

***komfovent***<sup>®</sup>



# DOMEKT



INSTALLATION  
AND SERVICE  
MANUAL

EN



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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.



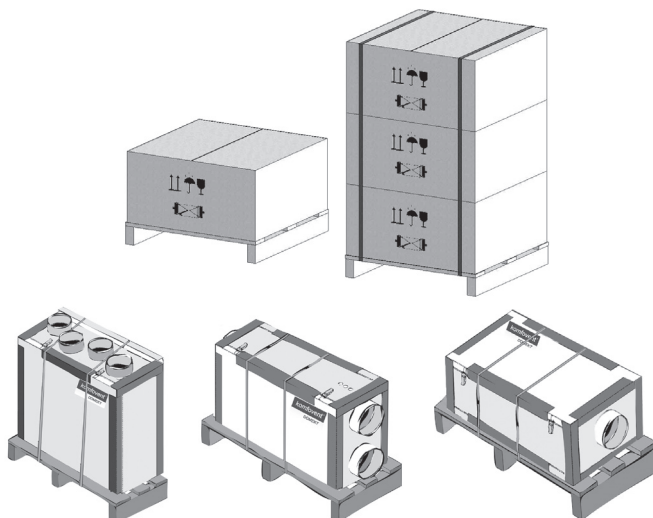
- Earth must be installed according EN61557, BS 7671.
- The unit should be installed according to Installation and Maintenance Manual.
- Before starting the unit, check correct position of air filters.
- Service maintenance should be carried out only in conformity with the instructions specified herein 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.

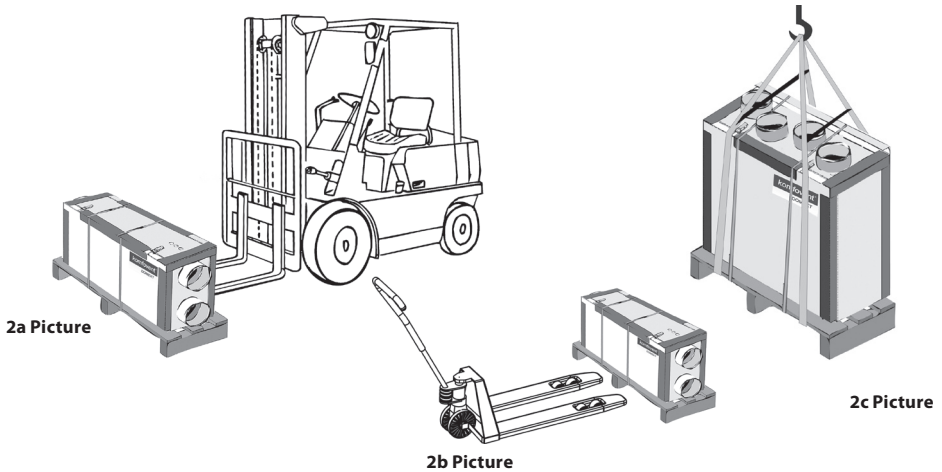
### Vertical and horizontal units ready for transit and storage



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



2a Unit is transported by forklift truck on a wooden pallet;  
2b Unit is transported by hand pallet truck on a wooden pallet;  
2c 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 °C ... +40 °C, outdoor air temperature. Extracted indoor air temperature +10 – +40 °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.

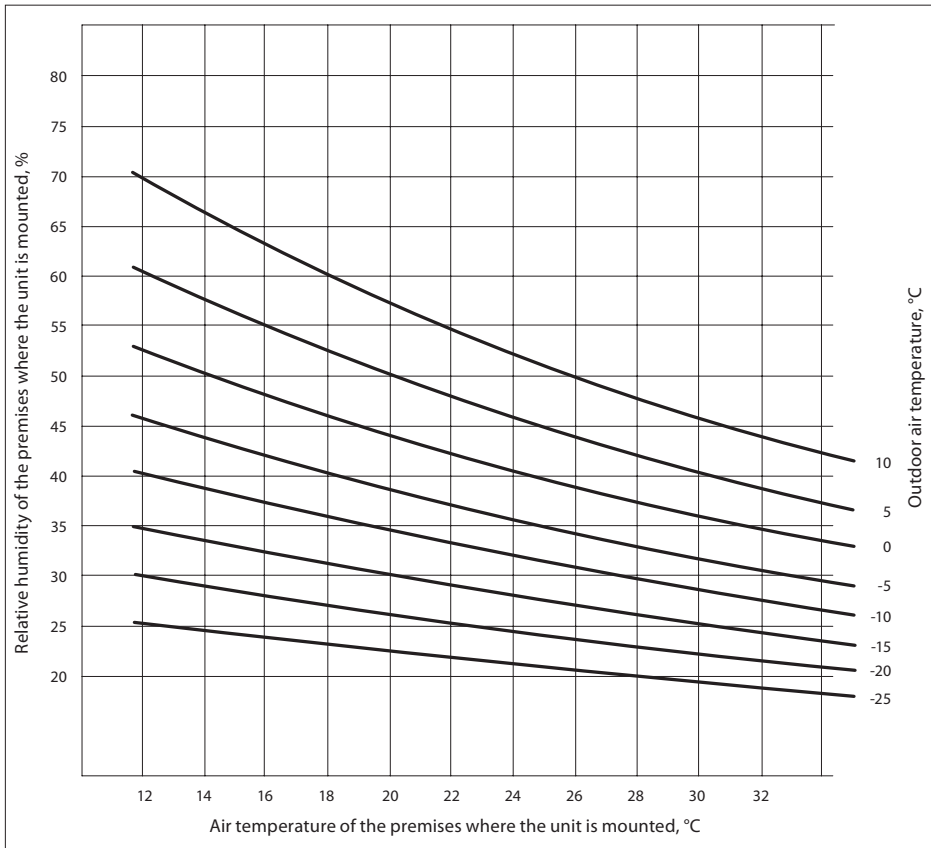
- Before you open the door, the unit must be switched off and the fans must have been given time to stop (up to 3 minutes).
- The unit contains heating elements that must not be touched when they are hot.
- We recommend to leave air handling unit in working mode (minimum 20 percent of power) during the 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.

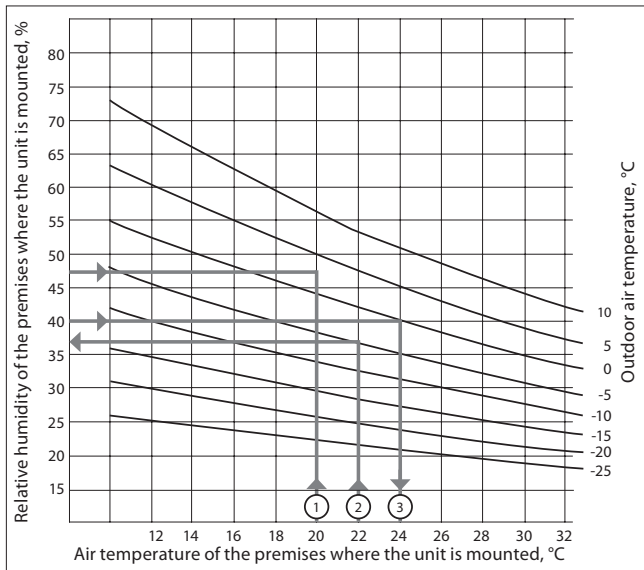
- Selecting the management without pre-heater, but with cold air bypass the unit must be additionally equipped with a secondary duct mounted heater.

