Mitsubishi Heavy Industries, Ltd. (MHI), are unswervingly dedicated to facing the challenges of the future.

MHI are dedicated to supporting global sustainability by offering the most energy-efficient air-conditioning systems. Through our in-depth research and development we are able to incorporate new technologies within our units to maximise their energy efficiency and significantly reduce carbon emissions.

Environmental Impact

MHI recognises the increasing importance of reducing carbon emissions as this is becoming a priority when selecting air and water distribution systems. Furthermore new technologies are constantly being developed to help meet heating and cooling requirements as well as environmental objectives.

The future of our planet rests in the sustained evolution of humankind while caring, with love and responsibility, for all life forms that inhabit it. Therefore MHI will continue to develop new technologies and products and will remain competitive in the market to achieve a sustainable future.

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100-8332, Japan
https://www.mhi-mth.co.jp/en/

ISO9001
Our Air Conditioning & Refrigeration Systems Headquarters is an ISO9001 approved factory for residential air conditioners and commercial-use air conditioners (including heat pumps).

BIWAJIMA PLANT
Mitsubishi Heavy Industries, Ltd.
Air-conditioning & Refrigeration Systems Headquarters
Certified ISO 9001
Certificate number : JQA-0709

MITSUBISHI HEAVY INDUSTRIES-MAHAJAK AIR CONDITIONERS CO., LTD.
Certified ISO 9001
Certificate Number : 04100 1998 0813

MITSUBISHI HEAVY INDUSTRIES-MAHAJAK AIR CONDITIONERS CO.,LTD.
Certificate Number : 04104 1998 0813 E5

(COMPANY) participates in the ECP programme for (PROGRAMME).
Check ongoing validity of certificate: www.eurovent-certification.com

MOVE THE WORLD FORWARD MITSUBISHI HEAVY INDUSTRIES GROUP

VRF inverter multi-system Air-Conditioners

MITSUBISHI HEAVY INDUSTRIES
THERMAL SYSTEMS

KXZ2

KXZ Heat Pump System

Heat pump systems operate with 2 inter-connecting pipes and are commonly referred to as '2-pipe systems'. These systems provide either a heating or cooling operation to all indoor units at the same time and are suitable for a wide range of applications from an apartment or villa to an entire multi-story building, especially when there are significant open plan areas to be controlled.

The KXZ2 range starts from a cooling capacity of 10 HP (28.0 kW) and expands up to 20 HP (56.0 kW) using a single outdoor unit. Our KXZ2 units can also be used as a modular system (twin or triple) providing up to 60 HP (168.0 kW) of cooling capacity.

KXZR Heat Recovery System

Heat recovery systems operate with 3 inter-connecting pipes, and are commonly referred to as a '3-pipe systems'. These systems can provide simultaneous heating and cooling operation to individual indoor units according to the demand in each room.

The system incorporates sophisticated controls which manage the operation mode of multiple indoor areas, whatever their requirement is, cooling or heating.

The KXZR2 systems interconnecting pipework has a unique arrangement with two of the interconnecting pipes routed through a PFD distribution controller. The third pipe connects directly to each indoor unit from the main pipe run.

This unique arrangement reduces the installation time and the number of brazed connections on site. The PFD distribution controllers are available for either single connection or as a 4-way connection, allowing each connected unit to have independent cooling or heating operation.

The KXZR2 range starts from a cooling capacity of 8 HP (22.4 kW) and expands up to 24 HP (67.0 kW) using a single outdoor unit. Our KXZR2 units can also be used as a modular system (twin or triple) providing up to 60 HP (168.0 kW) of cooling capacity.

PRODUCT LINE-UP

There are multiple combinations of the KXZ Heat pump, KXZR Heat Recovery series to suit a huge range and variety of applications.

KXZ2	KXZX2	KXZR2	KXZRX2	MicroKXZ	KXZLite
Heat Pump	Heat Pump (Hi-COP)	Heat Recovery	Heat Recovery (Hi-COP)	Heat Pump	Heat Pump
10 - 60HP	20 - 40HP	8 - 60HP	16 - 36HP	4 - 12HP	8 - 10HP

KXZ VRF series delivers high cooling/heating performance for all commercial, leisure, retail and office applications.

High Efficiency & Comfort	• High energy efficiency with advanced technology • Energy saving control by VTCC (Variable Temperature & Capacity Control) • Individual, centralised and customised comfort control
Easy & Customized Control	• Individual advanced control by wired and wireless remote controller. • Various options for BMS & Centralised control
Design Flexibility	• Various types of indoor unit suiting all applications • Long piping length and wide limitation of piping. • High static pressure (up to 85Pa) on outdoor models. Improving installation options. • Easy selection and design software
Good Serviceability	• Easy access for maintenance • Engineering and monitoring tool available

By combining 3 outdoor units 60HP can be achieved.

Product Line Up

Micro KXZ	HP	4	5	6	8	10	12
	Maximum No. of Connectable Indoor Units	8	10	10	22	24	24

KXZ Lite Heat Pump	HP	8	10
	Maximum No. of Connectable Indoor Units	8	8

Increased number of connectable units (compared to KXZE1)

KXZ2 Heat Pump	HP	10	12	14	16	17	18	20	22	24	26	28	30	32	34
	Maximum No. of Connectable Indoor Units	**37**	**44**	**53**	**60**	**50**	**53**	**59**	**65**	**71**	**78**	**80**	**80**	**80**	80
	HP	36	38	40	42	44	46	48	50	52	54	56	58	60	
	Maximum No. of Connectable Indoor Units	80	80	80	80	80	80	80	80	80	80	80	80	80	

KXZX2 Heat Pump Hi-COP Combination	HP	20	30	32	34	36	38	40
	Maximum No. of Connectable Indoor Units	59	80	80	80	80	80	80

KXZR2 Heat Recovery	HP	8	10	12	14	16	17	18	20	22	24	26	28	30	32
	Maximum No. of Connectable Indoor Units	29	37	44	53	60	50	53	59	65	71	78	80	80	80
	HP	34	36	38	40	42	44	46	48	50	52	54	56	58	60
	Maximum No. of Connectable Indoor Units	80	80	80	80	80	80	80	80	80	80	80	80	80	80

KXZRX2 Heat Recovery Hi-COP Combination	HP	16	18	20	22	24	26	28	30	32	34	36
	Maximum No. of Connectable Indoor Units	60	53	59	65	71	78	80	80	80	80	80

DESIGN FLEXIBILITY & EFFICIENCY

Our KXZ2 series provide high performance and excellent energy savings across the range and is achieved by our heat exchangers increased capacity and the employment of high efficiency DC motors of our indoor units.

