Service Manual Air Conditioner



Indoor Unit CS-MZ5SKE CS-MZ5SKE-M

Destination
Europe
Turkey
L.America
Croatia

Please file and use this manual together with the service manual for Model No. CU-2E12SBE CU-2E15SBE CU-2E18SBE CU-3E23SBE, Order No. PAPAMY1601015CE, CU-3E18PBE CU-4E23PBE, Order No. PAPAMY1301048CE and CU-4E27PBE CU-5E34PBE, Order No. PAPAMY1303046CE.

MARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE :

There are special components used in this equipment which are important for safety. These parts are marked by \triangle in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

PRECAUTION OF LOW TEMPERATURE

In order to avoid frostbite, be assured of no refrigerant leakage during the installation or repairing of refrigerant circuit.

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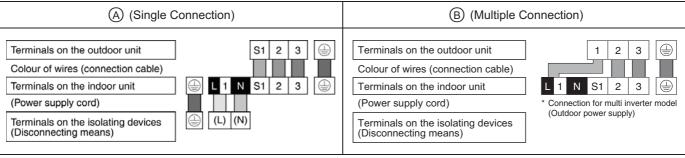
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A CAUTION

Before performing any of the electrical installation works, please verify on which of the intended connection use. Generally there are 2 types of indoor-outdoor connections:

- A Single Connection (Single Indoor Unit connects with Single Outdoor Unit)
- B Multiple Connection (Multiple Indoor Unit connect with Single Outdoor Unit)

Both connections have different connecting methods. Any mismatch connections will result in malfunctions. The following illustration demonstrates the correct electrical works for both type.



Please refer to the provided Installation Instructions for the detailed procedures for connecting cables to Indoor Unit.

1. Safety Precautions

- Read the following "SAFETY PRECAUTIONS" carefully before installation.
- Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and main circuit for the model to be installed.
- The caution items stated here must be followed because these important contents are related to safety. The meaning of each indication used is as below. Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.

⚠ WARNING	This indication shows the possibility of causing death or serious injury.
⚠ CAUTION	This indication shows the possibility of causing injury or damage to properties only.

• The items to be followed are classified by the symbols:

\Diamond	Symbol with white background denotes item that is PROHIBITED.
0 0	Symbol with dark background denotes item that must be carried out.

- Carry out test run to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.
- This appliance is not intended for accessibility by the general public.

	⚠ WARNING	
1.	Do not install outdoor unit near handrail of veranda. When installing air-conditioner unit on veranda of a high rise building, child may climb up to outdoor unit and cross over the handrail causing an accident.	\Diamond
2.	Do not use unspecified cord, modified cord, joint cord or extension cord for power supply cord. Do not share the single outlet with other electrical appliances. Poor contact, poor insulation or over current will cause electrical shock or fire.	\Diamond
3.	Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.	\Diamond
4.	Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury.	\Diamond
5.	Do not sit or step on the unit, you may fall down accidentally.	\Diamond
6.	Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.	\Diamond
7.	When installing or relocating air conditioner, do not let any substance other than the specified refrigerant, eg. air etc mix into refrigeration cycle (piping). Mixing of air etc. will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.	\Diamond
8.	Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.	\Diamond
9.	 For R410A model, use piping, flare nut and tools which is specified for R410A refrigerant. Using of existing (R22) piping, flare nut and tools may cause abnormally high pressure in the refrigerant cycle (piping), and possibly result in explosion and injury. Thickness for copper pipes used with R410A must be more than 0.8 mm. Never use copper pipes thinner than 0.8 mm. It is desirable that the amount of residual oil less than 40 mg/10 m. 	0
10.	Engage authorized dealer or specialist for installation. If installation done by the user is incorrect, it will cause water leakage, electrical shock or fire.	0
11.	Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.	0
12.	Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fall, water leakage, fire or electrical shock.	0
13.	Install at a strong and firm location which is able to withstand weight of the set. If the strength is not enough or installation is not properly done, the set will drop and cause injury.	0
14.	For electrical work, follow the local national wiring standard, regulation and this installation instruction. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock or fire.	0
15.	Do not use joint cable for indoor / outdoor connection cable. Use the specified indoor/outdoor connection cable, refer to instruction CONNECT THE CABLE TO THE INDOOR UNIT and connect tightly for indoor/outdoor connection. Clamp the cable so that no external force will have impact on the terminal. If connection or fixing is not perfect, it will cause heat up or fire at the connection.	0
16.	Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause fire or electrical shock.	0
17.	This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.	0