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:

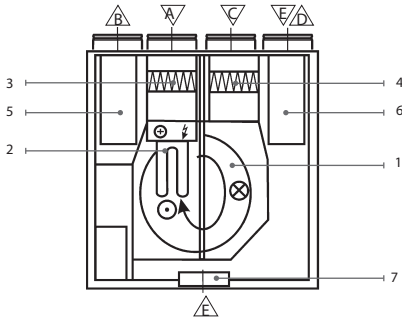
- 1) Maintain lower relative humidity in the room where air handling unit is mounted;
- 2) Preheater should be installed to increase the supply air temperature.

 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.

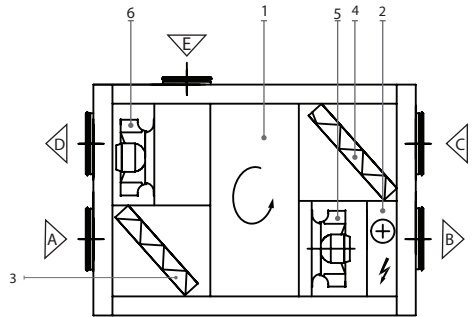
 It is forbidden to install DOMEKT air handling units outdoors. They are also not designed for ventilation or dehumidification of humid premises (swimming pools, baths, car washes, etc.).



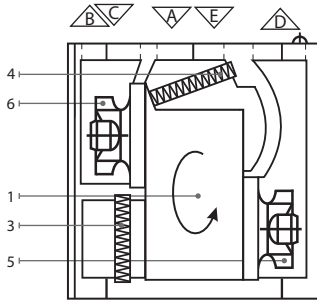
## Air Handling Units Schemes



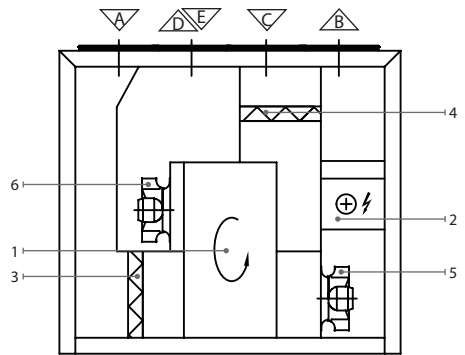
DOMEKT R 190V / 200V



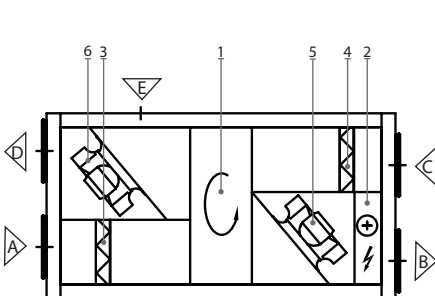
DOMEKT R 250 F C6



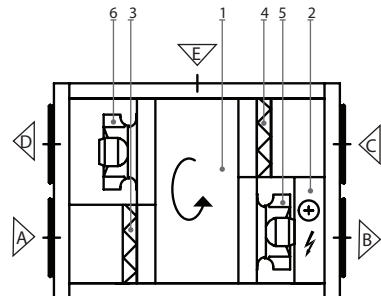
DOMEKT R 300V



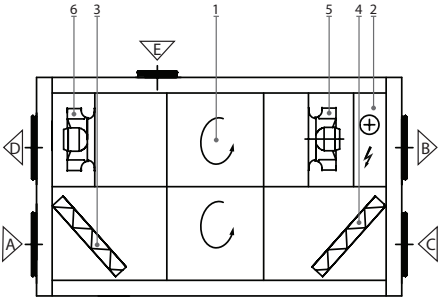
DOMEKT R 500V\*\* / DOMEKT R 700V\*\*



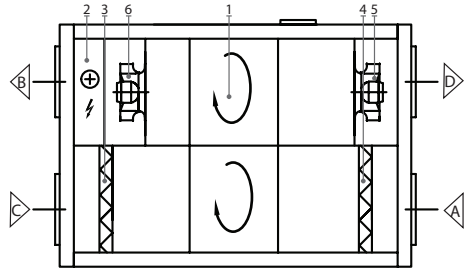
DOMEKT R 600H



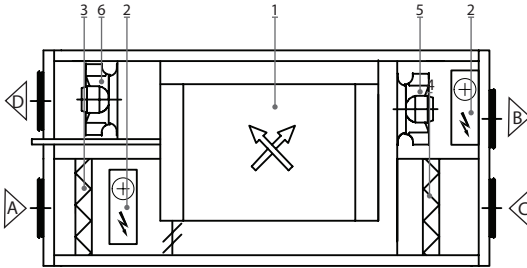
DOMEKT R 700H



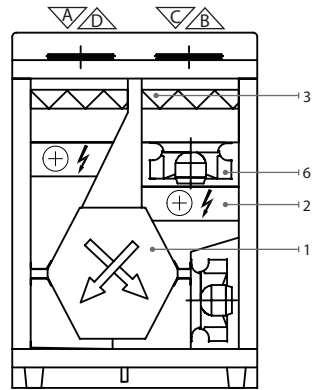
DOMEKT R 400F



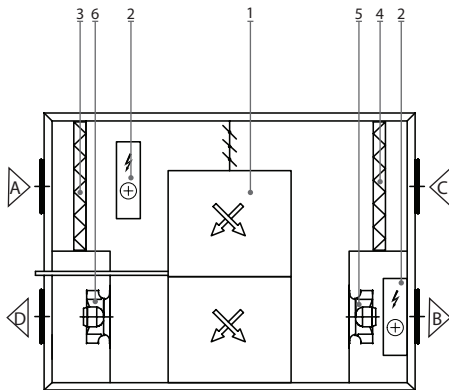
DOMEKT R 700F



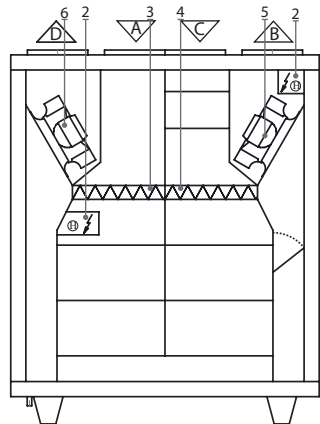
DOMEKT CF 250 F



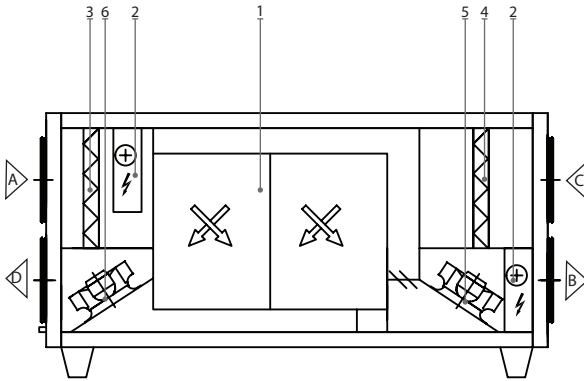
DOMEKT CF 400 V



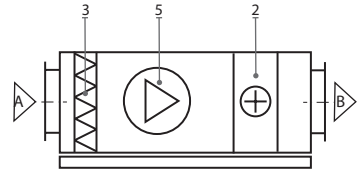
DOMEKT CF 500 F



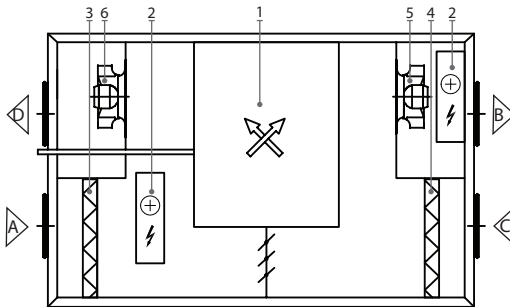
DOMEKT CF 700 V



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)