Excellent Energy Savings

Outdoor unit (Micro KXZ)	FDC121KXZEN1-W	FDC121KXZES1-W	FDC140KXZEN1-W	FDC140KXZES1-W	FDC155KXZEN1-W	FDC155KXZES1-W	FDC224KXZME1	FDC280KXZME1	FDC335KXZME1A
SEER / SCOP (Outdoor unit)	9.67 / 4.67	9.67 / 4.67	8.82 / 4.62	8.82 / 4.62	8.17 / 4.58	8.17 / 4.58	6.55 / 4.55	6.03 / 4.54	5.84 / 4.04

Outdoor unit (KXZ Lite)	FDC224KXZPE1	FDC280KXZPE1
SEER / SCOP (Outdoor unit)	6.65 / 4.34	6.68 / 4.50

Outdoor unit (KXZ2)	FDC280KXZE2	FDC335KXZE2	FDC400KXZE2	FDC450KXZE2	FDC475KXZE2	FDC500KXZE2	FDC560KXZE2
SEER / SCOP (Outdoor unit)	7.30 / 4.88	7.54 / 4.68	7.12 / 4.87	7.01 / 4.36	6.84 / 4.45	7.29 / 4.58	6.73 / 4.30

Outdoor unit (KXZR2)	FDC224KXZRE2	FDC280KXZRE2	FDC335KXZRE2	FDC400KXZRE2	FDC450KXZRE2	FDC475KXZRE2	FDC500KXZRE2	FDC560KXZRE2
SEER / SCOP (Outdoor unit)	6.21 / 4.06	6.36 / 4.02	7.15 / 4.43	6.78 / 4.39	6.29 / 4.33	6.60 / 4.27	7.01 / 4.39	6.26 / 4.29

Outdoor unit (KXZR2)	FDC615KXZRE2	FDC670KXZRE2
SEER / SCOP (Outdoor unit)	6.05 / 4.34	5.88 / 4.50

Indoor Unit Capacity Connection

Increased indoor units capacity connection due to increased outdoor unit receiver size. Indoor units can be connected to the KXZ2 series, with a range of 17 types of exposed or concealed indoor units over several capacities.

The tables show the maximum capacity connection range for each model:

Heat Pump Models

Increased max capacity connection

	HP	Capacity Connection
Micro KXZ	4 - 6	150%
	8 - 12	150%
KXZ Lite	8 - 10	120%
KXZ2	10 - 16	**200%**
	17 - 34	**160%**
	36 - 60	130%
KXZX2 (Hi-COP)	20 - 34	160%
	36 - 40	130%

Heat Recovery Models

	HP	Capacity Connection
KXZR2	8 - 16	200%
	17 - 34	160%
	36 - 60	130%
KXZRX2 (Hi-COP)	16	200%
	20 - 34	160%
	36 - 40	130%

Long Pipe Runs 10-60HP

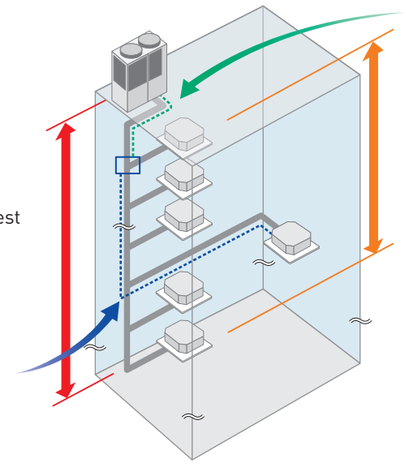
The piping length of our KXZ2 systems have been extended with a maximum height difference between indoor units of up to 30m enabling installation of indoor units on an extra three floors. Also, the furthest unit can be installed up to 160m from outdoor unit.

A total piping length of 1000m can be used with our KXZ2 systems (10-60HP) allowing flexibility and solutions for numerous applications.

Furthest indoor unit:
Actual length
160m
Equivalent length
185m

From the first branch to the furthest indoor unit *1
Max 90m
(previous:70m)

Piping length after the first branch
Max 90m



To the first branch:
Max 130m

Max height difference between indoor units *2:
Max 30m
(previous:18m)

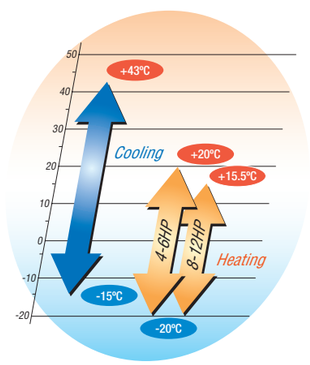
Total length: 1,000m

*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m. (MAX85m)
*2 It is necessary to change the setting corresponding to each height difference installation. The range of use is also different.

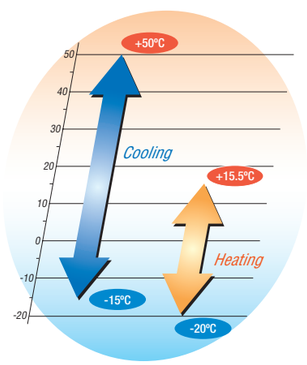
Wide Range of Operation

Our KXZ2 and KXZR2 series enable a heating range operation down to -20°C and a cooling range up to 46°C (43°C for the Micro KXZ). Furthermore, our KXZ Lite models extend to a cooling range operation of up to 50°C.

