

## TECHNICAL DATA

## 2WAY VRF SYSTEM

**R410A**



**Model No.  
Outdoor Unit**

	Class	8HP	10HP	12HP	14HP	16HP	18HP	20HP
ME1	Model Name	U-8ME1E81	U-10ME1E81	U-12ME1E81	U-14ME1E81	U-16ME1E81	U-18ME1E81	U-20ME1E81

## Check of Density Limit

The room in which the air conditioner is to be installed requires a design that in the event of refrigerant gas leaking out, its density will not exceed a set limit.

The refrigerant (R410A), which is used in the air conditioner, is safe, without the toxicity or combustibility of ammonia, and is not restricted by laws imposed to protect the ozone layer. However, since it contains more than air, it poses the risk of suffocation if its density should rise excessively. Suffocation from leakage of refrigerant is almost non-existent. With the recent increase in the number of high density buildings, however, the installation of multi air conditioner systems is on the increase because of the need for effective use of floor space, individual control, energy conservation by curtailing heat and carrying power, etc.

Most importantly, the multi air conditioner system is able to replenish a large amount of refrigerant compared to conventional individual air conditioners. If a single unit of the multi air conditioner system is to be installed in a small room, select a suitable model and installation procedure so that if the refrigerant accidentally leaks out, its density does not reach the limit (and in the event of an emergency, measures can be made before injury can occur).

In a room where the density may exceed the limit, create an opening with adjacent rooms, or install mechanical ventilation combined with a gas leak detection device. The density is as given below.

### Total amount of refrigerant (kg)

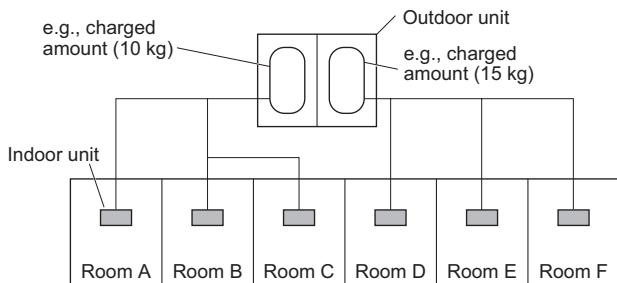
$$\text{Min. volume of the indoor unit installed room (m}^3\text{)} \leq \text{Density limit (kg/m}^3\text{)}$$

The density limit of refrigerant which is used in multi air conditioners is  $0.3 \text{ kg/m}^3$  (ISO 5149).

#### NOTE

- If there are 2 or more refrigerating systems in a single refrigerating device, the amount of refrigerant should be as charged in each independent device.

For the amount of charge in this example:

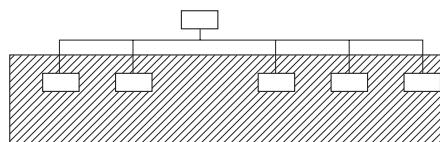


The possible amount of leaked refrigerant gas in rooms A, B and C is 10 kg.

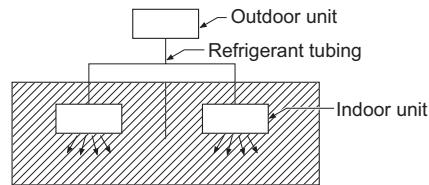
The possible amount of leaked refrigerant gas in rooms D, E and F is 15 kg.

- The standards for minimum room volume are as follows.

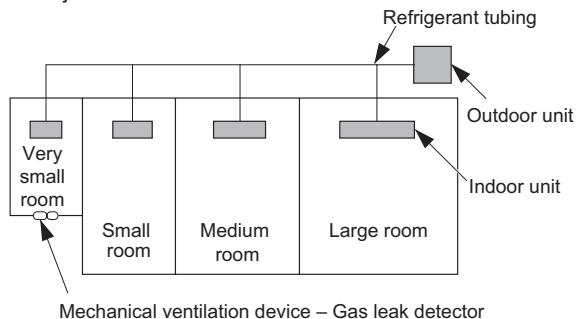
- No partition (shaded portion)



- When there is an effective opening with the adjacent room for ventilation of leaking refrigerant gas (opening without a door, or an opening 0.15% or larger than the respective floor spaces at the top or bottom of the door).

