Panasonic
ideas for life

2010

COMMERCIAL // HEATING AND COOLING SYSTEMS

EVERY OFFICE MATTERS

EVERY OFFICE MATTERS

heating and cooling systems

heatingandcoolingsystems

WELCOME TO COMMERCIAL RANGE

Welcome to Commercial range. Welcome to healthier air. A range which confirms its commitment to the environment. All our air conditioners use R410A gas. This environmentally friendly gas is totally harmless for the ozone layer. Our Inverter compressors optimise performance and thus reduce energy costs.
Here are some of your new air conditioner's major features.

INVERTER + SYSTEM. Inverter plus products improve on the characteristics of standard Inverter range by over 20%. This means 20% less consumption and 20% off your electric bill. A Inverter plus is also A class on cooling and heating mode.

INVERTER SYSTEM. The Inverter range provides greater efficiency, more comfort and less noise than classic inverter units. The Inverter system provides more precise temperature control, without highs and lows, and keeps the ambient temperature constant with lower energy consumption and a significant reduction in noise and vibration levels.

SUPER ALLERU-BUSTER FILTER. The super alleru-buster filter eliminates the allergens it captures. It combines three functions in one (anti-allergen, anti-virus and anti-bacteria) to keep room air clean and healthy.

DOWN TO -20°C IN HEAT PUMP. The air conditioner works in heat pump mode with an outdoor temperature as low as -15°C.

DOWN TO -15°C IN HEATING ONLY MODE. The air conditioner works in heating only mode with an outdoor temperature of -15°C.

DOWN TO -20°C IN COOLING ONLY MODE. The air conditioner works in cooling only mode with an outdoor temperature of -15°C.

R410A. Environmentally friendly refrigerant.

EUROVENT CERTIFIED AND GUARANTEED.

For further information visit www.panasonic.eu

PANASONIC HEATING AND COOLING SYSTEMS
TECHNOLOGY MAKES US BETTER

The desire to advance has made Panasonic the international leader in air conditioning. Our industrial capabilities and firm commitment to the environment enable us to open new avenues of research and to develop innovative technologies which can enhance our way of life.

The domestic range, semi-industrial range and VRF industrial range, together with the new Aquarea system, are adjusted to the most avant-garde construction needs and environmental demands of our time.

At Panasonic we know what a great responsibility it is to install heating and cooling systems. Because offering you the best solutions in heating and cooling matters.

EVERYTHING MATTERS

eco ideas

'ECO IDEAS' FOR PRODUCTS
We will produce energy-efficient products
Target. To increase the number of products with the industry's top-level environmental features based on both internal and external standards.

'ECO IDEAS' FOR MANUFACTURING
We will reduce CO_2 emissions across all our manufacturing sites
Target. To reduce total CO_2 emissions at manufacturing sites worldwide by 300,000 tons by Fiscal 2009. (compared to Fiscal 2006)

'ECO IDEAS' FOR EVERYBODY, EVERYWHERE
We will encourage the spread of environmental activities throughout the world

*Fiscal 2009: April 2009 ~ March 2010

FS RANGE

Commercial air conditioning from panasonic.
Professional solutions for all types of projects

CE

EUROVENT CERTIFICATION

QUALITY SYSTEM SIRIM

ISO 9000 Series Certification

CERTIFIED TO MS ISO 9002:1994
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAAM)
(Fomerly know as Matsushita Industrial Corp. Sdn. Bhd.)
Registration No.: AR 0866

ENVIRONMENTAL SYSTEM SIRIM

UKAS ENVIRONMENTAL MANAGEMENT 074

Enviroment Management Systems Approval Certificate

CERTIFIED TO MS ISO 14001:1997
Panasonic HA Air-Conditioning (M) Sdn. Bhd. (PHAAM)
(Fomerly know as Matsushita Industrial Corp. Sdn. Bhd.)
Certification No.: M015802127

COMMERCIAL RANGES	INVERTER +	INVERTER	HEAT PUMP

LOW STATIC PRESSURE HIDE-AWAY FS TYPE
Panasonic has also thought of integrating its technology into current architecture. Hide-away models are the answer. The small-sized indoor units are easily accommodated in false ceilings.

HIGH STATIC PRESSURE HIDE-AWAY FS TYPE
Panasonic has developed hide-away units with high static pressure power, ideal for business centres.

60X60 CASSETTE TYPE
Panasonic's 60x60 cassettes are particularly suitable for small or medium-sized offices. Their dimensions fit perfectly into European 60x60 detachable ceiling panels.

90X90 FS CASSETTE TYPE
Panasonic has developed air conditioners with revolutionary designs in both format and function. As an added benefit, they offer the option of selecting airflow patterns in two or four different directions, at the click of a button.

CEILING TYPE
Especially suited for shopping centres or very large areas, these air conditioners are practically invisible due to their slimness, lightness and absolutely silent operation.

HIGH PRESSURE HIDE-AWAY US TYPE
Panasonic has developed hide-away units with high static pressure power, ideal for business centres.

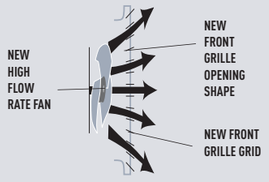
FS TECHNOLOGY

FS INVERTER, IMPROVED ENERGY PERFORMANCE

All Panasonic's FS Inverter series models are equipped with DC Inverters to give operation with improved energy efficiency. Their new quiet, highly efficient design reduces operating costs.

1. **Hyper Wave Inverter**
   The FS series quickly warms the room up to the set temperature and maintains it within the comfort zone while ensuring energy efficiency and savings.
2. **High efficiency compressor**
   A powerful neodymium magnet helps make the motor more compact.
3. **New diagonal fan**
   The following improvements minimise air resistance:

REDUCING AIR RESISTANCE



SPACE-SAVING DESIGN

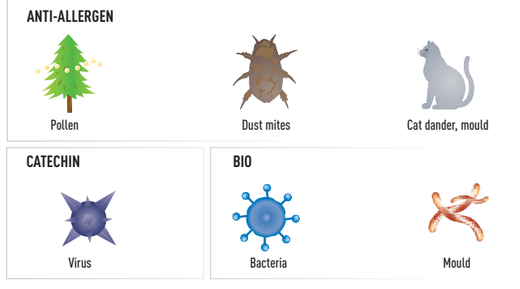
Thanks to its improved fan, the outdoor unit can be installed in smaller spaces where conventional models would not fit. It achieves higher efficiency without sacrificing quietness.

ONLY NEEDS

FOR CASSETTE AND CEILING MODELS

SUPER ALLERU-BUSTER FILTER

SUPER alleru-buster filter usesthree types of functionalmaterials that make it possibleto inactivate various harmfulairborne elements includingallergens, viruses, and bacteria.
This filter is available as an option.

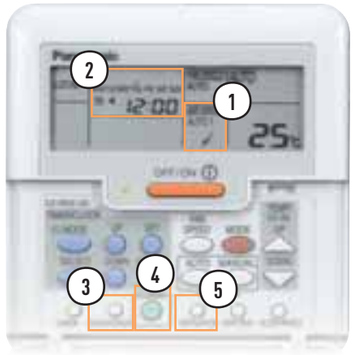


CZ-SA11P (FOR CASSETTE TYPE)
CZ-SA12P (FOR CEILING TYPE)

CONTROL UNIT

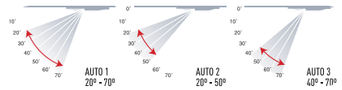
Maximum comfort in every detail

The Panasonic FS series includes a control unit for precise selection of the desired degree of comfort. It offers control of detailed parameters for adjusting air quality and flow.



1. Multi comfort air control

Newly developed control technology offers various airflow angle options. Select from the 3-pattern auto swings to avoid direct exposure to the air (total 50-degree swing width).



2. Weekly timer

Weekly timer setting (each day of a week) is available to control the air conditioner. Max. 6 settings/day and 42 settings/week can be run.

HOW TO SET

3. Odour wash

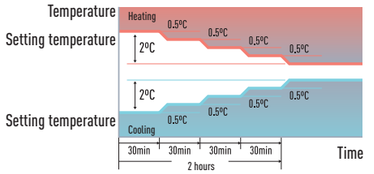
Odour Wash reduces any unpleasant odours produced by the air conditioner's heat exchanger.

4. Economy mode

An approximate 20% energy-saving operation is achieved. The air conditioner analyses ambient conditions and approaches the temperature set by the user in 0.5 degree steps (up to a maximum of 2 degrees), thus saving energy.

5. Ventilation

When an external device such as a fan is connected to the indoor unit, the fan's ON/OFF switch can be controlled by the wired remote control



* During operating in the cooling mode at the remote control set temperature of 25 under the cooling standard temperature conditions.
Can be operated with the wireless remote control.

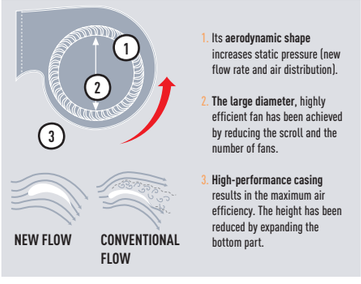
FS INDOOR UNITS

Hide-away range

Environmentally friendly, efficient and easy to install.
- Save 26% of space.
- Easy installation in false ceilings with limited height.
- Dimensions: 120 x 25 x 65 cm (W x H x D).

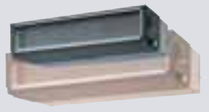
New sirocco fan

High-performance, large diameter fan. Designed precisely for airflow trajectory. The key to saving space.



SMALLER THAN CONVENTIONAL UNITS

26 %



THE MOST COMPACT IN THE INDUSTRY

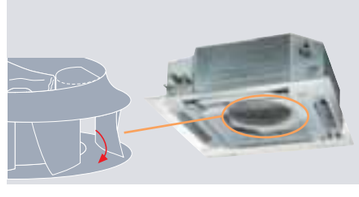
Cassette range

Advanced unit design: First-in-class indoor unit
- Selectable airflow rate and direction.
- Silent operation.
- Customised programming.

The indoor cassette unit is equipped with a hi-tech turbo fan. Its innovative blade design produces higher air speed and flow rate. The DC fan motor offers complete control. It is almost twice as efficient as a conventional motor and enables comfortable operation and energy savings. Likewise, the possibility of connecting two indoor units to one outdoor unit means considerable savings across the board.

Improved air inlet and outlet

The new three-dimensional blade shape stabilises airflow.
Optimising layout of the indoor heat exchanger and the fan allows an increase in fan diameter.

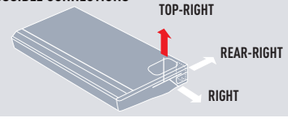


Ceiling range

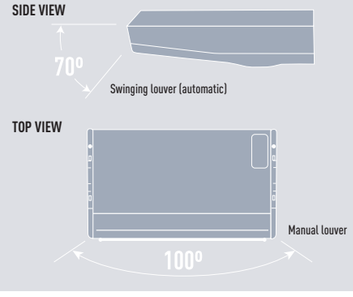
Trouble-free installation
- Easy setup.
- Multi-way connection.
- Broad range of air outlets.

ANTI-MOULD LONG-LIFE AIR FILTER

POSSIBLE CONNECTIONS

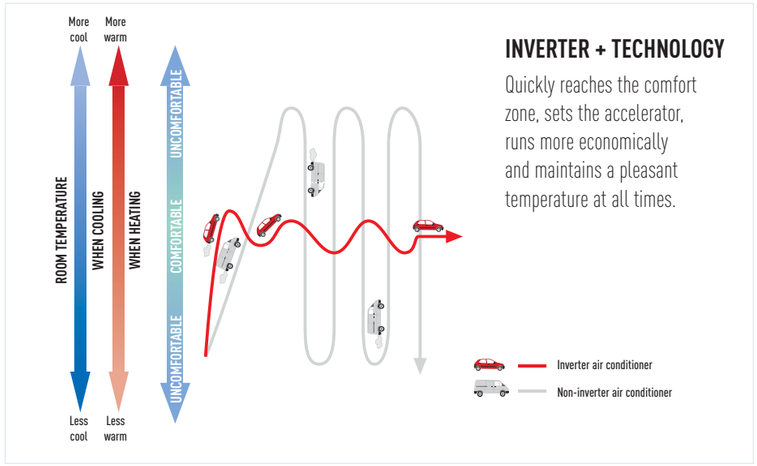


BROAD RANGE OF AIR OUTLETS



INVERTER + OUTDOOR UNITS

- Greater energy savings
- More installation options
- Quieter



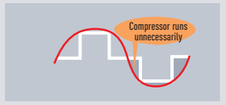
INVERTER + TECHNOLOGY

Quickly reaches the comfort zone, sets the accelerator, runs more economically and maintains a pleasant temperature at all times.

HIGH EFFICIENCY COMPRESSOR

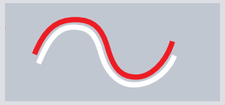
COMPRESSOR OPERATION INVERTER / HEAT PUMP

Inverter / Heat Pump



The heat pump waveform deviates from the motor waveform, so power is wasted.

Hyper wave Inverter



The compressor speed pattern perfectly fits the thermal needs at all times.

Compare this to a car rounding a corner

Power is lost when the car swings off course.

When the car stays on course, there is no power loss.

Energy-saving operation

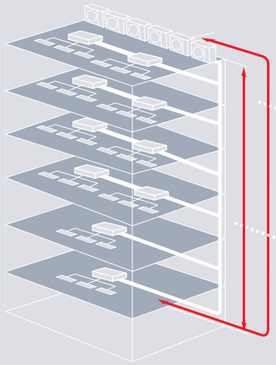
The new design provides quiet, highly efficient operation and reduces running costs.

High efficiency compressor

The new electric motor achieves lower distortion of the magnetic field to give greater efficiency.

INVERTER + INSTALLATION FLEXIBILITY

INSTALLATION WITH SIGNIFICANT HEIGHT DIFFERENCES WITHOUT LOSS OF EFFICIENCY.



MAXIMUM PIPE LENGHT OF 30 M WITHOUT ADDITIONAL LOAD AND 50 M WITH ADDITIONAL LOAD.

MAXIMUM HEIGHT DIFFERENCE OF 50 M EQUIVALENT TO 17/18 FLOORS.

New more compact outdoor units save space

Thanks to the new outdoor unit design, installation can be carried out in more limited spaces.

Operating range

The units can be used for cooling even when the outdoor temperature is extremely low. This is ideal for spaces which need cooling even in winter.

Normal cooling conditions	-15ºC to 43ºC (outside temperature)
Normal heating conditions	-20ºC to 24ºC (outside temperature)

Installation space

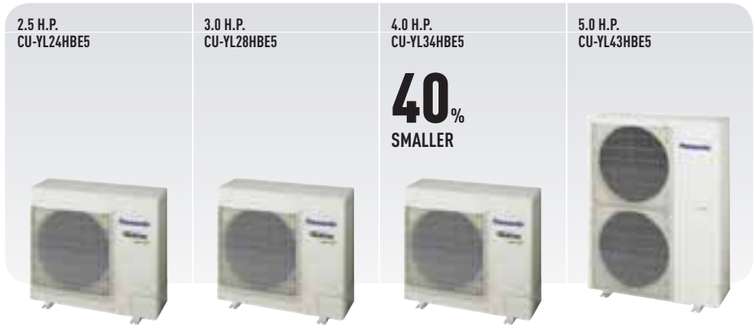
A Before 50 cm, now only 30 cm
B Outdoor only 32 cm deep

YL INVERTER OUTDOOR UNITS

- More compact outdoor units
- Increased pipe length
- Installation using existing pipes

NEW OUTDOOR UNITS INVERTER YL

The new commercial YL Inverter range: more compact, easier to install and with improved performance. All these outdoor units are perfectly compatible with indoor units of the low silhouette hide-away, high pressure hide-away, cassette and ceiling types.



FLEXIBLE RETROFITTING TO EXISTING INSTALLATIONS

COMPATIBILITY OF FS INVERTER AND INVERTER + SYSTEMS WITH VARIOUS PIPE DIAMETERS

Panasonic provides this new tool for retrofitting its equipment to any existing air conditioning installation. By using this simple compatibility table you will be able to check how the equipment works with different pipe diameters. Pipes should be cleaned correctly in all cases, taking special care to fully remove the remains of R22 refrigerating gas from the cooling circuit in systems that use that refrigerant.

	Ø Liquid pipe	1/4" (0.8mm)			3/8" (0.8mm)			1/2" (0.8mm)	
	Ø Gas pipe	3/8" (0.8mm)	1/2" (0.8mm)	5/8" (1.0mm)	1/2" (0.8mm)	5/8" (1.0mm)	3/4" (1.0mm)	5/8" (1.0mm)	3/4" (1.0mm)
2.5 H.P.	Max. pipe length			10m		50m [1] - 30m [2]		25m	
	Max. height	No	No	10m	No	30m [1] - 25m [2]	No	15m	No
	Additional load			-		50g/m		80g/m	
3.0 H.P.	Max. pipe length			10m		50m [1] - 30m [2]		25m	
	Max. height	No	No	10m	No	30m [1] - 25m [2]	No	15m	No
	Additional load			-		50g/m		80g/m	
4-6 H.P.	Max. pipe length			10m		50m [1] - 30m [2]	25m	25m	25m
	Max. height	No	No	10m	No	30m [1] - 25m [2]	15m	15m	15m
	Additional load			-		80g/m	80g/m	100g/m	100g/m

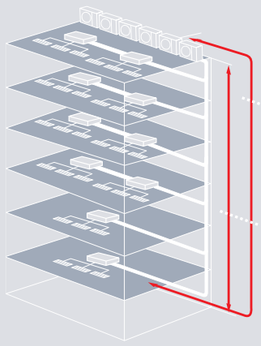
1) Inverter + range (CU-L)
2) Inverter range (CU-YL)

Correct · Possible · Not recommended · Installation not possible

Minimum piping lengh= 7.5m for all systems.

EASY INSTALLATION YL INVERTER

THANKS TO THE IMPROVEMENTS IN THE NEW FS SERIES INVERTER YOU SAVE SPACE AND INSTALLATION TIME.



MAXIMUM PIPE LENGHT OF 30 M WITHOUT ADDITIONAL LOAD AND 50 M WITH ADDITIONAL LOAD.

MAXIMUM HEIGHT DIFFERENCE OF 25 M EQUIVALENT TO 8/9 IN FLOORS.

New more compact units

The new outdoor units are up to 40% smaller (model CU-YL34HBE5) than the previous range.

Operating range

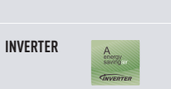
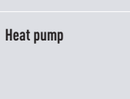
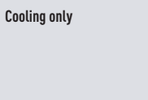
The units can be used for cooling even when the outdoor temperature is extremely low. This is ideal for spaces which need cooling even in winter.

Normal cooling conditions	-15ºC to 43ºC (outside temperature)
Normal heating conditions	-20ºC to 24ºC (outside temperature)

Installation space

A Before 50 cm, now only 30 cm
B Outdoor only 32 cm deep

RANGE OF INDOOR UNITS FS

		1.0 H.P.	1.5 H.P.	2.0 H.P.	2.25 H.P.	2.5 H.P.	3.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.	8.0 H.P.	10 H.P.
Low static pressure hide-away	INVERTER + // Page 10					CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5		
	INVERTER // Page 12	CS-E10JD3EA1	CS-E15JD3EA	CS-E18JD3EA		CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5			
	Heat pump // Page 14		CS-F14DD3E5	CS-F18DD3E5		CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5		
	Cooling only // Page 16		CS-F14DD3E5	CS-F18DD3E5		CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5		
High static pressure hide-away	INVERTER + // Page 18					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5		
	INVERTER // Page 20					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5			
	Heat pump // Page 22					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5		
	Cooling only // Page 24					CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5		
4-Way 60x60 cassette	INVERTER // Page 26	CS-E10HD4EA1	CS-E15HB4EA	CS-E18HB4EA	CS-E21HB4EA							
												
4-Way 90x90 cassette	INVERTER + // Page 28					CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5		
	INVERTER // Page 30					CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5			
	Heat pump // Page 32		CS-F14DB4E5	CS-F18DB4E5		CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5		
	Cooling only // Page 34		CS-F14DB4E5	CS-F18DB4E5		CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5		
Ceiling	INVERTER + // Page 36					CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5		
	INVERTER // Page 38					CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5			
	Heat pump // Page 40			CS-F18DTE5		CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5		
	Cooling only // Page 42			CS-F18DTE5		CS-F24DTE5	CS-F28DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5		
High pressure hide-away	INVERTER // Page 44										S-200E1DPQ1	S-250E1DPQ1
												

RANGE OF OUTDOOR UNITS

	1.0 H.P.	1.5 H.P.	2.0 H.P.	2.25 H.P.	2.5 H.P.	3.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.	8.0 H.P.	10 H.P.
INVERTER +					 CU-L24DBE5 I	 CU-L28DBE5 I	 CU-L34DBE5 I / L34DBE8 III	 CU-L43DBE5 I / L43DBE 8 III	 CU-L50DBE8 III		
INVERTER	 CU-E10HBEA I	 CU-E15HBEA I	 CU-E18HBEA I	 CU-E21HBEA I	 CU-YL24HBE5 I	 CU-YL28HBE5 I	 CU-YL34HBE5 I	 CU-YL43HBE5 I		 U-200X2XPQ III	 U-250X2XPQ III
Heat pump	 CU-B14DBE5 I	 CU-B18DBE5 I			 CU-B24DBE5 I	 CU-B28DBE5 I / B28DBE8 III	 CU-B34DBE5 I / B34DBE8 III	 CU-B43DBE8 III	 CU-B50DBE8 III		
Cooling only	 CU-J14DBE5 I	 CU-J18DBE5 I			 CU-J24DBE5 I / J24DBE8 III	 CU-J28DBE5 I / J28DBE8 III	 CU-J34DBE5 I / J34DBE8 III	 CU-J43DBE8 III	 CU-J50DBE8 III		

I Single-phase III Three-phase

TECHNICAL ZOOM

- HIGHER ENERGY CLASS FOR HIGH SAVINGS, EVEN AT -20°C
- ECO MODE FOR 20% ENERGY SAVING
- EXTREMELY COMPACT INDOOR UNITS WITHOUT LOSING STATIC PRESSURE (ONLY 250MM HIGH)
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

LOW STATIC PRESSURE HIDE AWAY // INVERTER + FS TYPE

A complete line up of compact, efficient, quieter and powerful hide away, for the most demanding customers, from 2.5 H.P. to 6.0 H.P., Single-phase and three-phase

LOW STATIC PRESSURE HIDE AWAY // INVERTER + FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			**KIT-F24DD3E5**	**KIT-F28DD3E5**	**KIT-F34DD3E5**	**KIT-F34DD3E8**	**KIT-F43DD3E5**	**KIT-F43DD3E8**	**KIT-F50DD3E8**
Indoor			**CS-F24DD3E5**	**CS-F28DD3E5**	**CS-F34DD3E5**	**CS-F34DD3E5**	**CS-F43DD3E5**	**CS-F43DD3E5**	**CS-F50DD3E5**
Outdoor			**CU-L24DBE5**	**CU-L28DBE5**	**CU-L34DBE5**	**CU-L34DBE8**	**CU-L43DBE5**	**CU-L43DBE8**	**CU-L50DBE8**
Wired remote control			**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**
Cooling capacity	Nominal (Min-Max)	kW	6.30 (2.00-6.50)	7.10 (2.10-7.50)	10.00 (4.00-12.00)	10.00 (4.00-12.00)	12.50 (4.00-13.50)	12.50 (4.00-13.50)	14.00 (4.00-16.00)
	Nominal (Min-Max)	kCal/h	5,418 (1,720-5,590)	6,106 (1,806-6,450)	8,600 (3,440-10,320)	8,600 (3,440-10,320)	10,750 (3,440-11,610)	10,750 (3,440-11,610)	12,040 (3,440-13,760)
EER [1]	Nominal (Min-Max)		3.21 (3.33-2.71) A	3.21 (3.23-3.06) A	3.61 (3.08-3.48) A	3.61 (3.08-3.48) A	3.01 (2.86-3.07) B	3.01 (2.86-3.07) B	2.81 (2.76-3.08) B
Power input Cooling	Nominal (Min-Max)	kW	1.96 (0.6-2.4)	2.21 (0.65-2.45)	2.77 (1.3-3.45)	2.77 (1.3-3.45)	4.15 (1.4-4.4)	4.15 (1.4-4.4)	4.98 (1.45-5.2)
Heating capacity	Nominal (Min-Max)	kW	7.10 (2.10-7.50)	8.00 (2.20-8.50)	11.20 (4.00-13.50)	11.20 (4.00-13.50)	14.00 (4.00-15.50)	14.00 (4.00-15.50)	16.00 (4.00-18.00)
	Nominal (Min-Max)	kCal/h	6,106 (1,806-6,450)	6,880 (1,892-7,310)	9,632 (3,440-11,610)	9,632 (3,440-11,610)	12,040 (3,440-13,330)	12,040 (3,440-13,330)	13,760 (3,440-15,480)
COP [1]	Nominal (Min-Max)		3.41 (3.50-2.38) B	3.42 (3.38-2.62) B	3.41 (3.08-3.18) B	3.41 (3.08-3.18) B	3.41 (2.86-3.04) B	3.41 (2.86-3.04) B	3.21 (2.86-2.95) C
Power input Heating	Nominal (Min-Max)	kW	2.08 (0.6-3.15)	2.34 (0.65-3.25)	3.28 (1.3-4.25)	3.28 (1.3-4.25)	4.11 (1.4-5.1)	4.11 (1.4-5.1)	4.98 (1.4-6.1)
Annual Energy Consumption [2]		kWh	980	1,105	1,385	1,385	2,075	2,075	2,490
Indoor unit									
External static pressure [3]	High (Shigh)	mmAq	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])
	Medium	mmAq	2.6	2.6	2.8	2.8	2.8	2.8	3
	Low	mmAq	1.8	1.8	2	2	2	2	2.5
Air Volume	High (Shigh)	m³/h	1,320 [7] (1,200 [8])	1,320 [7] (1,200 [8])	2,160 [7] (2,010 [8])	2,160 [7] (2,010 [8])	2,400 [7] (2,190 [8])	2,400 [7] (2,190 [8])	2,640 [7] (2,430 [8])
	Medium	m³/h	984	984	1,620	1,620	1,770	1,770	1,920
	Low	m³/h	810	810	1,320	1,320	1,420	1,420	1,560
Moisture removal volume		l/h	2.3	2.8	3.8	4.3	6.0	7.9	9.0
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	43 / 39	43 / 39	47 / 43	45 / 41	45 / 41	45 / 41	46 / 42
	Heating (Hi / Lo)	dB(A)	43 / 39	43 / 39	45 / 41	44 / 40	44 / 40	44 / 40	45 / 41
Sound power Level	Cooling (Hi)	dB	59	59	60	60	60	60	61
	Heating (Hi)	dB	59	59	59	59	59	59	60
Dimension	Indoor (H x W x D)	mm	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650
Net weight	Indoor	Kg	41	41	47	47	47	47	47
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outdoor unit									
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415
Connection		mm²	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	9.0	10.1	12.6	4.4	18.8	6.5	7.6
Current Heating	Nominal (Min / Max)	A	9.5	10.6	14.9	5.2	18.7	6.5	7.6
Air Volume	Cooling / Heating	m³/h	2,880 / 2,880	2,880 / 2,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880
Sound pressure Level [4]	Cooling (Hi)	dB(A)	47	48	52	52	53	53	54
	Heating (Hi)	dB(A)	49	50	54	54	55	55	56
Sound power Level	Cooling (Hi)	dB	63	64	66	66	67	67	68
	Heating (Hi)	dB	65	66	68	68	69	69	70
Dimensions	H x W x D	mm	795x900x320	795x900x320	1,340x900x320	1,340x900x320	1,340x900x320	1,340x900x320	1,340x900x320
Net weight		Kg	71	71	110	105	110	105	105
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	2.13	2.35	3.3	3.3	3.3	3.3	3.5
Elevation difference (in/out) [6]	Max	m	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50
Piping length without refrigerent increase	Max	m	30	30	30	30	30	30	30
Additional gas		g/m	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43
	Heating Min / Max	°C	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24

GLOBAL REMARKS

Rating conditions	Cooling	Heating
Inside air temperature	27°C DB / 19°C WB	20°C DB
Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.
7) Change connector on fan motor from Hi to SHi.
8) By reducing the air volume on the air duct.