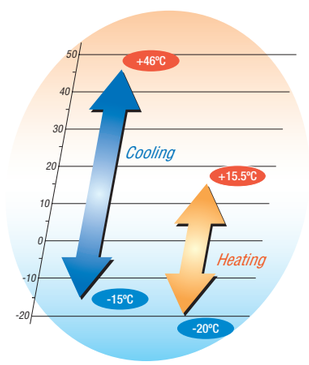
Micro KXZ (4HP to 12HP)



KXZ Lite (8HP & 10HP)



KXZ2 & KXZR2 (10HP to 60HP)

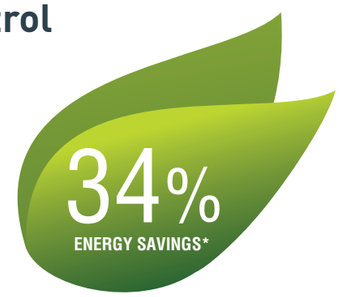


KXZ-VRF REDESIGNED

Energy Saving Technologies

Via Variable Temperature and Capacity Control

VTCC adjusts the target pressure of the refrigerant cycle in the outdoor unit automatically according to the demand of the indoor units in partial load conditions. These smooth adjustments ensure optimal usage of the indoor units as well as maximised energy savings. Ultimately this also increases comfort for the user.

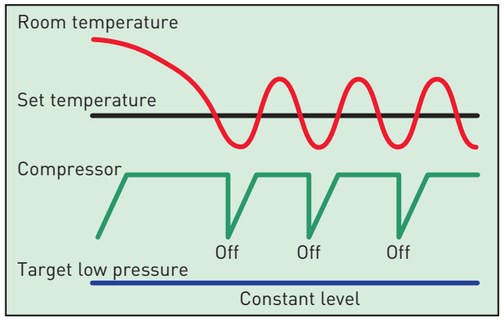


*34% energy savings are based on comparison with a KXZ standard model with VTCC vs. a KXZ standard model both under partial load condition.

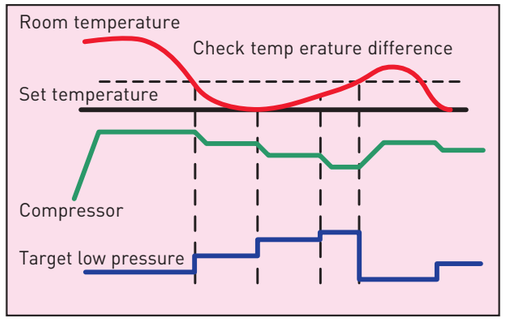
VTCC

- The VTCC is a unique energy saving function designed by MHI.
- It is a feature for all our KXZ ranges which provides up to 34%* energy savings in both cooling and heating mode.
- VTCC is a function specifically designed to maximise energy savings in partial load conditions throughout all seasons.
- 34% energy saving - based on comparison with a KXZ standard model with VTCC vs. a KXZ standard model both under partial load condition.

Normal operation (in the cooling mode)



Energy saving operation (in the cooling mode)



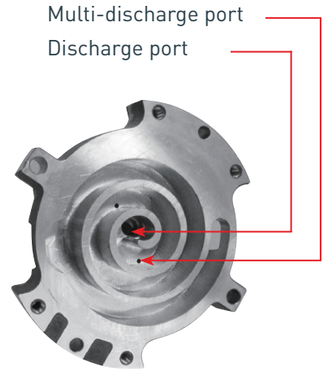
Advances in technologies ensure our KXZ series are efficient, energy saving and reliable.

Improved Scroll Compressor

The enhanced KXZ multiport compressor includes two additional discharge ports. This optimises the pressure control within the compressor.

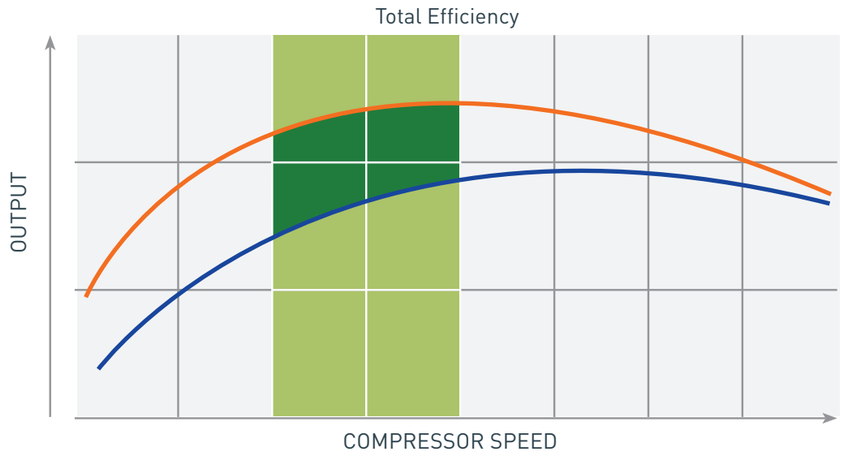
The combination of the new multi discharge compressor and the new concentrated winding motor increases the energy efficiency of the compressor in partial load conditions.

This scroll compressor has proven to be extremely reliable and uses the latest compressor technology.



Concentrated winding motor achieves

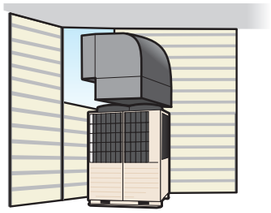
"High Output" and "Total Efficiency Improvement"



Continuous Heating Capacity Control (CHCC)

Our CHCC defrosting control allows our KXZ2 system to achieve greater capacities than that of our previous model (KXZ) in low ambient temperature conditions. CHCC controls the target pressure automatically before the capacity drops, which increases the period of heating operation and reduces the systems defrosting time.

