

komfovent[®]



DOMEKT

EN Installation and service Manual

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This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, or to an authorised collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service.

1. SAFETY REQUIREMENTS

- ⚠ • To avoid accidents and/or unit damage, only a trained technician must carry out the connection.
- The appropriate Personal Protective Equipment (PPE) attire is worn relative to the operation being carried out.
- Electrical equipment is rated, connected and earthed in accordance with CE regulations.

The air handling unit must be plugged in to an electrical outlet (with earth), which is in good order and corresponds with all requirements of electric safety. Before starting any operations inside the unit, make sure that the unit is switched off, and the power cable is unplugged.

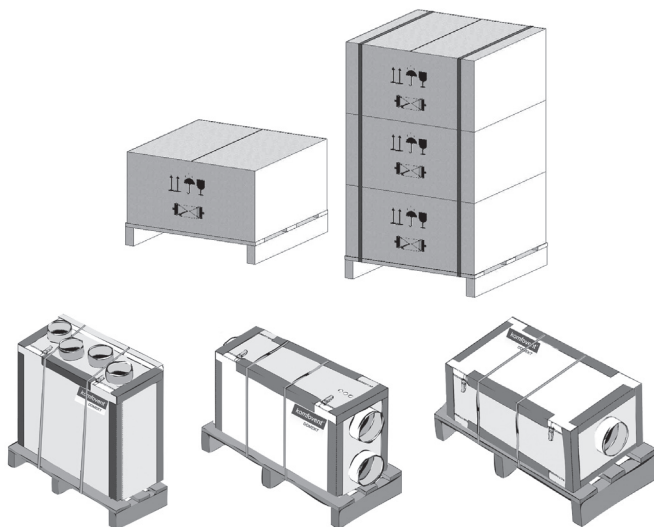
- ⚠ • Earth must be installed according EN61557, BS 7671.
- The unit should be installed according to Installation and Maintenance Manual.
- Before starting the unit, check correct position of air filters.
- Service maintenance should be carried out only in conformity with the instructions specified herein below.
- If main cable is damaged, only manufacturer, service team or trained technician must change it in order to avoid accidents.
- Drilling and using self-tapping screws on the unit casing is prohibited (where it is not provided by the construction), since cables or tubes inside of the casing may be damaged.

2. TRANSPORTATION

The air handling units are ready for transit and storage (1 Picture). The unit is packed to prevent damage of the external and internal parts of the unit, dust and moisture penetration.

Corners of the air handling units are protected against the damage – protective corners are used. The entire unit is wrapped up in protective film. For transit or storage, units are mounted on timber pallets. The unit is fastened to the pallet with polypropylene packing tape over protective corners.

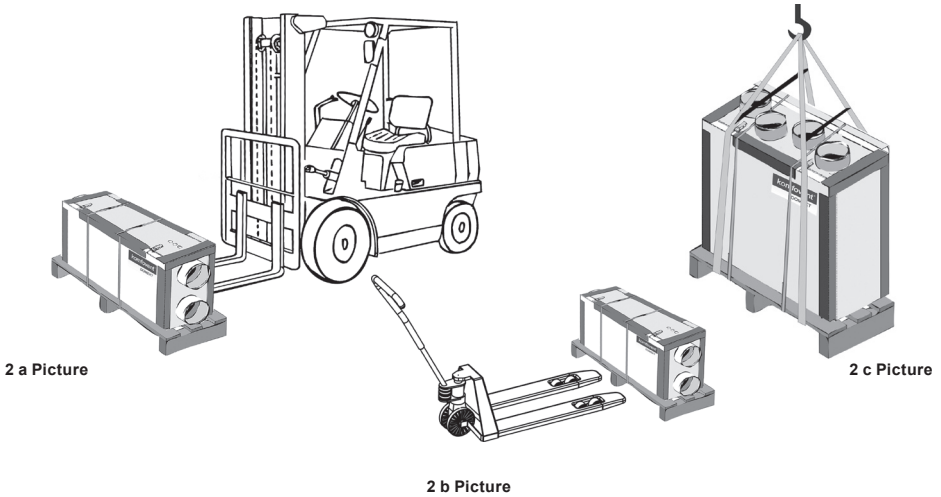
Vertical and horizontal units ready for transit and storage



1 Picture

When unit is loaded or unloaded by crane, cargo rope is fastened in its designated places.
Forklift truck or hand pallet truck can transport air handling unit as it is shown (2 a, b, c Pictures).

Vertical and horizontal unit transportation by forklift truck, hand pallet truck or crane



- 2 a Unit is transported by forklift truck on a wooden pallet;
2 b Unit is transported by hand pallet truck on a wooden pallet;
2 c Unit is lifted by crane on a wooden pallet.


The unit should be examined upon receipt, to ensure that no visible damage has occurred during transit, and the advice note checked to ensure that all items have been received. If damage or delivery shortages are discovered, the carrier should be immediately informed. KOMFOVENT should be notified within three days of receipt, with a written confirmation sent within seven days. KOMFOVENT can accept no responsibility for damage by unloading from carrier or for subsequent damage on site.

If the unit is not to be installed immediately, it should be stored in a clean, dry area. If stored externally, it should be adequately protected from the weather.

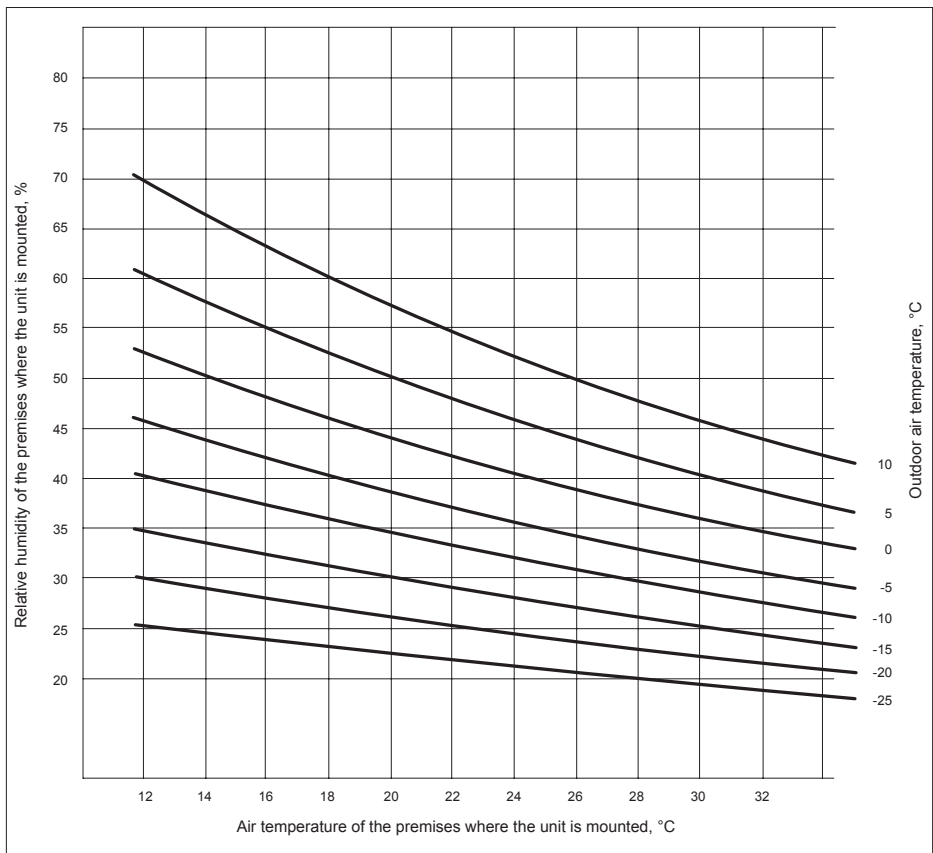
3. BRIEF DESCRIPTION OF THE UNIT

- The air handling units are intended for ventilation of small and medium-sized spaces (eg. single family houses, offices, etc.), having operating ambient temperature and relative humidity. The unit is intended to be installed in the domestic or non residential premises. Mineral wool is used for thermal insulation and sound attenuation. Units cover panels are 25–50 mm thick. As standard, the unit is designed for indoor placement. In cold, wet rooms possible icing or condensation on the housing inside and outside. The operating temperature range for the unit is $-30\text{ °C} \dots +40\text{ °C}$, outdoor air temperature. Extracted indoor air temperature $+10 - +40\text{ °C}$, relative humidity (non-condensing) 20–80 %.
- The air handling unit is not to be used to transport solid particles, even not in areas where there is a risk of explosive gases.
- Inside of the air handling unit it is integrated heat-exchanger and heater (or cooler), which compensates losses of the heat/cold during ventilation of the premises, thus AHU is not recommended to be used as main heating/cooling source of the building. AHU may not reach the supply temperature setpoint if the actual room temperature differs a lot from the desired value, since in that case heat exchanger capacity will be low.
- Before you open the door, the unit must be switched off and the fans must have been given time to stop (up to 3 minutes).
- The unit contains heating elements that must not be touched when they are hot.
- We recommend to leave air handling unit in working mode (minimum 20 percent of power) during the first operation year. Due to moisture in building constructions, condensation may occur inside and outside the air handling unit. Continuous operation of the equipment will significantly reduce the risk of condensation.

- Under conditions, when the outdoor air temperature is low and humidity is high, risk of heat exchanger frosting may appear. For this reason anti-frost protection function is foreseen in the controller of the Komfovent air handling units. Depending on the type of the air handling unit, different methods of anti-frost protection are available: cold air by-passing, supply air fan speed reducing and/or integrated preheater. Counter cross flow heat exchanger is the mostly sensitive for low outside air temperatures, as the risk of frosting appears in the temperature range from 0 to -5 °C and below. Standard aluminium cross-flow plate heat exchanger has better features, as the risk of freezing appears only at -10 °C. The lowest risk and the highest resistance to cold outside air is a competitive feature of the rotary heat exchanger, as it is not freezing even at the temperatures of -30 °C if the humidity level of the air is appropriate.