	⚠ WARNING	
18.	During installation, install the refrigerant piping properly before running the compressor. Operation of compressor without fixing refrigeration piping and valves at opened condition will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.	0
19.	During pump down operation, stop the compressor before remove the refrigeration piping. Removal of refrigeration piping while compressor is operating and valves are opened will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.	•
20.	Tighten the flare nut with torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause refrigerant gas leakage.	•
21.	After completion of installation, confirm there is no leakage of refrigerant gas. It may generate toxic gas when the refrigerant contacts with fire.	0
22.	Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant contacts with fire.	•
23.	This equipment must be properly earthed. Earth line must not be connected to gas pipe, water pipe, earth of lightning rod and telephone. Otherwise, it may cause electrical shock in case of equipment breakdown or insulation breakdown.	•

	⚠ CAUTION	
1.	Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.	\Diamond
2.	Do not release refrigerant during piping work for installation, re-installation and during repairing a refrigeration parts. Take care of the liquid refrigerant, it may cause frostbite.	\Diamond
3.	Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.	\Diamond
4.	Do not touch the sharp aluminium fin, sharp parts may cause injury.	\Diamond
5.	Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.	0
6.	Select an installation location which is easy for maintenance.	0
7.	Installation work. It may need two people to carry out the installation work.	0

2. Specifications

		Model		Indoor		CS-MZ5SKE			CS-MZ5SKE-M			
Performance Test Cond			nce Test Con	dition		EUROVENT			EUROVENT			
Power Supply				Phase, Hz		Single, 50			Single, 50			
			ply	V		230		230				
					Min.	Mid.	Max.	Min.	Mid.	Max.		
			kW	1.30	1.60	2.30	1.30	1.60	2.30			
	Capacity		BTU/h	4430	5460	7840	4430	5460	7840			
	Rı	ınning C	urrent	А	_	2.00	_	-	2.00	_		
ing		Input Po	wer	W	250	400	640	250	400	640		
Cooling	Annı	ual Cons	umption	kWh	_	200	_	-	200	_		
		EER		W/W	3.59	4.00	5.20	3.59	4.00	5.20		
				dB-A		38 / 26 / 21			38 / 26 / 21	•		
	Indoor	Noise (H	I / L / QLo)	Power Level dB		54 / –			54 / –			
				kW	1.20	2.60	3.20	1.20	2.60	3.20		
		Capaci	ity	BTU/h	4090	8870	10900	4090	8870	10900		
g	Rı	ınning C	urrent	А	_	3.00	_	-	3.00	_		
Heating		Input Po	wer	W	300	600	960	300	600	960		
ヹ゠		COP		W/W	4.00	4.33	3.33	4.00	4.33	3.33		
	Indoor	Naisa /I	1/1 / () (a)	dB-A		39 / 27 / 21		39 / 27 / 21				
	muoor	ivoise (F	I / L / QLo)	Power Level dB		55 / —		55 / —				
	Туре				(Cross-Flow Fan		Cross-Flow Fan				
	Material				ASG20K1			ASG20K1				
	Motor Type			DC /	Transistor (8-po	oles)	DC / Transistor (8-poles)					
	Input Power		W	44.9			44.9					
	Output Power		W		40		40					
		QLo Cool		rpm	610			600				
Fan			Heat	rpm		610		610				
Indoor Fan		Lo	Cool	rpm		700			700			
Ĕ			Heat	rpm		800			800			
	Speed	Me	Cool	rpm		865			865			
			Heat	rpm		955		955				
		Hi	Cool	rpm		1030 1110			1030 1110			
			Heat Cool	rpm rpm		1060			1060			
		SHi	Heat	rpm		1140			1140			
	Mois	ture Rem		L/h		1.0			1.0			
	WOO	are rem	Cool	m³/min (ft³/min)		5.06 (178)			5.06 (178)			
		QLo	Heat	m³/min (ft³/min)		5.08 (179)			5.08 (179)			
			Cool	m³/min (ft³/min)		6.03 (213)			6.03 (213)			
		Lo	Heat	m³/min (ft³/min)		7.14 (252)			7.14 (252)			
	ndoor		Cool	m³/min (ft³/min)		7.81 (276)			7.81 (276)			
	ndoor Airflow	Me	Heat	m³/min (ft³/min)		8.82 (311)			8.82 (311)			
			Cool	m³/min (ft³/min)		9.6 (340)			9.6 (340)			
		Hi	Heat	m³/min (ft³/min)		10.5 (370)			10.5 (370)			
			Cool	m³/min (ft³/min)		9.92 (350)			9.92 (350)			
		SHi	Heat	m³/min (ft³/min)		10.82 (382)			10.82 (382)			
			i iout	/ (10 /111111)		10.02 (002)			10.02 (002)			