CZ-RD513C

CU-L24DBE5
CU-L28DBE5

CU-L34DBE5
CU-L34DBE8
CU-L43DBE5

CU-L43DBE8
CU-L50DBE8

KIT-F24DD3E5 // KIT-F28DD3E5 // KIT-F34DD3E5 // KIT-F34DD3E8 // KIT-F43DD3E5 // KIT-F43DD3E8 // KIT-F50DD3E8

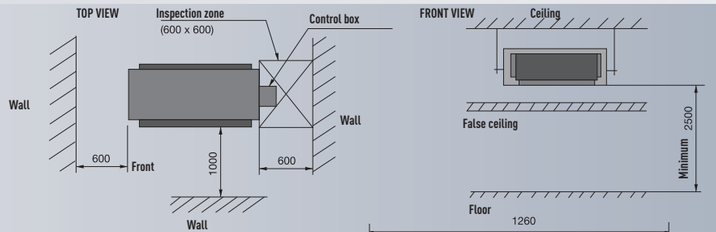
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -20 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at indoor unit or wired remote control

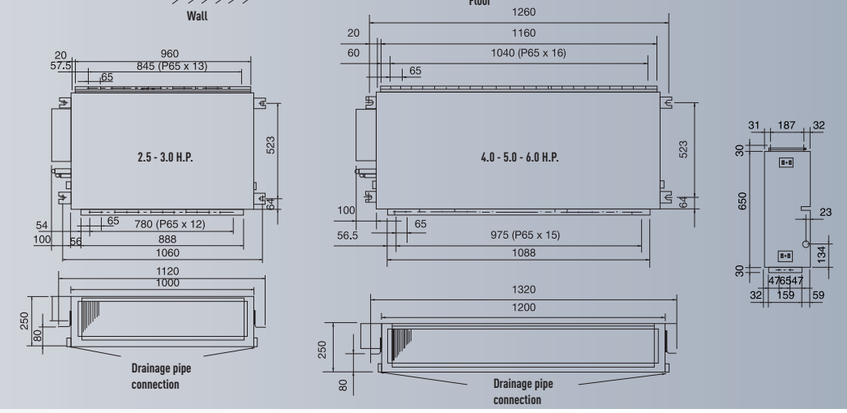
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes
- Selectable static pressure up to 7 mmAq
- Self-diagnostic function
- Condensation control
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

- ULTRA COMPACT OUTDOOR UNITS (-40% REDUCED SIZE FOR THE CU-YL34HBE5)
- ECO MODE FOR 20% ENERGY SAVING
- EXTREMELY COMPACT INDOOR UNITS WITHOUT LOSING STATIC PRESSURE (ONLY 250MM HIGH)
- COOLING WITH LOW OUTDOOR TEMPERATURES (DOWN TO -20 ºC)
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- EASY CHECK MODE FOR FAILURE DETECTION

LOW STATIC PRESSURE HIDE AWAY // INVERTER FS TYPE

Compact line up of inverter Hide away, from 1.0 H.P. to 5.0 H.P., Single-phase

LOW STATIC PRESSURE HIDE AWAY // INVERTER FS TYPE

			1 HP	1.5 HP	2 HP	2.5 HP	3.0 HP	4.0 HP	5.0 HP
KIT			KIT-E10-JD3EA	KIT-E15-JD3EA	KIT-E18-JD3EA	KIT-YH24DD3E5	KIT-YH28DD3E5	KIT-YH34DD3E5	KIT-YH43DD3E5
Indoor			CS-E10JD3EA1	CS-E15JD3EA	CS-E18JD3EA	CS-F24DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F43DD3E5
Outdoor			CU-E10HBEA	CU-E15HBEA	CU-E18HBEA	CU-YL24HBE5	CU-YL28HBE5	CU-YL34HBE5	CU-YL43HBE5
Wired remote control			CZ-RD52CP	CZ-RD52CP	CZ-RD52CP	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.80-3.00)	4.10 (0.90-4.70)	5.10 (0.90-5.70)	5.60 (2 - 6.30)	7.10 (2.10 - 7.50)	10.00 (3.8 - 10.50)	12.50 (3.80 - 13.00)
	Nominal (Min - Max)	kCal/h	2150 (690-2580)	3530 (770-4040)	4390 (770-4900)	4816 (1720-5418)	6106 (1806-6450)	8600 (3268-9030)	10750 (3268-11180)
EER [1]	Nominal (Min - Max)		3.68 (3.87-3.53) A	3.31 (3.53-3.13) A	3.15 (3.53-3.10) B	2.81 (3.64-2.86) C	2.81 (3.23-2.88) C	2.61 (2.92-2.56) D	3.81 (2.92-2.77) C
Power input Cooling	Nominal (Min-Max)	kW	0.680 (0.155-0.850)	1.240 (0.255-1.500)	1.620 (0.250-1.840)	1.990 (0.550-2.200)	2.530 (0.650-2.600)	3.560 (1.300-4.100)	4.450 (1.300-4.700)
Heating capacity	Nominal (Min - Max)	kW	3.20 (0.60-5.00)	4.80 (0.90-55.0)	6.10 (0.90-7.10)	7.00 (2.10-7.50)	8.00 (2.20-8.30)	11.20 (3.80-12.50)	14.00 (3.80-14.50)
	Nominal (Min - Max)	kCal/h	2752 (516-4300)	4130 (770-4730)	5250 (770-6110)	6020 (1806-6450)	6880 (1892-7138)	9632 (3268-10750)	12040 (3268-12470)
COP [1]	Nominal (Min - Max)		3.64 (4.44-3.27) A	2.64 (3.46-2.63) E	3.30 (3.46-3.23) C	2.81 (4.20-2.68) D	2.81 (3.67-2.59) D	3.01 (3.17-2.94) C	3.01 (3.17-2.90) C
Power input Heating	Nominal (Min - Max)	kW	0.880 (0.135-1.530)	1.820 (0.260-2.090)	1.850 (0.260-2.200)	2.490 (0.500-2.800)	2.850 (0.600-3.200)	3.720 (1.200-4.250)	4.650 (1.200-5.000)
Annual Energy Consumption [2]		kWh	340	620	810	995	1,265	1,780	2,225
Indoor unit									
External static pressure [3]	High (Shigh)	mmAq	3.5 (5.5 [7])	3.5 (7.0 [7])	3.5 (6.0 [7])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])
	Medium	mmAq	1.5	1.5	1.5	2.6	2.6	2.8	2.8
	Low	mmAq	1	1	1	1.8	1.8	2	2
Air Volume	High (Shigh)	m^3/h	414 (660 [7])	474 (660 [7])	624 (750 [7])	1.320 [7] (1.200 [8])	1.320 [7] (1.200 [8])	2.160 [7] (2.010 [8])	2.400 [7] (2.190 [8])
	Medium	m^3/h	402	402	528	984	984	1,620	1,770
	Low	m^3/h	330	330	444	810	810	1,320	1,420
Moisture removal volume		l/h	1.50	2.30	2.80	3.20	4.20	6.00	7.90
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	33 / 24	33 / 24	41 / 27	43 / 39	43 / 39	45 / 41	45 / 41
	Heating (Hi / Lo)	dB(A)	35 / 25	35 / 25	41 / 29	43 / 39	43 / 39	44 / 40	44 / 40
Sound power Level	Cooling (Hi)	dB	49	49	57	59	59	60	60
	Heating (Hi)	dB	51	51	57	59	59	60	60
Dimensions	H x W x D	mm	235x750+65 [5]x370	235x750+65 [5]x370	285x750+65 [5]x370	250x1,000+100 [5]x650	250x1,000+100 [5]x650	250x1,200+100 [5]x650	250x1,200+100 [5]x650
Net weight	Indoor	Kg	17	18	18	41	41	47	47
Dust filter			No	No	No	Yes	Yes	Yes	Yes
Outdoor unit									
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240
Connection		mm^2	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5
Current Cooling	Nominal (Min / Max)	A	2.9	5.7	7.3	9.00	11.40	16.30	20.30
Current Heating	Nominal (Min / Max)	A	3.8	8.2	8.3	11.30	12.20	17.00	21.20
Air Volume	Cooling / Heating	m^3/h	1,728	2,808	2,400	3,180	3,480	3,720	5,640
Sound pressure Level [4]	Cooling (Hi)	dB(A)	45	46	47	49	50	53	54
	Heating (Hi)	dB(A)	46	47	48	51	52	56	56
Sound power Level	Cooling (Hi)	dB	58	59	60	67	68	71	72
	Heating (Hi)	dB	59	60	61	68	69	73	73
Dimensions	H x W x D	mm	540x780+70 [5]x289	750x875+70 [5]x345	750x875+70 [5]x345	795x875+70 [5]x320	795x875+70 [5]x320	795x900x320	1170x900x320
Net weight		Kg	35	48	48	65	65	66	94
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	3/8" (9.52)	1/2" (12.70)	1/2" (12.70)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.15	1.23	1.06	1.63	2.05	2.8	2.8
Elevation difference (in/out) [6]	Max	m	15	15	20	25	25	25	25
Piping length	Min - Max	m	3 - 20	3 - 20	3 - 30	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50
Piping length without refrigerent increase	Max	m	10	10	10	25	25	25	25
Additional gas		g/m	20	20	20	50	50	50	50
Area control accessory						EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-10/43	-10/43	-10/43	-5 / 43	-5 / 44	-5 / 45	-5 / 46
	Heating Min / Max	°C	-10/24	-10/24	-10/24	-15 / 24	-15 / 25	-15 / 26	-15 / 27

GLOBAL REMARKS

Rating conditions	Cooling	Heating
Inside air temperature	27°C DB / 19°C WB	20°C DB
Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.
7) Change connector on fan motor from Hi to SHi.
8) By reducing the air volume on the air duct.

CZ-RD513C / CZ-RD52CP
WIRED

CU-E10HBEA CU-E18HBEA
CU-E15HBEA

CU-YL24HBE5
CU-YL28HBE5

CU-YL34HBE5

CU-YL43HBE5

KIT-E10-JD3EA // KIT-E15-JD3EA // KIT-E18-JD3EA // KIT-YH24DD3E5 // KIT-YH28DD3E5 // KIT-YH34DD3E5 // KIT-YH43DD3E5

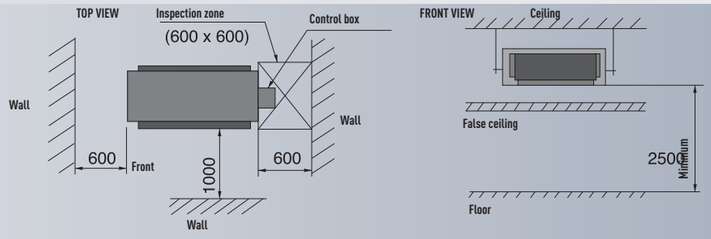
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -15 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at indoor unit or wired remote control

EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes
- Selectable static pressure up to 7 mmAq
- Self-diagnostic function
- Condensation control
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS

TECHNICAL ZOOM

- EXTREMELY COMPACT INDOOR UNITS WITHOUT LOSING STATIC PRESSURE (ONLY 250MM HIGH)
- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- EASY CHECK MODE FOR FAILURE DETECTION

LOW STATIC PRESSURE
HIDE AWAY // HEAT PUMP FS TYPE

Full line up of heat pump no-inverter Hide away, from 1.5 H.P. to 6.0 H.P., Single-phase and three-phase

LOW STATIC PRESSURE HIDE AWAY // HEAT PUMP FS TYPE

			1.5 H.P.	2.0 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F14DD3E5-C	KIT-F18DD3E5-C	KIT-F24DD3E5-C	KIT-F28DD3E5-C	KIT-F28DD3E8-C	KIT-F34DD3E5-C	KIT-F34DD3E8-C	KIT-F43DD3E8-C	KIT-F50DD3E8-C
Indoor			CS-F14DD3E5	CS-F18DD3E5	CS-F24DD3E5	CS-F28DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5
Outdoor			CU-B14DBE5	CU-B18DBE5	CU-B24DBE5	CU-B28DBE5	CU-B28DBE8	CU-B34DBE5	CU-B34DBE8	CU-B43DBE8	CU-B50DBE8
Wired remote control			CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	3.80	5.00	6.60	7.30	7.30	10.00	10.00	12.50	13.50
	Nominal (Min-Max)	kCal/h	3,268	4,300	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min-Max)		2.88 C	2.66 D	2.55 E	2.57 E	2.57 E	2.58 E	2.67 E	2.60 E	2.54 E
Power input Cooling	Nominal (Min-Max)	kW	1.35 (1.32-1.38)	1.89 (1.86-1.92)	2.59 (2.56-2.64)	2.84 (2.78-2.89)	2.84 (2.78-2.89)	3.88 (3.83-4.05)	3.75 (3.7-3.8)	4.80 (4.75-4.87)	5.31 (5.26-5.46)
Heating capacity	Nominal (Min-Max)	kW	4.30	5.60	7.10	8.00	8.00	11.20	11.20	14.00	15.00
	Nominal (Min-Max)	kCal/h	3,698	4,816	6,106	6,880	6,880	9,632	9,632	12,040	12,900
COP [1]	Nominal (Min-Max)		3.31 C	3.29 C	2.87 D	2.97 D	2.97 D	2.84 D	3.13 D	2.99 D	2.95 D
Power input Heating	Nominal (Min-Max)	kW	1.21 (1.18-1.24)	1.70 (1.67-1.73)	2.47 (2.4-2.56)	2.69 (2.61-2.78)	2.69 (2.61-2.78)	3.94 (3.86-4.0)	3.58 (3.54-3.64)	4.68 (4.61-4.78)	5.08 (5.03-5.13)
Annual Energy Consumption [2]		kWh	675	945	1,295	1,420	1,420	1,940	1,875	2,400	2,655
Indoor unit											
External static pressure [3]	High (Shigh)	mmAq	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])	5,1 [7] (7,0 [8])
	Medium	mmAq	2.5	2.5	2.6	2.6	2.6	2.8	2.8	2.8	3
	Low	mmAq	1.7	1.7	1.8	1.8	1.8	2	2	2	2.5
Air Volume	High (Shigh)	m^3/h	1,020	1,020	1,320 [7] (1,200 [8])	1,320 [7] (1,200 [8])	1,320 [7] (1,200 [8])	2,160 [7] (2,010 [8])	2,160 [7] (2,010 [8])	2,400 [7] (2,190 [8])	2,640 [7] (2,430 [8])
	Medium	m^3/h	798	798	984	984	984	1,620	1,620	1,770	1,920
	Low	m^3/h	660	660	810	810	810	1,320	1,320	1,420	1,560
Moisture removal volume		l/h	2.2	2.8	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	42 / 38	42 / 38	43 / 39	43 / 39	43 / 39	45 / 41	45 / 41	45 / 41	46 / 42
	Heating (Hi / Lo)	dB(A)	40 / 36	40 / 36	43 / 39	43 / 39	43 / 39	44 / 40	44 / 40	44 / 40	45 / 41
Sound power Level	Cooling (Hi)	dB	58	58	59	59	59	60	60	60	61
	Heating (Hi)	dB	56	56	59	59	59	59	59	59	60
Dimensions. indoor	H x W x D	mm	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650
Net weight	Indoor	Kg	34	34	41	41	41	47	47	47	47
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outdoor unit											
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	6.31	8.53	12.9	13.5	4.9	18.6	6.45	8.1	8.8
Current Heating	Nominal (Min / Max)	A	5.36	7.63	11.8	12.6	4.7	18.6	6.2	7.9	8.4
Air Volume	Cooling / Heating	m^3/h	3,240 / 3,240	3,420 / 3,429	3,600 / 3,600	3,780 / 3,780	3,780 / 3,780	5,640 / 5,640	5,640 / 5,640	5,640 / 5,640	5,760 / 5,760
Sound pressure Level [4]	Cooling (Hi)	dB(A)	49	49	50	52	52	55	55	56	56
	Heating (Hi)	dB(A)	50	50	51	53	53	56	56	57	57
Sound power Level	Cooling (Hi)	dB	65	65	66	67	67	69	69	70	70
	Heating (Hi)	dB	66	66	67	68	68	70	70	71	71
Dimensions	H x W x D	mm	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	1,170x900x320	1,170x900x320	1,170x900x320	1,170x900x320
Net weight		Kg	55	57	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	1/2" (12.70)	1/2" (12.70)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.1	1.35	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [6]	Max	m	20	20	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	20	20	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	20	20	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground
The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.
7) Change connector on fan motor from Hi to SHi.
8) By reducing the air volume on the air duct.

CZ-RD513C

CU-B14DBE5 CU-B28DBE5
CU-B18DBE5 CU-B28DBE8
CU-B24DBE5

CU-B34DBE5 CU-B43DBE8
CU-B34DBE8 CU-B50DBE8

KIT-F14DD3E5-C // KIT-F18DD3E5-C // KIT-F24DD3E5-C // KIT-F28DD3E5-C // KIT-F28DD3E8-C // KIT-F34DD3E5-C // KIT-F34DD3E8-C // KIT-F43DD3E8-C // KIT-F50DD3E8-C

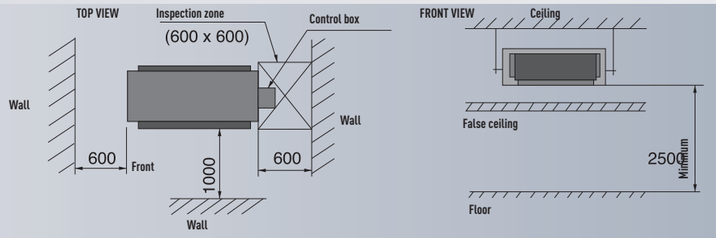
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at the indoor unit or the wired remote control

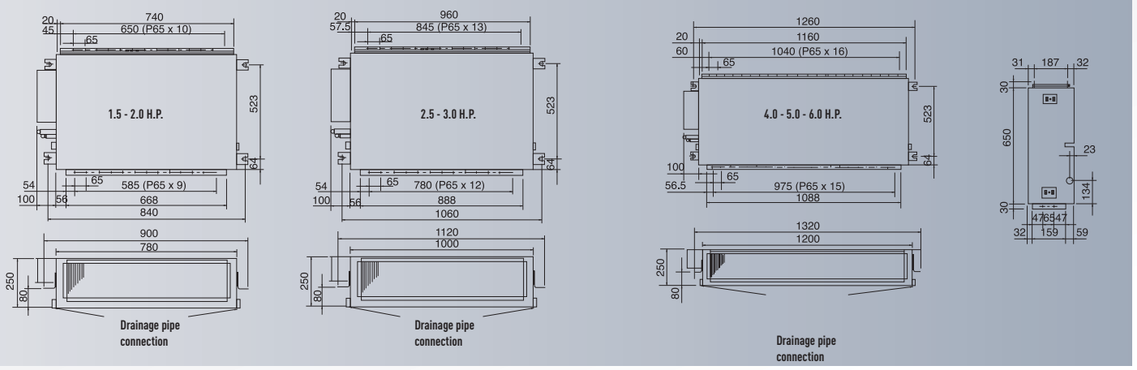
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- Selectable static pressure up to 7 mmAq
- Self-diagnostic function
- Condensation control
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

- EXTREMELY COMPACT INDOOR UNITS WITHOUT LOSING STATIC PRESSURE (ONLY 250MM HIGH)
- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- EASY CHECK MODE FOR FAILURE DETECTION

LOW STATIC PRESSURE
HIDE AWAY // COOLING ONLY FS TYPE

Full line up of cooling only no-inverter Hide away, from 1.5 H.P. to 6.0 H.P., Single-phase and three-phase

LOW STATIC PRESSURE HIDE AWAY // COOLING ONLY FS TYPE

			1.5 H.P.	2.0 H.P.	2.5 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F14DD3E5-F	KIT-F18DD3E5-F	KIT-F24DD3E5-F	KIT-F24DD3E8-F	KIT-F28DD3E5-F	KIT-F28DD3E8-F	KIT-F34DD3E5-F	KIT-F34DD3E8-F	KIT-F43DD3E8-F	KIT-F50DD3E8-F
Indoor			CS-F14DD3E5	CS-F18DD3E5	CS-F24DD3E5	CS-F24DD3E5	CS-F28DD3E5	CS-F28DD3E5	CS-F34DD3E5	CS-F34DD3E5	CS-F43DD3E5	CS-F50DD3E5
Outdoor			CU-J14DBE5	CU-J18DBE5	CU-J24DBE5	CU-J24DBE8	CU-J28DBE5	CU-J28DBE8	CU-J34DBE5	CU-J34DBE8	CU-J43DBE8	CU-J50DBE8
Wired remote control			CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min - Max)	kW	3.80	5.00	6.60	6.60	7.30	7.30	10.00	10.00	12.50	13.50
	Nominal (Min - Max)	kCal/h	3,268	4,300	5,676	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min - Max)		2.81 C	2.69 D	2.48 E	2.48 E	2.53 E	2.53 E	2.48 E	2.63 D	2.58 E	2.50 E
Power input Cooling	Nominal (Min - Max)	kW	1.35 (1.32-1.38)	1.86 (1.83-1.89)	2.66 (2.62-2.70)	2.66 (2.62-2.70)	2.89 (2.83-2.94)	2.89 (2.83-2.94)	4.04 (3.95-4.12)	3.80 (3.75-3.85)	4.84 (4.80-4.95)	5.41 (5.36-5.51)
Annual Energy Consumption [2]		kWh	675	930	1,330	1,330	1,445	1,445	2,020	1,900	2,420	2,655
Indoor unit												
External static pressure [3]	High (Shigh)	mmAq	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])	5.1 [7] (7.0 [8])
	Medium	mmAq	2.5	2.5	2.6	2.6	2.6	2.6	2.8	2.8	2.8	3
	Low	mmAq	1.7	1.7	1.8	1.8	1.8	1.8	2	2	2	2.5
Air Volume	High (Shigh)	m^3/h	1,020	1,020	1,320 [7] (1,200 [8])	1,320 [7] (1,200 [8])	1,320 [7] (1,200 [8])	1,320 [7] (1,200 [8])	2,160 [7] (2,010 [8])	2,160 [7] (2,010 [8])	2,400 [7] (2,190 [8])	2,640 [7] (2,430 [8])
	Medium	m^3/h	798	798	984	984	984	984	1,620	1,620	1,770	1,920
	Low	m^3/h	660	660	810	810	810	810	1,320	1,320	1,420	1,560
Moisture removal volume		l/h	2.2	2.8	3.8	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [4]	Hi / Lo	dB(A)	42 / 38	42 / 38	43 / 39	43 / 39	43 / 39	43 / 39	45 / 41	45 / 41	45 / 41	46 / 42
Sound power Level	Hi	dB	58	58	59	59	59	59	60	60	60	61
Dimensions. indoor	H x W x D	mm	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,000+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650	250x1,200+100[5]x650
Net weight	Indoor	Kg	34	34	41	41	41	41	47	47	47	47
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outdoor unit												
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	6.21	8.53	12.9	4.54	13.5	4.9	18.6	6.45	8.1	8.8
Air Volume	Cooling	m^3/h	3,240	3,420	3,600	3,600	3,780	3,780	5,640	5,640	5,640	5,760
Sound pressure Level [4]	Hi	dB(A)	49	49	50	50	52	52	55	55	56	56
Sound power Level	Hi	dB	65	65	66	66	67	67	69	69	70	70
Dimensions	H x W x D	mm	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	1,170x900x320	1,170x900x320	1,170x900x320	1,170x900x320
Net weight		Kg	55	57	69	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	1/2" (12.70)	1/2" (12.70)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.1	1.35	1.7	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [6]	Max	m	20	20	30	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	20	20	30	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	20	20	50	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43

GLOBAL REMARKS

Rating conditions	Cooling
Inside air temperature	27°C DB / 19°C WB
Outside air temperature	35°C DB / 24°C WB

DB : Dry buld; WB : Wet buld

1) EER, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.
7) Change connector on fan motor from Hi to SHi.
8) By reducing the air volume on the air duct.

CZ-RD513C

CU-J14DBE5 CU-J24DBE8
CU-J18DBE5 CU-J28DBE5
CU-J24DBE5 CU-J28DBE8

CU-J34DBE5 CU-J43DBE8
CU-J34DBE8 CU-J50DBE8

KIT-F14DD3E5-F // KIT-F18DD3E5-F // KIT-F24DD3E5-F // KIT-F24DD3E8-F // KIT-F28DD3E5-F // KIT-F28DD3E8-F // KIT-F34DD3E5-F // KIT-F34DD3E8-F // KIT-F43DD3E8-F // KIT-F50DD3E8-F

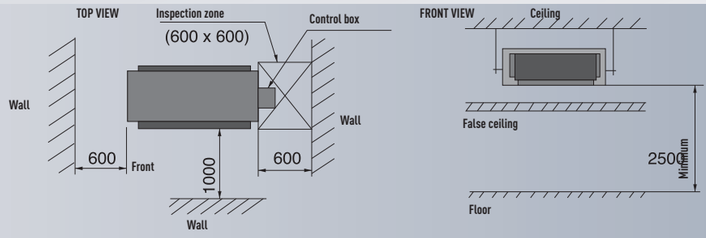
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at the indoor unit or the wired remote control

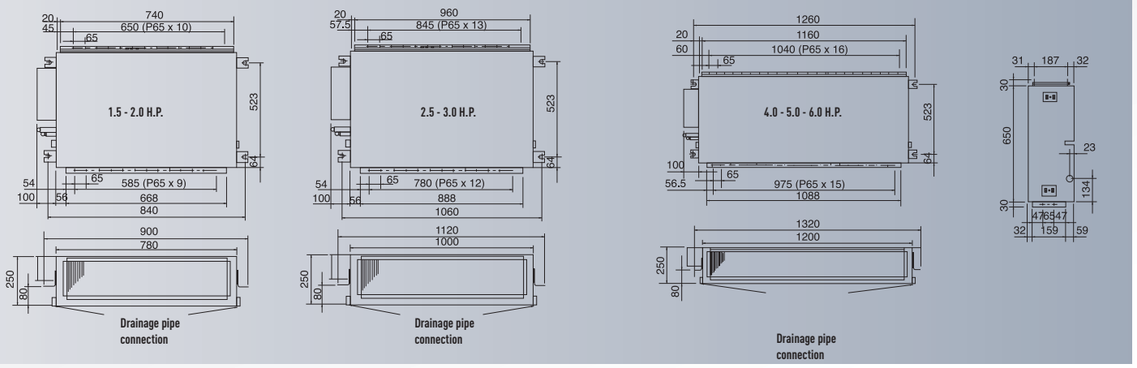
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- Selectable static pressure up to 7 mmAq
- Self-diagnostic function
- Condensation control
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

- HIGHER ENERGY CLASS FOR HIGH SAVINGS, EVEN AT -20°C
- ECO MODE FOR 20% ENERGY SAVING
- STATIC PRESSURE TILL 10MMAQ
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- MAX ELEVATION DIFFERENCE 30M
- EASY CHECK MODE FOR FAILURE DETECTION

HIGH STATIC PRESSURE
HIDE AWAY // INVERTER + FS TYPE

A complete line up of efficient and powerful high static pressure hide away, for the most demanding customers, from 2.5 H.P. to 6.0 H.P., Single-phase and three-phase

HIGH STATIC PRESSURE HIDE AWAY // INVERTER + FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F24DD2E5	KIT-F28DD2E5	KIT-F34DD2E5	KIT-F34DD2E8	KIT-F43DD2E5	KIT-F43DD2E8	KIT-F50DD2E8
Indoor			CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F43DD2E5	CS-F50DD2E5
Outdoor			CU-L24DBE5	CU-L28DBE5	CU-L34DBE5	CU-L34DBE8	CU-L43DBE5	CU-L43DBE8	CU-L50DBE8
Wired remote control			CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	6.30 (2.00-6.50)	7.10 (2.10-7.50)	10.00 (4.00-12.00)	10.00 (4.00-12.00)	12.50 (4.00-13.50)	12.50 (4.00-13.50)	14.00 (4.00-16.00)
	Nominal (Min-Max)	kCal/h	5,418 (1,720-5,590)	6,106 (1,806-6,450)	8,600 (3,440-10,320)	8,600 (3,440-10,320)	10,750 (3,440-11,610)	10,750 (3,440-11,610)	12,040 (3,440-13,760)
EER [1]	Nominal (Min-Max)		3.01 (3.33-2.71) B	3.01 (3.23-3.06) B	3.27 (2.96-3.43) A	3.27 (2.96-3.43) A	3.01 (2.86-3.00) B	3.01 (2.86-3.00) B	2.77 (2.76-2.96) D
Power input Cooling	Nominal (Min-Max)	kW	2.09 (0.6-2.4)	2.36 (0.65-2.45)	3.06 (1.35-3.5)	3.06 (1.35-3.5)	4.15 (1.4-4.5)	4.15 (1.4-4.5)	5.06 (1.45-5.4)
Heating capacity	Nominal (Min-Max)	kW	7.10 (2.10-7.50)	8.00 (2.20-8.50)	11.20 (4.00-13.50)	11.20 (4.00-13.50)	14.00 (4.00-15.50)	14.00 (4.00-15.50)	16.00 (4.00-18.00)
	Nominal (Min-Max)	kCal/h	6,106 (1,806-6,450)	6,880 (1,892-7,310)	9,632 (3,440-11,610)	9,632 (3,440-11,610)	12,040 (3,440-13,330)	12,040 (3,440-13,330)	13,760 (3,440-15,480)
COP [1]	Nominal (Min-Max)		3.41 (3.50-2.38) B	3.42 (3.38-2.62) B	3.41 (2.96-3.14) B	3.41 (2.96-3.14) B	3.21 (2.86-3.04) C	3.21 (2.86-3.04) C	3.30 (2.86-2.95) C
Power input Heating	Nominal (Min-Max)	kW	2.08 (0.6-3.15)	2.34 (0.65-3.25)	3.28 (1.35-4.3)	3.28 (1.35-4.3)	4.36 (1.4-5.1)	4.36 (1.4-5.1)	4.85 (1.4-6.1)
Annual Energy Consumption [2]		kWh	1,045	1,180	1,530	1,530	2,075	2,075	2,530
Indoor unit									
External static pressure [3]	High	mmAq	7	7	10	10	10	10	10
	Medium	mmAq	5	5	6.6	6.6	6.6	6.6	6.6
	Low	mmAq	4.1	4.1	5.1	5.1	5.1	5.1	5.6
Air Volume	High	m^3/h	1,320	1,320	2,280	2,280	2,400	2,400	2,700
	Medium	m^3/h	1,020	1,020	1,920	1,920	1,980	1,980	2,100
	Low	m^3/h	870	870	1,620	1,620	1,680	1,680	1,740
Moisture removal volume		l/h	3.8	4.3	6.0	6.0	7.9	7.9	9.0
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	45 / 41	45 / 41	49 / 45	49 / 45	49 / 45	49 / 45	49 / 45
	Heating (Hi / Lo)	dB(A)	43 / 39	43 / 39	47 / 44	47 / 44	47 / 44	47 / 44	47 / 44
Sound power Level	Cooling (Hi)	dB	61	61	64	64	64	64	64
	Heating (Hi)	dB	59	59	62	62	62	62	62
Dimensions. indoor	H x W x D	mm	290x1,000+100[5]x500	290x1,000+100[5]x500	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650
Net weight	Indoor	Kg	35	35	48	48	48	48	48
Dust filter			No	No	No	No	No	No	No
Outdoor unit									
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	9.5	10.7	13.8	4.8	18.8	6.5	7.7
Current Heating	Nominal (Min / Max)	A	9.5	10.6	14.9	5.2	19.7	6.8	7.4
Air Volume	Cooling / Heating	m^3/h	2,880 / 2,880	2,880 / 2,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880
Sound pressure Level [4]	Cooling (Hi)	dB(A)	47	48	52	52	53	53	54
	Heating (Hi)	dB(A)	49	50	54	54	55	55	56
Sound power Level	Cooling (Hi)	dB	63	64	66	66	67	67	68
	Heating (Hi)	dB	65	66	68	68	69	69	70
Dimensions	H x W x D	mm	795 x 900 x 320	795 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320
Net weight		Kg	71	71	110	110	110	110	105
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	2.13	2.35	3.3	3.3	3.3	3.3	3.5
Elevation difference (in/out) [6]	Max	m	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43
	Heating Min / Max	°C	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24