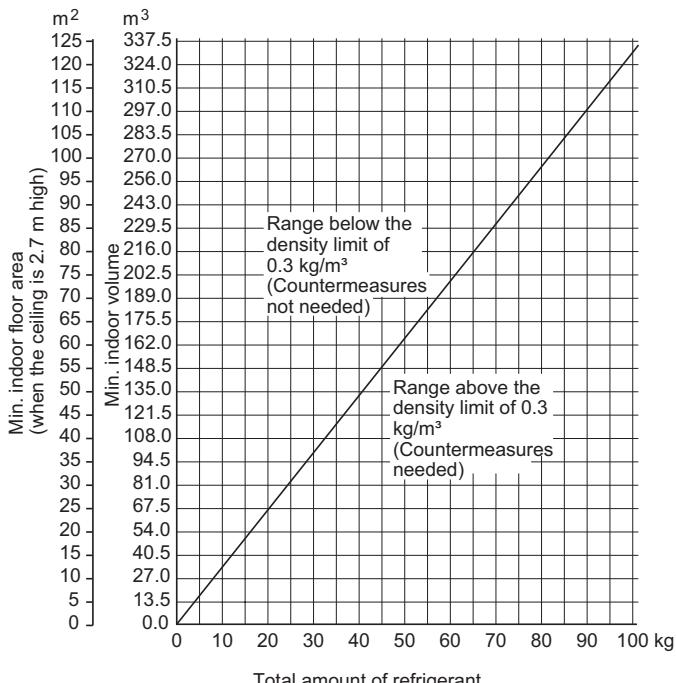


- If an indoor unit is installed in each partitioned room and the refrigerant tubing is interconnected, the smallest room of course becomes the object. But when mechanical ventilation is installed interlocked with a gas leakage detector in the smallest room where the density limit is exceeded, the volume of the next smallest room becomes the object.



Mechanical ventilation device – Gas leak detector

- The minimum indoor floor space compared with the amount of refrigerant is roughly as follows: (When the ceiling is 2.7 m high)



## Precautions for Installation Using New Refrigerant

### 1. Care regarding tubing

#### 1-1. Process tubing

- Material: Use C1220 phosphorous deoxidized copper specified in JIS H3300 "Copper and Copper Alloy Seamless Pipes and Tubes." For tubes of ø22.22 or larger, use C1220 T-1/2H material or H material, and do not bend the tubes.
- **Tubing size: Be sure to use the sizes indicated in the table below.**
- Use a tube cutter when cutting the tubing, and be sure to remove any flash. This also applies to distribution joints (optional).
- When bending tubing, use a bending radius that is 4 times the outer diameter of the tubing or larger.



**CAUTION**

**Use sufficient care in handling the tubing. Seal the tubing ends with caps or tape to prevent dirt, moisture, or other foreign substances from entering. These substances can result in system malfunction.**

Unit: mm

Material		O				
Copper tube	Outer diameter	6.35	9.52	12.7	15.88	19.05
	Wall thickness	0.8	0.8	0.8	1.0	1.2

Unit: mm

Material		1/2 H, H					
Copper tube	Outer diameter	22.22	25.4	28.58	31.75	38.1	41.28
	Wall thickness	1.0	1.0	1.0	1.1	over 1.35	over 1.45

- 1-2. Prevent impurities including water, dust and oxide from entering the tubing. Impurities can cause R410A refrigerant deterioration and compressor defects. Due to the features of the refrigerant and refrigerating machine oil, the prevention of water and other impurities becomes more important than ever.

### 2. Be sure to recharge the refrigerant only in liquid form.

- 2-1. Since R410A is a non-azeotrope, recharging the refrigerant in gas form can lower performance and cause defects in the unit.
- 2-2. Since refrigerant composition changes and performance decreases when gas leaks, collect the remaining refrigerant and recharge the required total amount of new refrigerant after fixing the leak.

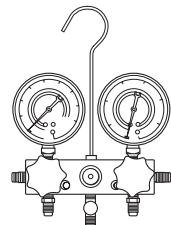
### 3. Different tools required

- 3-1. Tool specifications have been changed due to the characteristics of R410A.

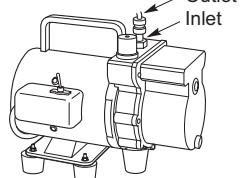
Some tools for R22- and R407C-type refrigerant systems cannot be used.

Item	New tool?	R407C tools compatible with R410A?	Remarks
Manifold gauge	Yes	No	Types of refrigerant, refrigerating machine oil, and pressure gauge are different.
Charge hose	Yes	No	To resist higher pressure, material must be changed.
Vacuum pump	Yes	Yes	Use a conventional vacuum pump if it is equipped with a check valve. If it has no check valve, purchase and attach a vacuum pump adapter.
Leak detector	Yes	No	Leak detectors for CFC and HCFC that react to chlorine do not function because R410A contains no chlorine. Leak detectors for HFC134a can be used for R410A.
Flaring oil	Yes	No	For systems that use R22, apply mineral oil (Suniso oil) to the flare nuts on the tubing to prevent refrigerant leakage. For machines that use R407C or R410A, apply synthetic oil (ether oil) to the flare nuts.

Manifold gauge



Vacuum pump

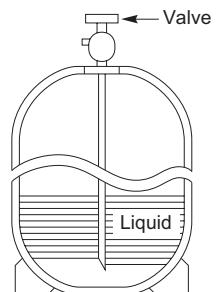


\* Using tools for R22 and R407C and new tools for R410A together can cause defects.

- 3-2. Use R410A exclusive cylinder only.

**Single-outlet valve  
(with siphon tube)**

Liquid refrigerant should be recharged with the cylinder standing on end as shown.