Model		Indoor	CS-MZ	5SKE	CS-MZ5	SKE-M	
	Height (I/D)	mm (inch)	295 (11	1-5/8)	295 (11	1-5/8)	
Dimension	Width (I/D)	mm (inch)	919 (36	-3/16)	919 (36	-3/16)	
	Depth (I/D)	mm (inch)	194 (7-2	21/32)	194 (7-2	21/32)	
Weight	Net (I/D)	kg (lb)	9 (2	0)	9 (2	0)	
Piping	Pipe Diameter (Liquid / Gas)	mm (inch)) 6.35 (1/4) / 9.52 (3/8)		6.35 (1/4) /	9.52 (3/8)	
Drain Hose	Inner Diameter	mm	16.	7	16.	7	
Dialii nose	Length	mm	650	0	650		
	Fin Material		Aluminium (Pre Coat)	Aluminium (Pre Coat)	
Indoor Heat	Fin Type		Slit F	in	Slit Fin		
Exchanger	Row × Stage × FPI		2 × 15	× 21	2 × 15 × 21		
	Size (W × H × L)	mm	610 × 315	5 × 25.4	610 × 315 × 25.4		
A : - E:11	Material		Polyprop	pelene	Polyprop	pelene	
Air Filter	Туре		One-to	ouch	One-to	ouch	
	0 "	Maximum °C	32	23	32	23	
Indoor	Cooling	Minimum °C	16	11	16	11	
Operation Range	Harden.	Maximum °C	30	_	30	_	
	Heating	Minimum °C	16	-	16	-	

Cooling capacities are based on indoor temperature of 27°C Dry Bulb (80.6°F Dry Bulb), 19.0°C Wet Bulb (66.2°F Wet Bulb) and outdoor air temperature of 35°C DRY BULB (95°F Dry Bulb), 24°C Wet Bulb (75.2°F Wet Bulb)

Heating capacities are based on indoor temperature of 20°C Dry Bulb (68°F Dry Bulb) and outdoor air temperature of 7°C Dry Bulb (44.6°F)

- Heating low temperature capacity, Input Power and COP measured at 230 V, indoor temperature 20°C, outdoor 2/1°C Heating extreme low temperature capacity, Input Power and COP measured at 230 V, indoor temperature 20°C, outdoor -7/-8°C Standby power consumption ≤10.0w (when switched OFF by remote control, except under self protection control).

- Specifications are subjected to change without prior notice for further improvement.

