

TECHNICAL SUBMITTAL SHEET

Submittal Ref No: M002
 Project No: Olwen House, 8-20 Loman Street London
 Project Reference: C10422
 Date: 01/11/2018

Technical submittal (specific details and technical literature) attached Air Conditioning DX (VRF) units to floors Ground, 1 st & 2 nd Manufacturer: Mitsubishi Indoor Unit Model Range: PEFY-P63VMA-E2 Ducted Size: 250H x 1100W x 732D Weight: 31kg Outdoor Unit Model Range: PURY-P450 & P500 Size: PURY-P450 1858H x 1240W x 740D Size: PURY-P500 1858H x 1750W x 740D Weight: PURY-P450 293kg / PURY-P500 337kg Controllers: AT-50			
Date answer required: 12/11/2018		Date answer received:	
PARKERAY – Review/Comments			
Distribution for response:		Copies of answer to: Vince Mann	
Consultant Response (Status)			
Name	Signature	Company	Date

Status A: Accepted
 Status B: Accepted subject to comments/Amendments
 Status C: Rejected/Resubmit

**Project No.
AVEAT / PARKERAY
OLWEN HOUSE**

25/10/2018



MITSUBISHI ELECTRIC CORPORATION -

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[illegible]

Centralized Ctrl Sys1

>System Configuration

> Outdoor unit / Indoor unit / Controller

Refrigerant system	Outdoor unit			Room	Indoor unit			Controller		Group name	
	Ref.	Model name			Ref.	Model name	Add.	Model name	Add.		
		Add.									
System 1- GROUND FLOOR		PURY-P450YNW-A				PEFY-P63VMA-E2	001			1	
		51				PEFY-P63VMA-E2	002			2	
		CMB-P1012V-JA				PEFY-P63VMA-E2	003			3	
		52				PEFY-P63VMA-E2	004			4	
							PEFY-P63VMA-E2	005			5
							PEFY-P63VMA-E2	006			6
							PEFY-P63VMA-E2	007			7
							PEFY-P63VMA-E2	008			8
System 2- FIRST FLOOR		PURY-P500YNW-A				PEFY-P63VMA-E2	010			9	
		60				PEFY-P63VMA-E2	011			10	
		CMB-P1012V-JA				PEFY-P63VMA-E2	012			11	
		61				PEFY-P63VMA-E2	013			12	
							PEFY-P63VMA-E2	014			13
							PEFY-P63VMA-E2	015			14
							PEFY-P63VMA-E2	016			15
							PEFY-P63VMA-E2	017			16
							PEFY-P63VMA-E2	018			17
System 3- SECOND FLOOR		PURY-P500YNW-A				PEFY-P63VMA-E2	019			18	
		69				PEFY-P63VMA-E2	020			19	

Centralized Ctrl Sys1

>System Configuration

> Outdoor unit / Indoor unit / Controller

Refrigerant system	Outdoor unit				Room	Indoor unit			Controller		Group name
	Ref.	Model name				Ref.	Model name	Add.	Model name	Add.	
		Add.									
System 3- SECOND FLOOR		CMB-P1012V-JA				PEFY-P63VMA-E2	021			20	
		70				PEFY-P63VMA-E2	022			21	
						PEFY-P63VMA-E2	023			22	
						PEFY-P63VMA-E2	024			23	
						PEFY-P63VMA-E2	025			24	
						PEFY-P63VMA-E2	026			25	
						PEFY-P63VMA-E2	027			26	

Centralized Ctrl Sys1

> Product information


>Controller

Model name	Product image*1	Qty	Description
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AT-50A		3	Advanced Touch Controller
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>Air conditioning unit specifications

1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2		
System 1- GROUND FLOOR	PURY- P450YNW-A		1		Rated	Corrected	Rated	Corrected	Rated	Corrected	
				Cooling	50.00	51.32	12.37	11.19	4.04	4.58	
				Heating	56.00	56.34	13.48	13.12	4.15	4.29	
				Conditions					Dimension(mm)		Net weight
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D		(kg)
				Cooling	35.0	-	-	-	1,858 (1,798 without legs) x 1,240 x 740		293
				Heating	7.0	6.0	87	-			


*1 The product image refers to a representative model. The actual product may differ from the image shown.

*2 Ability using in the COP calculation is corrected by capacity of connected indoor unit.


Centralized Ctrl Sys1

> Product information

2. BC controller

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
System 1-GROUND FLOOR	CMB-P1012V-JA		1		Rated	H X W X D	(kg)
				Cooling	0.180(220V)/0.211(230V)/0.236(240V)	246 x 1,135 x 639	56
				Heating	0.030(220V)/0.102(230V)/0.111(240V)		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Air flow rate	External static pressure
System 1-GROUND FLOOR	PEFY-P63VMA-E2		8		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	
				Cooling	7.10	6.42	5.50	5.00	0.07	13.5 - 16.0 - 19.0	*3	
				Heating	8.00	7.04			0.07			
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	23.0	16.3	50	250 x 1,100 x 732		31		
				Heating	20.0	-	-					

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
-	-		-	-

*1 The product image refers to a representative model. The actual product may differ from the image shown.
 *3 Please refer to the specification sheet in the "Product Features" section at the end.

Centralized Ctrl Sys1


> Product information

4. Branch/Header/Twinning kit


Sys.	Model name	Product image*1	Qty	Description
-	-		-	-

>Air conditioning unit specifications

1. Outdoor unit

Sys.	Model name	Product image*1	Qty	Capacity(kW)			Power input (kW)		COP (kW/kW)*2		
System 2- FIRST FLOOR	PURY- P500YNW-A		1		Rated	Corrected	Rated	Corrected	Rated	Corrected	
				Cooling	56.00	57.66	12.72	11.52	4.40	5.00	
				Heating	63.00	63.43	15.28	14.82	4.12	4.27	
				Conditions					Dimension(mm)		Net weight
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D	(kg)	
				Cooling	35.0	-	-	-	1,858 (1,798 without legs) x 1,750 x 740	337	
				Heating	7.0	6.0	87	-			

2. BC controller

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
System 2- FIRST FLOOR	CMB-P1012V- JA		1		Rated	H X W X D	(kg)
				Cooling	0.160(220V)/0.211(230V)/0.236(240V)	246 x 1,135 x 639	56
				Heating	0.090(220V)/0.102(230V)/0.114(240V)		


*1 The product image refers to a representative model. The actual product may differ from the image shown.

*2 Ability using in the COP calculation is corrected by capacity of connected indoor unit.

Centralized Ctrl Sys1

> Product information

3. Indoor unit


Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Air flow rate	External static pressure
System 2-FIRST FLOOR	PEFY-P63VMA-E2		9		Rated	Corrected	Rated	Corrected	Rated			
				Cooling	7.10	6.41	5.50	4.99	0.07	0.472280V5, 46230V5, 45284V1	13.5 - 16.0 - 19.0	*3
				Heating	8.00	7.05			0.07	0.472280V5, 46230V5, 45284V1		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	23.0	16.3	50	250 x 1,100 x 732		31		
				Heating	20.0	-	-					

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
-	-		-	-

>Air conditioning unit specifications

1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2		
System 3-SECOND FLOOR	PURY-P500YNW-A		1		Rated	Corrected	Rated	Corrected	Rated	Corrected	
				Cooling	56.00	57.66	12.72	11.52	4.40	5.00	
				Heating	63.00	63.43	15.28	14.82	4.12	4.27	
				Conditions					Dimension(mm)		Net weight
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D		(kg)
				Cooling	35.0	-	-	-	1,858 (1,798 without legs) x 1,750 x 740		337
				Heating	7.0	6.0	87	-			

*1 The product image refers to a representative model. The actual product may differ from the image shown.


*2 Ability using in the COP calculation is corrected by capacity of connected indoor unit.

*3 Please refer to the specification sheet in the "Product Features" section at the end.


Centralized Ctrl Sys1

> Product information

2. BC controller

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
System 3-SECOND FLOOR	CMB-P1012V-JA		1		Rated	H X W X D	(kg)
				Cooling	0.180(220V)/0.211(230V)/0.236(240V)	246 x 1,135 x 639	56
				Heating	0.090(220V)/0.102(230V)/0.114(240V)		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Air flow rate	External static pressure
System 3-SECOND FLOOR	PEFY-P63VMA-E2		9		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	
				Cooling	7.10	6.41	5.50	4.99	0.07	0.412(220V)/0.452(230V)/0.492(240V)	13.5 - 16.0 - 19.0	*3
				Heating	8.00	7.05			0.07	0.412(220V)/0.452(230V)/0.492(240V)		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	23.0	16.3	50	250 x 1,100 x 732		31		
				Heating	20.0	-	-					

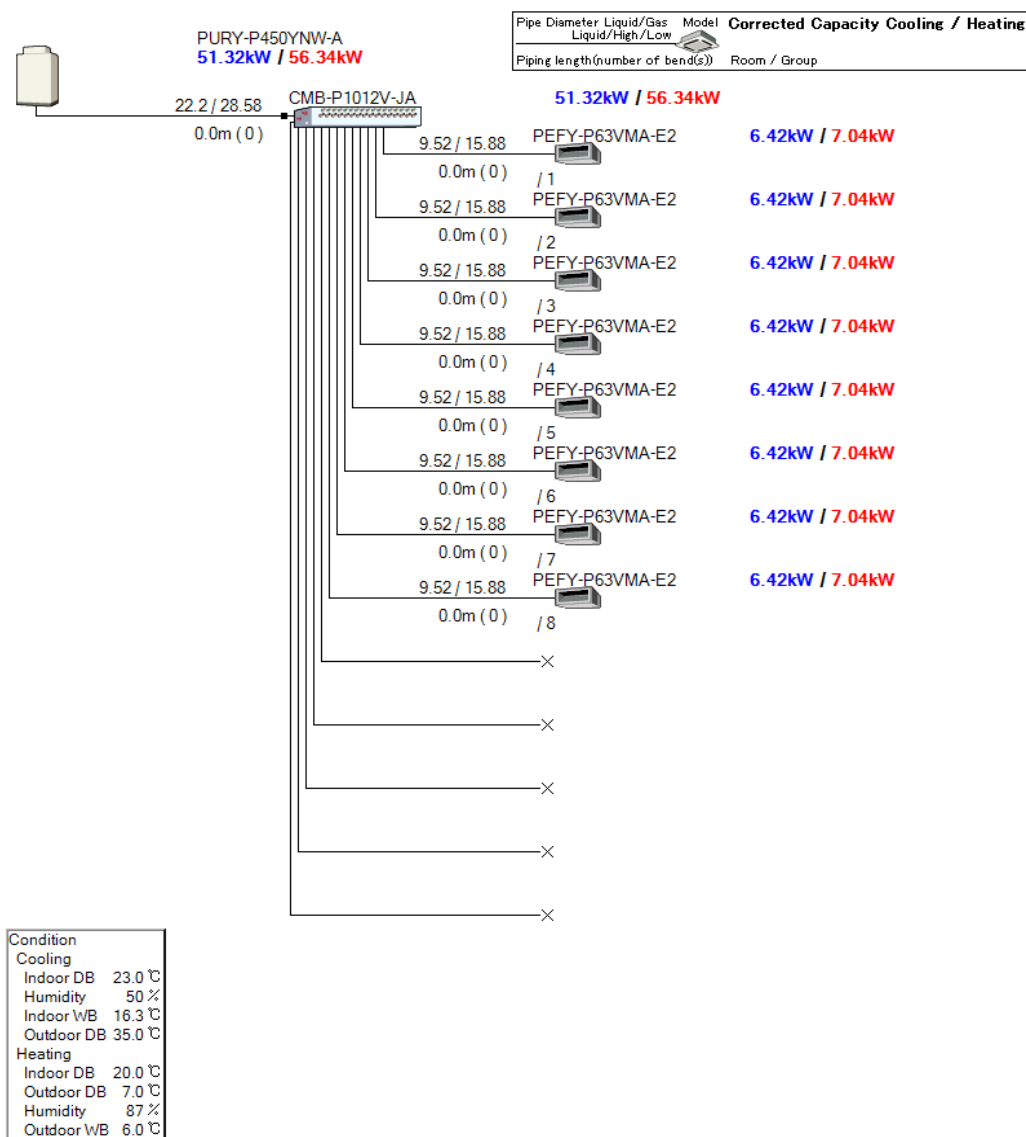
*1 The product image refers to a representative model. The actual product may differ from the image shown.