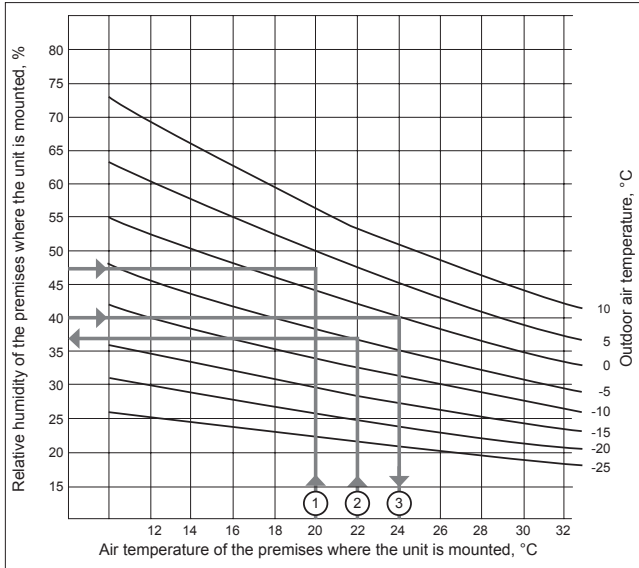
 In the units with counter flow or cross flow plate exchangers without integrated preheater, it is necessary to install additional duct mounted preheater in the outside air intake duct, which will ensure temperature of the intake air higher than -4 °C.

- Selecting the management without pre-heater, but with cold air bypass the unit must be additionally equipped with a secondary duct mounted heater.
If the unit is mounted in premises with high humidity, condensation might occur on the surface of the unit when outdoor temperatures are low (see picture 3). When installing unit in such a premises, it is necessary to take additional measures, to avoid condensate damage to the building construction elements or furniture.



3 picture. Condensation on unit surface diagram

From the diagram in picture 3, it can be checked under what conditions condensate might appear on the unit external surfaces.



Example No. 1

Temperature of the premises 20°C
Relative humidity of the premises 47%
Condensate will occur when outdoor temperature is lower than +3°C

Example No. 2


Temperature of the premises 22°C
Outdoor temperature -5°C
Condensate will occur when relative humidity of the premises will be higher than 37%

Example No. 3

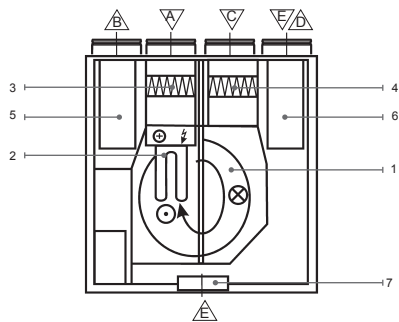
Relative humidity of the premises 40%
Outdoor temperature 0°C
Condensate will occur when temperature of the premises will be higher than 24,5°C

To minimize possibility of condensation on unit outer surfaces use following recommendations:

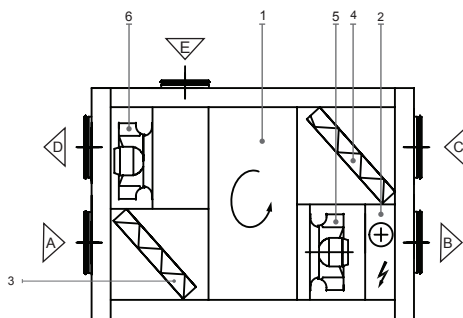
- 1) Maintain lower relative humidity in the room where air handling unit is mounted;
- 2) Preheater should be installed to increase the supply air temperature.

 It is recommended to keep air handling unit constantly running and in cases when ventilation is not necessary, switch it to the minimum intensity (20%). In that way, good indoor climate will be maintained and condensation inside of the unit will decrease, avoiding humidity damage to electronic components.

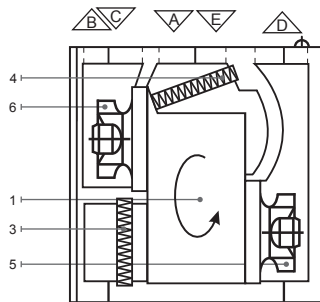
Air Handling Units Schemes



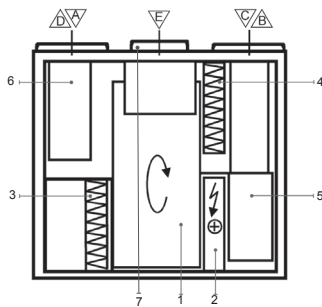
DOMEKT R 200 V



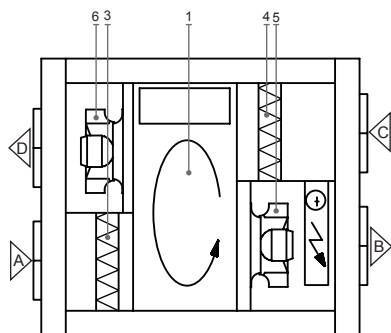
DOMEKT R 250 F C6



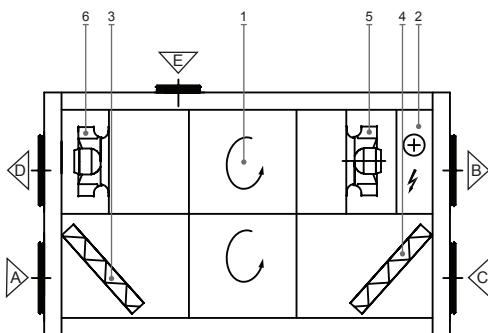
DOMEKT R 300 V



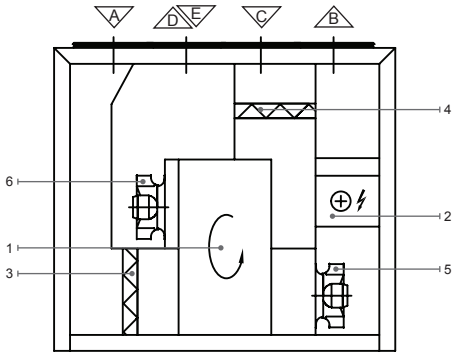
DOMEKT R 400 V / DOMEKT R 450 V



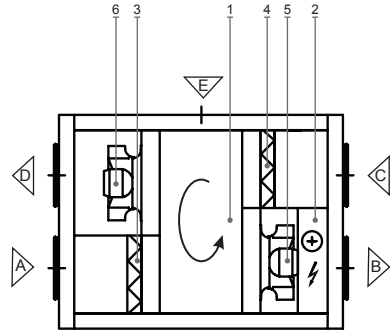
DOMEKT R 400 H



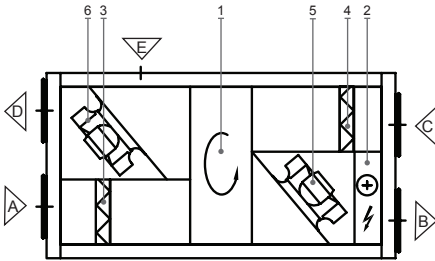
DOMEKT R 400 F



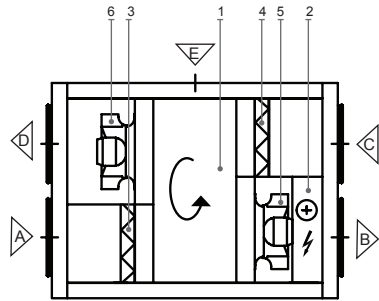
DOMEKT R 500 V** / DOMEKT R 700 V**



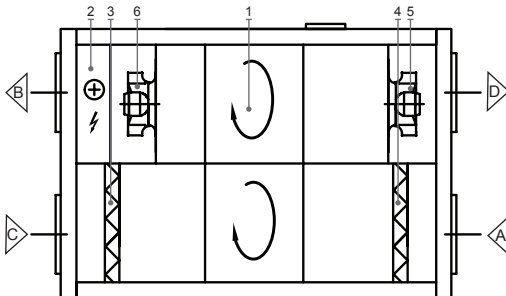
DOMEKT R 500 H C6



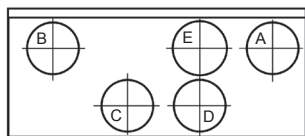
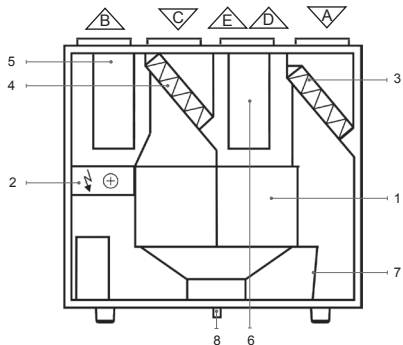
DOMEKT R 600 H



