3000

230 V / 50 Hz / published curve



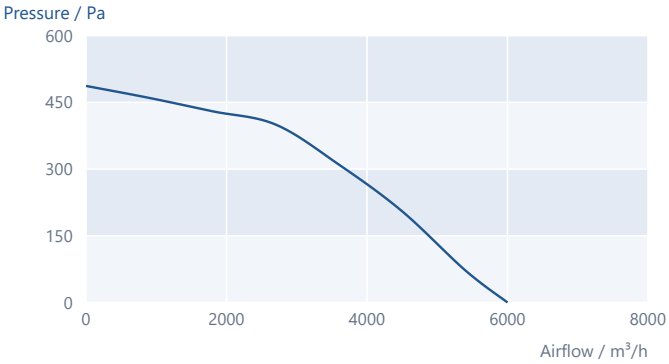

## VHRU 4000

230 V / 50 Hz / published curve




## VHRU 6000

230 V / 50 Hz / published curve



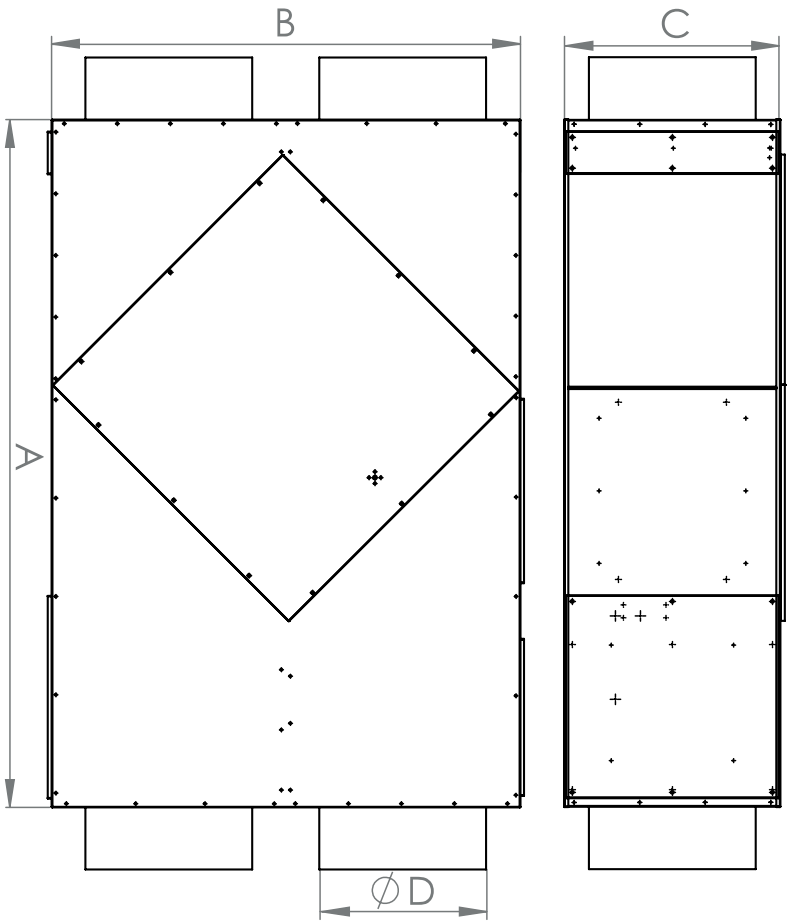

Model-specific scales. Exact pressure point arrays for the listed models; no extrapolation, re-fitting or automatic speed regulation. Thermal recovery efficiency is a separate quantity.

