

## air conditioning / heating / ventilation for home and office



# product catalog

product price list





# air conditioning / heating / ventilation for home and office

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#### Kaisai product catalog

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**Product price list** 

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# **Product series**

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# **Description** of functionalities

#### Health



#### **Evaporator self-cleaning**

After operation, the air conditioner switches into the cleaning mode and removes any moisture accumulated in the indoor unit. This prevents the development of microorganisms and fungi.



#### **Filter with C vitamin**

The filter emits vitamin C into the room. This way the vitamin C is absorbed by the skin. This vitamin improves skin firmness, protects against harmful UV rays and reduces stress.



#### **Filter with silver ions**

This filter contributes to the elimination of bacteria and other harmful microorganisms thanks to application of active silver ions. It ensures a high standard of air hygiene.

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#### **Catalytic filter**

Catalytic filter, due to application of multilayer catalyst coating, removes unpleasant odors from the air and effectively eliminates harmful organic compounds and volatile formaldehyde particles.



#### **3M filter**

Thanks to its unique design, this filter more effectively captures dust and harmful allergic substances that cause respiratory diseases.



#### **High-density filter**

Application of an increased density filter improves the efficiency of trapping contaminants, including dust and particulate. It not only protects the unit, but also maintains the air quality.



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#### Ventilation connection

Fresh outdoor air is supplied to the unit through the connecting duct, so that the air conditioner can also be used as a ventilator and in turn improves air comfort.

### Comfort



#### Turbo mode

Thanks to this option, the air conditioner operates at increased speed and ensures fast cooling or heating of the room.



#### 3D air flow

Horizontal and vertical louvers are controlled automatically and ensure uniform temperature distribution in a room as well as optimum air circulation.



#### **Automatic restart**

During a power outage, the air conditioner remembers the last settings and restores them once the power is resumed. It does not require reprogramming of the unit after each power outage.



#### 360° air supply

The unit can provide the best possible air distribution throughout the room with additional supply air slots in the air conditioner panel.



#### Temperature compensation

The unit compensates for the difference between the reading of the temperature sensor on the indoor unit and the actual temperature on the room floor. The desired temperature is reached throughout the room, not just around the air conditioner.



#### Cold air supply control

In order to minimize the feeling of unpleasant cool airflow, the air conditioner automatically reduces the fan's RPM in heating mode and increases the fan's speed as the air heats up.



#### Wide temperature range

Operation in wide range of outdoor temperatures. -15 to 50°C in cooling mode and -25 to 30°C in heating mode.

KAISAI

### Cost efficiency



#### 8°C continuous heating function

When the user is absent, the air conditioner maintains a constant room temperature of up to 8°C in heating mode, preventing the room from cooling down.



#### Standby mode

In standby mode, disconnection from unused components reduces power consumption even up to 80%.



#### **Sleep function**

Within two hours, the unit increases (in heating mode – decreases) the set temperature by 1°C per hour, and the fan is running at low speed. This reduces electric energy consumption and provides the best comfort for the user.



#### 5 fan speeds of the outdoor unit

Thanks to the inverter technology, the outdoor unit has 5 modes of operation, which improves the energy efficiency and the comfort of operation of the unit.



#### 12 fan speeds of indoor unit

The 12-stage fan control of the indoor unit ensures maximum comfort in the room and improves the energy efficiency.

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#### Temperature sensor in the remote control

The temperature sensor built into the remote control allows measurement of the temperature closer to the user, so that the unit can better adapt to the surrounding area.



#### Fresh air

Fresh outdoor air is supplied to the unit via a connecting hose. This significantly improves the "atmosphere" in a room.

### Safety



#### **Evaporation of condensate**

The condensed water is transferred to the condenser where it evaporates. As a result, the condensate tank is not required.



#### Operation at low outdoor temperatures

The air conditioner operates in the cooling mode even at outdoor temperatures as low as -15°C.

*

#### Operation at very low outdoor temperatures

The air conditioner operates even at outdoor temperatures as low as -25°C.



#### Indication of refrigerant leakage

The error code will be displayed on the control panel of the indoor unit, when the outdoor unit detects the refrigerant leak.



#### **Emergency use**

If one of the sensors fails, operation of the unit is not interrupted and can be continued until the failure has been corrected.



#### Self-diagnosis

The air conditioner monitors its operation and switches off when a malfunction or failure is detected. The error code is displayed on the control panel of the indoor unit.



#### Alarm port

The air conditioner is equipped with the alarm port enabling output of the fault signal.





#### Timer

The timer enables setting the time of automatic switching on and off the air conditioner.



#### Automatic louver (swing)

Automatic operation of horizontal louvers significantly improves the air distribution in the room.

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#### Mono and multi

The indoor unit is universal and can be used in single-unit (mono-split) and multiple-unit (multisplit) systems.

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#### **Simple installation**

The air conditioner enables easy installation and does not require any additional operation efforts.



#### **Twin combination**

Two identical indoor units operate simultaneously, connected to one outdoor unit.



#### **Two-sided installation**

It is possible to connect refrigerant supply pipes and condensate drain from both sides of the indoor unit, which facilitates installation and adaptation to the layout of the room.

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#### **Customized remote control**

It is possible to change the factory settings of the remote control to suit the current needs of the user.



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#### **Central controller**

Possibility of connecting a central controller, controlling up to 64 indoor units.



#### **Memory of louvers settings**

After each shutdown, the air conditioner remembers last settings of the louvers and restores them after the restart.



#### Port ON/OFF

The air conditioner is equipped with the port enabling remote switching on/off from a long distance (using non-voltage signal).

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The WiFi module enables remote control of the air conditioner with a smartphone or tablet - from anywhere in the world.

Thanks to the integrated casters, changing loca-

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#### **Built-in condensate pump**

**Multi directional casters** 

tion of the air conditioner is easier.

Thanks to the integrated pump, condensate can be discharged up to a height of 750 mm.

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#### **Compact dimensions**

Thanks to well planned components, the air conditioner features small dimensions while maintaining full performance parameters.

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#### Large installation lenght

Thanks to the applied technological solutions, the indoor and outdoor units of the air conditioner can be separated from each other up to 50 m in total and 25 meters vertically.



#### Very large installation lenght

Thanks to the applied technological solutions, the indoor and outdoor units of the air conditioner can be separated from each other up to 65 m in total and 30 meters vertically.







WiFi Control







KAISAI AIR CONDITIONING SYSTEM

Image: Second Projection         Image: Second Projection           Pipe density file         Image: Second Projection           Image: Second Projection         Image: Second Projection	STANDARI	D 🔲 OPTION	WALL-MOUNTED	FLOOR/ CEILING	CASSETTE Compact	CASSETTE SUPER SLIM	DUCT Slim	PORTABLE
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	<b>*</b>	Built-in condensate pump			•			

#### ABOUT KAISAI BRAND



# User-friendly air conditioning



Kaisai units are **high quality, environmental-friendly products,** designed with the operation comfort in mind. Moreover, we offer them at reasonable prices.

32 countries

points of sale

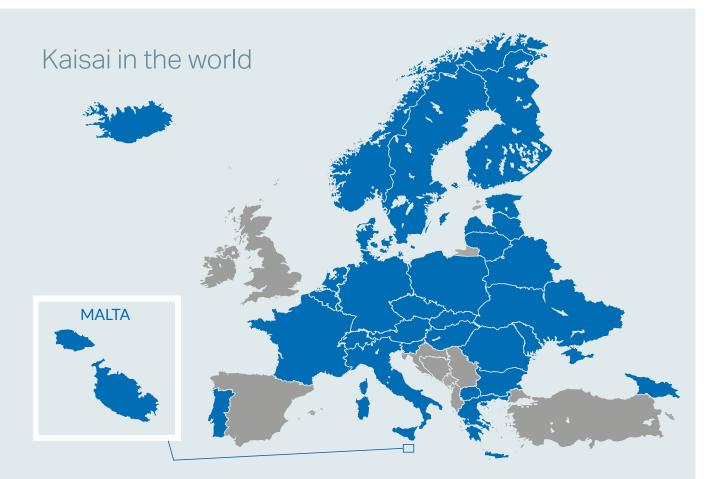
over

100 thousands of installed units

over

16 product types

The Kaisai brand debuted on the Polish market in 2011 and since then, year after year, it has been recording growing sales figures in Poland as well as on foreign markets. The latest technological solutions make Kaisai devices leaders in their class and meet high expectations in terms of ecology, safety, energy efficiency, quiet operation, comfort of use and manufacturer's warranty. Through many years of investment in technology, the Kaisai units have been recognized as some of the most innovative air-conditioning solutions, successfully implemented in public facilities and residential buildings.



Within the business platform of Kaisai International Corporation, following the principle of *Think globally - work locally*, the Kaisai brand is present in the following countries:

Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Georgia, Iceland, Italy, Latvia, Lithuania, Luxembourg, North Macedonia, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine.

# WE CARE ABOUT AIR

The motto "We Care about Air" derives from passion and understanding of human needs and is a declaration of responsibility for people and the environment. Our focus is on the quality and comfort of air – in the office, at home and in all rooms where people are present. Our values: respect for the environment, partnership with the Client, responsibility for the Employee, taking care of the business environment.

### ABOUT KAISAI BRAND



# Kaisai participates in the programs of Klima-Therm Group Academy

The basic scope of the Academy's activities includes:

Product-related and technical trainings

Authorization trainings – KEH heat pumps Sales trainings Testing Kaisai products

The Academy of the Klima-Therm Group is an innovative educational and research project, which main objective is to constantly boost the knowledge of the industry environment regarding current trends in the field of air conditioning and ventilation as well as the latest technological, design-related and product solutions. Thanks to the Academy's activity, customers can be sure of the professional knowledge of installers: it is a guarantee of safety and trouble-free operation of our equipment.

Kaisai is committed to ensure the highest quality of its products and installations. The Kaisai Authorized Service Partners, as members of the Klima-Therm Group, benefit from the training opportunities offered by the Academy. Trained installers not only receive theoretical knowledge, but can also acquire practical skills under the supervision of qualified trainers. The Academy has 3 training centers serving customers from all over Poland: in Gdansk, Warsaw and Katowice.

Kaisai products meet stringent safety, health and environmental requirements and have been awarded several labels and certifications. The refrigerants used are certified by the National Institute of Public Health.











# **Discover** Kaisai**technology**

# User guide



# Air conditioning selection

- Air conditioning in the house
- Operating costs
- Air conditioning is about ensuring comfort and health
- Choice of air conditioner
- Relevance of the energy efficiency class



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• Green energy source

Heat pump -

benefits

- Comfort all year round
- Reducing CO2 emissions

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### **Air curtains**

- Description of operation
- Benefits of air curtains

# 22 Environmental protection

- GWP what is it?
- ODP what is it?
- 20/20/20 program
- Refrigerants
- Energy efficiency class

# **25** The most interesting features of Kaisai units



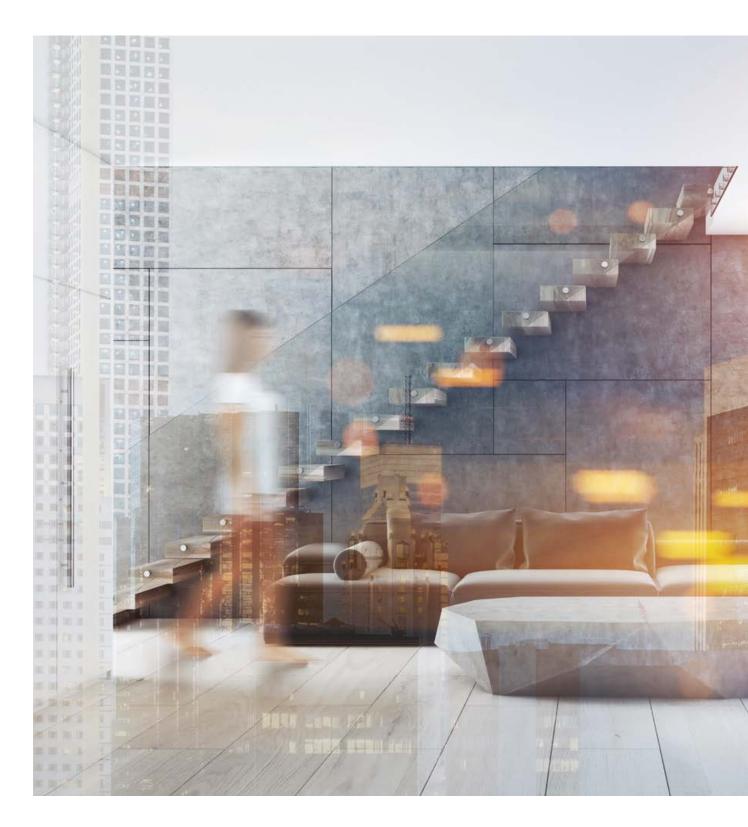
More information about air conditioning, heating and ventilation can be found in the guide at our webiste:

# kaisai.pl/poradnik

The guide prepared by us will introduce you to the world of air conditioning and will enable selection of units meeting the specific user's needs. Please contact our consultants who will quickly and reliably answer your questions about Kaisai products.

# HINTS AIR CONDITIONING

# Selection of air conditioning system



#### Air conditioning in house application

From March to September, the days are longer and the temperatures are higher. Especially in the period from June to August there are periods of several weeks of heat, which can cause discomfort while staying indoors. We recommend to consider it in advance, ensuring the ideal, comfortable air temperature regardless of the season and day.

Air conditioning was previously associated mainly with office premises and public buildings. Currently, it is within the financial reach of individual users. In addition, thanks to the heating function available in state-of-the-art units, air conditioners can also serve as an additional source of heat in colder periods. Air conditioning is an efficient and economical alternative to fans and electric heaters - it consumes up to 4 times less electricity.



#### **Operating** costs

Domestic air conditioning is fundamentally different in terms of power consumption from more demanding industrial air conditioning. A device with a capacity of 2.6 kW consumes less than 1 kW of electricity per hour of operation, which costs about 0.10 EUR.\*

There are a number of general recommendations and indicators to help users determine the required power level. The most important parameter is the cubic capacity of the air-conditioned room. It is assumed that a cooling capacity requirement of 40 W/m<sup>3</sup>, or 120 W per m<sup>2</sup> of surface area, can be estimated for standard rooms of approximately 3 m in height. This means that even the smallest 2.6 kW air conditioner can be sufficient for a room of 21 m<sup>2</sup>.