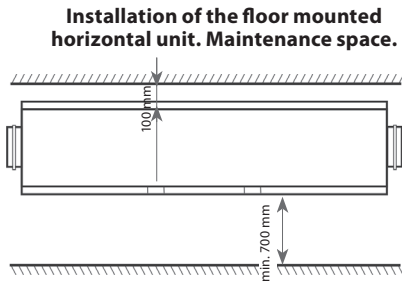
### 4. INSTALLATION

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.

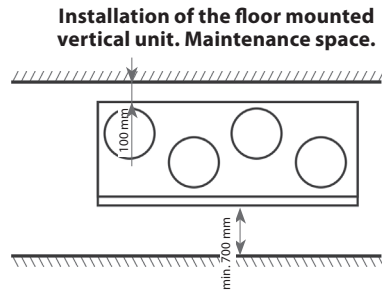
Some DOMEKT units can be suspended on the wall, and flat units can be attached to the ceiling. Special brackets, wall screws with plastic bushings and self-tapping screws are provided for mounting the units. When mounting the units, care must be taken to ensure that vibrations of the unit are not transmitted to the building structures, as it may lead to additional noise. In order to eliminate vibrations, additional anti-vibration gaskets are attached to the back wall of the unit. Some units are supplied with factory fitted anti-vibration gaskets; in other cases, they are supplied separately. In case of ceiling-mounted units, vibration absorbers are integrated in mounting brackets.

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.

When mounting on the floor, we recommend not to rest the unit against the wall to prevent noise or vibration and accumulation of moisture or mould on the wall due to condensation.

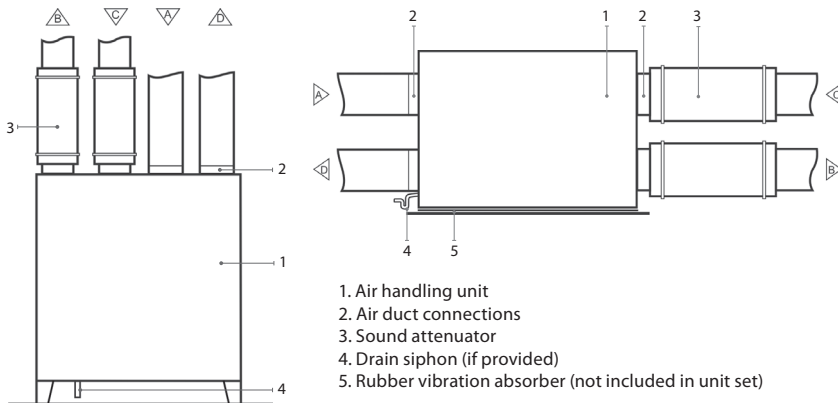


4a Picture

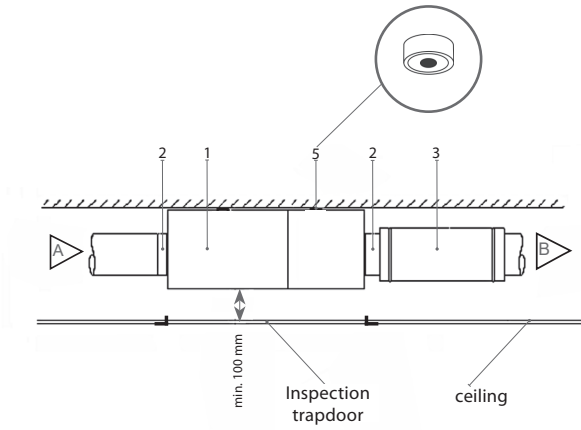


4b Picture

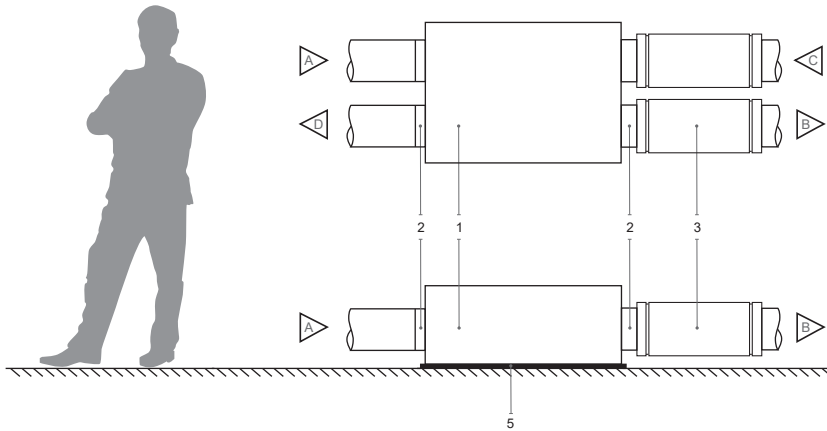
#### Unit Installation Scheme



4 Picture



5a Picture\*

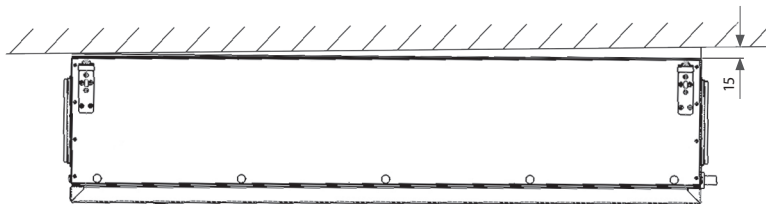


5b Picture\*\*

\* Only F type units

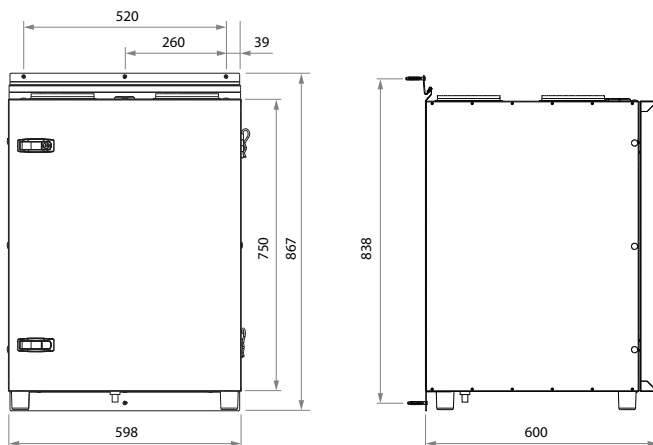
\*\* Only R 250 F, R 400 F, R 700 F, S 800 F HW, S 1000 F HW units.