GLOBAL REMARKS

Rating conditions	Cooling	Heating
Inside air temperature	27°C DB / 19°C WB	20°C DB
Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground
The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RD513C

CU-L24DBE5
CU-L28DBE5

CU-L34DBE5 CU-L43DBE8
CU-L34DBE8 CU-L50DBE8
CU-L43DBE5

KIT-F24DD2E5 // KIT-F28DD2E5 // KIT-F34DD2E5 // KIT-F34DD2E8 // KIT-F43DD2E5 // KIT-F43DD2E8 // KIT-F50DD2E8

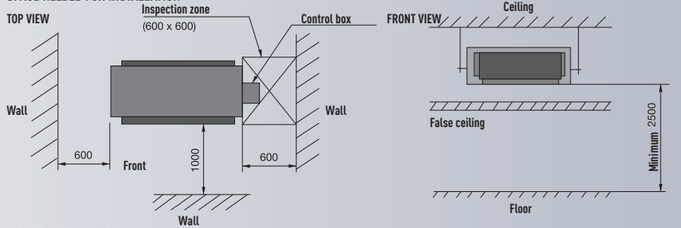
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -20 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at indoor unit or wired remote control

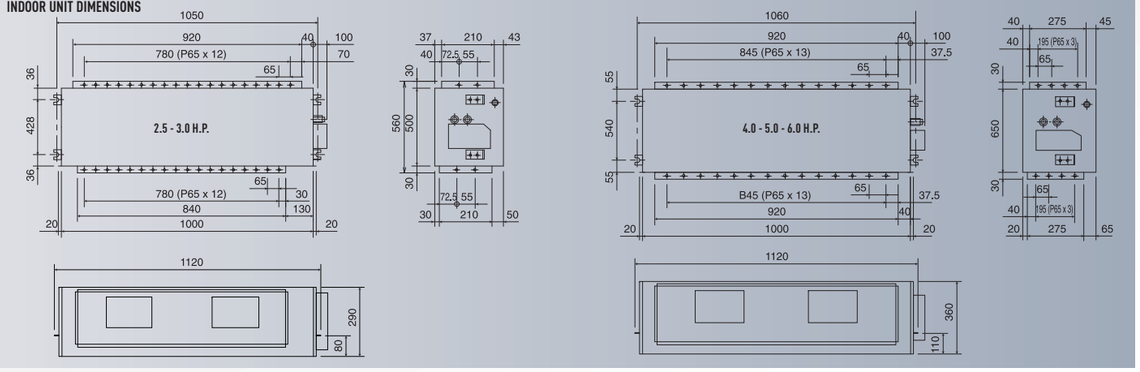
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes
- High static pressure units ideal for shops and offices
- Selectable static pressure up to 10 mmAq
- Self-diagnostic function
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

- ULTRA COMPACT OUTDOOR UNITS (-40% REDUCED SIZE FOR THE CU-YL34HBE5)
- ECO MODE FOR 20% ENERGY SAVING
- COOLING WITH LOW OUTDOOR TEMPERATURES (DOWN TO -20 ºC)
- STATIC PRESSURE TILL 10MMAQ
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- EASY CHECK MODE FOR FAILURE DETECTION

HIGH STATIC PRESSURE HIDE AWAY // INVERTER FS TYPE

Compact line up of inverter High static Hide away, from 1.0 H.P. to 5.0 H.P., Single-phase

HIGH STATIC PRESSURE HIDE AWAY // INVERTER FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	5.0 H.P.
KIT			KIT-YH24DD2E5	KIT-YH28DD2E5	KIT-YH34DD2E5	KIT-YH43DD2E5
Indoor			CS-F24DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F43DD2E5
Outdoor			CU-YL24HBE5	CU-YL28HBE5	CU-YL34HBE5	CU-YL43HBE5
Wired remote control			CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min - Max)	kW	5.60 (2 - 6.30)	7.10 (2.10 - 7.70)	10.00 (3.8 - 10.50)	12.50 (3.80 - 13.00)
	Nominal (Min - Max)	kCal/h	4,816 (1,720 - 5,418)	6,106 (1,806 - 6,622)	8,600 (3,268 - 9,030)	10,750 (3,268 - 11,180)
EER [1]	Nominal (Min - Max)		2.81 (3.64 - 2.86) C	2.81 (3.23 - 2.96) C	2.81 (2.92 - 2.56) D	2.81 (2.92 - 2.77) C
Power input Cooling	Nominal (Min - Max)	kW	1.99 (0.55 - 2.20)	2.53 (0.65 - 2.60)	3.56 (1.30 - 4.10)	4.45 (1.30 - 4.70)
Heating capacity	Nominal (Min - Max)	kW	7.00 (2.10 - 7.60)	8.00 (2.20 - 8.30)	11.20 (3.80 - 12.50)	14.00 (3.80 - 14.50)
	Nominal (Min - Max)	kCal/h	6,020 (1,806 - 6,450)	6,880 (1,892 - 7,138)	9,632 (3,268 - 10,750)	12,040 (3,268 - 12,470)
COP [1]	Nominal (Min - Max)		2.81 (4.20 - 2.68) D	2.81 (3.67 - 2.59) D	3.01 (3.17 - 2.94) C	3.01 (3.17 - 2.90) C
Power input Heating	Nominal (Min - Max)	kW	2.49 (0.50 - 2.80)	2.85 (0.60 - 3.20)	3.72 (1.20 - 4.25)	4.65 (1.20 - 5.00)
Annual Energy Consumption [2]		kWh	995	1,265	1,780	2,225
Indoor unit						
External static pressure [3]	High	mmAq	7	7	10	10
	Medium	mmAq	5	5	6.6	6.6
	Low	mmAq	4.1	4.1	5.1	5.1
Air Volume	High	m^3/h	1,320	1,320	2,400	2,400
	Medium	m^3/h	1,020	1,020	1,980	1,980
	Low	m^3/h	870	870	1,680	1,680
Moisture removal volume		l/h	3.20	4.20	6.00	7.90
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	45 / 41	45 / 41	49 / 45	49 / 45
	Heating (Hi / Lo)	dB(A)	43 / 39	43 / 39	47 / 44	47 / 44
Sound power Level	Cooling (Hi)	dB	67	68	71	72
	Heating (Hi)	dB	68	69	73	73
Dimensions. indoor	H x W x D	mm	290 x 1,000+100 [5] x 500	290 x 1,000+100 [5] x 500	390 x 1,000+100 [5] x 650	390 x 1,000+100 [5] x 650
Net weight	Indoor	Kg	35	35	48	48
Dust filter			No	No	No	No
Outdoor unit						
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240
Connection		mm^2	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5
Current Cooling	Nominal (Min / Max)	A	9.00	11.50	16.30	20.30
Current Heating	Nominal (Min / Max)	A	11.30	12.80	17.00	21.20
Air Volume	Cooling / Heating	m^3/h	2,880	2,880	5,880	5,880
Sound pressure Level [4]	Cooling (Hi)	dB(A)	49	50	53	54
	Heating (Hi)	dB(A)	51	52	56	56
Sound power Level	Cooling (Hi)	dB	67	68	71	72
	Heating (Hi)	dB	68	69	73	73
Dimensions	H x W x D	mm	795 x 875+70 [5] x 320	795 x 875+70 [5] x 320	795 x 900 x 320	1,170 x 900 x 320
Net weight		Kg	65	65	66	94
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.63	2.05	2.8	2.8
Elevation difference (in/out) [6]	Max	m	25	25	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50
Piping length without	Max	m	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 44	-5 / 45	-5 / 46
	Heating Min / Max	°C	-15 / 24	-15 / 25	-15 / 26	-15 / 27

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground
The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.


CZ-RD513C


CU-YL24HBE5
CU-YL28HBE5

CU-YL34HBE5

CU-YL43HBE5

KIT-YH24DD2E5 // KIT-YH28DD2E5 // KIT-YH34DD2E5 // KIT-YH43DD2E5

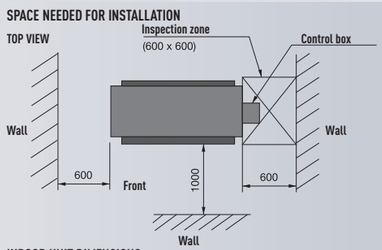
ENERGY EFFICIENCY AND ECOLOGY
- Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -15 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at indoor unit or wired remote control

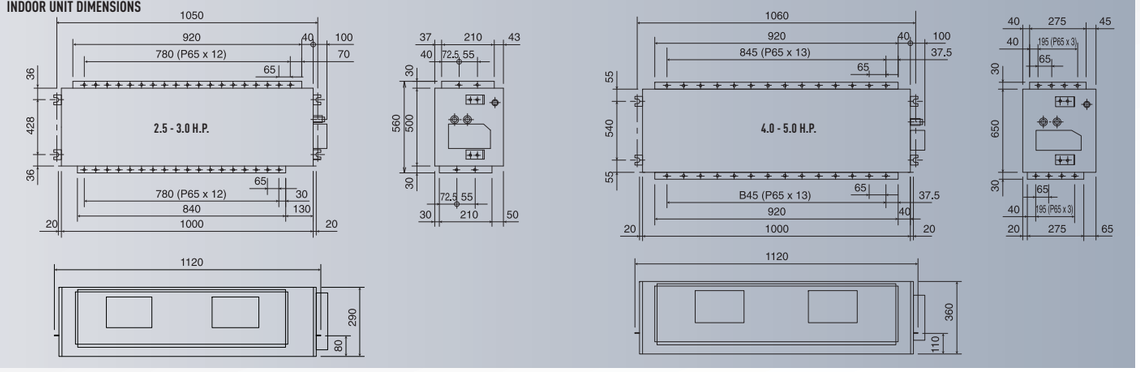
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes
- Selectable static pressure up to 10 mmAq
- Self-diagnostic function
- Condensation control
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

+ STATIC PRESSURE TILL 10MMAQ
+ ECO MODE FOR 20% ENERGY SAVING
+ MAX ELEVATION DIFFERENCE 30M
+ EASY CHECK MODE FOR FAILURE DETECTION

HIGH STATIC PRESSURE
HIDE AWAY // HEAT PUMP FS TYPE

Full line up of heat pump no-inverter High static pressure Hide away, from 2.5 H.P. to 6.0 H.P., Single-phase and three-phase

HIGH STATIC PRESSURE HIDE AWAY // HEAT PUMP FS TYPE

			2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F24DD2E5-C	KIT-F28DD2E5-C	KIT-F28DD2E8-C	KIT-F34DD2E5-C	KIT-F34DD2E8-C	KIT-F43DD2E8-C	KIT-F50DD2E8-C
Indoor			CS-F24DD2E5	CS-F28DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5
Outdoor			CU-B24DBE5	CU-B28DBE5	CU-B28DBE8	CU-B34DBE5	CU-B34DBE8	CU-B43DBE8	CU-B50DBE8
Wired remote control			CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min - Max)	kW	6.60	7.30	7.30	10,00	10,00	12.50	13.50
	Nominal (Min - Max)	kCal/h	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min - Max)		2.50 E	2.55 E	2.55 E	2,52 E	2,61 D	2.54 E	2.52 E
Power input Cooling	Nominal (Min - Max)	kW	2.64 (2.61-6.7)	2.86 (2.81-2.91)	2.86 (2.81-2.91)	3.97 (3.89-4.08)	3.83 (3.79-3.92)	4.92 (4.85-5.04)	5.36 (5.31-5.46)
Heating capacity	Nominal (Min - Max)	kW	7.10	8.00	8.00	11.20	11.20	14.00	15.00
	Nominal (Min - Max)	kCal/h	6,106	6,880	6,880	9,632	9,632	12,040	12,900
COP [1]	Nominal (Min - Max)		2.81 D	2.95 D	2.95 D	2.81 D	3.04 D	3.00 D	2.92 D
Power input Heating	Nominal (Min - Max)	kW	2.53 (2.45-2.62)	2.71 (2.62-2.8)	2.71 (2.62-2.8)	3.98 (3.9-4.05)	3.68 (3.63-3.75)	4.66 (4.56-4.78)	5.13 (5.08-5.18)
Annual Energy Consumption [2]		kWh	1,320	1,430	1,430	1,985	1,915	2,460	2,680
Indoor unit									
External static pressure [3]	High	mmAq	7	7	7	10	10	10	10
	Medium	mmAq	5	5	5	6.6	6.6	6.6	6.6
	Low	mmAq	4.1	4.1	4.1	5.1	5.1	5.1	5.6
Air Volume	High	m^3/h	1,320	1,320	1,320	2,280	2,280	2,400	2,700
	Medium	m^3/h	1,020	1,020	1,020	1,920	1,920	1,980	2,100
	Low	m^3/h	870	870	870	1,620	1,620	1,680	1,740
Moisture removal volume		l/h	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	45 / 41	45 / 41	45 / 41	49 / 45	49 / 45	49 / 45	49 / 45
	Heating (Hi / Lo)	dB(A)	43 / 39	43 / 39	43 / 39	47 / 44	47 / 44	47 / 44	47 / 44
Sound power Level	Cooling (Hi)	dB	61	61	61	64	64	64	64
	Heating (Hi)	dB	59	59	59	62	62	62	62
Dimensions. indoor	H x W x D	mm	290x1,000+100[5]x500	290x1,000+100x500	290x1,000+100x500	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650
Net weight	Indoor	Kg	35	35	35	48	48	48	48
Dust filter			No	No	No	No	No	No	No
Outdoor unit									
Power source		V	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	13.1	13.7	4.9	18.8	6.5	8.2	8.9
Current Heating	Nominal (Min / Max)	A	11.9	12.6	4.7	18.7	6.4	8.0	8.5
Air Volume	Cooling / Heating	m^3/h	3,600 / 3,600	3,780 / 3,780	3,780 / 3,780	5,640 / 5,640	5,640 / 5,640	5,640 / 5,640	5,760 / 5,760
Sound pressure Level [4]	Cooling (Hi)	dB(A)	50	52	52	55	55	56	56
	Heating (Hi)	dB(A)	51	53	53	56	56	57	57
Sound power Level	Cooling (Hi)	dB	66	67	67	69	69	70	70
	Heating (Hi)	dB	67	68	68	70	70	71	71
Dimensions	H x W x D	mm	795 x 900 x 320	795 x 900 x 320	795 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320
Net weight		Kg	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [6]	Max	m	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50
Piping length without	Max	m	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground
The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RD513C

CU-B24DBE5 CU-B28DBE8
CU-B28DBE5

CU-B34DBE5 CU-B43DBE8
CU-B34DBE8 CU-B50DBE8

KIT-F24DD2E5-C // KIT-F28DD2E5-C // KIT-F28DD2E8-C // KIT-F34DD2E5-C // KIT-F34DD2E8-C // KIT-F43DD2E8-C // KIT-F50DD2E8-C

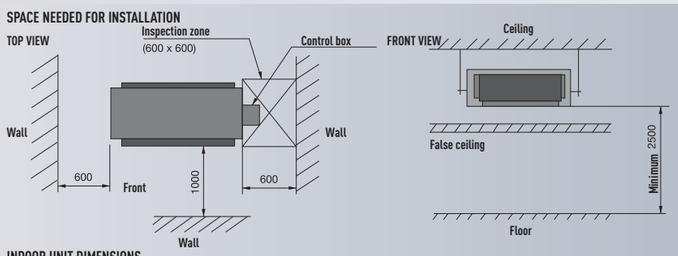
ENERGY EFFICIENCY AND ECOLOGY
+ R410A environmentally friendly refrigerant gas

COMFORT
+ Automatic start after a power cut
+ Automatic fan operation mode
+ Soft dry operation mode
+ Hot start mode
+ Selection of temperature sensor at the indoor unit or the wired remote control

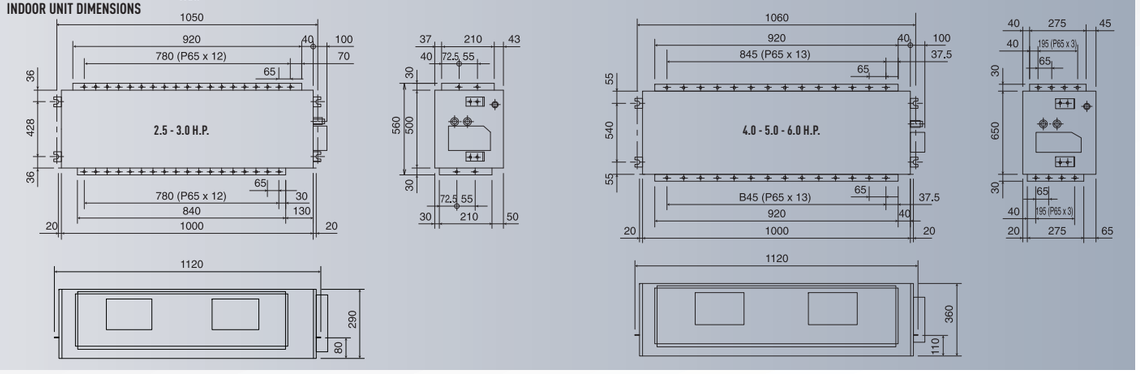
EASE OF USE
+ Weekly On/Off timer (6 settings per day and 42 per week)
+ Wired remote control

EASY INSTALLATION AND MAINTENANCE
+ High static pressure units ideal for shops and offices
+ Selectable static pressure up to 10 mmAq
+ Self-diagnostic function
+ Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

- STATIC PRESSURE TILL 10MMAQ
- ECO MODE FOR 20% ENERGY SAVING
- MAX ELEVATION DIFFERENCE 30M
- EASY CHECK MODE FOR FAILURE DETECTION

HIGH STATIC PRESSURE
HIDE AWAY // COOLING ONLY FS TYPE

Full line up of cooling only no-inverter High static pressure Hide Away, from 2.5 H.P. to 6.0 H.P., Single-phase and three-phase

HIGH STATIC PRESSURE HIDE AWAY // COOLING ONLY FS TYPE

			2.5 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F24DD2E5-F	KIT-F24DD2E8-F	KIT-F28DD2E5-F	KIT-F28DD2E8-F	KIT-F34DD2E5-F	KIT-F34DD2E8-F	KIT-F43DD2E8-F	KIT-F50DD2E8-F
Indoor			CS-F24DD2E5	CS-F24DD2E5	CS-F28DD2E5	CS-F28DD2E5	CS-F34DD2E5	CS-F34DD2E5	CS-F43DD2E5	CS-F50DD2E5
Outdoor			CU-J24DBE5	CU-J24DBE8	CU-J28DBE5	CU-J28DBE8	CU-J34DBE5	CU-J34DBE8	CU-J43DBE8	CU-J50DBE8
Wired remote control			CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min - Max)	kW	6.60	6.60	7.30	7.30	10.00	10.00	12.50	13.50
	Nominal (Min - Max)	kCal/h	5,676	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min - Max)		2.44 E	2.44 E	2.51 E	2.51 E	2,44 E	2,55 E	2.51 E	2.47 E
Power input Cooling	Nominal (Min - Max)	kW	2.70 (2.66-2.74)	2.70 (2.66-2.74)	2.91 (2.86-2.96)	2.91 (2.86-2.96)	4.10 (4.03-4.15)	3.92 (3.86-3.96)	4.96 (4.90-5.12)	5.46 (5.41-5.51)
Annual Energy Consumption [2]		kWh	1,350	1,350	1,455	1,455	2,050	1,960	2,490	2,680
Indoor unit										
External static pressure [3]	High	mmAq	7	7	7	7	10	10	10	10
	Medium	mmAq	5	5	5	5	6.6	6.6	6.6	6.6
	Low	mmAq	4.1	4.1	4.1	4.1	5.1	5.1	5.1	5.6
Air Volume	High	m3/h	1,320	1,320	1,320	1,320	2,280	2,280	2,400	2,700
	Medium	m3/h	1,020	1,020	1,020	1,020	1,920	1,920	1,980	2,100
	Low	m3/h	870	870	870	870	1,620	1,620	1,680	1,740
Moisture removal volume		l/h	3.8	4.3	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [4]	Hi / Lo	dB(A)	45 / 41	45 / 41	45 / 41	45 / 41	49 / 45	49 / 45	49 / 45	49 / 45
Sound power Level	Hi	dB	61	61	61	61	64	64	64	64
Dimensions. indoor	H x W x D	mm	290x1,000+100[5]x500	290x1,000+100[5]x500	290x1,000+100[5]x500	290x1,000+100[5]x500	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650	360x1,000+100[5]x650
Net weight	Indoor	Kg	35	35	35	35	48	48	48	48
Dust filter			No	No	No	No	No	No	No	No
Outdoor unit										
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm²	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	13.1	4.63	13.7	4.9	18.8	6.5	8.2	9.0
Air Volume		m³/h	3,600	3,600	3,780	3,780	5,640	5,640	5,640	5,760
Sound pressure Level [4]	Hi	dB(A)	50	50	52	52	55	55	56	56
Sound power Level	Hi	dB	66	66	67	67	69	69	70	70
Dimensions	H x W x D	mm	795 x 900 x 320	795 x 900 x 320	795 x 900 x 320	795 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320
Net weight		Kg	69	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.7	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [6]	Max	m	30	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50	7.5-50
Piping length without	Max	m	30	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43

GLOBAL REMARKS	Rating conditions	Cooling
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB : Dry buld; WB : Wet buld

1) EER, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground
The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) Add 100mm for indoor unit or 70mm for outdoor unit for piping port.
6) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RD513C

CU-J24DBE5 CU-J28DBE5
CU-J24DBE8 CU-J28DBE8

CU-J34DBE5 CU-J43DBE8
CU-J34DBE8 CU-J50DBE8

KIT-F24DD2E5-F // KIT-F24DD2E8-F // KIT-F28DD2E5-F // KIT-F28DD2E8-F // KIT-F32DD2E5-F // KIT-F34DD2E8-F // KIT-F43DD2E8-F // KIT-F50DD2E8-F

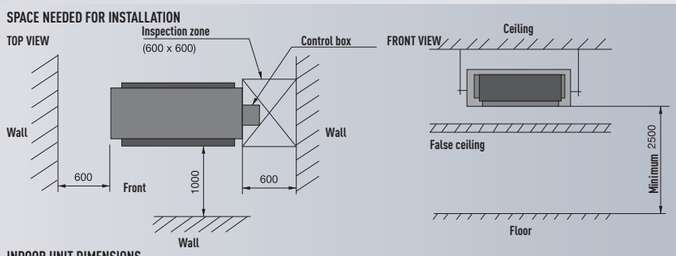
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at the indoor unit or the wired remote control

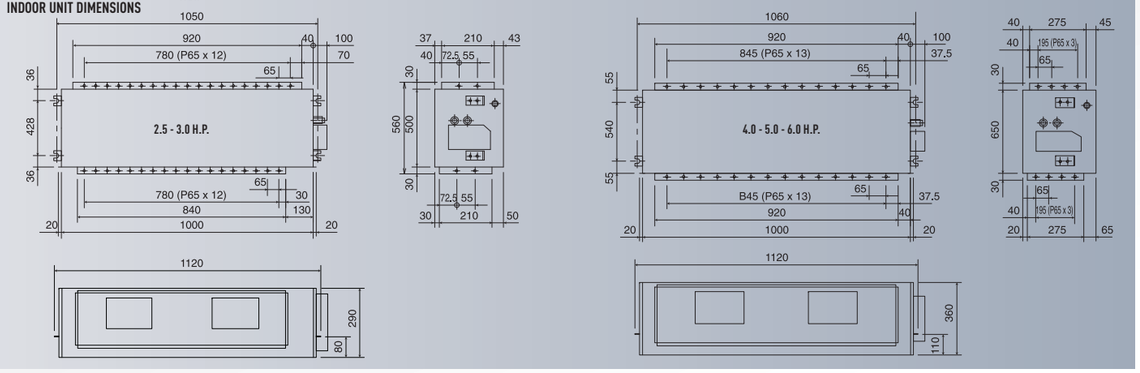
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- High static pressure units ideal for shops and offices
- Selectable static pressure up to 10 mmAq
- Self-diagnostic function
- Ultra compact indoor unit

SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS



TECHNICAL ZOOM

- EASY INSTALLATION ON THE CAP CEILING 60X60
- OPERATION DOWN TO -10ºC IN COOLING AND HEATING MODES
- PIPING LENGTH UP TO 30M
- MAXIMUM ELEVATION DIFFERENCE UP TO 20M
- ULTRA COMPACT OUTDOOR UNITS FOR EASY INSTALLATION
- 24 HOUR ON/OFF TIMER

4-WAY 60X60 CASSETTE FS // INVERTER TYPE

Small and powerful, ideal for offices and restaurants

OPTIONAL

4-WAY 60X60 CASSETTE FS // INVERTER TYPE

			1 H.P.	1.5 H.P.	2 H.P.	2.25 H.P.
KIT			KIT-E10-HB4EA	KIT-E15-HB4EA	KIT-E18-HB4EA	KIT-E21-HB4EA
Indoor			CS-E10HD4EA1	CS-E15HB4EA	CS-E18HB4EA	CS-E21HB4EA
Outdoor			CU-E10HBEA	CU-E15HBEA	CU-E18HBEA	CU-E21HBEA
Panel			CZ-BT20E	CZ-BT20E	CZ-BT20E	CZ-BT20E
Wireless control	Included on the kit		Include on the indoor unit	Include on the indoor unit	Include on the indoor unit	Include on the indoor unit
Cooling capacity	Nominal (Min - Max)	kW	2.50 (0.60 - 3.20)	4.10 (0.9 - 4.8)	4.8 (0.9 - 5.70)	5.9 (0.9 - 6.3)
	Nominal (Min - Max)	kCal/h	2,150 (516 - 2,752)	3,530 (770 - 4,130)	4,130 (770 - 4,900)	5,070 (770 - 5,420)
EER [1]	Nominal (Min - Max)		4.03 (4.14 - 3.68) A	3.15 (3.48 - 3.27) B	3.14 (3.53 - 2.95) B	2.88 (3.52 - 2.86) C
Power input Cooling	Nominal (Min - Max)	kW	0.620 (0.145 - 0.870)	1.300 (0.255 - 1.170)	1.539 (0.255 - 1.930)	2.050 (0.255 - 2.200)
Heating capacity	Nominal (Min - Max)	kW	3.20 (0.60 - 5.10)	5.10 (0.9 - 6.20)	5.60 (0.90 - 7.10)	7 (0.9 - 8.0)
	Nominal (Min - Max)	kCal/h	2,752 (516 - 4,300)	4,390 (770 - 5,330)	4,820 (770 - 6,110)	6,020 (770 - 6,880)
COP [1]	Nominal (Min - Max)		3.90 (4.80 - 3.51) A	2.88 (3.46 - 2.84) D	2.95 (3.46 - 2.90) D	2.86 (3.46 - 2.84) D
Power input Heating	Nominal (Min - Max)	kW	0.820 (0.125 - 1.450)	1.770 (0.260 - 2.180)	1.900 (0.260 - 2.450)	2.450 (0.260 - 2.820)
Annual Energy Consumption [2]		kWh	310	650	765	1,025
Indoor unit						
Air Volume	Cooling / Heating	m^3/h	630 / 648	630 / 648	660 / 690	768 / 840
Moisture removal volume		l/h	1.5	2.3	2.6	3.3
Sound pressure Level [3]	Cooling (Hi / Lo / S-Lo)	dB(A)	34 / 26 / 23	34 / 26 / 23	36 / 28 / 25	41 / 33 / 30
	Heating (Hi / Lo / S-Lo)	dB(A)	35 / 28 / 25	35 / 28 / 25	37 / 29 / 26	42 / 34 / 31
Sound power Level	Cooling (Hi)	dB	47	47	49	54
	Heating (Hi)	dB	58	48	50	55
Dimensions	Indoor (H x W x D)	mm	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575	260 x 575 x 575
	Panel (H x W x D)	mm	51 x 700 x 700	51 x 700 x 700	51 x 700 x 700	51 x 700 x 700
Net weight	Indoor	Kg	18	18	18	18
	Panel	Kg	2.5	2.5	2.5	2.5
Dust filter			Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA13P	CZ-SA13P	CZ-SA13P	CZ-SA13P
Outdoor unit						
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240
Connection		mm^2	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5
Current Cooling	Nominal (Min / Max)	A	2.9	6.0	7.0	9.2
Current Heating	Nominal (Min / Max)	A	3.8	8.0	8.5	10.9
Air Volume	Cooling / Heating	m^3/h	1,728	2,808	2,400	2568
Sound pressure Level [3]	Cooling (Hi)	dB(A)	45	45	47	49
	Heating (Hi)	dB(A)	46	47	48	49
Sound power Level	Cooling (Hi)	dB	58	58	60	62
	Heating (Hi)	dB	59	60	61	62
Dimensions	H x W x D	mm	540 x 780+70 [4] x 289	750 x 875+70 [4] x 345	750 x 875+70 [4] x 345	750 x 875+70 [4] x 345
Net weight		Kg	35	48	48	48
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)	1/4" (6.35)
	Gas pipe	inch (mm)	3/8" (9.52)	1/2" (12.70)	1/2" (12.70)	1/2" (12.70)
Refrigerant Loading	R410A	Kg	1.15	1.23	1.06	1.15
Elevation difference (in/out) [5]	Max	m	15	15	20	20
Piping length	Min - Max	m	3 - 20	3 - 20	3 - 30	3 - 30
Piping length without	Max	m	10	10	10	10 refrigerent increase
Additional gas		g/m	20	20	20	20
Operating range [3]	Cooling (Min / Max)	°C	- 10 / 43	- 10 / 43	- 10 / 43	- 10 / 43
	Heating (Min / Max)	°C	- 10 / 24	- 10 / 24	- 10 / 24	- 10 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) 70mm for piping port.
5) When installing the outdoor unit at a higher position than the indoor unit.