Dry Bulb), 6°C Wet Bulb (42.8°F Wet Bulb)

• Multi Split Combination Possibility:

- A single outdoor unit enables air conditioning of up to two separate rooms for CU-2E12SBE, CU-2E15SBE, CU-2E18SBE.
- A single outdoor unit enables air conditioning of up to three separate rooms for CU-3E23SBE.

	CONNECTABLE INDOOR UNIT		CU-2E12SBE		CU-2E15SBE		CU-2E18SBE		CU-3E23SBE		
	ROOM		А	В	А	В	Α	В	Α	В	С
	1.6kW	CS-MZ5SKE CS-MZ5SKE-M	•	•	•	•	•	•	•	•	•
	2.0kW	CS-Z7SKEW CS-E7SKEW CS-XE7SKEW CS-Z7SKEW-M CS-XZ7SKEW CS-E7SKEW-M	•	•	•	•	•	•	•	•	•
	2.5kW	CS-Z9SKEW CS-E9SKEW CS-XE9SKEW CS-XZ9SKEW CS-Z9SKEW-M CS-E9SKEW-M	•	•	•	•	•	•	•	•	•
Wall	3.2kW	CS-Z12SKEW CS-E12SKEW CS-XE12SKEW CS-XZ12SKEW CS-Z12SKEW-M CS-E12SKEW-M	-	-	_	_	•	•	•	•	•
	4.0kW	CS-Z15SKEW CS-E15SKEW CS-Z15SKEW-M CS-E15SKEW-M	-	-	-	-	-	-	-	•	•
	5.0kW	CS-Z18SKEW CS-E18SKEW CS-XE18SKEW CS-XZ18SKEW CS-Z18SKEW-M CS-E18SKEW-M	-	ı	_	_	_	-	-	•	•
С	apacity rang	e of connectable units	From 3.2kV	V to 5.6kW	From 3.2k\	N to 5.6kW	From 3.2k\	W to 7.5kW	From	4.8kW to 1	0.0kW
	1 room maximum pipe length (m)		2			.0		20		25	
th		able elevation (m)	1			0		0		15	
leng	Total allowable pipe length (m)		3	0	3	0	3	30		60	
Pipe	Total allowable pipe length (m) Total pipe length for maximum chargeless length (m)		2	0	20		20		30		
		nal gas amount over eless length (g/m)	1	5	1	5	15		20		

Note: "●" : Available

Remarks for CU-2E12SBE / CU-2E15SBE / CU-2E18SBE

- 1. At least two indoor units must be connected.
- 2. The total nominal cooling capacity of indoor unit that will be connected to outdoor unit must be within connectable capacity range of indoor unit. (as shown in the table above)
 - Example: The indoor units' combination below is possible to connect to CU-2E15SBE. (Total nominal capacity of indoor units is between 3.2kW to 5.6kW)
 - 1) Two CS-Z7SKEW only. (Total nominal cooling capacity is 4.0kW)
 - 2) One CS-Z7SKEW and one CS-Z9SKEW. (Total nominal cooling capacity is 4.5kW)

Remarks for CU-3E23SBE

- 1. At least two indoor units must be connected.
- The total nominal cooling capacity of indoor unit that will be connected to outdoor unit must be within connectable capacity range of indoor unit. (as shown in the table above)
 - Example: The indoor units' combination below is possible to connect to CU-3E23SBE. (Total nominal capacity of indoor units is between 4.8kW to 10.0kW)
 - 1) Two CS-Z9SKEW only. (Total nominal cooling capacity is 5.0kW)
 - 2) Three CS-Z12SKEW. (Total nominal cooling capacity is 9.6kW)

• Multi Split Combination Possibility:

- A single outdoor unit enables air conditioning of up to four separate rooms for CU-4E23PBE, CU-4E27PBE.
- A single outdoor unit enables air conditioning of up to five separate rooms for CU-5E34PBE.