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



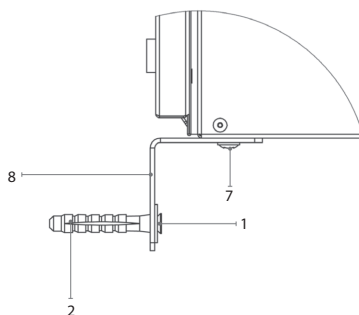
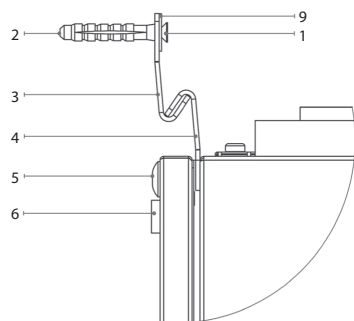
6 Picture

**DOMEKT CF 400 V Unit brackets' positions**



7 Picture

Pictures 7a and 7b show unit's upper and bottom fixing element.



7a Picture

7b Picture

- 1. Screw
- 2. Wall plug
- 3. Hanging bracket 1
- 4. Hanging bracket 2
- 5. Bolt M5

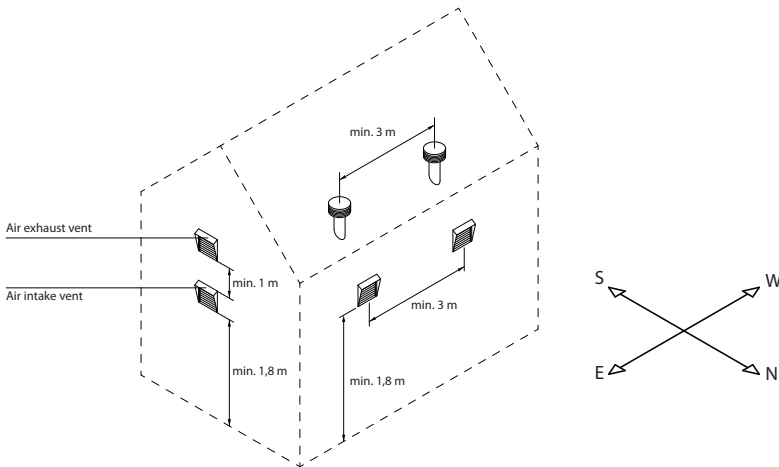
- 6. Gasket
- 7. Self tapping screw
- 8. L-shape bracket
- 9. Washer M5 DIN9021

**4.1. Duct system installation**

The air in and out of the unit flows through the duct system. The duct system should be designed and selected to have low airflow rates and low pressure differentials, ensuring more accurate airflow rates, lower energy consumption, lower noise levels and longer life of the unit.

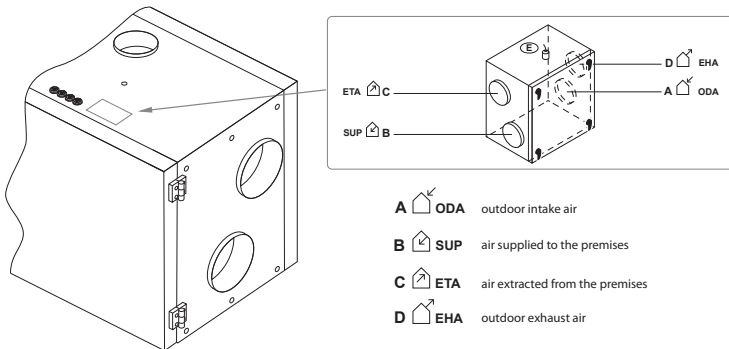
Outdoor vents must be installed as far apart as possible on different sides of the building to prevent the exhaust air from returning to the air intakes. Try to install the air intake vents where the outdoor air is the cleanest: do not direct them towards the street, car park or outdoor fireplace. We also recommend installing the air intake vent on the north or east side of the building, where the heat of the sun in summer will not have a significant effect on the supply air temperature.

It is highly recommended to install unit connecting ducts of supply inlet and exhaust outlet with a minimum slope on the outside of the premise, to avoid water flowing into the unit in case of rain or snow.



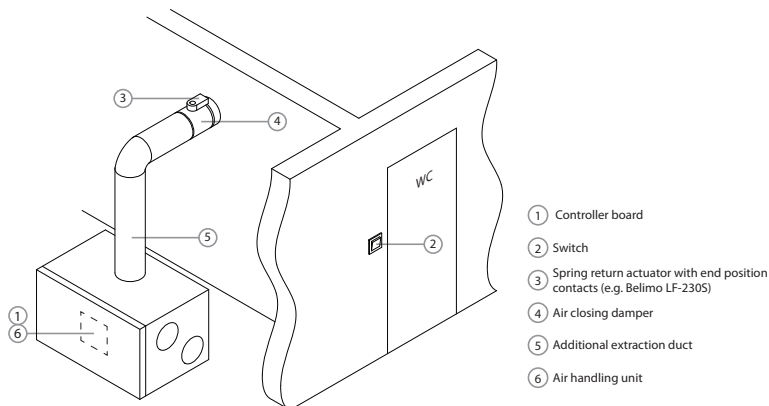
It is recommended to insulate the ducts in unheated rooms (attic, basement) to avoid heat loss. It is also recommended to insulate the supply air ducts if the unit is used for room cooling.

The air ducts are fitted to the unit with self-tapping screws. Different air flow duct positions are marked on the sticker located on the AHU:



**Fig. 8.** Air duct marking

Most units with a rotary heat exchanger also have a fifth branch (labelled E) to connect an additional exhaust duct (see „Air Handling Units Schemes“). The air flow through this opening is delivered directly to the exhaust fan, bypassing the heat exchanger, therefore, you can connect ducts from the bathroom, toilet or kitchen without worrying that odours and bacteria will contaminate the rotary heat exchanger or be passed on to the supplied air flow. However, air is extracted through an additional branch without recuperation, thus reducing the efficiency of the heat exchanger. For this reason, we do not recommend using the extra air extraction continuously. An additional exhaust duct should be fitted with air closing damper (motorized are recommended) and should only be opened when additional extraction is required (e.g. when bathing). If the additional branch is connected to the kitchen hood with an integrated closing damper, an additional damper is not needed.



**Fig. 9.** Example of mounting of an additional air extraction duct

**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.



- Ducts connecting the unit to the exterior of the building must be insulated (insulation thickness 50–100 mm) to prevent condensation on cold surfaces.
- Air intake and exhaust ducts must be fitted with air closing dampers (mechanical spring-loaded or electric with actuators) to protect the unit from exposure to climatic conditions when the unit is switched off.
- In order to minimise AHU noise transferring through the ducts into ventilated areas, sound attenuators must be connected to the unit.
- Duct system elements must have separate brackets and to be mounted in a way that their weight is not shifted to the unit casing.
- The kitchen hood with integrated exhaust fan must not be connected to the additional air exhaust duct. Such hood must be connected to a duct separated from the general ventilation system.



