MITSUBISHI HEAVY INDUSTRIES

www.mitsubishi-termal.it

MITSUBISHI HEAVY INDUSTRIES

KIREIA

R410A - R32

MOVE THE WORLD FORWARD

THE NEW FORM OF TECHNOLOGY

KIREIA Plus, KIREIA and KIREIA Smart wall units

The home is a place of the spirit, where we welcome in all that makes us live well. KIREIA Plus, KIREIA and KIREIA Smart are air conditioning units that take care of us, anticipating our comfort needs. Those who choose them bring home all the innovative technology of **Mitsubishi Heavy Industries**, the company that has been **contributing to the progress of the world for over a century. And we are proud of that**.

TECHNOLOGY AND DESIGN

Decorating a room means choosing how to live. KIREIA motors are the result of the best Japanese technology, and care of the aesthetics is left to those who best know how to seduce through form: **Italian designers**.

POWER AND SILENCE

Whether you want a gentle breeze or a powerful jet, you will have the desired temperature in just a few moments. All that without bothersome noise, thanks to our top-of-the-range silence.

LOOKING TOWARD THE FUTURE, WITH OUR HEARTS IN THE PRESENT

KIREIA Plus and KIREIA air conditioners are the first to operate with both refrigerant **R32** and **R410A**. This versatility means you can install these units in any context: **it's up to you!** Their construction quality guarantees high energy efficiency in both refrigerant solutions.

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A COMPLETE LINE.
GIVE SHAPE TO YOUR HOME.

The technological grit of the **new KIREIA series** seduces and conquers: the top of the class, comfort and health thanks to the innovative operating modes and a wide range of filters to help you breathing clean air, and the unmissable state-of-the-art control devices. All this packaged in **design** whose charm has no equal. **And it's all Italian**.

DESIGN

Italian design: soft, elegant lines come together perfectly in both modern and more classic settings
[mod. KIREIA Plus].

R32 AND R410A FOR THE SAME INDOOR UNIT

KIREIA Plus and **KIREIA** are the first MHI air conditioners that operate with both refrigerants R32 and R410A.

WI-FI

Thanks to the Wi-Fi device (optional), you can manage your air conditioner from a smartphone, even adjusting the temperature when you are away from home
[mod. KIREIA Plus and KIREIA].

3D VENTILATION

A single button on the remote control activates 3D ventilation, which generates and distributes a uniform breeze that reaches every corner of the room
[mod. KIREIA Plus and KIREIA].

ENERGY EFFICIENCY CLASS

Efficiency to the first place with energy classes up to A+++ for KIREIA Plus.

HUMAN SENSOR

A sensor that recognises activity in the room and adjusts its temperature as a result
[mod. KIREIA Plus].

FILTERS AND SANITISATION

Well-being and health pass through the air that we breathe. That's why MHI has equipped its KIREIA line units with filters and devices for antimicrobial treatment that perform a high level of sanitisation, preventing the formation of mould and allergens and exerting a deep deodorising action.

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COMPACT SIZE

Only 21 cm deep, the **KIREIA Smart** is suited to all types of environments.

COMFORT START-UP

Pleasant warmth in winter and comfortable cool in summer welcomes you as you step in the door: this function starts indoor unit operation 5 to 60 minutes before the scheduled start of the timer and ensures that the set temperature is reached as soon as the unit goes into operation [mod. KIREIA Plus, KIREIA and KIREIA Smart].

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HIGH EFFICIENCY.
LOW ENVIRONMENTAL IMPACT

The **KIREIA Plus** and **KIREIA** models are air conditions which, with the same indoor unit, can operate both with **R410A** gas and with **R32** gas, without compromising its technological features and high energy efficiency.

The **KIREIA Smart** model uses **R32** gas only.

VERSATILITY - IMPROVED SEASONAL EFFICIENCY

Both the models (KIREIA Plus and KIREIA) can be combined with outdoor units that use both refrigerant R410A and refrigerant R32, allowing these systems to achieve very high levels of energy efficiency while greatly reducing environmental impact.

European F-Gas Regulation no. 517/2014 with entry in force 1 January 2015 **imposes the prohibition of introducing monosplit conditioners on the market with a charge of <3kg of gas with GWP >750, starting from January 2025.**

	R32	R410A	R290	R744 (CO_2)
GWP[1]	**675**	**2088**	3	**1**
ODP[2]	0	0	0	0
Flammability (ISO817/2014)	**A2L**	**A1**	A3	**A1**

A1 = not flammable; A2L = slightly flammable; A3 = highly flammable

1. GWP stands for Global Warming Potential and expresses the contribution of a gas to the greenhouse effect. The index is based on a scale that compares each gas with carbon dioxide (CO2), whose GWP has a value of 1 by definition. Each GWP value is calculated for a specific time interval (typically 20, 100 or 500 years).

2. ODP stands for Ozone Depletion Potential. ODP is intended as the value of degradation that a chemical compound can cause to the ozone layer.

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> The path towards alternativerefrigerants has already begun and the future will certainly bring us HFO refrigerants with **very low GWP values**.

R410A MHI

WHAT IS REFRIGERANT GAS R410A?

Developed to substitute the extremely harmful R22 gas, R410A is a refrigerant that is mainly used for air conditioners and which is composed of a mixture of two fluorinated hydrocarbons: R32 and R125 in equal parts. It does not contain chlorine atoms and therefore cannot damage the earth's ozone layer, thus it has a reduced impact on the environment of our planet (ODP=0).

R410A is therefore a refrigerant that guarantees excellent performance and high efficiency, but at the same time also an extremely reduced environmental impact.

ADVANTAGES OF R410A GAS

R410A gas will continue to be available for many years for the following reasons:

- It is an environmentally-friendly gas.
- **It is non-flammable**.
- It is not harmful and does not present risks to the ozone.
- It is very efficient.

R22 gas has been banned from the market about 15 years after the block of product manufacturing: therefore, R410A gas will certainly be on the market for the next 20 years in order to fill up current systems.

R32 MHI

WHAT IS REFRIGERANT GAS R32?

The specific name of the R32 gas is difluoromethane. Currently, it is present among the low-value GWP fluorinated gases and is used in air-conditioning units intended for residential use.

The most relevant aspect of the R32 gas is its GWP value, equal to 675, which makes it possible to create systems containing up to 7 kg of gas without exceeding the threshold which obliges a characteristic leakage control, keeping of an equipment register, and an annual declaration to ISPRA, a threshold that for a R410A gas has already been surpassed by 2.4 kg of gas.

ADVANTAGES OF R32 GAS

- R32 has a GWP of 675 - 68% less than R410A gas with GWP 2088.
- It requires 20% less charge than R410A gas.
- It provides from 3% to 5% more energy efficiency than R410A gas.

WARNINGS

R32 gas is classified as a **slightly flammable gas** and this flammability class does not comply with the obligations of Legislative Decree 35/2010.

For further information, see the in-depth section on page 30.

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ITALIAN DESIGN JAPANESE HI-TECH

ROUNDED SHAPES, ELEGANT DESIGN, SUITED TO ALL TYPES OF INTERIORS

The Mitsubishi KIREIA line is the result of elaboration of effective solutions, able to meet the demanding requests of a sophisticated public that is attentive to detail. KIREIA was born from the expert hands of Italian designers and creators: TENSA is an industrial design company based in Milan that has been able to move from idea to project through competence and creativity.

KIREIA Plus and KIREIA guarantee aesthetics and functionality that are perfectly in line with architectural hedonism and Japanese technical standards. KIREIA Smart is second to none in terms of value for money.

STYLISH SIMPLICITY

Design means soft curves and rounded corners, giving the machine a 'fluctuating effect', making it elegant and compact: KIREIA Plus and KIREIA are not just air conditioners but are design complements, perfect for both modern and HiTech interiors as well as for interiors with a sober, traditional elegance.

Both models are available in white and titanium versions.

Its rounded corners give the machine a 'fluctuating effect', making it elegant and compact.

The ribbing in the extraction area is connected internally, giving it a softer shape.

A'DESIGN AWARD WINNER 2017 SILVER

A'Design Award

In 2017, the KIREIA Plus model received the Silver A'Design Award in the category of "Engineering and Technical Design" for "having met the demanding expectations of the European air conditioning market."