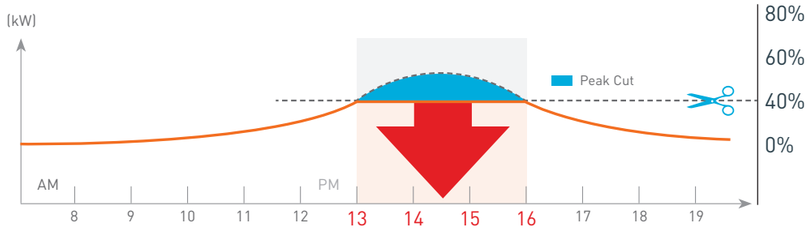
Extended external static pressure 50Pa to Max 85Pa



- Flexibility to meet installation location needs.

Peak Cut Control

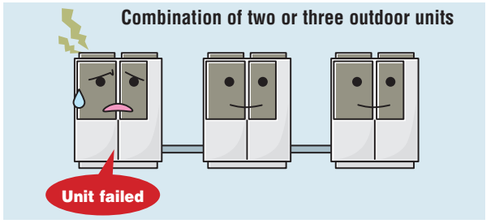
The peak cut function can easily be set on the controller. This function makes the control of the capacity easier and allow a better energy management over the long term. Four steps of capacity control are available with 80%, 60%, 40%, 0% (off). Schedule can be set up to 4 operations/day.



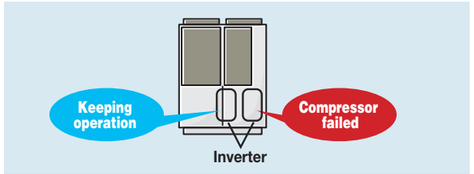
Reliability

Back-up Operation

In the event that one unit has a failure, the system will continue to operate with the remaining units.



For single outdoor units with 2 compressors, if one compressor fails then the system will continue to operate using the second compressor.



Emergency STOP Function

- KXZ units have control for emergency stop via an external input, i.e. an alarm can be connected to the PCB (Printed Circuit Board).
- The external input can also be used to connect to the leak detection system (as per BREEAM requirements).

PRIORITY OPERATION MODE RULE

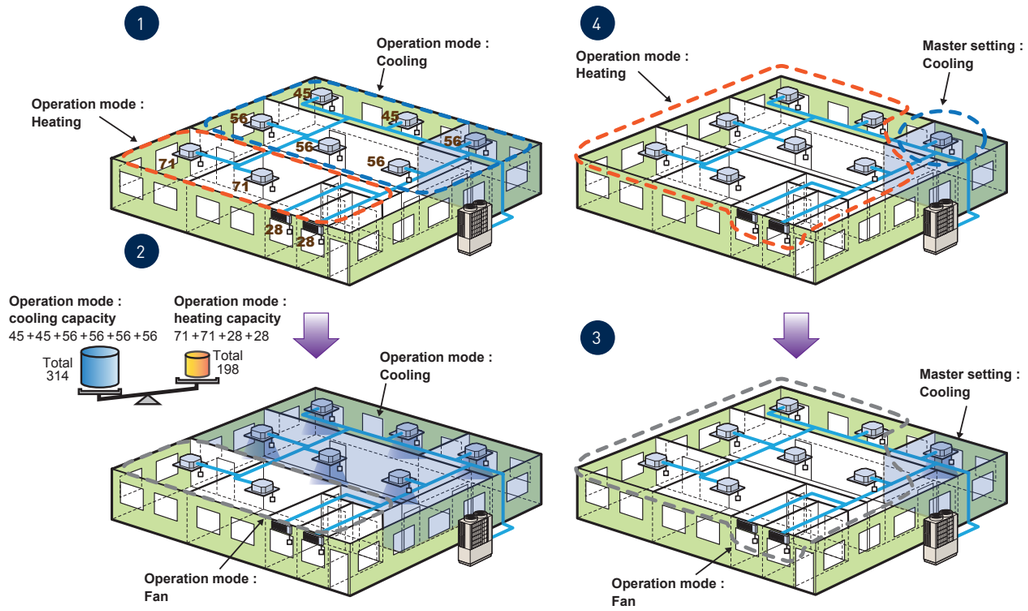
The KXZ has four operation modes:

1. ### First Indoor Unit Operation Mode
   The first indoor unit to operate will set the operation mode

2. ### Last Indoor Unit Operation Mode
   The last indoor unit to operate will set the operation mode

3. ### Majority Operation Mode
   The mode selected by the majority of Indoor units in operation (whichever has the greatest capacity between the cooling or heating mode request). Indoor units with a different operation mode will automatically switch to fan mode.

4. ### Master Operation Mode
   This is the mode selected by the nominated master indoor unit. Indoor units with a different operation mode will automatically switch to fan mode.