\*Cost estimated for Warsaw (Poland) 2019.

## HINTS AIR CONDITIONING

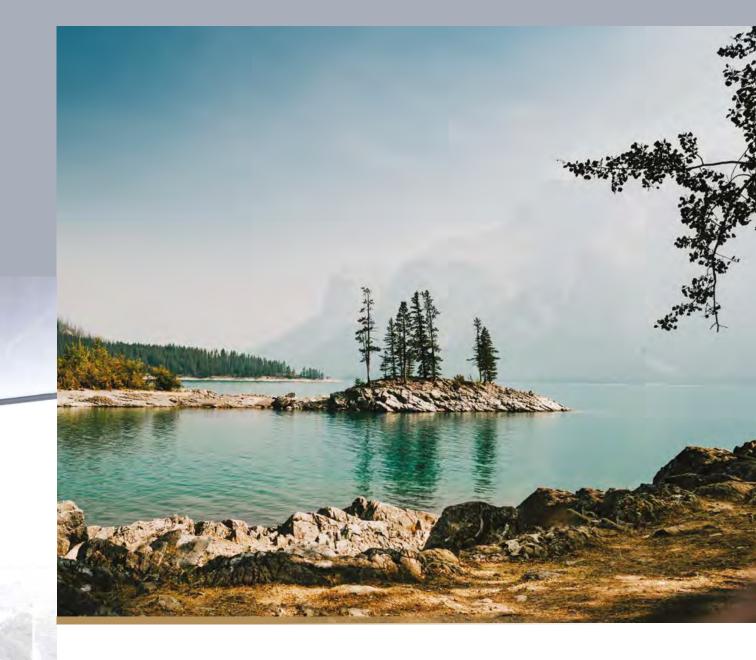
#### Air conditioning is about ensuring comfort and health

Home air conditioning is the comfort available for everyone. It allows you to freely control the temperature in your home, apartment, office or small retailer – replacing or complementing the central heating system. However, the advantages of an air-conditioning system do not stop there. Implementation of air-conditioning unit turns out to be an excellent way to take care of the health of all users. Modern air conditioners eliminate bacteria and fungi from the air, preventing diseases caused by them, and special filters improve the overall air quality. Air conditioning is also a good solution for maintaining adequate air parameters, when the outdoor air is heavily polluted, e.g. by smog.



#### Relevance of energy efficiency class

The more energy-efficient the device is, the higher its energy class is. When buying an air conditioner, it is worth paying attention to the fact that the energy class of the air conditioner should be at least at the A level. When the air conditioner is in operation, remember to close the windows in the air conditioned room, thus contributing to savings in energy bills. Do not set too low temperature in a room with the remote control, as this may result in increased operating costs.



#### **Selection of air conditioner**

Each split air conditioner consists of two components: an outdoor unit and an indoor unit. The first one is installed outside the building, the second one – inside the room.

The principle of the air conditioner operation is based on the physical properties of the refrigerant, which in the case of Kaisai appliances is an ecological refrigerant – R32. Depending on the operating mode of the air conditioner, the refrigerant condenses or evaporates in the indoor unit, releasing heat to or extracting it from the environment accordingly. This way, the air in the room is heated or cooled, and thanks to the system of filters, the air is also purified.

The unit does not blow additional air from the outside, but only cools the air inside. It protects the health of the residents, especially when the air is polluted by the smog.

### HINTS HEAT PUMP

# Heat pump – benefits

Heat pumps, by using the energy stored in the air, are able to heat your house and provide the domestic hot water. Operation of heat pump is made possible by a refrigerant that circulates in a closed circuit and transfers the heat from the environment into the building.

#### Low operating costs

Heat pumps make a substantial contribution to a significant reduction of the house operating costs. The costs of room heating and domestic hot water (DHW) can be reduced up to four-fold by means of the heat pump. By using the pump, we also reduce the maintenance costs of the system, among other things because there is no need for the chimney inspection.

#### Resident comfort

Heat pumps are the ideal solution because they provide comfort of operation thanks to the automation features. Convenient indoor temperature and desired domestic water parameters are set up using an intuitive controller. The user does not have to worry about turning on/off the heating system - the unit automatically maintains thermal comfort all year round.

#### Safe operation

Heat pumps are a very safe solution as they do not pose a fire hazard or a risk of gas escaping or exploding when compared to traditional domestic heating appliances. You do need to worry about gas sensors and you can sleep peacefully.

#### Green energy source

Heat pumps are one of the ecological sources of energy, because instead of coal, gas or oil they make use of the air potential, using refrigerants that have a much smaller impact on the environment than non-renewable energy sources. The electricity supply also allows the use of home photovoltaics in the so-called "passive house system" (i.e. the system does not consume energy from outside).





An incredible advantage of air-to-water heat pumps is the fact that even 75-80% of the heat going to the heating system is free heat, obtained from the outdoor air. The remaining 20-25% is electric energy needed mainly for compressor and heating system circulation pumps.

#### Comfort all year round

The heat pump transfers the heat from the air to the water, heating up the water. The cold air coming out of the pump can be used to cool rooms, e.g. storerooms or technical facilities.

#### **Reducing CO<sub>2</sub> emissions**

Heat pumps are an ideal alternative to gas and coal boilers, helping to reduce CO<sub>2</sub> emissions to the atmosphere. The units operate at the time indicated by the user and do not produce smoke, ash or any other harmful substances.

# HINTS AIR CURTAINS

# Air curtains – useful information



#### Description of operation

Air curtains are mounted above the entrance door. They create a strong stream of cold or warm air directed downwards, which prevents the inflow of air from outside the building and also creates an air barrier against dust, smoke and insects.



#### Benefits of air curtains

Air curtains are small but functional devices, which allow you to save energy by maintaining a constant temperature and avoiding unpleasant draughts inside a premise.

Their application makes air conditioning more effective and definitely cheaper to use both in cooling mode (does not allow for mixing with air from outside) and heating mode (prevents the flow of heat out of the room).

Air curtains are especially recommended for service premises and retail outlets – they reduce air conditioning bills in summer and heating bills in winter.

### HINTS ECOLOGY AND ECONOMY

# Environmental protection

#### GWP-what is it?

Greenhouse potential (GWP – Global Warming Potential) is a figure expressing the global warming potential of a refrigerant if released into the atmosphere. This is a relative value that compares the effect of 1 kg of refrigerant with the effect of 1 kg CO<sub>2</sub> per 100 years.

#### ODP - what is it?

Ozone Depletion Potential is an indicator of the harmfulness of chemical substances for the ozone layer. It is a value comparing the influence of a given refrigerant with the analogous mass of R11 refrigerant. The ODP value of R11 refrigerant is defined as 1, the modern refrigerant – R32 – has the potential defined as 0.

# **R32**

Environmentally friendly refrigerant R32, available in the entire Kaisai product range

Kaisai currently applies the latest environmentally friendly refrigerant – R32 – in its products. It is more efficient than refrigerants applied before, so that the air-conditioning system requires less refrigerant volume and has significantly better environmental impact factors. It is a modern solution that takes into account both ecological needs and the economy of application.

#### Main characteristics of R32 refrigerant

#### ECOLOGICAL

R32 has the lowest GWP coefficient available on the market, equal to 675, and does not cause damage to the ozone layer, thanks to the ODP coefficient equal to 0. Compared to older solutions, it has as much as 75% less impact on global warming. What is more, it can also be recycled.

#### ECONOMICAL

Compared to R410A, R32 has a higher energy efficiency, so the air conditioning system requires less energy and the efficiency of the equipment increases by up to 10%.

#### SAFE

The R32 has low toxicity and low flammability – it does not pose a threat to life and health even in the event of leaks in the installation.

# 20/20/20 program

Kaisai follows the assumptions of the energy and climate change package, which assumes an increase in the consumption of energy from renewable sources and an increase in energy efficiency by 20% and a reduction in  $CO_2$  emissions by 20% by 2020. Directive 2009/125/EC adopted by the European Union concerns the rules for setting requirements for Energy-related Products (ErP). From 1 January 2013, the provisions of the Directive apply to air conditioners with a cooling capacity of less than 12 kW.



greenhouse gases



Reducing primary energy consumption



Increasing the share of renewable energy sources



# **R290**

Safe and environmentally friendly refrigerant available in portable air conditioners

The refrigerant – R290 – is known as propane, a colorless, odorless organic compound belonging to the group of saturated hydrocarbons existing in natural gas fields.

Devices based on propane have been successfully operating in various countries of the European Union for many years. The propane popularity is steadily increasing due to its low environmental impact while maintaining very good thermodynamic properties. The R290 factor has a zero ODP, which means no negative impact on the ozone layer, and an exceptionally low GWP, which indicates the global warming potential. Propane is a combustible gas and has a flammability limit of 2.1% by volume in the air. This means that with 230g of R290 in Kaisai appliances and special fireproofing, it is also safe for use in confined spaces.

R290 has a low sensitivity to moisture and does not cause corrosion, so it can operate in refrigeration systems equipped with both hermetic and semi-hermetic compressor units.



### HINTS ECOLOGY

#### Energy efficiency class

Energy labels shall be affixed to any electrical household appliance sold in the European Union. This is regulated by the special EU Directive 2010/30/EU. Labels inform the user about the quality of the product, taking into account its energy efficiency. The label ensures that everyone before the purchase decision can find out which unit will be the cheapest to operate. The energy efficiency rating, also referred to as the energy class, is indicated by the letters: for air conditioners, a scale from G (lowest) to A++++ (highest) has been determined. We also use energy efficiency coefficients to assess energy savings: SEER for cooling and SCOP for heating. These factors determine the ratio of the cooling/heating power achieved by the air conditioner to the electrical power drawn by the unit from the mains during an entire season. Units with SEER=6 and SCOP=4 (class A++) from 1 kW of electricity on average per season can generate 6 kW of cooling energy or 4 kW of heat energy and can be up to 4 times cheaper in operation than fans and electric heaters.

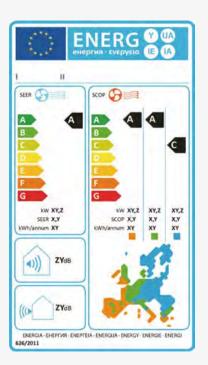
10-grade energy efficiency scale (from A++++ to G)

Power efficiency for cooling and heating

Efficiency determination based on calculations of multiple features, corresponding to the actual power consumption of the machine during operation

#### Sound power level

Data for 3 seasons (moderate - required, hot and cold - optional)



	SEER (cooling)	SCOP (heating)
A***	SEER ≥ 8.50	SCOP ≥ 5.10
<b>A</b> <sup>++</sup>	6.10 ≤ SEER < 8.50	4.60 ≤ SCOP < 5.10
A	5.60 ≤ SEER < 6.10	4.00 ≤ SCOP < 4.60
A	5.10 ≤ SEER < 5.60	3.40 ≤ SCOP < 4.00
В	4.60 ≤ SEER < 5.10	3.10 ≤ SCOP < 3.40
C	4.10 ≤ SEER < 4.60	2.80 ≤ SCOP < 3.10
D	3.60 ≤ SEER < 4.10	2.50 ≤ SCOP < 2.80
E	3.10 ≤ SEER < 3.60	2.20 ≤ SCOP < 2.50
F	2.60 ≤ SEER < 3.10	1.90 ≤ SCOP < 2.20
G	SEER < 2.60	SCOP < 1.90

CURRENT ENERGY LABEL Valid from 1 January 2013. Air conditioners up to 12 kW

### HINTS UNIT FUNCTIONS

# Featured **functions**





# Operation at **low outdoor** temperatures

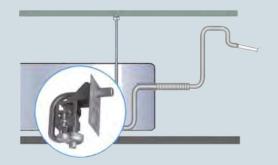
Thanks to the specially designed control board, the air conditioner can operate as a cooling function even at outdoor temperatures down to  $-15^{\circ}$ C.



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#### Built-in condensate pump

Thanks to the integrated pump, condensate can be removed up to a height of 750 mm.

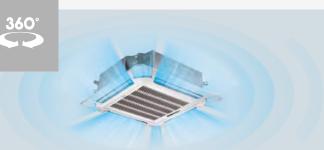


#### **Temperature sensor**



The temperature sensor is built into the remote control. Thanks to this, the temperature measurement is performed close to the resident, while the operation of the air conditioner is adjusted to the actual room conditions.





#### 360° air supply

Cassette air conditioners are equipped with additional supply air slots in the panel. This design ensures 360° fan operation which provide even better air distribution in an air-conditioned room.

## HINTS UNIT FEATURES



#### Automatic restart

In case of the units equipped with the automatic restart function, the air conditioner remembers the last settings when the power supply is interrupted and automatically restores them when power is resumed.





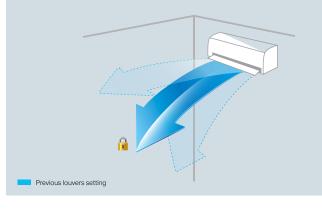
#### Indication of refrigerant leakage

The air conditioner has a refrigerant leakage indication function. If the unit detects a leak, the indoor unit display shows EC message and the air conditioner is automatically switched off. This function also protects the compressor against damage.



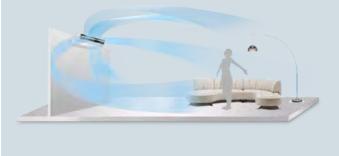
#### Memory of louvers settings

Thanks to the louvers settings saving function, after each shutdown the air conditioner retains the last settings and restores them after restarting.



#### 3D air flow

Horizontal and vertical louvers are controlled automatically and ensure uniform temperature distribution in a room as well as optimum air circulation.





#### **Emergency** use

The emergency function of the air conditioner allows the unit to operate even if one of the sensors has failed. Thanks to this solution, operation of the air conditioner is not interrupted and it can operate until the fault is rectified.



#### Fresh air

The outdoor air can be supplied via a connecting duct to the air conditioner, thus improving the thermal comfort in the room.

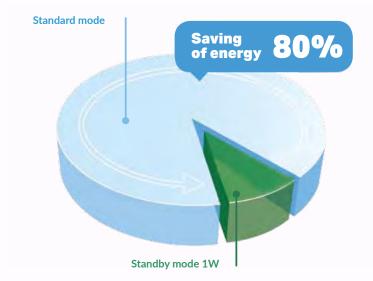
#### Central **controller**



Possibility of connecting a central controller, controlling up to 64 indoor units.