Paolo Ramazzotti and Stefano Casartelli

Engineer and Product Designer

TENSA INDUSTRIAL DESIGN Milan

KIREIA Plus & KIREIA

R410A MHI

R32 MHI

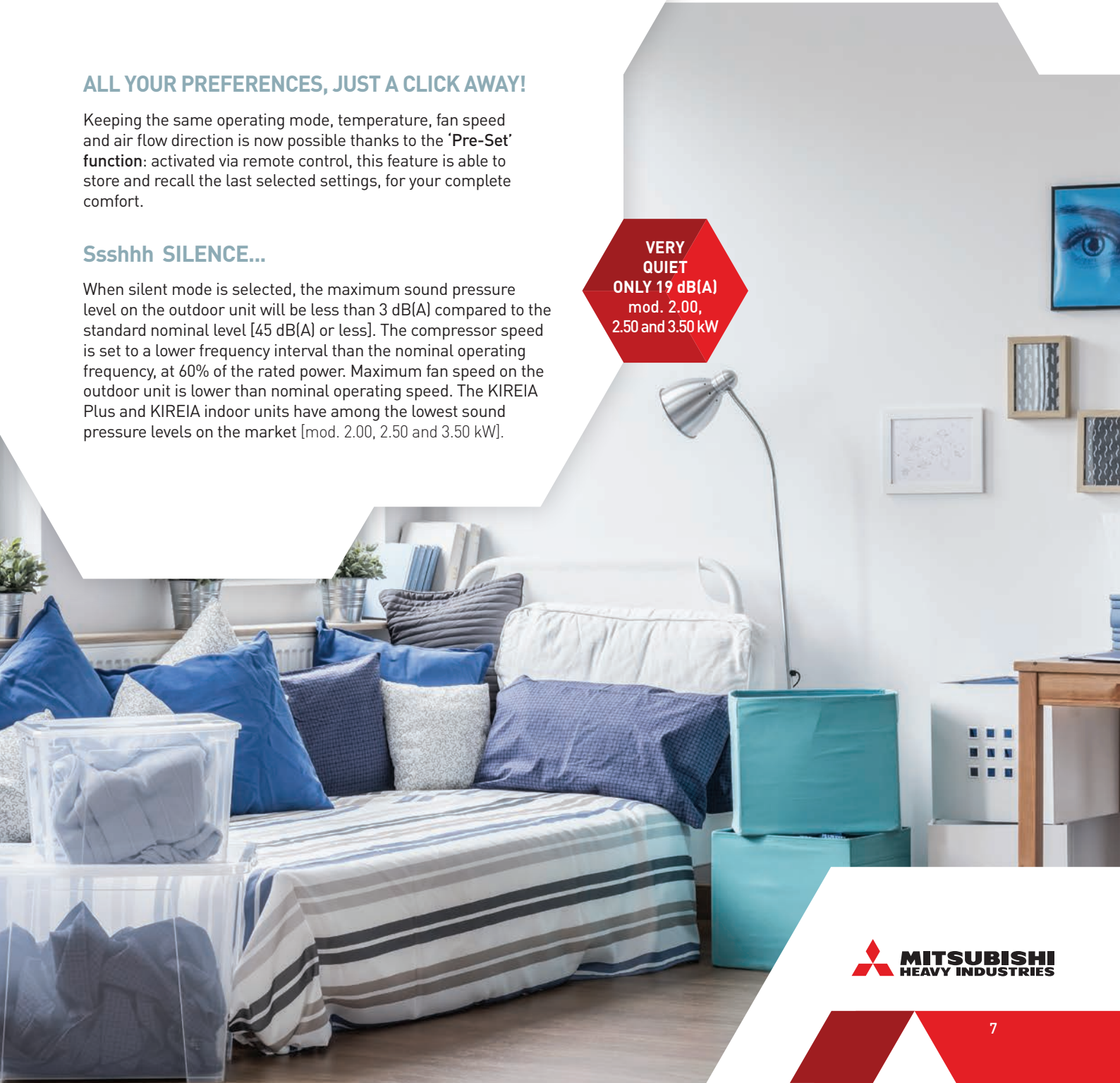
ALL YOUR PREFERENCES, JUST A CLICK AWAY!

Keeping the same operating mode, temperature, fan speed and air flow direction is now possible thanks to the '**Pre-Set' function**: activated via remote control, this feature is able to store and recall the last selected settings, for your complete comfort.

Ssshhh SILENCE...

When silent mode is selected, the maximum sound pressure level on the outdoor unit will be less than 3 dB(A) compared to the standard nominal level [45 dB(A) or less]. The compressor speed is set to a lower frequency interval than the nominal operating frequency, at 60% of the rated power. Maximum fan speed on the outdoor unit is lower than nominal operating speed. The KIREIA Plus and KIREIA indoor units have among the lowest sound pressure levels on the market [mod. 2.00, 2.50 and 3.50 kW].

VERY QUIET
ONLY 19 dB(A)
mod. 2.00,
2.50 and 3.50 kW



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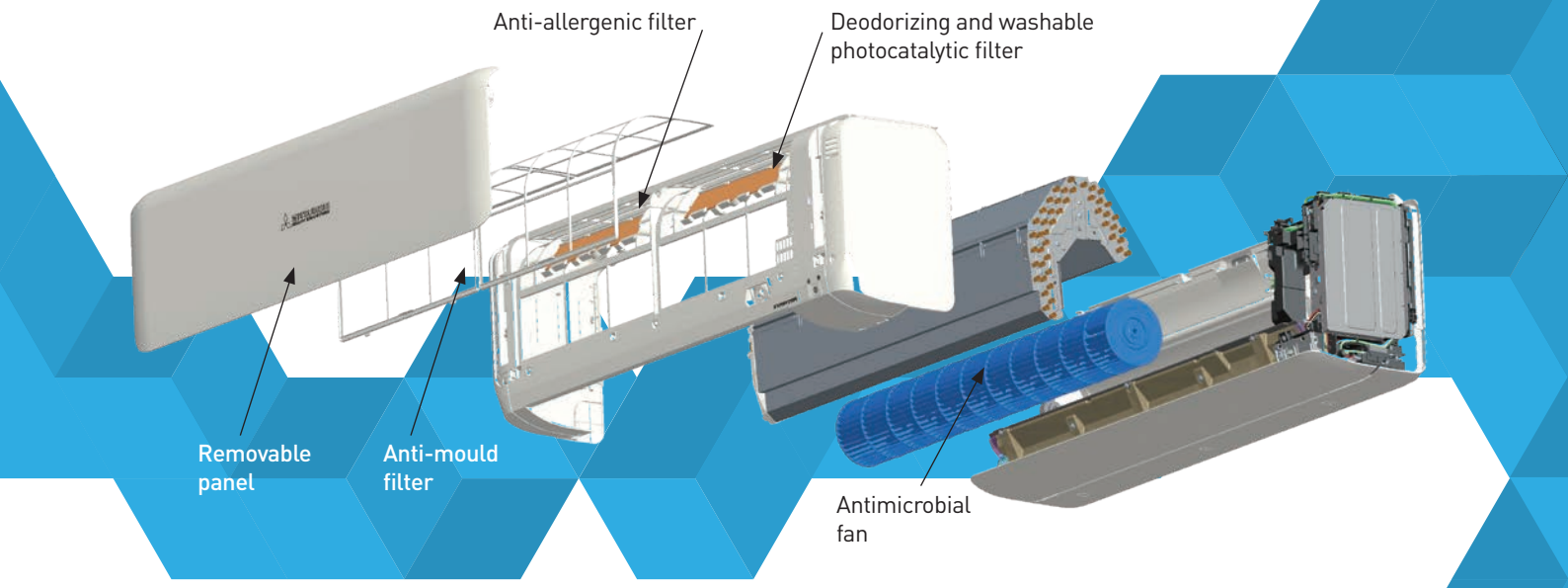
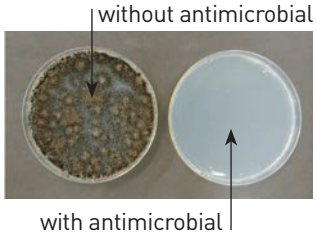
BREATHE HEALTHY AIR.
FILTERS AND SANITISATION

Well-being and health also pass through the air that we breathe. That's why Mitsubishi Heavy Industries makes our environments comfortable by sanitizing and, at the same time, evenly distributing the air by its air conditioners. In particular, the KIREIA Plus and KIREIA model filters and structure perform a high level of filtering: they remove dust, preventing the formation of fungus and mould and exerting a deep deodorizing action.



ANTIMICROBIAL TREATMENTS IN FAN

To keep indoor units clean, the fan has been subjected to antimicrobial treatment against mould and germs, making the system clean and safe. Here below is a comparison between bacteria and mould growth on fan surfaces (microscopic image)



PHOTOCATALYTIC FILTER WITH TITANIUM DIOXIDE + ZEOLITE

In non-woven fabric with TIO2 powders + Zeolite

Deodorizing and washable, keeps air fresh by neutralizing odour-causing molecules. The filter and its deodorizing power can be restored by simply rinsing with water and drying in the sun.

ANTI-ALLERGENIC FILTER

With carbonic acid diamide

The anti-allergenic filter eliminates pollen[1], lice[2], and allergens that live on in cat hair, etc., and deactivates them. The secret to this deactivation is the enzyme-carbonic acid diamide compound. Deactivation affects not only allergens but also all types of bacteria[2], moulds and viruses[3].

1. ELISA colorimetric test method Laboratory: Sagamihara Hospital independent national hospital agency, no. 1536. 2. ELISA colorimetric test method/ELISA fluorescent method Laboratory: Sagamihara Hospital independent national hospital agency, no. 1536. 3. TCID test method (infection value 50%) Laboratory: Kitasato Institute Foundation of the Environmental Sciences, no. 15-0145.

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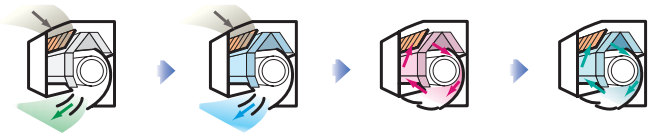
Where not specified on this page, the characteristics refer to the KIREIA Plus and KIREIA models.

ALLERGEN CLEAR FUNCTION

The Allergen Clear function is a real thermal/mechanical sanitization program: it is activated via the remote control, goes on for an hour and half, and ends with activation of the Self Clean Operation, then shutting down automatically.

This function neutralizes bacteria collected on the surface of the special self-cleaning anti-allergenic filter (with Carbonic Acid Diamide), thanks to the sophisticated interaction between the temperature and humidity control which activates the hydrolytic functions of the enzymes present on the filter.

The 4 phases of the Allergen Clear function



1. Captures allergens
2. Cooling: condensate production on the battery
3. Heating: distribution of hot water condensate on the filter to neutralise allergens
4. Self Clean function activation for drying

SELF CLEAN OPERATION

This function identifies the automatic mould sanitisation program that can be carried out at the end of the machine's operating cycle (or as the last phase of the Allergen Clear function). It lasts a couple of hours.

Mould proliferation is blocked through a thermal/mechanical process [mod. KIREIA Plus, KIREIA and KIREIA Smart].

Filters and functions

Model	KIREIA Plus	KIREIA	KIREIA Smart
Dust-proof	✓	✓	✓
Anti-allergenic	✓	✓	
Photocatalytic	✓	✓	
Allergen Clear	✓	✓	
Self Clean Operation	✓	✓	✓

Example

When the "Self Clean Operation" is NOT performed for a week → Expansion of fungal mycelium

mould spores

When "Self Clean Operation" is performed → Mould spores do not germinate

mould spores

Where not specified on this page, the characteristics refer to the KIREIA Plus and KIREIA models.