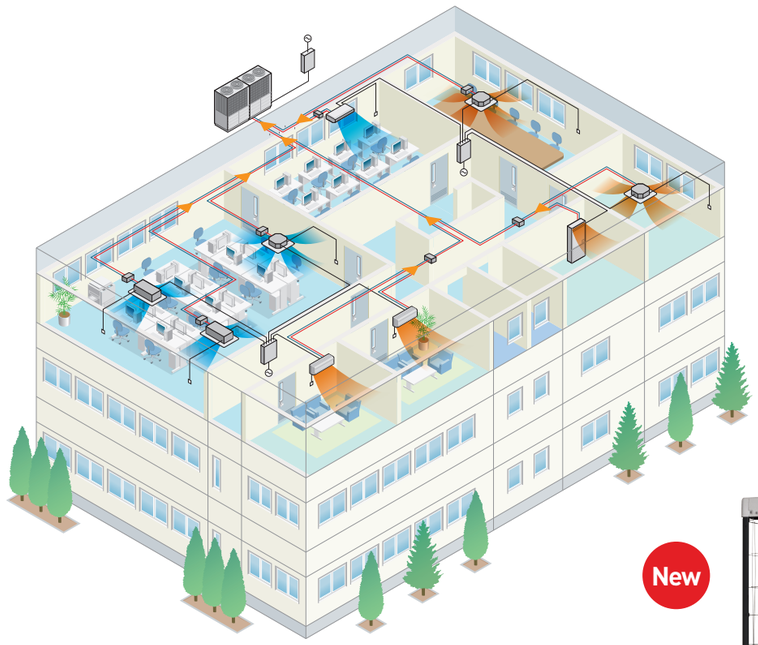


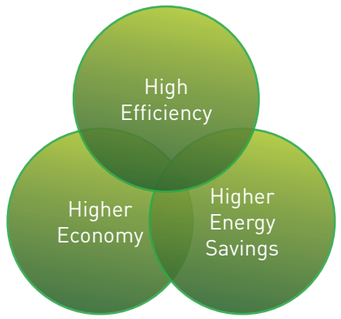
KXZR – SIMULTANEOUS COMFORT

Flexibility and Performance

Our heat recovery systems operate with 3 inter-connecting pipes, commonly referred to as a '3-pipe system'. 3-pipe systems provide both heating and cooling operations simultaneously to individual indoor units according to room conditions or user requirements. KXZR2 systems incorporate highly sophisticated controls transferring heat load energy from the entire building to provide an efficient, comfortable heating and cooling environment.

Example of simultaneous heating and cooling:





New

Up tp 24HP [67kW] with 1 single outdoor unit

PFD Control Box

Groups of indoor units can be connected to our PFD control box with a maximum total capacity of 28.0kW achieved from a single PFD. The units connected in this group will operate in the same mode only (cooling or heating) making it ideal for open plan areas.
We also have a 4-way PFD control; PFD1124X4-E. This 4-way PFD can connect up to four indoor units (or groups of indoor units) with individual control allowing for simultaneous cooling or heating within the application.

1-way PFD box

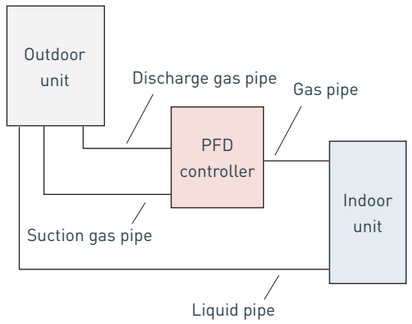
4-way PFD box

Branch control	Total downstream capacity	*Connectable indoor units
PFD1124-E	Less than 11.2kW	1-5
PFD1804-E	11.2kW or more but less than 18.0kW	1-8
PFD2804-E	18.0kW or more but less than 28.0kW	1-10
PFD1124X4-E	Less than 37.1kW (less than 11.2kW per branch)	Up to 16

*Refer to Data Book for details

Easy Installation

PFD control box design allows to directly connect the liquid pipe from indoor unit to outdoor unit by bypassing the PFD box. As a result, the piping connections per indoor unit are reduced by a third, thus reducing installation time and cost.



PRODUCT LINE UP - INDOOR UNITS

Wide variety of 17 types

● Indoor units only for R32 ● Indoor units only for R410A

Type			Capacity	0.5HP	0.8HP	1HP	1.25HP	1.6HP	2HP	2.5HP	3.2HP	4HP	5HP	6HP	8HP	10HP
			Model Code: kW	15	22	28	36	45	56	71	90	112	140	160	224	280
Ceiling Cassette	4way	FDT				●	●	●	●	●	●	●	●	●		
						●	●	●	●	●	●	●	●	●		
	4way Compact (600 x 600)	FDTC		●	●	●	●	●	●							
				●	●	●	●	●	●							
	2way	FDTW				●		●	●	●	●	●	●			
	1way	FDTS						●		●						
	1way Compact	FDTQ			●	●	●									
Ducted	High Static Pressure	FDU						●	●	●	●	●	●	●		
								●	●	●	●	●	●	●	●	●
	Low/Middle Static Pressure	FDUM			●	●	●	●	●	●	●	●	●	●		
					●	●	●	●	●	●	●	●	●	●		
	Low Static Pressure (thin)	FDUT		●	●	●	●	●	●	●						
				●	●	●	●	●	●	●						
	Compact & Flexible	FDUH			●	●	●									
Wall Mounted		FDK			●	●	●	●	●	●						
					●	●	●	●	●	●						
Ceiling Suspended		FDE					●	●	●	●		●	●			
Floor Standing	2way	FDFW				●		●	●							
	with casing	FDFL								●						
	without casing	FDFU				●		●	●	●						
OA Processing unit		FDU-F									●		●		●	●

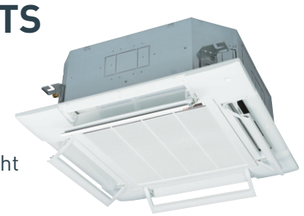
Type		Air flow M3/h	150	250	350	500	800	1000
Fresh Air Ventilation and Heat Exchange unit	SAF		●	●	●	●	●	●
Fresh Air DX Assembly	SAF-DX			●	●	●	●	●

NEW & IMPROVED

AWARD WINNING PRODUCTS

FDT - Standard Cassette

- Keeps maximum comfort with minimal draught
- Automatic energy saving control
- Quiet operation
- When the unit is turned off, the louvres close inwards



Fine snow white

FDT colour variation
Blend in, or stand out.

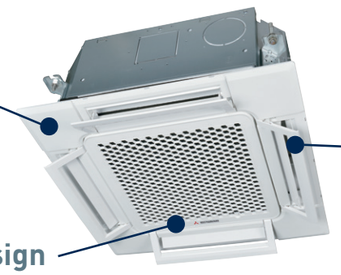
Now available in shadow black

FDTC - Compact & Cassette (600 x 600mm)
European design & Flat panel

A'DESIGN AWARD WINNER 2019 GOLD

Thin Panel
FDTC thin panel fits within 10mm of the ceiling.

Unique Grille Design
Honeycomb grille



Big Louvre
Improved directionally

Now available in Grid type grille

Next Generation Refrigerant R32

New indoor units line up available for R32 refrigerant. Only available for Micro KXZ R32 outdoor series.

