



Airfi Commercial Line

# Airfi C5

The most compact air handling unit in its size class on the market



NURSING HOMES



EDUCATIONAL INSTITUTIONS  
AND DAY CARE CENTRES



HOSPITALS



INDUSTRIAL AND  
SPORTS HALLS



OFFICE AND BUSINESS  
PREMISES



A+

500 dm<sup>3</sup>/s



MORE THAN PURE AIR

# Airfi C5 – Air handling unit with internal coils for large construction projects



## Integrated post-heating and cooling

The integrated post-heating can be selected as either liquid-based or electrical. A low temperature, liquid-based post-heating option is also available. A cooling coil can also be integrated inside the air handling unit (liquid or DX direct evaporation). Cooling coils can also be upgraded later. Integrated cooling coils reduce condensation problems. A separate drainage of condensation water is not required.

## Suitable for geothermal pumps or district cooling

This results in significant energy savings for the property.

## Fast and reliable installation

The new Plug & Play solution speeds up installation and reduces the risk of errors. Factory-connected controls for valves and pump groups minimise electrical connections at the site.

## Durable surface material

The durability and service life of the Airfi C5 air handling unit is extended by Magnelis®, a first-class corrosion resistance surface material.

## Contract boundaries are clear and maintenance is easy.

Available with Airfi control automation or as a terminal block version.

## Finnish product development

Airfi ventilation units have been developed for Finland's challenging conditions and regulations. The learning AFPS™ AI feature optimizes energy efficiency. Our products are tested by an independent laboratory.

## Electric power

### Airfi Model C5 Electric

230 VAC 50 Hz 16 A, max input power 2 kW

### Airfi Model C5 Water

230 VAC 50 Hz 16 A, max input power 2 kW

## Electric post-heating element

### Element 1

Fuse size 3 x 16 A, 400 VAC, max input power 7.2 kW – Separate supply

### Element 2

Fuse size 3 x 25 A, 400 VAC, max input power 14.3 kW – Separate supply

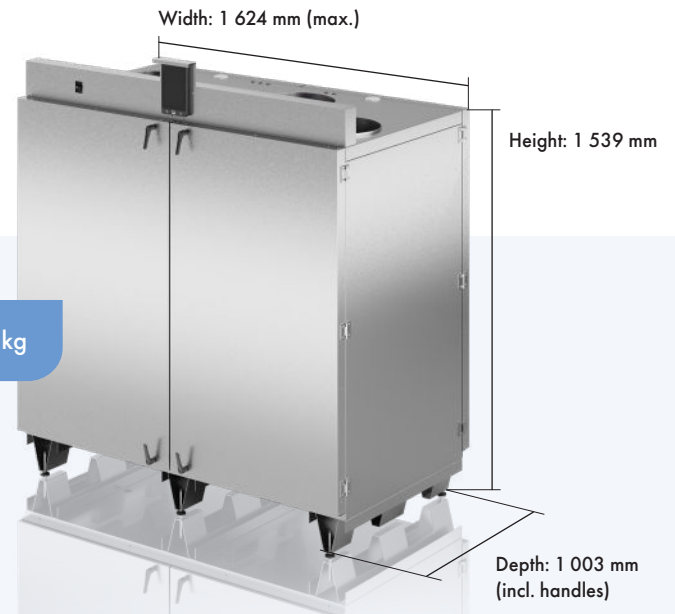
## Cooling coil

Coolant, coil power 1, e.g. 7/12

Coolant, coil power 2, e.g. 9/19

Cooling, direct evaporation coil DX-1

Weight: 420 kg



## Liquid-based post-heating coil

### Coil 1

Suitable for, e.g. 50/30 liquids

### Coil 2

For low temperatures, e.g. 35/25, 35/30

The exact delivery content is determined by the code key in the calculation program.



## Calculation software to help with design

An informative and reliable calculation program is freely available to designers to support project planning. The program provides site-specific technical values and helps you select the right ventilation unit for each project. You can find the calculation program at [airfi.fi](http://airfi.fi).

The calculation programme was produced by Insinööritoimisto W. Zenner Oy, which conducts the FINAS-accredited laboratory measurements of our products.

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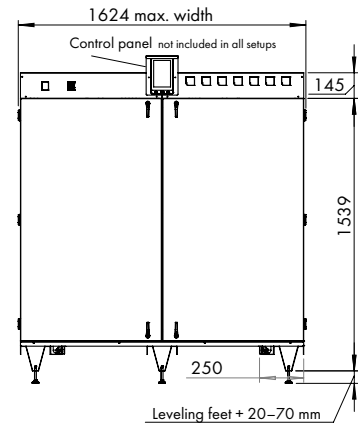
### INDUSTRIAL AND SPORTS HALLS