COMFORT AND BENEFITS.
MHI TAKES CARE OF YOU

Guaranteeing the most complete personal well-being is a priority for MHI: through numerous operational features, the KIREIA series models ensure night-time comfort, controlled humidity levels in the environment and the ideal temperature at any time of the year.

HIGH POWER: BOOST MODE

This mode provides extra air delivery to quickly bring the room to the desired temperature (in heating or cooling mode).
Useful in both the winter and summer months, the HIGH POWER function ensures a boost of warm air for pleasant warmth when you wake up in the winter, or a boost of fresh air when you get home on a hot summer day.

The air conditioner automatically resets the previous operating mode after 15 minutes to prevent the room from excessive heating or cooling [mod. KIREIA Plus, KIREIA and KIREIA Smart].

WEEKLY TIMER

Up to 4 timer programs are available (ON-TIMER, programmed automatic start / OFF-TIMER, automatic programmed stop) for each day of the week.

Up to 28 programs can be set per week. Once selected, this mode will repeat the same programming each week unless the setting is changed or cancelled [mod. KIREIA Plus and KIREIA].

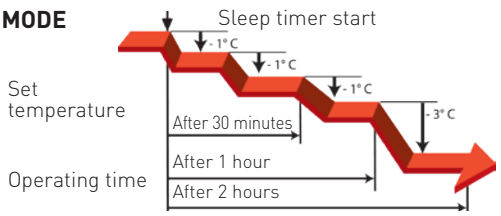
NIGHT SET-BACK MODE

During the cold months, keep the room temperature at a comfortable level when you are not at home, at night and when the room is empty. The air conditioner keeps a constant temperature of about 10°C [mod. KIREIA Plus and KIREIA].

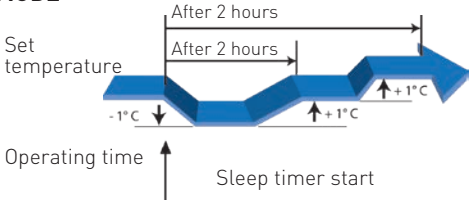
SLEEP TIMER: NIGHT-TIME OPERATION

Excessive cooling/heating is not needed during night-time rest. Thanks to this function, you can have moderate cooling/heating by means of power adjustment, also guaranteeing energy savings [mod. KIREIA Plus, KIREIA and KIREIA Smart].

IN HEATING MODE



IN COOLING MODE



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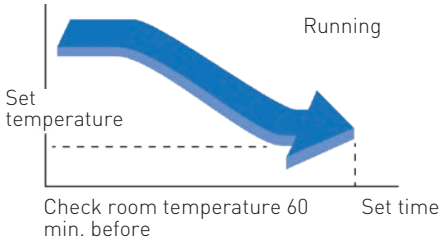
COMFORT START-UP MODE

Who hasn't ever wanted to return home welcomed by a pleasant cool breeze in summer and a comfortable warmth in winter?

When the timer is operational, the '**Comfort Start-up**' function - activated via remote control - starts indoor unit operation 5 to 60 minutes before the scheduled start time and ensures that the set temperature is reached as soon as the unit goes into operation [mod. KIREIA Plus, KIREIA and KIREIA Smart].

In COOLING mode (Stop)
Operating start

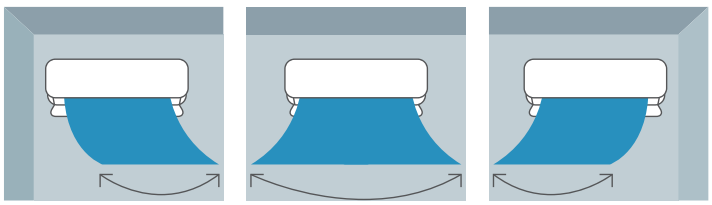


KEEPING HUMIDITY UNDER CONTROL

The perceived temperature in a room also depends on the degree of humidity. Dehumidification removes moisture from the air, lowering the perceived temperature during the summer months [mod. KIREIA Plus, KIREIA and KIREIA Smart].

INSTALLATION POSITION

Air flow direction can be set to adapt it to room configurations and to ensure their correct air conditioning [mod. KIREIA Plus and KIREIA].



VENTILATION.
AIR DISTRIBUTION

Jet Air technology for very quiet, very wide air flow. MHI has used the same aerodynamic analysis technology used in the development of jet engines for their air conditioners.

3D AIR FLOW. QUIET AND WITH A WIDE AIR FLOW RANGE

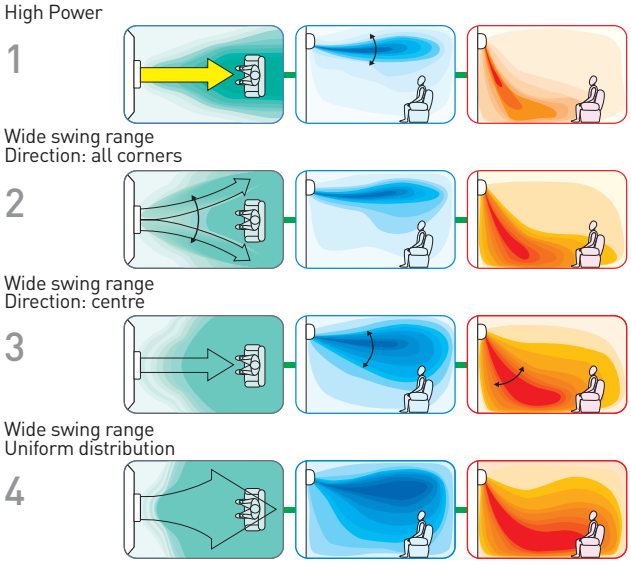
MHI made use of aeronautical technology for KIREIA Plus and KIREA model air flow system component design. Thanks to this technology, the units are able to distribute a wide, uniform air flow into the room, with a considerable reduction in consumption and sound levels: only 19 dB(A) for 2.00, 2.50 and 3.50 kW models.

The automatic control of the air flow volume and direction ensures a comfortable, uniform climate in the environment.

Through this control, it is possible to prevent any air currents that are too cold or too hot from being directed towards those present in the room.

In heating mode, the hot air flow can be aimed toward the ground, thus achieving an optimal degree of comfort.

3D AUTO PROGRAMMING



This program, which can be selected from the remote control, lets you use a single button to activate three independent air flows, generating a uniform breeze that reaches every corner of the room.

In cooling mode, the cooled air does not hit people in the room directly but first flows on the ceiling, letting them feel the air like a fresh breeze. In heating mode, the hot air flow is diffused directly on the ground.

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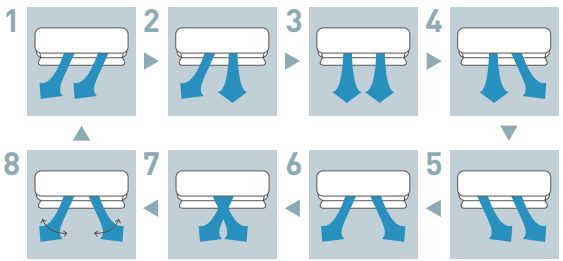
Where not specified on this page, the characteristics refer to the KIREIA Plus and KIREIA models.

HORIZONTAL AIR DELIVERY LOUVRE SWING IN 8 DIFFERENT DIRECTIONS

It is possible to manage the flow direction of the air delivery louvres individually: 8 different horizontal swing modes, selected from the remote control, to choose the direction of the air that you wish, thus achieving an optimal degree of comfort.



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KIREIA *Plus*
IT SEES YOU, IT HEARS YOU

Three functions to achieve optimum energy savings, with the HUMAN SENSOR device

An all new operating sensor that guarantees automatic energy savings control. Detects not only the presence/absence of people in the room, but also the type of activities being carried out.
Then KIREIA Plus regulates its cooling and heating capacity based on the real needs in the room where it is installed, in relation to the perception of those present.

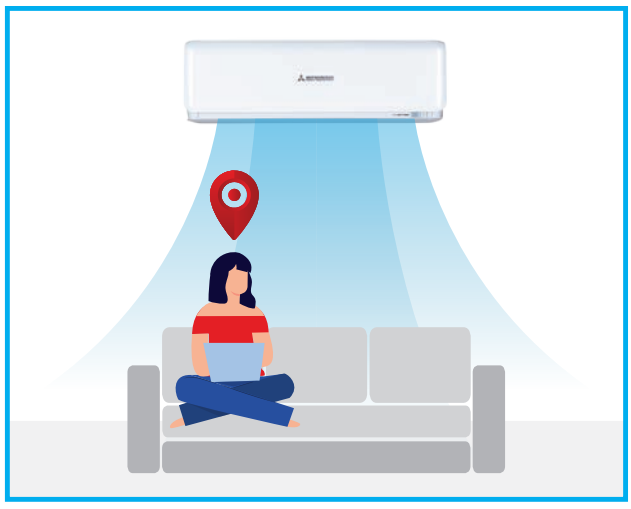
1. ECO OPERATION BY HUMAN SENSOR

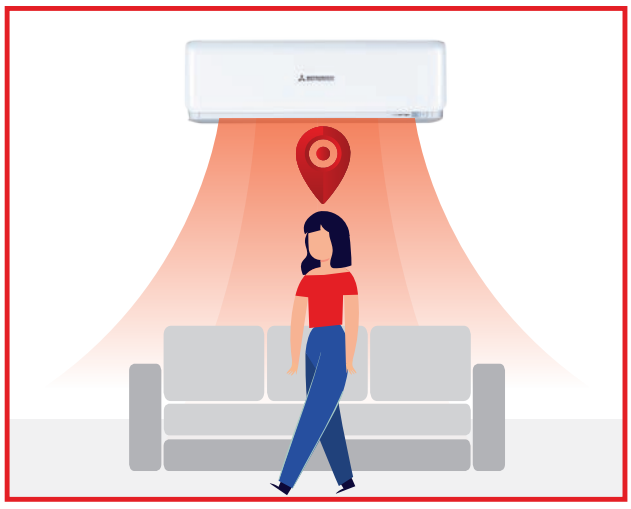
IN COOLING MODE

KIREIA Plus activates energy savings when low activity is detected and automatically raises the outlet air temperature.