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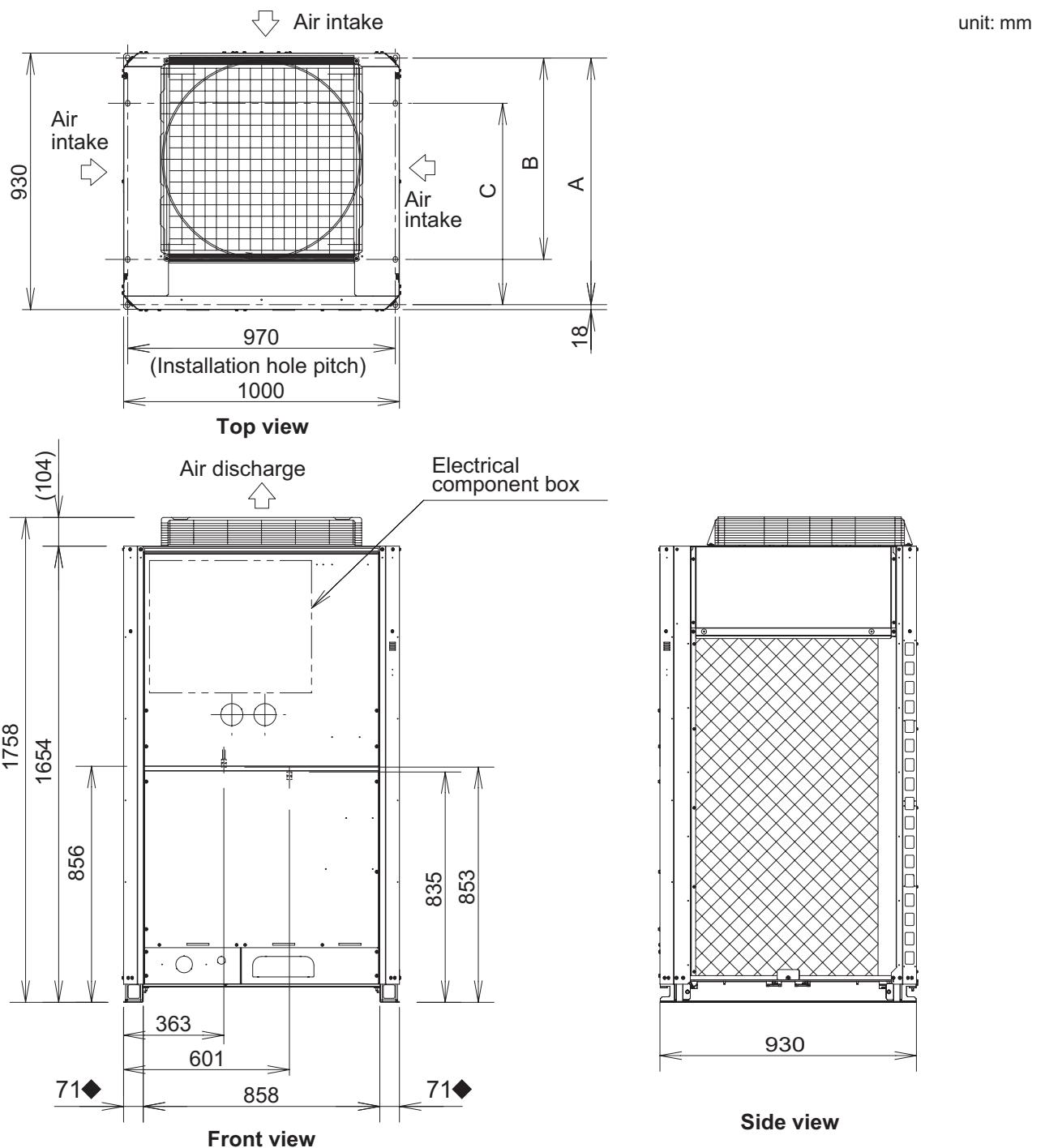
### 1. OUTLINE OF 2WAY SYSTEM

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## 1. Line-up

### Outdoor units

Model	U-14ME1E81	U-16ME1E81
Capacity: kW (BTU/h) Cooling / Heating	40.0 (136,500)/ 45.0 (153,600)	45.0 (153,600)/ 50.0 (170,600)