## HINTS UNIT FEATURES





#### Standby mode

In standby mode, the power supply is disconnected from unused electronic components, reducing power consumption to 1W. Compared to standard devices that consume 5W on average in standby mode, it saves about 80% of energy.



#### Constant heating 8°C

The function of maintaining a constant temperature of 8°C in heating mode is a solution especially useful in bungalows/ camping pods and detached houses.

It keeps the air conditioner at a constant temperature of up to 8°C; it prevents rooms from cooling down and pipes from freezing. This prevents the build-up of moisture and thus the development of microorganisms and fungi. Air conditioners with this option are more efficient solution than commonly used electric heaters with thermostats.

This is what distinguishes Kaisai home air conditioners in their class. Combined with the Smart AC function and the ability to set the temperature at a distance, this makes our products ideal for users who are often away from home.

#### Twin system

The TWIN system allows you to connect two indoor units of the same power level to a single outdoor unit.

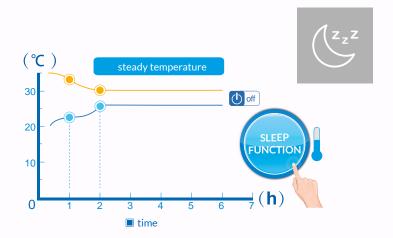
The system consists of an outdoor unit with a cooling capacity of 10.6 or 14.0 kW, a T-piece separating the refrigerant flow and two indoor units with a capacity of 5.3 kW or 7.0 kW. They work simultaneously, so they are ideal for air conditioning of large rooms such as conference and banquet rooms, open space offices, restaurants and other service and commercial facilities. Equal operation of two air conditioners makes it easier to maintain uniform temperature throughout the room. This solution, like the Multi Split system, also saves space, by using a single outdoor unit.

The Twin system can be used with Kaisai air conditioners: floor and ceiling air conditioners, Slim duct air conditioners, Super Slim cassette air conditioners.



#### Sleep function

Activating the sleep function causes the unit to increase the set temperature by 1°C per hour in cooling mode (to decrease – in heating mode) within two hours. During this time the fan is running at low speed. The air conditioner switches off after 5 hours. Slow, unnoticeable temperature change and automatic shutdown guarantee comfort and energy saving.



### HINTS UNIT FEATURES

# **Breathe** clean air

#### For the sake of **air quality**

Modern filters used in Kaisai products guarantee clean and fresh air in an air-conditioned room. The filters capture very small dust particles, bacteria, fungi and germs, leaving a healthy and clean air.



#### Self-cleaning of heat exchanger

In order to ensure the highest hygienic standards and comfort of use, Kaisai brand appliances use the latest self-cleaning technology of the internal heat exchanger.

After operation, the air conditioner switches to the cleaning mode. During the process, it removes moisture accumulated in the unit, which prevents the growth of microorganisms and fungi.

Kaisai air conditioners are designed for the sake of health and comfort of users.

#### Filter with silver ions

The silver ion filter is designed to destroy bacteria and prevent the development of microorganisms such as viruses and fungi. The internal structure of silver ions destroys microorganisms.



#### Filter with C vitamin

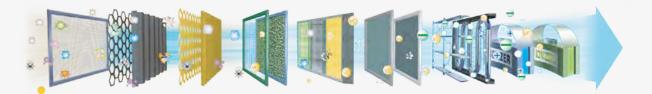
The filter emits vitamin C, which has a positive effect on the skin, protecting it from the sun's rays. As an active antioxidant, vitamin C has a nourishing effect, stimulates collagen production and reduces stress.





#### Catalytic filter

By using a multilayer catalyst layer and a fiber layer, the filter removes harmful particles and unpleasant odors from the air. It also eliminates volatile formaldehyde particles and harmful organic compounds.



#### High-density filter

Application of high density filters significantly increases the efficiency of dirt trapping – by up to 50%.

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#### **3M** filter

Thanks to its unique design, the filter captures dust particles and other harmful substances from the air, which can cause respiratory diseases.

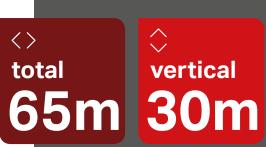


# HINTS UNIT FEATURES

# **Modern** technologies

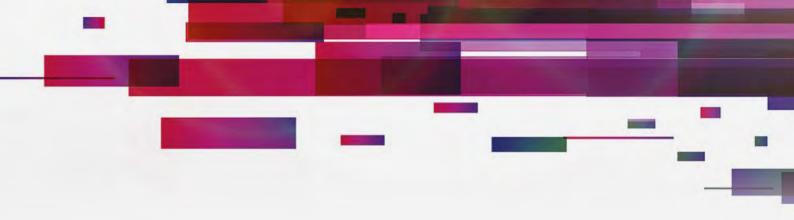
Kaisai units are characterized by high quality of workmanship and application of modern technologies – all for the convenience of the user. Efficient and comfortable air conditioning is now available for everyone.





#### **Total installation length**

Kaisai's Split range units enable installation of indoor and outdoor units at a large distance from each other – up to 65 m in total and up to 30 m vertically. This makes it much easier to plan even in older buildings. You don't have to adjust the design of your house to the air-conditioning system – we adapt it to your needs.



#### **Operating** temperature:

Thanks to modern technology and the new R32 refrigerant, Kaisai air conditioners can operate in a wide range of outdoor temperatures: -15°C to 50°C in cooling mode and -25°C to 30°C in heating mode.

They can do their job all year round, providing users with cooling comfort in summer and additional heating in winter.





#### Dimensions and design

We make every effort to ensure that Kaisai appliances follow the latest trends in design: we want the air conditioner to be neatly shaped and in line with the trend of modern interior design.

In addition, when designing indoor cassette and duct units, we take into account the space occupied by the equipment. Thanks to the optimal size of the devices, the suspended ceiling does not require much technical space and thus leaves more room for use.

## HINTS UNIT FEATURES

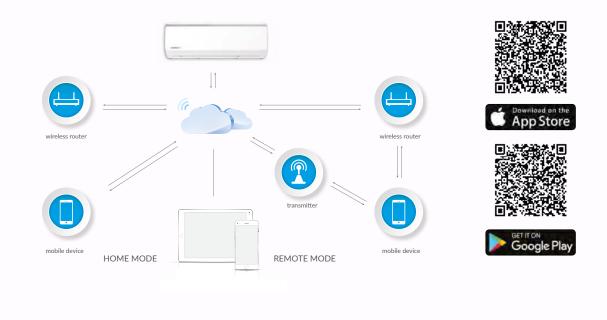


Kaisai products comprise number of features improving the usage comfort, for example, new control options, so that managing the air conditioning has never been so convenient and easy.

#### **Smart AC**

Smart AC is a WiFi module that comes as standard with all Kaisai wall-mounted air conditioners. Thanks to its application, the user can control the device through an application installed on a tablet or smartphone, also while away from home or office.

Using the WiFi function, the user can turn the device on or off, change the temperature and some operating functions from anywhere in the world, where there is Internet access. Control via WiFi allows you to save electricity and improve the comfort of operating air conditioning system by controlling the temperature in the apartment or office from any location.



# Product range



# Split air conditioners

Compact dimensions provide a subtle, elegant look, and a number of unit types allow them to be adapted to different types of interiors – both at home, in offices and in retail outlets.



## Portable air conditioners

56

Portable air conditioners are used where it is not possible to install split air conditioners. Thanks to their modern design, they are suitable for home and office interiors.



# **62** Multi Split systems

These systems are recommended for buildings requiring air conditioning in many rooms. All the advantages of split-type devices with a single outdoor unit are retained.



## 68 Air curtains

Air curtains are an important addition to air conditioning in commercial premises. By creating an outdoor air barrier, they reduce the energy consumption of the air conditioning system and increase the comfort of the air in passageways.



76 Heat pumps

Air-to-water heat pumps use the energy stored in the air to heat the building and to achieve high temperatures for domestic hot water. They are an economic and ecological solution for everyone.

## 80 Controllers

Kaisai's wide range of controllers allows you to conveniently adjust the air conditioners to your needs. Wired controllers, wireless remote controls and the Smart AC – WiFi function allow you to comfortably use and adjust the operation of air conditioners for the most demanding users.





# **FIJ** wall-mounted air conditioners

#### KWX 09 | 12 | 18 | 24 HRDI



The Kaisai Fly energy-saving wall-mounted air conditioner with R32 refrigerant combines elegance with functionality. Its universal, timeless design makes it suitable for any interior.

The device enables effective operation in the heating mode at outdoor temperature even down to -25°C. WiFi function as standard increases the convenience of air conditioning control, and a modern wireless remote control allows you to use 3 additional functions: evaporator self-cleaning (Self Clean), continuous heating 8°C (Heating 8°C) and temperature sensor in the remote control (Follow Me).

#### KWX 09 | 12 | 18 | 24 HRDI

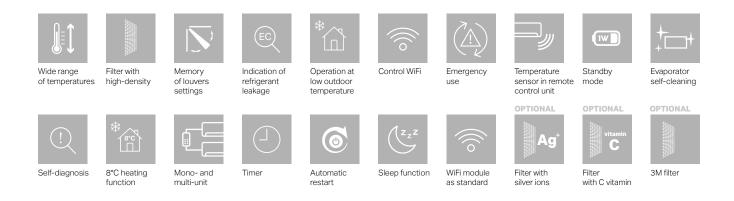


excellent solution for bedroom, sitting room or office



#### UNIT FUNCTIONS

38



MODEL	indoor unit		KWX-09HRDI	KWX-12HRDI	KWX-18HRDI	KWX-24HRDI
MODEL	outdoor unit		KWX-09HRDO	KWX-12HRDO	KWX-18HRDO	KWX-24HRDO
Capacity	cooling	kW	2.6(0.9÷3.4)	3.5(1.1÷4.2)	5.3(1.8÷6.1)	7.0(2.1÷7.9)
average (min-max)	heating	kW	2.9(0.8÷3.4)	3.8(1.1÷4.2)	5.6(1.4÷6.7)	7.3(1.6÷8.8)
Energy class	cooling/heat	ing	A++/A+	A++/A+	A++/A+	A++/A+
SEER	average	W/W	6.2	6.1	7.1	6.1
SCOP	average	W/W	4	4	4	4
Power input	cooling	W	710(100÷1,240)	1,237(130÷1,580)	1,539(140÷2,360)	2,345(160÷2,960)
average (min-max)	heating	W	739(120÷1,200)	964(100÷1,580)	1,480(200÷2,410)	2,035(260÷3,140)
Operation current	cooling	A	3.1(0.4÷5.4)	5.4(0.5÷6.9)	6.9(0.6÷10.3)	10.2(0.7÷13.3)
average (min-max)	heating	A	3.2(0.5÷5.2)	4.2(0.4÷6.9)	6.4(0.9÷10.5)	10.2(1.1÷13.3)
	indoor	m³/h	520/460/360	600/500/360	840/680/540	980/817/662
Air flow	outdoor	m³/h	1,700	1,700	2,500	3,000
Operating temperature	indoor	°C	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30
cooling/heating	outdoor	°C	-15÷50/-25÷30	-15÷50/-25÷30	-15÷50/-25÷30	-15÷50/-25÷30
Sound pressure level	indoor	dB(A)	40/30/26/21	40/34/26/22	44/37/30/25	44.5/42/34.5/28
	outdoor	dB(A)	55.5	56	56	59.5
	indoor	mm	805/285/194	805/285/194	957/302/213	1,040/327/220
Net dimensions w/h/d	outdoor	mm	700/550/275	700/550/275	800/554/333	845/702/363
	indoor	mm	870/360/270	870/360/270	1035/380/295	1,120/310/405
Transport dimensions w/h/d	outdoor	mm	815/615/325	815/615/325	920/615/390	965/765/395
<b>.</b>	indoor	kg	7.5	7.5	10	12.3
Net weight	outdoor	kg	22.7	22.7	34	51.5
	indoor	kg	9.7	9.7	13	15.8
Transport weight	outdoor	kg	25.2	25.2	36.7	54.5
Pipe diameter: liquid/gas		mm	6.35/9.52	6.35/9.52	6.35/12.7	9.52/15.9
Total length of installation		m	25	25	30	50
Max. level difference		m	10	10	20	25
Power supply	outdoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Circuit breaker/fuse	outdoor	A	10	16	16	20
Power supply lines	outdoor	# of wires x mm <sup>2</sup>	3x1.5	3x1.5	3x2.5	3x2.5
Control lines	ind outd.	# of wires x mm <sup>2</sup>	5x1.5	5x1.5	5x1.5	5x1.5
Factory amount of refrigerant	up to 5 rm	kg	0.5	0.5	1	1.6
Additional amount of refrigerant	over 5 rm	g/m	12	12	12	24
NET PRICE EUR			672	718	1141	1485

#### ACCESSORIES AND CONTROLLERS



WIRELESS CONTROL UNIT



wired controller KJR12B (optional)



WIRED CONTROLLER KJR90A (OPTIONAL)



## **kue** floor/ceiling air conditioner

KUE 18 | 24 | 36 | 48 | 55 HRF32

Universal air conditioners that are ideal for rooms without suspended ceilings.

They are characterized by a three-dimensional supply of air through the automatic control of the louvers, which ensures optimal air circulation and uniform temperature distribution. The timer gives the possibility to set the time of automatic switching on and off the air conditioner. To minimize the feeling of an unpleasant, cool airflow, the air conditioner starts in heating mode and automatically reduces the fan speed until the heat exchanger is heated.