IN HEATING MODE

KIREIA Plus activates energy savings when intense physical activity is detected and automatically lowers the outlet air temperature.





When the sensor detects that nobody is present in the room, the unit automatically reduces the power delivered to a moderate level after about 15 minutes. The unit returns to normal operation once people enter the room.

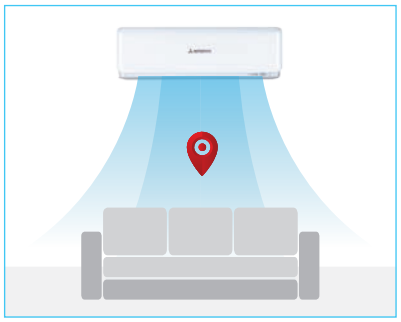
2. AUTO OFF BY HUMAN SENSOR

If there are still no people in the room after 1 hour (can be set from 1 to 2 hours via remote control), KIREIA Plus stops operation and goes into "stand-by" mode.

It re-activates when any human presence is detected within 12 hours or switches off entirely after 12 hours if nobody else enters the room.

You can activate and deactivate the AUTO OFF function from the remote control.

ABSENCE

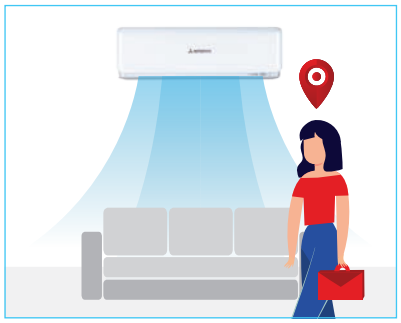


Power control: when the system detects that nobody is present in the room, the air flow stops.

AFTER 1 OR 2 HOURS (SELECTABLE)

Stand-by: the unit stops running if no activity is detected for 1 hour. It re-activates if and when activity is detected.

PEOPLE IN ROOM



Function re-activation: if activity returns inside the room within 12 hours, the air conditioner automatically starts to run again in the pre-set mode.

The HUMAN SENSOR is disabled if any manual timer setting [Sleep timer, Timer on/off, Weekly timer] is activated.

3. FUZZY AUTO OPERATION

Fuzzy Auto Operation guarantees automatic control of the comfort temperature even in the presence of a change in climate.

MITSUBISHI HEAVY INDUSTRIES

KIREIA *Plus*
DESIGN + HI-TECH

TOP CLASS ENERGY EFFICIENCY

R410A MHI

Energy savings for all seasons.

A+++
Energy class in cooling
SEER 9.60
(mod. 2.50 kW)

A+++
Energy class in heating
SCOP 5.20
(mod. 2.00 and 2.50 kW)

TOP CLASS ENERGY EFFICIENCY

R32 MHI

Energy savings for all seasons.

A+++
Energy class in cooling
SEER 10.30
(mod. 2.50 kW)

A+++
Energy class in heating
SCOP 5.20
(mod. 2.00 and 2.50 kW)

OPERATING RANGE

Broad scope of operation for all power levels.

-15°C / +46°C
cooling operation

-20°C / +24°C
in heating

BRIGHTNESS ADJUSTMENT

LED display brightness can be adjusted to suit individual preferences.

AN ALL-ITALIAN DESIGN

Soft lines, great attention to detail and authentic exclusivity. Two colours available, white and titanium, that blend with any home décor. Italian design that wins at home and also abroad, with the Silver A'Design Award'.

A'DESIGN AWARD WINNER 2017 SILVER

COMPLETE SILENCE

The quietest of the design models on the market at maximum speed and just 19 dB(A) at minimum speed.

19 dB(A)
[for models from 2.00 to 3.50 kW]

REMOVABLE PANEL

Advanced design and technology: the removable panel for air recovery has been designed to further reduce air resistance.

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R410A MHI

R410A technical data

SRK 20~60 ZSX-W

SRK 20~60 ZSX-W-T

SRC 20~60 ZSX-S

Remote control included

WiFi optional

Indoor unit model			SRK 20 ZSX-W(T)	SRK 25 ZSX-W(T)	SRK 35 ZSX-W(T)	SRK 50 ZSX-W(T)	SRK 60 ZSX-W(T)
Outdoor unit model			SRC 20 ZSX-S	SRC 25 ZSX-S	SRC 35 ZSX-S	SRC 50 ZSX-S	SRC 60 ZSX-S
Type			DC-Inverter heat pump				
Control			Remote control				
Rated capacity (T=35°C)	Cooling	kW	2.00 (0.90~3.20)	2.50 (0.90~3.70)	3.50 (0.90~4.30)	5.00 (1.00~5.80)	6.10 (1.00~6.80)
Rated absorbed power (T=35°C)	Cooling	kW	0.32 (0.16~0.74)	0.44 (0.16~0.89)	0.78 (0.16~1.26)	1.30 (0.19~1.80)	1.81 (0.19~2.50)
Rated energy efficiency coefficient	Cooling	EER[1]	6.25	5.68	4.49	3.85	3.37
Seasonal energy efficiency class	Cooling	626/2011[3]	A+++	A+++	A+++	A++	A++
Seasonal energy efficiency index	Cooling	SEER[2]	9.5	9.6	9.2	8.2	7.6
Annual energy consumption	Cooling	kWh/a	74	92	134	214	282
Theoretical load (Pdesignc) @35°C	Cooling	kW	2.0	2.5	3.5	5.0	6.1
Rated capacity (T=7°C)	Heating	kW	2.70 (0.80~5.30)	3.20 (0.80~5.80)	4.30 (0.80~6.60)	6.00 (0.60~8.10)	6.80 (0.60~8.70)
Rated absorbed power (T=7°C)	Heating	kW	0.47 (0.14~1.36)	0.59 (0.14~1.54)	0.90 (0.14~1.89)	1.36 (0.18~2.43)	1.67 (0.18~2.86)
Rated energy performance coefficient	Heating	COP[1]	5.74	5.42	4.78	4.41	4.07
Energy efficiency class (average season)	Heating	626/2011[3]	A+++	A+++	A+++	A++	A++
Seasonal efficiency class index (average season)	Heating	SCOP[2]	5.2	5.2	5.1	4.7	4.7
Annual energy consumption	Heating	kWh/a	728	781	906	1341	1551
Theoretical load (Pdesignh) @-10°C	Heating	kW	2.7	2.9	3.3	4.5	5.2
Operating limits (outside temp.)	Cooling	°C	-15~46				
	Heating	°C	-20~24				
Electrical data							
Power	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz				
Power cable		type	3 x 2.5 mm2			3 x 4 mm2	
Absorbed current (rated)	Cooling	A	1.9	2.5	3.9	6.0	8.3
	Heating	A	2.6	3.2	4.4	6.2	7.7
Maximum current		A	9	9	9	15	15
Maximum absorbed power		kW	1.92	1.92	1.92	2.9	2.9
Connection wires between I.U. and O.U. (including ground)		no.	4	4	4	4	4
Refrigerant circuit							
Refrigerant (GWP)[4]			R410A (2088)				
Quantity refrigerant pre-load		Kg	1.45	1.45	1.45	1.5	1.5
Diameter of refrigerant piping on liquid/gas		mm (inches)	ø6.35(1/4") - ø9.52(3/8")			ø6.35(1/4") - ø12.74(1/2")	
Max splitting length		m	25	25	25	30	30
Max height difference I.U. /O.U.		m	15	15	15	20	20
Splitting length without additional load		m	15	15	15	15	15
Additional load		g/m	20	20	20	20	20
Specifications of indoor units							
Dimensions	H x L x D	mm	305 x 920 x 220				
	Net weight	Kg	13	13	13	13	13
Sound pressure level (Hi/Mi/Lo/ULo)	Cooling	dB(A)	38/31/24/19	39/33/25/19	43/35/26/19	44/39/31/22	46/41/33/22
	Heating	dB(A)	38/32/25/19	40/34/27/19	41/35/28/19	46/41/33/23	46/42/34/23
Sound power level (Hi)	Cooling	dB(A)	53	55	58	59	62
	Heating	dB(A)	53	56	58	62	63
Handled air volume (Hi/Me/Lo/ULo)	Cooling	m3/h	678/546/360/300	732/600/402/300	786/648/438/300	858/744/468/324	978/804/534/324
	Heating	m3/h	732/618/432/324	768/660/468/324	834/708/516/324	1038/858/588/372	1068/822/654/372
Motor power (Output)		W	42	42	42	42	42
Diameter of condensate drain		mm	16	16	16	16	16
Provided biological filters		type	Anti-allergenic x 1: Photocatalytic (washable, with deodorising function) x 1				
Specifications of outdoor units							
Dimensions	H x L x D	mm	640 x 800(+71) x 290				
	Net weight	Kg	43	43	43	45	45
Sound pressure level	Cooling	dB(A)	43	44	48	50	52
	Heating	dB(A)	44	45	47	49	52
Sound power level	Cooling	dB(A)	56	57	61	63	65
	Heating	dB(A)	58	58	62	63	64
Handled air (Max)	Cooling	m3/h	1860	1860	2160	2340	2490
	Heating	m3/h	1860	1860	1860	1980	2340
Motor power (Output)		W	34	34	34	34	34
Optional parts							
Wi-Fi module[5]		Accessories to be paired with the SC-BIKN2-E interface module	MH-WIFI				
Wired remote control			RC-E5/RC-EX3				
SUPERLINK II interface for centraliser control			SC-ADN-AE				
BMS interfaces	KNX		MH-RC-KNX-1i				
	Modbus		MH-RC-MBS-1				
	Enocean		MH-RC-ENO-1				

1 Value measured according to harmonised standard EN14511. 2 EU Regulation No.206/2012 - Value measured according to harmonised standard EN14825. 3 EU Delegated Regulation No.626/2011 on the new labelling indicating the energy consumption of air conditioners. 4 Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 2088 times higher than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary. 5 Use of the Wi-Fi module excludes the possibility of connecting any other optional accessories.