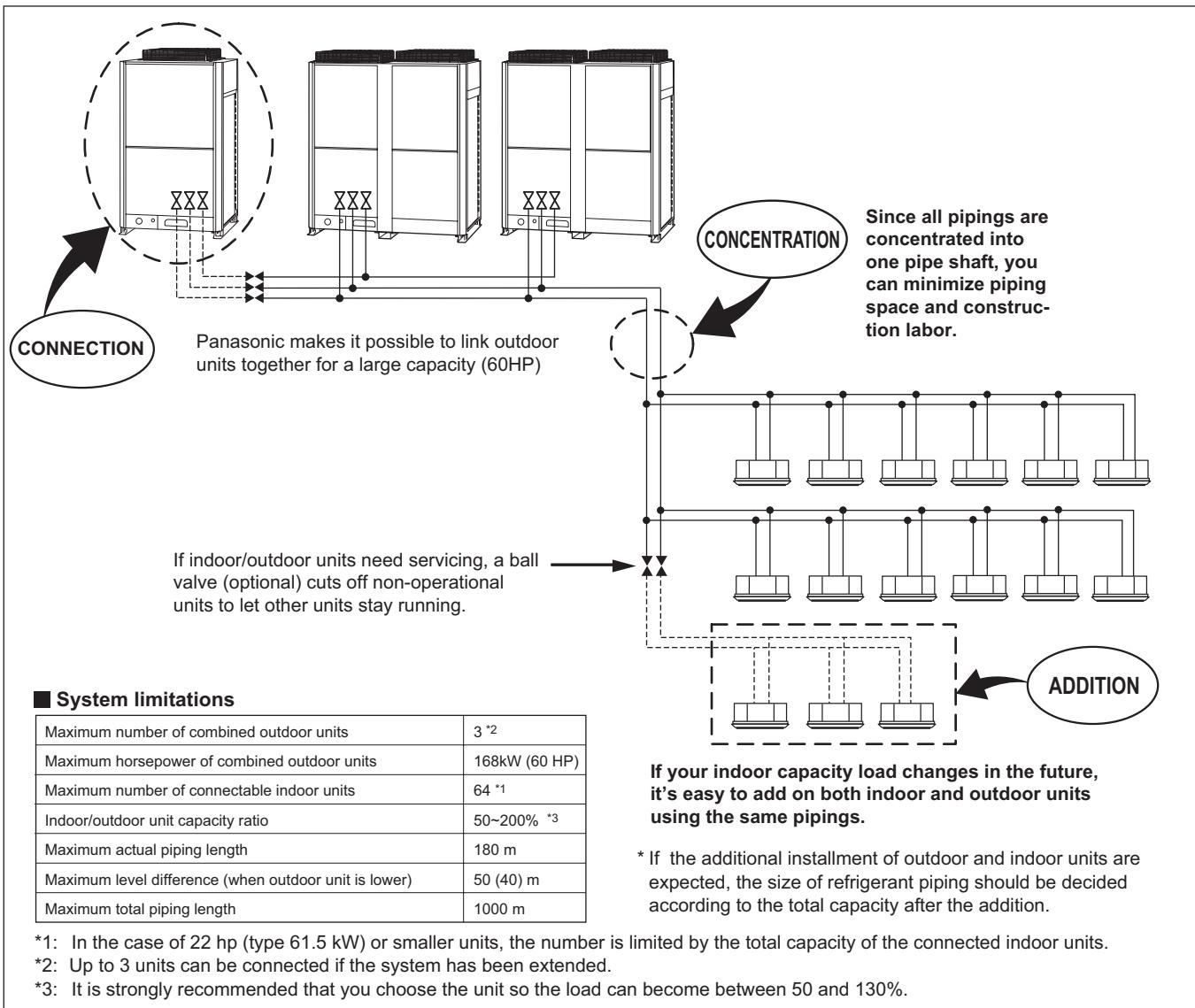
- ◆ Installation fixing bracket  
Installation side

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".
  - A : 894 (Installation hole pitch) \* The tubing is routed out from the front.
  - B : 730 (Installation hole pitch) \* The tubing is routed out from the bottom.
  - C : 730 (Installation hole pitch)

## 2. Features of 2WAY SYSTEM

### 2-1. Outline of 2WAY SYSTEM

#### ■ System example



## 2. Features of 2WAY SYSTEM

### ■ Combination of outdoor units (Standard-COP mode)

Total horse power Type (hp)	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60		
	8	1						1																					
8	1								1																				
10		1								1																			
12			1								1	1								1	1								
14				1						1	1	1		1						1	1								
16					1							1	1	2	1	1				1	2	2	3	2	2	1			
18						1									1	1							1		1	2	1		
20							1									1	1	2							1	1	1	2	3

### ■ Combination of outdoor units (High-COP mode)

- Setting the Dip switch (SW8) on the outdoor unit PCB to "ON" activates as the high-COP mode.
  - When operating in the high-COP mode, the outdoor unit capacity decreases against the standard COP mode.
- See the following table and select the most suitable unit for the air conditioning load.