	CONNECTABLE INDOOR UNIT			CU-4E	23PBE			CU-4E	27PBE			CU-5E34PBE				
		ROOM	Α	В	С	D	Α	В	С	D	Α	В	С	D	Е	
	1.6kW	CS-MZ5SKE CS-MZ5SKE-M	•	•	•	•	•	•	•	•	•	•	•	•	•	
	2.0kW	CS-Z7SKEW CS-E7SKEW CS-XE7SKEW CS-Z7SKEW-M CS-XZ7SKEW CS-E7SKEW-M	•	•	•	•	•	•	•	•	•	•	•	•	•	
	2.5kW	CS-Z9SKEW CS-E9SKEW CS-XE9SKEW CS-XZ9SKEW CS-Z9SKEW-M CS-E9SKEW-M	•	•	•	•	•	•	•	•	•	•	•	•	•	
Wall	3.2kW	CS-Z12SKEW CS-E12SKEW CS-XE12SKEW CS-XZ12SKEW CS-Z12SKEW-M CS-E12SKEW-M	_	•	•	•	•	•	•	•	•	•	•	•	•	
	4.0kW	CS-Z15SKEW CS-E15SKEW CS-Z15SKEW-M CS-E15SKEW-M	_	-	•	•	_	•	•	•	_	•	•	•	•	
	5.0kW	CS-Z18SKEW CS-E18SKEW CS-XE18SKEW CS-XZ18SKEW CS-Z18SKEW-M CS-E18SKEW-M	-	-	•	•	_	-	•	•	-	_	•	•	•	
C	apacity ran	ge of connectable units	Fro	m 4.8kV	V to 11.0)kW	Fro	m 4.8kV	V to 13.6	6kW		From 4	.8kW to	17.5kW		
	1 room m	naximum pipe length (m)		2	25		25				25					
بج	Allo	wable elevation (m)		1	5			1	5				15			
engt	Total all	owable pipe length (m)		7	0			7	70				80			
Pipe length		pe length for maximum argeless length (m)		4	0		45			45						
		onal gas amount over geless length (g/m)		2	20			2	20				20	" " A		

Note: "●" : Available

Remarks for CU-4E23PBE / CU-4E27PBE / CU-5E34PBE

- At least two indoor units must be connected.
- 2. The total nominal cooling capacity of indoor unit that will be connected to outdoor unit must be within connectable capacity range of indoor unit. (as shown in the table above)
 - Example: The indoor units' combination below is possible to connect to CU-4E27PBE. (Total nominal capacity of indoor units is between 4.5kW to 13.6kW)
 - 1) Two CS-Z9SKEW only. (Total nominal cooling capacity is 5.0kW)
 - 2) Three CS-Z12SKEW. (Total nominal cooling capacity is 9.6kW)

Indoor Unit: CS-MZ5SKE / CS-MZ5SKE-M

Outdoor Unit: CU-2E12SBE

2Rc	oom	1Room					
Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)				
1.6+1.6	3.2	1.6	1.6				
1.6+2.0	3.6	2.0	2.0				
1.6+2.5	4.1	2.5	2.5				
1.6+2.8	4.4	2.8	2.8				
1.6+3.2	4.8	3.2	3.2				
2.0+2.0	4.0						
2.0+2.5	4.5						
2.0+2.8	4.8						
2.0+3.2	5.2						
2.5+2.5	5.0						
2.5+2.8	5.3						
2.5+3.2	5.7						
2.8+2.8	5.6						

Indoor Unit: CS-MZ5SKE / CS-MZ5SKE-M

Outdoor Unit : CU-2E15SBE

2Rc	oom	1Room				
Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)			
1.6+1.6	3.2	1.6	1.6			
1.6+2.0	3.6	2.0	2.0			
1.6+2.5	4.1	2.5	2.5			
1.6+2.8	4.4	2.8	2.8			
1.6+3.2	4.8	3.2	3.2			
2.0+2.0	4.0					
2.0+2.5	4.5					
2.0+2.8	4.8					
2.0+3.2	5.2					
2.5+2.5	5.0					
2.5+2.8	5.3					