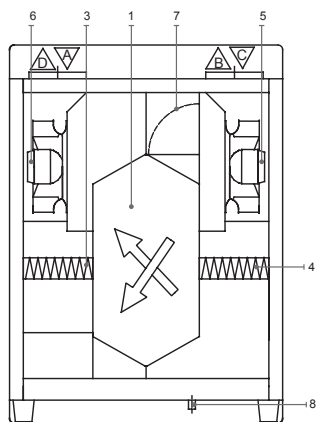
DOMEKT R 700 H



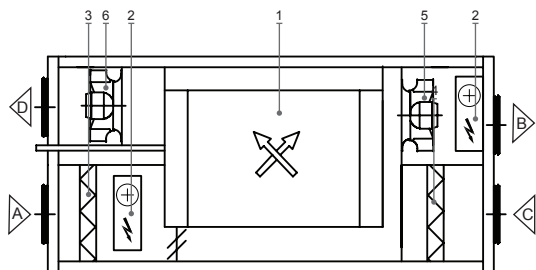
DOMEKT R 700 F



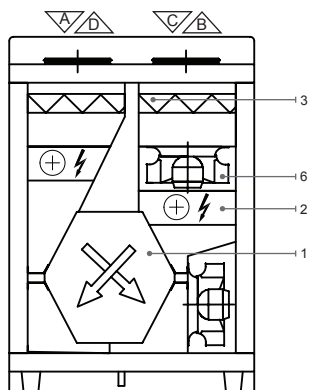
DOMEKT PP 300 V / 450 V



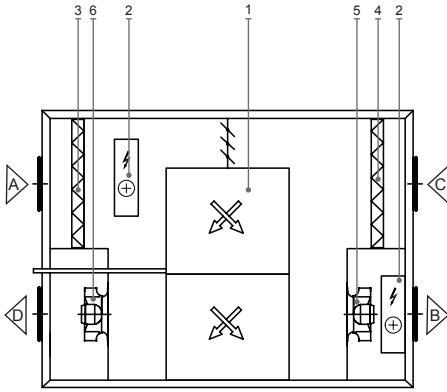
DOMEKT CF 250 V



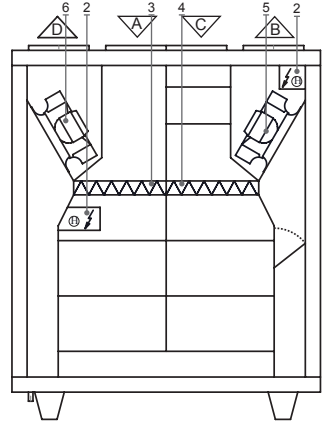
DOMEKT CF 250 V



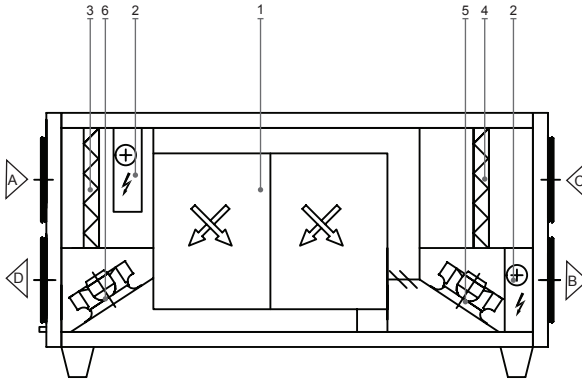
DOMEKT CF 400 V



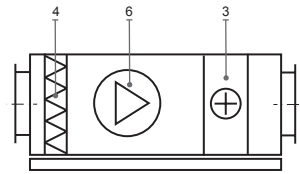
DOMEKT CF 500 F



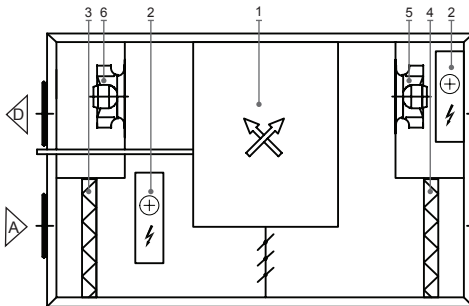
DOMEKT CF 700 V



DOMEKT CF 700 H



DOMEKT S 650 F / 800 F / 1000 F



DOMEKT CF 700 F

1. Rotary or plate heat exchanger
2. Electric or water air heater
3. Supply air filter
4. Exhaust air filter
5. Supply fan
6. Exhaust fan
7. Air by-pass damper
8. Condensate drain (the water trap must be installed)

A. Outdoor intake

B. Supply air

C. Extract indoor

D. Exhaust air

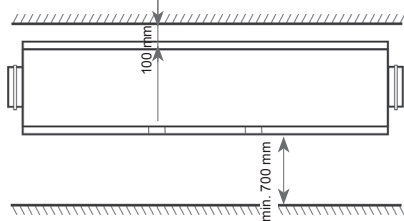
E. Kitchen hood connection
(by-pass – extraction without heat recovery)

4. INSTALLATION

It is recommended to install the air handling unit in a separate room or in the attic on a hard smooth surface insulated with a rubber mat. The minimum free space in front of the control panel should be not less than 700 mm. The free space over the top of the unit should be at least 300 mm (4 a, b Picture). Rubber vibration absorbers must be used when unit is going to be mounted on the wall or ceiling.

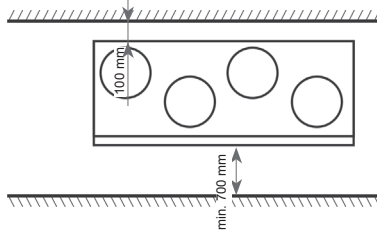
The place for the unit must be selected with allowance for minimum access to the unit for maintenance or service and must comply with safety requirements. Opening for inspection can not be smaller than dimensions of the unit and unit itself must be mounted in a way, that if needed (for example in case of complicated repair) it can be easily dismantled.

Minimum Maintenance Space for Horizontal Units



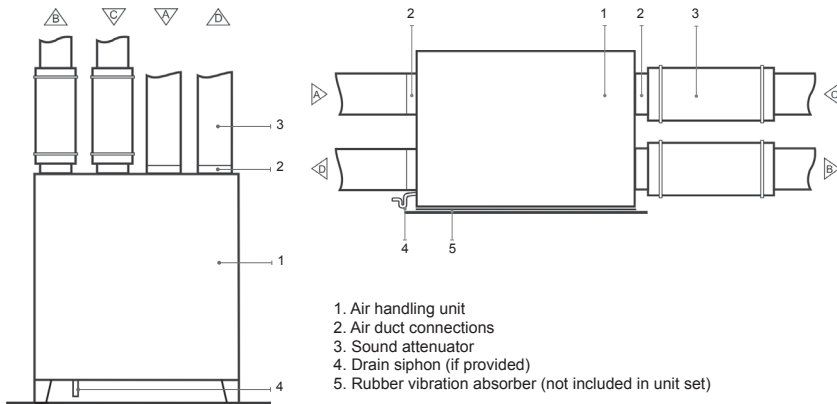
4 a Picture

Minimum Maintenance Space for Vertical Units



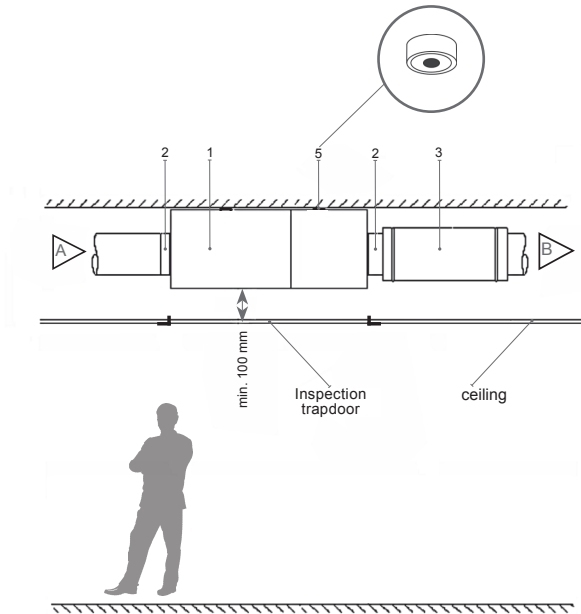
4 b Picture

Unit Installation Scheme



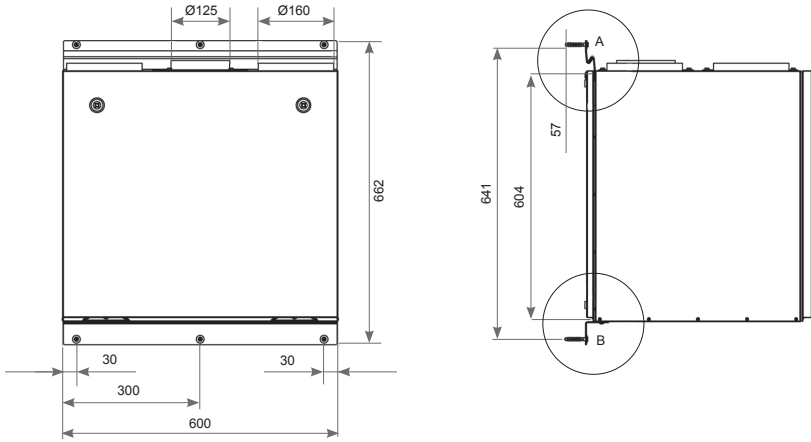
1. Air handling unit
2. Air duct connections
3. Sound attenuator
4. Drain siphon (if provided)
5. Rubber vibration absorber (not included in unit set)