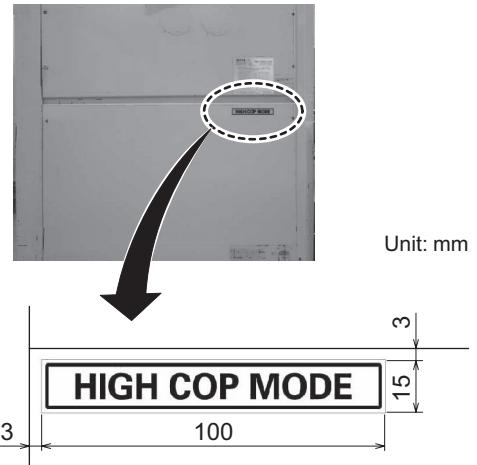
Total system horsepower (kW)	Combined outdoor units		
8HP (22.4)	—	—	—
10HP (28.0)	U-14ME1E81	—	—
12HP (33.5)	U-16ME1E81	—	—
14HP (40.0)	U-18ME1E81	—	—
16HP (45.0)	U-20ME1E81	—	—
18HP (50.0)	U-14ME1E81	U-8ME1E81	—
20HP (56.0)	U-16ME1E81	U-8ME1E81	—
22HP (61.5)	U-18ME1E81	U-8ME1E81	—
24HP (68.0)	U-16ME1E81	U-16ME1E81	—
26HP (73.0)	U-18ME1E81	U-16ME1E81	—
28HP (78.5)	U-20ME1E81	U-16ME1E81	—
30HP (85.0)	U-20ME1E81	U-18ME1E81	—
32HP (90.0)	U-20ME1E81	U-20ME1E81	—
34HP (96.0)	U-18ME1E81	U-16ME1E81	U-8ME1E81
36HP (101.0)	U-16ME1E81	U-16ME1E81	U-16ME1E81
38HP (107.0)	U-18ME1E81	U-16ME1E81	U-16ME1E81
40HP (113.0)	U-20ME1E81	U-16ME1E81	U-16ME1E81
42HP (118.0)	U-20ME1E81	U-18ME1E81	U-16ME1E81
44HP (124.0)	U-20ME1E81	U-18ME1E81	U-18ME1E81
46HP (130.0)	U-20ME1E81	U-20ME1E81	U-18ME1E81
48HP (135.0)	U-20ME1E81	U-20ME1E81	U-20ME1E81

\* Be sure that the total load of indoor unit (load when operating the maximum number of units) should not exceed 130% of the outdoor unit capacity.

## 2. Features of 2WAY SYSTEM

### ■ Setting procedure for using High-COP mode

- (1) Turn off all outdoor units.
- (2) Set the DIP switch (SW8) to "ON" on all main outdoor units PCB for setting the high-COP mode.  
If multiple outdoor units are connected to a system, perform the same step on each of the outdoor units. In the case of combination with the 8HP (U-8ME1E81), do set in a similar manner noted above.  
If one of the outdoor units is not set in the "ON" position, the alarm message indicates "L17".
- (3) Switch on the outdoor unit.  
Now the setting is over.  
Paste the label of "HIGH COP MODE" on the outdoor unit set in the high-COP mode.  
The purpose of this notice is to inform that the unit is in the high-COP mode before maintenance is performed.



1

#### NOTE

- It may sometimes happen that the power consumption increases to that in the standard COP mode temporarily due to the maintenance drive of the outdoor unit although the high-COP mode has been set. The electrical capacitance (electrical wire length, diameter, breaker capacity and electrical capacitance for the building) should be in the same manner of the standard COP mode.
- Be sure that the total load of indoor units (load when operating the maximum number of units) should not exceed 130% of outdoor unit capacity. The limitation of the indoor-outdoor capacity ratio is 200% against the outdoor capacity in the high-COP mode.
- Select the tube length and size equivalent to the content described on pages 9 and 10 in the installation instructions. Be sure to read the total capacity of outdoor units as that in the high-COP mode.
- Select the optional distribution joints suited to the capacity.  
However, when you used the tube diameter for the standard COP mode between the outdoor unit and the first distribution joint in a system to which more than two outdoor units are connected, select joint suited to the capacity in the standard COP mode.
- The additional refrigerant charge should be calculated according to the liquid tubing size.
- The installation space is equivalent to that of the standard COP mode.
- The shield for horizontal exhaust and wind ducting are equivalent to that of the standard COP mode.

## 2. Features of 2WAY SYSTEM

### ■ Capacity control

The compressor combination (DC inverter compressor + constant-speed compressor) allows smooth capacity control from 0.8 HP to 60 HP.

#### Realization of smooth capacity control from 0.8HP to 60HP

Capacity control is possible smoothly with a DC inverter compressor.