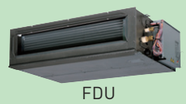
R32

FDT

FDTC

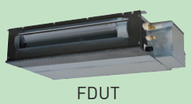
FDK

Available in Summer 2021



FDU

FDUM



FDUT

INDOOR UNITS BENEFITS SUMMARY

When using RC-EX3A (Remote control), functions with symbol ● are available.

			FDT	FDTC	FDTW	FDTS	FDTQ	FDU	FDUM	FDUT	FDUH	FDK	FDE	FDFW	FDFL	FDFU	FDU-F
Energy Saving	Inverter technology	Inverter control technology delivers high efficiency and a smooth operation from high speed to low speed. A smooth sine voltage wave is attained.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Energy-saving※	Since the capacity is controlled automatically based on the outdoor temperature, energy can be saved without losing comfort.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Motion sensor※	This sensor detects human activity and shifts the temperature setting according to the amount of activity in the room.	● Option	● Option	● Option	● Option	● Option	● Option	● Option	● Option	● Option	● Option	● Option		● Option	● Option	● Option
	Home leave operation※	This function ensures that when the room is unoccupied for long periods of time, the unit will maintain a moderate indoor temperature, avoiding extremely hot or cool temperatures.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Set temperature auto return※	This function allows you to program a preferred set temperature that the unit will return to each time it is operated.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Comfort	Automatic operation	This function automatically selects the required heating or cooling function based on the current room conditions.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Silent operation	This function allows you to program periods where the unit will operate with reduced noise levels, perfect for night time and an uninterrupted sleep.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Hi power operation※	Use the high power function to quickly reach your optimum temperature level when you first turn on the unit. This function will operate for a maximum of 15 minutes before returning to normal operation.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Air flow	Flap control system	This function allows you to set the upper and lower limit positions of the flap at each air outlet individually, providing you with complete control over interior air flow.	●	●	●	●						●	●	●			
	Vertical auto swing	The vertical louvers on your unit will move up and down continuously during operation. This function allows you to set the up/down swing position of the louver to your preferred operation angle.	●	●	●	●	●					●	●	●			
	Draft prevention setting※	Draft Prevention setting provides a comfortable air flow without any draft feeling. Whether cooling or heating a room, the remote control can be used to instantly suppress any warm or cool drafts. This accurately assists how air flow is directed out of the indoor unit.	● Option	● Option													
	Automatic fan speed	The unit's on-board microcomputer continuously monitors the room's air temperature and adjusts the air flow automatically.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Timer	Sleep timer	This function allows you to set a pre-determined amount of time between 30 and 240 minutes that your unit will operate for before switching off.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Peak-cut timer※	This function lets you to preset the capacity limit during certain periods of the day, minimising energy consumption during peak billing times, thus reducing operation costs.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Weekly timer	Set your unit to turn on and off automatically on a weekly basis to suit your usual room usage on each day.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Convenient	Function Switch※	From the eight available functions on the unit, this function allows you to set two functions to operate automatically.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Favourite setting※	Operation mode, set temperature, fan speed and air flow direction automatically adjust to the programmed favourite setting.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Static pressure adjustment	This is operable when connecting duct type indoor units equipped with the external static pressure adjustment function. It will adjust the airflow accordingly based on the connected duct static pressure.						●	●	● (71only)							●
	Select the language※	Set the language to be displayed on the remote control.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Air filter	The air filter in the unit traps and removes airborne dust particles and other allergens to provide you with a clean air function.	●	●	●	●	●	procure locally	● Option	● Option	● Option	●	●	●	●	●	procure locally
	Filter sign	This warning alerts when the filter needs to be cleaned.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Outside air intake	This function provides clean fresh air into the room through the external air intake, avoiding the constant recycling of internal air.	●	● Option	●	●	●	●	●	●	●						●
Others	Self diagnostics	The internal microcomputer automatically runs a diagnostic of the system in the event of a malfunction. This enables your authorised dealer to isolate and repair any issues.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Built in drain pump	The built-in drain pump, allows greater flexibility with installation, offering a great solution for applications with limited space.	●	●	●	●	●	● ＊1	●	●	● Option						● ＊2
	Improved serviceability	The fan unit (comprised of impeller and motor) is easily accessible from either the side or bottom of the unit and can be slid out for easy maintenance.						●	●								

• For RC-E5 (Remote control), functions with ※ are not available.

＊1 : Except 224 • 280　＊2 : Except 1800 • 2400

RC-EX3A CONTROLLER

Simple use with advanced settings remote control

- Easy touch and easy view with full dot Liquid Crystal display
- Function switch

The function switch allows the user to select two preferred functions that are desired from the seven available functions shown. These functions can be used by simply pressing the button after they are set, allowing you to use your preferable functions immediately.

1. High Power Mode

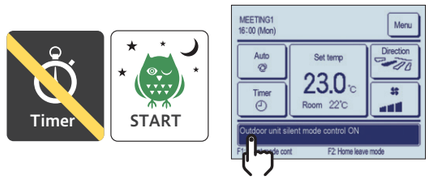
High Power Mode achieves extra cooling / heating capacity for 15 minutes to quickly adjust the room temperature to a comfortable level.

2. Energy Saving Mode

Temperature is set to save energy without losing comfort.

3. Quiet Mode

Outdoor unit starts to operate quietly by activating this mode. The time of this mode can be set in conjunction with Indoor Silent Timer.

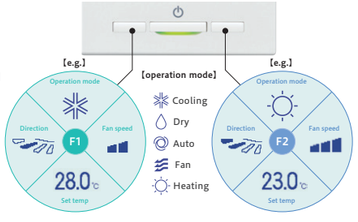


4. Home Leave Mode

Home leave mode maintains the room temperature at a moderate level.

5. Favourite Mode

Operation mode, set temperature, fan speed and air flow direction will automatically be adjusted to the programmed favorite setting.



6. Filter Sign

Indicates that it is time to clean the air filter.