*3 Please refer to the specification sheet in the "Product Features" section at the end.

Centralized Ctrl Sys1 System 1- GROUND FLOOR

> Piping Design

1. Piping diagram



Centralized Ctrl Sys1 System 1- GROUND FLOOR

> Piping Design

2. Refrigerant Piping

	Liquid/High (mm)	Gas/Low(mm)	Low/Gas/Bypass/ Oil(mm)	Total length(m)	Number of bent
BC controller to Indoor unit	9.52	15.88		0	0
Outdoor Unit to BC controller	22.2	28.58		0	0

3. Summary totals (Refrigerant piping)

Pipe Size (mm)	Total length(m)	Number of bent
9.52	0	0
15.88	0	0
22.2	0	0
28.58	0	0

4. Refrigerant charge

Additional refrigerant required	R410A	X	8	kg
Total refrigerant amount	R410A	X	18.8	kg

5. Water flow rate (for WY/WR2/HCM(Water Cooled))

Flow rate(m3/h)	Pressure drop(kPa)
-	-

Centralized Ctrl Sys1 System 2- FIRST FLOOR

> Piping Design

2. Refrigerant Piping

	Liquid/High (mm)	Gas/Low(mm)	Low/Gas/Bypass/ Oil(mm)	Total length(m)	Number of bent
BC controller to Indoor unit	9.52	15.88		0	0
Outdoor Unit to BC controller	22.2	28.58		0	0

3. Summary totals (Refrigerant piping)

Pipe Size (mm)	Total length(m)	Number of bent
9.52	0	0
15.88	0	0
22.2	0	0
28.58	0	0

4. Refrigerant charge

Additional refrigerant required	R410A	X	8	kg
Total refrigerant amount	R410A	X	18.8	kg

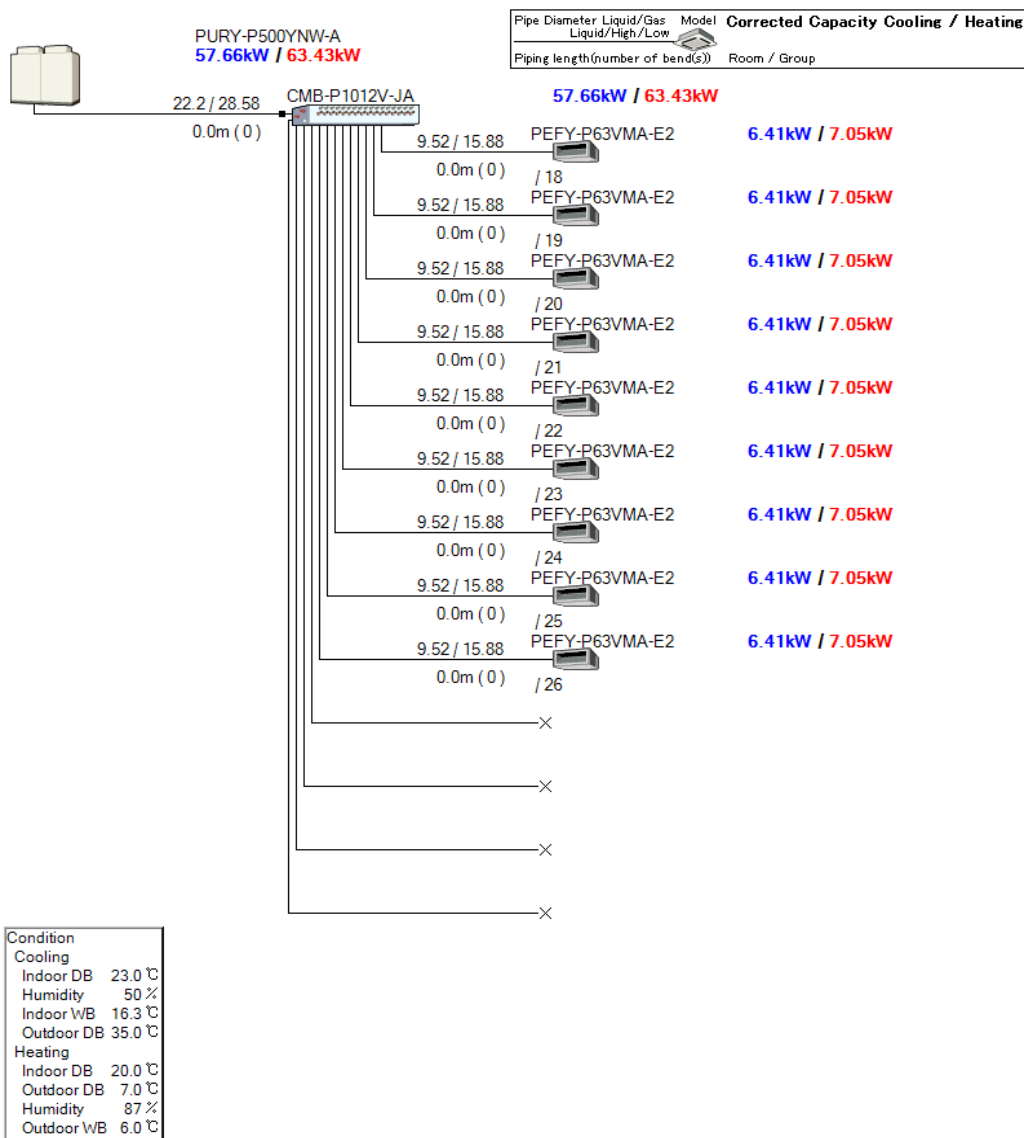
5. Water flow rate (for WY/WR2/HCM(Water Cooled))

Flow rate(m3/h)	Pressure drop(kPa)
-	-

Centralized Ctrl Sys1 System 3- SECOND FLOOR

> Piping Design

1. Piping diagram



Centralized Ctrl Sys1 System 3- SECOND FLOOR

> Piping Design

2. Refrigerant Piping

	Liquid/High (mm)	Gas/Low(mm)	Low/Gas/Bypass/ Oil(mm)	Total length(m)	Number of bent
BC controller to Indoor unit	9.52	15.88		0	0
Outdoor Unit to BC controller	22.2	28.58		0	0

3. Summary totals (Refrigerant piping)

Pipe Size (mm)	Total length(m)	Number of bent
9.52	0	0
15.88	0	0
22.2	0	0
28.58	0	0

4. Refrigerant charge

Additional refrigerant required	R410A	X	8	kg
Total refrigerant amount	R410A	X	18.8	kg

5. Water flow rate (for WY/WR2/HCM(Water Cooled))

Flow rate(m3/h)	Pressure drop(kPa)
-	-

Centralized Ctrl Sys1

> Electrical Wiring Information

[illegible]

*2 TB7 is used for centralized controller.

Centralized Ctrl Sys1

> Electrical Wiring Information

Sys.	8	x	PEFY-P63VMA-E2
System 1- GROUND FLOOR	Power supply info.		
	Power source:	1-phase 220/230/240V 50Hz	
	MCA(A):	2.08	
	Max.Fuse(A):	-	
	Connection:	TB2(L,N),ground	
	Power supply cable:	Metal conduit wire	
	size	1.5mm2 or thicker(main) *3	
		1.5mm2 or thicker(ground) *3	
		-	
		-	
Transmission info.			
Connection:	TB5(M1,M2,S)TB15(1,2) *4		
Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS		
size	1.25mm2 or thicker		

Sys.	1	x	PURY-P500YNW-A
System 2- FIRST FLOOR	Power supply info.		
	Power source:	3-phase 4-wire 380/400/415V	
	MCA(A):	43.2	
	Max.Fuse(A):	-	
	Connection:	TB1(L1,L2,L3,N),ground	
	supply cable:	Metal conduit wiring	
	size	10.0mm2 or thicker(main)	
		10.0mm2 or thicker(ground)	
		-	
		-	
Transmission info.			
Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2		
Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS		
size	1.25mm2 or thicker		

Sys.	1	x	CMB-P1012V-JA
System 2- FIRST FLOOR	Power supply info.		
	Power source:	1-phase 220/230/240V 50Hz	
	MCA(A):	1.24	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
		-	
Transmission info.			
Connection:	-		
Transmission cable:	-		
size	-		

Sys.	9	x	PEFY-P63VMA-E2
System 2- FIRST FLOOR	Power supply info.		
	Power source:	1-phase 220/230/240V 50Hz	
	MCA(A):	2.08	
	Max.Fuse(A):	-	
	Connection:	TB2(L,N),ground	
	Power supply cable:	Metal conduit wire	
	size	1.5mm2 or thicker(main) *3	
		1.5mm2 or thicker(ground) *3	
		-	
		-	
Transmission info.			
Connection:	TB5(M1,M2,S)TB15(1,2) *4		
Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS		
size	1.25mm2 or thicker		


*2 TB7 is used for centralized controller.


*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm² or thicker(16A or less), 2.5mm² or thicker(25A or less), 4.0mm² or thicker(32A or less)


*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.