Α+

**R32** 

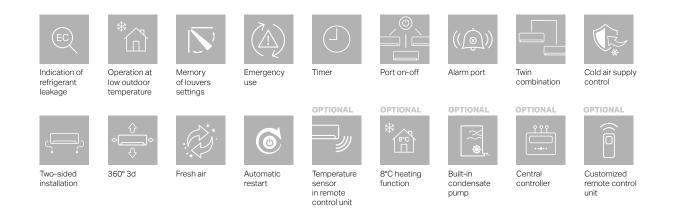
#### KUE 18 | 24 | 36 | 48 | 55 HRF32



it will work effectively in office, as well as in house



#### UNIT FUNCTIONS



	indoor unit		KUE-18HRF32	KUE-24HRF32	KUE-36HRF32	KUE-48HRF32	KUE-55HRF32
MODEL	outdoor unit		KOB30U -18HFN32	KOCA30U -24HFN32	KOD30U -36HFN32	KOE30U- 48HFN32	KOE30U- 55HFN32
Capacity	cooling	kW	5.3(1.3÷6.1)	7.0(2.2÷8.2)	10.5(2.6÷12.0)	14.2(5.0÷15.1)	15.9(5.3÷17.0)
average (min-max)	heating	kW	5.6(1.8÷7.0)	7.6(2.4÷8.6)	11.1(2.9÷13.2)	16.1(3.8÷18.0)	18.2(4.4÷19.6)
Energy class	cooling/heati	ing	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+
SEER	average	W/W	6.1	6.1	6.1	6.1	6.1
SCOP	average	W/W	4	4	4	4	4
Power input	cooling	W	1,640(280÷2,150)	2,190(480÷2,850)	3,950(660÷4,500)	5,500(1,158÷5,703)	6,063(1,227÷6,296
average (min-max)	heating	W	1,500(330÷2,180)	2,050(500÷2,880)	3,000(6,500÷4,550)	5,050(1,026÷6,200)	6,036(1,022÷6,546
Operation current	cooling	A	7.1(1.2÷9.3)	9.5(2.1÷12.4)	7.2(1.2÷8.2)	9.1(1.8÷9.3)	10.5(1.9÷10.3)
average (min-max)	heating	A	6.5(1.4÷9.5)	8.9(2.2÷12.5)	5.2(1.5÷8.3)	8.1(1.6÷10.3)	9.9(1.6÷10.8)
	indoor	m³/h	902/786/677	1,208/1,066/853	2,160/1,844/1,431	2,329/1,930/1,417	2,454/1,834/1,420
Air flow	outdoor	m³/h	2,100	2,700	4,000	7,500	7,500
Operating temperature	indoor	°C	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30
cooling/heating	outdoor	°C	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24
	indoor	dB(A)	45/40/37	50/46/41	51/47/42	54/50/46	54/47/42
Sound pressure level	outdoor	dB(A)	57	62	64	66	66
	indoor	mm	1,068/675/235	1,068/675/235	1,650/675/235	1,650/675/235	1,650/675/235
Net dimensions w/h/d	outdoor	mm	800/554/333	845/702/363	946/810/410	952/1,333/410	952/1,333/410
Transport dimensions	indoor	mm	1,145/755/313	1,145/755/313	1,725/755/313	1,725/755/313	1,725/755/313
w/h/d	outdoor	mm	920/615/390	965/765/395	1,090/865/500	1,095/1,470/500	1,095/1,470/500
<b>N</b>	indoor	kg	26.6	26.8	39	41.2	41.4
Net weight	outdoor	kg	35.6	66.8	81.5	106.7	111.3
	indoor	kg	31.8	31.9	45	47.6	47.8
Transport weight	outdoor	kg	38.5	72.6	87	119.9	124.3
Pipe diameter: liquid/gas		mm	6.35/12.7	9.52/15.9	9.52/15.9	9.52/15.9	9.52/15.9
Max. length of installation	1	m	30	50	65	65	65
Max. level difference		m	20	25	30	30	30
	indoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Power supply	outdoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1	380÷420/50/3	380÷420/50/3	380÷420/50/3
Circuit breaker/fuse	outdoor	A	16	20	16	16	16
<b>D</b>	indoor	# of wires x mm <sup>2</sup>	3x1.5	3x1.5	3x1.5	3x1.5	3x1.5
Power supply lines	outdoor	# of wires x mm <sup>2</sup>	3x2.5	3x2.5	5x2.5	5x2.5	5x2.5
Control lines	ind. outd.	# of wires x mm <sup>2</sup>	2x0.5 shielded	2x0.5 shielded	2x0.5 shielded	2x0.5 shielded	2x0.5 shielded
Factory amount of refrigerant	up to 5 rm	kg	1.35	1.5	2.4	2.8	2.95
Additional amount of refrigerant	over 5 rm	g/m	12	24	24	24	24
Ext. diameter of the cond	lensate drain	mm	25	25	25	25	25

#### ACCESSORIES AND CONTROLLERS



WIRELESS CONTROL UNIT





WIRED CONTROLLER KJR90A (OPTIONAL)



CENTRAL CONTROLLER CCM03 (optional)



## kca compact cassette air conditioners

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27

#### KCA3U 12 | 18 HRF32X

Cassette air conditioners are perfect for offices, conference rooms or other large rooms that require efficient air conditioning.

> Compact cassette air conditioners are equipped with an indoor unit with a quiet fan and a peripheral air supply. They are characterized by high efficiency and high comfort of use.

> > They have a function of supplying fresh air and the possibility of connecting an additional air supply duct to the adjacent room.



#### KCA3U 12 | 18 HRF32X



#### UNIT FUNCTIONS



Fresh air



Automatic restart



Emergency use





Self-diagnosis Mono and multi



OPTIONAL

Temperature

sensor in remote control unit

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OPTIONAL

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8°C heating function





Cold air flow control



Central controller Customized remote control unit

KAISAI AIR CONDITIONING SYSTEM

46

Temperature

sensor

MODEL	indoor unit		KCA3U-12HRF32X	KCA3U-18HRF32X
NODEL	outdoor unit		KOB30-12HFN32X	KOB30-18HFN32X
Capacity	cooling	kW	3.5(1.52÷5.28)	5.3(2.9÷5.74)
average (min-max)	heating	kW	4.4(1.03÷5.57)	5.4(2.37÷6.10)
Energy class	cooling/heating		A++/A++	A++/A+
SEER	average	W/W	7.8	6.1
SCOP	average	W/W	4.6	4
Power input	cooling	W	850(350÷1,600)	1,633(720÷1,860)
average (min-max)	heating	W	1,100(310÷1,800)	1,460(700÷1,930)
Operation current	cooling	A	3.8(1.6÷7.1)	7.2(3.2÷8.2)
average (min-max)	heating	A	5.0(1.4÷7.9)	6.4(3.1÷8.5)
	indoor	m³/h	617/504/416	720/625/540
Air flow	outdoor	m³/h	2,000	2,100
Operating temperature	indoor	°C	17÷32/0÷30	17÷32/0÷30
cooling/heating	outdoor	°C	-15÷50/-15÷24	-15÷50/-15÷24
	indoor	dB(A)	41/36/33	42.5/39/35.5
Sound pressure level	outdoor	dB(A)	60	55
	indoor	mm	570/260/570	570/260/570
let dimensions w/h/d	outdoor	mm	647/50/647	647/50/647
	panel	mm	800/554/333	800/554/333
	indoor	mm	662/317/662	662/317/662
Fransport dimensions	outdoor	mm	715/123/715	715/123/715
wniva	panel	mm	920/615/390	920/615/390
	indoor	kg	16/2.5	16/2.5
ansport dimensions /h/d et weight ansport weight	outdoor	kg	34.7	35.5
	indoor	kg	21.4/4.5	21.4/4.5
Iransport weight	outdoor	kg	37.5	38.5
Pipe diameter: liquid/gas		mm	6.35/9.52	6.35/12.7
Max. length of installation		m	25	30
Max. level difference		m	10	20
	indoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1
Power supply	outdoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1
Circuit breaker/fuse	outdoor	А	16	16
	indoor	# of wires x mm <sup>2</sup>	-	-
Power supply lines	outdoor	# of wires x mm <sup>2</sup>	3x2.5	3x2.5
Control lines	indoor outdoor	# of wires x mm <sup>2</sup>	5x1.5	4x1.5
Factory amount of refrigerant	up to 5 rm	kg	0.87	1.35
Additional amount of refrigerant	over 5 rm	g/m	12	12
Ext. diameter of the condensate d	rain	mm	25	25

#### ACCESSORIES AND CONTROLLERS





## **kcd** super slim cassette air conditioners

A<sup>+</sup>+

**R32** 

#### KCD 24 | 36 | 48 | 55 HRF32

Universal air conditioners, which are ideal for use in rooms with suspended ceilings with particularly low technical space.

Cassette air conditioners are equipped with additional supply air gaps in the panel. Thanks to this design, the 360° fan operation can provide even better air distribution in an air-conditioned room.

Super Slim cassette units can work in Twin system, making it easier to maintain uniform temperature in the room.





#### KCD 24 | 36 | 48 | 55 HRF32



#### UNIT FUNCTIONS



360

360° air flow



Fresh air





6

Automatic

restart

Built-in condensate pump

Self-diagnosis



OPTIONAL

sensor in remote control unit 8°C heating

OPTIONAL





Cold air flow control



Central controller Customized remote control unit

50

Temperature

compensation

MODEL	indoor unit		KCD-24HRF32	KCD-36HRF32	KCD-48HRF32	KCD-55HRF32
MODEL	outdoor unit		KOCA30U-24HFN32	KOD30U-36HFN32	KOE30U-48HFN32	KOE30U-55HFN32
Capacity	cooling	kW	7.0(2.2÷8.2)	10.5(2.6÷12.0)	14.0(4.8÷14.6)	15.7(5.3÷16.7)
average (min-max)	heating	kW	7.6(2.4÷8.6)	11.1(2.9÷13.2)	16.1(3.9÷16.8)	18.2(4.4÷19.3)
Energy class	cooling/heatin	g	A++/A+	A++/A+	A++/A+	A++/A+
SEER	average	W/W	6.1	6.1	6.1	6.1
SCOP	average	W/W	4	4	4	4
Power input	cooling	W	2,190(480÷2,850)	3,950(660÷4,500)	5,130(1,174÷5,602)	5,951(1,147÷6,682)
average (min-max)	heating	W	2,050(500÷2,880)	3,000(650÷4,550)	5,050(987÷5,378)	6,036(1,022÷6,448)
Operation current	cooling	А	9.5(2.1÷12.4)	7.2(1.2÷8.2)	8.3(1.8÷9.3)	9.8(1.8÷11.0)
average (min-max)	heating	А	8.9(2.2÷12.5)	5.5(1.2÷8.3)	8.2(1.6÷8.8)	9.9(1.6÷10.6)
	indoor	m³/h	1,378/1,200/1,032	1,775/1,620/1,438	1,715/1,568/1,381	1,970/1,737/1,537
Air flow -	outdoor	m³/h	2,700	4,000	7,500	7,500
Operating temperature	indoor	°C	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30
cooling/heating	outdoor	°C	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24
	indoor	dB(A)	47/43/40	52/49/46	52/50/49	53/50/48
Sound pressure level	outdoor	dB(A)	62	64	66	66
	indoor	mm	840/245/840	840/245/840	840/287/840	840/287/840
Net dimensions w/h/d	outdoor	mm	950/55/950	950/55/950	950/55/950	950/55/950
	panel	mm	845/702/363	946/810/410	952/1,333/410	952/1,333/410
	indoor	mm	900/265/900	900/265/900	900/292/900	900/292/900
Transport dimensions	outdoor	mm	1,035/90/1,035	1,035/90/1,035	1,035/90/1,035	1,035/90/1,035
w/h/d	panel	mm	965/765/395	1,090/865/500	1,095/1,470/500	1,095/1,470/500
	indoor	kg	23/5	27.5/5	29/5	29.7/5
Net weight	outdoor	kg	66.8	81.5	106.7	111.3
	indoor	kg	27/8	31/8	32.7/8	33.4/8
Transport weight	outdoor	kg	72.6	87	119.9	124.3
Pipe diameter: liquid/gas		mm	9.52/15.9	9.52/15.9	9.52/15.9	9.52/15.9
Max. length of installation		m	50	65	65	65
Max. level difference		m	25	30	30	30
	indoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Power supply	outdoor	V/Hz/Ph	220÷240/50/1	380÷420/50/3	380÷420/50/3	380÷420/50/3
Circuit breaker/fuse	outdoor	А	20	16	16	16
	indoor	# of wires x mm <sup>2</sup>	3x1.5	3x1.5	3x1.5	3x1.5
Power supply lines	outdoor	# of wires x mm <sup>2</sup>	3x2.5	5x2.5	5x2.5	5x2.5
Control lines	indoor outdoor	# of wires x mm <sup>2</sup>	2x0.5 shielded	2x0.5 shielded	2x0.5 shielded	2x0.5 shielded
Factory amount of refrigerant	up to 5 rm	kg	1.5	2.4	2.8	2.95
Additional amount of refrigerant	over 5 rm	g/m	24	24	24	24
Ext. diameter of the condens		mm	32	32	32	32
Ext. diameter of the condens			02			

#### ACCESSORIES AND CONTROLLERS





# slim duct air conditioners

#### KTI 18 | 24 | 36 | 48 | 55 HWF32

Duct air conditioners are suitable for use in large objects. Their advantage is the ability to distribute air freely through ducts and diffusers in the entire room.

The Slim series of duct air conditioners is characterized by a significant available compression – 160 Pa with low noise level. The unit has a lower height than a standard channel unit, so that it can be installed in a small space in the suspended ceiling.

Thanks to the use of modern technology, the air conditioner automatically adjusts the static pressure and maintains a constant flow of air.