04 / DIMENSIONS

# Plan the ceiling connections.

## ORIGINAL SERIES OUTLINE / PLAN & SIDE

All dimensions in mm




| Model | A | B | C | D |
|---|---|---|---|---|
| **VHRU 1000** | 967 | 760 | 320 | 250 |
| **VHRU 2000** | 1150 | 980 | 405 | 305 |
| **VHRU 3000** | 1540 | 1130 | 505 | 355 |
| **VHRU 4000** | 1650 | 1130 | 520 | 400 |
| **VHRU 6000** | 1850 | 1230 | 550 | 450 |

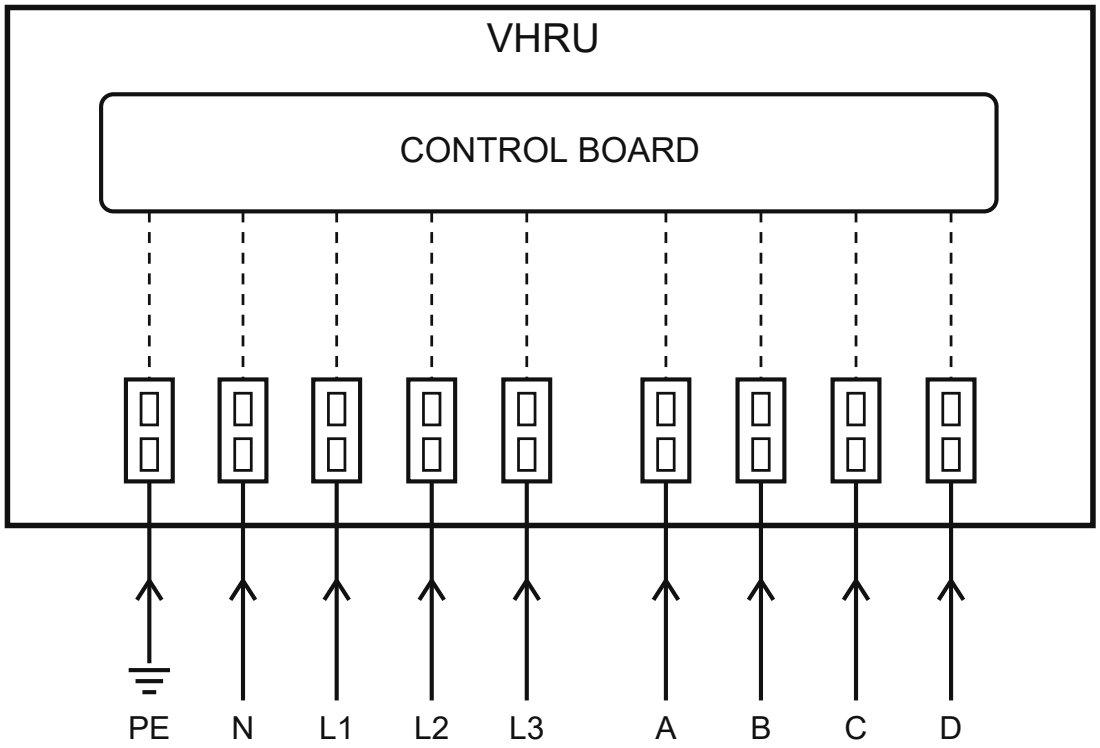
Original mechanical geometry and A-D definitions are retained as native vectors. D identifies the circular duct connection diameter. Use the selected model dimensions and provide installation and service clearance; do not scale the drawing.

05 / ELECTRICAL & INSTALLATION

# Connect the unit controls.

Fan supply: 230 V / 1 phase / 50 Hz. The user-supplied diagram below is a control-board terminal layout. It does not define a complete unit wiring design or the supply arrangement of an optional heater.

## VHRU / CONTROL BOARD & UNIT TERMINALS




## TERMINAL IDENTIFICATION

The supplied PE, N, L1, L2, L3 and A-D labels are retained exactly. Terminal functions and the optional heater supply must follow the supplied unit documentation; do not reinterpret this layout as a fan-only motor connection.

## INSTALLATION AND SERVICE ACCESS

Mount on suitable supports with access to service panels and duct connections. Respect the published operating range. Isolate electrical supplies before opening the unit; keep filters, fans and heat exchanger accessible for inspection and cleaning.

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