MITSUBISHI HEAVY INDUSTRIES

R32 MHI

R32 technical data

SRK 20~60 ZSX-W

SRK 20~60 ZSX-W-T

SRC 20~60 ZSX-W

Remote control included

WiFi optional

Indoor unit model			SRK 20 ZSX-W(T)	SRK 25 ZSX-W(T)	SRK 35 ZSX-W(T)	SRK 50 ZSX-W(T)	SRK 60 ZSX-W(T)
Outdoor unit model			SRC 20 ZSX-W	SRC 25 ZSX-W	SRC 35 ZSX-W	SRC 50 ZSX-W	SRC 60 ZSX-W
Type			DC-Inverter heat pump				
Control			Remote control				
Rated capacity (T=35°C)	Cooling	kW	2.00 (0.90~3.40)	2.50 (0.90~3.80)	3.50 (0.90~4.50)	5.00 (1.00~6.20)	6.10 (1.00~6.90)
Rated absorbed power (T=35°C)		kW	0.31 (0.16~0.76)	0.44 (0.16~0.91)	0.74 (0.16~1.27)	1.24 (0.19~1.90)	1.71 (0.19~2.50)
Rated energy efficiency coefficient		EER[1]	6.45	5.68	4.73	4.03	3.57
Seasonal energy efficiency class		626/2011[3]	A+++	A+++	A+++	A++	A++
Seasonal energy efficiency index		SEER[2]	10.0	10.3	9.5	8.3	7.8
Annual energy consumption		kWh/a	70	85	129	211	274
Theoretical load (Pdesignc) @35°C		kW	2.0	2.5	3.5	5.0	6.1
Rated capacity (T=7°C)	Heating	kW	2.70 (0.80~5.50)	3.20 (0.80~6.00)	4.30 (0.80~6.80)	6.00 (0.80~8.20)	6.80 (0.80~8.80)
Rated absorbed power (T=7°C)		kW	0.47 (0.14~1.36)	0.59 (0.14~1.54)	0.90 (0.14~1.87)	1.36 (0.20~2.46)	1.65 (0.20~2.86)
Rated energy performance coefficient		COP[1]	5.74	5.42	4.78	4.41	4.12
Energy efficiency class (average season)		626/2011[3]	A+++	A+++	A+++	A++	A++
Seasonal efficiency class index (average season)		SCOP[2]	5.2	5.2	5.1	4.7	4.7
Annual energy consumption		kWh/a	754	808	934	1341	1551
Theoretical load (Pdesignh) @-10° C		kW	2.8	3	3.4	4.5	5.2
Operating limits (outside temp.)	Cooling	°C	-15~46				
	Heating	°C	-20~24				
Electrical data							
Power	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz				
Power cable		type	3 x 2.5 mm[2]			3 x 4 mm[2]	
Absorbed current (rated)	Cooling	A	1.8	2.4	3.5	5.4	7.5
	Heating	A	2.5	3.0	4.3	6.0	7.2
Maximum current		A	9	9	9	15	15
Maximum absorbed power		kW	1.92	1.92	1.92	2.9	2.9
Connection wires between I.U. and O.U. (including ground)		no.	4	4	4	4	4
Refrigerant circuit							
Refrigerant (GWP)[4]			R32 (675)				
Quantity refrigerant pre-load		Kg	1.2	1.2	1.2	1.3	1.3
Diameter of refrigerant piping on liquid/gas		mm (inches)	ø6.35(1/4") - ø9.52(3/8")			ø6.35(1/4") - ø12.74(1/2")	
Max splitting length		m	25	25	25	30	30
Max height difference I.U. /O.U.		m	15	15	15	20	20
Splitting length without additional load		m	15	15	15	15	15
Additional load		g/m	20	20	20	20	20
Specifications of indoor units							
Dimensions	H x L x D	mm	305 x 920 x 220				
	Net weight	Kg	13	13	13	13	13
Sound pressure level (Hi/Mi/Lo/ULo)	Cooling	dB(A)	38/31/24/19	39/33/25/19	43/35/26/19	44/39/31/22	48/41/33/22
	Heating		38/33/25/19	40/34/27/19	42/35/28/19	47/41/33/23	47/42/34/23
Sound power level (Hi)	Cooling	dB(A)	53	55	58	59	62
	Heating		55	56	58	62	63
Handled air volume (Hi/Me/Lo/ULo)	Cooling	m³/h	678/546/360/300	732/600/402/300	786/648/438/300	858/744/468/324	978/804/534/324
	Heating		732/618/432/324	768/660/468/324	834/708/516/324	1038/858/588/372	1068/822/654/372
Motor power (Output)		W	42	42	42	42	42
Diameter of condensate drain		mm	16	16	16	16	16
Provided biological filters		type	Anti-allergenic x 1: Photocatalytic (washable, with deodorising function) x 1				
Specifications of outdoor units							
Dimensions	H x L x D	mm	640 x 800(+71) x 290				
	Net weight	Kg	43	43	43	45	45
Sound pressure level	Cooling	dB(A)	43	44	48	51	52
	Heating		45	45	47	49	53
Sound power level	Cooling	dB(A)	56	57	61	63	65
	Heating		58	58	62	61	64
Handled air (Max)	Cooling	m³/h	1860	1860	2160	2340	2490
	Heating		1860	1860	1860	1980	2340
Motor power (Output)		W	34	34	34	34	34
Optional parts							
Wi-Fi module[5]			MH-WIFI				
Wired remote control		Accessories to be paired with the interface module SC-BIKN2-E	RC-E5/RC-EX3				
SUPERLINK II interface for centraliser control			SC-ADN-AE				
BMS interfaces	KNX		MH-RC-KNX-1i				
	Modbus		MH-RC-MBS-1				
	Enocean		MH-RC-ENO-1				

1 Value measured according to harmonised standard EN14511. 2 EU Regulation No.206/2012 - Value measured according to harmonised standard EN14825. 3 EU Delegated Regulation No.626/2011 on the new labelling indicating the energy consumption of air conditioners. 4 Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 675. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 675 times higher than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary. 5 Use of the Wi-Fi module excludes the possibility of connecting any other optional accessories.

MITSUBISHI HEAVY INDUSTRIES

MITSUBISHI HEAVY INDUSTRIES

KIREIA
IRRESISTIBLE COMFORT

HIGH ENERGY EFFICIENCY:

R410A MHI

Energy savings for all seasons.

A++

Energy class in cooling

SEER 7.80
(mod. 2.00 ~ 3.50 kW)

A++

Energy class in heating

SCOP 4.60
(mod. 2.00 ~ 3.50 kW)

HIGH ENERGY EFFICIENCY:

R32 MHI

Energy savings for all seasons.

A+++

Energy class in cooling

SEER 8.50
(mod. 2.00 and 2.50 kW)

A++

Energy class in heating

SCOP 4.70
(mod. 2.50 and 3.50 kW)

OPERATING RANGE

Broad scope of operation for all power levels.

-15°C / +46°C

cooling operation

-15°C / +24°C

in heating

COMPLETE SILENCE

The quietest of the design models on the market at maximum speed and just 19 dB(A) at minimum speed.

19dB(A)

[for models from 2.00 to 3.50 kW]

BRIGHTNESS ADJUSTMENT

LED brightness can be adjusted to your liking for increased comfort during the night hours.