INCLUDED WITH THE INDOOR UNIT

CU-E10HBEA
CU-E15HBEA
CU-E18HBEA
CU-E21HBEA

KIT-E10-HB4EA // KIT-E15-HB4EA // KIT-E18-HB4EA // KIT-E21-HB4EA

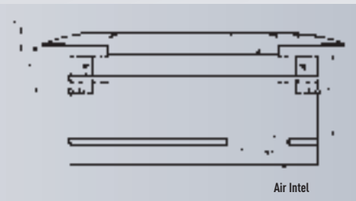
HEALTHY AIR
- CZ-SA13P Alleru-buster antiallergic filter (optional)
- Odour-removing function

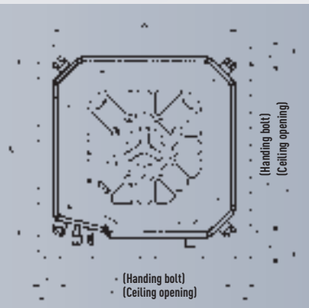
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system

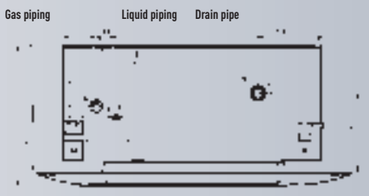
COMFORT
- Super Quiet mode
- Powerful mode
- Automatic vertical airflow control
- Hot start mode
- 24 hour On/Off timer
- Automatic restart after power cut

EASE OF USE
- Ergonomic infrared remote control

EASY INSTALLATION AND MAINTENANCE
- Removable, washable panel of the indoor unit
- Top panel maintenance access for the outdoor unit







TECHNICAL ZOOM

- HIGHER ENERGY CLASS FOR HIGH SAVINGS, EVEN AT -20°C
- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 3 OPENING ANGLES FOR THE PRE-PRO-GRAMMED GRILLES
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

4-WAY 90X90 CASSETTE // INVERTER + FS TYPE

A complete line up of compact, efficient , quieter and powerful cassette 90x90, for the most demanding customers, from 2.5 H.P. to 6.0 H.P., Single-phase and three-phase

OPTIONAL

4-WAY 90X90 CASSETTE // INVERTER + FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F24DB4E5	KIT-F28DB4E5	KIT-F34DB4E5	KIT-F34DB4E8	KIT-F43DB4E5	KIT-F43DB4E8	KIT-F50DB4E8
Indoor			CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F43DB4E5	CS-F50DB4E5
Outdoor			CU-L24DBE5	CU-L28DBE5	CU-L34DBE5	CU-L34DBE8	CU-L43DBE5	CU-L43DBE8	CU-L50DBE8
Panel			CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P
Wireless control	Included on the kit		CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B
Wired remote control	Optional		CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	6.30 (2.10-7.10)	7.10 (2.20-8.00)	10.00 (4.00-12.00)	10.00 (4.00-12.00)	12.50 (4.00-14.00)	12.50 (4.00-14.00)	14.00 (4.00-16.00)
	Nominal (Min-Max)	kCal/h	5,418 (1,806-6,106)	6,106 (1,892-6,880)	8,600 (3,440-10,320)	8,600 (3,440-10,320)	10,750 (3,440-12,040)	10,750 (3,440-12,040)	12,040 (3,440-13,760)
EER [1]	Nominal (Min-Max)		3.71 (4.20-3.23) A	3.55 (3.67-3.34) A	3.86 (3.48-3.75) A	3.86 (3.48-3.75) A	3.43 (3.34-3.69) A	3.43 (3.34-3.69) A	3.01 (3.34-3.23) B
Power input Cooling	Nominal (Min-Max)	kW	1.70 (0.50-2.20)	2.00 (0.60-2.40)	2.59 (1.15-3.20)	2.59 (1.15-3.20)	3.64 (1.20-3.80)	3.64 (1.20-3.80)	4.65 (1.20-4.95)
Heating capacity	Nominal (Min-Max)	kW	7.10 (2.20-8.00)	8.00 (2.30-8.50)	11.20 (4.00-14.00)	11.20 (4.00-14.00)	14.00 (4.00-16.00)	14.00 (4.00-16.00)	16.00 (4.00-18.00)
	Nominal (Min-Max)	kCal/h	6,106 (1,892-6,880)	6,880 (1,978-7,310)	9.632 (3,440-12,040)	9.632 (3,440-12,040)	12,040 (3,440-13,760)	12,040 (3,440-13,760)	13,760 (3,440-15,480)
COP [1]	Nominal (Min-Max)		3.86 (4.40-2.58) A	3.79 (3.83-2.65) A	3.86 (3.64-3.41) A	3.86 (3.64-3.41) A	3.61 (3.48-3.27) A	3.61 (3.48-3.27) A	3.41 (3.48-3.05) B
Power input Heating	Nominal (Min-Max)	kW	1.84 (0.50-3.10)	2.11 (0.60-3.20)	2.90 (1.10-4.10)	2.90 (1.10-4.10)	3.88 (1.15-4.90)	3.88 (1.15-4.90)	4.69 (1.15-5.90)
Annual Energy Consumption [2]		kWh	850	1000	1295	1295	1820	1820	2325
Indoor unit									
Air Volume	Cooling / Heating	m³/h	1,080 / 1,080	1,200 / 1,200	1,620 / 1,620	1,620 / 1,620	1,860 / 1,860	1,860 / 1,860	1,920 / 1,920
Moisture removal volume		l/h	3.6	4.2	6.0	6.0	7.9	7.9	9.0
Sound pressure Level [3]	Cooling (Hi / Lo)	dB(A)	36 / 32	38 / 33	42 / 37	42 / 37	46 / 41	46 / 41	47 / 42
	Heating (Hi / Lo)	dB(A)	36 / 32	38 / 33	42 / 37	42 / 37	46 / 41	46 / 41	47 / 42
Sound power Level	Cooling (Hi)	dB	51	53	57	57	61	61	62
	Heating (Hi)	dB	51	53	57	57	61	61	62
Dimensions	Indoor (H x W x D)	mm	246 x 840 x 840	246 x 840 x 840	288 x 840 x 840	288 x 840 x 840	288 x 840 x 840	288 x 840 x 840	288 x 840 x 840
	Panel (H x W x D)	mm	45 x 950 x 950	45 x 950 x 950	45 x 950 x 950	45 x 950 x 950	45 x 950 x 950	45 x 950 x 950	45 x 950 x 950
Net weight	Indoor	Kg	26	26	28.5	28.5	28.5	28.5	28.5
	Panel	Kg	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P
Outdoor unit									
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415
Connection		mm²	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	7.7	9.2	11.7	4.1	16.5	5.8	7.1
Current Heating	Nominal (Min / Max)	A	8.4	9.6	13.2	4.6	17.6	6.1	7.2
Air Volume	Cooling / Heating	m³/h	2,880 / 2,880	2,880 / 2,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5,880
Sound pressure Level [3]	Cooling (Hi)	dB(A)	47	48	52	52	53	53	54
	Heating (Hi)	dB(A)	49	50	54	54	55	55	56
Sound power Level	Cooling (Hi)	dB	63	64	66	66	67	67	68
	Heating (Hi)	dB	65	66	68	68	69	69	70
Dimensions	H x W x D	mm	795 x 900 x 320	795 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320
Net weight		Kg	71	71	110	110	105	105	105
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	2.13	2.35	3.3	3.3	3.3	3.3	3.5
Elevation difference (in/out) [4]	Max	m	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43
	Heating Min / Max	°C	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP classification is at 220 - 240V in accordance with EU directive 2002/31/EC
2) The annual consumption is calculated by multiplying the input power at 220 - 240V by an avarage of 500-hr per year in cooling mode
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification
4) When installing the outdoor unit at a higher position than the indoor unit

CZ-RL513B

CZ-RD513C

CU-L24DBE5
CU-L28DBE5

CU-L34DBE5 CU-L43DBE8
CU-L34DBE8 CU-L50DBE8
CU-L43DBE5

KIT-F24DB4E5 // KIT-F28DB4E5 // KIT-F34DB4E5 // KIT-F34DB4E8 // KIT-F43DB4E5 // KIT-F43DB4E8 // KIT-F50DB4E8

HEALTHY AIR
- CZ-SA11P Alleru-buster antiallergic filter (optional)

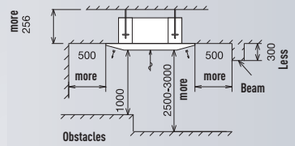
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -20 ºC)
- 3 types of air emission (3 opening angles for the pre-programmed grilles)
- Automatic deflectors
- Automatic start after a power cut
- Automatic fan operation mode

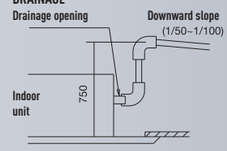
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes
- Drain pump (up to 750 mm)
- Self-diagnostic function
- Condensation control
- Removable, washable indoor unit panel

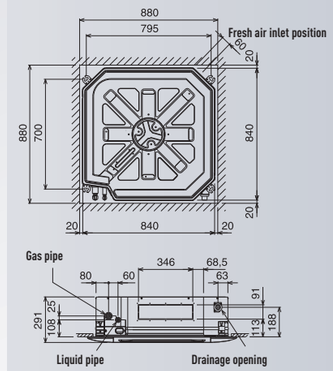
SPACE NEEDED FOR INSTALLATION



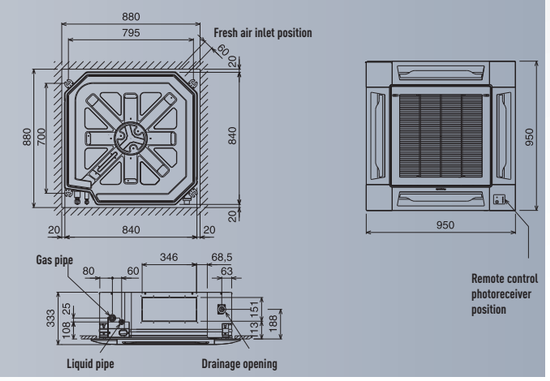
DRAINAGE



INDOOR UNIT DIMENSIONS // CS-F24DB4E5 // CS-F28DB4E5



INDOOR UNIT DIMENSIONS // CS-F34DB4E5 // CS-F43DB4E5 // CS-F50DB4E5



TECHNICAL ZOOM

- ULTRA COMPACT OUTDOOR UNITS (-40% REDUCED SIZE FOR THE CU-YL34HBE5)
- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 3 OPENING ANGLES FOR THE PRE-PRO-GRAMMED GRILLES
- 25 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

4-WAY 90X90 CASSETTE // INVERTER FS TYPE

Compact line up of inverter cassette, from 2.5 H.P. to 5.0 H.P., Single-phase

OPTIONAL

4-WAY 90X90 CASSETTE // INVERTER FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	5.0 H.P.
KIT			KIT-YH24DB4E5	KIT-YH28DB4E5	KIT-YH34DB4E5	KIT-YH43DB4E5
Indoor			CS-F24DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F43DB4E5
Outdoor			CU-YL24HBE5	CU-YL28HBE5	CU-YL34HBE5	CU-YL43HBE5
Panel			CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P
Wireless control	**Included on the kit**		CZ-RL513C	CZ-RL513C	CZ-RL513C	CZ-RL513C
Wired remote control	**Optional**		CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B
Cooling capacity	Nominal (Min - Max)	kW	5.60 (2 - 6.30)	7.10 (2.10 - 7.70)	10.00 (3.8 - 11.00)	12.50 (3.80 - 13.00)
	Nominal (Min - Max)	kCal/h	4,816 (1,720 - 5,418)	6,106 (1,806 - 6,622)	8,600 (3,268 - 9,460)	10,750 (3,268 - 11,180)
EER [1]	Nominal (Min - Max)		3.01 (3.64 - 2.86) B	3.01 (3.23 - 2.96) B	3.01 (3.04 - 2.78) B	3.01 (3.04 - 2.92) B
Power input Cooling	Nominal (Min - Max)	kW	1.86 (0.55 - 2.20)	2.36 (0.65 - 2.60)	3.32 (1.25 - 3.95)	4.15 (1.25 - 4.45)
Heating capacity	Nominal (Min - Max)	kW	7.00 (2.10 - 7.60)	8.00 (2.20 - 8.30)	11.20 (3.80 - 13.00)	14.00 (3.80 - 15.00)
	Nominal (Min - Max)	kCal/h	6,020 (1,806 - 6,536)	6,880 (1,892 - 7,138)	9,632 (3,268 - 11,180)	12,040 (3,268 - 12,900)
COP [1]	Nominal (Min - Max)		3.41 (4.20 - 2.71) B	3.42 (3.67 - 2.59) B	3.41 (3.45 - 3.17) B	3.41 (3.45 - 3.06) B
Power input Heating	Nominal (Min - Max)	kW	2.05 (0.50 - 2.80)	2.34 (0.60 - 3.20)	3.28 (1.10 - 4.10)	4.15 (1.10 - 4.90)
Annual Energy Consumption [2]		kWh	930	1180	1660	2075
Indoor unit						
Air Volume	Cooling / Heating	m^3/h	1,080 / 1,080	1,200 / 1,200	1,620 / 1,620	1,860 / 1,860
Moisture removal volume		l/h	3.6	4.2	6.0	7.9
Sound pressure Level [3]	Cooling (Hi / Lo)	dB(A)	36 / 32	38 / 33	42 / 37	46 / 41
	Heating (Hi / Lo)	dB(A)	36 / 32	38 / 33	42 / 37	46 / 41
Sound power Level	Cooling (Hi)	dB	51	53	57	61
	Heating (Hi)	dB	51	53	57	61
Dimensions	Indoor (H x W x D)	mm	246 x 840 x 840	246 x 840 x 840	288 x 840 x 840	288 x 840 x 840
	Panel (H x W x D)	mm	950 x 950 x 45	950 x 950 x 45	950 x 950 x 45	950 x 950 x 45
Net weight	Indoor	Kg	26	26	28.5	28.5
	Panel	Kg	4.5	4.5	4.5	4.5
Dust filter			Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P
Outdoor unit						
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240
Connection		mm^2	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5
Current Cooling	Nominal (Min / Max)	A	8.30	10.60	15.20	19.00
Current Heating	Nominal (Min / Max)	A	9.20	10.50	15.00	18.80
Air Volume	Cooling / Heating	m^3/h	3,180	3,480	3720	5,640
Sound pressure Level [3]	Cooling (Hi)	dB(A)	49	50	54	55
	Heating (Hi)	dB(A)	51	52	56	56
Sound power Level	Cooling (Hi)	dB	67	68	71	72
	Heating (Hi)	dB	68	69	73	73
Dimensions	H x W x D	mm	795 x 875+70 [4] x 320	795x 875+70 [4] x 320	795 x 900 x 320	1,170 x 900 x 320
Net weight		Kg	1/4" (6.35)	65	66	94
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1,63	2.05	2.8	2.8
Elevation difference (in/out) [5]	Max	m	25	25	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50
Piping length without	Max	m	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 44	-5 / 45	-5 / 46
	Heating Min / Max	°C	-15 / 24	-15 / 25	-15 / 26	-15 / 27

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) Add 70mm for piping port.
5) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513B

CZ-RD513C

CU-YL24HBE5
CU-YL28HBE5

CU-YL34HBE5

CU-YL43HBE5

KIT-YH24DB4E5 // KIT-YH28DB4E5 // KIT-YH34DB4E5 // KIT-YH43DB4E5

HEALTHY AIR
- CZ-SA11P Alleru-buster antiallergic filter (optional)

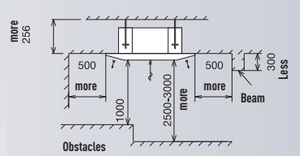
ENERGY EFFICIENCY AND ECOLOGY
- Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -15 ºC)
- 3 types of air emission (3 opening angles for the pre-programmed grilles)
- Automatic deflectors
- Automatic start after a power cut
- Automatic fan operation mode

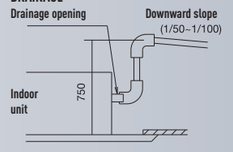
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes (only for YL*HBE5 units)
- Drain pump (up to 750 mm)
- Self-diagnostic function
- Condensation control
- Removable, washable indoor unit panel

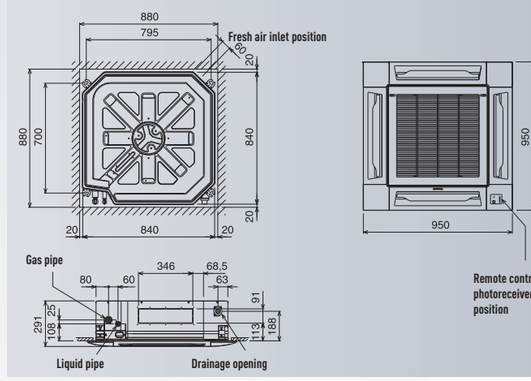
SPACE NEEDED FOR INSTALLATION



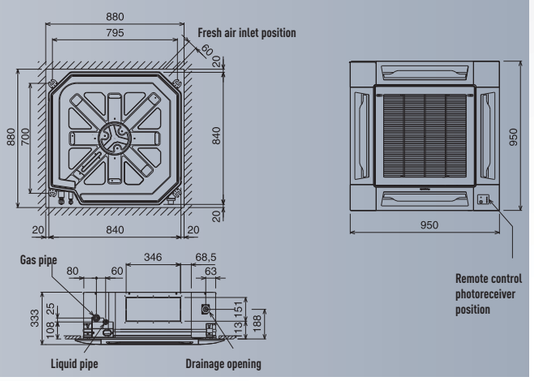
DRAINAGE



INDOOR UNIT DIMENSIONS // CS-F24DB4E5 // CS-F28DB4E5



INDOOR UNIT DIMENSIONS // CS-F34DB4E5 // CS-F43DB4E5



TECHNICAL ZOOM

- ECO MODE FOR 20% ENERGY SAVING
- 3 OPENING ANGLES FOR THE PRE-PRO-GRAMMED GRILLES
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

4-WAY 90X90 CASSETTE // HEAT PUMP FS TYPE

Full line up of heat pump no-inverter cassette, from 1.5 H.P. to 6.0 H.P., Single-phase and three-phase

OPTIONAL

4-WAY 90X90 CASSETTE // HEAT PUMP FS TYPE

			1.5 H,P	2.0 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F14DB4E5-C	KIT-F18DB4E5-C	KIT-F24DB4E5-C	KIT-F28DB4E5-C	KIT-F28DB4E8-C	KIT-F34DB4E5-C	KIT-F34DB4E8-C	KIT-F43DB4E8-C	KIT-F50DB4E8-C
Indoor			CS-F14DB4E5	CS-F18DB4E5	CS-F24DB4E5	CS-F28DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5
Outdoor			CU-B14DBE5	CU-B18DBE5	CU-B24DBE5	CU-B28DBE5	CU-B28DBE8	CU-B34DBE5	CU-B34DBE8	CU-B43DBE8	CU-B50DBE8
Panel			CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P
Wireless control	**Included on the kit**		CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B
Wired remote control	**Optional**		CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	3.80	5.00	6.60	7.3	7.3	10	10	12.5	13.5
	Nominal (Min-Max)	kCal/h	3268	4300	5676	6278	6278	8600	8600	10750	11610
EER [1]	Nominal (Min-Max)		3.09 B	2.91 C	2.63 D	2.61 D	2.61 D	2.62 D	2.72 D	2.69 D	2.67 D
Power input Cooling	Nominal (Min-Max)	kW	1.23 (1.2-1.6)	1.72 (1.69-1.75)	2.51(2.46-2.57)	2.80 (2.74-2.85)	2.80 (2.74-2.85)	3.81 (3.76-3.86)	3.68 (3.63-3.73)	4.65 (4.6-4.7)	5.06 (5.01-5.15)
Heating capacity	Nominal (Min-Max)	kW	4.30	5.60	7.1	8.0	8.0	11.2	11.2	14.0	15.0
	Nominal (Min-Max)	kCal/h	3698	4816	6106	6880	6880	9632	9632	12040	12900
COP [1]	Nominal (Min-Max)		3.52 B	3.46 B	3.01 D	3.08 D	3.08 D	2.90 D	2.96 D	3.05 D	3.04 D
Power input Heating	Nominal (Min-Max)	kW	1.22 (1.19-1.25)	1.62 (1.59-1.65)	2.36 (2.31-2.41)	2.60 (2.55-2.65)	2.60 (2.55-2.65)	3.86 (3.81-3.91)	3.78 (3.73-3.83)	4.59 (4.54-4.64)	4.93 (4.88-4.98)
Annual Energy Consumption [2]		kWh	615	860	1255	1400	1400	1905	1840	2325	2530
Indoor unit											
Air Volume	Cooling / Heating	m³/h	900 / 900	960 / 960	1,080 / 1,080	1,200 / 1,200	1,200 / 1,200	1,620 / 1,620	1,620 / 1,620	1,860 / 1,860	1,920 / 1,920
Moisture removal volume		l/h	2.2	2.8	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [3]	Cooling (Hi / Lo)	dB(A)	34 / 31	35 / 32	36 / 32	38 / 33	38 / 33	42 / 37	42 / 37	46 / 41	47 / 42
	Heating (Hi / Lo)	dB(A)	34 / 31	34 / 31	36 / 32	38 / 33	38 / 33	42 / 37	42 / 37	46 / 41	47 / 42
Sound power Level	Cooling (Hi)	dB	49	50	51	53	53	57	57	61	62
	Heating (Hi)	dB	49	49	51	53	53	57	57	61	62
Dimensions	Indoor (H x W x D)	mm	246x840x840	246x840x840	246x840x840	246x840x840	246x840x840	288x840x840	288x840x840	288x840x840	288x840x840
	Panel (H x W x D)	mm	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950
Net weight	Indoor	Kg	25	26	26	26	26	28.5	28.5	28.5	28.5
	Panel	Kg	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P
Outdoor unit											
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm²	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	5.5	7.7	12.4	12.8	4.85	18.1	6.1	7.9	8.5
Current Heating	Nominal (Min / Max)	A	5.45	7.2	11.2	11.8	4.3	17.7	6.0	7.7	8.0
Air Volume	Cooling / Heating	m³/h	3,240	3,420	3,600	3,780	3,780	5,640	5,640	5,640	5,760
Sound pressure Level [3]	Cooling (Hi)	dB(A)	49	49	50	52	52	55	55	56	56
	Heating (Hi)	dB(A)	50	50	51	53	53	56	56	57	57
Sound power Level	Cooling (Hi)	dB	65	65	66	67	67	69	69	70	70
	Heating (Hi)	dB	66	66	67	68	68	70	70	71	71
Dimensions	H x W x D	mm	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	1,170x900x320	1,170x900x320	1,170x900x320	1,170x900x320
Net weight		Kg	55	57	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	1/4'' (6.35)	1/4'' (6.35)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)
	Gas pipe	inch (mm)	1/2'' (12.70)	1/2'' (12.70)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)
Refrigerant Loading	R410A	Kg	1.10	1.35	1.70	2.05	2.05	2.70	2.70	3.10	3.40
Elevation difference (in/out) [4]	Max	m	20	20	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	20	20	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP classification is at 220 - 240V in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V by an avarage of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513B

CZ-RD513C

CU-B14DBE5 CU-B28DBE5
CU-B18DBE5 CU-B28DBE8
CU-B24DBE5

CU-B34DBE5 CU-B43DBE8
CU-B34DBE8 CU-B50DBE8

KIT-F14DB4E5-C // KIT-F18DB4E5-C // KIT-F24DB4E5-C // KIT-F28DB4E5-C // KIT-F28DB4E8-C // KIT-F34DB4E5-C // KIT-F34DB4E8-C // KIT-F43DB4E8-C // KIT-F50DB4E8-C

HEALTHY AIR
- CZ-SA11P Alleru-buster antiallergic filter (optional)

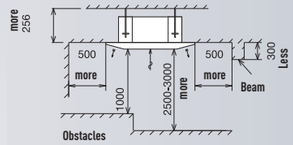
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- 3 types of air emission (3 opening angles for the pre-programmed grilles)
- Automatic deflectors
- Automatic start after a power cut
- Automatic fan operation mode

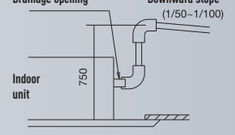
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Self-diagnostic function
- Drain pump (up to 750 mm)
- Condensation control
- Removable, washable indoor unit panel

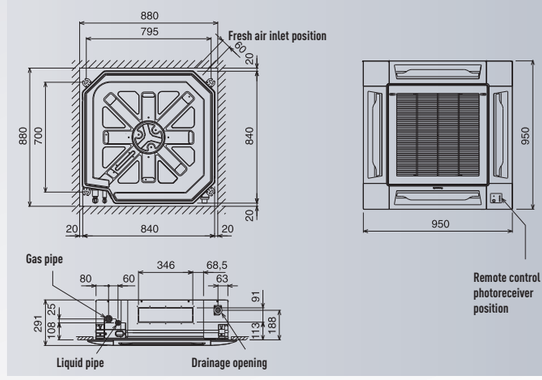
SPACE NEEDED FOR INSTALLATION



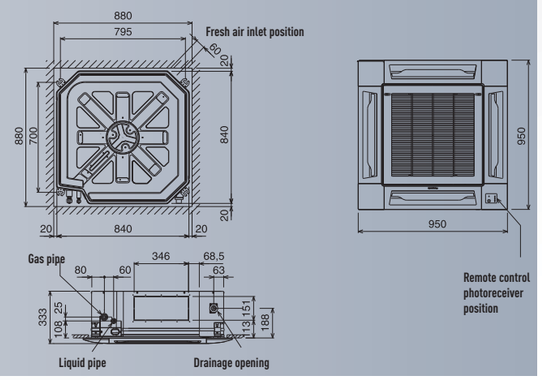
DRAINAGE



INDOOR UNIT DIMENSIONS // CS-F14DB4E5 // CS-F18DB4E5 // CS-F24DB4E5 // CS-F28DB4E5



INDOOR UNIT DIMENSIONS // CS-F34DB4E5 // CS-F43DB4E5 // CS-F50DB4E5



TECHNICAL ZOOM

- ECO MODE FOR 20% ENERGY SAVING
- 3 OPENING ANGLES FOR THE PRE-PRO-GRAMMED GRILLES
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

4-WAY 90X90 CASSETTE // COOLING ONLY FS TYPE

Full line up of cooling only no-inverter cassette, from 1.5 H.P. to 6.0 H.P., Single-phase and three-phase