Centralized Ctrl Sys1

> Electrical Wiring Information

Svs.	1	x	PURY-P500YNW-A
System 3-SECO ND FLOOR		Power supply info.	
		Power source:	3-phase 4-wire 380/400/415V 50Hz
		MCA(A):	43.2
		Max.Fuse(A):	-
		Connection:	TB1(L1,L2,L3,N),ground
		Power supply cable:	Metal conduit wiring
		size	10.0mm ² or thicker(main) 10.0mm ² or thicker(ground)
		-	-
		-	-
		-	-
		Transmission info.	
		Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2
		Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS
		-	-
		size	1.25mm ² or thicker

Svs.	1	x	CMB-P1012V-JA
System 3-SECO ND FLOOR		Power supply info.	
		Power source:	1-phase 220/230/240V 50Hz
		MCA(A):	1.24
		Max.Fuse(A):	-
		Connection:	-
		Power supply cable:	-
		size	-
		-	-
		-	-
		-	-
		Transmission info.	
		Connection:	-
		Transmission cable:	-
		-	-
		size	-

Svs.	9	x	PEFY-P63VMA-E2
System 3-SECO ND FLOOR		Power supply info.	
		Power source:	1-phase 220/230/240V 50Hz
		MCA(A):	2.08
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	Metal conduit wire
		size	1.5mm ² or thicker(main) *3 1.5mm ² or thicker(ground) *3
		-	-
		-	-
		-	-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS
		-	-
		-	-

*2 TB7 is used for centralized controller.

*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm² or thicker(16A or less), 2.5mm² or thicker(25A or less), 4.0mm² or thicker(32A or less)

*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.

Summary List

> Equipment list

1. Controller

Model name	Quantity
AT-50A	3

2. PI/AI/DIDO controller

Model name	Quantity
-	-

3. Outdoor unit

Model name	Quantity
PURY-P450YNW-A	1
PURY-P500YNW-A	2

4. BC controller

Model name	Quantity
CMB-P1012V-JA	3

5. Indoor unit

Model name	Quantity
PEFY-P63VMA-E2	26

6. Branch/Header/Twinning kit

Model name	Quantity
-	-

7. Lossnay

Model name	Quantity

8. HUB (Field supply)

Model name	Quantity
-	-

Summary List

> Equipment list

9. Air volume controller (Field supply)

Model name	Quantity
-	-

10. Twinning pipe (Field supply)

Model name	Quantity
-	-

Summary List

> Field providing list

1. Refrigerant Piping Materials

Pipe Size(mm)	Total length(m)	Number of bent
9.52	0	0
15.88	0	0
22.2	0	0
28.58	0	0

2. Refrigerant charge

Additional refrigerant required	R410A	X	24	kg
Total refrigerant amount	R410A	X	56.4	kg
Additional refrigerant required	R32	X	0	kg
Total refrigerant amount	R32	X	0	kg

3. Electrical cables

Power supply cable size	Cable type	Usage
1.5mm ² or thicker	Metal conduit wire *1 *2 *3	Lossnay power supply cable (main and ground wire)
1.5mm ² or thicker *4	Metal conduit wire *1 *2 *3	Indoor unit power supply cable (main and ground wire)
10.0mm ² or thicker	Metal conduit wiring	Outdoor unit power supply cable (main and ground)
Transmission cable size	Cable type	Usage
0.3mm ²	Sheathed 2-core cable (unshielded)	MA remote controller transmission cable
1.25-2mm ² or thicker	Shielding wire (2-core) CVVS or CPEVS	Centralized control transmission cable
1.25mm ² or thicker	Shielding wire (2-core) CVVS, CPEVS or MVVS	Indoor/outdoor transmission cable

*1 The wire size is the minimum value for metal conduit wiring. If the voltage drops, use a wire that is one rank thicker in diameter.
 Make sure the power-supply voltage does not drop more than 10%.

*2 Specific wiring requirements should adhere to the wiring regulations of the region.

*3 Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord (design 245 IEC57). For example, use wiring such as YZW.

*4 The wiring size differs depending on the total operating current of the indoor unit.
 1.5mm² or thicker(16A or less), 2.5mm² or thicker(25A or less), 4.0mm² or thicker(32A or less)

CVVS,MVVS : PVC insulated PVC jacketed shielded control cable
 CPEVS : PE insulated PVC jacketed shielded communication cable
 CVV : PVC insulated PVC sheathed control cable

1. SPECIFICATIONS

Indoor units

Model				PEFY-P50VMA-E2	PEFY-P63VMA-E2	PEFY-P71VMA-E2	PEFY-P80VMA-E2	
Power source				1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	1-phase 220-230-240 V 50 Hz	
Cooling capacity (Nominal)	*1	kW		5.6	7.1	8.0	9.0	
		kcal/h		4,800	6,100	6,900	7,700	
		BTU/h		19,100	24,200	27,300	30,700	
	*2	Power input	kW	0.085	0.071	0.085	0.085	
	*2	Current input	A	0.57-0.55-0.53	0.47-0.45-0.43	0.63-0.60-0.58	0.63-0.60-0.58	
Heating capacity (Nominal)	*3	kW		6.3	8.0	9.0	10.0	
		kcal/h		5,400	6,900	7,700	8,600	
		BTU/h		21,500	27,300	30,700	34,100	
	*2	Power input	kW	0.083	0.069	0.083	0.083	
	*2	Current input	A	0.57-0.55-0.53	0.47-0.45-0.43	0.63-0.60-0.58	0.63-0.60-0.58	
External finish			Galvanized steel plate		Galvanized steel plate	Galvanized steel plate	Galvanized steel plate	
External dimension H x W x D		mm	250 x 900 x 732		250 x 1,100 x 732	250 x 1,100 x 732	250 x 1,100 x 732	
		in.	9-7/8 x 35-7/16 x 28-7/8		9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	9-7/8 x 43-5/16 x 28-7/8	
Net weight		kg (lbs)	26 (58)		31 (69)	31 (69)	31 (69)	
Heat exchanger			Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	
FAN	Type x Quantity		Sirocco fan x 1		Sirocco fan x 2	Sirocco fan x 2	Sirocco fan x 2	
	*4	External static press.	Pa	35 - <50> - <70> - <100> - <150>		40 - <50> - <70> - <100> - <150>	40 - <50> - <70> - <100> - <150>	
			mmH ₂ O	3.6 - <5.1> - <7.1> - <10.2> - <15.3>		3.6 - <5.1> - <7.1> - <10.2> - <15.3>	4.1 - <5.1> - <7.1> - <10.2> - <15.3>	
	Motor Type		DC motor		DC motor	DC motor	DC motor	
	Motor output		kW	0.085		0.121	0.121	
	Driving mechanism		Direct-driven by motor		Direct-driven by motor	Direct-driven by motor	Direct-driven by motor	
	Air flow rate		(Low-Mid-High)		(Low-Mid-High)	(Low-Mid-High)	(Low-Mid-High)	
			m ³ /min	12.0 - 14.5 - 17.0		13.5 - 16.0 - 19.0	14.5 - 18.0 - 21.0	14.5 - 18.0 - 21.0
			L/s	200 - 242 - 283		225 - 267 - 317	242 - 300 - 350	242 - 300 - 350
			cfm	424 - 512 - 600		477 - 565 - 671	512 - 636 - 742	512 - 636 - 742
Sound pressure level (measured in anechoic room)			(Low-Mid-High)		(Low-Mid-High)	(Low-Mid-High)	(Low-Mid-High)	
*2, 5	*2, 6	dB <A>	28-31-35		29-32-35	29-32-34	29-32-34	
			24-28-32		25-28-32	26-29-32	26-29-32	
Insulation material			EPS, Polystyrene foam, Urethane foam		EPS, Polystyrene foam, Urethane foam	EPS, Polystyrene foam, Urethane foam	EPS, Polystyrene foam, Urethane foam	
Air filter			PP honeycomb fabric.		PP honeycomb fabric.	PP honeycomb fabric.	PP honeycomb fabric.	
Protection device			Fuse		Fuse	Fuse	Fuse	
Refrigerant control device			LEV		LEV	LEV	LEV	
Connectable outdoor unit			R410A CITY MULTI		R410A CITY MULTI	R410A CITY MULTI	R410A CITY MULTI	
Refrigerant piping diameter	Liquid (R410A)	mm (in.)	6.35 (1/4")Braze		9.52 (3/8")Braze	9.52 (3/8")Braze	9.52 (3/8")Braze	
	Gas (R410A)	mm (in.)	12.7 (1/2")Braze		15.88 (5/8")Braze	15.88 (5/8")Braze	15.88 (5/8")Braze	
Field drain pipe size		mm (in.)	O.D.32 (1-1/4")		O.D.32 (1-1/4")	O.D.32 (1-1/4")	O.D.32 (1-1/4")	
Drawing	External		IU-KS94-T485		IU-KS94-T485	IU-KS94-T485	IU-KS94-T485	
	Wiring		IU-KS94-R932		IU-KS94-R932	IU-KS94-R932	IU-KS94-R932	
	Refrigerant cycle		-		-	-	-	
Standard attachment	Document		Installation Manual, Instruction Book		Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book	
	Accessory		Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band		Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	Insulation pipe for refrigerant pipe, Washer, Drain hose, Tie band	
Optional parts	Filter box		PAC-KE92TB-E		PAC-KE93TB-E	PAC-KE93TB-E	PAC-KE93TB-E	
Remarks			* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specifications may be subject to change without notice.					

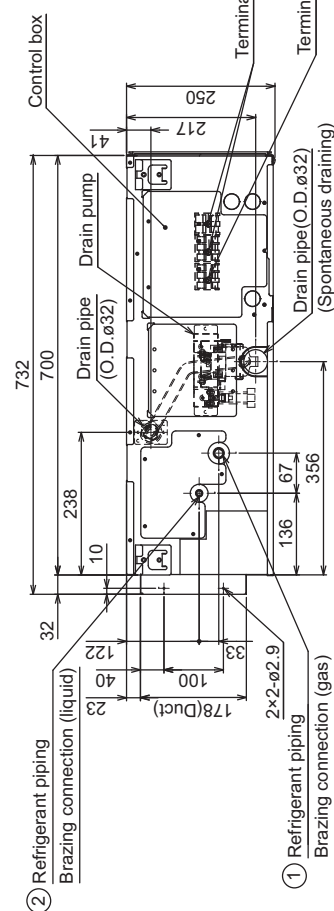
Notes:	Unit converter
1.Nominal cooling conditions Indoor:27°CDB/19°CWB (81°FDB/66°F WB), Outdoor:35°CDB (95°FDB) Pipe length:7.5m (24-9/16ft.), Level difference:0m (0ft.)	kcal/h =kW x 860 BTU/h =kW x 3,412
2.The values are measured at the rated external static pressure.	cfm =m ³ /min x 35.31
3.Nominal heating conditions Indoor:20°CDB (68°FDB), Outdoor:7°CDB/6°CWB (45°FDB/43°F WB) Pipe length:7.5m (24-9/16ft.), Level difference:0m (0ft.)	lbs =kg/0.4536
4.The rated external static pressure is shown without < > .The factory setting is the rated value.	
5.Measured in anechoic room with a 1 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.	
6.Measured in anechoic room with a 2 m air inlet duct and 2 m air outlet duct attached to the unit and 1.5 m below the unit.	*Above specification data is subject to rounding variation.