MITSUBISHI HEAVY INDUSTRIES

KIREIA

R410A MHI

R410A technical data

SRK 20~50 ZS-S

SRK 20~50 ZS-S-T

SRC 20~50 ZS-S

Remote control included

WiFi optional

Indoor unit model			SRK 20 ZS-S(T)	SRK 25 ZS-S(T)	SRK 35 ZS-S(T)	SRK 50 ZS-S(T)
Outdoor unit model			SRC 20 ZS-S	SRC 25 ZS-S	SRC 35 ZS-S	SRC 50 ZS-S
Type			DC-Inverter heat pump			
Control			Remote control			
Rated capacity (T=35°C)	Cooling	kW	2.00 (1.00~2.80)	2.50 (1.00~3.00)	3.50 (1.00~3.80)	5.00 (1.70~5.50)
Rated absorbed power (T=35°C)	Cooling	kW	0.44 (0.21~0.77)	0.62 (0.21~0.88)	1.01 (0.21~1.24)	1.56 (0.40~2.30)
Rated energy efficiency coefficient	Cooling	EER[1]	4.55	4.03	3.47	3.21
Seasonal energy efficiency class	Cooling	626/2011[3]	A++	A++	A++	A++
Seasonal energy efficiency index	Cooling	SEER[2]	7.8	7.8	7.8	6.26
Annual energy consumption	Cooling	kWh/a	90	113	158	280
Theoretical load (Pdesignc) @35°C	Cooling	kW	2.0	2.5	3.5	5.0
Rated capacity (T=7°C)	Heating	kW	2.70 (0.90~4.20)	3.20 (0.90~4.40)	4.00 (0.90~4.80)	5.80 (1.60~6.60)
Rated absorbed power (T=7°C)	Heating	kW	0.62 (0.17~1.38)	0.80 (0.17~1.36)	1.00 (0.17~1.45)	1.59 (0.37~2.30)
Rated energy performance coefficient	Heating	COP[1]	4.35	4.00	4.00	3.65
Energy efficiency class (average season)	Heating	626/2011[3]	A++	A++	A++	A+
Seasonal efficiency class index (average season)	Heating	SCOP[2]	4.6	4.6	4.6	4.2
Annual energy consumption	Heating	kWh/a	732	762	852	1300
Theoretical load (Pdesignh) @-10°C	Heating	kW	2.4	2.5	2.8	3.9
Operating limits (outside temp.)	Cooling	°C	-15~46			
	Heating	°C	-15~24			
Electrical data						
Power	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz			
Power cable		type	3 x 2.5 mm²			3 x 4 mm²
Absorbed current (rated)	Cooling	A	2.4	3.1	4.7	6.9
	Heating	A	3.1	3.8	4.7	7
Maximum current		A	9	9	9	14.5
Maximum absorbed power		kW	1.65	1.65	1.65	2.68
Connection wires between I.U. and O.U. (including ground)		no.	4	4	4	4
Refrigerant circuit						
Refrigerant (GWP)[4]			R410A (2088)			
Quantity refrigerant pre-load		Kg	0.75	0.75	0.95	1.25
Diameter of refrigerant piping on liquid/gas		mm (inches)	ø6.35(1/4") - ø9.52(3/8")			ø6.35(1/4") - ø12.74(1/2")
Max splitting length		m	20	20	20	25
Max height difference I.U. /O.U.		m	10	10	10	15
Splitting length without additional load		m	15	15	15	15
Additional load		g/m	20	20	20	20
Specifications of indoor units						
Dimensions	H x L x D	mm	290 x 870 x 230			
	Net weight	Kg	9.5	9.5	9.5	10
Sound pressure level (Hi/Mi/Lo/ULo)	Cooling	dB(A)	34/25/22/19	36/28/23/19	40/30/26/19	45/36/28/22
	Heating	dB(A)	36/29/23/19	39/30/24/19	41/36/25/19	45/37/31/24
Sound power level (Hi)	Cooling	dB(A)	50	52	56	58
	Heating	dB(A)	52	55	58	59
Handled air volume (Hi/Me/Lo/ULo)	Cooling	m³/h	558/420/354/300	594/480/354/300	678/522/336/300	726/594/444/354
	Heating	m³/h	600/510/390/354	678/522/402/354	738/660/420/336	834/672/546/444
Motor power (Output)		W	30	30	30	
Diameter of condensate drain		mm	16	16	16	16
Provided biological filters		type	Anti-allergenic x 1: Photocatalytic (washable, with deodorising function) x 1			
Specifications of outdoor units						
Dimensions	H x L x D	mm	540 x 780(+62) x 290			595 x 780(+62) x 290
	Net weight	Kg	31.5	31.5	34.5	36.5
Sound pressure level	Cooling	dB(A)	45	46	50	51
	Heating	dB(A)	45	46	48	53
Sound power level	Cooling	dB(A)	57	58	62	62
	Heating	dB(A)	57	58	61	63
Handled air (Max)	Cooling	m³/h	1644	1644	1890	1968
	Heating	m³/h	1416	1416	1668	1968
Motor power (Output)		W	24	24	24	24
Optional parts						
Wi-Fi module[5]			MH-WIFI			
Wired remote control		Accessories to be paired with the SC-BIKN2-E interface module	RC-E5/RC-EX3			
SUPERLINK II interface for centraliser control			SC-ADN-AE			
BMS interfaces	KNX		MH-RC-KNX-1i			
	Modbus		MH-RC-MBS-1			
	Enocean		MH-RC-ENO-1			

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MITSUBISHI HEAVY INDUSTRIES

KIREIA

R32 MHI

R32 technical data

SRK 20~50 ZS-W

SRK 20~50 ZS-W-T

SRC 20~50 ZS-W

Remote control included

WiFi optional

Indoor unit model			SRK 20 ZS-W(T)	SRK 25 ZS-W(T)	SRK 35 ZS-W(T)	SRK 50 ZS-W(T)
Outdoor unit model			SRC 20 ZS-W	SRC 25 ZS-W	SRC 35 ZS-W	SRC 50 ZS-W
Type			DC-Inverter heat pump			
Control			Remote control			
Rated capacity (T=35°C)	Cooling	kW	2.00 (0.90~2.90)	2.50 (0.90~3.10)	3.50 (0.90~4.00)	5.00 (1.30~5.50)
Rated absorbed power (T=35°C)	Cooling	kW	0.44 (0.19~0.80)	0.62 (0.19~0.90)	0.89 (0.17~1.24)	1.35 (0.29~1.80)
Rated energy efficiency coefficient	Cooling	EER[1]	4.55	4.03	3.93	3.70
Seasonal energy efficiency class	Cooling	626/2011[3]	A+++	A+++	A++	A++
Seasonal energy efficiency index	Cooling	SEER[2]	8.5	8.5	8.4	7
Annual energy consumption	Cooling	kWh/a	83	103	146	250
Theoretical load (Pdesignc) @35°C	Cooling	kW	2.0	2.5	3.5	5
Rated capacity (T=7°C)	Heating	kW	2.7 0(0.90~4.30)	3.20 (0.90~4.50)	4.00 (0.90~5.00)	5.80 (1.30~6.60)
Rated absorbed power (T=7°C)	Heating	kW	0.59 (0.20~1.40)	0.74 (0.20~1.42)	0.94 (0.19~1.45)	1.56 (0.25~1.98)
Rated energy performance coefficient	Heating	COP[1]	4.58	4.32	4.26	3.72
Energy efficiency class (average season)	Heating	626/2011[3]	A++	A++	A++	A++
Seasonal efficiency class index (average season)	Heating	SCOP[2]	4.6	4.7	4.7	4.6
Annual energy consumption	Heating	kWh/a	793	804	895	1158
Theoretical load (Pdesignh) @-10°C	Heating	kW	2.6	2.7	3.0	3.8
Operating limits (outside temp.)	Cooling	°C	-15~46			
	Heating	°C	-15~24			
Electrical data						
Power	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz			
Power cable		type	3 x 2.5 mm²			3 x 4 mm²
Absorbed current (rated)	Cooling	A	2.5	3.1	4.2	5.9
	Heating	A	3	3.6	4.4	6.9
Maximum current		A	9	9	9	14.5
Maximum absorbed power		kW	1.65	1.65	1.65	2.68
Connection wires between I.U. and O.U. (including ground)		no.	4	4	4	4
Refrigerant circuit						
Refrigerant (GWP)[4]			R32 (675)			
Quantity refrigerant pre-load		Kg	0.62	0.62	0.78	1.05
Diameter of refrigerant piping on liquid/gas		mm (inches)	ø6.35(1/4") - ø9.52(3/8")			ø6.35(1/4") - ø12.74(1/2")
Max splitting length		m	20	20	20	25
Max height difference I.U. /O.U.		m	10	10	10	15
Splitting length without additional load		m	15	15	15	15
Additional load		g/m	20	20	20	20
Specifications of indoor units						
Dimensions	H x L x D	mm	290 x 870 x 230			
	Net weight	Kg	9.5	9.5	9.5	10
Sound pressure level (Hi/Mi/Lo/ULo)	Cooling	dB(A)	34/25/22/19	36/28/23/19	40/30/26/19	46/36/29/22
	Heating	dB(A)	36/29/23/19	39/30/24/19	41/36/25/19	46/37/31/24
Sound power level (Hi)	Cooling	dB(A)	48	50	54	59
	Heating	dB(A)	50	53	56	60
Handled air volume (Hi/Me/Lo/ULo)	Cooling	m³/h	558/420/354/300	594/480/354/300	678/522/420/300	726/594/444/354
	Heating	m³/h	600/510/390/354	678/522/402/354	738/660/420/336	834/672/546/444
Motor power (Output)		W	42	42	42	42
Diameter of condensate drain		mm	16	16	16	16
Provided biological filters		type	Anti-allergenic x 1: Photocatalytic (washable, with deodorising function) x 1			
Specifications of outdoor units						
Dimensions	H x L x D	mm	540 x 780(+62) x 290			595 x 780(+62) x 290
	Net weight	Kg	31.5	31	34.5	36
Sound pressure level	Cooling	dB(A)	45	46	50	51
	Heating	dB(A)	45	46	48	52
Sound power level	Cooling	dB(A)	56	56	61	61
	Heating	dB(A)	56	58	61	63
Handled air (Max)	Cooling	m³/h	1482	1644	1890	1968
	Heating	m³/h	1416	1416	1668	1968
Motor power (Output)		W	24	24	24	24
Optional parts						
Wi-Fi module[5]			MH-WIFI			
Wired remote control		Accessories to be paired with the interface module SC-BIKN2-E	RC-E5/RC-EX3			
SUPERLINK II interface for centraliser control			SC-ADN-AE			
BMS interfaces	KNX		MH-RC-KNX-1i			
	Modbus		MH-RC-MBS-1			
	Enocean		MH-RC-ENO-1			

1 Value measured according to harmonised standard EN14511. 2 EU Regulation No.206/2012 - Value measured according to harmonised standard EN14825. 3 EU Delegated Regulation No.626/2011 on the new labelling indicating the energy consumption of air conditioners. 4 Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 675. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 675 times higher than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary. 5 Use of the Wi-Fi module excludes the possibility of connecting any other optional accessories.

MITSUBISHI HEAVY INDUSTRIES

KIREIA Smart
INTELLIGENT CLIMATE

ENERGY EFFICIENCY

R32 MHI

Energy savings for all seasons.

A++

Energy class in cooling

SEER 7.30
(mod. 3.20 kW)

A+

Energy class in heating

SCOP 4.40
(mod. 3.20 kW)

OPERATING RANGE

Broad scope of operation for all power levels.

-15°C / +46°C

cooling operation

-15°C / +24°C

in heating

NOISE LEVEL

Discreet and quiet, the KIREIA Smart boasts a sound pressure of 23 dB(A) at minimum speed [for models from 2.50 to 3.20 kW].

COMFORT START-UP MODE

This function lets you start indoor unit operations 5 to 60 minutes before the scheduled start time and ensures that the set temperature is reached as soon as the unit goes into operation. See the description on pg. 11.

VERY COMPACT DESIGN

High-performance and compact, KIREIA Smart is the most discreet solution for home air conditioning, with a depth of only 21 cm for all power sizes.

21 cm (depth)

SELF CLEAN OPERATION

This function lets you dry the indoor unit heat exchanger to avoid the formation of mould and bacteria. See the description on pg. 9.