OPTIONAL

4-WAY 90X90 CASSETTE // COOLING ONLY FS TYPE

			1.5 H,P	2.0 H.P.	2.5 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F14DB4E5-F	KIT-F18DB4E5-F	KIT-F24DB4E5-F	KIT-F24DB4E8-F	KIT-F28DB4E5-F	KIT-F28DB4E8-F	KIT-F34DB4E5-F	KIT-F34DB4E8-F	KIT-F43DB4E8-F	KIT-F50DB4E8-F
Indoor			CS-F14DB4E5	CS-F18DB4E5	CS-F24DB4E5	CS-F24DB4E5	CS-F28DB4E5	CS-F28DB4E5	CS-F34DB4E5	CS-F34DB4E5	CS-F43DB4E5	CS-F50DB4E5
Outdoor			CU-J14DBE5	CU-J18DBE5	CU-J24DBE5	CU-J24DBE8	CU-J28DBE5	CU-J28DBE8	CU-J34DBE5	CU-J34DBE8	CU-J43DBE8	CU-J50DBE8
Panel			CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P
Wireless control	Included on the kit		CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B	CZ-RL513B
Wired remote control	Optional		CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	3.80	5.00	6.60	6.60	7.3	7.3	10	10	12.5	13.5
	Nominal (Min-Max)	kCal/h	3,268	4,300	5,676	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min-Max)		3.02 B	2.91 C	2.58 E	2.56 E	2.61 D	2.61 D	2.54 E	2.63 D	2.61 D	2.61 D
Power input Cooling	Nominal (Min-Max)	kW	1.26 (1.2-1.29)	1.72 (1.69-1.75)	2.58(2.53-2.63)	2.58(2.53-2.63)	2.80 (2.74-2.85)	2.80 (2.74-2.85)	3.93 (3.88-3.98)	3.80 (3.63-3.85)	4.79 (4.74-4.84)	5.18 (5.13-5.23)
Annual Energy Consumption [2]		kWh	630	860	1,290	1,290	1,400	1,400	1,965	1,900	2,395	2,590
Indoor unit												
Air Volume		m^3/h	900	960	1,080	1,080	1,200	1,200	1,620	1,620	1,860	1,920
Moisture removal volume		l/h	2.2	2.8	3.8	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [3]	Hi / Lo	dB(A)	34 / 31	35 / 32	36 / 32	36 / 32	38 / 33	38 / 33	42 / 37	42 / 37	46 / 41	47 / 42
Sound power Level	Hi	dB	49	50	51	51	53	53	57	57	61	62
Dimensions	Indoor (H x W x D)	mm	246x840x840	246x840x840	246x840x840	246x840x840	246x840x840	246x840x840	288x840x840	288x840x840	288x840x840	288x840x840
	Panel (H x W x D)	mm	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950	45x950x950
Net weight	Indoor	Kg	25	26	26	26	26	26	28.5	28.5	28.5	28.5
	Panel	Kg	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antiallergic filter	Optional		CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P	CZ-SA11P
Outdoor unit												
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	5.7	7.7	13.2	4.55	12.9	4.9	18.1	6.2	8	8.5
Air Volume		m^3/h	3,240	3,420	3,600	3,600	3,780	3,780	5,640	5,640	5,640	5,760
Sound pressure Level [3]	Hi	dB(A)	49	49	50	50	52	52	55	55	56	56
Sound power Level	Hi	dB	65	65	66	66	67	67	69	69	70	70
Dimensions	H x W x D	mm	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	1,170x900x320	1,170x900x320	1,170x900x320	1,170x900x320
Net weight		Kg	55	57	69	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	1/2" (12.70)	1/2" (12.70)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.1	1.35	1.7	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [4]	Max	m	20	20	30	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	20	20	30	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43

GLOBAL REMARKS	Rating conditions	Cooling
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB : Dry buld; WB : Wet buld

1) EER, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513B

CZ-RD513C

CU-J14DBE5 CU-J24DBE8
CU-J18DBE5 CU-J28DBE5
CU-J24DBE5 CU-J28DBE8

CU-J34DBE5 CU-J43DBE8
CU-J34DBE8 CU-J50DBE8

KIT-F14DB4E5-F // KIT-F18DB4E5-F // KIT-F24DB4E5-F // KIT-F24DB4E8-F // KIT-F28DB4E5-F // KIT-F28DB4E8-F // KIT-F34DB4E5-F // KIT-F34DB4E8-F // KIT-F43DB4E8-F // KIT-F50DB4E8-F

HEALTHY AIR
- CZ-SA11P Alleru-buster antiallergic filter (optional)

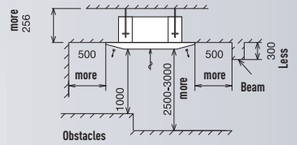
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- 3 types of air emission (3 opening angles for the pre-programmed grilles)
- Automatic deflectors
- Automatic start after a power cut
- Automatic fan operation mode

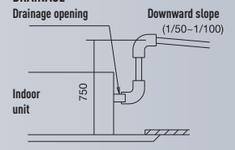
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Self-diagnostic function
- Drain pump (up to 750 mm)
- Condensation control
- Removable, washable indoor unit panel

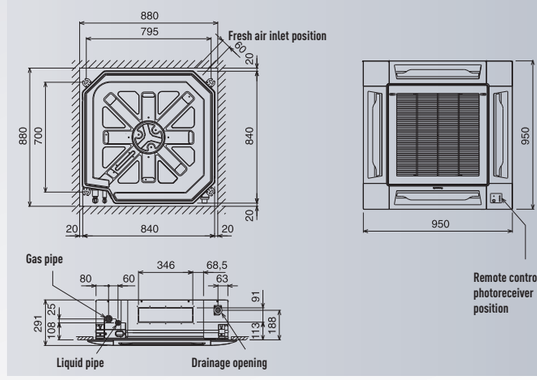
SPACE NEEDED FOR INSTALLATION



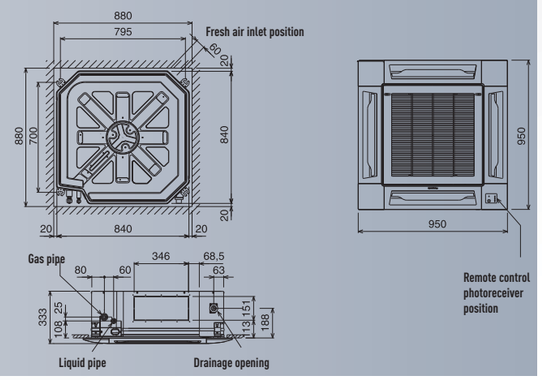
DRAINAGE



INDOOR UNIT DIMENSIONS // CS-F14DB4E5 // CS-F18DB4E5 // CS-F24DB4E5 // CS-F28DB4E5



INDOOR UNIT DIMENSIONS // CS-F34DB4E5 // CS-F43DB4E5 // CS-F50DB4E5



TECHNICAL ZOOM

- HIGHER ENERGY CLASS FOR HIGH SAVINGS, EVEN AT -20°C
- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- ULTRA COMPACT OUTDOOR UNITS WHICH ARE EASY TO INSTALL
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

CEILING // INVERTER + FS TYPE

A complete line up of compact, efficient , quieter and powerful Ceiling, for the most demanding customers, from 2.5 H.P. to 6.0 H.P., Single-phase and three-phase

OPTIONAL

CEILING // INVERTER + FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			**KIT-F24DTE5**	**KIT-F28DTE5**	**KIT-F34DTE5**	**KIT-F34DTE8**	**KIT-F43DTE5**	**KIT-F43DTE8**	**KIT-F50DTE8**
Indoor			**CS-F24DTE5**	**CS-F28DTE5**	**CS-F34DTE5**	**CS-F34DTE5**	**CS-F43DTE5**	**CS-F43DTE5**	**CS-F50DTE5**
Outdoor			**CU-L24DBE5**	**CU-L28DBE5**	**CU-L34DBE5**	**CU-L34DBE8**	**CU-L43DBE5**	**CU-L43DBE8**	**CU-L50DBE8**
Wireless control	**Included on the kit**		**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**
Wired remote control	**Optional**		**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**	**CZ-RD513C**
Cooling capacity	Nominal (Min-Max)	kW	6.30 (2.00-6.50)	7.10 (2.10-7.50)	10.00 (4.00-12.00)	10.00 (4.00-12.00)	12.50 (4.00-13.50)	12.50 (4.00-13.50)	14.00 (4.00-16.00)
	Nominal (Min-Max)	kCal/h	5,418 (1,720-5,590)	6,106 (1806-6450)	8,600 (3,440-10,320)	8,600 (3,440-10,320)	10,750 (3,440-11,610)	10,750 (3,440-11,610)	12,040 (3,440-13,760)
EER [1]	Nominal (Min-Max)		3.21 (3.64-2.83) A	2.91 (3.23-3.06) C	3.33 (3.20-3.53) A	3.33 (3.20-3.53) A	3.01 (3.08-3.14) C	3.01 (3.08-3.14) C	2.91 (2.96-3.14) C
Power input Cooling	Nominal (Min-Max)	kW	1.96 (0.55-2.30)	2.44 (0.65-2.45)	3.00 (1.25-3.40)	3.00 (1.25-3.40)	4.15 (1.3-4.30)	4.15 (1.3-4.30)	4.81 (1.35-5.10)
Heating capacity	Nominal (Min-Max)	kW	7.10 (2.10-7.50)	8.00 (2.20-8.50)	11.20 (4.00-13.50)	11.20 (4.00-13.50)	14.00 (4.00-15.50)	14.00 (4.00-15.50)	16.0 (4.00-18.00)
	Nominal (Min-Max)	kCal/h	6,106 (1,806-6,450)	6,880 (1,892-7,310)	9,632 (3,440-11,610)	9,632 (3,440-11,610)	12,040 (3,440-13,330)	12,040 (3,440-13,330)	13,760 (3,440-15,480)
COP [1]	Nominal (Min-Max)		3.21 (3.82-2.38) C	3.02 (3.38-2.62) D	3.41 (3.20-3.21) B	3.41 (3.20-3.21) B	3.50 (3.20-3.10) B	3.50 (3.20-3.10) B	3.41 (3.08-3.00) B
Power input Heating	Nominal (Min-Max)	kW	2.21 (0.55-3.15)	2.65 (0.65-3.25)	3.28 (1.25-4.20)	3.28 (1.25-4.20)	4.00 (1.25-5.00)	4.00 (1.25-5.00)	4.69 (1.30-6.00)
Annual Energy Consumption [2]		kWh	980	1,220	1,500	1,500	2,075	2,075	2,405
Indoor unit									
Air Volume	Cooling / Heating	m^3/h	1,020 / 1,020	1,080 / 1,080	1,740 / 1,740	1,740 / 1,740	1,860 / 1,860	1,860 / 1,860	1,920 / 1,920
Moisture removal volume		l/h	3.6	4.2	6.0	6.0	7.9	7.9	9.0
Sound pressure Level [3]	Cooling (Hi / Lo)	dB(A)	43 / 39	45 / 41	47 / 43	47 / 43	49 / 45	49 / 45	50 / 46
	Heating (Hi / Lo)	dB(A)	43 / 39	45 / 41	47 / 43	47 / 43	49 / 45	49 / 45	50 / 46
Sound power Level	Cooling (Hi)	dB	60	62	64	64	66	66	67
	Heating (Hi)	dB	60	62	64	64	66	66	67
Dimensions	Indoor (H x W x D)	mm	210 x 1,245 x 700	210 x 1,245 x 700	250 x 1,600 x 700	250 x 1,600 x 700	250 x 1,600 x 700	250 x 1,600 x 700	250 x 1,600 x 700
Net weight	Indoor	Kg	33	33	43	43	47	47	47
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P
Outdoor unit									
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	8.9	11.1	13.0	4.7	18.8	6.5	7.4
Current Heating	Nominal (Min / Max)	A	10.0	12.0	14.9	5.2	18.2	6.3	7.2
Air Volume	Cooling / Heating	m^3/h	2,880 / 2,880	2,880 / 2,880	5,880 / 5,880	5,880 / 5,880	5,880 / 5880	5,880 / 5,880	5,880 / 5,880
Sound pressure Level [3]	Cooling (Hi)	dB(A)	47	48	52	52	53	53	54
	Heating (Hi)	dB(A)	49	50	54	54	55	55	56
Sound power Level	Cooling (Hi)	dB	63	64	66	66	67	67	68
	Heating (Hi)	dB	65	66	68	68	69	69	70
Dimensions	H x W x D	mm	795 x 900 x 320	795 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900 x 320	1,340 x 900x 320
Net weight		Kg	71	71	110	110	110	110	105
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	2.13	2.35	3.3	3.3	3.3	3.3	3.5
Elevation difference (in/out) [4]	Max	m	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43
	Heating Min / Max	°C	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24	-20 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513T

CZ-RD513C

CU-L24DBE5
CU-L28DBE5

CU-L34DBE5 CU-L43DBE8
CU-L34DBE8 CU-L50DBE8
CU-L43DBE5

KIT-F24DTE5 // KIT-F28DTE5 // KIT-F34DTE5 // KIT-F34DTE8 // KIT-F43DTE5 // KIT-F43DTE8 // KIT-F50DTE8

HEALTHY AIR
- Anti-Mould long life air filter
- CZ-SA12P Alleru-buster antiallergic filter (optional)

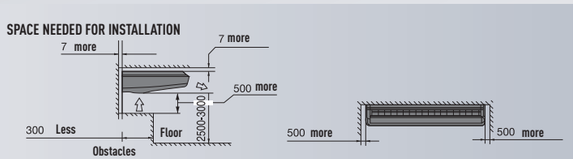
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -20 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Automatic air deflector system
- Hot start mode
- Super wide air outlet (100 degrees horizontally)

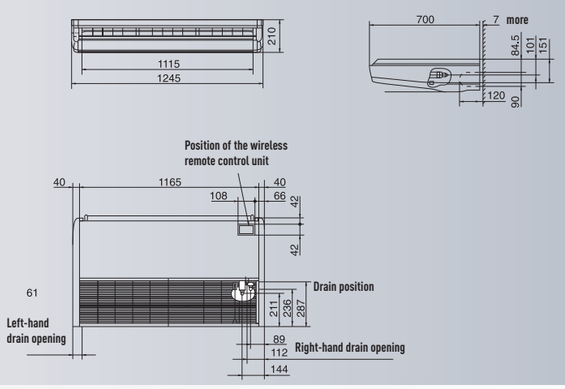
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Wired remote control optional

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes
- Self-diagnostic function
- Condensation control

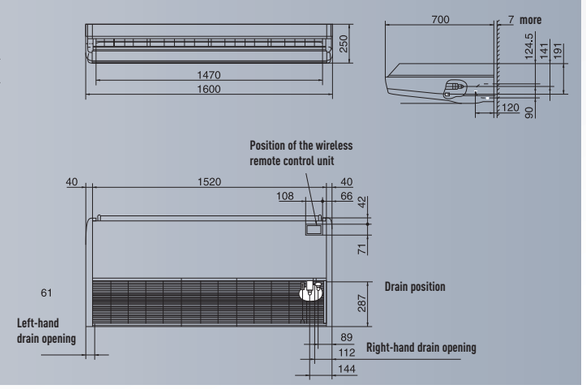
SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS CS-F24DTE5 // CS-F28DTE5



INDOOR UNIT DIMENSIONS CS-F34DTE5 // CS-F43DTE5 // CS-F50DTE5



TECHNICAL ZOOM

- ULTRA COMPACT OUTDOOR UNITS (-40% REDUCED SIZE FOR THE CU-YL34HBE5)
- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 25 M MAXIMUM ELEVATION DIFFERENCE
- COOLING WITH LOW OUTDOOR TEMPERATURES (DOWN TO -20 ºC)
- EASY CHECK MODE FOR FAILURE DETECTION

CEILING // INVERTER FS TYPE

Compact line up of inverter Ceiling, from 2.5 H.P. to 5.0 H.P., Single-phase

OPTIONAL

CEILING // INVERTER FS TYPE

			2.5 H.P.	3.0 H.P.	4.0 H.P.	5.0 H.P.
KIT			**KIT-YH24DTE5**	**KIT-YH28DTE5**	**KIT-YH34DTE5**	**KIT-YH43DTE5**
Indoor			**CS-F24DTE5**	**CS-F28DTE5**	**CS-F34DTE5**	**CS-F43DTE5**
Outdoor			**CU-YL24HBE5**	**CU-YL28HBE5**	**CU-YL34HBE5**	**CU-YL43HBE5**
Wireless control	**Included on the kit**		**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**	**CZ-RL513T**
Wired remote control	**Optional**		**CZ-RL513C**	**CZ-RL513C**	**CZ-RL513C**	**CZ-RL513C**
Cooling capacity	Nominal (Min - Max)	kW	5.60 (2 - 6.30)	7.10 (2.10 - 7.50)	10.00 (3.8 - 10.50)	12.50 (3.80 - 13.00)
	Nominal (Min - Max)	kCal/h	4,816 (1,720 - 5,418)	6,106 (1,806 - 6,450)	8,600 (3,268 - 9,030)	10,750 (3,268 - 11,180)
EER [1]	Nominal (Min - Max)		2.81 (3.03 - 2.68) C	2.81 (3.00 - 2.78) C	2.61 (2.92 - 2.56) D	3.81 (2.92 - 2.77) C
Power input Cooling	Nominal (Min - Max)	kW	1.99 (0.66 - 2.35)	2.53 (0.70 - 2.70)	3.83 (1.30 - 4.10)	4.45 (1.30 - 4.70)
Heating capacity	Nominal (Min - Max)	kW	7.00 (2.10 - 7.50)	8.00 (2.20 - 8.30)	11.20 (3.80 - 12.50)	14.00 (3.80 - 14.50)
	Nominal (Min - Max)	kCal/h	6,020 (1,806 - 6,450)	6,880 (1,892 - 7,138)	9,632 (3,268 - 10,750)	12,040 (3,268 - 12,470)
COP [1]	Nominal (Min - Max)		2.81 (3.82 - 2.54) D	2.81 (3.38 - 2.55) D	3.21 (3.30 - 2.98) C	3.31 (3.39 - 2.90) C
Power input Heating	Nominal (Min - Max)	kW	2.49 (0.55 - 2.95)	2.855 (0.65 - 3.25)	3.49 (1.15 - 4.20)	4.23 (1.12 - 5.00)
Annual Energy Consumption [2]		kWh	995	1,265	1,915	2,225
Indoor unit						
Air Volume	Cooling / Heating	m^3/h	1,020 / 1,020	1,080 / 1,080	1,740 / 1,740	1,860 / 1,860
Moisture removal volume		l/h	3.20	4.20	6.00	7.90
Sound pressure Level [3]	Cooling (Hi / Lo)	dB(A)	43 / 39	45 / 41	47 / 43	49 / 45
	Heating (Hi / Lo)	dB(A)	43 / 39	45 / 41	47 / 43	49 / 45
Sound power Level	Cooling (Hi)	dB	60	62	64	66
	Heating (Hi)	dB	60	62	64	66
Dimensions	Indoor (H x W x D)	mm	210 x 1,245 x 700	210 x 1,245 x 700	210 x 1,600 x 700	210 x 1,600 x 700
Net weight	Indoor	Kg	33	33	43	47
Dust filter			Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P
Outdoor unit						
Power source		V	220 - 240	220 - 240	220 - 240	220 - 240
Connection		mm^2	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5	4 x 1.5 to 2.5
Current Cooling	Nominal (Min / Max)	A	8.9	11.3	17.5	20.3
Current Heating	Nominal (Min / Max)	A	11.2	12.8	16	19.4
Air Volume	Cooling / Heating	m^3/h	3,180	3,480	3,720	5,640
Sound pressure Level [3]	Cooling (Hi)	dB(A)	49	50	53	54
	Heating (Hi)	dB(A)	51	52	56	56
Sound power Level	Cooling (Hi)	dB	60	62	64	66
	Heating (Hi)	dB	60	62	64	66
Dimensions	H x W x D	mm	795 x 875+70 [4] x 320	795 x 875+70 [4] x 320	795 x 900 x 320	1,170 x 900 x 320
Net weight		Kg	65	65	66	94
Piping connections	Liquid pipe	inch (mm)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.63	2.05	2.8	2.8
Elevation difference (in/out) [5]	Max	m	25	25	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 30	7.5 - 50	7.5 - 50
Piping length without	Max	m	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 43	-5 / 44	-5 / 45	-5 / 46
	Heating Min / Max	°C	-15 / 24	-15 / 25	-15 / 26	-15 / 27

GLOBAL REMARKS

Rating conditions	Cooling	Heating
Inside air temperature	27°C DB / 19°C WB	20°C DB
Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) Add 70mm for piping port.
5) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513T

CZ-RD513C

CU-YL24HBE5
CU-YL28HBE5

CU-YL34HBE5

CU-YL43HBE5

KIT-YH24DTE5 // KIT-YH28DTE5 // KIT-YH34DTE5 // KIT-YH43DTE5

HEALTHY AIR
- Anti-Mould long life air filter
- CZ-SA12P Alleru-buster antiallergic filter (optional)

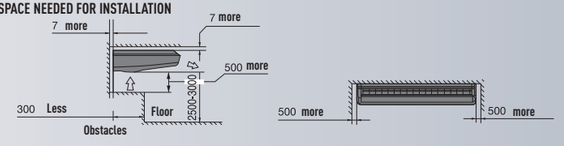
ENERGY EFFICIENCY AND ECOLOGY
- Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -15 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Automatic air deflector system
- Hot start mode
- Super wide air outlet (100 degrees horizontally)

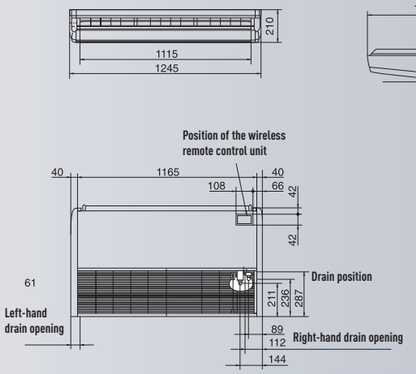
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Installation using existing pipes (only for YL*HBE5 units)
- Self-diagnostic function
- Condensation control

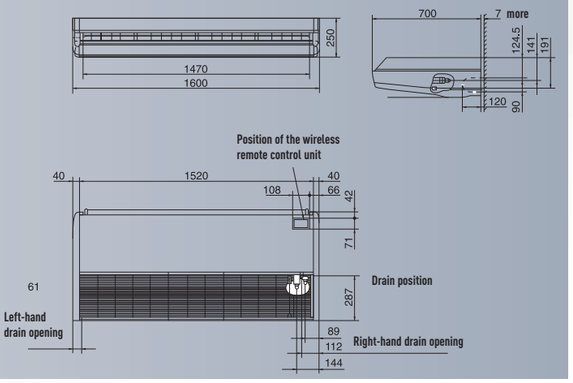
SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS CS-F24DTE5 // CS-F28DTE5



INDOOR UNIT DIMENSIONS CS-F34DTE5 // CS-F43DTE5



TECHNICAL ZOOM

- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

CEILING // HEAT PUMP FS TYPE

Full line up of heat pump no-inverter Ceiling, from 2 H.P. to 6.0 H.P., Single-phase and three-phase

OPTIONAL

CEILING // HEAT PUMP FS TYPE

			2.0 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F18DTE5-C	KIT-F24DTE5-C	KIT-F28DTE5-C	KIT-F28DTE8-C	KIT-F34DTE5-C	KIT-F34DTE8-C	KIT-F43DTE8-C	KIT-F50DTE8-C
Indoor			CS-F18DTE5	CS-F24DTE5	CS-F28DTE5	CS-F28DTE5	CS-F34DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5
Outdoor			CU-B18DBE5	CU-B24DBE5	CU-B28DBE5	CU-B28DBE8	CU-B34DBE5	CU-B34DBE8	CU-B43DBE8	CU-B50DBE8
Wireless control	**Included on the kit**		CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T
Wired remote control	**Optional**		CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	5.00	6.60	7.30	7.30	10.00	10.00	12.50	13.50
	Nominal (Min-Max)	kCal/h	4,300	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min-Max)		2.76 D	2.57 E	2.56 E	2.56 E	2.56 D	2.65 D	2.63 D	2.62 E
Power input Cooling	Nominal (Min-Max)	kW	1.81 (1.75-1.84)	2.57 (2.51-2.63)	2.85 (2.8-2.9)	2.85 (2.8-2.9)	3.66 (3.85-3.95)	3.77 (3.72-3.82)	4.75 (4.7-4.8)	5.16 (5.11-5.28)
Heating capacity	Nominal (Min-Max)	kW	5.60	7.10	7.80	7.80	11.20	11.20	14.00	15.00
	Nominal (Min-Max)	kCal/h	4,816	6,106	6,708	6,708	9,632	9,632	12,040	12,900
COP [1]	Nominal (Min-Max)		3.22 C	2.85 D	2.84 D	2.84 D	2.81 E	2.86 E	2.99 D	2.98 D
Power input Heating	Nominal (Min-Max)	kW	1.74 (1.71-1.77)	2.49 (2.44-2.62)	2.75 (2.7-2.8)	2.75 (2.7-2.8)	3.99 (3.94-4.04)	3.91 (3.86-3.96)	4.69 (4.64-4.74)	5.03 (4.98-5.08)
Annual Energy Consumption [2]		kWh	905	1285	1425	1425	1950	1885	2375	2580
Indoor unit										
Air Volume	Cooling / Heating	m^3/h	840 / 840	1,020 / 1,020	1,080 / 1,080	1,080 / 1,080	1,740 / 1,740	1,740 / 1,740	1,860 / 1,860	1,920 / 1,920
Moisture removal volume		l/h	2.8	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [3]	Cooling (Hi / Lo)	dB(A)	41 / 37	43 / 39	45 / 41	45 / 41	47 / 43	47 / 43	49 / 45	50 / 46
	Heating (Hi / Lo)	dB(A)	41 / 37	43 / 39	45 / 41	45 / 41	47 / 43	47 / 43	49 / 45	50 / 46
Sound power Level	Cooling (Hi)	dB	58	60	62	62	64	64	66	67
	Heating (Hi)	dB	58	60	62	62	64	64	66	67
Dimensions	Indoor (H x W x D)	mm	210 x 1,245 x 700	210 x 1,245 x 700	210 x 1,245 x 700	210 x 1,245 x 700	250 x 1,600 x 700	250 x 1,600 x 700	250 x 1,600 x 700	250 x 1,600 x 700
Net weight	Indoor	Kg	33	33	33	33	43	43	47	47
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P
Outdoor unit										
Power source		V	220 - 240	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	8.1	12.6	12.9	4.9	18.2	6.1	8.0	8.6
Current Heating	Nominal (Min / Max)	A	7.75	12.6	13.0	4.7	18.2	6.4	7.8	8.0
Air Volume	Cooling / Heating	m^3/h	3,420	3,600	3,780	3,780	5,640	5,640	5,640	5,760
Sound pressure Level [3]	Cooling (Hi)	dB(A)	49	50	52	52	55	55	56	56
	Heating (Hi)	dB(A)	50	51	53	53	56	56	57	57
Sound power Level	Cooling (Hi)	dB	65	66	67	67	69	69	70	70
	Heating (Hi)	dB	66	67	68	68	70	70	71	71
Dimensions	H x W x D	mm	795 x 900 x 320	795 x 900 x 320	795 x 900 x 320	795 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320	1,170 x 900 x 320
Net weight		Kg	57	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	1/4" (6.35)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas pipe	inch (mm)	1/2" (12.70)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
Refrigerant Loading	R410A	Kg	1.35	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [4]	Max	m	20	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	20	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	20	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43
	Heating Min / Max	°C	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24	-10 / 24

GLOBAL REMARKS	Rating conditions	Cooling	Heating
	Inside air temperature	27°C DB / 19°C WB	20°C DB
	Outside air temperature	35°C DB / 24°C WB	7°C DB / 6°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513T

CZ-RD513C

CU-B18DBE5 CU-B28DBE5
CU-B24DBE5 CU-B28DBE8

CU-B34DBE5 CU-B43DBE8
CU-B34DBE8 CU-B50DBE8

KIT-F18DTE5-C // KIT-F24DTE5-C // KIT-F28DTE5-C // KIT-F28DTE8-C // KIT-F34DTE5-C // KIT-F34DTE8-C // KIT-F43DTE8-C // KIT-F50DTE8-C

HEALTHY AIR
- Anti-Mould long life air filter
- CZ-SA12P Alleru-buster antiallergic filter (optional)

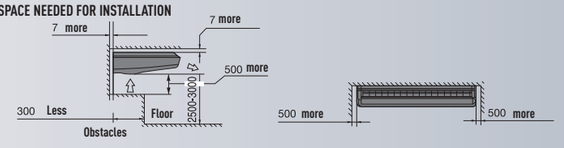
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Automatic air deflector system
- Hot start mode
- Super wide air outlet (100 degrees horizontally)

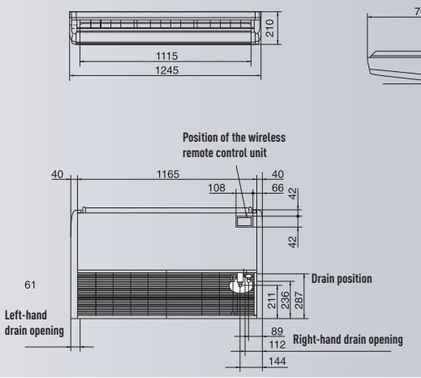
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Self-diagnostic function
- Condensation control