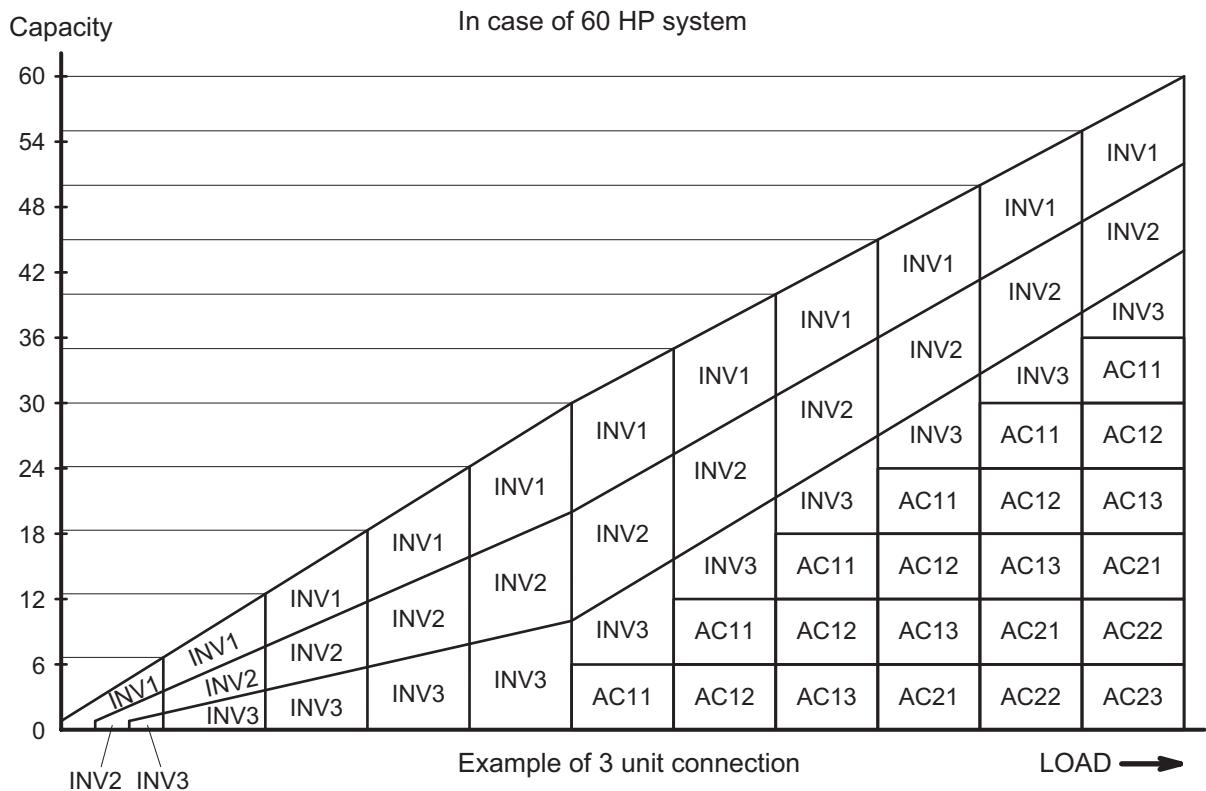
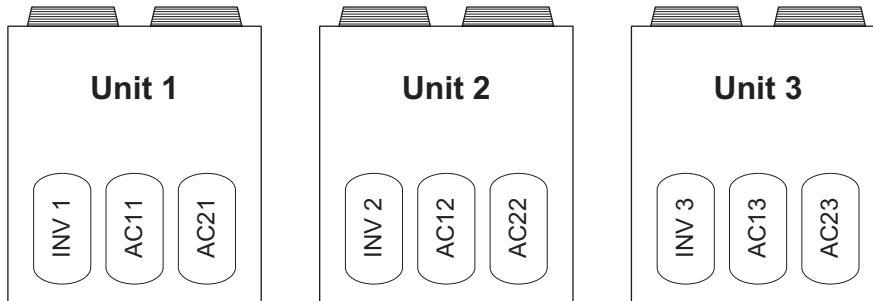
The graph shown in the below is the image of the operating combination of compressors in case of 60HP system.

In actual operation, the combination will be changed by operationg condition, operating time amount, priority of compressor and so on.

Comp. HP	Unit 1 (main)	Unit 2 (sub 1)	Unit 3 (sub 2)
INV comp.	10	10	10
AC1 comp.	6	6	6
AC2 comp.	6	6	6