R32 technical data

SRK 25~45 ZSP-W

SRC 25~35 ZSP-W

SRC 45 ZSP-W

Remote control included

Indoor unit model			SRK 25 ZSP-W	SRK 35 ZSP-W	SRK 45 ZSP-W
Outdoor unit model			SRC 25 ZSP-W	SRC 35 ZSP-W	SRC 45 ZSP-W
Type			DC-Inverter heat pump		
Control			Remote control		
Rated capacity (T=35°C)	Cooling	kW	2.50 (0.90~3.10)	3.20 (0.90~3.70)	4.50 (1.30~4.80)
Rated absorbed power (T=35°C)	Cooling	kW	0.71 (0.20~1.01)	0.91 (0.20~1.32)	1.35 (0.29~1.71)
Rated energy efficiency coefficient	Cooling	EER[1]	3.52	3.52	3.33
Seasonal energy efficiency class	Cooling	626/2011[3]	A++	A++	A++
Seasonal energy efficiency index	Cooling	SEER[2]	6.8	7.3	6.3
Annual energy consumption	Cooling	kWh/a	129	154	251
Theoretical load (Pdesignc) @35°C	Cooling	kW	2.5	3.2	4.5
Rated capacity (T=7°C)	Heating	kW	2.80 (1.00~4.10)	3.60 (1.00~4.60)	5.00 (1.20~5.80)
Rated absorbed power (T=7°C)	Heating	kW	0.69 (0.20~1.43)	0.93 (0.20~1.43)	1.36 (0.27~1.84)
Rated energy performance coefficient	Heating	COP[1]	4.05	3.87	3.68
Energy efficiency class (average season)	Heating	626/2011[3]	A+	A+	A+
Seasonal efficiency class index (average season)	Heating	SCOP[2]	4.1	4.4	4.2
Annual energy consumption	Heating	kWh/a	957	955	1269
Theoretical load (Pdesignh) @-10°C	Heating	kW	2.8	3.0	3.8
Operating limits (outside temp.)	Cooling	°C	-15~46		
	Heating	°C	-15~24		
Electrical data					
Power	Outdoor unit	Ph-V-Hz	1Ph - 220/240V - 50Hz		
Power cable		type	3 x 2.5 mm²		3 x 4 mm²
Absorbed current (rated)	Cooling	A	3.4	4.3	6.1
	Heating	A	3.4	4.3	6.1
Maximum current		A	9	9	14.5
Maximum absorbed power		kW	1.65	1.65	2.68
Connection wires between I.U .and O.U. (including ground)		no.	4	4	4
Refrigerant circuit					
Refrigerant (GWP)[4]			R32 (675)		
Quantity refrigerant pre-load		Kg	0.55	0.68	1.1
Diameter of refrigerant piping on liquid/gas		mm (inches)	ø6.35(1/4") - ø9.52(3/8")		ø6.35(1/4") - ø12.74(1/2")
Max splitting length		m	15	15	25
Max height difference I.U. /O.U.		m	10	10	15
Splitting length without additional load		m	10	15	15
Additional load		g/m	20	20	20
Specifications of indoor units					
Dimensions	H x L x D	mm	267 x 783 x 210	267 x 783 x 210	267 x 783 x 210
	Net weight	Kg	7	7	7.5
Sound pressure level (Hi/Mi/Lo)	Cooling	dB(A)	45/34/23	45/36/23	44/39/24
	Heating	dB(A)	43/34/26	44/36/28	48/41/30
Sound power level (Hi)	Cooling	dB(A)	57	58	56
	Heating	dB(A)	57	58	62
Handled air volume (Hi/Me/Lo)	Cooling	m³/h	600/438/252	570/408/252	540/432/228
	Heating	m³/h	570/438/312	576/444/330	720/552/372
Motor power (Output)		W	30	30	30
Diameter of condensate drain		mm	16	16	16
Filter included		type	Polypropylene mesh		
Specifications of outdoor units					
Dimensions	H x L x D	mm	540 x 645(+57) x 275		595 x 780(+62) x 290
	Net weight	Kg	26.5	28.5	36
Sound pressure level	Cooling	dB(A)	47	48	51
	Heating	dB(A)	45	48	51
Sound power level	Cooling	dB(A)	57	59	63
	Heating	dB(A)	56	60	64
Handled air (Max)	Cooling	m³/h	1422	1368	2136
	Heating	m³/h	1182	1320	2004
Motor power (Output)		W	24	24	24
Optional parts					
Wi-Fi module		Accessories to be paired with the interface module SC-BIKN2-E	Not available for this product		
Wired remote control					
SUPERLINK II interface for centraliser control					
BMS interfaces	KNX				
	Modbus				
	Enocean				

1 Value measured according to harmonised standard EN14511. 2 EU Regulation No.206/2012 - Value measured according to harmonised standard EN14825. 3 EU Delegated Regulation No.626/2011 on the new labelling indicating the energy consumption of air conditioners. 4 Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 675. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 675 times higher than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary.

EVERYTHING'S UNDER **CONTROL**

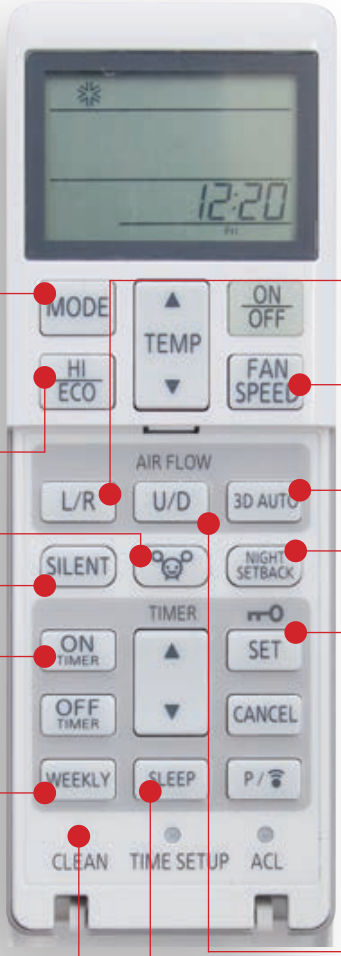
SIMPLE AND INTELLIGENT

What is the meaning of a symbol on the remote control? What is it used for? How can I set the mode I want? Although it may seem obvious, these are the questions most of us have when we hold an air conditioner remote control and want to use it to operate the unit.

The standard remote controls supplied with the KIREIA series guarantee simple and intuitive use, for complete control of the room temperature and air distribution, wherever you are. The keys guide the function settings and the convenient display lets you view all the selected and active parameters.

R410A MHI R32 MHI

KIREIA Plus & KIREIA



Operating mode

To select the modes: **auto**, **cooling**, **heating**, **dehumidification**, **ventilation**.

High Power / Eco modes

Allergen Clear function

Silent mode

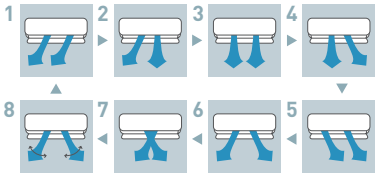
ON Timer

To select the Comfort Start-function

Weekly timer

Up to 4 daily programs with timer on/off timer, for a total of 28 weekly programs.

Self Clean Operation



Horizontal swing in 8 directions

Fan speed

3D air flow

Night Set-Back mode

Button lock

The unit lock prevents involuntary operations. This function is especially useful for families with small children.

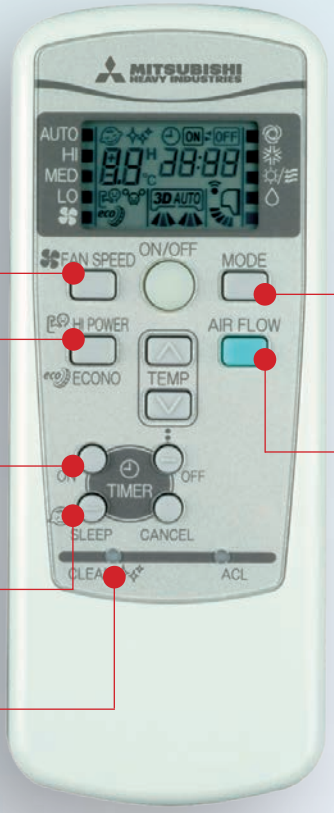
Vertical swing

Sleep mode

MITSUBISHI HEAVY INDUSTRIES

R32
MHI

KIREIA Smart



Fan speed

Hi Power/Econo modes

To choose between maximum power and energy savings.

ON Timer

To select the Comfort Start-function

Sleep mode

For maximum comfort during the night.

Self Clean Operation

Operating mode

To select the modes: **auto**, **cooling**, **heating**, **dehumidification**, **ventilation**.

Flow direction

MITSUBISHI HEAVY INDUSTRIES

EVERYTHING'S UNDER **CONTROL**

KIREIA *Plus* & KIREIA

SMART WIFI AND ENERGY SAVINGS

The WiFi device lets you set and program the air conditioner from wherever you are by means of **iOS** or **Android** systems, managing the unit and household climate even from outside your home, according to your needs and thus preventing wasted energy.

Thanks to the **MH-WiFi kit** (optional) it is possible at any time to carry out the following operations directly from your smartphone: switch the unit on or off, set the operating mode, adjust the temperature and the air flow.

Some examples of screens from the iOS device

R410A MHI

R32 MHI

MITSUBISHI HEAVY INDUSTRIES

MITSUBISHI
HEAVY INDUSTRIES

EFFICIENCY AND SAVINGS.
RENEWABLE ENERGY

CERTIFIED QUALITY AND SAFETY

Mitsubishi Heavy Industries has obtained International Standard Quality Management System ISO 9001 and ISO 14001 certification.

All products come with the CE marking for access to European markets, participate in the Eurovent certification program and comply with the RoHS directives on restrictions on the use of substances harmful to the environment.

In Italy, the Termal Group is a member of Ridomus, a consortium that ensures the correct processing and recovery of Waste Electrical and Electronic Equipment (WEEE).