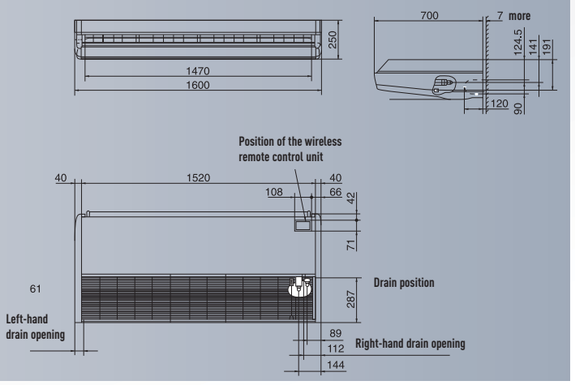
SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS CS-F18DTE5 // CS-F24DTE5 // CS-F28DTE5



INDOOR UNIT DIMENSIONS CS-F34DTE5 // CS-F43DTE5 // CS-F50DTE5



TECHNICAL ZOOM

- ECO MODE FOR 20% ENERGY SAVING
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- 30 M MAXIMUM ELEVATION DIFFERENCE
- EASY CHECK MODE FOR FAILURE DETECTION

CEILING // COOLING ONLY FS TYPE

Full line up of cooling only no-inverter Ceiling, from 2 H.P. to 6.0 H.P., Single-phase and three-phase

OPTIONAL

CEILING // COOLING ONLY FS TYPE

			2.0 H.P.	2.5 H.P.	2.5 H.P.	3.0 H.P.	3.0 H.P.	4.0 H.P.	4.0 H.P.	5.0 H.P.	6.0 H.P.
KIT			KIT-F18DTE5-F	KIT-F24DTE5-F	KIT-F24DTE8-F	KIT-F28DTE5-F	KIT-F28DTE8-F	KIT-F34DTE5-F	KIT-F34DTE8-F	KIT-F43DTE8-F	KIT-F50DTE8-F
Indoor			CS-F18DTE5	CS-F24DTE5	CS-F24DTE5	CS-F28DTE5	CS-F28DTE5	CS-F34DTE5	CS-F34DTE5	CS-F43DTE5	CS-F50DTE5
Outdoor			CU-J18DBE5	CU-J24DBE5	CU-J24DBE8	CU-J28DBE5	CU-J28DBE8	CU-J34DBE5	CU-J34DBE8	CU-J43DBE8	CU-J50DBE8
Wireless control	Included on the kit		CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T	CZ-RL513T
Wired remote control	Optional		CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C	CZ-RD513C
Cooling capacity	Nominal (Min-Max)	kW	5.00	6.60	6.60	7.30	7.30	10.00	10.00	12.50	13.50
	Nominal (Min-Max)	kCal/h	4,300	5,676	5,676	6,278	6,278	8,600	8,600	10,750	11,610
EER [1]	Nominal (Min-Max)		2.76 D	2.51 E	2.51 E	2.56 E	2.56 E	2.49 E	2.57 E	2.56 E	2.56 E
Power input Cooling	Nominal (Min-Max)	kW	1.81 (1.75-1.84)	2.63 (2.58-2.68)	2.63 (2.58-2.68)	2.85 (2.8-2.9)	2.85 (2.8-2.9)	4.02 (3.97-4.07)	3.99 (3.84-3.94)	3.99 (3.84-3.94)	5.28 (5.23-5.33)
Annual Energy Consumption [2]		kWh	905	1.315	1.315	1.425	1.425	2.010	1.945	2.445	2.640
Indoor unit											
Air Volume		m^3/h	840	1,020	1,020	1,080	1,080	1,740	1,740	1,860	1,920
Moisture removal volume		l/h	2.8	3.8	3.8	4.3	4.3	6.0	6.0	7.9	8.6
Sound pressure Level [3]	Hi / Lo	dB(A)	41 / 37	43 / 39	43 / 39	45 / 41	45 / 41	47 / 43	47 / 43	49 / 45	50 / 46
Sound power Level	Hi	dB	58	60	60	62	62	64	64	66	67
Dimensions	Indoor (H x W x D)	mm	210x1,245x700	210x1,245x700	210x1,245x700	210x1,245x700	210x1,245x700	250x1,600x700	250x1,600x700	250x1,600x700	250x1,600x700
Net weight	Indoor	Kg	33	33	33	33	33	43	43	47	47
Dust filter			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Antialergic filter	Optional		CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P	CZ-SA12P
Outdoor unit											
Power source		V	220 - 240	220 - 240	380 - 415	220 - 240	380 - 415	220 - 240	380 - 415	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	8.1	13.3	4.6	13	4.95	18.5	6.1	8.2	8.6
Air Volume		m^3/h	3,420	3,600	3,600	3,780	3,780	5,640	5,640	5,640	5,760
Sound pressure Level [3]	Hi	dB(A)	49	50	50	52	52	55	55	56	56
Sound power Level	Hi	dB	65	66	66	67	67	69	69	70	70
Dimensions	H x W x D	mm	795x900x320	795x900x320	795x900x320	795x900x320	795x900x320	1,170x900x320	1,170x900x320	1,170x900x320	1,170x900x320
Net weight		Kg	57	69	69	69	69	102	100	102	102
Piping connections	Liquid pipe	inch (mm)	1/4'' (6.35)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)	3/8'' (9.52)
	Gas pipe	inch (mm)	1/2'' (12.70)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)	5/8'' (15.88)
Refrigerant Loading	R410A	Kg	1.35	1.7	1.7	2.05	2.05	2.7	2.7	3.1	3.4
Elevation difference (in/out) [4]	Max	m	20	30	30	30	30	30	30	30	30
Piping length	Min - Max	m	7.5 - 30	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50	7.5 - 50
Piping length without	Max	m	20	30	30	30	30	30	30	30	30 refrigerent increase
Additional gas		g/m	50	50	50	50	50	50	50	50	50
Area control accessory			EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire	EKRORO wire
Operating range [3]	Min / Max	°C	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43	-10 / 43

GLOBAL REMARKS	Rating conditions	Cooling
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB : Dry buld; WB : Wet buld

1) EER, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
4) When installing the outdoor unit at a higher position than the indoor unit.

CZ-RL513T

CZ-RD513C

CU-J18DBE5 CU-J24DBE5 CU-J24DBE8 CU-J28DBE5 CU-J28DBE8

CU-J34DBE5 CU-J34DBE8 CU-J43DBE8 CU-J50DBE8

KIT-F18DTE5-F // KIT-F24DTE5-F // KIT-F28DTE8-F // KIT-F28DTE5-F // KIT-F28DTE8-F // KIT-F34DTE5-F // KIT-F34DTE8-F // KIT-F43DTE8-F // KIT-F50DTE8-F

HEALTHY AIR
- Anti-Mould long life air filter
- CZ-SA12P Alleru-buster antiallergic filter (optional)

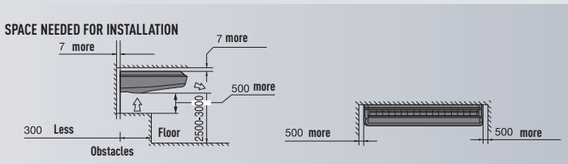
ENERGY EFFICIENCY AND ECOLOGY
- R410A environmentally friendly refrigerant gas

COMFORT
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Automatic air deflector system
- Hot start mode
- Super wide air outlet (100 degrees horizontally)

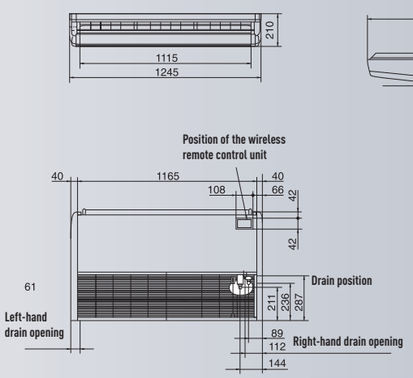
EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Infrared remote control
- Optional wired remote control

EASY INSTALLATION AND MAINTENANCE
- Self-diagnostic function
- Condensation control

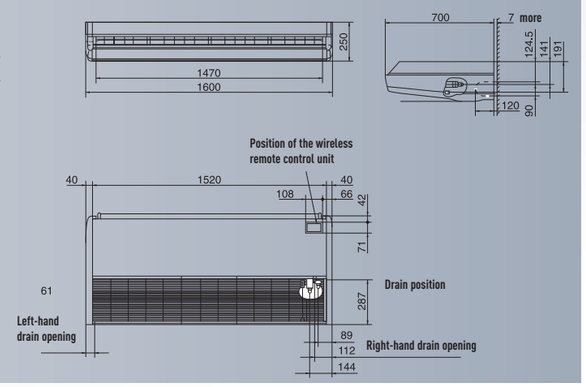
SPACE NEEDED FOR INSTALLATION



INDOOR UNIT DIMENSIONS CS-F18DTE5 // CS-F24DTE5 // CS-F28DTE5



INDOOR UNIT DIMENSIONS CS-F34DTE5 // CS-F43DTE5 // CS-F50DTE5



TECHNICAL ZOOM

- SELECTABLE STATIC PRESSURE UP TO 25 MMAQ
- HEATING WITH LOW OUTDOOR TEMPERATURES (DOWN TO -15 ºC)
- WEEKLY TIMER, 42 SETTINGS PER WEEK
- EASY CHECK MODE FOR FAILURE DETECTION

HIGH STATIC PRESSURE HIDE AWAY 8-10 H.P. // INVERTER US TYPE

Inverter High static pressure Hide away, 8 - 10 H.P., three-phase

HIGH STATIC PRESSURE HIDE AWAY 8-10 H,P, // INVERTER US TYPE

			8.0 H,P,	10.0 H,P,
KIT			**KIT-200X2XPQ**	**KIT-250X2XPQ**
Indoor			**S-200E1DPQ1**	**S-250E1DPQ1**
Outdoor			**U-200X2XPQ**	**U-250X2XPQ**
Wired remote control			**CZ-02RT11P**	**CZ-02RT11P**
Cooling capacity	Nominal (Min - Max)	kW	20.00 (10.00 - 22.00)	25.0 (12.5 - 27.5)
	Nominal (Min - Max)	kCal/h	17,200 (17,200 - 18,920)	21,500 (10,750-23,650)
EER [1]	Nominal (Min - Max)		3.21 (3.11 - 3.10) A	2,81 (2.98 - 2.99) C
Power input Cooling	Nominal (Min - Max)	kW	6.23 (3.22 - 7.09)	8.58 (4.20 - 9.20)
Heating capacity	Nominal (Min - Max)	kW	23.0 (11.5 - 25.3)	27.0 (13.0 - 29.7)
	Nominal (Min - Max)	kCal/h	19,780 (9,890 - 21,758)	23,220 (11,180 - 25,540)
COP [1]	Nominal (Min - Max)		3.41 (3.04 - 3.05) B	3.28 (3.02 - 3.03) C
Power input Heating	Nominal (Min - Max)	kW	6.74 (3.78 - 8.3)	8.22 (4.30 - 9.80)
Annual Energy Consumption [2]		kWh	3115	4290
Indoor unit				
Power source		V	220 - 240	220 - 240
External static pressure [3]	High	mmAq	25	25
	Medium	mmAq		
	Low	mmAq		
Air Volume	High	m^3/h	4,200	5,340
	Medium	m^3/h		
	Low	m^3/h		
Moisture removal volume		l/h		
Sound pressure Level [4]	Cooling (Hi / Lo)	dB(A)	45	45
	Heating (Hi / Lo)	dB(A)	45	45
Sound power Level	Cooling (Hi)	dB		
	Heating (Hi)	dB		
Dimensions	H x W x D	mm	450 x 1,400 x 900	450 x 1,400 x 900
Net weight	Indoor	Kg	87	92
Dust filter			Yes	Yes
Outdoor unit				
Power source		V	380 - 415	380 - 415
Connection		mm^2	4 x 1'5 to 2'5	4 x 1'5 to 2'5
Current Cooling	Nominal (Min / Max)	A	20	24.1
Current Heating	Nominal (Min / Max)	A	23	16.4
Air Volume	Cooling / Heating	m^3/h	10,500	10,500
Sound pressure Level [4]	Cooling (Hi)	dB(A)	57	57
	Heating (Hi)	dB(A)	57	57
Sound power Level	Cooling (Hi)	dB		
	Heating (Hi)	dB		
Dimensions	H x W x D	mm	1,680 x 930 x 765	1,680 x 930 x 765
Net weight		Kg	198	198
Piping connections	Liquid pipe	inch (mm)	3/8	1/2
	Gas pipe	inch (mm)	7/8	7/8
Refrigerant Loading	R410A	Kg	8	9
Elevation difference (in/out) [5]	Max	m	30	30
Piping length	Min - Max	m	5 - 100	5 - 100
Piping length without	Max	m	30	30 refrigerent increase
Additional gas		g/m	see installation manual	see installation manual
Area control accessory			EKRORO wire	EKRORO wire
Operating range [3]	Cooling Min / Max	°C	-5 / 46	-5 / 46
	Heating Min / Max	°C	-15 / 15	-15 / 15

GLOBAL REMARKS	Rating conditions	Cooling
	Inside air temperature	27°C DB / 19°C WB
	Outside air temperature	35°C DB / 24°C WB

DB : Dry buld; WB : Wet buld

1) EER and COP, Energy Saving Classification, is at 220 - 240V (380 - 415V) only in accordance with EU directive 2002/31/EC.
2) The annual consumption is calculated by multiplying the input power at 220 - 240V (380 - 415V) by an average of 500-hr per year in cooling mode.
3) The specification listed on the table indicates values under the condition of 50Pa (5,1 mmAq) which are applied for factory default setting.
4) The sound pressure Level of the units shows the value measured of a position 1 meter in front of the main body and 1,5 from the ground. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification.
5) When installing the outdoor unit at a higher position than the indoor unit.

CZ-02RT11P

U-200X2XPQ
U-250X2XPQ

KIT-200X2XPQ // KIT-250X2XPQ

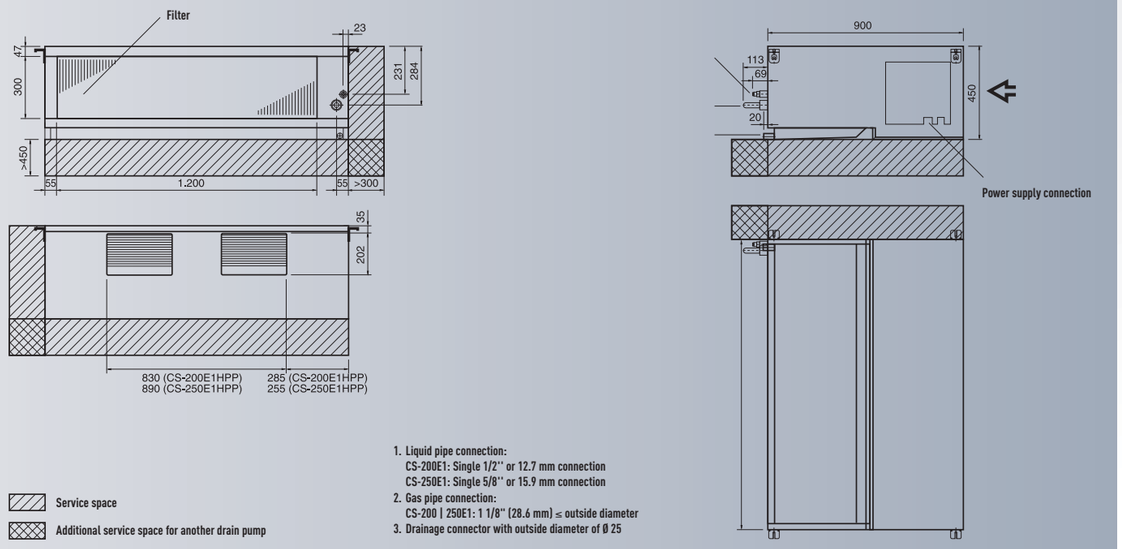
ENERGY EFFICIENCY AND ECOLOGY
- Maximum efficiency Inverter system
- R410A environmentally friendly refrigerant gas

COMFORT
- Cooling with low outdoor temperatures (down to -15 ºC)
- Automatic start after a power cut
- Automatic fan operation mode
- Soft dry operation mode
- Hot start mode
- Selection of temperature sensor at indoor unit or wired remote control
- Outdoor air inlet
- Filter included

EASE OF USE
- Weekly On/Off timer (6 settings per day and 42 per week)
- Wired remote control

EASY INSTALLATION AND MAINTENANCE
- High static pressure units ideal for shops and offices
- Selectable static pressure up to 25 mmAq
- Self-diagnostic function

INDOOR UNIT DIMENSIONS



1. Liquid pipe connection:
   CS-200E1: Single 1/2'' or 12.7 mm connection
   CS-250E1: Single 5/8'' or 15.9 mm connection
2. Gas pipe connection:
   CS-200 | 250E1: 1 1/8'' (28.6 mm) ≤ outside diameter
3. Drainage connector with outside diameter of Ø 25

TWIN FLEXI SYSTEM FS // INVERTER + // INVERTER // HEAT PUMP // COOLING ONLY FS

Panasonic's FS units can be installed as Twin systems (two indoor units of the same type with one outdoor unit). The indoor units can be combined in any of the different available ratings (1.5 H.P., 2 H.P., 2.5 H.P. and 3 H.P.).
The total power of indoor units will coincide with the power of the outdoor unit in all cases so that their operation will always be simultaneous*. The outdoor units are available in ratings of 3 H.P., 4 H.P., 5 H.P. and 6 H.P.

*** Simultaneous operation of indoor units in all cases.**

COMPATIBLE INDOOR UNITS

CS-F14DB4E5 / CS-F18DB4E5
CS-F24DB4E5 / CS-F28DB4E5

CS-F18DTE5 / CS-F24DTE5 / CS-F28DTE5

CS-F14DD3E5 / CS-F18DD3E5
CS-F24DD3E5 / CS-F28DD3E5

CS-F24DD2E5 / CS-F28DD2E5

COMPATIBLE OUTDOOR UNITS

CU-J28DBE5/8

CU-B28DBE5/8

CU-L28DBE5

CU-YL28HBE5
CU-YL34HBE5

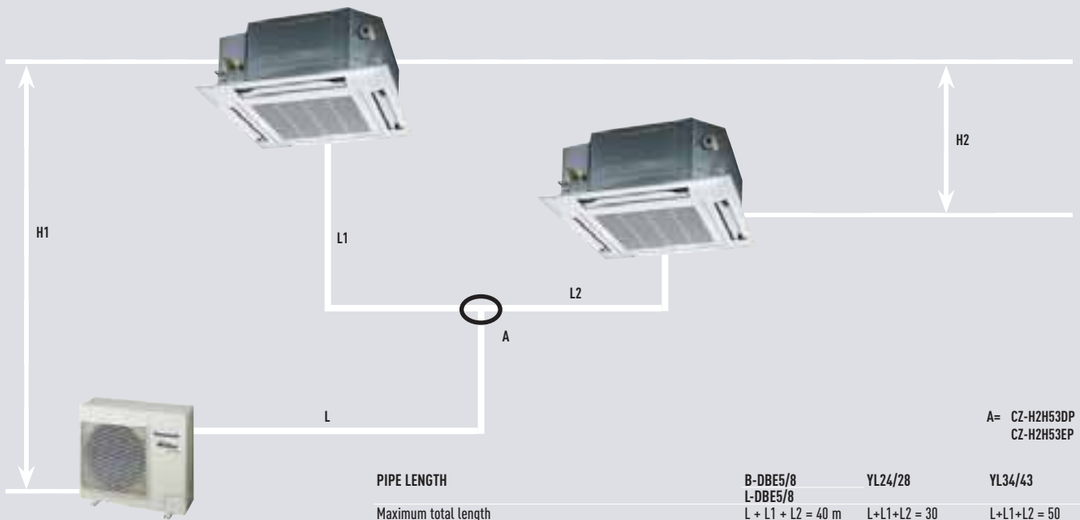
CU-J34DBE5/8
CU-J43DBE8
CU-J50DBE8

CU-B34DBE5/8
CU-B43DBE8
CU-B50DBE8

CU-L34DBE5/8
CU-L43DBE5/8
CU-L50DBE8

CU-YL43HBE5

TABLE OF TWIN COMBINATIONS



A= CZ-H2H53DP
CZ-H2H53EP

PIPE LENGTH	B-DBE5/8 L-DBE5/8	YL24/28	YL34/43
Maximum total length	L + L1 + L2 = 40 m	L+L1+L2 = 30	L+L1+L2 = 50
Maximum branch length	L1, L2 = 20 m	L1, L2 = 10 m	L1, L2 = 20 m
Maximum difference in branch lengths	L1 – L2 = 10 m	L1 - L2 = 5 m	L1 - L2 = 10 m
Maximum gradient between the outdoor unit and the indoor unit	H1 = 30 m (20 m*)	H1 = 25 m (20 m)	H1 = 30 m (20 m)
Maximum gradient between indoor units	H2 = 0.5 m	H2 = 0.5 m	H2 = 0.5 m

* If the outdoor unit is below the indoor units.

TABLE OF COMBINATIONS FOR FS HEAT PUMP // FS INVERTER +

OUTDOOR UNIT	STANDARD TWIN		DIVERTER	OUTDOOR UNIT	STANDARD TWIN		DIVERTER
3.0 H.P. (CU-28)	3.0 H.P. (CU-28)	1.5 H.P. (CS-14)	CZ-H2H53DP	5.0 H.P. (CU-43)	5.0 H.P. (CU-43)	2.5 H.P. (CS-24)	CZ-H2H53EP
		1.5 H.P. (CS-14)				2.5 H.P. (CS-24)	
4.0 H.P. (CU-34)	4.0 H.P. (CU-34)	2.0 H.P. (CS-18)	CZ-H2H53DP	6.0 H.P. (CU-50)	6.0 H.P. (CU-50)	3.0 H.P. (CS-28)	CZ-H2H53EP
		2.0 H.P. (CS-18)				3.0 H.P. (CS-28)	

COMPATIBLE INDOOR UNITS

			(14) 1,5 H.P.	(18) 2,0 H.P.	(24) 2,5 H.P.	(28) 3,0 H.P.
SPLIT CASSETTE TYPE			CS-F14DB4E5	CS-F18DB4E5	CS-F24DB4E5	CS-F28DB4E5
Panel			CZ-BT03P	CZ-BT03P	CZ-BT03P	CZ-BT03P
Power input	Cooling	kW - kcal/h	3.8 - 3,268	5.0 - 4,300	6.6 - 5,676	7.3 - 6,278
	Heating	kW - kcal/h	4.3 - 3,698	5.6 - 4,816	7.1 - 6,106	8.0 - 6,880
Dimensions	Indoor	H x W x D (mm)	246 x 840 x 840	246 x 840 x 840	246 x 840 x 840	246 x 840 x 840
	Panel	H x W x D (mm)	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950	30 x 950 x 950
Sound pressure Level		dB(A)	31	32	32	36
Air Volume		m^3/h	900	960	1,080	1,200
SPLIT CEILING TYPE			—	CS-F18DTE5	CS-F24DTE5	CS-F28DTE5
Power input	Cooling	kW - kcal/h	—	5.0 - 4,300	6.6 - 5,676	7.3 - 6,278
	Heating	kW - kcal/h	—	5.6 - 4,816	7.1 - 6,106	7.8 - 6,708
Dimensions	H x W x D	mm	—	210 x 1,245 x 700	210 x 1,245 x 700	210 x 1,245 x 700
Sound pressure Level		dB(A)	—	34	39	41
Air Volume		m^3/h	—	840	1,020	1,080
LOW STATIC PRESSURE HIDE-AWAY TYPE			CS-F14DD3E5	CS-F18DD3E5	CS-F24DD3E5	CS-F28DD3E5
Power input	Cooling	kW - kcal/h	3.8 - 3,268	5.0 - 4,300	6.6 - 5,676	7.3 - 6,278
	Heating	kW - kcal/h	4.3 - 3,698	5.6 - 4,816	7.1 - 6,106	8.0 - 6,880
Dimensions	H x W x D	mm	270 x 780+100 x 650	270 x 780+100 x 650	270 x 1,000+100 x 650	270 x 1,000+100 x 650
Sound pressure Level		dB(A)	35	38	43	43
Air Volume		m^3/h	900	1,020	1320	1,320
HIGH PRESSURE HIDE-AWAY TYPE			—	—	CS-F24DD2E5	CS-F28DD2E5
Power input	Cooling	kW - kcal/h	—	—	6.6 - 5,676	7.10 - 6,106
	Heating	kW - kcal/h	—	—	7.1 - 6,106	8.00 - 6,880
Dimensions	H x W x D	mm	—	—	290 x 1,000+100 x 500	290 x 1,000+100 x 500
Sound pressure Level		dB(A)	—	—	41	44
Air Volume		m^3/h	—	—	1,320	1,320

OUTDOOR UNITS

INVERTER + FS			CU-L28DBE5 I	CU-L34DBE5 I	CU-L43DBE5 I	CU-L50DBE5 III
Power input		kW - kcal/h	7,10 - 6.106	10,00 - 8.600	12,50 - 10.750	14,00 - 12.040
Dimensions	H x W x D	mm	795 x 900 x 320	1.340 x 900 x 320	1.340 x 900 x 320	1.340 x 900 x 320
Sound pressure Level		dB(A)	48	52	53	54
Power source		V	220	220	220	380
INVERTER FS			CU-YL28HBE5 I	CU-YL34HBE5 I	CU-YL43HBE5 I	
Power input		kW - kcal/h	7,10 - 6.106	10,00 - 8.600	12,50 - 10.750	
Dimensions		mm	795 x 875 x 320	795 x 900 x 320	1.170 x 900 x 320	
Sound pressure Level		dB(A)	50	54	55	
Power source		V	220	220	220	
HEAT PUMP FS			CU-B28DBE5 I / CU-B28DBE8 III	CU-B34DBE5 I / CU-B34DBE8 III	CU-B43DBE8 III	CU-B50DBE8 III
Power input		kW - kcal/h	7,3 - 6.275	10,45 - 9.000	13,0 - 11.200	14,5 - 12.100
Dimensions	H x W x D	mm	795 x 900 x 320	1.170 x 900 x 320	1.170 x 900 x 320	1.170 x 900 x 320
Sound pressure Level		dB(A)	52	55	56	56
Power source		V	220 - 240 I / 380 III	220 - 240 I / 380 III	380 III	380 III
COOLING ONLY FS			CU-J28DBE5 I / CU-J28DBE8 III	CU-J34DBE5 I / CU-J34DBE8 III	CU-J43DBE8 III	CU-J50DBE8 III
Power input		kW - kcal/h	7,3 - 6.275	10,45 - 9.000	13,0 - 11.200	14,5 - 12.100
Dimensions	H x W x D	mm	795 x 900 x 320	1.170 x 900 x 320	1.170 x 900 x 320	1.170 x 900 x 320
Sound pressure Level		dB(A)	52	55	56	56
Power source		V	220 - 240 I / 380 III	220 - 240 I / 380 III	380 III	380 III

I Single-phase III Three-phase

CONNECTIVITY

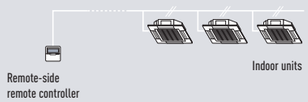
CONTROL SYSTEM

Panasonic's Twin systems can be controlled from a wired remote control or an infrared remote control.
Multi Mix systems also have various control options.
Group control: It is possible to control up to 16 systems at the same time using a single wired or infrared control. The operating settings will be the same for all the connected systems, but the compressors will start in sequence.

WIRED REMOTE CONTROL
FS HEAT PUMP / FS INVERTER
CZ-RL513C (HIDE-AWAY, CASSETTE AND CEILING)

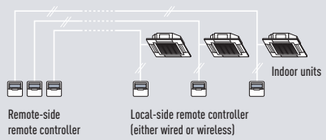
INFRARED REMOTE CONTROL
FS HEAT PUMP / FS INVERTER
CZ-RL513B (CASSETTE)
CZ-RL513T (CEILING)

GROUP CONTROL BY A SINGLE REMOTE CONTROLLER



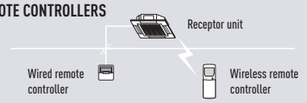
- **All indoor units operate in the same mode.**

SEPARATE CONTROL BY TWIN REMOTE CONTROLLERS



- **Each indoor unit can be operated by either of the two remote controllers.**
- **Apart from the timer setting time, the displays for the two remote controllers are identical.**
- **The last button pressed has priority (The main or slave attribute is set with the remote controller).**

COMMON CONTROL BY BOTH WIRED AND WIRELESS REMOTE CONTROLLERS



- **The last button pressed has priority (using either wired or wireless remote controllers).**

CZ-TA31P
ADAPTER FOR EXTERNAL SIGNALS
- A fan outside the indoor unit can be controlled
- External remote controller for switching the indoor unit ON/OFF
- Indoor unit status outputs (operating mode, fault)

CZ-TA40P
ADAPTER FOR URBAN NET
- Connecting board for Urban Net for centralised control of FS range indoor units

CZ-TA50P
ADAPTER FOR ADDRESSING
- Board for manual adjustment of indoor unit addresses for centralised control. Use for setting addresses before connecting the indoor unit to the power and when there is no remote control

CZ-TE20P
POWER SUPPLY
- Power supply for Urban Net (one unit for each Urban Net network)

CZ-20GWAP
CONNECTION INTERFACE FOR URBAN NET AND UM NET
- Indoor units controllable: 64
- Control functions: ON/OFF, Operating mode, Temperature adjustment, Fan speed, Air direction, Fault information, Suction temperature, Filter status information.