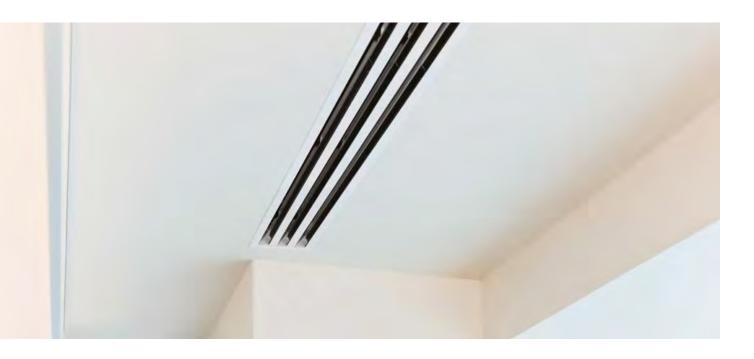


**A**<sup>+</sup>+

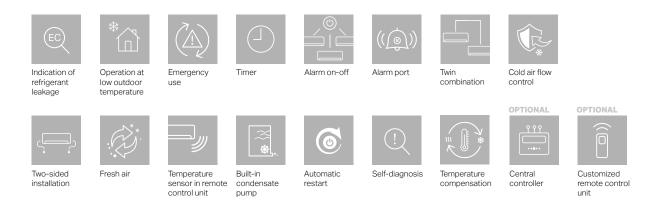
**R32** 

efficient and discrete unit for home and office





#### UNIT FUNCTIONS



	indoor unit		KTI-18HWF32	KTI-24HWF32	KTI-36HWF32	KTI-48HWF32	KTI-55HWF32
MODEL	outdoor unit		KOB30U- 18HFN32	KOCA30U -24HFN32	KOD30U -36HFN32	KOE30U- 48HFN32	KOE30U- 55HFN32
Capacity	cooling	kW	5.3(1.2÷6.1)	7.0(2.2÷8.2)	10.5(2.6÷12.0)	14.0(4.3÷15.2)	15.4(5.9÷17.3)
average (min-max)	heating	kW	5.6(1.8÷7.0)	7.6(2.4÷8.6)	11.1(2.9÷13.2)	16.1(3.7÷18.0)	18.2(4.7÷20.5)
Energy class	cooling/heatir		A++/A+	A++/A+	A++/A+	A++/A+	A++/A+
SEER	average	 	6.1	6.1	6.1	6.1	6.1
SCOP	average	W/W	4	4	4	4	4
Power input	cooling	W	1,640(280÷2,150)	2,190(480÷2,850)	3,950(660÷4,500)	5,150(1,170÷5,699)	5,423(1,274÷6,651
average (min-max)	heating	W	1,500(330÷2,180)	2,050(500÷2,880)	3,000(650÷4,550)	4,280(1,048÷6,124)	-
Operation current	cooling	A	7.1(1.2÷9.3)	9.5(2.1÷12.4)	7.2(1.2÷8.2)	8.3(1.8÷9.4)	8.93(2.0÷11.0)
average (min-max)	heating	A	6.5(1.4÷9.5)	8.9(2.2÷12.5)	5.5(1.2÷8.3)	6.8(1.65÷10.22)	8.8(1.6÷9.9)
	indoor	m³/h	1,006/853/684		1,400/1,150/750	2,400/2,040/1,680	2,600/2,210/,1820
Air flow	outdoor	m³/h	2.100	2,700	4.000	7,500	7,500
Available compression		Pa	25/100	25/160	37/160	50/160	50/160
Operating temperature	indoor	°C	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30	17÷32/0÷30
cooling/heating	outdoor	°C	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24
	indoor	dB(A)	44/42/40	44/42/40	47/43/40	50.5/49.5/48	54/52/50.5
Sound pressure level	outdoor	dB(A)	57	62	64	66	66
	indoor	mm	880/210/674	1.100/249/774	1.360/249/774	1.200/300/874	1.200/300/874
Net dimensions w/h/d	outdoor	mm	800/554/333	845/702/363	946/810/410	952/1,333/410	952/1,333/410
Transport dimensions	indoor	mm	1.070/270/725	1.305/305/805	1,570/305/805	1,405/355/915	1,405/355/915
w/h/d	outdoor		920/615/390	965/765/395	1,090/865/500	1,095/1,470/500	1,095/1,470/500
	indoor	kg	25.6	31.5	40.5	47.6	47.6
Net weight	outdoor	kg	35.6	66.8	81.5	106.7	111.3
	indoor	kg	31.4	38.9	48.5	55.8	55.8
Transport weight	outdoor	kg	38.5	72.6	87	119.9	124.3
Pipe diameter: liquid/gas	outdoor	mm	6.35/12.7	9.52/15.9	9.52/15.9	9.52/15.9	9.52/15.9
Max. length of installation		m	30	50	65	65	65
Max. level difference		m	20	25	30	30	30
	indoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Power supply	outdoor	V/Hz/Ph	220÷240/50/1	220÷240/50/1	380÷420/50/3	380÷420/50/3	380÷420/50/3
Circuit breaker/fuse	outdoor	A	16	220.240/30/1	16	16	16
Circuit breakennuse				3x1.5	3x1.5	3x1.5	3x1.5
Power supply lines				3x2.5	5x2.5	5x2.5	5x2.5
Control lines		# of wires x mm <sup>2</sup>		2x0.5 shielded	2x0.5 shielded	2x0.5 shielded	2x0.5 shielded
Factory amount of refrigerant	up to 5 rm	kg	1.35	1.5	2.4	2.8	2.95
, ,			1.35	24	2.4	2.8	2.95
Additional amount of refrigerant Ext. diameter of the conde	over 5 rm	g/m 	25	24	24	24	24
			20	20	20	20	20
NET PRICE EUR			1688	2156	3584	4156	4406

#### ACCESSORIES AND CONTROLLERS



CENTRAL CONTROLLER KJR12B









CENTRAL CONTROLLER CCM03 (optional)



R290

**A+** 

## **kpc/kppd** portable air conditioners

(79)

#### KPC-09AK29 • KPPD-12HRN29

Portable air conditioners are perfect for all applications where there is a need to change location or where stationary air-conditioning is not possible.

The 2.6 kW KPC air conditioner has cooling, drying and evaporation functions. It is a perfect solution for rooms with low heat loads, with an area of up to approx.  $20 \text{ m}^2$ . The KPPD model with a cooling capacity of 3.5 kW has an additional heating function and can also be used in larger rooms up to approx.  $30 \text{ m}^2$ .





#### KPC-09AK29 • KPPD-12HRN29



**Efficient heating:** Thanks to its heating function, the KPPD air conditioner is an excellent alternative to traditional electric heating systems, as it provides efficient heating with much lower energy consumption. Thanks to the fan forced air circulation in the room, the desired temperature is reached much faster.

**Comfortable sleep:** After starting the sleep function, the device will increase (in heating mode) the set temperature by 1°C per hour within 2 hours and the fan will operate at low speed.

**Fireproof casing:** For the safety of the user, the sealed metal housing of the electrical unit is used to prevent fire in the event of an electrical short circuit.

#### UNIT FUNCTIONS









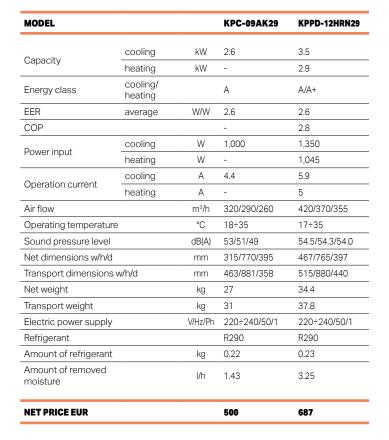
Multi-directional casters

Automatic restart

6

#### **TECHNICAL SPECIFICATION**

#### ACCESSORIES AND CONTROLLERS





WIRELESS CONTROL UNIT YX1F (for KPC)



WIRELESS CONTROL UNIT **R51** (for KPPD)



## kob/koc kod/koe condensing units

#### KOB30U 18 HFN32 • KOCA30U 24 HFN32 KOD30U 36 HFN32 • KOE30U 48 I 55 HFN32

Inverter condensing units are equipped with a control module that enables the connection of a universal outdoor unit to a freon heat exchanger in the air handling unit.

Such solution makes it possible to control the efficiency of the condensing unit by means of a 0-10V DC signal sent from the air handling unit control system. Both cooling and heating operation are possible. The units have built-in expansion valves, so that no additional refrigeration fittings are needed.

Kaisai condensing units may only be used with AHUs equipped with protection devices suitable for R32 flammability characteristic.



A++

**R32** 

MODEL			KOB30U -18HFN32	KOCA30U -24HFN32	KOD30U -36HFN32	KOE30U- 48HFN32	KOE30U- 55HFN32
Capacity	cooling	kW	5.3(1.2÷6.1)	7.0(2.2÷8.2)	10.5(2.6÷12.0)	14.0(4.3÷15.2)	15.4(5.9÷17.3)
average (min-max)	heating	kW	5.6(1.8÷7.0)	7.6(2.4÷8.6)	11.1(2.9÷13.2)	16.1(3.7÷18.0)	18.2(4.7÷20.5)
Energy class	cooling/h	leating	A++/A+	A++/A+	A++/A+	A+/A+	A+/A+
SEER	average	W/W	6.1	6.1	6.1	6.1	6.1
SCOP	average	W/W	4	4	4	4	4
Power input	cooling	W	1,640(280÷2,150)	2,190(480÷2,850)	3,950(660÷4,500)	5,150(1,170÷5,699)	5,423(1,274÷6,651)
average (min-max)	heating	W	1,500(330÷2,180)	2,050(500÷2,880)	3,000(650÷4,550)	4,280(1,048÷6,124)	5,329(1,042÷6,034)
Operation current	cooling	А	7.1(1.2÷9.3)	9.5(2.1÷12.4)	7.2(1.2÷8.2)	8.3(1.8÷9.4)	8.9(2.0÷11.0)
average (min-max)	heating	А	6.5(1.4÷9.5)	8.9(2.2÷12.5)	5.5(1.2÷8.3)	6.8(1.6÷10.2)	8.8(1.6÷9.9)
Air flow		m³/h	2,100	2,700	4,000	7,500	7,500
Operating temperature	cooling	°C	-15÷50	-15÷50	-15÷50	-15÷50	-15÷50
	heating	°C	-15÷24	-15÷24	-15÷24	-15÷24	-15÷24
Sound pressure level		dB(A)	57	62	64	66	66
Net dimensions w/h/d		mm	800/333/554	845/363/702	946/410/810	952/410/1,333	952/410/1,333
Transport dimensions w/h/	d	mm	920/390/615	965/395/755	1,090/500/865	1,095/500/1,470	1,095/500/1,470
Net weight		kg	35.6	66.8	81.5	106.7	111.3
Transport weight		kg	38.5	72.6	87	119.9	124.3
Pipe diameter: liquid/gas		mm	6.35/12.7	9.52/15.9	9.52/15.9	9.52/15.9	9.52/15.9
Total length of installation		m	30	50	65	65	65
Max. level difference		m	20	25	30	30	30
Power supply		V/Hz/Ph	220÷240/50/1	220÷240/50/1	380÷420/50/3	380÷420/50/3	380÷420/50/3
Circuit breaker/fuse		А	16	20	16	16	16
Power supply lines		# of wires x mm <sup>2</sup>	3x2.5	3x2.5	5x2.5	5x2.5	5x2.5
Factory amount of refrigerant	< 5 rm	kg	1.35	1.5	2.4	2.8	2.95
Additional amount of refrigerant	> 5 rm	g/m	12	24	24	24	24
NET PRICE EUR (WITH KMS M	IODULE)	1	1720	2125	3095	3375	3595

#### TYPES OF CONDENSING UNITS AND CONTROL



KOB30U 18 HFN32 KOCA30U 24 HFN32 KOD30U 36 HFN32



KOE30U 48 I 55 HFN32



Control module KMS-8243



# **multi** Split

KWX • KCA



Air conditioners working in the Multi Split system are extremely energy-efficient and highly efficient devices. The system design allows for installation of 2 to 5 Fly wall units or Compact cassette units to one cooling unit (outdoor unit).

Each of the indoor units operates individually, has the ability to independently adjust the temperature and adjust the power to the needs of users. When buying a Multi Split air conditioner, we must select the cooling capacity needed for each room where there is a wall or cassette air conditioner. Selected devices are installed in rooms, and at the very end we connect each of the air conditioners to the previously installed one, large cooling unit. In this way, we do not need to install an indoor or outdoor unit in every room.

### indoor **units**



#### KWX 09 | 12 | 18 | 24 HRDI WIFI AS STANDARD

#### TECHNICAL SPECIFICATION

MODEL			KWX-09HRDI	KWX-12HRDI	KWX-18HRDI	KWX-24HRDI
Power supply		V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Oranaita	cooling	kW	2.6	3.5	5.3	7.0
Capacity	heating	kW	2.9	3.8	5.6	7.3
Air flow		m³/h	520/460/360	600/500/360	840/680/540	980/817/662
Sound pressure level	high/medium/low	dB(A)	40/30/26/21	40/34/26/22	44/37/30/25	44.5/42/34.5/28
	net	mm	805/285/194	805/285/194	957/302/213	1,040/327/220
Dimensions: w/h/d	transport	mm	870/360/270	870/360/270	1,035/380/295	1,120/310/405
Maiabt	net	kg	7.5	7.5	10	12.3
Weight	transport	kg	9.7	9.7	13	15.8
Dia a dia manta a	liquid	mm	6.35	6.35	6.35	9.52
Pipe diameter	gas	mm	9.52	9.52	12.7	15.9
NET PRICE EUR			297	328	437	562



#### KCA3I-09HRF32 | KCA3U 12 | 18 HRF32

#### TECHNICAL SPECIFICATION

MODEL			KCA3I-09HRF32	KCA3U-12HRF32	KCA3U-18HRF32	KCA3U-12HRF32X	KCA3U-18HRF32X
Power supply		V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Capacity	cooling	kW	2.6	3.5	5.3	3.5	5.3
	heating	kW	2.8	4.1	5.6	4.4	5.4
Air flow		m³/h	580	650	800	617	720
Sound pressure level	high/medium/low	dB(A)	39/36/33	42/38/34	48/43/36	41/36/33	42.5/39/35.5
Dimensions:	net	mm	570/260/570	570/260/570	570/260/570	570/260/570	570/260/570
w/h/d indoor unit	transport	mm	655/290/655	655/290/655	655/290/655	662/317/662	662/317/662
Dimensions:	net	mm	647/50/647	647/50/647	647/50/647	647/50/647	647/50/647
w/h/d panel	transport	mm	715/123/715	715/123/715	715/123/715	715/123/715	715/123/715
Weight indoor	net	kg	16/2.5	16/2.5	16/2.5	16/2.5	16/2.5
unit /panel	transport	kg	19/4.5	19/4.5	19/4.5	21.4/4.5	21.4/4.5
Dina diamatar	liquid	mm	6.35	6.35	6.35	6.35	6.35
Pipe diameter	gas	mm	9.52	9.52	12.7	9.52	12.7
NET PRICE EUR			469	578	703	578	703