The diameter of the ducts varies by unit model:

		Unit										
		Domektr 190 V Domektr 200 V	Domektr 300 V	Domektr 250 F	Domektr 400 F Domektr 600 H Domektr 700 H	Domektr 500 V Domektr 700 V Domektr 700 F	DomektrCF 250 F DomektrCF 400 V	DomektrCF 500 F DomektrCF 700 V	DomektrCF 700 F DomektrCF 700 H	Domekts 650 F	Domekts 800 F	Domekts 1000 F
Duct diameter, mm	Duct A	125	160	160	200	250	160	200	250	160	200	250
	Duct B	125	160	160	200	250	160	200	250	160	200	250
	Duct C	125	160	160	200	250	160	200	250	-	-	-
	Duct D	125	160	160	200	250	160	200	250	-	-	-
	Duct E	125	100	125	125	125	-	-	-	-	-	-

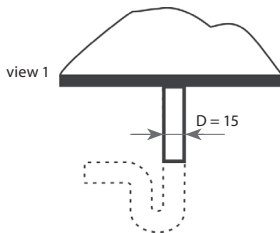
## 4.2. Condensate Drain Connections

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.

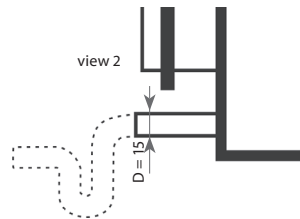
### A condensate pipe and a drain trap

**Drain scheme of Vertical Unit**



**10a Picture**

**Drain scheme of Horizontal Unit**

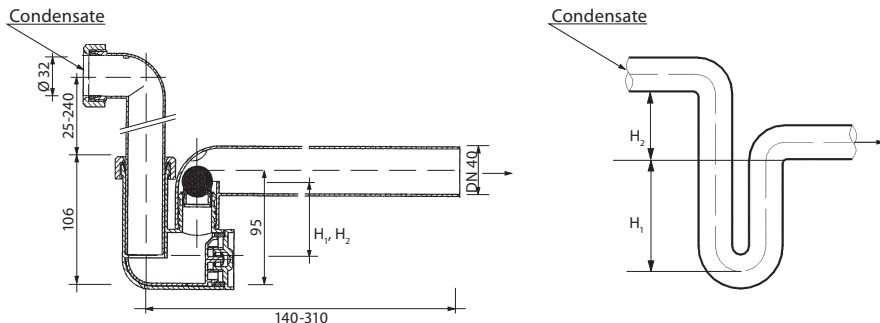


**10b Picture**

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.



**⚠️ Caution:** 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.

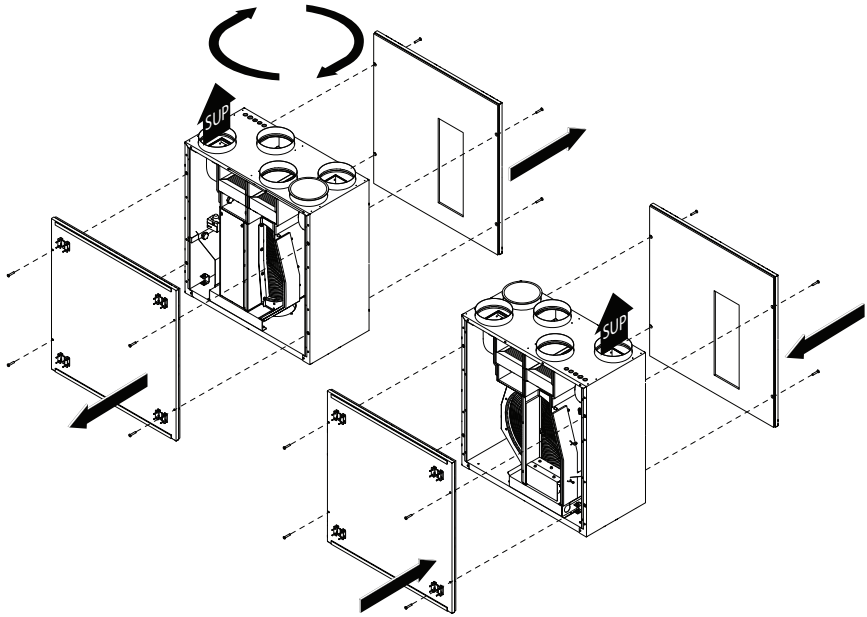
#### 4.1.2. Water trap installation for a unit section mounted on the pressure side

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.

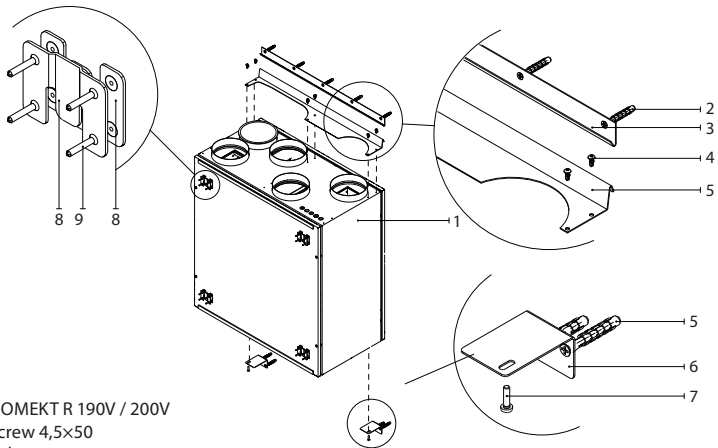
Any drainage systems must not be connected directly to the municipal sewage system. The condensate tray shall be easily accessible for cleaning and disinfection.

**DOMEKT R 190V / 200V unit inspection side change**



SUP – Supply air duct connection.

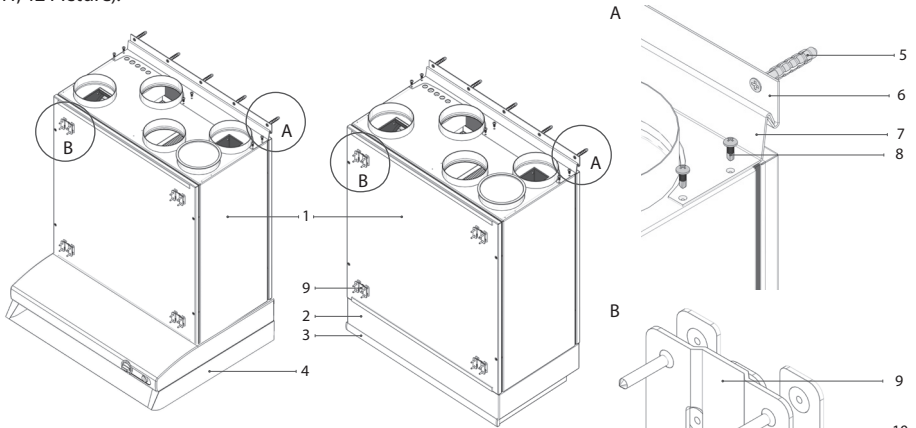
**DOMEKT R 190V / 200V Unit hanging scheme without kitchen hood**



1. Air handling unit DOMEKT R 190V / 200V
2. Wall plug 8x50 + screw 4,5x50
3. Wall mounting bracket
4. Self tapping screw 4,2x13
5. Unit bracket
6. Bottom bracket
7. Screw M4x16 (DIN 7895)
8. Bracket for decorative panel
9. Screw 2,5x16 with cone head

**DOMEKT R 190V / 200V unit with kitchen hood**

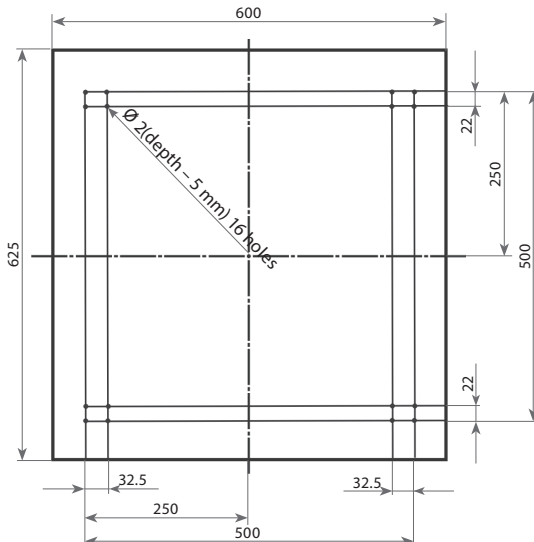
Air handling unit DOMEKT R 190V / 200V can be mounted with one of the two types of kitchen hoods (11, 12 Picture).