\* 60HP = U-20ME1E81 x 3

1



### 3. MARKINGS FOR DIRECTIVE 97/23/EC (PED)

Rating nameplate figure

<b>Panasonic</b>					
<b>Multi Type Air Conditioner</b> Кондиционер Мульти-Сплит Система Кондиционер Мульти-сплит система		<b>Model No.</b>	<b>A:</b> Model Name Various Класс защиты I		
POWER SOURCE : <b>B:</b> Various MAX ELECTRIC INPUT <b>C:</b> kW <b>A:</b> A TIME DELAY FUSE MAX SIZE : <b>D:</b> A UNIT PROTECTION : IPX4					
Operating Spec. Area Various (Not for the PED)					
MAX. WORKING PRESSURE : HIGH SIDE <b>E:</b> bar (MPa) Various LOW SIDE <b>F:</b> bar (MPa) Various					
REFRIGERANT: R410A <b>G:</b> kg. Various NET WEIGHT : Various (Not for the PED)					
SERIAL NO. : Серийный номер. : Various Серийний номер. :		PROD. DATE : Дата производства : YYYY-MM Дата виготовлення :			
THE CAPACITY, CURRENT AND POWER INPUT ARE FOR THIS UNIT CONNECTED TO THE FOLLOWING INDOOR UNITS. ПРОИЗВОДИТЕЛЬНОСТЬ, ТОК И ПОТРЕБЛЯЕМАЯ МОЩНОСТЬ ДАННОГО БЛОКА ПРИ ЕГО ПОДКЛЮЧЕНИИ К СЛЕДУЮЩИМ ВНУТРЕННИМ БЛОКАМ. ПРОДУКТИВНІСТЬ, СТРУМ ТА СПОЖИВАНА ПОТУЖНІСТЬ ДАННОГО БЛОКУ ПРИ ЙОГО ПІДКЛЮЧЕННІ ДО НАСТУПНИХ ВНУТРІШНІХ БЛОКІВ.					
Various (Not for the PED) FOR OTHER COMBINATIONS, REFER TO MANUAL. ИНФОРМАЦИЮ ПО ДРУГИМ КОМБИНАЦІЯМ СМОТРИТЕ В ІНСТРУКЦІЇ. ЗА ІНФОРМАЦІЮ СТОСОВНО ІНШИХ КОМБІНАЦІЙ ЗВЕРТАЙТЕСЯ ДО ІНСТРУКЦІЇ.					
Authorized representative in EU Panasonic Testing Centre		Panasonic Marketing Europe GmbH Winsbergring 15, 22525 Hamburg, Germany			
Panasonic Corporation 1006 Kadoma, Kadoma City Osaka, Japan			Made in Malaysia Сделано в Малайзии Вироблено в Малайзії Fabricado en Malasia		

#### Tabulation of Various data

A	U-8ME1E81	U-10ME1E81	U-12ME1E81	U-14ME1E81	U-16ME1E81
B	380 – 415 V, 3 N~, 50 Hz				
C	7.90 kW, 11.7 A	10.8 kW, 16.4 A	13.0 kW, 19.7 A	15.7 kW, 23.3 A	19.1 kW, 28.4 A
D	25 A	25 A	35 A	35 A	45 A
E	38.0 bar (3.80 MPa)				
F	25.0 bar (2.50 MPa)				
G	6.5 kg	6.8 kg	6.8 kg	8.5 kg	8.5 kg
A	U-18ME1E81	U-20ME1E81			
B	380 – 415 V, 3 N~, 50 Hz				
C	19.8 kW, 30.5 A	23.1 kW, 35.4 A			
D	50 A	50 A			
E	38.0 bar (3.80 MPa)				
F	25.0 bar (2.50 MPa)				
G	9.0 kg	9.0 kg			

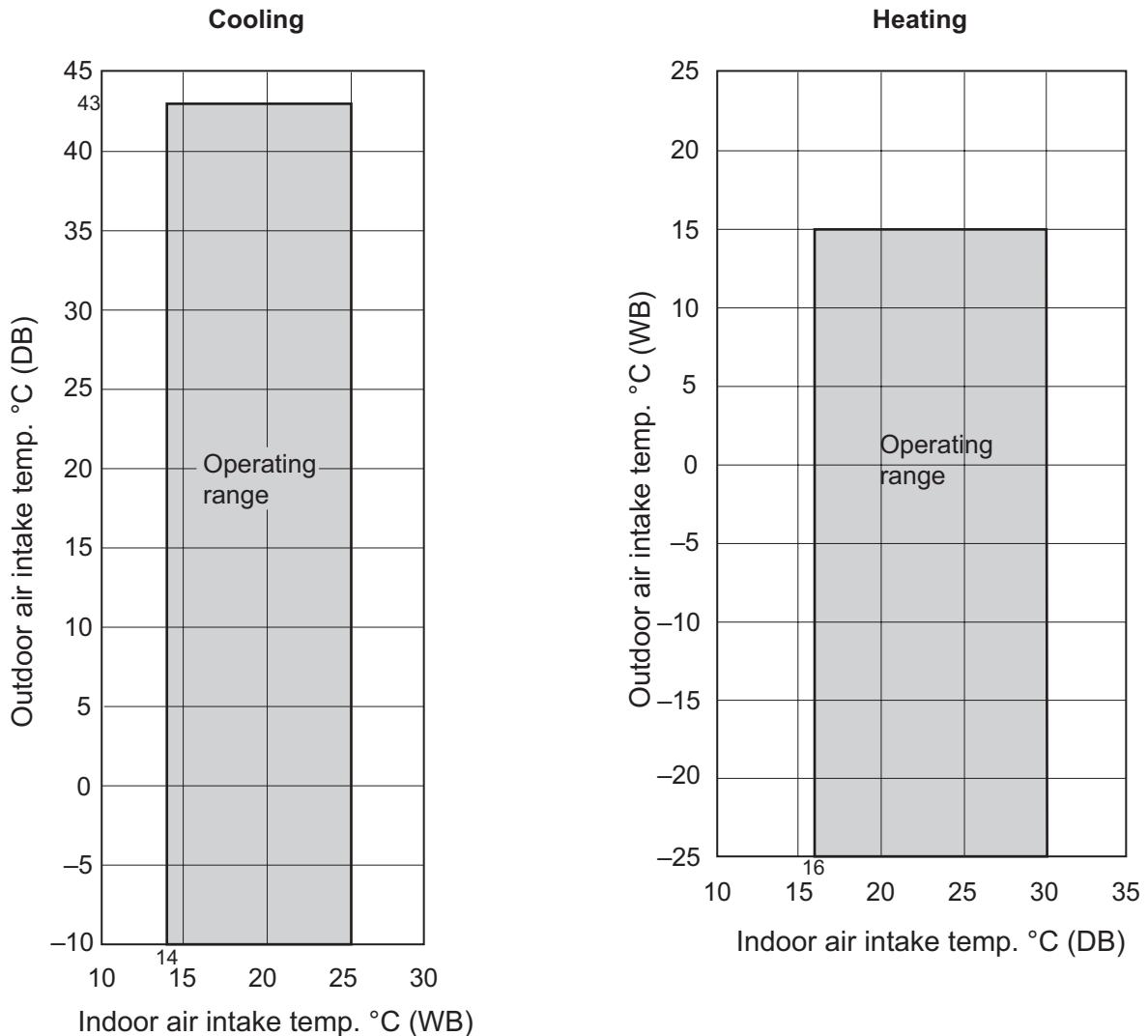
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## 1. Model Selecting and Capacity Calculator