4 Picture



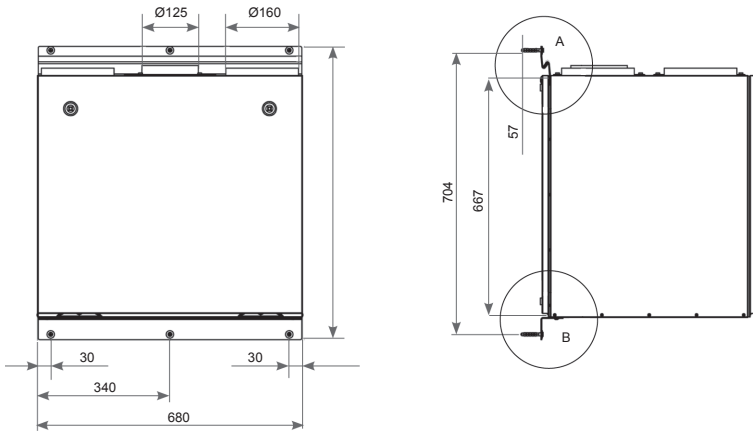
5 Picture

DOMEKT R 400 V Unit brackets' positions



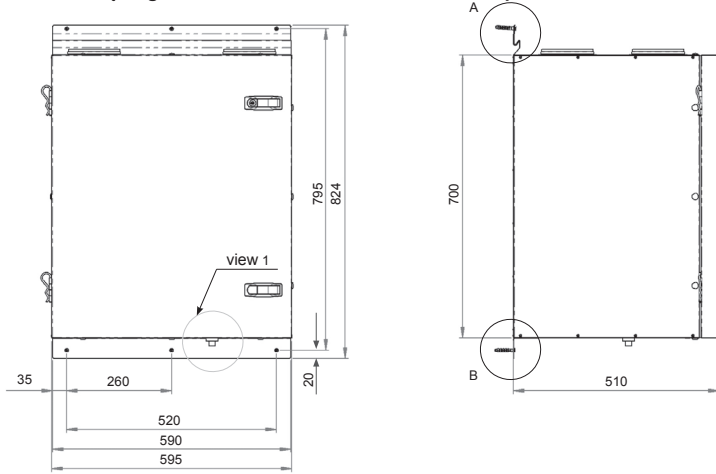
6 Picture

DOMEKT R 450 V Unit brackets' positions



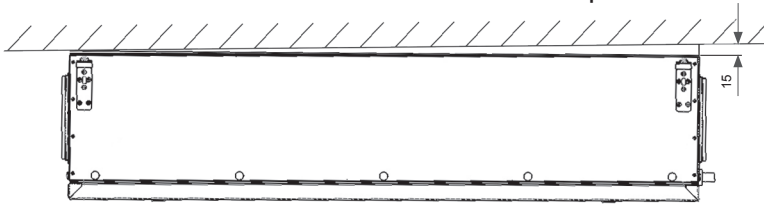
7 Picture

Irenginio DOMEKT CF 250 V Unit brackets' positions



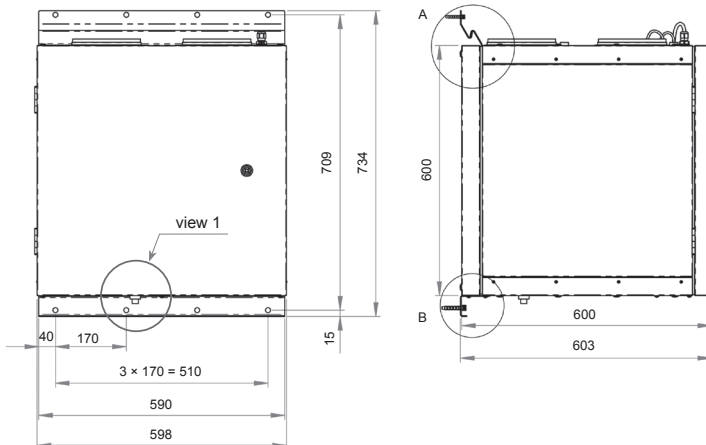
8 Picture

DOMEKT CF 250F – CF 500F – CF 700F Units brackets' positions



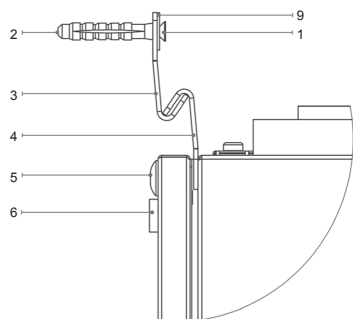
9 Picture

DOMEKT CF 400 V Unit brackets' positions

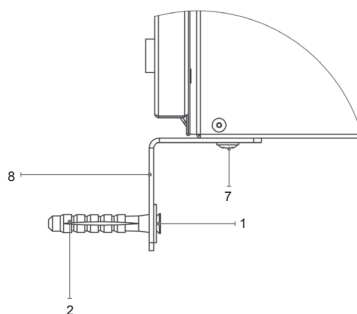


10 Picture

Pictures 11 a and 11 b show unit's upper and bottom fixing element.



11 a Picture



11 b Picture

1. Screw
2. Wall plug
3. Hanging bracket 1
4. Hanging bracket 2
5. Bolt M5
6. Gasket
7. Self tapping screw
8. L-shape bracket
9. Washer M5 DIN9021

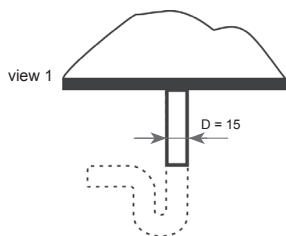
4.1. Condensate Drain Connections

All condensate drain connections must be correctly trapped. Incorrect trapping can result in flooding within the unit and consequent flooding of the immediate area. Fill the drain trap with water before starting up the unit.

All drain lines should be insulated where passing through any space where damage from condensation drip might occur. If the unit is installed in unheated premises the condensate pipe should be heat-insulated and heated with heating cable.

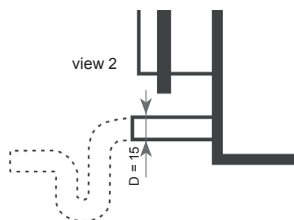
A condensate pipe and a drain trap

Drain scheme of Vertical Unit



12 a Picture

Drain scheme of Horizontal Unit

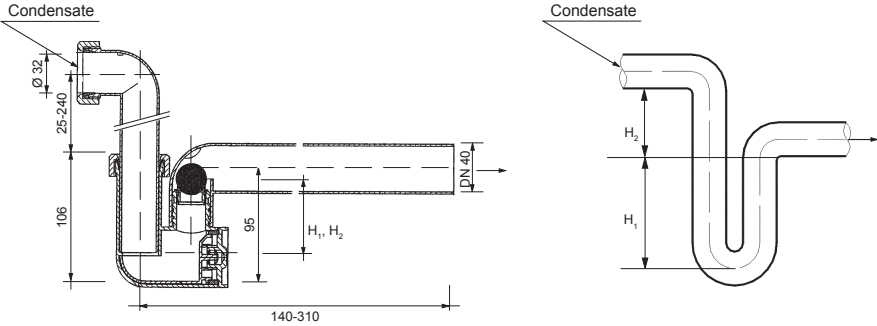


12 b Picture

The bend of the water trap can be repositioned by turning it to the right or the left. The drain line from the water trap must be arranged so that it will not damage adjacent unit sections or building elements. If the drain line is run through cold spaces, it should be insulated to prevent freezing. A heating cable may be required.

4.1.1. Water trap installation for a unit section mounted on the suction side

Since the fans in most air handling units are last in the chain of functions and generate sub-atmospheric pressure inside the unit, it is very important to correctly install the water trap. Because of that reason condensate can be hardly eliminated from the air handling unit and the technical premise may get covered with condensate. Height H_1 must be at least equivalent in mm to half of the negative pressure inside the unit in mm water gauge. Height H_2 must be at least equivalent in mm to the negative pressure inside the unit in mm water gauge.



- ⚠ Precaution:** The drainage siphon should be mounted on the outlet fitting pipe of every drip tray for complete condensate drainage from the air handling unit and prevention of penetration of offensive odours from an effluent into the ventilation system.
- ⚠** In case of the outdoor operation of the air handling unit, the siphon and the bleeders should be heated with an electric thermal cable (if ambient air temperature $t_{amb} < 0 \text{ }^\circ\text{C}$). The siphon and the bleeders should be heat-insulated with an insulating material.

4.1.2. Water trap installation for a unit section mounted on the pressure side

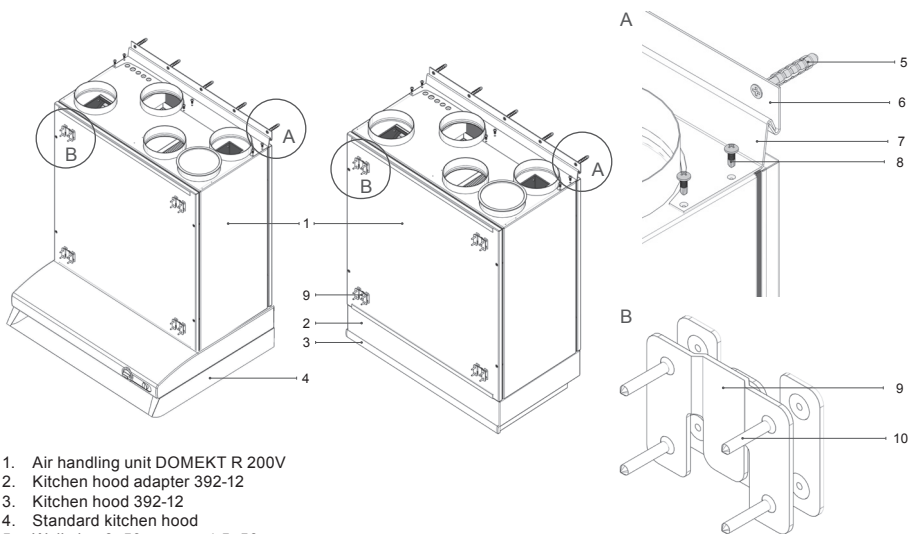
Since the fans in most air handling units are not last in the chain of functions and generate over-atmospheric pressure inside the cooling section. In such case the consisted condensate can be easily removed from AHU and there will be no strict requirements for siphon's installation. A drainage siphon is enough with a minimum rake.

RECOMMENDATION: The drainage siphon must be installed in connection with not less size pipe diameter.