Indoor units

Unit: mm

[illegible]

Model	A	B	C	D	E	F	G	① Gas pipe	② Liquid pipe
PEFY-P20.25.32VMA-E2	700	754	800	660	7	600	658		
PEFY-P40.50VMA-E2	900	954	1000	860	9	800	858		ø6.35
PEFY-P63.71.80VMA-E2	1100	1154	1200	1060	11	1000	1058		
PEFY-P100.125VMA-E2	1400	1454	1500	1360	14	1300	1358		ø9.52
PEFY-P1.40VMA-E2	1600	1654	1700	1560	16	1500	1558		



PEFY-P-VMA(L)-E2, VMA3-E

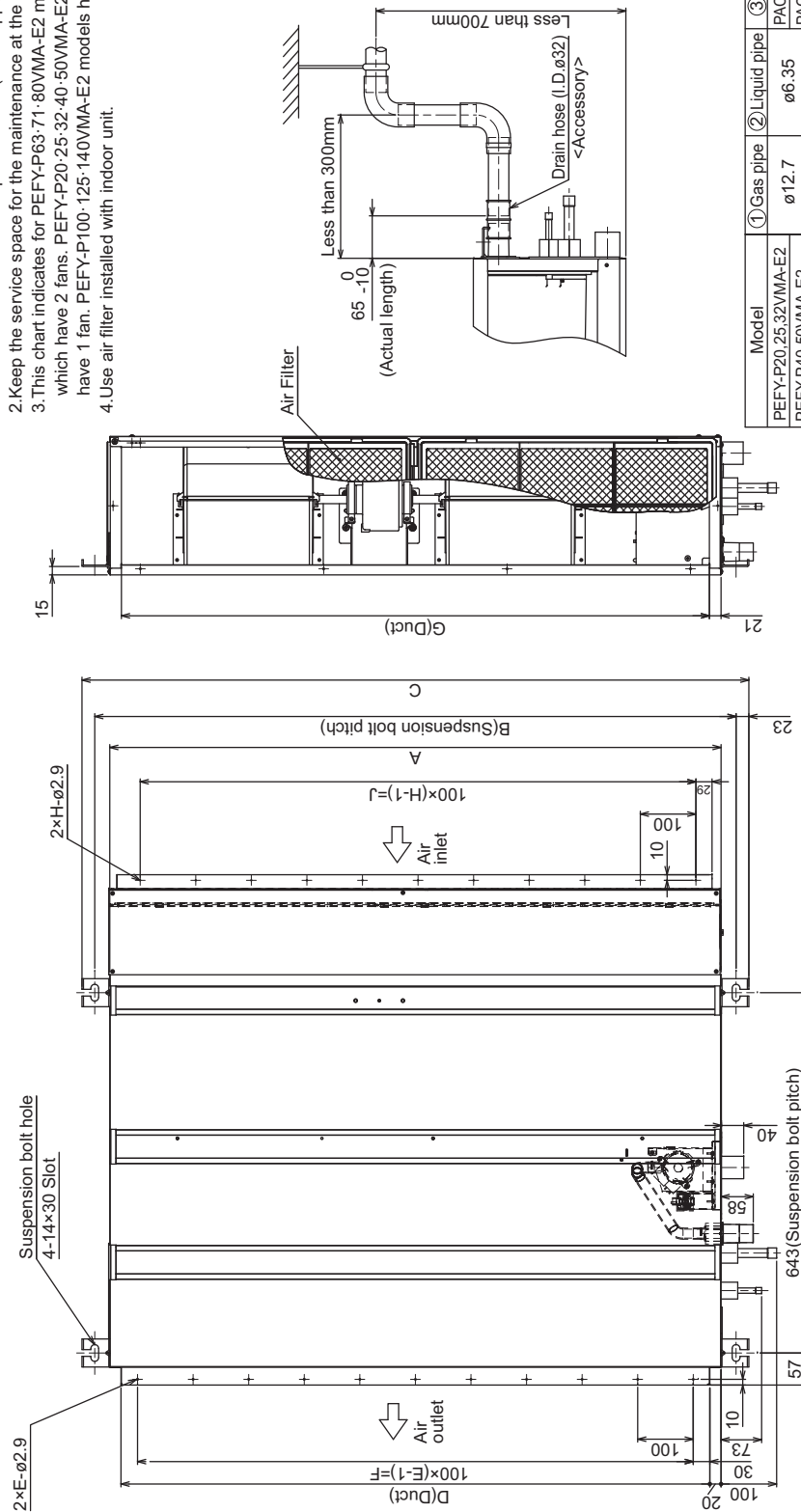
Unit: mm

lb-5- 12

PEFY-P20, 25, 32, 40, 50, 63, 71, 80, 100, 125, 140VMA-E2 with filter box

Unit: mm

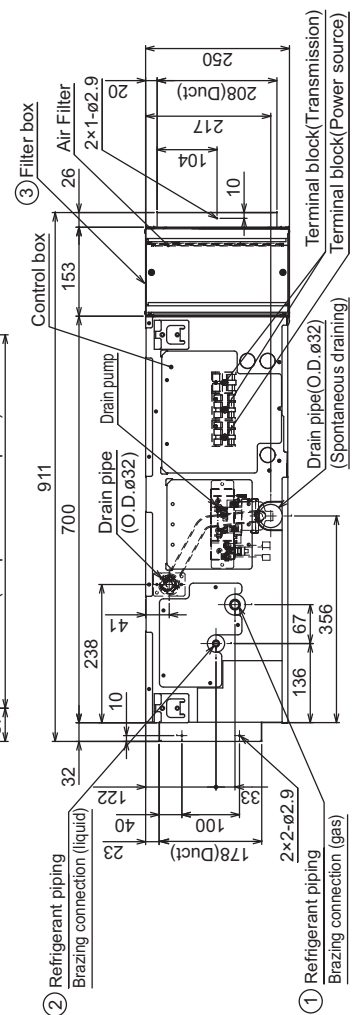
- Note 1. Use M10 screw for the Suspension bolt (field supply).
 2. Keep the service space for the maintenance at the bottom.
 3. This chart indicates for PEFY-P63-71-80VMA-E2 models, which have 2 fans. PEFY-P20-25-32-40-50VMA-E2 models have 1 fan. PEFY-P100-125-140VMA-E2 models have 3 fans.
 4. Use air filter installed with indoor unit.



Model	① Gas pipe	② Liquid pipe	③ Filter box
PEFY-P20,25,32VMA-E2	ø12.7	ø6.35	PAC-KE91TB-E
PEFY-P40,50VMA-E2			PAC-KE92TB-E
PEFY-P63,71,80VMA-E2	ø15.88	ø9.52	PAC-KE93TB-E
PEFY-P100,125VMA-E2			PAC-KE94TB-E
PEFY-P140VMA-E2			PAC-KE95TB-E

Model	A	B	C	D	E	F	G	H	J
PEFY-P20,25,32VMA-E2	700	754	800	660	7	600	658	7	600
PEFY-P40,50VMA-E2	900	954	1000	860	9	800	858	9	800
PEFY-P63,71,80VMA-E2	1100	1154	1200	1060	11	1000	1058	11	1000
PEFY-P100,125VMA-E2	1400	1454	1500	1360	14	1300	1358	14	1300
PEFY-P140VMA-E2	1600	1654	1700	1560	16	1500	1558	16	1500

<Suction filter box built-in-specification>



PEFY-P20, 25, 32, 40, 50, 63, 71, 80, 100, 125, 140VMA-E2 with filter box

Unit: mm

[Maintenance access space]
Secure enough access space to allow for the maintenance, inspection, and replacement of the motor, fan, drain pump, heat exchanger, and electric box in one of the following ways.
Select an installation site for the indoor unit so that its maintenance access space will not be obstructed by beams or other objects.

- (1) When a space of 300mm or more is available below the unit between the unit and the ceiling. (Fig. 1)
- Create access door 1 and 2 (450×450mm each) as shown in Fig. 2.
(Access door 2 is not required if enough space is available below the unit for a maintenance worker to work in.)
- (2) When a space of less than 300mm is available below the unit between the unit and the ceiling.
(At least 20mm of space should be left below the unit as shown in Fig. 3.)
- Create access door 1 diagonally below the electric box and access door 3 below the unit as shown in Fig. 4.
or
- Create access door 4 below the electric box and the unit as shown in Fig. 5.

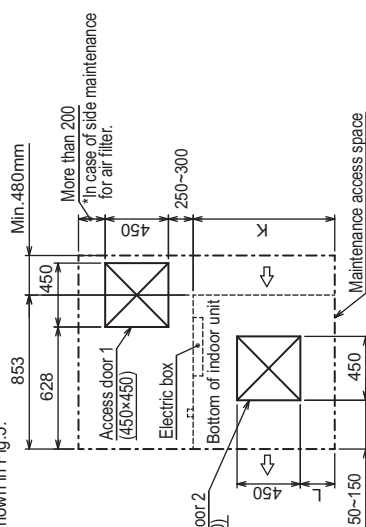
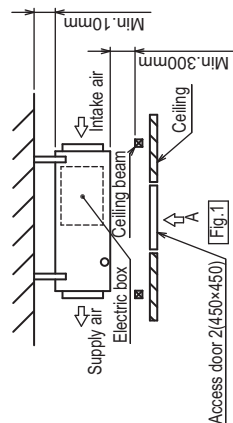


Fig. 2 (Viewed from the direction of the arrow A)

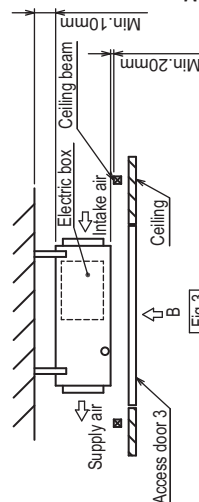


Fig. 3

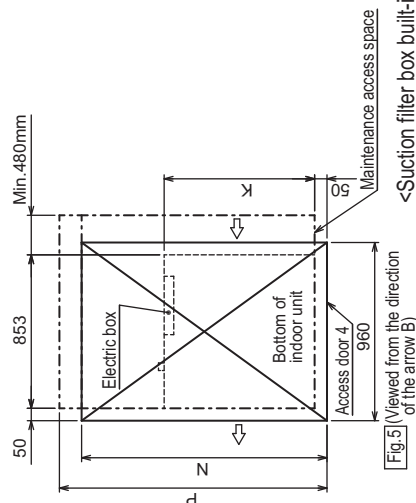


Fig. 5 (Viewed from the direction of the arrow B)

<Suction filter box built-in specification>

Fig. 4 (Viewed from the direction of the arrow B)

*Dimension 'P' is in case of side maintenance for air filter.