CZ-01FULAP
SERIAL INTERFACE UNIT
- Indoor units controllable: 64
- External connection: RS232C

CZ-01ESW11P
PROGRAMMER CONTROLLER
Enables programming of 64 groups.
- Up to 128 indoor units can be controlled
- 8 types of weekly programming
- Stand-by power supply for a maximum of 48 hours
- Maximum wiring length, 1,000 m (total: 2,000 m)

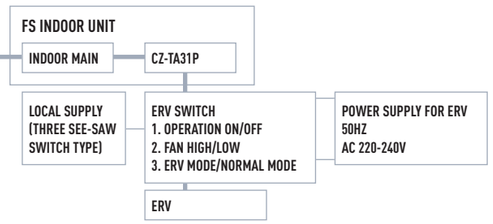
CZ-01ANA11P
UNIFIED ON/OFF CONTROLLER
Permits individual and simultaneous control of 16 groups of indoor units.
- Up to 16 groups can be controlled (128 indoor units)
- Use of 2 remote controls located in different places for operating mode (normal, alarm)
- Centralised control indicator
- Maximum wiring length, 1,000 m (total: 2,000 m)

CZ-02ESM11P
CENTRALISED REMOTE CONTROL
Permits individual control of 64 groups (areas) of indoor units.
- Up to 64 groups can be controlled (128 indoor units, max. of 10 outdoor units)
- 128 groups, maximum, can be controlled (128 indoor units, max. of 10 outdoor units) using 2 centralised remote controllers located in separate locations
- Zone control
- Fault code indicator
- Maximum wiring length, 1,000 m (total: 2,000 m)

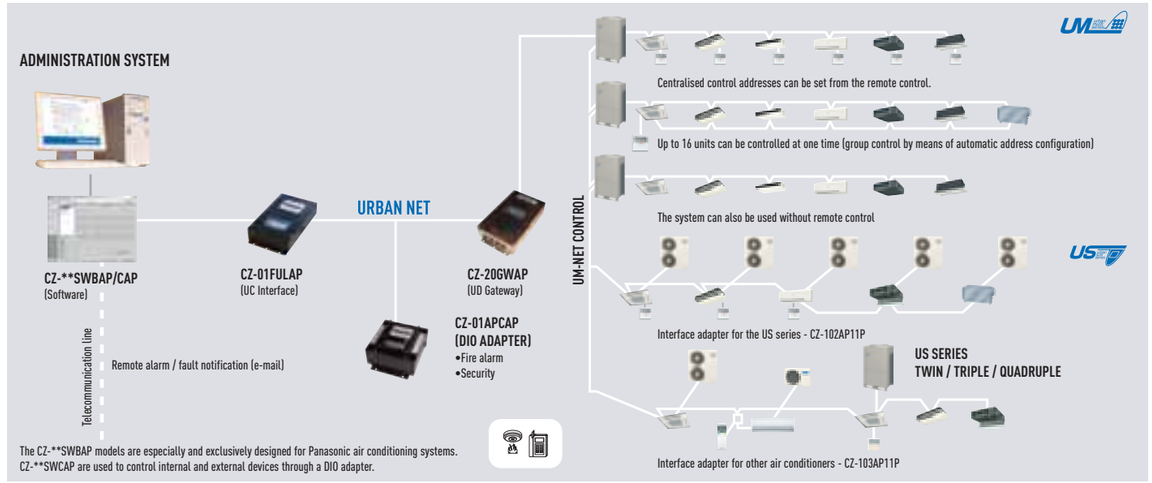
CZ-TA31P OPERATION MODE WITH CZ-RD513C (REMOTE CONTROLLER)

CZ-RD513C mode*	Ventilation button (on/off)	Interlink with FS system FS operation from Off to On	FS operation from On to Off	Ventilation button operation and interlink Operation	Remarks
000	no function	No function	No function	No operation happend even push ventilation button	Factory default setting
001	On/Off possible	No function	No function	ERV individual On/Off possible	No interlink with FS side, ERV can select operate On/Off
002	On/Off possible	No function	Forced ventilation Off	· "ERV ventilation On" can be selected by Ventilation button · In case FS system switched Off, also "Forced ventilation Off"	In case required ventilation continually even at FS system operation is Off mode, ventilation button must be switch On.
003	On/Off possible	Forced ventilation On	Forced ventilation Off	· FS system operation On same time ERV ventilation On. · FS system operation Off on same time ERV ventilation Off	· Manual On/Off possible at FS operation keep On · Manual On/Off possible at FS operation at Off mode · In case continually required ventilation On, ventilation button must be switch On.

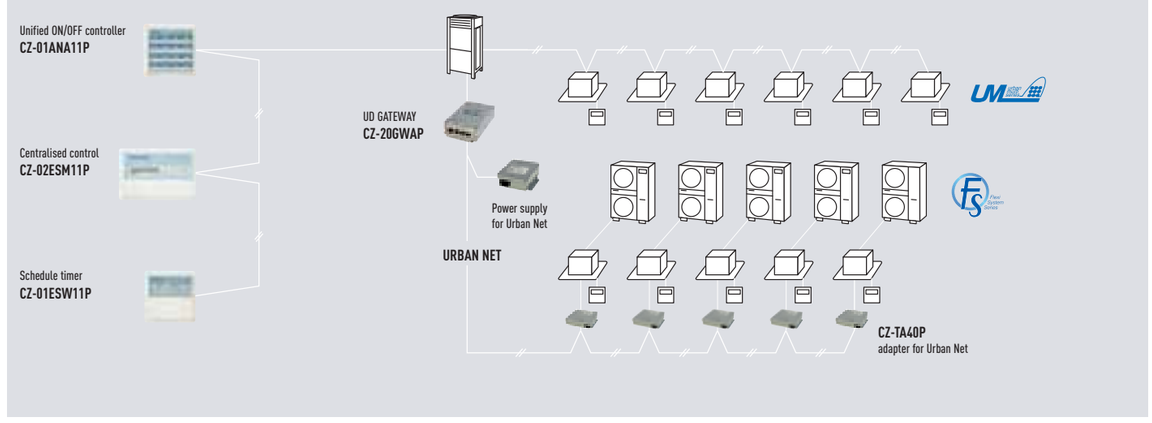
*Be sure to select either 001, 002, or 003. ERV: Energy Recovery Ventilators



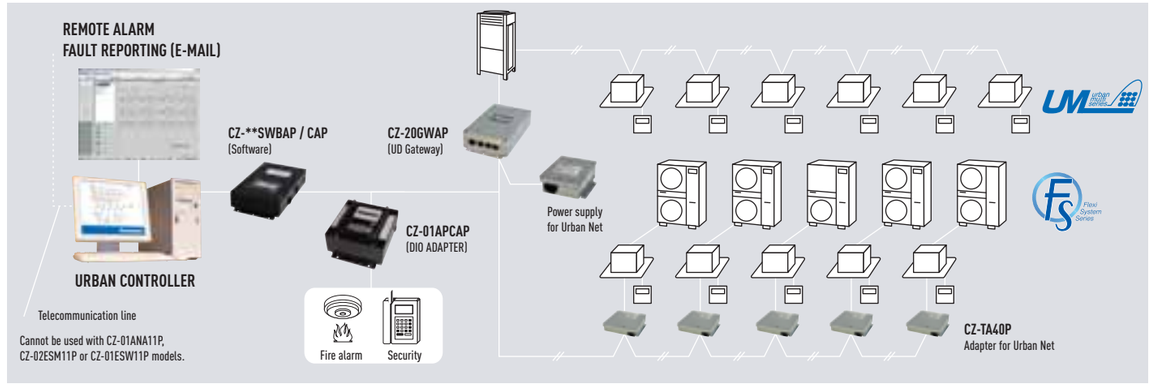
URBAN CONTROLLER TEMPERATURE CONTROL NETWORK COMBINED WITH THE US RANGE



EXAMPLE OF A SYSTEM WITH CENTRALISED CONTROL (UM NET)



URBAN CONTROLLER TEMPERATURE CONTROL NETWORK COMBINED WITH THE FS RANGE



SELF DIAGNOSIS DESCRIPTION AND CHECK POINT TABLE

SELF DIAGNOSIS FUNCTION

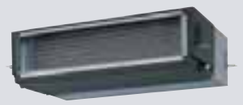
Once abnormality detected during operation, the unit will immediately stop its operation (Self Diagnosis LED at the outdoor unit printed circuit board will light on) and an error code (abnormality) will be saved in memory. The abnormality of the operation can be identifi ed through the below breakdown diagnosis method:

FS WIRED REMOTE CONTROL TYPE

CS-F24/28/34/43/50DB4E5 (CASSETTE TYPE)

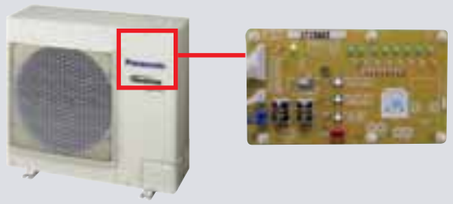
CS-F24/28/34/43/50DTE5 (CEILING TYPE)

CS-F24/28/34/43/50DD1E5/50DD2E5/50DD3E5 (DUCTED TYPE)

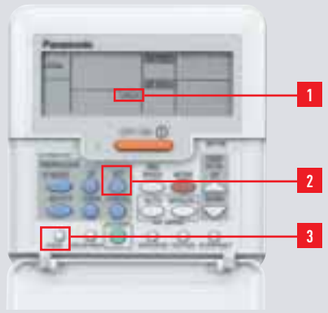


1. When an abnormality occurs, “CHECK” fl ashes in the remote control display.
2. Press the CHECK button when the display is fl ashing. The timer display will change and error code (eg. “F20”) will be displayed.
3. Press TIMER SET button while the error code is displayed. The error code display will change to detail display.

OUTDOOR UNIT



WIRED REMOTE CONTROL



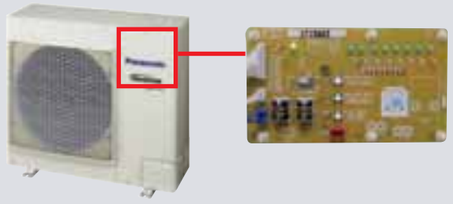
FS WIRELESS REMOTE CONTROL TYPE

CS-F24/28/34/43/50DB4E5 (CASSETTE TYPE)

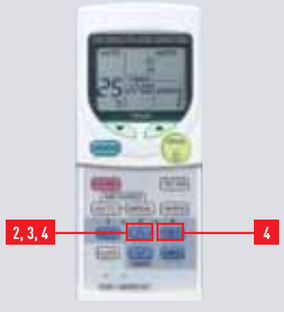
CS-F24/28/34/43/50DTE5 (CEILING TYPE)

1. When an abnormality occurs, TIMER LED blinks at the indoor receiver indicator.
2. .ress the “^” button control continuously for more than 5 seconds to turn on self diagnosis mode. “ _ _:_ _”
3. Press “^” button again, “F 00:00” is displayed.
4. By pressing the “^” or “v” button again, the display will change from “F0” to “F9”. If beep sound is heard from the indoor unit, press SET button, then the error number will shift to the next digit. Once the error shift to the lowest digit, error code is determined.
5. If no input of “^” or “v” button for more than 30 seconds, the self diagnosis mode will be cancelled.

OUTDOOR UNIT



WIRELESS REMOTE CONTROL



ERROR CODES TABLE // INVERTER MODEL

Warning: Electrical power must be disconnected when terminal protective cover is not in place to protect against electrocution.

LED 301 (green) illuminates to indicate that the microprocessor on the printed circuit board is operating in normal condition. If LED 301 flashing irregularly, check the power supply. Reset the power.

Remote Control		Outdoor unit printed circuit board LED								Check point location
Code	Detail	302	303	304	305	306	307	308	309	
F15	-01		☼	☼	☼	☼		(✳)	(✳)	Drain level float switch
F16	-01						☼	(✳)	(✳)	Louver switch
F17	-02	☼	☼				☼	(✳)	(✳)	DC fan motor
F20	-01				☼		☼	(✳)	(✳)	Indoor temperature sensor
	-02	☼			☼		☼	(✳)	(✳)	Remote control thermistor
F21	-01		☼		☼		☼	(✳)	(✳)	Pipe temp. sensor (indoor)
F26	-01			☼		☼	☼	(✳)	(✳)	Remote control transmission
F27	-01		☼	☼		☼	☼	(✳)	(✳)	Indoor / Outdoor unit disconnected
	-05	☼	☼	☼		☼	☼	(✳)	(✳)	In. / Out. unit connection problem
F27	-01	☼		☼		☼				Indoor / Outdoor unit disconnected
	-05					☼				In. / Out. unit connection problem
F30	-01						☼			System problem
	-02			☼			☼			Open phase, or reversed phase of supply
F31	-01		☼							Suction pressure protection
	-02	☼								High-pressure cut-off
	-06			☼	☼					4-way valve
	-09		☼	☼	☼					Leakage of refrigerant
	-10		☼	☼		☼				Refrigerant system

Remote Control		Outdoor unit printed circuit board LED								Check point location
Code	Detail	302	303	304	305	306	307	308	309	
F32	-03			☼		☼				Inverter protection (Low DC voltage)
	-04	☼	☼			☼				Inverter protection (IPM protection)
	-05	☼	☼							Compressor overcurrent protection
	-06	☼	☼		☼					Compressor discharge temp. protection
	-08	☼		☼	☼					Inverter protection (PFC protection)
	-09	☼				☼				Inverter protection (DC current protection)
	-10	☼	☼	☼	☼					Number of rotation compressor problem
F35	-02		☼			☼				DC Fan motor lock
F40	-01			☼						Outlet temperature sensor
	-11				☼					Compressor suction temp. sensor
	-21	☼		☼						Heat exchanger outlet temp. sensor
	-31	☼	☼	☼						DEF temperature sensor
	-51		☼	☼						Compressor discharge temp. sensor
F41	-02	☼	☼				☼			High pressure switch open circuit
	-11	☼					☼			Low pressure sensor
F42	-11		☼		☼					Current detector open circuit
F44	-01	☼			☼					Inverter protection (IPM temp. sensor problem)

☼: Blinking ● : Illuminated Blank : OFF

(✳)	308	309
	●	Master
	●	Slave

ERROR CODES TABLE // NON INVERTER MODEL

Warning: Electrical power must be disconnected when terminal protective cover is not in place to protect against electrocution.

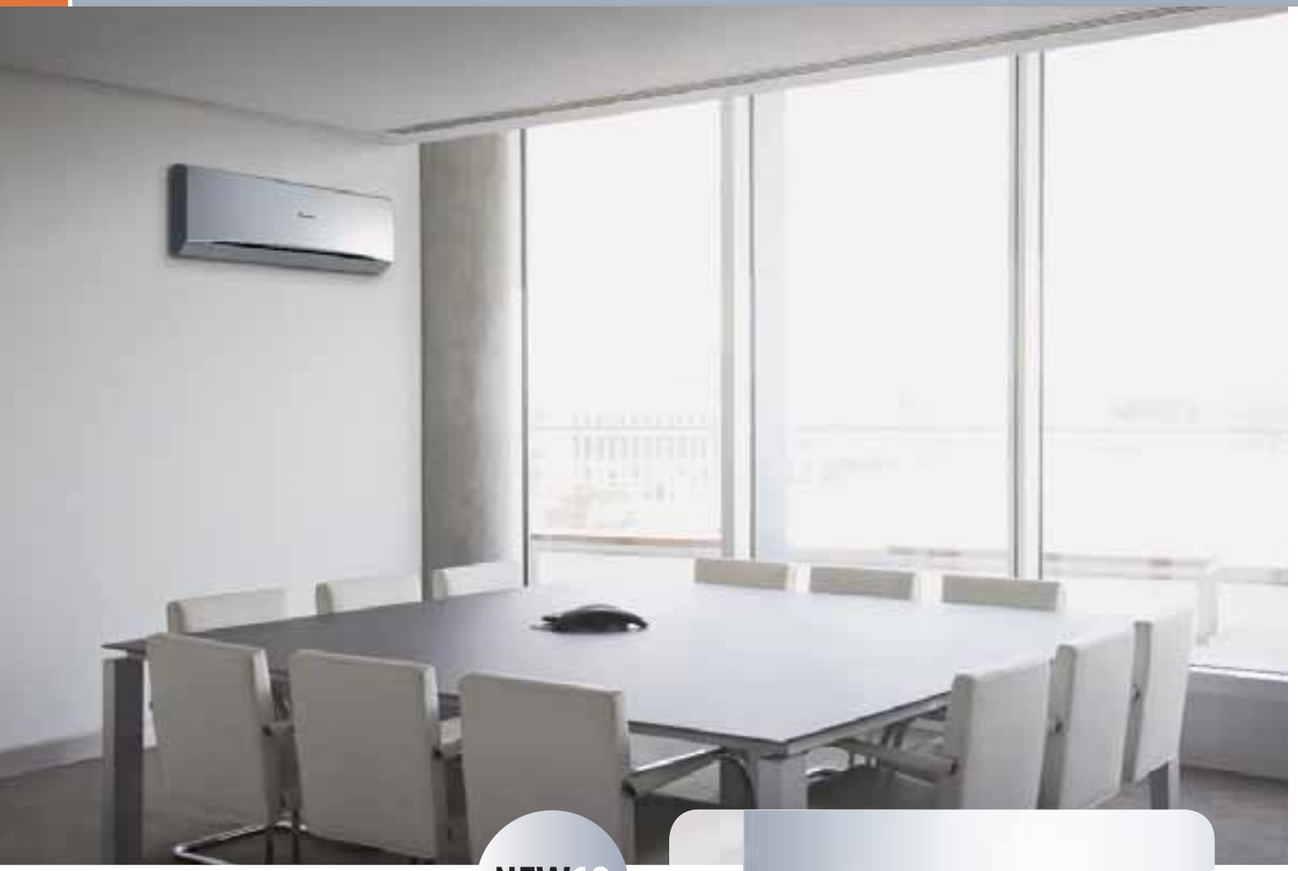
LED 1 (green) illuminates to indicate that the microprocessor on the printed circuit board is operating in normal condition. If LED fl ashing irregularly, check the power supply. Reset the power.

Remote Control		Outdoor unit printed circuit board LED							Check point location
Code	Detail	2	3	4	5	6	7	8	
F15	-01		☼	☼	☼		☼	(✳)	Drain level fl oat switch
F16	-01						☼	(✳)	Louver switch
F17	-02	☼	☼				☼	(✳)	DC fan motor
F20	-01				☼		☼	(✳)	Indoor temperature sensor
	-02	☼			☼		☼	(✳)	Remote control thermistor
F21	-01		☼		☼		☼	(✳)	Pipe temp. sensor (indoor)
F26	-01			☼		☼	☼	(✳)	Remote control transmission
F27	-01		☼	☼		☼	☼	(✳)	Indoor / Outdoor unit disconnected
	-05	☼	☼	☼		☼	☼	(✳)	Indoor / Outdoor unit connection problem
F27	-01	☼		☼		☼			Indoor / Outdoor unit disconnected
	-05					☼			Indoor / Outdoor unit connection problem
F30	-01				☼	☼			System problem
	-02			☼	☼	☼			Open phase, or reversed phase of supply

Remote Control		Outdoor unit printed circuit board LED							Check point location
Code	Detail	2	3	4	5	6	7	8	
F31	-01		☼						Suction pressure protection
	-02	☼							High-pressure cut-off
F31	-06			☼	☼				4-way valve
	-10		☼	☼		☼			Refrigerant system
F32	-05	☼	☼						Compressor overcurrent protection
	-06	☼	☼		☼				Compressor discharge temp. protection
F40	-21	☼		☼					Heat exchanger outlet temperature sensor
	-51		☼	☼					Compressor discharge temperature sensor
F41	-02	☼	☼		☼	☼			High pressure switch open circuit
	-12	☼		☼	☼	☼			Low pressure sensor
F42	-11		☼		☼				Current detector open circuit

☼: Blinking ● : Illuminated Blank : OFF

(✳)	8
●	Master
☼	Slave



NEW10 NEW FS MULTI

With unique Etherea wall mounted (white and silver), design indoor units arrive to professional applications!

New FS Multi from Panasonic an outstanding VRF solution!

The FS Multi is the new range of VRF which capitalizes on Panasonic's experience in air conditioning buildings and large surface areas with its Urban Multi series and VRF - R410A technology. Ideal for commercial areas as well as for uses in the home, the FS Multi always meets the requirements of the most demanding customers.

The advantages of Panasonic's FS multi

- Up to 6 different indoor unit types.
- Up to 30 indoor units in total, from 2.2 kW to 9 kW.
- Possibility to connect a unique wall type Etherea design, white and silver.
- 3 outdoor unit ratings: 4,5 and 6 H.P., single-phase.
- Panasonic Inverter technology with R410A gas, for greater comfort and economy with lower consumption.
- Ease of installation. Thanks to the reduced dimensions of the outdoor unit it can be taken to the roof of the building in a lift.
- Easy control in a centralized or individual form, or even by computer control with a range of functions for achieving optimum climate management in your business.
- Allows you to choose the best option depending on architectural needs and decoration criteria.

Outdoor units

A new outdoor unit design which is more adapted to today's building and architectural requirements.

- Up to 8 indoor units can be connected
- Capacities from 11.2 to 15.5 kW
- A 30 m difference in elevation

ETHEREA
designed to care for you

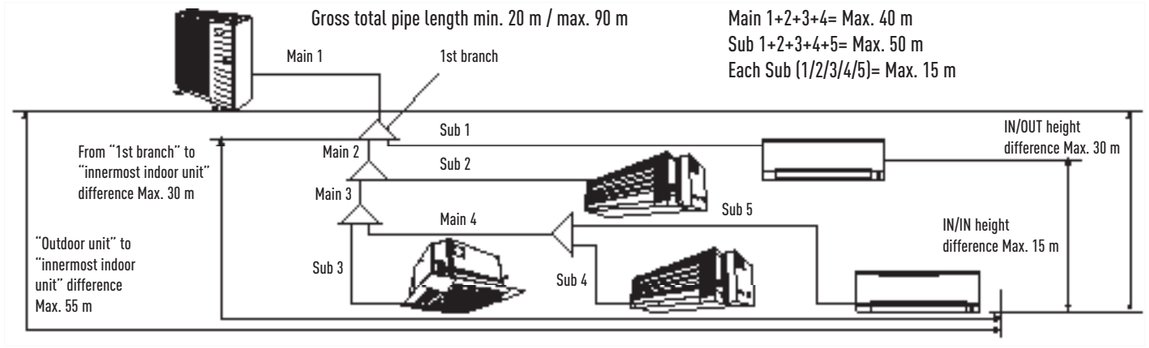
Mini-VRF Outdoor unit			4 H.P.	5 H.P.	6 H.P.
			U-4LA1E5	U-5LA1E5	U-6LA1E5
Cooling Capacity		kW	11.2	14	15.5
Heating Capacity		kW	12.5	16	18
Maximum Connection Ratio		%	130	130	130
Indoor unit selection allowance			5.6 kW to 14.5 kW within max 6 indoor	7.0 kW to 18.2 kW within max 8 indoor	7.7 kW to 20.1 kW within max 8 indoor
Power consumption Cooling / Heating		kW	3.10 / 3.04	4.31 / 3.97	5.15 / 4.69
EER	Cooling	-	3.61 A	3.25 A	3.01 B
COP	Heating	-	4.11 A	4.03 A	3.84 A
Operating current Cooling / Heating		A	23.50 / 21.40	19.80 / 18.10	14.20 / 13.90
Starting current		A	14	20	24
Max current		A	22.5	26	29
Maximum power input		kW	4.4 in cooling / 4.7 in heating	5.7 at cooling/heating	6.2 at cooling/heating
Power source		V/Hz	230 / 50	230 / 50	230 / 50
Recommended fuse size		A	30	30	30
Sound pressure level Cooling / Heating		dB(A)	52 / 54	53 / 55	55 / 57
Sound power		dB	74	72	71
Dimension	H x W x D	mm	1340 x 900 x 350	1340 x 900 x 350	1340 x 900 x 350
Net weight		kg	115	123	123
Air flow rate		m^3/min	92	95	98
Outdoor temperature Cooling / Heating		°C	-5 to +43 / -15 to +24	-5 to +43 / -15 to +24	-5 to +43 / -15 to +24
Pipe length (min. - max.)		m	20-90	20-90	20-90
Height difference ID - OD		m	30	30	30
Pipe diameter Liquid / Gas		mm (inch)	9.52 (3/8) / 15.88 (5/8)	9.52 (3/8) / 15.88 (5/8)	9.52 (3/8) / 15.88 (5/8)

EXAMPLE OF CORRECT COMBINATION:
Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)
Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW) + S-36YA1E5 (3.6 kW)
Total capacity of indoor units selected: 8.6 kW.

EXAMPLE OF INCORRECT COMBINATION:
Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)
Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW)
Total capacity of indoor units selected: 5.0 kW. The total indoor capacity is lower than the minimum permitted.

EXAMPLE OF INCORRECT COMBINATION:
Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)
Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW) + S-90UA1E5 (9.0 kW) +S-56NA1E5 (5.6 kW)
Total capacity of indoor units selected: 19.6 kW. The total indoor capacity is higher than the maximum permitted.

REFRIGERANT PIPE LENGTH



* Not for all combinations.

EER and COP classification is at 230V in accordance with EU directive 2002/31/EC.

WALL TYPE White, KA1 series, Etherea design

Elegant and exclusive design, inspired by Etherea's domestic best seller. **Capacity: 2.2, 2.8, 3.6, 4.5, 5.6, 6.3, 7.1 kW**

Mini-VRF Wall KA1 series		0.8 H.P. - 2.2 kW S-22KA1E5	1.0 H.P. - 2.8 kW S-28KA1E5	1.5 H.P. - 3.6 kW S-36KA1E5	1.75 H.P. - 4.5 kW S-45KA1E5	2.0 H.P. - 5.6 kW S-56KA1E5	2.5 H.P. - 6.3 kW S-63KA1E5	3.0 H.P. - 7.1 kW S-71KA1E5
Cooling Capacity	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1
Heating Capacity	kW	2.5	3.2	4.2	5.1	6.4	7.1	8
Power consumption Cooling / Heating	kW	0.025 / 0.025	0.027 / 0.027	0.03 / 0.03	0.035 / 0.035	0.045 / 0.045	0.05 / 0.05	0.055 / 0.055
Dimension (H x W x D) / Net weight	mm / kg	290 x 870 x 204 / 9	290 x 870 x 204 / 9	290 x 870 x 204 / 9	290 x 870 x 204 / 9	290 x 1070 x 235 / 11	290 x 1070 x 235 / 12	290 x 1070 x 235 / 12
Sound pressure level Low / High	dB(A)*	33 / 38	33 / 39	34 / 42	35 / 43	38 / 44	39 / 46	40 / 48
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	9.52 (3/8) 15.88 (5/8)

Remote controls not included, see next page for references.

WALL TYPE Silver, KA1 series, Etherea design

Elegant and exclusive design, inspired by Etherea's domestic best seller. **Capacity: 2.2, 2.8, 3.6, 4.5 kW**

Mini-VRF Wall KA1 series		0.8 H.P. - 2.2 kW S-22KA1E5S	1.0 H.P. - 2.8 kW S-28KA1E5S	1.5 H.P. - 3.6 kW S-36KA1E5S	1.75 H.P. - 4.5 kW S-45KA1E5S
Cooling Capacity	kW	2.2	2.8	3.6	4.5
Heating Capacity	kW	2.5	3.2	4.2	5.1
Power consumption Cooling / Heating	kW	0.025 / 0.025	0.027 / 0.027	0.03 / 0.03	0.035 / 0.035
Dimension (H x W x D) / Net weight	mm / kg	290 x 870 x 204 / 9	290 x 870 x 204 / 9	290 x 870 x 204 / 9	290 x 870 x 204 / 9
Sound pressure level Low / High	dB(A)*	33 / 38	33 / 39	34 / 42	35 / 43
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)

Remote controls not included, see next page for references.