Any drainage systems must not be connected directly to the municipal sewage system. The condensate tray shall be easily accessible for cleaning and disinfection.

DOMEKT R 200V unit with kitchen hood

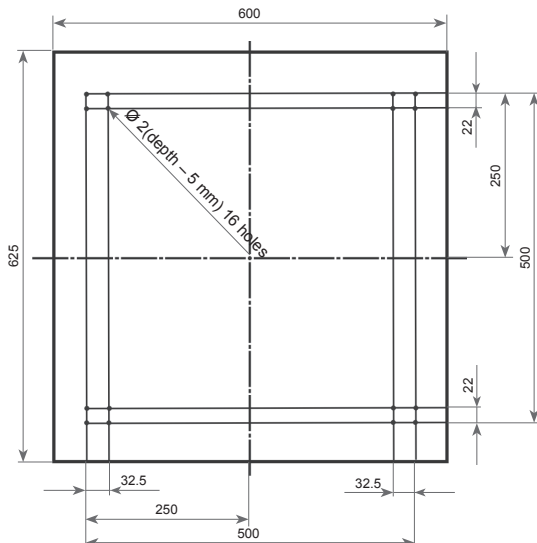
Air handling unit DOMEKT R 200 V can be mounted with one of the two types of kitchen hoods (13, 14 Picture).



1. Air handling unit DOMEKT R 200V
2. Kitchen hood adapter 392-12
3. Kitchen hood 392-12
4. Standard kitchen hood
5. Wall plug 8×50 + screw 4,5×50
6. Wall mounting bracket
7. Unit bracket
8. Self tapping screw 4,2×13
9. Bracket for decorative panel
10. Screw 2.5×16 with cone head

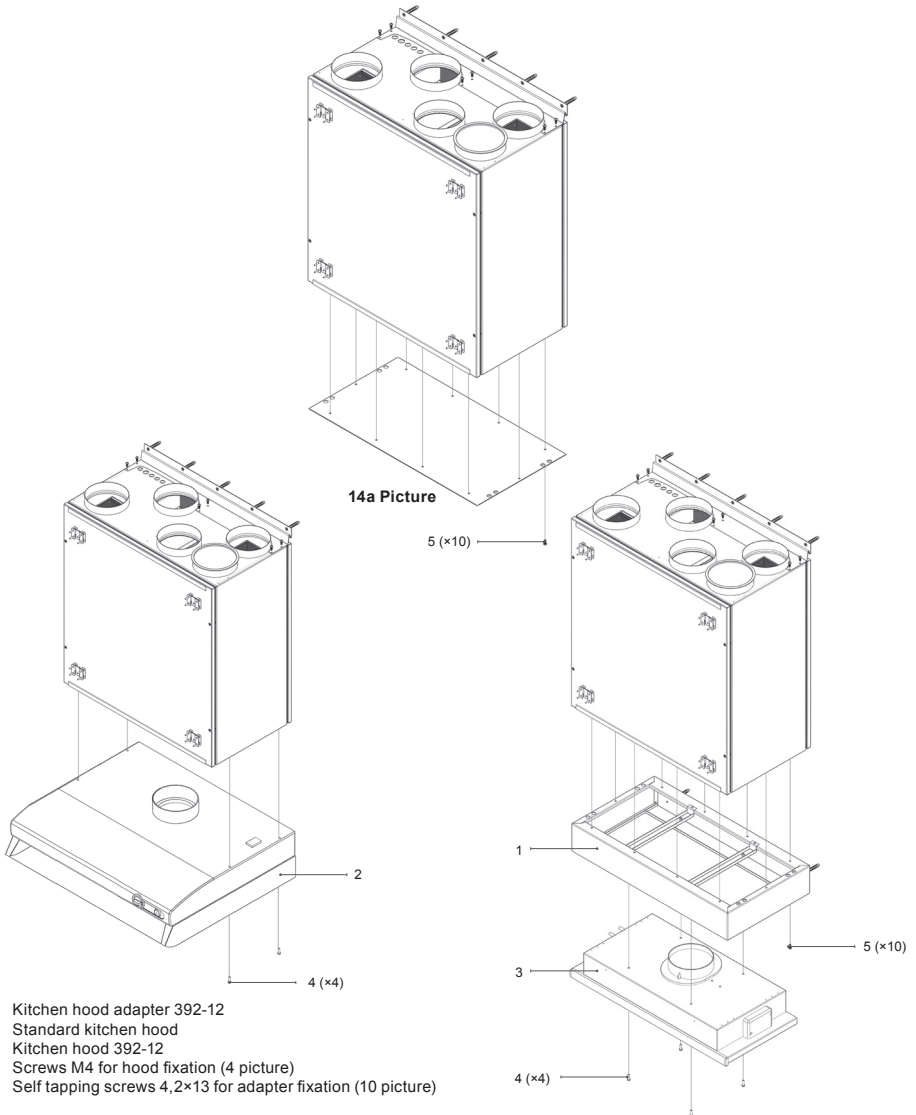
13 Picture

Dimensions for mounting furniture panel



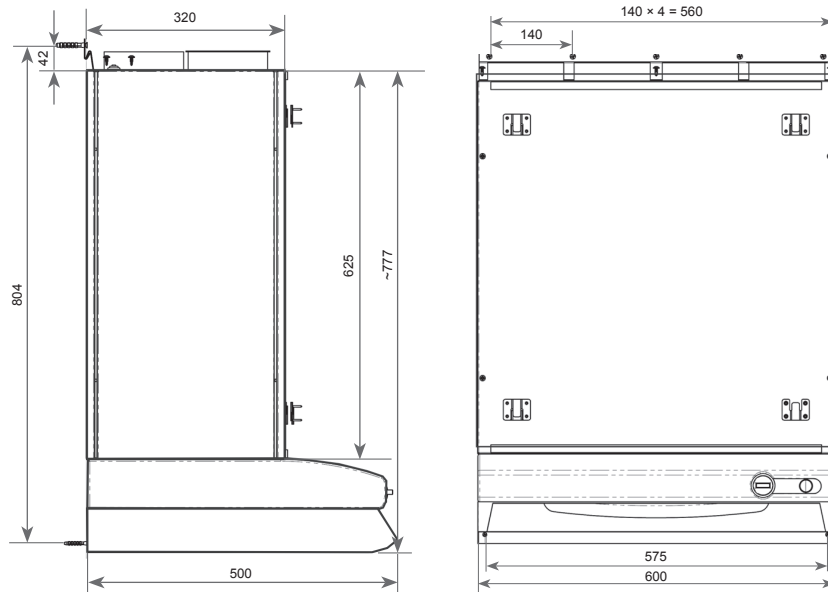
Installation scheme of DOMEKT R 200V unit with kitchen hood

Before installing kitchen hood, bottom cover plate must be removed by removing fixing screws (14a pic.)

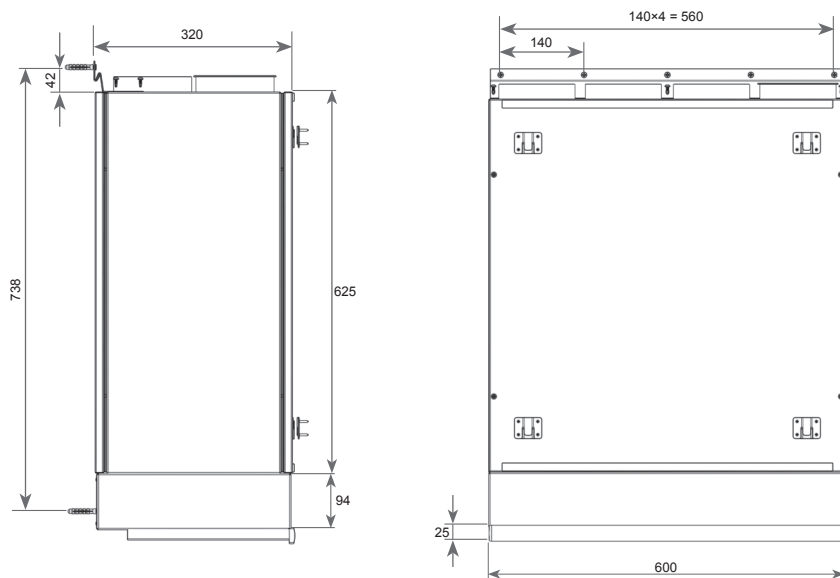


1. Kitchen hood adapter 392-12
2. Standard kitchen hood
3. Kitchen hood 392-12
4. Screws M4 for hood fixation (4 picture)
5. Self tapping screws 4,2x13 for adapter fixation (10 picture)