Mitsubishi Heavy Industries Research&Development brings continuous improvements in the energy efficiency of products. The use of renewable resources in accordance with the ErP Eco-design Directive helps people save energy and money. The technology of the Kireia Plus, Kireia and Kireia Smart wall units has opened up new horizons of efficiency and convenience.

THE ERP ECODESIGN DIRECTIVE

Eco-design of energy-related products (ErP: Energy related Products).

Over 80% of the environmental impact of a product is determined at the design stage. Ecodesign implies taking into account all the environmental impacts of a product from the earliest stages of design.

The purpose of this standard has been to promote eco-compatible design of energy-using products and reducing consumption of CO2 emissions to help meet the strategic European '20 - 20 - 20' plan through an incremental evolution, which means that, by 2020:

- 20% reduction of primary energy consumption.
- 20% reduction of CO2 emissions.
- Use of 20% of renewable energy.

CONSUMER BENEFITS

The European ErP directive:

- Aims to increase the minimum efficiency of air conditioners, at the same time reordering the air conditioning sector by prohibiting the importing and production of products which are no longer considered efficient.
- Ensures that differences between the regulations of the various European countries do not become obstacles in the intra-European market.
- Obliges all manufacturers to provide more details and information to consumers, thus allowing them to make even more informed purchasing choices.

ENVIRONMENTAL BENEFITS

The Directive requires manufacturers promote the development of more efficient appliances, which leads to a reduction in the consumption of valuable natural resources, minimising the environmental impact. The increased quality and quantity of information improves transparency on air conditioning energy consumption.

MITSUBISHI HEAVY INDUSTRIES

WARNINGS ON R32 GAS USE

REFRIGERANT GAS R32

The specific name of the R32 gas is difluoromethane. Currently, it is present among the low-value GWP fluorinated gases, equal to 675, and is used in air-conditioning units intended for residential use.

It cannot be used in air conditioning units with direct expansion for tertiary and industrial use with a high refrigerant content, such as VRF systems, since it does not comply with some current regulations*.

There is no obligation to replace the current R410A gas, which therefore remains regularly on the market, except in monosplit applications with refrigerant <3 kg where, starting from 2025, the use of gas with GWP<750 will be mandatory.

When storing units containing R32, it may be necessary, on the depending on the quantities stored, to revise the Fire Prevention Certificate to guarantee the validity of its insurance guarantee (Presidential Decree 151/2011). The transport of dangerous goods is regulated by Leg. Decree 35/2010. R32 has been classified as slightly flammable by ISO 817 and as such has no stringent restrictions on road transport, maintaining a strict regulation in maritime and aeronautical transport.

THE REGULATION

The EN 378:2016 standard also regulates the applications of appliances using R32 gas.
The maximum concentration limits of gas in residential applications must always be verified, with particular regard to multisplit systems that can potentially concentrate (in case of leakage) high quantities of refrigerant in small-sized environments. R32 gas is heavier than air and accumulates in the event of a leak. Indoor units therefore follow different normative parameters depending on the type of application.

Installation in public buildings is regulated by specific standards concerning the application of appliances with flammable gases, such as: Min. Decree for Hotels 09/04/1994, Min. Decree for shopping centres 27/07/2010, Min. Decree for buildings for shows19/08/1996, Min. Decree for hospitals 18/09/2012, Min. Decree for schools 26/08/1992, Min. Decree for offices 22/02/2006, Min. Decree for games for children 16/07/2014, Min. Decree for airports 07/07/2014, Min. Decree for interports 18/07/2101.

DESIGN, INSTALLATION AND MAINTENANCE

The design, installation and maintenance of appliances with R32 gas are regulated by the following standards: Ministerial Decree 37/2008 provisions concerning the installation of plants inside buildings, Leg. Decree 81/2008 text on health and safety at work, F-gas 517/2014 regulation of fluorinated gases, Presidential Decree 151/2011 governing the procedures relating to fire prevention, EN 378:2016 refrigeration systems and heat pumps (requirements for plant safety).

Scrupulous checking of existing regulations is recommended when using equipment containing R32 gas. Failure to comply with these standards requires the designers and installers of equipment with R32 to have their own direct legal responsibility for them.

* Italy applies a ban on flammable refrigerant for applications such as in hotels (Min.Decree 09/04/1994), shopping centres (Min-Decree 27/07/2010), buildings for public performance (Min. Decree 19/08/1996), hospitals (Min. Decree 18/09/2012), schools (Min. Decree 26/08/1992), offices (Min. Decree 22/02/2006), play grounds for children (Min.Decree 16/07/2014), airports (Min.Decree 07/07/2014) and interports (Min.Decree 18/07/2014).

TAX REGULATIONS AND DEDUCTIONS

LEGISLATIVE DIRECTIVE ON THE PROMOTION OF THE USE OF ENERGY FROM RENEWABLE SOURCES

BUILDING RENOVATION 50%

Bonus for Air conditioners and Water heaters with heat pump

- This bonus is an IRPEF deduction of a quota divided into 10 annual instalments.
- The tax deduction relates to renovation work carried out on individual property units and on the common parts of condominiums.
- Can be used for installation of high efficiency air conditioners and heat pumps.
- Only available to individuals.
- Valid until 31/12/2019 with a 50% rate.
- Maximum expenditure of € 96,000 has been confirmed.
- Confirmed extension of the incentive to works aimed at achieving energy savings and use of renewable energy (eg. installation of heat pumps).
- Obligation to preserve and exhibit upon request of offices all documents relating to the property being renovated.

Also for works started from 1 January 2019 and up to 31 December, it will be possible to benefit from a tax deduction of 50% of the expenses incurred and within the limit of 96,000 Euros of expenditure. This extension of the restructuring bonus is one of the measures contained in the official text of Budget Law 2019, in force since 1 January 2019.

Please refer to the **Revenue Agency Guide dedicated to the Deductions for building renovations**: **http://www.agenziaentrate.gov.it/**.

65% DEDUCTION FOR ENERGY REDEVELOPMENT – ECOBONUS

With Budget Law 2019 (Law No. 145 of 30 December 2018), the 65% tax deduction for energy efficiency measures has been extended until 31 December 2019. This legislation consists of a deduction from IRPEF or from Ires and is granted when carrying out interventions that increase the level of energy efficiency of existing buildings. In general, deductions are recognized if the expenses are incurred for:

- Reduction of energy needs for heating.
- Thermal improvement of buildings (insulation - floors - windows, including window frames).
- Installation of solar panels.
- The replacement of winter air conditioning systems.

Please refer to the Revenue Agency website for the distinction between Deduction, equal to 65% for expenses incurred from 6 June 2013 to 31 December 2019, and 50% deduction for expenses incurred from 1 January 2019.

Who can request the Ecobonus

The tax deduction for interventions is aimed at energy savings and redevelopment of homes and condominiums, or as provided for by Ecobonus 2019 is intended for all taxpayers, including the owners of business income, who are owners of a property on which energy redevelopment interventions are implemented. Starting from 2018, taxpayers who are unable to pay for expenses incurred in private buildings will also be able to apply for tax deductions: in practice, they are tax exempt as inferior to the minimum.

In detail, taxpayers who can request a tax deduction of 65% or 75% in the case of condominium interventions are:

- Taxpayers earning business income (individuals, partnerships, corporations).
- Associations between professionals.
- Public and private bodies that do not carry out commercial activities; individuals: owners of a real right on property, condominiums for interventions on common areas, tenants, those who own a property on loan, family members or cohabitants who bear costs.

To request eco-incentives, please refer to the Revenue Agency Guide dedicated to Energy Reduction Deductions.

THERMAL ACCOUNT 2.0

Heat Pumps and Water heaters with heat pump

The Thermal Account 2.0 is an incentive system aimed at increasing the efficiency of buildings and heating systems. It is a capital incentive for people who want to improve the efficiency of their building or produce thermal energy from renewable sources, such as heat pumps. It is not a tax deduction, therefore the applicant will directly receive the incentive from the GSE, the entity responsible for the implementation and management of the system, through a dedicated Internet portal on which interested parties can request the incentive and fill and send the necessary documentation.

Overall, incentives cover up to a maximum of 40% of the cost for the replacement of the system. Public administrations and private persons may benefit, that is individuals, condominiums and businesses either directly or through ES.CO.

Please refer to the website http://www.gse.it/it/ "Thermal Account" section for consultation of the text of the law.

SUMMARY OF KIREIA PLUS, KIREIA AND KIREIA SMART FEATURES

	FUNCTION	KIREIA PLUS	KIREIA	KIREIA SMART
ENERGY SAVINGS	Fuzzy Auto Operation	●	●	●
	Human sensor	●		
	Eco Mode	●		
	Auto-off	●		
	Economy mode		●	●
AIR FLOW	Jet Air	●	●	●
	3D Auto	●	●	
	Auto louvre movement selection	●	●	●
	Louvre position memory	●	●	●
	Vertical louvre swing	●	●	●
	Horizontal louvre swing	●	●	
	Installation position	●	●	
FILTERS AND SANITISATION	Allergen Clear [1] function	●	●	
	Self Clean function	●	●	●
	Anti-allergenic filter	●	●	
	Photocatalytic filter	●	●	
	Removable panel	●	●	●
COMFORT	Dehumidification	●	●	●
	High Power function	●	●	●
	Silent [2] function	●	●	
	Night function	●	●	
	Weekly timer	●	●	
	24-hour programmable timer			●
	Sleep timer	●	●	●
	On/off timer	●	●	●
	Comfort Start-up	●	●	●
	Pre-Set function	●	●	
	Child lock	●	●	
	LED intensity adjustment	●	●	
OTHER FUNCTIONS	Defrost function	●	●	●
	Self-diagnosis function	●	●	●
	Auto-restart function	●	●	●
	Back-up function	●	●	●

1 Not available with multisplit systems. 2 Cannot be used with multisplit systems. However it can be available when connected with SCM 50 ZS-S1, SCM 60-80 ZM-S1.

MITSUBISHI HEAVY INDUSTRIES

03-2019

MITSUBISHI HEAVY INDUSTRIES

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