Model	K	L	M	N	P*
PEFY-P20,25,32/VMA-E2	700	50~150	800	1300	1450
PEFY-P40,50/VMA-E2	900	150~250	1000	1500	1850
PEFY-P63,71,80/VMA-E2	1100	250~350	1200	1700	2150
PEFY-P100,125/VMA-E2	1400	400~500	1500	2000	2550
PEFY-P140/VMA-E2	1600	500~600	1700	2200	2550

1. SPECIFICATIONS

Indoor units

Model			CMB-P1012V-JA			
Number of branch			12			
Power source			1-phase 220-230-240 V			
			50Hz		60Hz	
Power input	Cooling	kW	0.186/0.211/0.236		0.150/0.168/0.186	
	Heating	kW	0.090/0.102/0.114		0.072/0.081/0.090	
Current input	Cooling	A	0.85/0.92/0.99		0.69/0.74/0.78	
	Heating	A	0.42/0.44/0.48		0.33/0.36/0.38	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P900			
Indoor unit capacity connectable to 1 branch *12			Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81.)			
External dimension H x W x D		mm	246 x 1,135 x 639			
		in.	9-11/16 x 44-11/16 x 25-3/16			
Refrigerant piping diameter	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*13 mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P400 to P500	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*13 mm (in.) O.D.	P550	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
		*13 mm (in.) O.D.	P600	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P650	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P700 to P800	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P850 to P900	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed	
	To indoor unit		Liquid pipe		Gas pipe	
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	
	To other BC controller		Total down-stream Indoor unit capacity	High press. pipe	Liquid pipe	Low press. pipe
		mm (in.) O.D.	to P200	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P201 to P300	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P301 to P350	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P351 to P400	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P401 to P600	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P601 to P650	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P651 to P800	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P801 to P1000	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
	mm (in.) O.D.	P1001 or above	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	55 (122)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	62(When P250 Outdoor/Heat source unit connected),65(P450),68(P700),69(P900)			
	Defrost	dB <A>	74			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	44(When P250 Outdoor/Heat source unit connected),47(P450),50(P700),51(P900)			
	Defrost	dB <A>	56			
Accessories			Drain Connection pipe, Washer, Tie band			
Remarks						

Notes:

1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
2. The equipment is for R410A refrigerant.
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition.
The sound pressure/power level at the rated operation is the value of the cooling mode.
5. The sound pressure/power level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The sound pressure level values were obtained at the location below 1.5m from the unit.
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
10. This unit is not designed for outside installations.
11. When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
12. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
13. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

2. EXTERNAL DIMENSIONS

Indoor units

CMB-P108, 1012, 1016V-JA

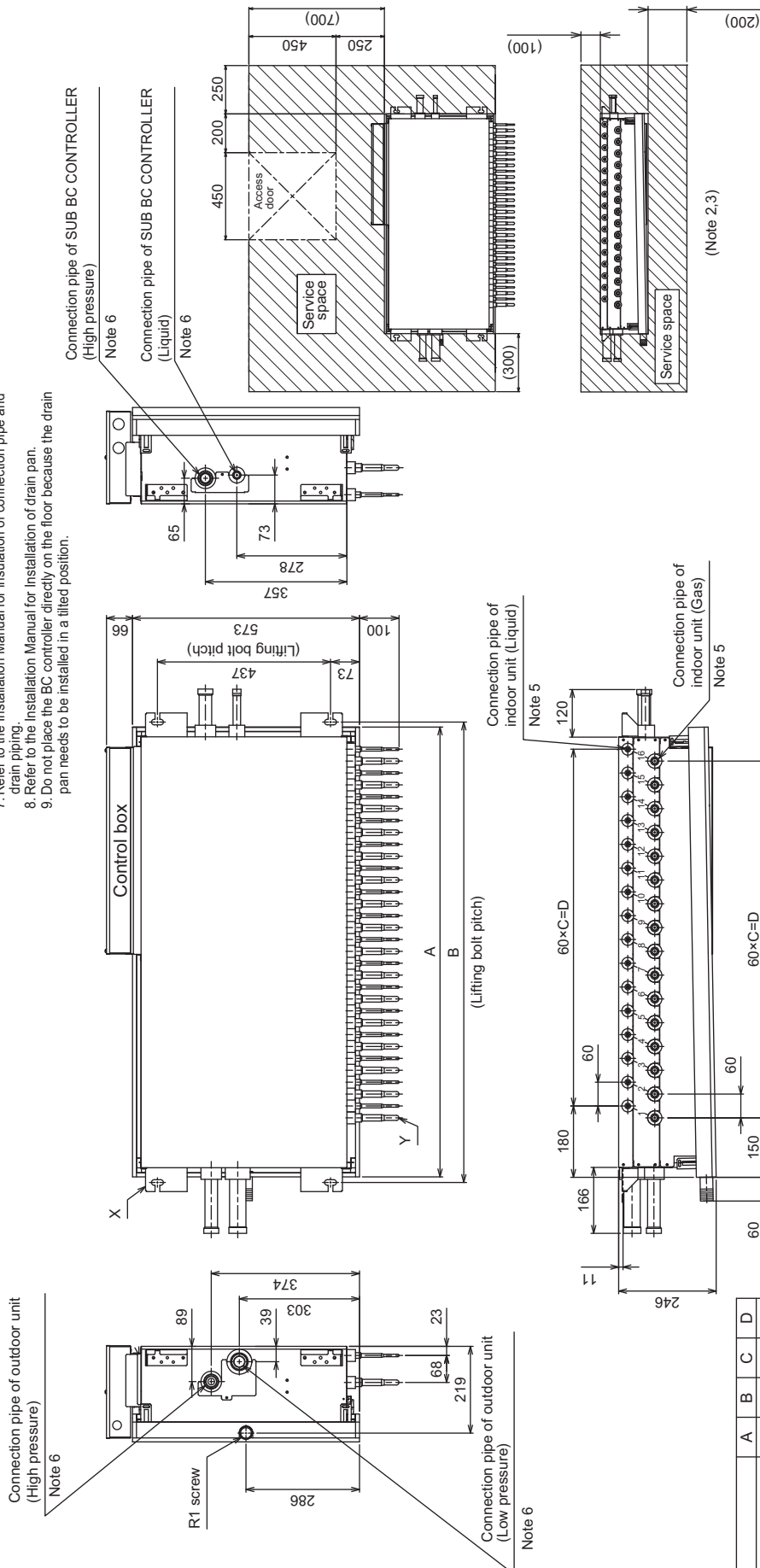
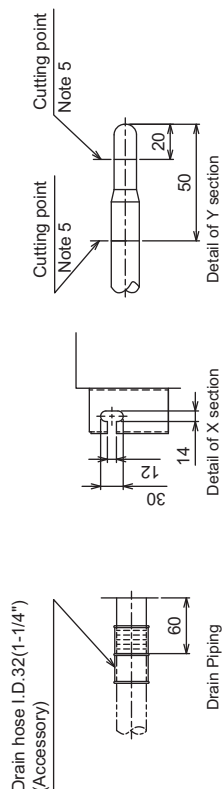
Unit: mm

<Accessories>

- Drain hose I.D. 3/2(1-1/4")1pc.
- Tie band3pcs.
- Square washer (with cushion)4pcs.
- Square washer.....4pcs.

Note 1. Suspension bolt(ø10) and nut(M10) prepare in the field.

2. Take notice of service space as follows.
(Please give attention not to occupy service space by letting ducts and pipes through.)
3. Please take service space for connection pipe of SUB BC CONTROLLER.
4. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
5. Refer to the Installation Manual for refrigerant piping diameter size when connecting plural indoor units with 1 branch.
6. Refer to the Installation Manual for connection pipe of outdoor unit or SUB BC CONTROLLER diameter size.
7. Refer to the Installation Manual for insulation of connection pipe and drain piping.
8. Refer to the Installation Manual for Installation of drain pan.
9. Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tilted position.



	A	B	C	D
CMB-P108V-JA	911	938	7	420
CMB-P1012V-JA	1135	1161	11	660
CMB-P1016V-JA	1125	1161	15	900

PURY-P350, 400, 450YNW-A(-BS)