Dimensions for the DOMEKT R 200 V installation space

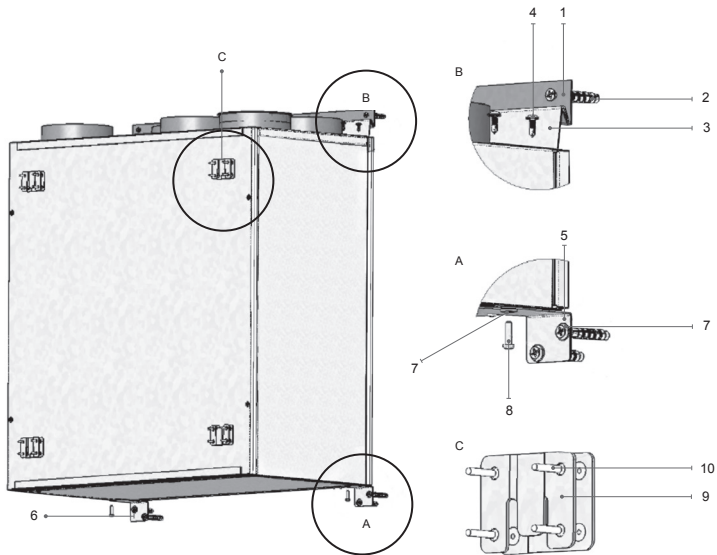


15 Picture. Dimensions with standard kitchen hood



16 Picture. Dimensions with kitchen hood 392-12

DOMEKT R 200 V Unit hanging scheme without kitchen hood

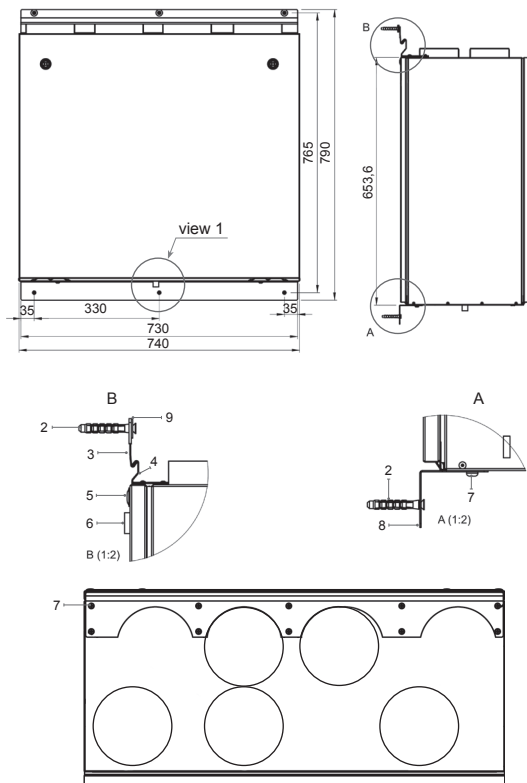


17 Picture

View C: Brackets for hanging the furniture or decorative panel.

| | Marking | Description | pcs. |
|----|---|--------------------|-------------|
| 1 | DOMEKT R 200 V -00.014 | Mounting bracket | 1 |
| 2 | Wall plug KWP (nylon) 8×50 + screw | | 9 |
| 3 | DOMEKT R 200 V -00.011 | Unit bracket | 1 |
| 4 | Self tapping screw 4,2×13 | | 16 |
| 5 | DOMEKT R 200 V -00.015 | Bracket | 1 |
| 6 | DOMEKT R 200 V -00.016 | Bracket | 1 |
| 7 | M6 (DIN 125 A) | Washer | 6 |
| 8 | M 4×16 (DIN 7985) | Screw | 2 |
| 9 | Bracket for front cover 4260-2.293 Z (AGVA) | | 4 |
| 10 | Screw 2.5×16 ZnG with cone head | | 16 |

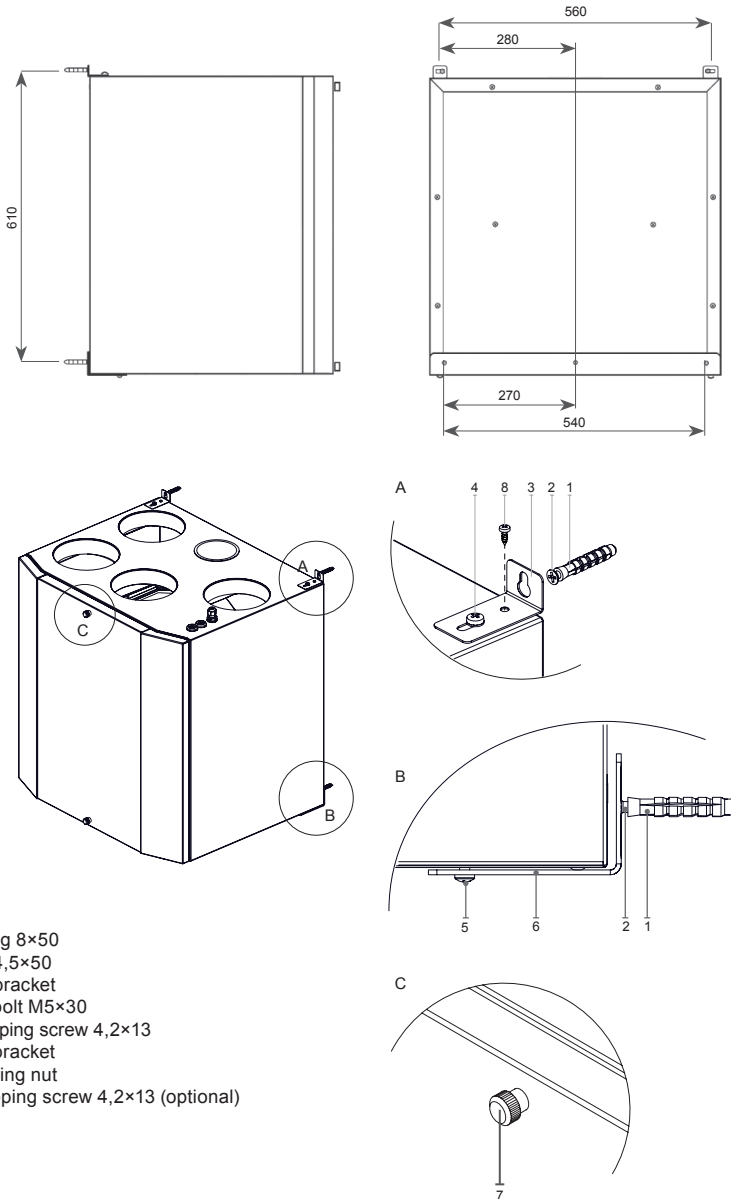
DOMEKT PP 300 V / DOMEKT PP 450 V Unit brackets' positions




18 Picture

1. Screw
2. Wall plug
3. Hanging bracket 1
4. Hanging bracket 2
5. Bolt M5
6. Gasket
7. Self tapping screw
8. L-shape bracket
9. Washer M5 DIN9021

DOMEKT R-300V Unit hanging scheme



1. Wall plug 8×50
2. Screw 4,5×50
3. Upper bracket
4. Fixing bolt M5×30
5. Self tapping screw 4,2×13
6. Lower bracket
7. Door fixing nut
8. Self tapping screw 4,2×13 (optional)

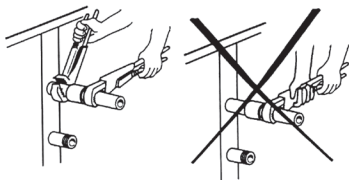
 When closing unit doors, fixing nuts (7) should be easily tightened by hand. Do not over tighten, since it will damage the doors or casing of the unit.

19 Picture

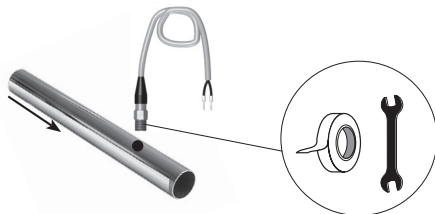
4.2. Heating coil connection¹

Pipe work should be connected in accordance with good engineering practice. All pipe work must be adequately supported to ensure that no additional load is stressing the unit. Mounting the pipes on the heating coil, tight the pipes with spanners. As shown in 20 Picture.

Fitting Pipes Connection



Sensors Installation



20 a Picture

20 b Picture

The pipe work should be done in order to ensure the space for maintenance and service work. When carrying out the installation of heater pipes, make sure that hot water supply is completely disconnected. Before start-up of the air handling unit, the heater system should be filled in with water. Glycol is used in the air handling units with coil heat exchanger. Never pour glycol down a drain; collect it in a receptacle and leave it at a recycling centre or the like. Glycol is highly dangerous to consume and can cause fatal poisoning or damage the kidneys. Contact a doctor! Avoid breathing glycol vapour in confined spaces. If you get glycol in your eyes, flush them thoroughly with water (for about 5 minutes).



When operating air handling unit in the temperatures lower than 0 °C, it is necessary to use glycol additionally or assure the reversible heating agent temperature more than 25 °C.



It is important to maintain air heaters and coolers cleanliness; that is to change filters installed in the air handling unit on time. If the air heater or cooler gets dirty, to perform periodical cleaning.

4.3. Ductwork

The air flows in/out air handling unit through ductwork. We recommend using galvanized steel (Zn 275 gr/m²) ductwork, to ensure easy cleaning and durability. It is necessary to use the ductwork system with low air flow rate and small pressure drop to have necessary air volume and low sound level and save the energy. The appropriate sound attenuators will reduce the noise level of the fans in the premises. All ductwork should be insulated with 50–100 mm thickness insulation to avoid the condensation.

Note: temperature sensor B1 has to be mounted in the supply air duct under electric heater (see the functional diagram in Control System Electrical Installation and Operation Manual). It is necessary to leave space in straight air duct for sensor mounting and guarantee the space for maintenance and service work. Minimal space between the unit and B1 sensor is the space of double air duct diameter.



Ductwork, steelwork and any other services should not be supported off the unit.



It is recommended to install air dampers in the inlet and outlet ducts. For ventilation units with water air heater, it is mandatory to use inlet air closing damper with spring return mechanism.

¹ If water heater build in.

4.4. Final Inspection

After installation of the unit, a thorough inspection should be carried out. This should include inspecting the inside of the unit and removing debris and tools, which may have been left behind by on site contractors. Replace any panels, which may have been removed and close all access doors, ensuring that the door sealing gaskets have not been damaged.

5. MAINTENANCE

It is recommended to carry out routine maintenance of the air handling unit 3–4 times per year. With units mounted on ceiling do not release the door to the key to open the door. Do not release the door to swing freely, but open it slowly at a 90 degree angle. Be careful while opening, because clogged filters might fall out.