- 1. Air handling unit DOMEKT R 190V / 200V
- 2. Kitchen hood adapter 392-12
- 3. Kitchen hood 392-12
- 4. Standard kitchen hood
- 5. Wall plug 8x50 + screw 4,5x50
- 6. Wall mounting bracket
- 7. Unit bracket
- 8. Self tapping screw 4,2x13
- 9. Bracket for decorative panel
- 10. Screw 2.5x16 with cone head

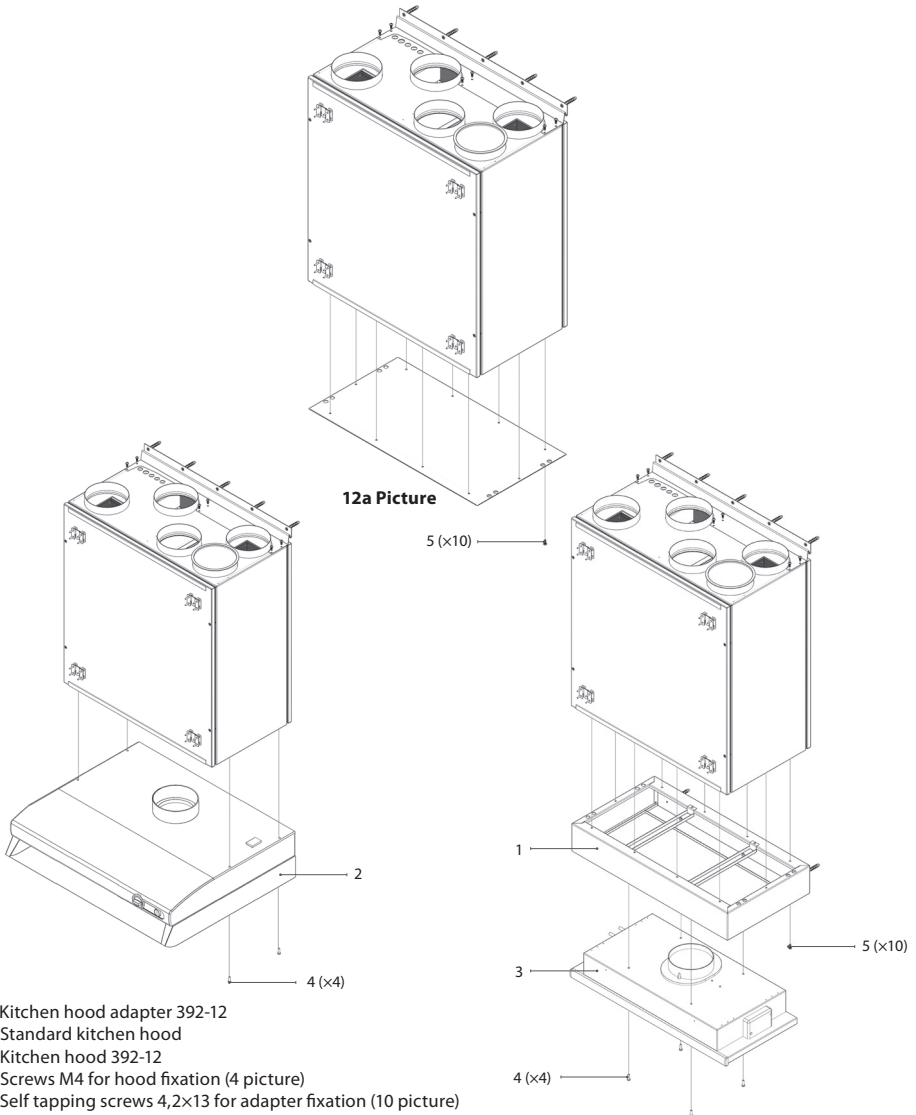
**11 Picture**

**Dimensions for mounting furniture panel**



## Installation scheme of DOMEKT R 190V / 200V unit with kitchen hood

Before installing kitchen hood, bottom cover plate must be removed by removing fixing screws (2a pic.)

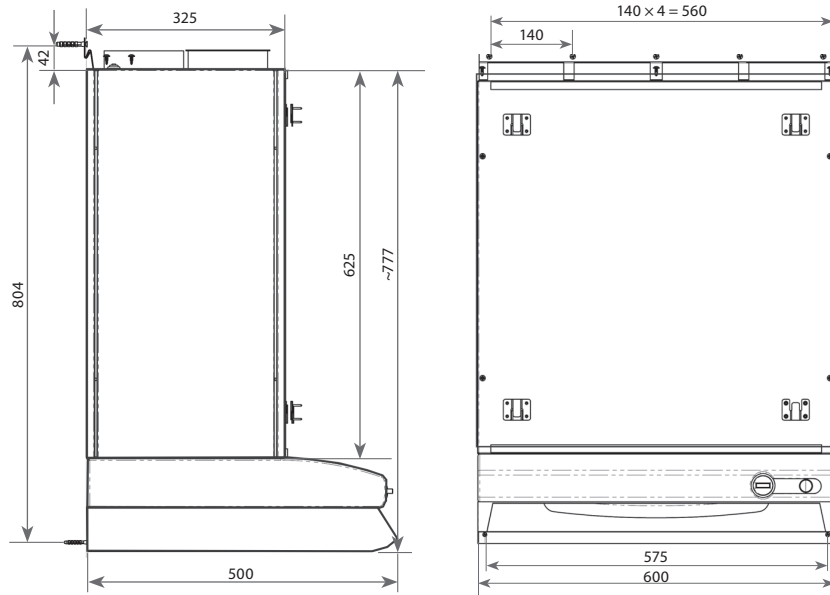


1. Kitchen hood adapter 392-12
2. Standard kitchen hood
3. Kitchen hood 392-12
4. Screws M4 for hood fixation (4 picture)
5. Self tapping screws 4,2x13 for adapter fixation (10 picture)