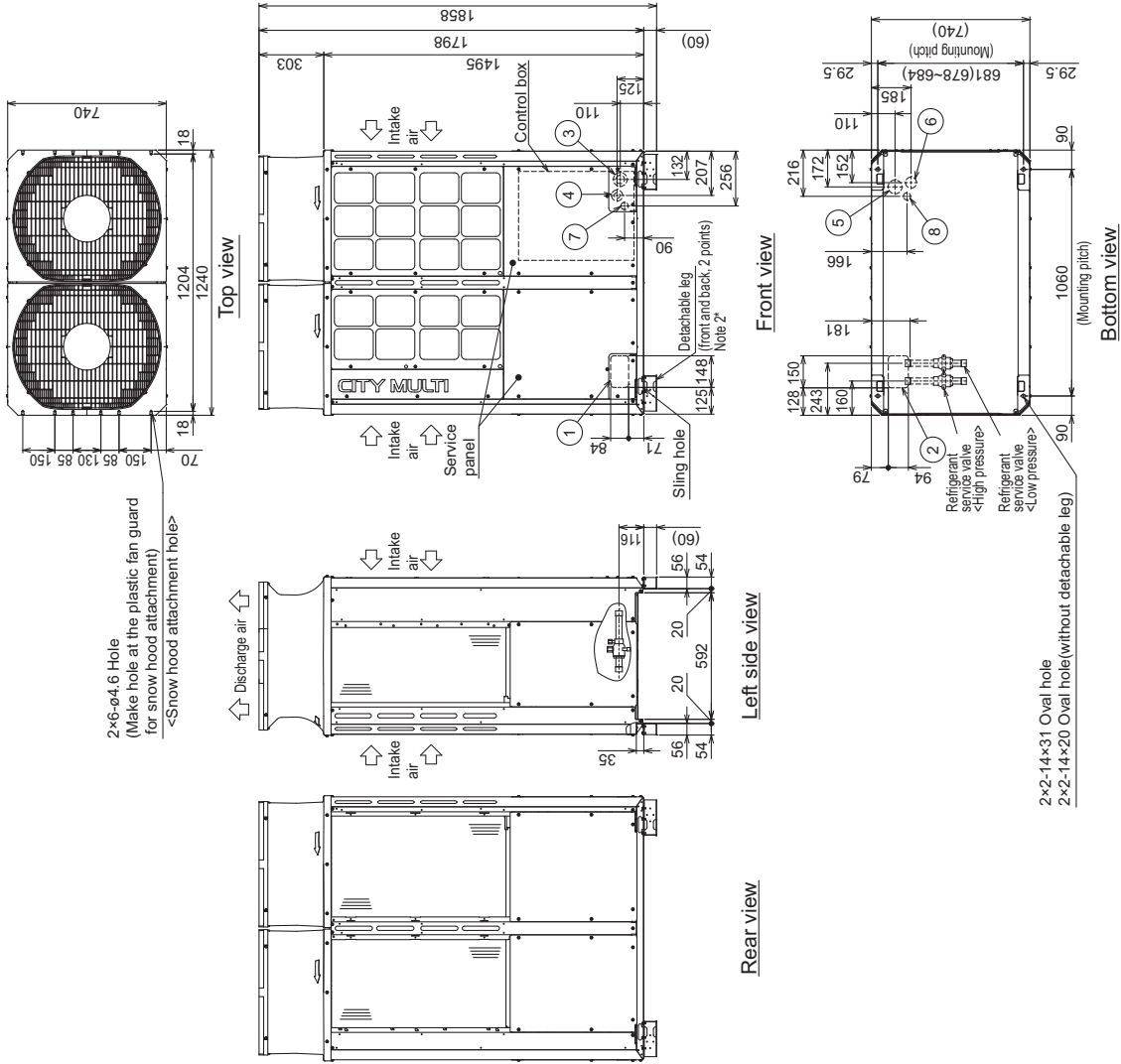
Unit: mm

- Note 1. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
2. The detachable leg can be removed at site.
3. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C.

Model	Connecting pipe specifications			Service valve
	Refrigerant pipe	High pressure	Low pressure	
P350	Ø19.05 Braze ^{*1}	Ø28.58 Braze ^{*1}	Ø28.58	Low pressure
P400	Ø22.2 Braze ^{*1}	Ø28.58 Braze ^{*1}	Ø28.58	Low pressure
P450	Ø22.2 Braze ^{*1}	Ø28.58 Braze ^{*1}	Ø28.58	Low pressure

^{*1} Connect the refrigerant pipe to the service valve according to the Installation Manual.

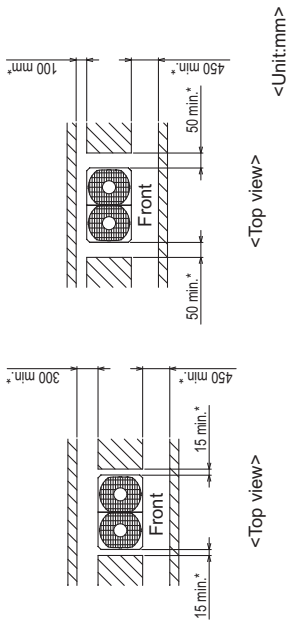
NO.	Usage	Specifications
①	Front through hole	148 × 84 Knockout hole
②	Bottom through hole	150 × 94 Knockout hole
③	Front through hole	Ø65 or Ø40 Knockout hole
④	Front through hole	Ø65 or Ø40 Knockout hole
⑤	Bottom through hole	Ø65 Knockout hole
⑥	Bottom through hole	Ø65 Knockout hole
⑦	Front through hole	Ø65 Knockout hole
⑧	Bottom through hole	Ø65 Knockout hole



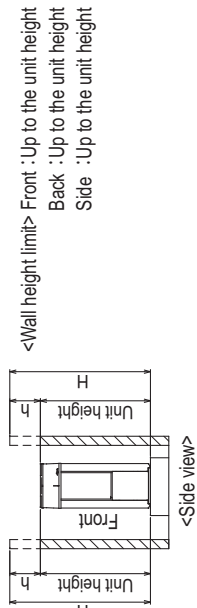
1. Required space around the unit

● In case of single installation

- ① Secure enough space around the unit as shown in the figure below.
 - With a space of at least 300mm to the wall on the back of the unit



- ② When the height of the walls on the front, back or on the sides <H> exceeds the wall height limit as defined below add the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route, and wiring route when preparing the installation site.
 - <Note that the drain water comes out of the unit during operation.>
- ② Build the foundation in such way that the corner of the installation leg is securely supported as shown in the right figure.(Fig.A,B)
 - When using a rubber isolating cushion, please ensure it is large enough to cover the entire width of each of the unit's legs.
- ③ The protrusion length of the anchor bolt must not exceed 30mm.(Fig.A,B)
- ④ Use four fixing plates as shown in the right figure <field supply required> when using post-installed anchor bolts.(Fig.C,D)
- ⑤ To prevent small animals and water and snow from entering the unit and damaging its parts, close the gap around the edges of through holes for pipes and wires with filler plates <field supply required>
- ⑥ When the pipes or cables are routed at the bottom of the unit, make sure that the through hole at the base of the unit does not get blocked with the installation base.
- ⑦ Refer to the Installation Manual when installing units on an installation base.

● In case of collective installation

- ① When multiple units are installed adjacent to each other, secure enough space to allow for air circulation and walkway between groups of units as shown in the figures below.
- ② At least two sides must be left open.
- ③ As with the single installation, add the height that exceeds the height limit <h> to the figures that are marked with an asterisk.
- ④ If there is a wall at both the front and the rear of the unit, install up to six units consecutively in the side direction and provide a space of 1000mm or more as inlet space/ passage space for each six units.

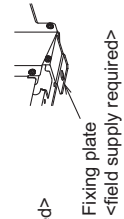
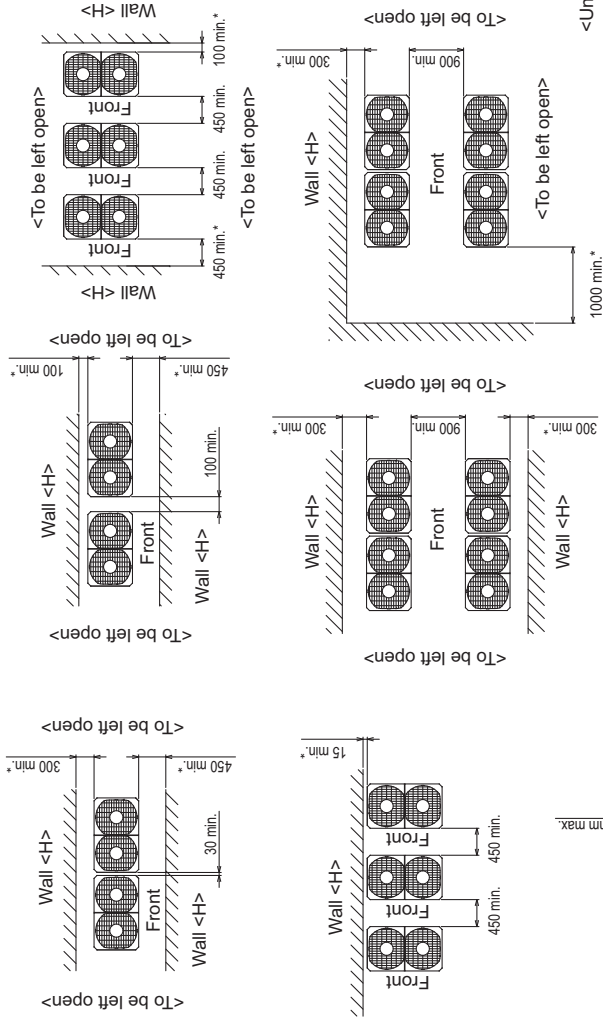


Fig.C (without detachable legs)

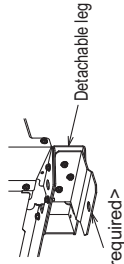


Fig.D (with detachable legs)

Unit: mm

1. SPECIFICATIONS

Outdoor units

Model			PURY-P500YNW-A (-BS)			
Power source			3-phase 4-wire 380-400-415 V 50/60 Hz			
Cooling capacity (Nominal)	*1	kW	56.0			
		kcal/h	50,000			
		BTU/h	191,100			
		Power input	kW	12.72		
		Current input	A	21.4-20.3-19.6		
		EER	kW/kW	4.40		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)			
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)			
Heating capacity (Max)	*2	kW	63.0			
		kcal/h	54,200			
		BTU/h	215,000			
		Power input	kW	15.28		
		Current input	A	25.7-24.5-23.6		
		COP	kW/kW	4.12		
	(Nominal)	*3	kW	56.0		
			kcal/h	50,000		
			BTU/h	191,100		
			Power input	kW	12.09	
			Current input	A	20.4-19.3-18.6	
			COP	kW/kW	4.63	
Temp. range of heating	Indoor	D.B.	15.0~27.0°C (59~81°F)			
	Outdoor	W.B.	-20.0~15.5°C (-4~60°F)			
Indoor unit connectable	Total capacity		50~150%			
	Model/Quantity		P15~P250/1~50			
Sound pressure level (measured in anechoic room) *4		dB <A>	63.5/64.5			
Sound power level (measured in anechoic room) *4		dB <A>	82.0/84.0			
Refrigerant piping diameter	High pressure	mm (in.)	22.2 (7/8) Brazed			
	Low pressure	mm (in.)	28.58 (1-1/8) Brazed			
FAN	Type x Quantity		Propeller fan x 2			
	Air flow rate	m³/min	295			
		L/s	4,917			
		cfm	10,416			
		Control, Driving mechanism		Inverter-control, Direct-driven by motor		
	Motor output	kW	0.92 x 2			
	*5	External static press.	0 Pa (0 mmH₂O)			
Compressor	Type		Inverter scroll hermetic compressor			
	Manufacture		AC&R Works, MITSUBISHI ELECTRIC CORPORATION			
	Starting method		Inverter			
	Motor output	kW	13.0			
	Case heater	kW	-			
	Lubricant		MEL32			
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension H x W x D		mm	1,858 (1,798 without legs) x 1,750 x 740			
		in.	73-3/16 (70-13/16 without legs) x 68-15/16 x 29-3/16			
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)			
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection			
	Compressor		-			
	Fan motor		-			
Refrigerant	Type x original charge		R410A x 10.8 kg (24 lbs)			
	Control		Indoor LEV and BC controller			
Net weight		kg (lbs)	337 (743)			
Heat exchanger			Salt-resistant cross fin & copper tube			
HIC circuit (HIC: Heat Inter-Changer)			-			
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		WKS94T750			
	Wiring		WKE94G342			
Standard attachment	Document		Installation Manual			
	Accessory		-			
Optional parts			Joint: CMY-Y102SS-G2,CMY-Y102LS-G2,CMY-R160-J1			
			Main BC controller: CMB-P108,1012,1016V-JA,CMB-P1016V-KA			
			Sub BC controller: CMB-P104V-KB			
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. Due to continuing improvement, above specifications may be subject to change without notice.			