Besides preventive maintenance inspection, the following operations should be performed:

1. **Rotary heat exchanger check.** Inspection of the rotary heat exchanger is performed once per year. Free rotation of the rotary heat exchanger, continuity of the rotating belt, absence of damages of the rotor drums and the seal gasket are checked. It is necessary to check the stretch of belt. Free belt will slide and the efficiency of rotary heat exchanger will fall down. To reach maximal efficiency, rotor must turn at least 8 times per minute. Polluted heat exchanger will decrease efficiency. Clean heat exchanger with an air blast or wash with tepid water. Check out water falling on the electric motor.
 2. **Plate heat exchanger check.** Inspection and dedusting of the plate heat exchanger is performed once per year (it is removed from the unit and blown with an air blast or washed with tepid water).
Plate heat exchanger cleaning. If plate heat exchanger cleaning by compressed air is not effective, it can be washed with soapsuds, or if needed – use degreasing soak for metal (aluminum) cleaning. Leave plate heat exchanger to dry in a warm place. It can be mounted only when it is absolutely dry.
- Note: plate heat exchanger may be replaced with summer cassette (for units without by pass), when recuperation is needless.*
3. **Fans check (once per year).** Polluted fans decrease efficiency.



Before performing any inspection work, check whether the unit is switched off from the electric power supply.

Fans should be carefully cleaned with textile or soft brush. Do not use water. Do not break balance. Check if direction of fan turns is right, because wrong direction of turns gives only 30 % rating. Check if fan freely rotates and is not mechanically damaged, if impeller does not touch suction nozzles, fan does not spread noise, the pressure tubes are connected to the nozzle (if it is required), mounting bolts are screwed.

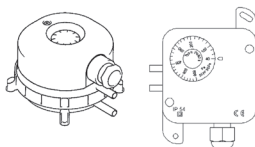
The rubber couplings connecting the motor base and the unit should be visually inspected for signs of wear and replaced as necessary.

Any unusual noise or vibration when the fan is running should be immediately investigated, as this usually an indication of wear or imbalance in the fan system.

4. **Air heater check.** Recommended to perform periodical inspection and cleaning of heater. Check the plates of water air heater. The air heater is cleaned with Hoover from supply air side or with air blast from exhaust air side. If it is very dirty, wash with tepid water, which will not make corrosion of aluminium. Check if position of return water temperature sensor is right. Check if electric air heater is properly fixed, wires connections are not damaged and heating elements are not bent. They can be damaged or bent due to uneven heat or uneven and turbulent air direction. Check if electric air heater is clear of unnecessary things and heating elements are not clogged, because this can cause unpleasant smell or in the worst case – dust can start burning. Air flow through the air heater should be greater than 1,5 m/s. Heating elements can be cleaned with Hoover or wet textile.
5. **Air damper check (if it is required).** Not fully opened outside air damper rises up the pressure in the system. Water air heater can freeze if outside air damper does not fully close in not working air handling unit. Mounting and running of air damper should be checked and regulated.
6. **Air filter clogging check.** Change air filters when air filter clogging is indicated. We recommend changing filters at least twice per year: before and after heating season or more¹. Filters are one time used. We do not recommend cleaning them. Stop the air handling unit before changing filters.

¹ Clogged filters unbalance ventilation system, air handling unit uses more power.

Pressure sensor



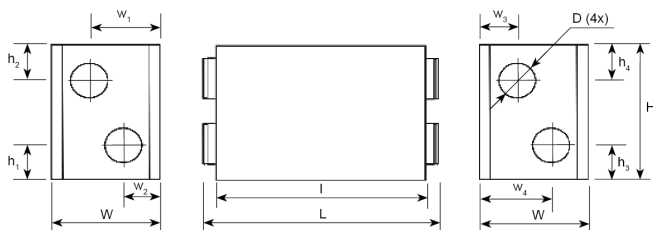
21 Picture

7. Pressure sensor setting, which indicates impurity of filters. Pressure sensor is set according to EN 13779:2007 standard: 100 Pa for small systems, 150 Pa for big systems. Remove cover from the pressure sensor and turn the cursor due to proper position. The indicator will turn on when filters will be clogged.

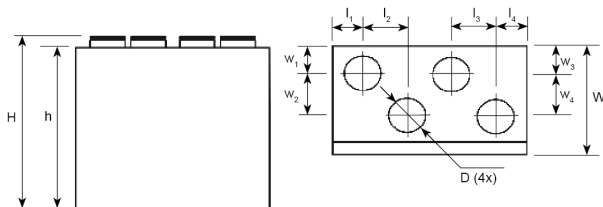
- One of pressure sensors shown in 21 Picture can be mounted in the air handling unit.
- Close the door after pressure sensor regulating process. Be sure that sensor does not indicate impurity of clear filters.
- Pressure sensors in the air handling units up to size 900 are regulated and set in factory.

6. TECHNICAL INFORMATION

Horizontal / Ceiling units



Vertical units



| Parameters Type | Dimensions | | | Weight kg | Supply voltage V | Maximum Operating current A | Electric heater capacity ¹ kW | Fans input power at max. flow rate W | Ducts connection D mm |
|-----------------------|------------|----------------|----------------|--------------|------------------------|--------------------------------------|---|--|--------------------------------|
| | Width, W | Length, L/I | Height, H/h | | | | | | |
| | mm | mm | mm | | | | | | |
| DOMEKT R (C4) | | | | | | | | | |
| 200 V | 320 | 600 | 660/625 | 42 | 1~230 | 4,7 | 0,8 | 2*66 | 5×125 |
| 250 F | 310 | 830/790 | 550 | 41 | 1~230 | 6,3 | 1,0 | 2*98 | 4×160, 1×125 |
| 400 V | 495 | 600 | 565/547 | 42 | 1~230 | 5,5 | 1,0 | 2*63 | 4×160, 1×125 |
| 400 F | 310 | 1162/1120 | 650 | 62 | 1~230 | 7,3 | 1,0 | 2*166 | 4×200, 1×125 |
| 450 V | 535 | 680 | 630/610 | 46 | 1~230 | 7,2 | 1,0 | 2*172 | 4×160, 1×125 |
| 600 H | 600 | 1150/1130 | 600 | 90 | 1~230 | 7,3 | 1,0 | 2*174 | 4×200, 1×125 |
| DOMEKT R (C6) | | | | | | | | | |
| 250 F | 310 | 885/845 | 605 | 40 | 1~230 | 6 | 1,0 | 2*90 | 4×160, 1×125 |
| 300 V | 502 | 598 | 610 | 25 | 1~230 | 3,2 | 0,5 | 2*90 | 4×160 |
| 400 V | 495 | 600 | 565/547 | 64 | 1~230 | 5,5 | 1,0 | 2*71 | 4×160, 1×125 |
| 400 H | 515 | 682/650 | 565 | 60 | 1~ 230 | 6,6 | 1,0 | 2*126 | 4×160 |
| 400 F | 330 | 1202/1170 | 700 | 67 | 1~230 | 7,2 | 1,0 | 2*165 | 4×200, 1×125 |
| 450 V | 535 | 680 | 630/610 | 71 | 1~230 | 7,1 | 1,0 | 2*170 | 4×160, 1×125 |
| 500 H | 647 | 963/930 | 700 | 90 | 1~ 230 | 7,2 | 1,0 | 2*155 | 4×200, 1×125 |
| 500 V | 645 | 1070 | 966/950 | 140 | 1~ 230 | 7,2 | 1,0 | 2*177 | 4×250, 1×125 |
| 600 H | 600 | 1160/1130 | 600 | 90 | 1~230 | 7,1 | 1,0 | 2*179 | 4×200, 1×125 |
| 700 V | 645 | 1070 | 966/950 | 140 | 1~ 230 | 11,6 | 2,0 | 2*181 | 4×250, 1×125 |
| 700 H | 647 | 963/930 | 700 | 90 | 1~ 230 | 11,6 | 2,0 | 2*180 | 4×250, 1×125 |
| 700 F | 424 | 1272/1240 | 854 | 80 | 1~ 230 | 11,6 | 2,0 | 2*176 | 4×250 |
| DOMEKT P | | | | | | | | | |
| 300 V | 345 | 740 | 725/700 | 42 | 1~230 | 5,5 | 1,0 | 2*67 | 5×125 |
| 450 V | 345 | 740 | 725/700 | 42 | 1~230 | 6,7 | 1,0 | 2*167 | 5×125 |
| DOMEKT CF (C4) | | | | | | | | | |
| 250 V ⁴ | 510 | 595 | 747/700 | 41 | 1~ 230 | 1,7 | - | 2*90 | 4×125 |
| 250 F ⁴ | 290 | 1132/1100 | 600 | 43 | 1~ 230 | 1,7 | - | 2*90 | 4×160 |
| 400 V | 600 | 600 | 670/650 | 55 | 1~ 230 | 6,3 | 1,0 | 2*103 | 4×160 |
| 500 F | 290 | 1220/1180 | 1050 | 70 | 1~ 230 | 7,3 | 1,0 | 2*177 | 4×200 |