7. Draft prevention ON/OFF

User can enable/disable the motion of Draft prevention panel for each air outlet for each operation mode. This function can be set while operating. *Only FDT/FDTC series

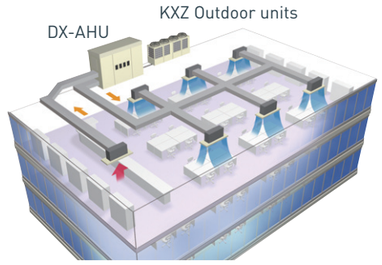
8. Error display

If any error occurs on the system, the "Unit protection stop" is indicated on the message display.

EEV-KIT

CONNECTION TO THE OTHER HVAC TECHNOLOGIES

- The EEV-KIT is a control kit for connecting the KXZ to an externally sourced AHU or FCU with its own direct expansion heat exchanger coils.
  (AHU : Air Handling Unit, FCU : Fan Coil Unit)
- Our EEV-KIT is composed of one EEV-Control Assembly and one EEV-Set.



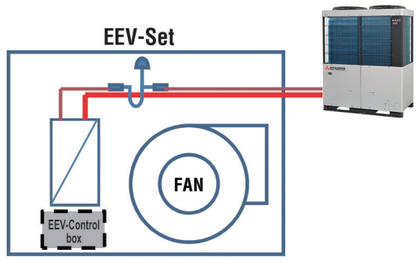
DX: Direct expansion coil

Single refrigerant system

A single refrigerant system is one that can have multiple outdoor units connected to one refrigerant pipework circuit. There are 2 types of EEV-KIT system that can be built into the single refrigeration system.

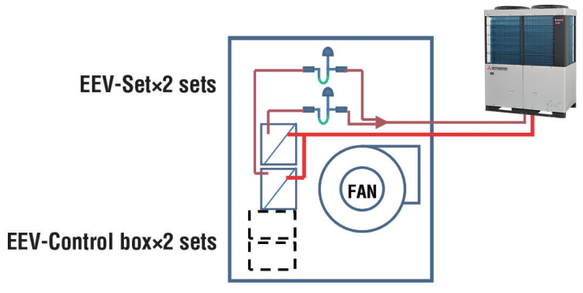
System A: One EEV-KIT

This system has only one EEV-KIT built into one indoor unit with only one heat exchanger. This system can be applied to an indoor unit whose capacity is up to 10HP.



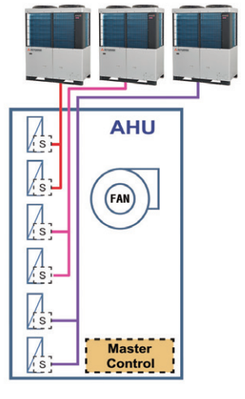
System B - Multiple EEV-KIT's

System B is a system that has multiple EEV-KITs built into one indoor unit with multiple heat exchangers on one refrigerant circuit. This system can be applied with a KXZ/ AHU arrangement providing up to 168kW.



Multiple Refrigerant System

A multiple refrigerant system is an AHU system with multiple independent refrigerant circuits and one master control to control the whole system.



Advantage

- Large systems are possible [max capacity 896kW]
- External control
- Capacity step control
- Can connect to 32 units

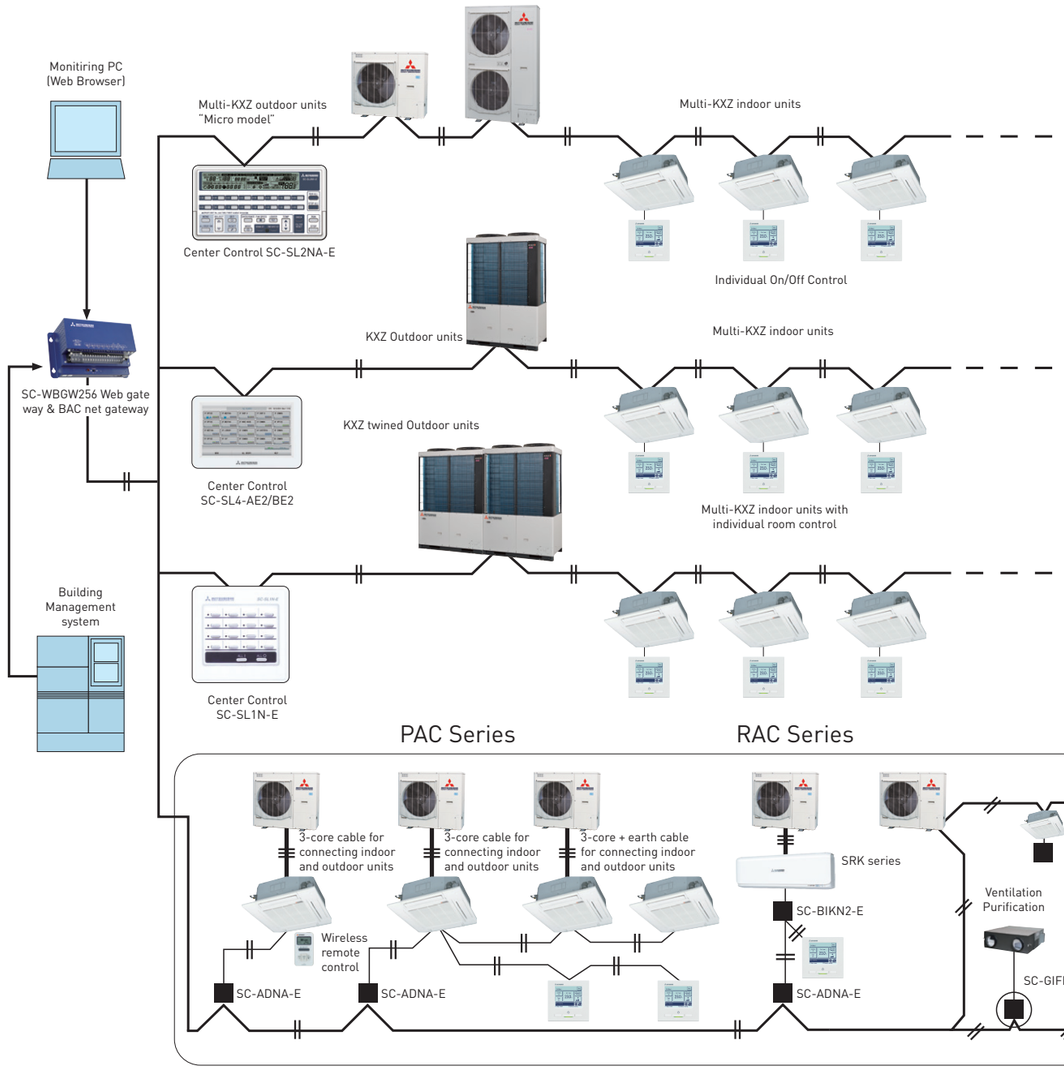
Additional parts over a single refrigeration system

- One master control
- The slave EEV control and EEV set are the same as a single refrigeration system.