Notes:		Unit converter
1.Nominal cooling conditions (subject to JIS B8615-2) Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B./24°C W.B. (95°F D.B./75°F W.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)		BTU/h =kW x 3,412
2.Nominal heating conditions (subject to JIS B8615-2) Indoor: 20°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)		cfm =m ³ /min x 35.31
3.Nominal heating conditions (subject to JIS B8615-2) Indoor: 20°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.) Eurovent registered		lbs =kg/0.4536
4.Cooling mode/Heating mode		
5.External static pressure option is available (30 Pa, 60 Pa, 80 Pa/3.1 mmH ₂ O, 6.1 mmH ₂ O, 8.2 mmH ₂ O). Consult your dealer about the specification when setting External static pressure option.		*Above specification data is subject to rounding variation.

PURY-P500, 550YNW-A(-BS)

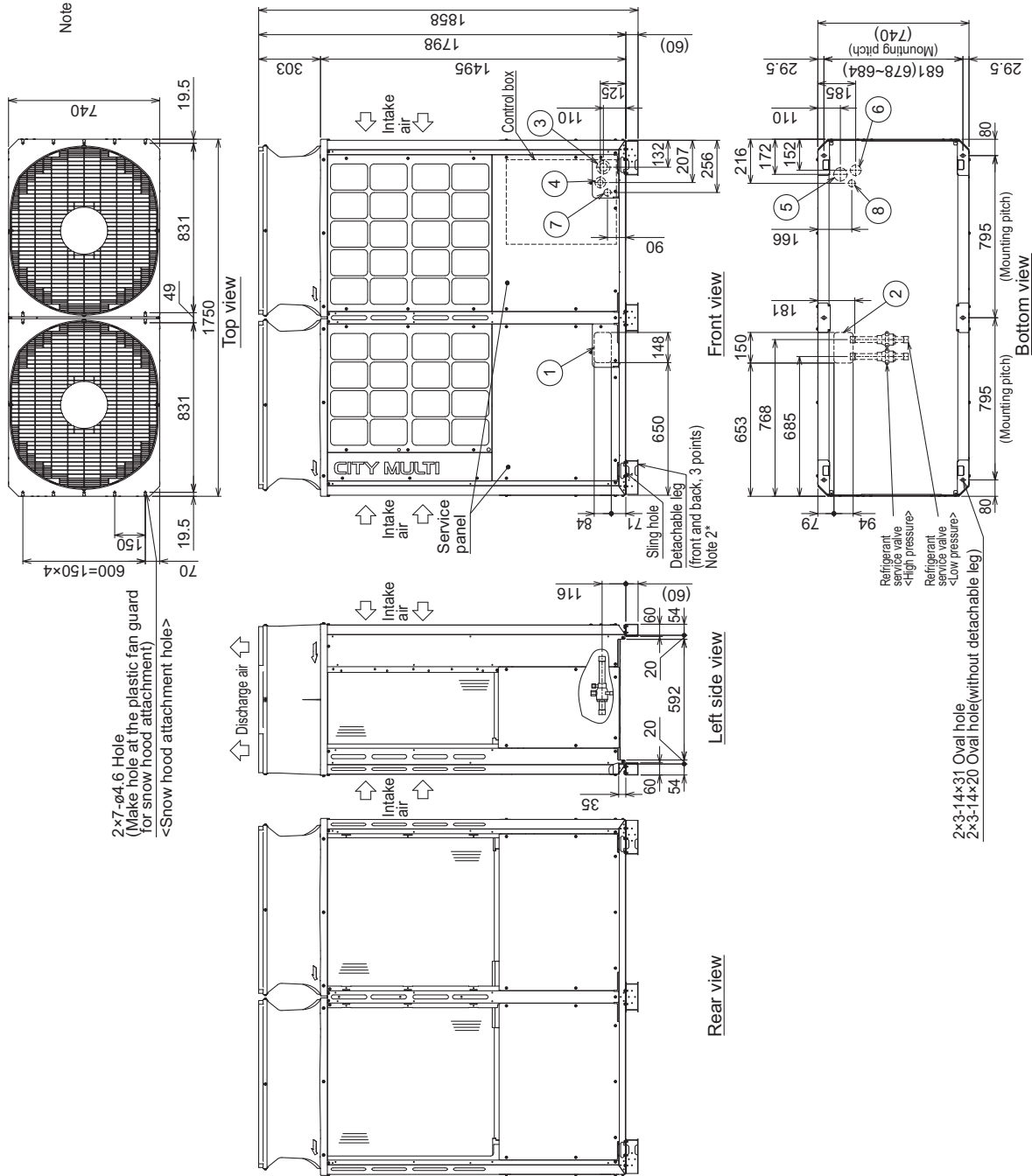
Unit: mm

Note 1. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
2. The detachable leg can be removed at site.
3. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C.

Model	Refrigerant pipe		Diameter	
	High pressure	Low pressure	High pressure	Service valve
P500	ø22.2 Braze ^{*1}	ø28.58 Braze ^{*1}	ø28.58	ø28.58
P550	ø22.2 Braze ^{*1}	ø28.58 Braze ^{*2}	ø28.58	ø28.58

^{*1} Connect the refrigerant pipe to the service valve according to the Installation Manual.

^{*2} When the piping length is 65m or longer, use the ø28.58 pipe for the part that exceeds 65m.



NO.	Usage	Specifications
①	For pipes	Front through hole 148 x 84 Knockout hole
②		Bottom through hole 150 x 94 Knockout hole
③		Front through hole ø65 or ø40 Knockout hole
④	For wires	Front through hole ø52 or ø27 Knockout hole
⑤		Bottom through hole ø65 Knockout hole
⑥		Bottom through hole ø52 Knockout hole
⑦	For transmission cables	Front through hole ø34 Knockout hole
⑧		Bottom through hole ø34 Knockout hole

PURY-P500, 550YNW-A-(BS)

In case of collective installation

- ① When multiple units are installed adjacent to each other, secure enough space to allow for air circulation and walkway between groups of units as shown in the figures below.
- ② At least two sides must be left open.
- ③ As with the single installation, add the height that exceeds the height limit<h> to the figures that are marked with an asterisk.
- ④ If there is a wall at both the front and the rear of the unit, install up to three units consecutively in the side direction and provide a space of 1000mm or more as inlet space/ passage space for each three units.

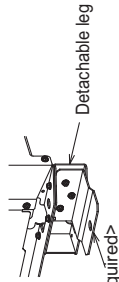
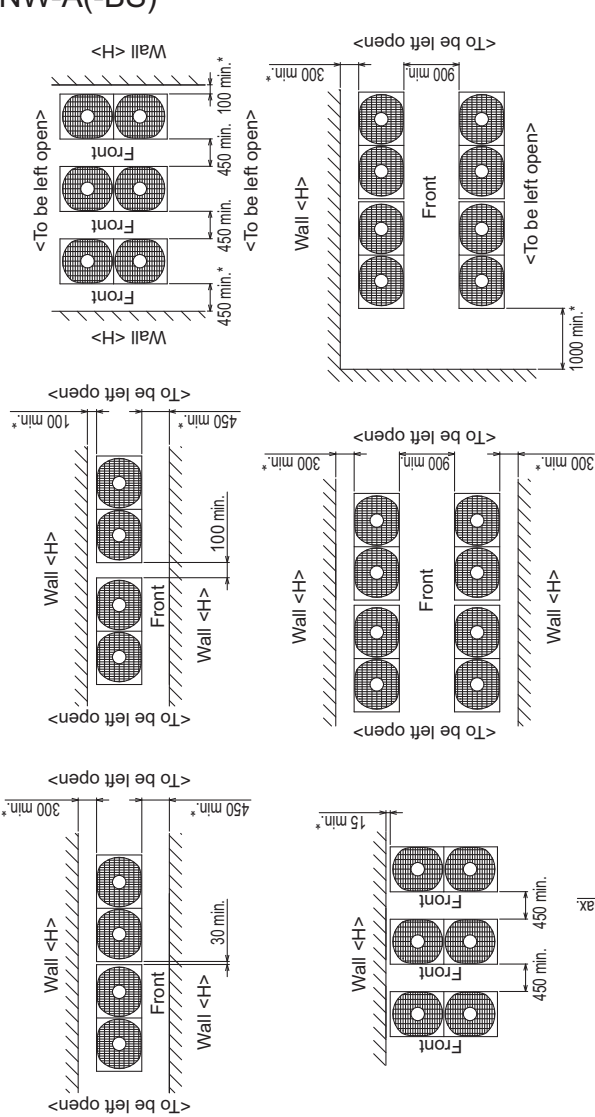


Fig.D (with detachable legs)



Fig.C (without detachable legs)

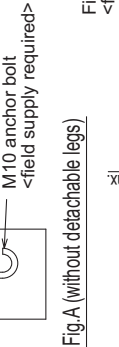


Fig.A (without detachable legs)

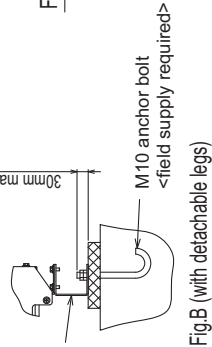
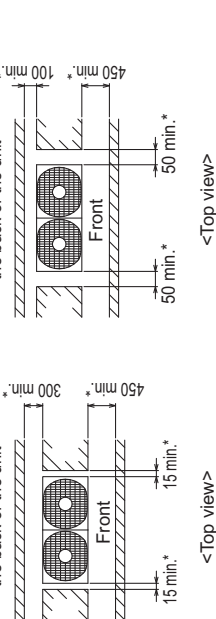


Fig.B (with detachable legs)

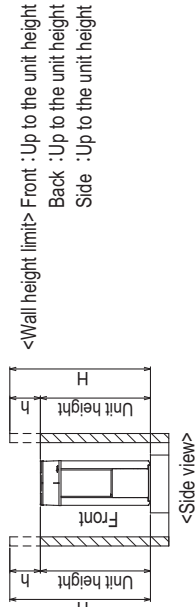
1. Required space around the unit

In case of single installation

- ① Secure enough space around the unit as shown in the figure below.
- With a space of at least 100mm to the wall on the back of the unit



- ② When the height of the walls on the front, back or on the sides<H> exceeds the wall height limit as defined below add the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route, and wiring route when preparing the installation site.
- ② Build the foundation in such way that the corner of the installation leg is securely supported as shown in the right figure.(Fig.A,B)
- ③ When using a rubber isolating cushion, please ensure it is large enough to cover the entire width of each of the unit's legs.
- ④ The protrusion length of the anchor bolt must not exceed 30mm.(Fig.A,B)
- ⑤ Use four fixing plates as shown in the right figure <field supply required> when using post-installed anchor bolts.(Fig.C,D)
- ⑥ To prevent small animals and water and snow from entering the unit and damaging its parts, close the gap around the edges of through holes for pipes and wires with filler plates <field supply required>.
- ⑦ When the pipes or cables are routed at the bottom of the unit, make sure that the through hole at the base of the unit does not get blocked with the installation base.
- ⑧ Refer to the Installation Manual when installing units on an installation base.