| Parameters Type | Dimensions | | | Weight | Supply voltage | Maximum Operating current | Electric heater capacity ¹ | Fans input power at max. flow rate | Ducts connection D |
|-----------------------|------------|-------------|-------------|--------|---------------------|---------------------------|---------------------------------------|------------------------------------|--------------------|
| | Width, W | Length, L/l | Height, H/h | | | | | | |
| | mm | mm | mm | | | | | | |
| DOMEKT CF (C5) | | | | | | | | | |
| 700 V | 490 | 1020 | 1145/1040 | 95 | 1~ 230 | 12 | 2,0 | 2*177 | 4×200 |
| 700 H | 490 | 1540/1500 | 700 | 95 | 1~ 230 | 12 | 2,0 | 2*180 | 4×250 |
| DOMEKT CF (C6) | | | | | | | | | |
| 250 F | 294 | 1282/1250 | 604 | 43 | 1~ 230 | 8,3 | 1,5 | 2*89 | 4x160 |
| 400V | 600 | 600 | 765/750 | 55 | 1~ 230 | 10,5 | 2,0 | 2*91 | 4x160 |
| 500F | 295 | 1430/1400 | 1045 | 70 | 1~ 230 | 11,6 | 2,0 | 2*171 | 4x200 |
| 700H | 497 | 1533/1500 | 700 | 95 | 1~ 230 | 12,0 | 2,0 | 2*178 | 4x250 |
| 700V | 495 | 1020 | 1145/1130 | 95 | 1~ 230 | 12,0 | 2,0 | 2*177 | 4x200 |
| 700F | 344 | 1395/1365 | 875 | 80 | 1~ 230 | 11,7 | 2,0 | 2*177 | 4x250 |
| DOMEKT S | | | | | | | | | |
| 650 F-HE/3 | 475 | 873 | 297 | 35 | 1~ 230 | 14,2 | 3,0 | 172 | 160 |
| 650 F-HE/6 | 475 | 873 | 297 | 35 | 3~ 400 | 10,0 | 6,0 | 172 | 160 |
| 800 F-HE/6 | 475 | 973 | 350 | 37 | 3~ 400 ³ | 10,6 | 6,0 | 181 | 200 |
| 800 F-HE/9 | 475 | 973 | 350 | 37 | 3~ 400 ³ | 14,9 | 9,0 | 181 | 200 |
| 1000 F-HE/9 | 700 | 893 | 350 | 46 | 3~ 400 ³ | 15,4 | 9,0 | 182 | 250 |
| 1000 F-HE/15 | 700 | 893 | 350 | 46 | 3~ 400 ³ | 24,1 | 15,0 | 182 | 250 |

Parameters with nominal air volume, $t_{\text{outside}} = -23\text{ }^{\circ}\text{C}$, $t_{\text{inside}} = 22\text{ }^{\circ}\text{C}$.

¹ Water heaters is a possible choice.

² 3~ 230 V is available as an option.

³ Supply voltage using water heater – 1~230V.

⁵ If duct mounted preheater is ordered, it should maintain -4 °C temperature for optimal air handling unit performance.

Dimensions of Ductwork Connection

| Parameter | w ₁ | w ₂ | w ₃ | w ₄ | l ₁ | l ₂ | l ₃ | l ₄ | h ₁ | h ₂ | h ₃ | h ₄ |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Type | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| DOEKT R (C4) | | | | | | | | | | | | |
| 200 V | 92 | 136 | 92 | 136 | 81 | 145 | 145 | 81 | - | - | - | - |
| 250 F | 155 | 155 | 155 | 155 | - | - | - | - | 175 | 125 | 125 | 175 |
| 400 V | 131 | 231 | 131 | 231 | 90 | 0 | 0 | 90 | - | - | - | - |
| 400 F | 155 | 155 | 155 | 155 | - | - | - | - | 140 | 200 | 140 | 200 |
| 450 V | 131 | 255 | 131 | 255 | 110 | 0 | 0 | 110 | - | - | - | - |
| 600 H | 375 | 285 | 375 | 285 | - | - | - | - | 170 | 120 | 170 | 120 |
| DOEKT R (C6) | | | | | | | | | | | | |
| 250 F | 145 | 145 | 145 | 145 | - | - | - | - | 200 | 155 | 200 | 155 |
| 300 V | 115 | 215 | 195 | 135 | 100 | 0 | 190 | 100 | - | - | - | - |
| 400 V | 131 | 231 | 131 | 231 | 90 | 0 | 0 | 90 | - | - | - | - |
| 400 F | 145 | 145 | 145 | 145 | - | - | - | - | 165 | 225 | 165 | 225 |
| 400 H | 267 | 157 | 267 | 157 | - | - | - | - | 183 | 153 | 153 | 183 |
| 450 V | 130 | 255 | 130 | 255 | 110 | 0 | 0 | 110 | - | - | - | - |
| 500 H / 700 H | 402 | 257 | 257 | 402 | - | - | - | - | 198 | 198 | 198 | 198 |
| 500 V / 700 V | 229 | 186 | 229 | 186 | 190 | 228 | 228 | 190 | - | - | - | - |
| 600 H | 375 | 285 | 375 | 285 | - | - | - | - | 170 | 120 | 170 | 120 |
| 700 F | 202 | 202 | 202 | 202 | - | - | - | - | 202 | 218 | 202 | 218 |
| DOEKT P | | | | | | | | | | | | |
| 300V | 100 | 140 | 100 | 140 | 85 | 180 | 185 | 110 | - | - | - | - |
| 450 V | 100 | 140 | 100 | 140 | 85 | 180 | 185 | 110 | - | - | - | - |
| DOEKT CF (C4) | | | | | | | | | | | | |
| 250 V | 134 | 225 | 134 | 225 | 105 | 0 | 0 | 105 | - | - | - | - |
| 250 F | 128 | 128 | 128 | 128 | - | - | - | - | 162 | 192 | 162 | 142 |
| 400 V | 145 | 265 | 145 | 265 | 167 | 0 | 0 | 167 | - | - | - | - |
| 500 F | 130 | 130 | 130 | 130 | - | - | - | - | 290 | 340 | 260 | 340 |
| DOEKT CF (C5) | | | | | | | | | | | | |
| 700 V | 160 | 160 | 160 | 160 | 155 | 255 | 255 | 155 | - | - | - | - |
| 700 H | 245 | 245 | 245 | 245 | - | - | - | - | 200 | 200 | 200 | 200 |
| DOEKT CF (C6) | | | | | | | | | | | | |
| 250 F | 128 | 128 | 128 | 128 | - | - | - | - | 162 | 192 | 162 | 142 |
| 400V | 112 | 270 | 112 | 270 | 139 | 0 | 0 | 139 | - | - | - | - |
| 500F | 130 | 130 | 130 | 130 | - | - | - | - | 277 | 277 | 277 | 277 |
| 700H | 245 | 245 | 245 | 245 | - | - | - | - | 200 | 200 | 200 | 200 |
| 700V | 166 | 160 | 166 | 160 | 155 | 255 | 255 | 155 | - | - | - | - |
| 700F | 153 | 153 | 153 | 153 | - | - | - | - | 234 | 234 | 234 | 234 |

Filters

| Unit | Type | Overall dimensions | | Supply | Exhaust |
|----------------------------|------------------------------|--------------------|--------|------------------------------|---------|
| | | Width | Height | Length | Length |
| DOMEKT R | | | | | |
| 200 V | KF5/KF7* | 285 | 130 | 46 | 46 |
| 250 F | KF5/KF7* | 278 | 258 | 46 | 46 |
| 300 V | KF5/KF7* | 290 | 205 | 46 | 46 |
| 400 V | KF5/KF7* | 450 | 210 | 46 | 46 |
| 400 H | KF5/KF7* | 410 | 200 | 46 | 46 |
| 400 F | KF5/KF7* | 278 | 258 | 46 | 46 |
| 450 V | KF5/KF7* | 470 | 240 | 46 | 46 |
| 500 V/H | KF5/KF7* | 540 | 260 | 46 | 46 |
| 600 H | KF5/KF7* | 475 | 235 | 46 | 46 |
| 700 V/H | KF5/KF7* | 540 | 260 | 46 | 46 |
| 700 F | KF5/KF7* | 370 | 360 | 46 | 46 |
| DOMEKT P | | | | | |
| 300 V | KF5/KF7* | 300 | 200 | 46 | 46 |
| 450 V | KF5/KF7* | 300 | 200 | 46 | 46 |
| DOMEKT CF | | | | | |
| 250 V | KF5/KF7* | 145 | 350 | 46 | 46 |
| 250 F | KF5/KF7* | 265 | 250 | 46 | 46 |
| 400 V | KF5/KF7* | 235 | 350 | 46 | 46 |
| 500 F (C4) | KF5/KF7* | 410 | 200 | 46 | 46 |
| 500 F (C6) | KF5/KF7* | 484 | 250 | 46 | 46 |
| 700 V/H | KF5/KF7* | 390 | 300 | 46 | 46 |
| 700 F | KF5/KF7* | 400 | 300 | 46 | 46 |
| DOMEKT S | | | | | |
| 650 F | KF5/KF7* | 235 | 371 | 46 | - |
| 800 F | KF5/KF7* | 287 | 371 | 46 | - |
| 1000 F | KF5/KF7* | 558 | 287 | 46 | - |
| Supply/Exhaust air | | | | | |
| DOMEKT R / DOMEKT P | | | | | |
| KF5 | Compact, class M5 (EN779) | KF7 | | Compact, class F7 (EN779) | |
| BF5 | Bag filter, class M5 (EN779) | BF7 | | Bag filter, class F7 (EN779) | |

* F7 class filter is available as an option.

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| | Gevent Magyarország Kft. | www.gevent.hu |
| | Merkapt | www.merkapt.hu |
| IR | Fantech Ventilation Ltd | www.fantech.ie |
| IS | Blikk & Tækniþjónustan ehf | www.bogt.is |
| | Hitataekni ehf | www.hitataekni.is |
| NL | Ventilair group | www.ventilairgroup.com |
| | DECIPOL-Vortvent | www.vortvent.nl |
| NO | Ventistål AS | www.ventistal.no |
| | Thermo Control AS | www.thermocontrol.no |
| PL | Ventia Sp. z o.o. | www.ventia.pl |
| SE | Nordisk Ventilator AB | www.nordiskventilator.se |
| SI | Agregat d.o.o | www.agregat.si |
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