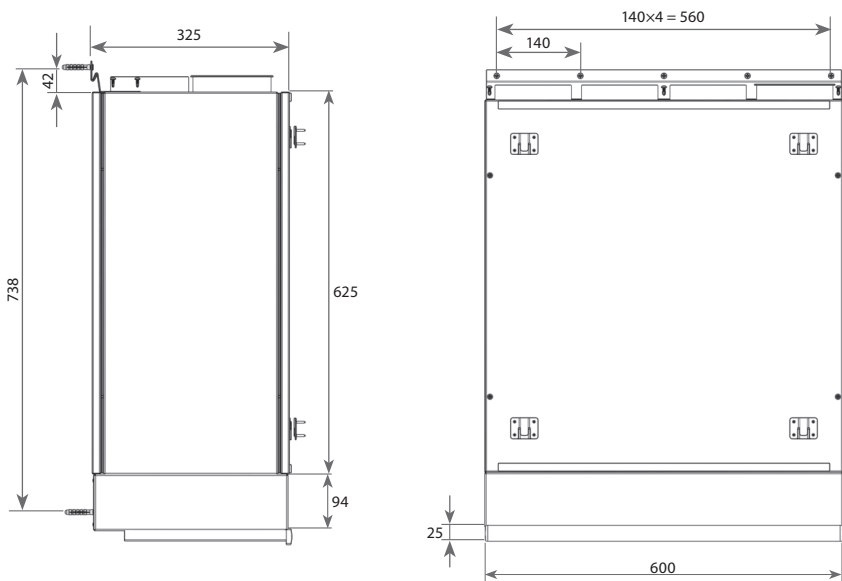
**12b Picture.** Installation of standard kitchen hood

**12c Picture.** Installation of kitchen hood 392-12

**Dimensions for the DOMEKT R 190V / 200V installation space**

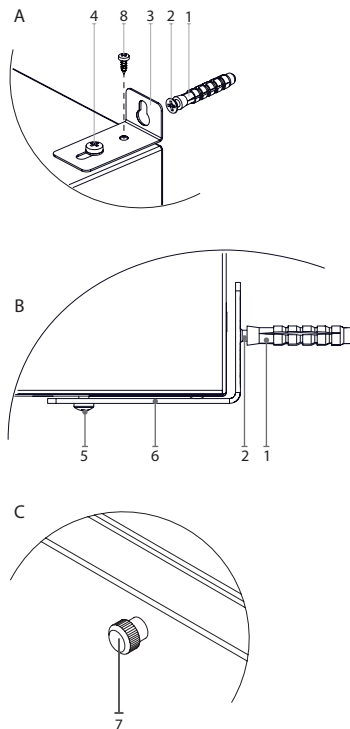
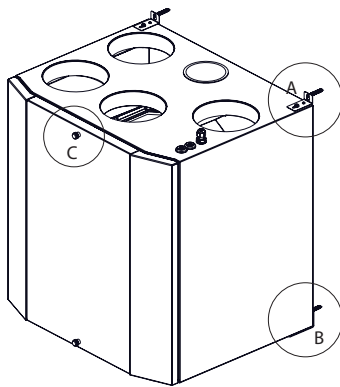
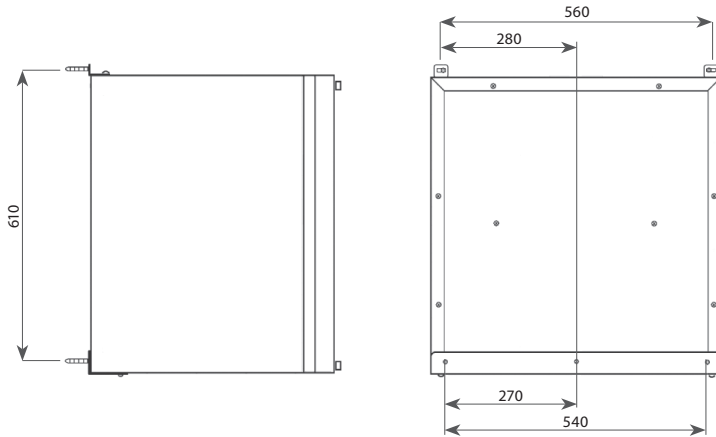


**13 Picture.** Dimensions with standard kitchen hood



**14 Picture.** Dimensions with kitchen hood 392-12

## 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)

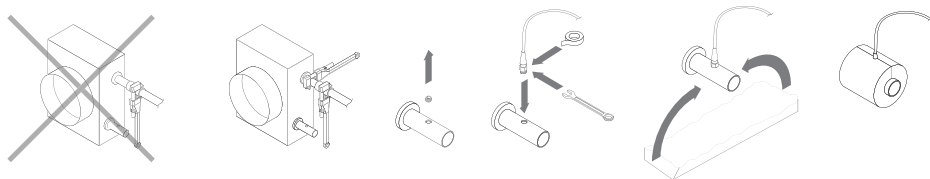
15 Picture



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.

### 4.3. Heating coil connection<sup>1</sup>

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 16 Picture.



**16 Picture.** Connecting the water heater/cooler hoses and installing the water temperature sensor

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.



Pipework package<sup>2</sup> must include circulation pump, which circulates heating/cooling medium through the coil (smaller circuit) and 3-way mixing valve with modulated actuator. In cases if 2-way valve is used, additionally it must be installed non-return valves to ensure continuous circulation around smaller circuit. PPU must be installed as close to the water coil as possible.



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.

### 4.4. 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.

<sup>1</sup> If water heater build in.

<sup>2</sup> It is recommended to use PPU made by Komfovent.



## 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.

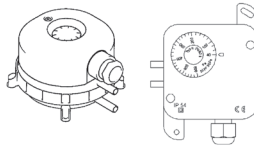
The rubber couplings connecting the motor base and the unit should be visually inspected for signs of wear and replaced as necessary.

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 more<sup>1</sup>. Filters are one time used. We do not recommend cleaning them. Stop the air handling unit before changing filters.

<sup>1</sup> Clogged filters unbalance ventilation system, air handling unit uses more power.

### Pressure sensor

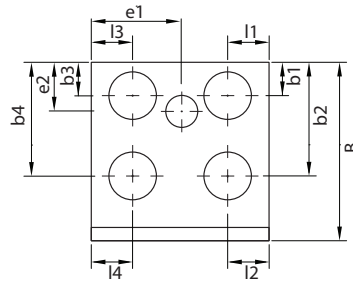
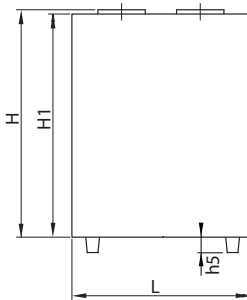


17 Picture

- 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 17 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.