Advanced Touch Controller

With our new Advanced Touch Controller AT-50A, easy and simple operation on the touch panel offers an optimal air environment for individual unit.

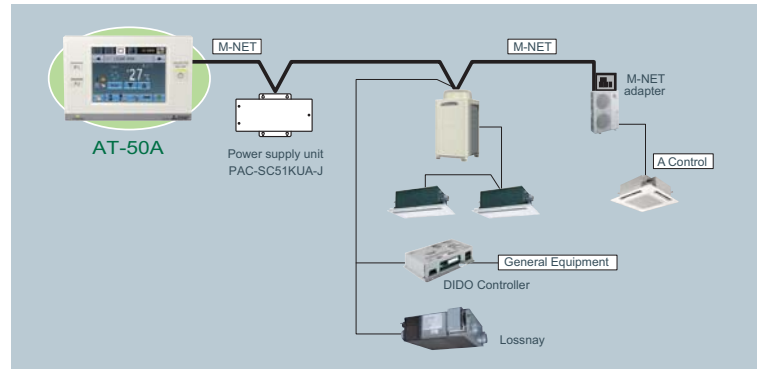
NEW

Touch controller AT-50A



Dimensions: 180(W) x 120(H) x 30(D) mm
: 7-2/16(W) x 4-12/16(H) x 1-3/16(D) in.

System structure



New Design

Backlit LCD (Liquid Crystal Display) Touch Panel

5-inch color LCD touch panel enables easy and simple operation.

The backlight lights up when the panel is touched, and lights off after certain period of time.

The touch panel displays the operation status of the units in GRID, LIST or in GROUP.



GRID (zoom-out) screen
Displays the operation status of all groups.



GRID (zoom-in) screen
Displays the detailed operation status of each group.



LIST screen
Displays the detailed operation status of each group with group name.



GROUP screen
Displays the detailed operation status of each group. Sets group operations.



Remote Controller

New Functions

Three in One

The following three features are integrated into AT-50A.

- Control up to 50 indoor units from one location
- A weekly programmable timer, being able to control up to 50 indoor units
- Control up to 50 units/50 groups of air conditioners

Weekly and daily schedule

5 patterns of one day and 12 patterns of weekly schedule (16 settings max. per pattern).

Two types of weekly schedule can be set.

System changeover

Operation mode can be switched depending on indoor temperature setting and target temperature of each group or a representative indoor unit.

Functions

[Basic Functions]

- ON/OFF ▪ Operation mode switching
- Temperature setting ▪ Fan speed setting
- Airflow direction setting ▪ Louver setting

Night setback function

This function allows having a two-temperature setting to keep the desired room temperature when the units are not in operation and during the time this function is effective. The unit automatically starts heating (cooling) operation when the temperature drops below (rises above) the preset lower (upper) limit temperature. This is not only for comfort environment, but also for saving energy.

Main system controller/Sub system controller

AT-50A can be set to Sub System controller.

When connecting multiple system controllers, designate the system controller with many functions as the "Main", and set the system controllers with few functions as the "Sub".

Simple button arrangement

The F1 (Function 1) and the F2 (Function 2) button can be set as a run button of the following collective operation. (Setback/Schedule/Operation Mode/Temperature Correction/Remote Controller Prohibition)

Advanced Functions

□: Each unit ○: Each group ◎: Group or collective ×: Not available			
Item	Description	Operations	Display
Permit / Prohibit	The ON/OFF, operation mode, setting temperature and filter sign reset operations using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group.	◎	◎
Operation lock	The operation lock can be set to the input operation of AT-50A. Each button can be set. (Function Button 1, Function Button 2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	◎	◎
Error display	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen show abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	×	□◎
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	◎	◎
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	◎	◎
Temperature-set limitation	Batch-setting to temperature range limit at cooling, heating, and auto mode. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	◎	◎
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited. When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	◎	◎
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	◎	◎
Checking the Gas Amount	Use this function to check for refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y (PUMY is excluded.) series only.	□	□
Schedule operation	Weekly schedule setting up to 12 pattern is available. In one pattern, up to 16 setting of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction" and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule(Summer/Winter) can be set. Today's schedule setting up to 5 pattern is available.	○	○

* Depending on the installation conditions, power supply unit (PAC-SC51KUA) is required. Please contact your local distributor or MITSUBISHI ELECTRIC branch office for further information.



3-1. Advanced touch controller [AT-50A]



- AT-50A features a 5 inch color LCD touch panel. The settings for air conditioning units can be changed by touching the corresponding icons on the display. On the panel of AT-50A are 3 buttons; ON/OFF, F1 and F2 enabling simple and quick operation.
- One AT-50A can control up to 50 groups/units of air conditioners.

Item	Description	Operations	Display
External input (Emergency stop input, etc.)	The following input with level signals or pulse signals are available. Level signal: "Emergency stop input" or "Collective ON/OFF" Pulse signal: "Collective ON/OFF" or "Local remote controller prohibit/permit" One input can be selected from those above. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	⊙	⊙
External output (Error output, operation output)	"ON/OFF" and "error/normal" are output with the level signal. * An external input/output adapter (PAC-YT41HAA (sold separately)) is required. Relays and DC power supply or other devices must be prepared at the site.	⊙	⊙
Checking the Gas Amount	Use this function to check for refrigerant leak from the outdoor unit. * When this function is used, the gas amount checking function of the outdoor unit cannot be used. This function is for CITY MULTI R2 and Y(PUMY is excluded.) series only.	□	□
Main system controller /Sub system controller	AT-50A can be set to Sub System controller. When connecting multiple system controllers, designate the system controller with many functions as the "Main", and set the system controllers with few functions as the "Sub".	✓	—
Function Buttons (F1 Button, F2 Button)	The F1 button and the F2 button can be set as a run button of the following collective operation. (Setback/Schedule/Operation Mode/Temperature Correction/Remote Controller Prohibition)	⊙	⊙

■ Functions

□:Each unit ○:Each group ●:Each block ✓:Available
△:Each floor ⊙:Group or collective ×:Not available

Item	Description	Operations	Display
ON/OFF	ON and OFF operation for the air conditioner units. Even when only a single indoor unit connected to the group remote controller will operate and collective ON/OFF lamp will light up.	⊙	⊙
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat Operation modes vary depending on the air conditioner unit. Auto mode is for CITY MULTI R2 and WR2 series only.	⊙	⊙
Temperature setting	The temperature can be set within the following range. Cool/Dry : 19°C - 30°C / 67°F - 87°F Heat : 17°C - 28°C / 63°F - 83°F Auto : 19°C - 28°C / 67°F - 83°F Setback : [Upper limit] 19°C-30°C [19°C-30°C] / 67°F-87°F [67°F-87°F] [Lower limit] 12°C-28°C [17°C-28°C] / 53°F-83°F [63°F-83°F] * [] in case of using Mr.SLIM units. * Set temperature range varies depending on the model.	⊙	⊙
Fan speed setting	Models with 5 air flow speed settings: Hi/Mid-2/Mid-1/Low, Auto Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low * Fan speed setting (including Auto) varies depending on the model.	⊙	⊙
Air flow direction setting	Air flow direction angles 4-angle or 5-angle, Swing, Auto Louver ON/OFF * Air flow direction settings vary depending on the model.	⊙	⊙
Permit / Prohibit	The ON/OFF, operation mode, setting temperature and filter sign reset operations using the local remote controllers can be prohibited. Only ON/OFF and filter reset can be prohibited for the LOSSNAY group.	⊙	⊙
Operation lock	The operation lock can be set to the input operation of AT-50A. Each button can be set. (Function Button 1, Function Button2, Collective ON/OFF, Touch Panel) Each function can be set. (Operation mode, Setting temperature, Fan speed, Menu button) The password for the lock release can be set.	⊙	⊙
Error display	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. * When an error occurs, the "ON/OFF" LED flashes. The operation monitor screen show abnormal icon over the unit. The error monitor screen shows the abnormal unit address and error code. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	×	□ ⊙
Schedule operation	Weekly schedule setting up to 12 pattern is available. In one pattern, up to 16 setting of "ON/OFF", "Operation mode", "Set Temperature", "Fan speed", "Air flow direction" and "Permit / Prohibit local operation" can be scheduled. Two types of weekly schedule(Summer/Winter) can be set. Today's schedule setting up to 5 pattern is available. * Time setting unit: 5 minute /unit	○	○
Night setback setting	This function helps keep the indoor temperature in the temperature range while the units are stopped and during the time this function is effective.	⊙	⊙
Ventilation (independent)	Switches the mode "Bypass/Heat recovery/Auto" for LOSSNAY groups.	⊙	⊙
Ventilation (interlocked)	The LOSSNAY will run in interlock with the operation of indoor unit. The mode cannot be changed. The LED will turn ON during operation after interlocking.	⊙	⊙
Temperature-set limitation	Batch-setting to temperature range limit at cooling, heating, and auto mode. This function cannot be used with the MA remote controller. (Depends on the indoor unit model.)	⊙	⊙
Specific mode operation prohibit (Cooling prohibit, heating prohibit, cooling/heating prohibit)	When set as the main controller, operation of the following modes with the local remote controllers can be prohibited. When cooling is prohibited: Cooling, dry, automatic can not be chosen. When heating is prohibited: Heating, automatic can not be chosen. When cooling/heating is prohibited: Cooling, dry, heating, automatic can not be chosen.	⊙	⊙
System changeover	Operation mode can be switched to an optimal mode depending on indoor temperature setting and target temperature of each group or a representative indoor unit. * When this function is used, the system changeover function of the outdoor unit cannot be used.	●	—

■ External dimension