• Indoor Unit: CS-MZ5SKE / CS-MZ5SKE-M

• Outdoor Unit: CU-2E18SBE

2Re	oom	1Room					
Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)				
1.6+1.6	3.2	1.6	1.6				
1.6+2.0	3.6	2.0	2.0				
1.6+2.5	4.1	2.5	2.5				
1.6+2.8	4.4	2.8	2.8				
1.6+3.2	4.8	3.2	3.2				
2.0+2.0	4.0						
2.0+2.5	4.5						
2.0+2.8	4.8						
2.0+3.2	5.2						
2.5+2.5	5.0						
2.5+2.8	5.3						
2.5+3.2	5.7						
2.8+2.8	5.6						
2.8+3.2	6.0						
3.2+3.2	6.4						

- Cooling capacities are based on indoor temperature of 27°C DRY BULB, 19°C WET BULB and outdoor air temperature of 35°C DRY BULB, 24°C WET BULB.
- Specifications are subject to change without notice for further improvement.

• Indoor Unit: CS-MZ5SKE / CS-MZ5SKE-M

• Outdoor Unit: CU-3E18SBE

3Room		2Room		1Room	
Indoor Unit	Total Indoor	Indoor Unit	Total Indoor	Indoor Unit	Total Indoor
Capacity (kW)					
1.6+1.6+1.6	4.8	1.6+3.2	4.8	1.6	1.6
1.6+1.6+2.0	5.2	1.6+4.0	5.6	2.0	2.0
1.6+1.6+2.5	5.7	1.6+5.0	6.6	2.5	2.5
1.6+1.6+2.8	6.0	2.0+2.5	4.5	2.8	2.8
1.6+1.6+3.2	6.4	2.0+2.8	4.8	3.2	3.2
1.6+1.6+4.0	7.2	2.0+3.2	5.2	4.0	4.0
1.6+1.6+5.0	8.2	2.0+4.0	6.0	5.0	5.0
1.6+2.0+2.0	5.6	2.0+5.0	7.0		
1.6+2.0+2.5	6.1	2.5+2.5	5.0		
1.6+2.0+2.8	6.4	2.5+2.8	5.3		
1.6+2.0+3.2	6.8	2.5+3.2	5.7		
1.6+2.0+4.0	7.6	2.5+4.0	6.5		
1.6+2.0+5.0	8.6	2.5+5.0	7.5		
1.6+2.5+2.5	6.6	2.8+2.8	5.6		
1.6+2.5+2.8	6.9	2.8+3.2	6.0		
1.6+2.5+3.2	7.3	2.8+4.0	6.8		
1.6+2.5+4.0	8.1	2.8+5.0	7.8		
1.6+2.8+2.8	7.2	3.2+3.2	6.4		
1.6+2.8+3.2	7.6	3.2+4.0	7.2		
1.6+2.8+4.0	8.4	3.2+5.0	8.2		
1.6+3.2+3.2	8.0	4.0+4.0	8.0		
1.6+3.2+4.0	8.8	4.0+5.0	9.0		
2.0+2.0+2.0	6.0				
2.0+2.0+2.5	6.5				
2.0+2.0+2.8	6.8				
2.0+2.0+3.2	7.2				
2.0+2.0+4.0	8.0				
2.0+2.0+5.0	9.0				
2.0+2.5+2.5	7.0				
2.0+2.5+2.8	7.3				
2.0+2.5+3.2	7.7				
2.0+2.5+4.0	8.5				
2.0+2.8+2.8	7.6				
2.0+2.8+3.2	8.0				
2.0+2.8+4.0	8.8				
2.0+3.2+3.2	8.4				
2.5+2.5+2.5	7.5				
2.5+2.5+2.8	7.8				
2.5+2.5+3.2	8.2				
2.5+2.5+4.0	9.0				
2.5+2.8+2.8	8.1				
2.5+2.8+3.2	8.5				
2.5+3.2+3.2	8.9				
2.8+2.8+2.8	8.4				
2.8+2.8+3.2	8.8				

- Cooling capacities are based on indoor temperature of 27°C DRY BULB, 19°C WET BULB and outdoor air temperature of 35°C DRY BULB, 24°C WET BULB.
- Specifications are subject to change without notice for further improvement.