CASSETTE 60X60, YA1 series

Stylish and compact, it can be installed in ceilings and standard architectural modules. **Capacity: 2.2, 2.8, 3.6, 4.5, 5.6 kW**

Mini-VRF Mini-Casette YA1 series Panel (not included)		0.8 H.P. - 2.2 kW S-22YA1E5 CZ-KPY1	1.0 H.P. - 2.8 kW S-28YA1E5 CZ-KPY1	1.5 H.P. - 3.6 kW S-36YA1E5 CZ-KPY1	1.75 H.P. - 4.5 kW S-45YA1E5 CZ-KPY1	2.0 H.P. - 5.6 kW S-56YA1E5 CZ-KPY1
Cooling Capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating Capacity	kW	2.5	3.2	4.2	5.1	6.4
Power consumption Cooling / Heating	kW	0.035 / 0.035	0.035 / 0.035	0.040 / 0.040	0.040 / 0.040	0.045 / 0.045
Dimension (H x W x D) / Net weight	mm / kg	260 x 575 x 575 / 18	260 x 575 x 575 / 18	260 x 575 x 575 / 18	260 x 575 x 575 / 18	260 x 575 x 575 / 18
Sound pressure level Low / High	dB(A)*	33 / 36	33 / 37	34 / 38	35 / 39	36 / 40
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)

750 mm drain-up mechanism included. Remote controls not included, see next page for references.

CASSETTE 90X90, UA1 series

Elegant design and high airflow rate for a comfortable and appealing environment. **Capacity: 6.3, 7.1, 9.0 kW**

Mini-VRF Casette comparison UA1 series Panel (not included)		2.5 H.P. - 6.3 kW S-63UA1E5 CZ-BT03P	3.0 H.P. - 7.1 kW S-71UA1E5 CZ-BT03P	3.5 H.P. - 9.0 kW S-90UA1E5 CZ-BT03P
Cooling Capacity	kW	6.3	7.1	9.0
Heating Capacity	kW	7.1	8	10
Power consumption Cooling / Heating	kW	0.11 / 0.11	0.115 / 0.115	0.115 / 0.115
Dimension (H x W x D) / Net weight	mm / kg	246 x 840 x840 / 26	246 x 840 x840 / 26	246 x 840 x840 / 26
Sound pressure level Low / High	dB(A)*	35 / 41	36 / 42	36 / 42
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	9.52 (3/8) 15.88 (5/8)	9.52 (3/8) 15.88 (5/8)

750 mm drain-up mechanism included. Remote controls not included, see next page for references.

HIDE AWAY 0-3 mmAq, NA1 series

Compact design. Guarantees good air distribution. 0-3 mmAq. **Capacity: 2.2, 2.8, 3.2, 3.6, 4.5, 5.6 kW**

Mini-VRF Duct NA1 series (D4)		0.8 H.P. - 2.2 kW S-22NA1E5	1.0 H.P. - 2.8 kW S-28NA1E5	1.25 H.P. - 3.2 kW S-32NA1E5	1.5 H.P. - 3.6 kW S-36NA1E5	1.75 H.P. - 4.5 kW S-45NA1E5	2.0 H.P. - 5.6 kW S-56NA1E5
Cooling Capacity	kW	2.2	2.8	3.2	3.6	4.5	5.6
Heating Capacity	kW	2.5	3.2	3.6	4.2	5.1	6.4
Power consumption Cooling / Heating	kW	0.075 / 0.075	0.08 / 0.08	0.085 / 0.085	0.085 / 0.085	0.095 / 0.095	0.105 / 0.105
Dimension (H x W x D) / Net weight	mm / kg	200 x 900 x 550 / 21	200 x 900 x 550 / 21	200 x 900 x 550 / 22	200 x 900 x 550 / 22	200 x 900 x 550 / 22	200 x 900 x 550 / 22
Air flow rate	m³/min	6-8-10	7-9-11	7-9-11	7-9-11	8-10-12	8.5-10.5-12.5
External static pressure	Pa/mmAq	0 or 29 / 0 or 3 mmAq (factory defalut 0 mmAq)					
Sound pressure level Low / High	dB(A)*	30 / 36	30 / 37	31 / 38	31 / 38	32 / 39	32 / 39
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)

Remote controls not included, see next page for references. Filter for S-_NA1E5 not available.

HIDE AWAY 5-7 mmAq, MA1 series

Unit designed to offer maximum flexibility in terms of installation methods. 5-7 mmAq. **Capacity: 4.5, 5.6, 6.3, 7.1, 9.0 kW**

Mini-VRF Duct MA1 series (D3)		1.75 H.P. - 4.5 kW S-45MA1E5	2.0 H.P. - 5.6 kW S-56MA1E5	2.5 H.P. - 6.3 kW S-63MA1E5	3.0 H.P. - 7.1 kW S-71MA1E5	3.5 H.P. - 9.0 kW S-90MA1E5
Cooling Capacity	kW	4.5	5.6	6.3	7.1	9.0
Heating Capacity	kW	5.1	6.4	7.1	8.0	10
Power consumption Cooling / Heating	kW	0.135 / 0.135	0.135 / 0.135	0.135 / 0.135	0.135 / 0.135	0.175 / 0.175
Dimension (H x W x D) / Net weight	mm / kg	250 x 780+100 x 650 / 29	250 x 780+100 x 650 / 29	250 x 1000+100 x 650 / 32	250 x 1000+100 x 650 / 32	250 x 1000+100 x 650 / 32
Air flow rate	m³/min	13-15	13-15	13-15-17	13-15-17	15-17-19
External static pressure	Pa/mmAq	49 or 69 / 5-7 (factory default 5 mmAq)				5-7
Sound pressure level Low / High	dB(A)*	35 / 42	35 / 42	36 / 43	36 / 43	37 / 44
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	9.52 (3/8) 15.88 (5/8)	9.52 (3/8) 15.88 (5/8)

Remote controls not included, see next page for references. S-_MA1E5 with dust filter.

* Indoor noise level measured at 230 V.

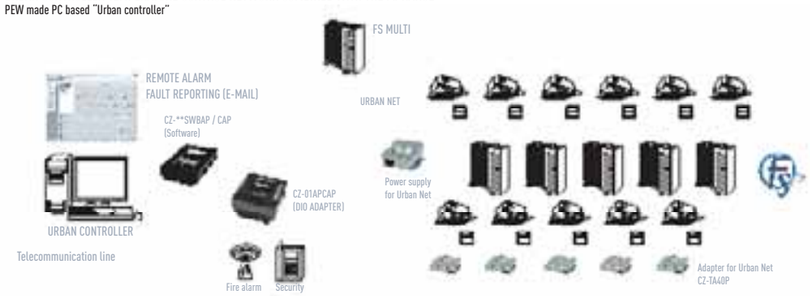
INDOOR UNITS

CONNECTIVITY. Easy connection with Urban Controller Software

EXAMPLE OF A SYSTEM WITH CENTRALISED CONTROL

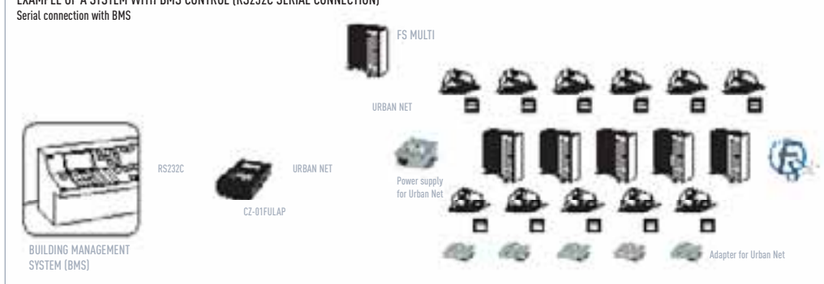
URBAN CONTROLLER TEMPERATURE CONTROL NETWORK COMBINED WITH THE FS RANGE

PEW made PC based "Urban controller"



EXAMPLE OF A SYSTEM WITH BMS CONTROL (RS232C SERIAL CONNECTION)

Serial connection with BMS



Cannot be used with CZ-01ANA11P, CZ-02ESM11P or CZ-01ESW11P.

Wired remote control CZ-RT1
The weekly timer CZ-RT1 offers control of detailed parameters for adjusting air quality and flow for each indoor unit.

Infrared receiver (for Ducted MA&NA series only) CZ-RWRM1
Infrared receiver for UA Cassette only (infrared receiver included on the YA Cassette) CZ-RWRU1
Infrared remote control (for all Heat Pump) CZ-RWS1
Infrared remote control (for all Cooling Only) CZ-RWC1
Infrared remote control CZ-RWS1

Line Branch Pipe CZ-P155BK1

Adapter for external signals CZ-TA31P

MINI UM 5

The entire indoor range with a three-phase UM outdoor unit.
Mini UM 5 is the new range of air conditioners which capitalise on Panasonic's experience in air conditioning buildings and large areas with its Urban Multi series with VRF - R410A technology.
The adaptation of the leading edge Urban Multi technology to medium-sized and small areas with three-phase power supplies opens up unprecedented prospects in Commercial air conditioning.

All the UM 4 series indoor units are available for the three-phase Mini UM units. You can check the characteristics of these indoor units on pages 144 to 155 of this catalogue.

ADVANTAGES OF MINI UM 5 - R410A

- Total freedom of choice. Up to 11 different indoor unit models. Allows you to choose the best option depending on architectural needs and decoration criteria.
- Three outdoor unit ratings: 4, 5 and 6 H.P., three-phase.
- Inverter technology with R410A gas, "greater comfort and economy with lower consumption".
- Greatest space reduction. A single outdoor unit feeds up to 9 indoor units.
- Ease of installation. Thanks to the reduced dimensions of the outdoor unit it can be taken to the roof of the building in the lift.
- Total control. In a centralised or individual form, or even by computer control with an infinity of functions for achieving optimum climate management in your business.

COMBINATION TABLE

Reference	Outdoor unit	Maximum indoor unit	Maximum combination capacity	Minimum combination capacity
U-4ML5XPQ	4.0 H.P.	6	130	50
U-5ML5XPQ	5.0 H.P.	8	162	62
U-6ML5XPQ	6.0 H.P.	9	195	75

COMBINATION EXAMPLE

CORRECT

	Reference	Quantity	Capacity	Minimum capacity	Maximum capacity
Outdoor	U-6ML5XPQ	1	-	75	195
Indoor	S-20KM3HPR	1	20	-	-
	S-32KM3HPR	2	(32 x 2) 64	-	-
	S-20FM3HPQ	1	20	-	-
	S-25FM3HPQ	3	(25 x3) 75	-	-
Total indoor capacity	7	179			

INCORRECT

	Reference	Quantity	Capacity	Minimum capacity	Maximum capacity
Outdoor	U-6ML5XPQ	1	-	75	195
Indoor	S-20KM3HPR	1	20	-	-
	S-32KM3HPR	2	(32 x 2) 64	-	-
	S-40FM3HPQ	1	40	-	-
	S-20FM3HPQ	1	20	-	-
	S-25FM3HPQ	3	(25 x3) 75	-	-
Total indoor capacity	8	219			

INCORRECT

	Reference	Quantity	Capacity	Minimum capacity	Maximum capacity
Outdoor	U-6ML5XPQ	1	-	75	195
Indoor	S-20KM3HPR	1	20	-	-
	S-20FM3HPQ	1	20	-	-
	S-25FM3HPQ	1	25	-	-
Total indoor capacity	3	65			

* Indoor capacity lower than the minimum permitted.

01 SPLIT 60X60 CASSETTES TYPE
Stylish and compact, it can be installed in ceilings and standard architectural modules.
Ratings: 20, 25, 32, 40, 50
Ref.: S-[power] YM3HPQ

02 CASSETTE 360º 90X90 TYPE
Elegant design and high airflow rate for a comfortable and appealing environment.
Ratings: 20, 25, 32, 40, 50, 63, 80, 100, 125
Ref.: S-[power] UM4JPQ

03 2-WAY CASSETTE TYPE
Reduced volume enabling the unit to be installed in false ceilings only 35 mm deep.
Ratings: 20, 25, 32, 40, 50, 63, 80, 125
Ref.: S-[power] LM3HPQ

04 HIGH PRESSURE HIDE-AWAY TYPE
Complete high pressure duct system for top quality air conditioners.
Ratings: 40, 50, 63, 80, 100, 125, 200, 250
Ref.: S-[power] EM3HPS

05 LOW SILHOUETTE HIDE-AWAY TYPE
Unit designed to offer maximum flexibility in terms of installation methods.
Ratings: 20, 25, 32, 40, 50, 63, 80, 100, 125
Ref.: S-[power] FM3HPQ / FM4 [1)]

06 HOTEL TYPE DUCT TYPE
Compact design ideal for installation in hotels and housing. Very easy to mount in false ceilings.
Ratings: 20, 25
Ref.: S-[power] NM3HPQ

07 1-WAY CASSETTE TYPE
Automatic orientation mechanism. Can be installed in false ceilings only 22 cm deep.
Ratings: 25, 32, 40, 63
Ref.: S-[power] DM3HPS

08 WALL TYPE
Elegant design and good airflow rate for greater comfort. Automatic oscillation function.
Ratings: 20, 25, 32, 40, 50, 63
Ref.: S-[power] KM3HPR

09 CEILING TYPE
Ultra quiet operation combined with elegant and stylish design. Guarantees good air distribution.
Ratings: 32, 63, 100
Ref.: S-[power] TM3JPR

10 CONSOLE TYPE
Intended for installation under windows. Reduced base of only 22 cm and height of 60 cm.
Ratings: 20, 25, 32, 40, 50, 63
Ref.: S-[power] PM3HPS

11 CONSOLE WITHOUT CASING
Easy to build in, representing a substantial saving in installation space needed.
Ratings: 20, 25, 32, 40, 50, 63
Ref.: S-[power] RM3HPS

1) Confirm availability.

PANASONIC'S ENERGY RECOVERY VENTILATOR UNIT OFFERS MAXIMUM COMFORT AND GREATER ENERGY SAVINGS

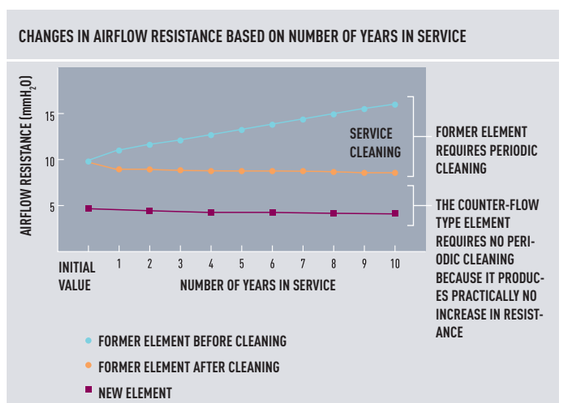
Energy recovery ventilators offer ventilation which increases comfort and saves energy. They efficiently recover the heat lost in ventilation during the heat recovery process.

20% energy saving
Energy consumption is dramatically reduced by using a counter-flow heat-exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings.

Lightweight structure
The lightweight structure makes installation easier.

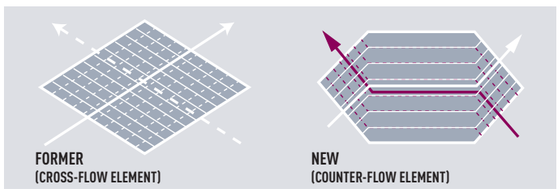
Quiet operation
Low noise operation results in noticeably quieter units. All models with capacities below 500 m3/h run at noise levels below 32 dB (High setting) and even our largest 1,000 m3/h-capacity model runs at only 37.5 dB (High setting).

Long heat-exchange element service life



The heat exchanger is made up of a membrane manufactured from a special material covered in resin for optimal heat transmission. The nylon/polyester fibre filter offers high dust retention capacity. We have also redesigned the air ducts to obtain a long-lasting heat exchange system which does not need periodic cleaning.

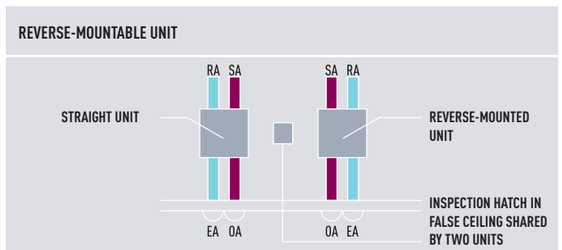
Heat exchanger characteristics



With the cross-flow element, air moves in a straight line across the element. With the counter-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect remains unchanged even if the element is made thinner.

Characteristics common to all models
- Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.
- All maintenance can be performed through a single inspection hole.
- Straight air supply / exhaust system used for easier installation.
- Each unit can be mounted in reverse position.
- Equipped with an Extra-High setting.
- Can incorporate a medium performance filter (optional, installed on site).

Slim shape and easier installation
Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.



TECHNICAL ZOOM

- HIGH ENERGY SAVING, UP TO 20%
- COUNTER CROSS FLOW TECHNOLOGY FOR BETTER EFFICIENCY
- LONG LIFE ELEMENT CORE
- EASY INSTALLATION AND 20% LESS THICKNESS
- EASY CONNECTION TO AIR CONDITIONING UNITS
- SUPER QUIET UNITS

ENERGY RECOVERY VENTILATION SYSTEM

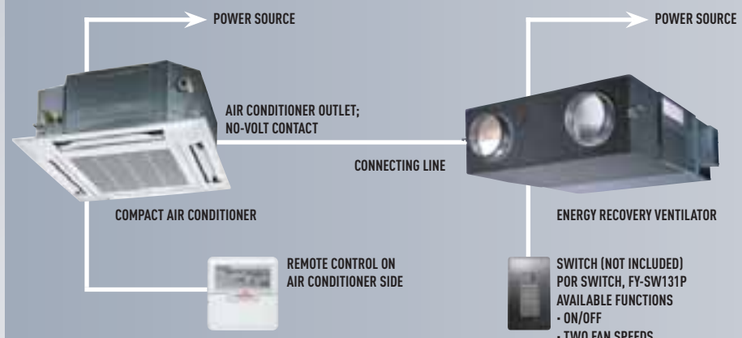
Recovers up to 77% of the heat in the outgoing air, for aN ecological and energy saving building

ENERGY RECOVERY VENTILATION SYSTEM

Rated flow rate			250 m³/h	350 m³/h	500 m³/h	800 m³/h	1000 m³/h
Models			**FY-250ZDY2**	**FY-350ZDY2**	**FY-500ZDY2**	**FY-800ZDY2**	**FY-01KZDY2A**
Power Source		V A.C	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240
Frequency		Hz	50	50	50	50	50
Heat Exchange Ventilation							
Input	Extra High	W	104 - 119	137 - 154	188 - 214	316 - 347	399 - 445
	High	W	99 - 114	124 - 137	169 - 188	309 - 329	360 - 399
	Low	W	79 - 90	117 - 128	151 - 166	302 - 327	332 - 367
Current	Extra High	A	0.48 - 0.50	0.63 - 0.65	0.86 - 0.90	1.51 - 1.54	1.97 - 2.04
	High	A	0.46 - 0.48	0.59 - 0.60	0.79 - 0.81	1.48 - 1.50	1.85 - 1.93
	Low	A	0.37 - 0.39	0.56 - 0.57	0.72 - 0.73	1.44 - 1.46	1.68 - 1.76
Air Volume	Extra High / High / Low	m³/h	250 / 250 / 170	350 / 350 / 280	500 / 500 / 370	800 / 800 / 650	1000 / 1000 / 810
Air Volume	Extra High / High / Low	ft³/min	148 / 148 / 100	207 / 207 / 165	295 / 295 / 218	472 / 472 / 384	590 / 590 / 478
External Static Pressure	Extra High / High / Low	Pa	90 / 80 / 37	95 / 65 / 42	105 / 70 / 38	140 / 110 / 70	90 / 55 / 35
Temperature Exchange Efficiency	Extra High / High / Low	%	75 / 75 / 77	75 / 75 / 77	75 / 75 / 77	75 / 75 / 76	75 / 75 / 76
Enthalpy Exchange Efficiency	Extra High / High / Low	Cooling %	63 / 63 / 66	66 / 66 / 69	62 / 62 / 67	65 / 65 / 68	65 / 65 / 68
	Extra High / High / Low	Heating %	70 / 70 / 73	69 / 69 / 71	67 / 67 / 71	71 / 71 / 74	71 / 71 / 73
Normal Ventilation							
Input	Extra High	W	103 - 119	133 - 151	184 - 210	309 - 337	392 - 438
	High	W	98 - 114	119 - 132	161 - 182	300 - 325	358 - 392
	Low	W	79 - 90	113 - 125	145 - 164	297 - 316	329 - 362
Current	Extra High	A	0.47 - 0.50	0.61 - 0.63	0.84 - 0.88	1.47 - 1.50	1.95 - 2.03
	High	A	0.46 - 0.48	0.57 - 0.60	0.76 - 0.77	1.45 - 1.48	1.84 - 1.92
	Low	A	0.37 - 0.39	0.54 - 0.56	0.71 - 0.73	1.41 - 1.43	1.67 - 1.74
Air Volume	Extra High / High / Low	m³/h	250 / 250 / 170	350 / 350 / 280	500 / 500 / 370	800 / 800 / 650	1000 / 1000 / 810
External Static Pressure	Extra High / High / Low	Pa	90 / 80 / 37	95 / 65 / 42	105 / 70 / 38	140 / 110 / 70	90 / 55 / 35
Noise	Extra High	dB	27 - 28	31 - 32	34 - 35	38.5 - 39.5	38 - 39
	High	dB	26.5 - 27.5	30 - 31	32 - 33	37 - 38	36.5 - 37.5
	Low	dB	21.5 - 22.5	26 - 27	26.5 - 27.5	33.35	31.5 - 33.5
Product Weight		Kg	29	37	43	71	83

- This noise of the product is the value which was measured at the acoustic room. Actually, in the established condition, that undergo influence by the echoing of the room and so that become bigger than the display numericat value.
- The input, the current and the exchange efficiency are values at the time of the mentioned air volume.
- The noise level shall be measured 1.5m below the center of the unit.
- The temperature exchange efficiency averages that of when cooling and when heating.

TYPICAL SYSTEM LINKED TO A CASSETTE TYPE AIR CONDITIONER



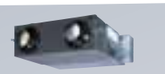
USE CONDITIONS

OUTDOOR AIR CONDITIONS
TEMPERATURE RANGE: -10 ºC – 40 ºC
RELATIVE HUMIDITY: 85% OR LESS

INDOOR AIR CONDITIONS
TEMPERATURE RANGE: -10 ºC – 40 ºC
RELATIVE HUMIDITY: 85% OR LESS

REQUIREMENTS FOR INSTALLATION
USE IS TO BE AVOIDED IN REFRIGERATED CHAMBERS OR OTHER PLACES WHERE THE TEMPERATURE MAY UNDERGO SIGNIFICANT FLUCTUATIONS, EVEN WHEN THE TEMPERATURE RANGE IS ACCEPTABLE.


FY-250ZDY2


FY-350ZDY2


FY-500ZDY2


FY-800ZDY2


FY-01KZDY2A

FY-10ESPNAH // FY-10ELPNAH

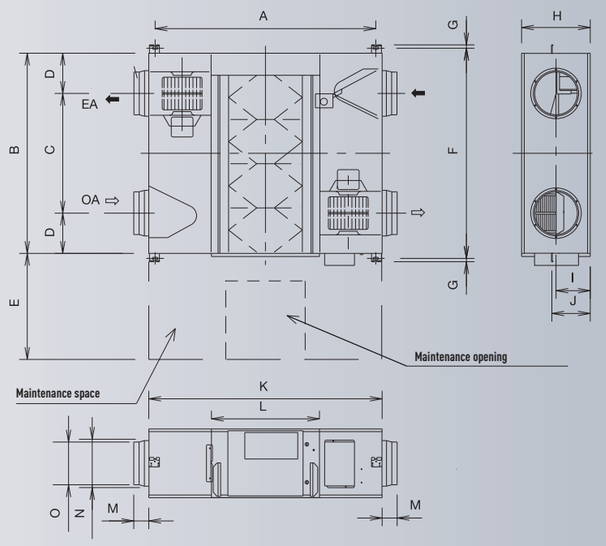
HEALTHY AIR
- The filter guarantees healthier air

ENERGY EFFICIENCY AND ECOLOGY
- Up to 20% energy saving in the installation
- Recovers up to 77% of the heat in the outgoing air

COMFORT
- Quiet units (21,5 dB for the FY-250ZDY2)
- Cleaning reduced due to the revolutionary structure of the exchanger (recommended every 6 months)
- Ideal for indoor spaces without windows

EASY INSTALLATION AND MAINTENANCE
- Five models for easier selection
- Reduced system height (270 mm and 388 mm)
- Side opening for cleaning (inspection of filter, motor and other parts)
- Installation can be reversed to share an inspection opening between 2 machines
- Easy connection to the air conditioning unit (without additional elements)
- Installation in false ceilings
- Units operate at 220 - 240V
- High static pressure for easier installation

INDOOR UNIT DIMENSIONS



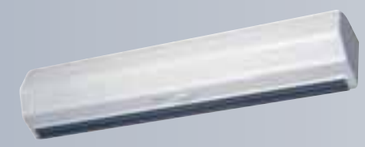
	FY-250ZDY2	FY-350ZDY2	FY-500ZDY2	FY-800ZDY2	FY-01KZDY2A
A	810	810	890	1,250	1,250
B	599	804	904	884	1,134
C	315	480	500	428	678
D	142	162	202	228	228
E	600	600	600	600	600
F	655	860	960	940	1,190
G	19	19	19	19	19
H	270	270	270	288	388
I	135	145	145	194	194
J	159	159	159	218	218
K	882	882	962	1,322	1,322
L	414	414	414	612	612
M	95	95	107	85	85
N	219	219	246	258	258
O	144	144	194	242	242

TECHNICAL ZOOM

- 2 SIZES : 900MM AND 1200MM
- POWERFUL AIR FLOW (10 M/S)
- VERY LOW NOISE, ONLY 42DB

AIR CURTAIN

2 sizes for 900mm and 1200mm air curtains. Ideal for separating areas and energy saving



AIR CURTAIN

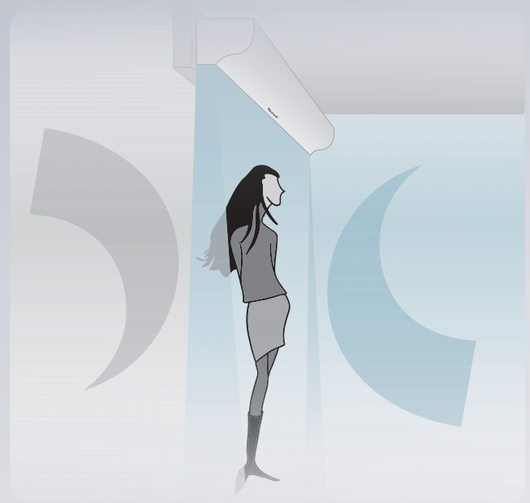
			FY-10ESPNAH	FY-10ELPNAH
Width			900	1.200
Watts	Hi	W	71,5	96
	Lo	W	61,5	74
Current	Hi	A	0,40	0,54
	Lo	A	0,29	0,35
Air speed	Hi	m/s	13,0	13,1
	Lo	m/s	11,1	11,0
Air volume	Hi	m^3/h	750	1.000
	Lo	m^3/h	630	830
Noise lever	Hi	dB(A)	46	46
	Lo	dB(A)	42	41
Weight		Kg	11	14

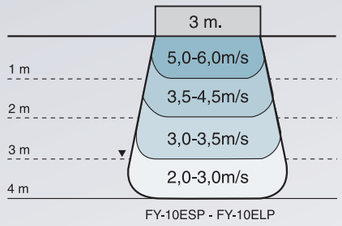
FY-10ESPNAH // FY-10ELPNAH

COMFORT
- Easy redirection of airflow by means of the manual deflector

EASE OF USE
- Speed selector (high and low) on the unit itself

EASY INSTALLATION AND MAINTENANCE
- Simple installation
- Its compact dimensions improve installation and positioning in any space

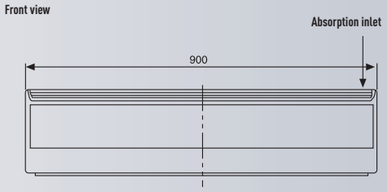




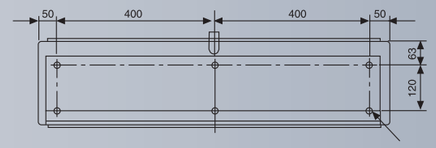
▼ Effectiveness of air

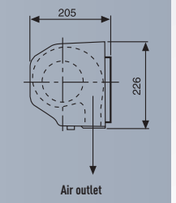
INDOOR UNIT DIMENSIONS FY-10ESPNAH

Front view



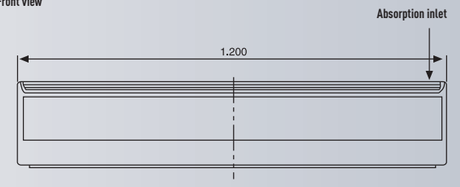
Back view



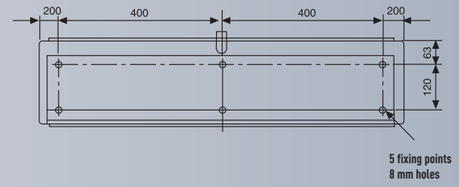


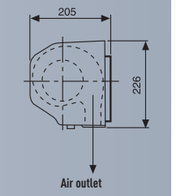
INDOOR UNIT DIMENSIONS FY-10ELPNAH

Front view



Back view





Contact Details:
E-mail: aircon.info@panasonic.co.uk
Telephone: 01344 853182
www.panasonic.co.uk

Address: Panasonic Air Conditioning
Panasonic House
Willoughby Road
Bracknell
Berkshire
RG12 8FP

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