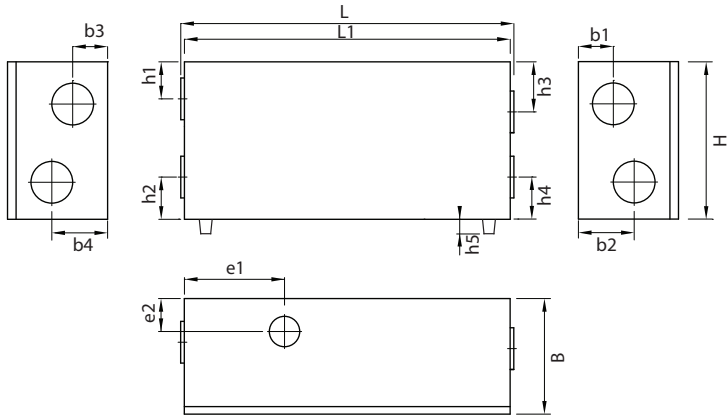
## 6. UNIT DIMENSIONS

### 6.1. Vertical units



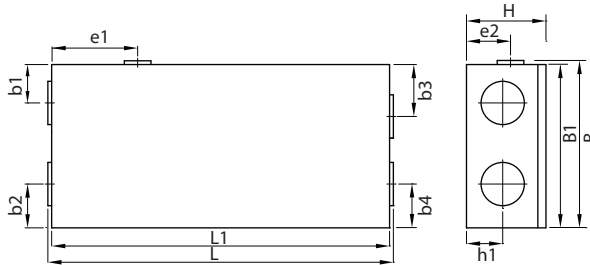
Unit	Inspection side	Dimensions, mm														
		H	H1	L	B	b1	b2	b3	b4	l1	l2	l3	l4	h5	e1	e2
<b>DOMEKT R (C4)</b>																
190 V 200 V	Right	660	625	600	325	95	230	95	230	81	226	226	81	-	81	95
	Left	660	625	600	325	95	230	95	230	81	226	226	81	-	519	230
<b>DOMEKT R (C6)</b>																
300V	Right	610	610	598	502	195	330	114	330	100	288	100	100	-	300	82
	Left	610	610	598	502	195	330	114	330	100	228	100	100	-	300	82
500 V	Right	966	950	1070	645	229	415	229	415	418	190	190	418	-	418	166
	Left	966	950	1070	645	229	415	229	415	418	190	190	418	-	652	479
700 V	Right	966	950	1070	645	229	415	229	415	418	190	190	418	-	418	166
	Left	966	950	1070	645	229	415	229	415	418	190	190	418	-	652	479
<b>DOMEKT CF (C6)</b>																
400 V	Right	764	750	598	600	112	382	112	382	139	139	139	139	50	-	-
	Left	764	750	598	600	112	382	112	382	139	139	139	139	50	-	-
700 V	Right	1146	1130	1020	495	165	325	165	325	155	410	410	155	90	-	-
	Left	1146	1130	1020	495	165	325	165	325	155	410	410	155	90	-	-

### 6.2. Horizontal units



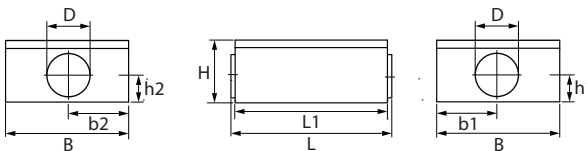
Unit	Inspection side	Dimensions, mm														
		H	L	L1	B	b1	b2	b3	b4	h1	h2	h3	h4	h5	e1	e2
<b>DOMEKT R (C6)</b>																
500 H	Right	700	963	930	647	257	402	402	257	198	198	198	198	-	465	150
	Left	700	963	930	647	257	402	402	257	198	198	198	198	-	465	150
600 H	Right	600	1160	1130	570	373	285	285	373	122	168	168	122	-	305	286
	Left	600	1160	1130	570	373	285	285	373	122	168	168	122	-	825	286
700 H	Right	700	963	930	647	257	402	402	257	198	198	198	198	-	465	150
	Left	700	963	930	647	257	402	402	257	198	198	198	198	-	465	150
<b>DOMEKT CF (C6)</b>																
700 H	Right	700	1533	1500	494	246	246	246	246	200	200	200	200	90	-	-
	Left	700	1533	1500	494	246	246	246	246	200	200	200	200	90	-	-

6.3. Flat units



Unit	Inspection side	Dimensions, mm											
		H	L	L1	B	B1	b1	b2	b3	b4	h1	e1	e2
<b>DOMEKT R (C6)</b>													
250F	Right	310	871	842	618	602	200	150	150	200	146	245	106
	Left	310	871	842	618	602	150	200	200	150	146	597	106
400 F	Right	330	1202	1170	720	700	225	165	225	165	145	387	200
	Left	330	1202	1170	720	700	225	165	225	165	145	783	200
700 F	Right	420	1272	1240	870	854	202	202	202	202	186	399	271
	Left	420	1272	1240	870	854	202	202	202	202	186	841	271
<b>DOMEKT CF (C6)</b>													
250F	Right	294	1278	1250	604	604	142	162	192	162	134	-	-
	Left	294	1278	1250	604	604	192	162	142	162	134	-	-
500F	Right	295	1430	1400	1045	1045	277	239	277	316	135	-	-
	Left	295	1430	1400	1045	1045	277	316	277	239	135	-	-
700F	Right	344	1394	1365	875	875	266	234	204	234	159	-	-
	Left	344	1394	1365	875	875	204	234	266	234	159	-	-

Units Domekt S



Unit	Dimensions, mm							
	H	L	L1	B	b1	b2	h1	h2
<b>DOMEKT S (C5)</b>								
650F	297	905	873	475	237,5	237,5	120	120
800F	360	1005	973	475	237,5	237,5	152	152
1000F	350	925	893	700	350	350	152	152

## 6.4. Filters

Unit	Type	Supply		Exhaust	
		Class	BxHxL, mm	Class	BxHxL, mm
Domekt R 190 V Domekt R 200 V	Compact	ePM1 55% (F7)	285x130x46	ePM10 50% (M5) *	285x130x46
Domekt R 250 F	Compact	ePM1 55% (F7)	278x258x46	ePM10 50% (M5) *	278x258x46
Domekt R 300 V	Compact	ePM1 55% (F7)	290x205x46	ePM10 50% (M5) *	290x205x46
Domekt R 400 F	Compact	ePM1 55% (F7)	278x258x46	ePM10 50% (M5) *	278x258x46
Domekt R 500 V Domekt R 700 V	Compact	ePM1 55% (F7)	540x260x46	ePM10 50% (M5) *	540x260x46
Domekt R 600 H	Compact	ePM1 55% (F7)	475x235x46	ePM10 50% (M5) *	475x235x46
Domekt R 700 H	Compact	ePM1 55% (F7)	540x260x46	ePM10 50% (M5) *	540x260x46
Domekt R 700 F	Compact	ePM1 55% (F7)	370x360x46	ePM10 50% (M5) *	370x360x46
Domekt CF 250 F	Compact	ePM1 55% (F7)	265x250x46	ePM10 50% (M5) *	265x250x46
Domekt CF 400 V	Compact	ePM1 55% (F7)	350x235x46	ePM10 50% (M5) *	350x235x46
Domekt CF 500 F	Compact	ePM1 55% (F7)	484x250x46	ePM10 50% (M5) *	484x250x46
Domekt CF 700 V	Compact	ePM1 55% (F7)	390x300x46	ePM10 50% (M5) *	390x300x46
Domekt CF 700 H	Compact	ePM1 55% (F7)	390x300x46	ePM10 50% (M5) *	390x300x46
Domekt CF 700 F	Compact	ePM1 55% (F7)	400x300x46	ePM10 50% (M5) *	400x300x46
Domekt S 650 F	Compact	ePM1 55% (F7)	371x235x46	-	-
Domekt S 800 F	Compact	ePM1 55% (F7)	371x287x46	-	-
Domekt S 1000 F	Compact	ePM1 55% (F7)	558x287x46	-	-

\* ePM1 55% (F7) class filter is available as an option.



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