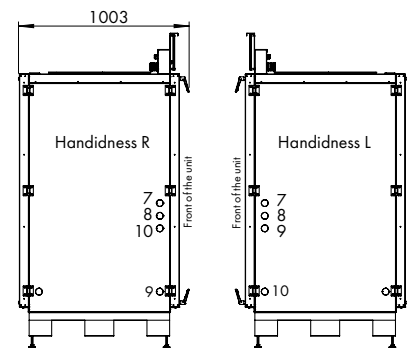
### OFFICE AND BUSINESS PREMISES



Front

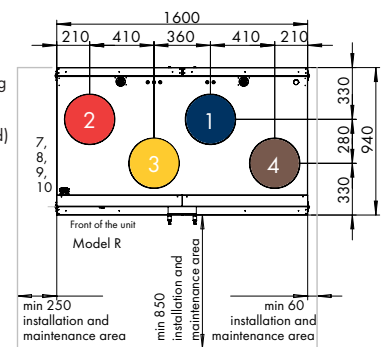


Side

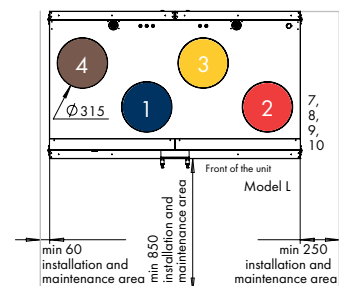


Model R

Installation opening 1850 x 900 (front doors and front strip detached)



Model L



- Outdoor air (1)
- Supply air (2)
- Extract air (3)
- Exhaust air (4)
- Coil connect (7,8,9,10)

# Airfi C5 – Technical specifications

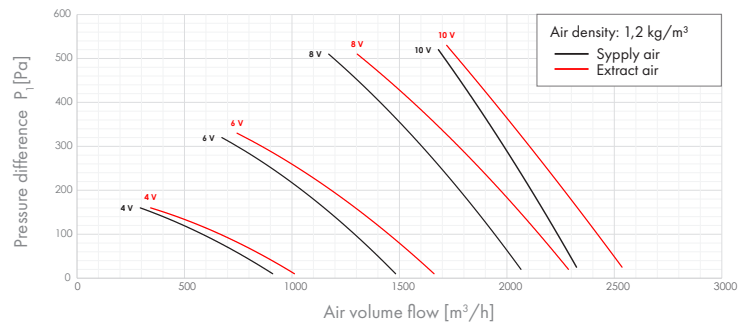
## Airfi automation

- Airfi control automation with patented AFPS defrost system, incl. actuators and sensors.
- ModBus TCP and RTU as standard.
- Versatile building management system (BMS) options as standard, including relay/voltage control.
- Ethernet-ready, Airfi APP / Airfi API / Airfi Cloud.
- Multiple alarm options.
- The C-Series includes the Airfi Mille Wire controller for implementation and operation.
- Plug & Play installation.

## Terminal block unit

- Actuators connected and tested for terminal blocks. Includes 5 NTC temperature sensors and, in the liquid-based unit, an NTC anti-freeze sensor and different pressure transmitter.
- Other pressure transmitters and accessories are available for selection.
- The system of your choice can be freely connected to control the unit.

## Airfi C5 air flow rate



## Standard equipment

- Energy efficient EC fans.
- Counterflow heat exchanger efficiency: 85% (EN 13141-7).
- Sectional defrost and bypass damper with actuators
- Integrated electrical connections.
- Disconnect switches installed in accordance with the selected unit type.
- Thermal and sound-insulated, non-combustible 50 mm sandwich structure.
- Steel structure. Inner and outer surface coated with Magnelis<sup>®</sup>, which has excellent corrosion-resistance.
- Stainless steel condensation tray EN1.4301.
- Integrated mounting stand with adjustable feet.
- 32 mm water traps (2 pcs) included, installation on site.
- Next generation synthetic filter material, free of glass fibre. After use, filter and frame can be recycled as energy waste.

## Accessories

- Selected air quality sensors installed in the unit's exhaust chamber.
- Spring-return dampers (waste and/or outdoor air) installed and electrified.
- Constant pressure control, supply and extract.
- Air flow measurement, supply and extract, measured at the fan intake cone.
- Selectable filter levels for intake and extract. Available: ISO ePM10 50% (M5 level) – ISO ePM1 65% (F7 level) – ISO ePM1 85% (F8/F9 level).
- Pre-installed energy meters: Operating power (fan energy and automation), and in the electric unit, postheating power consumption.
- Choose the required internal post-heater (electric or liquid coil).
- Choose the required internal cooling coil (liquid or DX).
- 2-way valve and actuator for liquid-based postheating coil, delivered separately. Electronically Plug & Play ready.
- Pump group for liquid-based postheating coil, assembled, delivered as a separate package. Electronically Plug & Play ready.
- 3-way valve and actuator for liquid-based cooling coil, delivered separately. Electronically Plug & Play ready.
- Pump group for liquid-based cooling coil, assembled, delivered as a separate package. Electronically Plug & Play ready.
- KNX adaptor.
- Airfi Sento controller.
- Electronic timer and many other control options.



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