• Indoor Unit: CS-MZ5SKE / CS-MZ5SKE-M

• Outdoor Unit : CU-3E23SBE

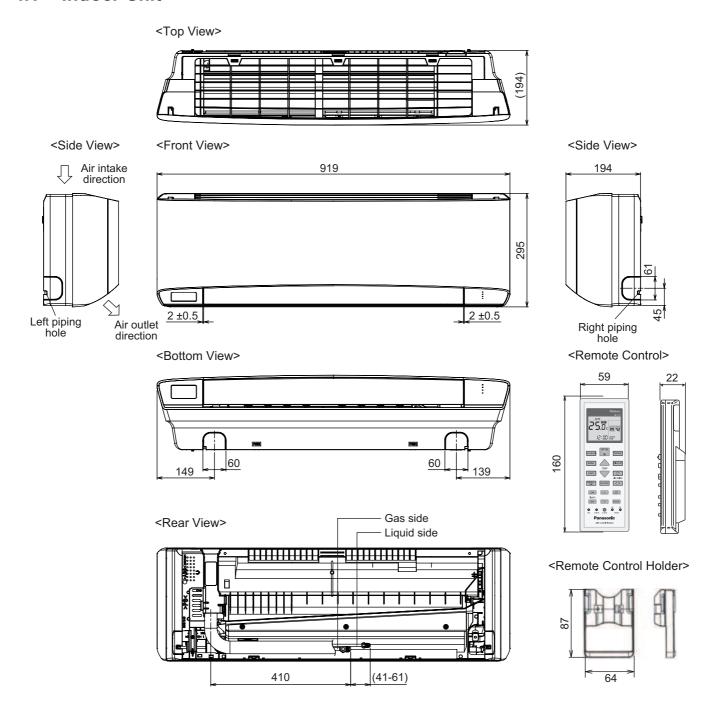
3Room		2Room		1Room	
Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)
1.6+1.6+1.6 1.6+1.6+2.0	4.8 5.2	1.6+3.2 1.6+4.0	4.8 5.6	1.6 2.0	1.6 2.0
1.6+1.6+2.5	5.2 5.7	1.6+5.0	6.6	2.0	2.0
1.6+1.6+2.8	6.0	1.6+6.0	7.6	2.8	2.8
1.6+1.6+3.2	6.4	2.0+2.5	4.5	3.2	3.2
1.6+1.6+4.0	7.2	2.0+2.8	4.8	4.0	4.0
1.6+1.6+5.0	8.2	2.0+3.2	5.2	5.0	5.0
1.6+1.6+6.0 1.6+2.0+2.0	9.2 5.6	2.0+4.0 2.0+5.0	6.0 7.0	6.0	6.0
1.6+2.0+2.5	6.1	2.0+6.0	8.0		
1.6+2.0+2.8	6.4	2.5+2.5	5.0		
1.6+2.0+3.2	6.8	2.5+2.8	5.3		
1.6+2.0+4.0	7.6	2.5+3.2	5.7		
1.6+2.0+5.0 1.6+2.0+6.0	8.6 9.6	2.5+4.0 2.5+5.0	6.5 7.5		
1.6+2.5+2.5	6.6	2.5+6.0	8.5		
1.6+2.5+2.8	6.9	2.8+2.8	5.6		
1.6+2.5+3.2	7.3	2.8+3.2	6.0		
1.6+2.5+4.0	8.1	2.8+4.0	6.8		
1.6+2.5+5.0 1.6+2.5+6.0	9.1 10.1	2.8+5.0 2.8+6.0	7.8 8.8	1	
1.6+2.5+6.0	7.2	3.2+3.2	6.4		
1.6+2.8+3.2	7.6	3.2+4.0	7.2		
1.6+2.8+4.0	8.4	3.2+5.0	8.2		
1.6+2.8+5.0	9.4	3.2+6.0	9.2		
1.6+2.8+6.0	10.4	4.0+4.0	8.0		
1.6+3.2+3.2 1.6+3.2+4.0	8.0 8.8	4.0+5.0 4.0+6.0	9.0 10.0		
1.6+3.2+5.0	9.8	5.0+5.0	10.0		
1.6+3.2+6.0	10.8	5.0+6.0	11.0		
1.6+4.0+4.0	9.6				
1.6+4.0+5.0	10.6				
2.0+2.0+2.0 2.0+2.0+2.5	6.0 6.5				
2.0+2.0+2.8	6.8				
2.0+2.0+3.2	7.2				
2.0+2.0+4.0	8.0				
2.0+2.0+5.0	9.0				
2.0+2.0+6.0 2.0+2.5+2.5	10.0 7.0				
2.0+2.5+2.8	7.3				
2.0+2.5+3.2	7.7				
2.0+2.5+4.0	8.5				
2.0+2.5+5.0	9.5				
2.0+2.5+6.0 2.0+2.8+2.8	10.5 7.6				
2.0+2.8+3.2	8.0				
2.0+2.8+4.0	8.8				
2.0+2.8+5.0	9.8				
2.0+2.8+6.0	10.8			-	
2.0+3.2+3.2 2.0+3.2+4.0	8.4 9.2				
2.0+3.2+5.0	10.2				
2.0+4.0+4.0	10.0				
2.0+4.0+5.0	11.0				
2.5+2.5+2.5	7.5				
2.5+2.5+2.8 2.5+2.5+3.2	7.8 8.2			1	
2.5+2.5+3.2	9.0				
2.5+2.5+5.0	10.0				
2.5+2.5+6.0	11.0				
2.5+2.8+2.8	8.1				
2.5+2.8+3.2	8.5			1	
2.5+2.8+4.0 2.5+2.8+5.0	9.3 10.3			1	
2.5+3.2+3.2	8.9				
2.5+3.2+4.0	9.7				
2.5+3.2+5.0	10.7				
2.5+4.0+4.0	10.5				
2.8+2.8+2.8	8.4		L		