### K20C-18|30E-27|40B-36|50D-42 HFN32

#### TECHNICAL SPECIFICATION

MODEL			K20C-18HFN32	K30E-27HFN32	K40B-36HFN32	K50D-42HFN32
	cooling, average	kW	5.3	7.9	10.6	12.3
Capacity	heating, average	kW	5.6	8.2	10.6	12.3
Energy class	cooling/heating	W/W	A+/A	A++/A+	A++/A+	A++/A+
SEER	average	W/W	5.8	6.1	6.1	5.8
SCOP	average	W/W	3.8	4.0	4.0	3.8
Device in t	cooling, average	W	1,630	2,440	3,280	4,260
Power input	heating, average	W	1,390	2,180	2,630	3,100
On another a summation	cooling, average	А	7.1	10.6	14.3	18.5
Operation current	heating, average	А	6.1	9.5	11.4	13.5
Air flow		m3/h	2,200	2,700	4,000	3,850
Operating temp., cooling/heati	ng	°C	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24	-15÷50/-15÷24
Sound pressure level		dB(A)	56	59	63	64
Net dimensions w/h/d		mm	800/554/333	845/702/363	946/810/410	946/810/410
Transport dimensions: w/h/d		mm	920/615/390	965/755/395	1,090/865/500	1,090/865/500
Net weight		kg	36	53	68.8	73.3
Transport weight		kg	39	56.5	75.6	80.4
Pipe diameter: liquid/gas		mm	2x6.35/9.52	3x6.35/9.52	3x6.35/9.52 + 1x6.35/12.7	4x6.35/9.52 + 1x6.35/12.7
Total length of installation		m	40	60	80	80
Max. length of installation for 1	single indoor unit	m	25	30	35	35
Max. level difference		m	15	15	15	15
Electric power supply		V/Hz/Ph	220÷240/50/1	220÷240/50/1	220÷240/50/1	220÷240/50/1
Circuit breaker/fuse		А	16	20	25	25
Power supply lines		# of wires x	3x2.5	3x2.5	3x4.0	3x4.0
Control lines		mm2	4x1.5	4x1.5	4x1.5	4x1.5
Factory amount of refrigerant	up to 5 rm	kg	1.3	1.57	2.1	2.4
Additional amount of refrigerant	over 5 rm	g/m	12	12	12	12
NET PRICE EUR			1078	1610	2547	2781

## **Configuration table** of indoor units

The table shows the possible options for connecting the indoor units of different power capacities to the individual outdoor units. The numbers in the table correspond to the power of the units expressed in thousands of BTU/h.

#### K30E-27HFN32

#### K20C-18HFN32

1 UNIT	2 UNITS	2 UNITS		
9	9+9	12+12	9+9+9	9+12+12
12	9+12	12+18	9+9+12	9+12+18
18	9+18	18+18	9+9+18	12+12+12

1 UNIT	2 UNITS	
9	9+9	12+12
12	9+12	
18	9+18	

#### K40B-36HFN32

1 UNIT	2 UNITS		3 UNITS			4 UNITS	
9	9+9	18+18	9+9+9	9+18+18	24+9+9	9+9+9+9	9+12+12+18
12	9+12	12+24	9+9+12	9+12+24	24+9+12	9+9+9+12	12+12+12+12
18	9+18	24+9	9+9+18	12+12+12	24+12+12	9+9+9+18	
24	9+24	24+12	9+9+24	12+12+18		9+9+12+12	
	12+12	24+18	9+12+12	12+18+18		9+9+12+18	
	12+18	24+24	9+12+18	12+12+24		9+12+12+12	

#### K50D-42HFN32

1 UNIT	2 UNITS				3 UNITS			
9	9+9	12+12		18+24	9+9+9	9+12+12	12+12+12	18+18+18
12	9+12	12+18		24+24	9+9+12	9+12+18	12+12+18	24+9+18
18	9+18	12+24			9+9+18	9+12+24	12+12+24	24+12+18
24	9+24	18+18			9+9+24	9+18+18	12+18+18	
4 UNITS					5 UNITS			
9+9+9+9 9+9+12+18		9+9+12+18	9+12+12+18		9+9+9+9+9		9+9+9+12+18	
9+9+9+12	9+9+9+12 9+9+12+24		9+12+12+24		9+9+9+9+12		9+9+12+12+12	
9+9+9+18	9+9+9+18 9+9+18+18		12+12+12+12		9+9+9+9+18		9+12+12+12+12	
9+9+9+24 9+9+18+24		12+12+12+18		9+9+9+9+24				
9+9+12+12 9+12+12+12		12+12+12+24		9+9+9+12+12				

## Multi Split systems

Up to five indoor units can be connected to one outdoor unit and each indoor unit can be individually controlled. Moreover, the system can be extended over time with new indoor units while maintaining the appropriate power parameters.

Kaisai Multi Split air conditioners are ideal for apartments, shops, small hotels, motels, offices and warehouses. Modern, compact design of the outdoor unit allows to reduce the space occupied by air conditioning units on balconies, roofs or building facades. Multi Split system in no way limits the cooling or heating possibilities, and each user in any room has the ability to adjust the temperature and air flow/blowing power to their needs. This is especially useful when you want to keep the temperature in some places much lower or higher.





033 **•** 4 ---manen ----

KOTEOI

and the

## silver, gold platinum new

acces

## air curtains

AG • AU • PTN

Small but functional devices, which allow you to save energy by maintaining a constant temperature and avoiding unpleasant draughts inside the building. Easy to install and use, they provide effective protection against cold air and dirt from outside.

Kaisai air curtains are a guarantee of economy and comfort. Easy remote control, adjustable airflow and an attractive, modern design make the devices a perfect fit in the interior design. The air curtains will discreetly and effectively improve the comfort of customers at the point of sale, while taking care to save energy and eliminate heat loss in the room.

Modern and elegant Kaisai air curtains are perfect for public buildings. Offices, restaurants, cafés, shops and storage areas are places where doors are repeatedly opened and closed during the day, causing heat loss or overheating. In turn, for cafés and restaurants protection against dust and insects will provide even greater comfort of work and use of the premises.



#### AG 100 H6 I AG 150 H10 I AG 200 H14 AG 100 I 150 I 200 CX

## silver







The Silver air curtain is a reliable unit with a compact design and quiet operation. Easy to install and operate, the air curtain comes in three sizes, with or without electric heater.

SILVER MODEL WITH HEATER			AG-100H6	AG-150H10	AG-200H14
Voltage/frequency	,	V~/Hz	400/50	400/50	400/50
Motor power		W	180	230	350
Heater output		kW	6	10	14
A: ()	min	m/s	6.5	6.5	6.5
Air flow	max	m/s	6.5	6.5	6.5
Air flow	min	m³/h	1100	1400	2,100
	max	m³/h	1300	1900	2600
Noise level	min	dB	56	57	59
	max	dB	58	59	61
Net weight kg		kg	15.5	21	25
Net dimensions w/d/h		mm	1000/180/215	1500/180/215	2000/180/215
NET PRICE EUR			365	485	750

SILVER MODEL WITHOUT HEATER	ł		AG-100CX	AG-150CX	AG-200CX
Voltage/frequency		V~/Hz	230/50	230/50	230/50
Motor power		W	180	230	350
Air flow	min	m/s	9	9	9
	max	m/s	11	11	11
Air flow	min	m³/h	1,100	2,000	2,900
	max	m³/h	1,400	2,500	3,600
	min	dB	56	57	59
Noise level	max	dB	58	59	61
Net weight		kg	12	15	22
Net dimensions w/d/h		mm	1,000/180/215	1,500/180/215	2,000/180/215
NET PRICE EUR		203	282	375	

#### ACCESSORIES AND CONTROLLERS



WIRELESS CONTROL UNIT



#### AU 100 H3,5 I AU 100 H6 I AU 120 H8 I AU 150 H10 AU 200 H14 I AU 100 I 150 I 200 CX

# gold

solution for shops, offices and service premises





The Gold air curtain is a device which is characterized by a strong air stream. Easy to install and operate, the air curtain comes in four sizes with electric heater and three sizes without heater.

### TECHNICAL SPECIFICATION

GOLD MODEL WITH HEATER			AU-100H3.5	AU-100H6	AU-120H8	AU-150H10	AU-200H14
Voltage/frequency		V~/Hz	230/50	400/50	400/50	400/50	400/50
Motor power		W	180	180	200	230	350
	1	kW	1.75	2	2.7	3.3	4.6
Heater output	II	kW	3.5	4	5.3	6.7	9.4
	III	kW	-	6	8	10	14
A := 61	min	m/s	8.5	8.5	8.5	8.5	8.5
Air flow	max	m/s	9.5	9.5	9.5	9.5	9.5
Air flow	min	m³/h	1100	1100	1500	1900	2800
AIF HOW	max	m³/h	1330	1330	1700	2200	3100
Noise level	min	dB	56	56	56	57	59
Noise level	max	dB	57	57	58	59	61
Net weight		kg	14.5	14.5	16	18.5	26.5
Net dimensions w/d/h		mm	1,000/190/260	1,000/190/260	1,200/190/260	1,500/190/260	2,000/190/26
NET PRICE EUR			360	406	447	531	735

GOLD MODEL WITHOUT HEATE	R		AU-100CX	AU-150CX	AU-200CX
Voltage/frequency	/	V~/Hz	230/50	230/50	230/50
Motor power		W	180	230	350
A := 61	min	m/s	9	9	9
Air flow	max	m/s	11	11	11
A: 0	min	m³/h	1,300	2,000	2,900
Air flow	max	m³/h	1,600	2,500	3,600
	min	dB	55	57	59
Noise level	max	dB	57	59	61
Net weight		kg	10	15	20
Net dimensions w	/d/h	mm	1,000/190/260	1,500/190/260	2,000/190/260
NET PRICE EUR			235	328	437

### ACCESSORIES AND CONTROLLERS



kaisai.pl | 73



## platinum new

modern design and high performance for demanding customers





The latest elegant version of the Platinum New air curtain can be mounted at a maximum height of 4 m above the floor. The device has a AC motor and an adjustable air stream. The air curtains are available in 3 different sizes with or without a heater. They also offer the possibility to connect a door limit switch to control the operation of the curtain.

### TECHNICAL SPECIFICATION

PLATINUM NEW M WITH HEATER	IODEL		PTN-90H8	PTN-120H10	PTN-150H12
Voltage/frequency	,	V~/Hz	400/50	400/50	400/50
Motor power		W	260	380	490
	Ι	kW	2.5	3.5	4
Heater output		kW	5.5	7	8
		kW	8	10	12
Airflow	min	m/s	9	9	9
Air flow	max	m/s	11	11	11
Air flow	min	m³/h	1300	1950	2550
AIT HOW	max	m³/h	1600	2400	3150
Noise level	min	dB	59	60	61
INDISE IEVEI	max	dB	61	62	63
Net weight		kg	15.5	19	22.5
Net dimensions w/	′d/h	mm	900/218/247	1200/218/247	1500/218/247
NET PRICE EUR			453	531	656

PLATINUM NEW MODEL WITHOUT HEATER		PTN-90CX		PTN-120CX	PTN-150CX	
Voltage/frequency	/	V~/Hz	230/50	230/50	230/50	
Motor power		W	160	200	230	
Air flow	min	m/s	9	9	9	
AIT HOW	max	m/s	11	11	11	
A := {	min	m³/h	1,300	1,950	2,550	
Air flow	max	m³/h	1,600	2,400	3,150	
	min	dB	53	54	55	
Noise level	max	dB	55	56	57	
Net weight		kg	12.5	15.5	18	
Net dimensions w	/d/h	mm	900/218/247	1,200/218/247	1,500/218/247	
NET PRICE EUR			280	312	375	

### ACCESSORIES AND CONTROLLERS



# khp ecohome heat pumps

### KHP-2.4/D270 • KEH 08 | 10 | 12 | 14 VER

A heat pump uses free air energy and uses it to heat or cool a building or to produce domestic hot water. It is a cheap, ecological and reliable source of heat, which can be used by everyone.

Thanks to modern technology, the Kaisai heat pumps operate in a very wide range of outdoor temperatures and achieve high temperatures in the heating system or in domestic hot water applications. The absence of harmful emissions, safety and maintenance-free operation make Kaisai heat pumps the ideal solution for anyone who builds a house but also replaces or upgrades an existing heat source. Kaisai heat pumps are used in commercial, single- and multi-family buildings.

# khp

The device is distinguished by a modern controller with intuitive operation and anti-freeze function, which solves the problem of ice and frost. The stainless steel storage tank and the magnesium anode make the unit extremely corrosion-resistant. The maximum heated water temperature is 70°C.



#### TECHNICAL SPECIFICATION

MODEL		KHP-2.4/D270
Nominal heat output	W	2 400
Nominal power input	W	685
COP coefficient		3.5
Domestic hot water (DHC) container capacity	I	270
Energy class		А
Heating power of the electric heater	W	1 500
Temperature range of outlet water	°C	35÷70
Nominal temperature of outlet water	°C	55
Electric power supply	V/Hz	220÷240/~50
Watertightness class		IPX4
Refrigerant		R134a
Amount of refrigerant	kg	1.1
Diameter of air outlets	mm	150
Diameter of water connections	inch	3⁄4
Dimensions (w/d/h)	mm	660/667/1 958
Transport dimensions (w/d/h)	mm	813/813/2 100
Net/gross weight	kg	114/139
Sound pressure level	dB(A)	49
Temperature range of sucked air	°C	-7/45
NET PRICE EUR		2 500









The Kaisai Eco Home heat pump is an advanced device for both space heating and domestic hot water. In addition, it has the ability to cool the air, and a modern controller allows you to adjust the operation of the pump to the needs of the user.