CONTROLS NETWORK OVERVIEW

IMPROVED CONNECTABILITY

Our company offers simplicity in installation with the highly sophisticated Superlink - II Control System

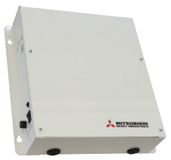


- This offers building owners and occupiers a comprehensive control and management system while providing complete commissioning and service maintenance assistance for installers and service engineers.
- The Superlink - II is an advanced high speed data transmission system which can connect up to 128 indoor units and 32 outdoor units onto one network.
- A wide range of control options are available for the Superlink - II network to suit any application large or small, as well as connection to a new or existing Building Management System (BMS).

Building Management Systems

Our company offers a wide range of control options for the KXZ system to suit any application, large or small, as well as connection to a new or existing BMS.

SC-WBGW256
Web & BACnet gateway



SC-LGWNB
LonWorks BMS Gateway

INMBSMHI
Modbus Controller

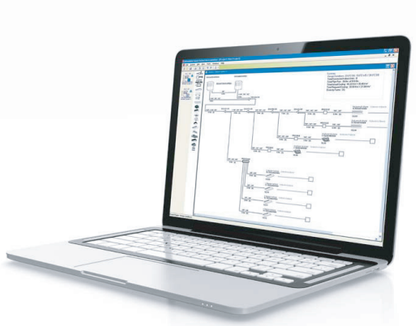
INKNXMHI
KNX Controller

TIME SAVING SOFTWARE

e-solution

Use our e-solution design software tool to find the latest specifications for our KXZ VRF systems. This software helps to simplify the processes to enable engineers to select the most suitable indoor units, outdoor units, pipework, controls & calculate any additional required refrigerants.

If you're an engineer interested in using e-solution, please register and download the e-solution via https://mhiae.com/e-solution/ and be sure to download the latest updates when available.



Please be aware that this tool was developed to cater for the design of two and three pipe systems, and specifies the appropriate models and sizes. It also generates wiring diagrams and engineering drawing to export to AutoCAD or PDF. This flexibility allows engineers to print selected design information and technical data to present to potential clients. As well as personalising the design information into their own formats and documents for future proposals.

MHI e-service App

MHI e-service application is available & free to download to both IOS and Android devices.
The application covers "Mitsubishi Heavy Industries Thermal Systems, Ltd" Air conditioning systems: Split (RAC & PAC), VRF, Q-ton & A2W.
This "MHI e-service" Application enables field engineers to make:

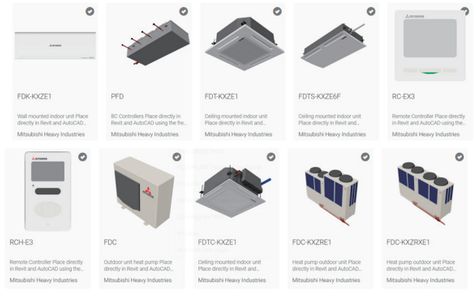
- A quick search of the meaning of error codes that may appear when there is a malfunction in a "Mitsubishi Heavy Industries Thermal Systems, Ltd" Air conditioning system, and the probable cause for the malfunction.
- Scan the unit's QR code and search the meaning of error codes depending on the model type
- Additional refrigerant charge calculation for Split (PAC, RAC) & VRF
- Currently available in English & Spanish languages

To download the App go to:
iPhone:https://apps.apple.com/gb/app/mhi-e-service/id1208986291
Android:https://play.google.com/store/apps/details?id=com.mitsubishi.apps.conapp&hl=en_GB

BIM (Building Information Modelling)

We can provide high quality Building Information Modelling (BIM) models in three formats:

1. Revit
2. 3D Cad
3. IFC (IFC provides an interoperability solution between different software applications. The format establishes international standards to import and export building objects and their properties)



How and why BIM is used

BIM enables all disciplines of a project (Architects, engineers, quantity surveyors, contractors, clients etc..) to share a common model and data representing the project they are building.

- Better design visualization
- BIM reduces conflicts and changes during construction
- Increases overall accuracy of project documentation
- Improves cost estimating
- Improves energy analysis
- Simplifies reporting and scheduling

https://mhiae.com/BIM/

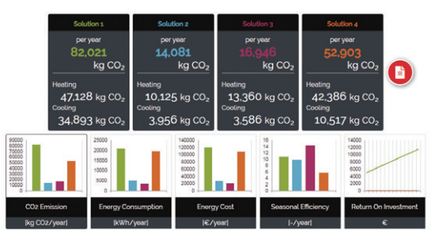
SL Checker II

By linking to the system Superlink - II communication network, you can force operation of the indoor and outdoor units, view the system operating details and trouble shoot system anomalies. The maximum connectable number of indoor units from the SL Checker II is 128 indoor units on one Super link system.

e-seasonal (coming soon)

e-seasonal is an application for our Air cooled VRF Outdoor unit selection.

By selecting a combination of systems, location and occupancy profiles you can simulate:



1. Annual seasonal efficiency calculation
2. Annual energy consumption, cost and CO_2 emission estimation
3. Comparison with multiple solutions including conventional heaters
   It is possible to download to your PC for an off line version or using a web browser for an online version.
   e-seasonal provides solution suggestions according to your requested design conditions.