3Room		2Room		1Room	
Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)	Indoor Unit Capacity (kW)	Total Indoor Capacity (kW)
2.8+2.8+3.2	8.8				
2.8+2.8+4.0	9.6				
2.8+2.8+5.0	10.6				
2.8+3.2+3.2	9.2				
2.8+3.2+4.0	10.0				
2.8+3.2+5.0	11.0				
2.8+4.0+4.0	10.8				
3.2+3.2+3.2	9.6				
3.2+3.2+4.0	10.4				

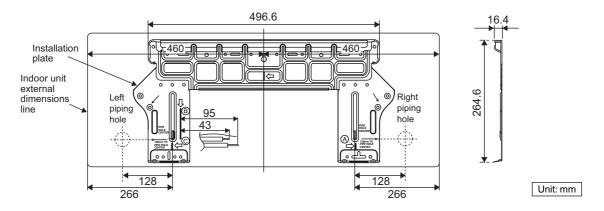
- Cooling capacities are based on indoor temperature of 27°C DRY BULB, 19°C WET BULB and outdoor air temperature of 35°C DRY BULB, 24°C WET BULB.
- Specifications are subject to change without notice for further improvement.

4. Dimensions

4.1 Indoor Unit



Relative position between the indoor unit and the installation plate <Front View>



5. Wiring Connection Diagram

5.1 Indoor Unit