### TECHNICAL SPECIFICATION

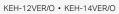
NODEL	indoor units			KEH-08VER/I	KEH-10VER/I	KEH-12VER/I	KEH-14VER/I
MODEL	outdoor units			KEH-08VER/O	KEH-10VER/O	KEH-12VER/O	KEH-14VER/C
Electric power supply			V/Ph/Hz	220÷240/1/50	220÷240/1/50	380÷415/3/50	380÷415/3/50
Nominal capacity	Capacity	heating	kW	8	10	12	14
Heating: water 30/35°C	Capacity	cooling	kW	7.8	8.2	13.5	14.5
ext. temp. 7°C	Electric power	heating	kW	1.78	2.27	2.8	3.35
Cooling: water 23/18°C	input	cooling	kW	1.95	2.1	3.55	3.95
ext. temp. 35°C	COP*/EER			4.5/3.9	4.4/3.0	4.3/3.8	4.2/3.7
Nominal capacity	Capacity	heating	kW	7.60	9.50	12.00	13.50
Heating: water 40/45°C	Capacity	cooling	kW	6.30	7.20	10.00	10.50
ext. temp. 7°C	Electric power	heating	kW	2.24	2.88	3.55	4.05
Cooling: water 12/7°C	input	cooling	kW	2.33	2.77	3.35	3.60
ext. temp. 35°C	COP*/EER			3.4/2.6	3.3/2.7	3.4/3.0	3.35/2.95
Energy class – heating				A++	A++	A+	A+
		indoor unit	mm	500/981/324	500/981/324	500/981/324	500/981/324
Net dimensions (w/h/d)		outdoor unit	mm	980/788/427	980/788/427	900/1345/412	900/1345/41
Fransport dimensions (w/h/d)		indoor unit	mm	608/1043/395	608/1043/395	608/1043/395	608/1043/39
		outdoor unit	mm	1097/862/477	1097/862/477	998/1515/458	998/1515/45
Not/transport weight		indoor unit	kg	56/65	56/65	58/67	58/67
Net/transport weight		outdoor unit	kg	80/89	80/89	107/117	114/124
		indoor unit	dB(A)	31	31	31	31
Sound pressure level		outdoor unit – heating	dB(A)	56	56	57	57
		outdoor unit – cooling	dB(A)	54	54	55	55
Refrigerant pipe diameter	r	liquid/gas	mm	9.52/15.9	9.52/15.9	9.52/15.9	9.52/15.9
R410A refrigerant charge	ed quantity		kg	2.30	2.30	3.60	3.60
Max refrigerant installatio	on length/level dif	ference	m	30/15	30/15	30/15	30/15
Circulation pump model				Wilo RS25/7.5	Wilo RS25/7.5	Wilo RS25/7.5	Wilo RS25/7.5
Water flow rate			l/min	12	12	12	12
Auxiliary electric heater c	output	quantity x power	kW	6(2×3)	6(2x3)	6(1×6)	6(1×6)
Water temp. – DHW mode	e		°C	40÷80	40÷80	40÷80	40÷80
\//-+		heating mode	°C	25÷55	25÷55	25÷55	25÷55
Water temperature		cooling mode	°C	7÷25	7÷25	7÷25	7÷25
		heating mode	°C	-20÷35	-20÷35	-20÷35	-20÷35
Outdoor temperature ran	ige	Domestic hot water mode	°C	-20÷45	-20÷45	-20÷45	-20÷45
·		cooling mode	°C	10÷48	10÷48	10÷48	10÷48

### TYPES OF CONDENSING UNITS AND CONTROL



KEH-08VER/O · KEH-10VER/O







Controller

### **CONTROLLERS** FOR KAISAI UNITS





CENTRAL CONTROLLER

Optional controller for air conditioners: cassette, floor / ceiling and duct air conditioners.

Possibility to control up to 64 units. In addition to the standard functions, it has locking options for: operating mode, individual controllers and central control buttons. The maximum length of communication cables is 1200 m.

**NET PRICE EUR** 



WIRED CONTROLLER

The controller is dedicated for duct air conditioners and optional for cassette and floor / ceiling air conditioners.

Basic functions: Turning ON/OFF | Operating mode | Air temperature | Fan speed | Timer | Temp. sensor in remote control unit Auto louver function

**NET PRICE EUR** 

122

Dist



WIRED CONTROLLER KJR90A Optional controller for: cassette, wall, floor / ceiling, duct devices.

Basic functions: Turning ON/OFF| Operating mode | Air temperature | Fan speed | Timer | Auto louver function | Clock

**NET PRICE EUR** 

594

160

### Wireless controllers



Lusa

RG57 WIRELESS REMOTE CONTROL UNIT

The controller is dedicated for wall, cassette, floor/ceiling air conditioners and optional for duct units.

Basic functions: Turning ON/OFF| Operating mode | Air temperature | Fan speed | Timer | Temp. sensor in remote control unit | Auto louver function | Direction of air flow | Turbo function | Self-cleaning evaporator | 8°C continuous heating function

NET PRICE EUR	110
WIRELESS CONTROL UNIT R51	WIRELESS CONTROL UNIT YX1F
The controller dedicated for KPPD portable air condi- tioners and optional for wall, cassette, floor / ceiling air conditioners.	Controller dedicated exclusively for KPC portable air conditioners.
Basic functions: Turning ON/OFF  Operating mode  Air tem- perature   Fan speed   Timer   Direction of air flow   Auto louver function   Turbo function	Basic functions: Turning ON/OFF  Operating mode   Air tem- perature   Fan speed   Timer   Auto louver function   Turbo func- tion
NET PRICE EUR 103	NET PRICE EUR 103
WIRELESS CONTROL UNIT RCAC-1	WIRELESS CONTROL UNIT RCAC-2
Controller dedicated for Silver and Gold air curtains.	The controller dedicated exclusively for Platinum New
Basic functions: Turning ON/OFF  Fan speed   Operating mode	air curtains. Basic functions: Turning ON/OFF  Fan speed   Operating mode
NET PRICE EUR 60	NET PRICE EUR 60

### **Dimensions** of Split units

### FLY wall-mounted

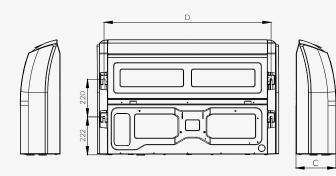
MODEL	Dimensio	Dimensions [mm]					
	W	D	н				
KWX-09HRDI	805	194	285				
KWX-12HRDI	805	194	285				
KWX-18HRDI	957	213	302				
KWX-24HRDI	1040	220	327				

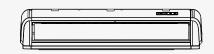


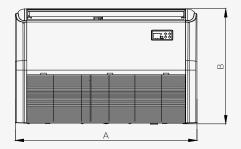


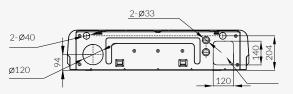
### FLOOR/CEILING

MODEL	Dimensio	Dimensions [mm]						
	Α	В	C	D				
KUE-18HRF32	1,068	675	235	983				
KUE-24HRF32	1,068	675	235	983				
KUE-36HRF32	1,650	675	235	1,565				
KUE-48HRF32	1,650	675	235	1,565				
KUE-55HRF32	1,650	675	235	1,565				



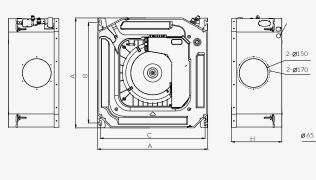


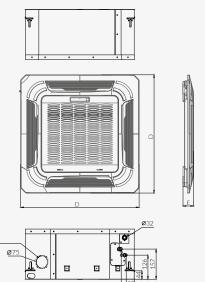




### **COMPACT** cassette

MODEL	Dimensions [mm]							
	A	В	C	D	E	Н		
KCA3U-12HFN32X	570	523	545	647	50	260		
KCA3U-18HFN32X	570	523	545	647	50	260		

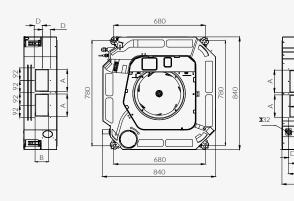


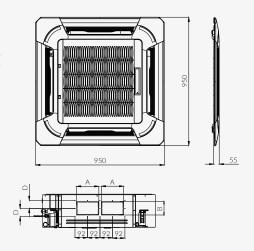


### SUPER SLIM cassette

MODEL	Dimen	Dimensions [mm]					
	A	В	C	D			
KCD-24HRF32	160	95	245	60			
KCD-36HRF32	160	95	245	60			
KCD-48HRF32	160	95	245	60			
KCD-55HRF32	160	95	245	60			

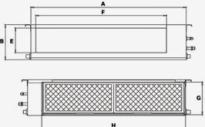


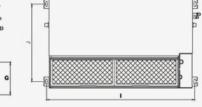


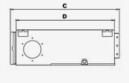


### SLIM duct

MODEL	Dimensions [mm]									
	A	В	C	D	E	F	G	н	I	J
KTI-18HWF32	880	210	674	600	136	706	190	782	920	508
KTI-24HWF32	1100	249	774	700	175	926	228	1001	1140	598
KTI-36HWF32	1360	249	774	700	175	1186	228	1261	1400	598
KTI-48HWF32, KTI-55HWF32	1200	300	874	800	227	1044	280	1101	1240	697



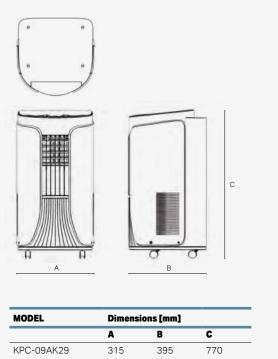




### **Dimensions** of Portable units

PORTABLE KPC

PORTABLE KPPD





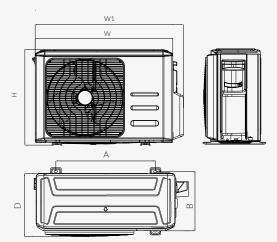
MODEL	Dimensions [mm]					
	A	В	C			
KPPD-12HRN29	467	397	765			

С

### OUTDOOR UNITS

#### for FLY wall-mounted models

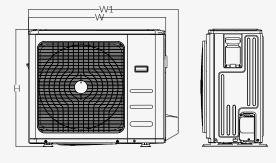
MODEL	Dime	Dimensions [mm]							
	W	D	н	W1	A	В			
KWX-09HRDO	700	287	550	773	450	260			
KWX-12HRDO	700	287	550	773	450	260			
KWX-18HRDO	800	365	554	870	514	340			
KWX-24HRDO	845	375	702	914	540	350			

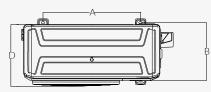


### for cassette models, floor and ceiling models, duct models

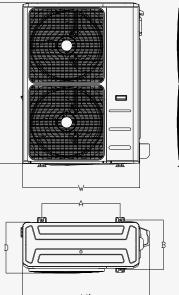
MODEL Dimensions [mm]								
	w	D	н	W1	A	В		
KOB30-12HFN32X, KOB30U-12HFN32	800	333	554	870	514	340		
KOB30-18HFN32X, KOB30U-18HFN32	800	333	554	870	514	340		
KOCA30U-24HFN32	845	363	702	914	540	350		
KOD30U-36HFN32	946	410	810	1030	673	403		
KOE30U-48HFN32	952	415	1333	1045	634	404		
KOE30U-55HFN32	952	415	1333	1045	634	404		

#### KOB30-12 | 18 HFN32X · KOB30U-12 | 18 | 24 HFN32





KOE30U-48 | HFN32

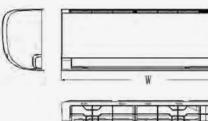


### Dimensions of Multi Split units

### WALL-MOUNTED

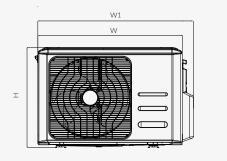
MODEL	Dimensio	Dimensions [mm]				
	W	D	н			
KWX-09HRDI	805	194	285			
KWX-12HRDI	805	194	285			
KWX-18HRDI	957	213	302			
KWX-24HRDI	1,040	220	327			

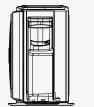


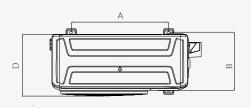




### OUTDOOR UNITS



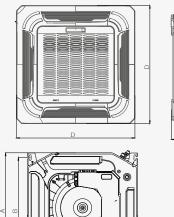


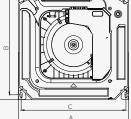


MODEL	Dimensio	Dimensions [mm]						
	w	D	н	W1	A	В		
K20C-18HFN32	800	333	554	860	514	340		
K30E-27HFN32	845	363	702	923	540	350		
K40B-36HFN32	946	410	810	1,034	673	403		
K50D-42HFN32	946	410	810	1,034	673	403		

### CASSETTE

MODEL	Dimensions [mm]							
	A	В	C	D	E	F		
KCA3I-09HRF32	570	523	545	647	50	260		
KCA3U-12HRF32	570	523	545	647	50	260		
KCA3U-18HRF32	570	523	545	647	50	260		
KCA3U-12HRF32X	570	523	545	647	50	260		
KCA3U-18HRF32X	570	523	545	647	50	260		



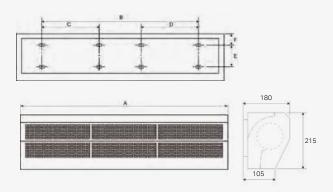


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### **Dimensions** of Air curtains

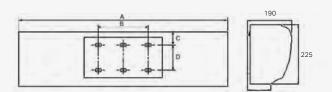
#### SILVER

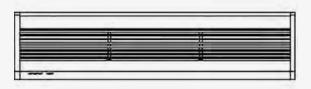
MODEL	Dimensions [mm]							
	A	В	C	D	F	E		
WITH HEATER								
SILVER AG-100H6	1,000	950	340	340	50	100		
SILVER AG-150H10	1,500	1,408	569	569	50	100		
SILVER AG-200H14	2,000	1,904	847	847	50	100		
WITHOUT HEATER								
SILVER AG-100CX	1,000	440	-	-	50	90		
SILVER AG-150CX	1,500	840	-	-	50	90		
SILVER AG-200CX	2,000	840	-	-	50	90		



#### GOLD

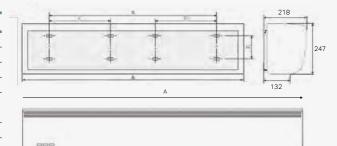
MODEL	Dimens	ions [m	m]	
	A	В	C	D
WITH HEATER				
GOLD AU-100H3.5	1,000	440	42	90
GOLD AU-100H6	1,000	440	42	90
GOLD AU-120H8	1,200	440	42	90
GOLD AU-150H10	1,500	840	42	90
GOLD AU-200H14	2,000	840	42	90
WITHOUT HEATER				
GOLD AU-100CX	1,000	440	42	90
GOLD AU-150CX	1,500	840	42	90
GOLD AU-200CX	2,000	840	42	90



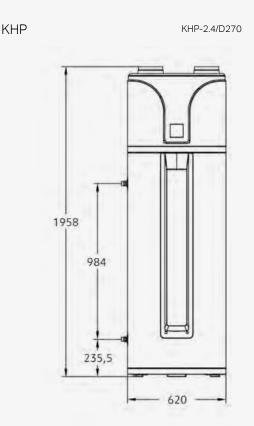


### PLATINUM NEW

MODEL	Dimen	sions [	mm]		
	A	В	C	D	E
WITH HEATER					
PLATINUM NEW PTN-90H8	900	440	-	-	90
PLATINUM NEW PTN-120H10	1,200	440	-	-	90
PLATINUM NEW PTN-150H12	1,500	440	-	-	90
WITHOUT HEATER					
PLATINUM NEW PTN-90CX	900	440	-	-	90
PLATINUM NEW PTN-120CX	1,200	440	-	-	90
PLATINUM NEW PTN-150CX	1,500	440	-	-	90

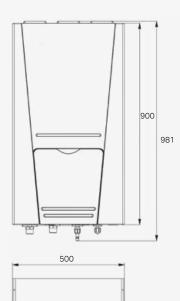


### Dimensions of Heat pumps



ECO HOME

KEH-08/10/12/14VER/I

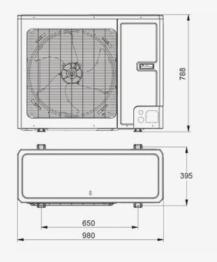


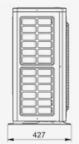


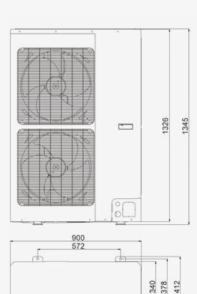
### ECO HOME

### OUTDOOR

KEH-08/10VER/O







KEH-12/14VER/O



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### Pallet arrangement-logistic data

Indoor unit	Outdoor unit	Number of assemblies	Pallet size
KWX-09HRDI	KWX-09HRDO	6	120x90x200
KWX-12HRDI	KWX-12HRDO	6	120x90x200
KWX-18HRDI	KWX-18HRDO	5	120x90x200
KWX-24HRDI	KWX-24HRDO	4	120x90x200
KUE-18HRF32	KOB30U-18HFN32	3	120x90x175
KUE-24HRF32	KOCA30U-24HFN32	3	120x90x175
KUE-36HRF32	KOD30U-36HFN32	1	120x90x190
KUE-48HRF32	KOE30U-48HFN32	1	120x90x190
KUE-55HRF32	KOE30U-55HFN32	1	120x90x190
KCA3U-12HRF32X	KOB30-12HFN32X	3	120x90x185
KCA3U-18HRF32X	KOB30-18HFN32X	3	120x90x185
KCD-24HRF32	KOCA30U-24HFN32	3	120x100x195
KCD-36HRF32	KOD30U-36HFN32	2	120x100x160
KCD-48HRF32	KOE30U-48HFN32	1	120x90x165
KCD-55HRF32	KOE30U-55HFN32	1	120x90x165
KTI-18HWF32 KTI-24HWF32	KOB30U-18HFN32 KOCA30U-24HFN32	3	120x90x175 120x100x170
KTI-24HWF32 KTI-36HWF32	KOD30U-36HFN32	1	120x100x170
KTI-48HWF32	KOE30U-48HFN32	1	120x90x165
KTI-55HWF32	KOE300-48/1/1/32	1	120x90x165
KN-55HWF32 KPC-09AK29		8	120x90x185
KPPD-12HRN29		8	120x90x180
	KOB30U-18HFN32	9	120x90x200
	KOCA30U-24HFN32	6	120x90x165
	KOD30U-36HFN32	4	120x100x190
	KOE30U-48HFN32	2	120x100x165
	KOE30U-55HFN32	2	120x100x165
KWX-09HRDI		20	120x90x200
KWX-12HRDI		20	120x90x200
KWX-18HRDI		15	120x90x200
KWX-24HRDI		12	120x80x200
KCA3I-09HRF32		5	120x80x200
KCA3U-12HRF32		5	120x80x200
KCA3U-18HRF32		5	120x80x200
KCA3U-12HRF32X		5	120x80x200
KCA3U-18HRF32X		5	120x80x200
	K20C-18HFN32	9	120x90x200
	K30E-27HFN32	6	120x90x165
	K40B-36HFN32	4	120x100x190
	K50D-42HFN32	4	120x100x190
SILVER AG-100H6		21	120x80x200
SILVER AG-150H10 SILVER AG-200H14		21	200x80x200
SILVER AG-200H14 SILVER AG-100CX		21 21	200x80x200 120x80x200
SILVER AG-100CX SILVER AG-150CX		21	200x80x200
SILVER AG-150CX		18	200x80x200
GOLD AU-100H3.5		18	120x80x200
GOLD AU-100H6		18	120x80x200
GOLD AU-120H8		18	120x80x200
GOLD AU-150H10		18	200x80x200
GOLD AU-200H14		18	200x80x200
GOLD AU-100CX		18	120x80x200
GOLD AU-150CX		18	200x80x200
GOLD AU-200CX		18	200x80x200
PLATINUM NEW PTN-90H8		14	120x80x180
PLATINUM NEW PTN-120H10		14	120x80x180
PLATINUM NEW PTN-150H12		14	200x80x180
PLATINUM NEW PTN-90CX		14	120x80x180
PLATINUM NEW PTN-120CX		14	120x80x180
PLATINUM NEW PTN-150CX		14	200x80x180
KHP-2.4/D270		1	80x80x210
KEH-08VER/I	KEH-08VER/O	2	120x100x185
KEH-10VER/I	KEH-10VER/O	2	120x100x185
KEH-12VER/I	KEH-12VER/O	1	120x90x160
KEH-14VER/I	KEH-14VER/O	1	120x90x170

### Product price list 2019/2020

### VALID FROM 01.04.2019 UNTIL FURTHER NOTICE





MODEL		Capacity		Net price
INDOOR UNIT	OUTDOOR UNIT	COOLING [kW]	HEATING [kW]	[EUR]
FLY WALL-MOUNTED AI	R CONDITIONER WITH WI-FI MO	DULE (pages: 36÷39)		
KWX-09HRDI	KWX-09HRDO	2.6	2.9	672
KWX-12HRDI	KWX-12HRDO	3.5	3.8	718
KWX-18HRDI	KWX-18HRDO	5.3	5.6	1141
KWX-24HRDI	KWX-24HRDO	7.0	7.3	1485
FLOOR/CEILING AIR CO	NDITIONER (pages: 40÷43)			
KUE-18HRF32	KOB30U-18HFN32	5.3	5.6	1656
KUE-24HRF32	KOCA30U-24HFN32	7.0	7.6	2125
KUE-36HRF32	KOD30U-36HFN32	10.5	11.1	3531
KUE-48HRF32	KOE30U-48HFN32	14.2	16.1	4140
KUE-55HRF32	KOE30U-55HFN32	15.9	18.2	4266
COMPACT CASSETTE A	IR CONDITIONER (pages: 44÷47)			
KCA3U-12HRF32X	KOB30-12HFN32X	3.5	4.1	1500
KCA3U-18HRF32X	KOB30-18HFN32X	5.3	5.6	1781
SUPER SLIM CASSETTE	AIR CONDITIONER (pages: 48÷51	)		
KCD-24HRF32	KOCA30U-24HFN32	7.0	7.6	2219
KCD-36HRF32	KOD30U-36HFN32	10.5	11.1	3531
KCD-48HRF32	KOE30U-48HFN32	14.0	16.1	3970
KCD-55HRF32	KOE30U-55HFN32	15.8	18.2	4328
SLIM DUCT AIR CONDIT	IONER (pages: 52÷55)			
KTI-18HWF32	KOB30U-18HFN32	5.3	5.6	1688
KTI-24HWF32	KOCA30U-24HFN32	7.0	7.6	2156
KTI-36HWF32	KOD30U-36HFN32	10.5	11.1	3584
KTI-48HWF32	KOE30U-48HFN32	14.0	16.1	4156
KTI-55HWF32	KOE30U-55HFN32	15.4	18.2	4406
PORTABLE AIR CONDIT	IONERS (pages: 57÷59)			
KPC-09AK29		2.6		500
KPPD-12HRN29		3.5	2.9	687

Purchase prices presented in the price list are net prices in PLN currency. The price list does not constitute an offer within the meaning of Article 66 of the Commercial Code.

### THE PRICE LIST IS VALID FROM 1ST OF APRIL 2019 UNTIL FURTHER NOTICE

MODEL				Capacity			Net price
INDOOR UNIT		OUTDOOR UNIT		COOLING [kW]	HE	ATING [kW]	[EUR]
MULTI SPLIT SY	(STEM V	VALL-MOUNTED OUT	DOOR FLY UI	NITS WITH WI-FI MODU	JLE (page: 6	i4)	
KWX-09HRDI				2.6	2.9		297
KWX-12HRDI				3.5	3.8		328
KWX-18HRDI				5.3	5.6		437
KWX-24HRDI				7.0	7.3		562
MULTI SPLIT SY	(STEM C	ASSETTE INDOOR C	OMPACT UNI	<b>TS</b> (page: 64)			
KCA3I-09HRF32				2.6	2.8		469
KCA3U-12HRF32	2/ KCA3U-12	HRF32X		3.5	4.1		578
KCA3U-18HRF32	2/ KCA3U-18	HRF32X		5.3	5.6		703
MULTI SPLIT SY	(STEM 0	UTDOOR MULTI SPL	T UNITS (pag	ie: 65)			
K20C-18HFN32				5.3	5.6		1078
K30E-27HFN32				7.9	8.2		1610
K40B-36HFN32				10.6	10.	6	2547
K50D-42HFN32				12.3	12.	3	2781
TWIN SYSTEM I	ELEMENTS						
KTI-18HWF32	788	KUE-18HRF32	756	KCD-24HRF32	1090	KOE30U-48HFN32	2080
KTI-24HWF32	1027	KUE-24HRF32	996	KOD30U-36HFN32	1821	UTP-SX248A	145
CONDENSING U	JNITS WITH	I CONTROL MODULE	(pages: 60÷61	)			
KOB30U-18HFN3	32 + KMS-82	243 module	1720	KOE30U-48HFN	32 + KMS-8	243 module	3375
KOCA30U-24HFN	N32 + KMS-8	3243 module	2125	KOE30U-55HFN	32 + KMS-8	243 module	3595
KOD30U-36HFN3	32 + KMS-82	243 module	3095				
VENTILATION U	JNITS (page	s: 69÷75)					
Silver air curtain w	vith heater –	AG-100H6					365
Silver air curtain w	vith heater –	AG-150H10					485
Silver air curtain w	vith heater –	AG-200H14					750
Silver air curtain w	vithout heate	er – AG-100CX					203
Silver air curtain w	vithout heate	er – AG-150CX					282
Silver air curtain w	vithout heate	er – AG-200CX					375
Gold air curtain wi	ith heater – A	AU-100H3.5					360
Gold air curtain wi	ith heater – A	AU-100H6					406
Gold air curtain wi	ith heater – A	AU-120H8					447
Gold air curtain wi	ith heater – A	AU-150H10					531
Gold air curtain wi	ith heater – A	AU-200H14					735
Gold air curtain wi	ithout heater	r – AU-100CX					235
Gold air curtain wi	ithout heater	r – AU-150CX					328
Gold air curtain wi	ithout heater	r – AU-200CX					437
Platinum New air (	curtain with ł	neater – PTN-90H8					453
Platinum New air (	curtain with h	neater – PTN-120H10					531
Platinum New air (	curtain with h	neater – NEW PTN-150H	112				656
Platinum New air (	curtain withc	out heater – PTN-90CX					280
Platinum New air (	curtain withc	out heater – PTN-120CX					312
		out heater – PTN-150CX					375

Purchase prices presented in the price list are net prices in PLN currency. The price list does not constitute an offer within the meaning of Article 66 of the Commercial Code.

### Product price list 2019/2020

### VALID FROM 01.04.2019 UNTIL FURTHER NOTICE

MODEL	Net price [EUR]
HEATING UNITS (pages: 76÷79)	
DHC KHP Heat Pump – KHP-2.4/D270	2500
KEH heat pump, heating/cooling/DHC – Kaisai Eco Home – KEH-08VER/I, KEH-08VER/O	5625
KEH heat pump, heating/cooling/DHC – Kaisai Eco Home – KEH-10VER/I, KEH-10VER/O	6094
KEH heat pump, heating/cooling/DHC – Kaisai Eco Home – KEH-12VER/I, KEH-12VER/O	7062
KEH heat pump, heating/cooling/DHC – Kaisai Eco Home – KEH-14VER/I KEH-14VER/O	7970
CONTROLLERS (pages: 80÷81)	
RG57 – wireless	110
R51 – wireless	103
YX1F - wireless	103
RCAC-1 – wireless	60
RCAC-2 – wireless	60
CCM03 – central	594
KJR12B – wired	122
KJR90A – wired	160
ACCESSORIES	
Sequential/switching AC controller SPN-IR – applies to all models of air conditioners (except ducts) and curtains	400
Sequential/switching AC controller TS4 – applies to all split and multi split models (except wall models)	390
Set of heaters with thermostat – heating function – applies to all split and multi split models	112
Set of heaters with thermostat – cooling function – applies to all split and multi split models	75
Connection kit for wired remote control ZPPP-FLY – applies to Fly air conditioners	50
Filters	40

Purchase prices presented in the price list are net prices in EUR currency. | The price list does not constitute an offer within the meaning of Article 66 of the Commercial Code, and the photos of the products are only exemplary and serve to present selected models. | Products may in fact differ from those shown in the pictures. | Products are subject to continuous improvement, so Kaisai reserves the right to change prices and technical specifications without prior notice. | The existing price list is canceled.

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## Documentation

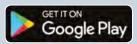
Technical documentation for download in several languages in electronic format in the app:

KTG











### **Contact** data

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#### SALES DEPT.

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### Klima-Therm Group Academy:

#### Gdańsk Division

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Would you like to obtain an authorization certificate and become our installer? Contact us: handlowy@kaisai.pl



This publication is an informational and presentation document for Kaisai air conditioners, air curtains and heat pumps. |The technologically advanced production process makes it necessary to continuously monitor and improve it. This is why the information contained in the publication may be subject to change. |The net prices are the catalog prices of the products and do not include discounts or installation costs. | Technical data and prices in the catalog are subject to change. Up-to-date information is always available at **www.kaisai.pl** 



KAISAI

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WE CARE ABOUT AIR

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