### 1-1. Operating Range



### 3. Electrical Wiring

#### 3-1. General Precautions on Wiring

- (1) Before wiring, confirm the rated voltage of the unit as shown on its nameplate, then carry out the wiring closely following the wiring diagram.
- (2) Provide a power outlet to be used exclusively for each unit, and a power supply disconnect, circuit breaker and earth leakage breaker for overcurrent protection should be provided in the exclusive line.
- (3) To prevent possible hazards from insulation failure, the unit must be grounded.
- (4) Each wiring connection must be done in accordance with the wiring system diagram. Wrong wiring may cause the unit to misoperate or become damaged.
- (5) Do not allow wiring to touch the refrigerant tubing, compressor, or any moving parts of the fan.
- (6) Unauthorized changes in the internal wiring can be very dangerous. The manufacturer will accept no responsibility for any damage or misoperation that occurs as a result of such unauthorized changes.
- (7) Regulations on wire diameters differ from locality to locality. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning. You must ensure that installation complies with all relevant rules and regulations.
- (8) To prevent malfunction of the air conditioner caused by electrical noise, care must be taken when wiring as follows:
  - The remote control wiring and the inter-unit control wiring should be wired apart from the inter-unit power wiring.
  - Use shielded wires for inter-unit control wiring between units and ground the shield on both sides.
- (9) If the power supply cord of this appliance is damaged, it must be replaced by a repair shop appointed by the manufacturer, because special purpose tools are required.
- (10) Use a waterproof conduit for outdoor unit wiring to avoid damaging the wire and to prevent accumulation of liquid inside the unit.

#### 3-2. Recommended Wire Length and Wire Diameter for Power Supply System

##### Outdoor unit

	(A) Power supply		Time delay fuse or circuit capacity
	Wire size	Max. length	
U-8ME1E81	4 mm <sup>2</sup>	56 m	25 A
U-10ME1E81	4 mm <sup>2</sup>	46 m	25 A
U-12ME1E81	6 mm <sup>2</sup>	65 m	35 A
U-14ME1E81	10 mm <sup>2</sup>	91 m	35 A
U-16ME1E81	10 mm <sup>2</sup>	75 m	45 A
U-18ME1E81	10 mm <sup>2</sup>	70 m	50 A
U-20ME1E81	10 mm <sup>2</sup>	58 m	50 A

(A) Power supply		Time delay fuse or circuit capacity
Wire size	Max. length	
6 mm <sup>2</sup>	84 m	35 A
6 mm <sup>2</sup>	69 m	35 A
6 mm <sup>2</sup>	65 m	35 A
10 mm <sup>2</sup>	91 m	50 A
10 mm <sup>2</sup>	75 m	50 A
10 mm <sup>2</sup>	70 m	50 A
10 mm <sup>2</sup>	58 m	50 A

or

##### Indoor unit

Type	(B) Power supply		Time delay fuse or circuit capacity
	Minimum 2 mm <sup>2</sup>	2.5 mm <sup>2</sup>	
K2	Max. 150 m	—	15 A
Y2	Max. 130 m	—	15 A
K1	—	Max. 150 m	10 – 16 A
D1, L1, U1, Y1, T1, F1, M1, P1, R1	—	Max. 130 m	10 – 16 A
E1 (73, 106, 140)	—	Max. 60 m	10 – 16 A
E1 (224)	—	Max. 50 m	10 – 16 A
E1 (280)	—	Max. 30 m	10 – 16 A

##### Control wiring

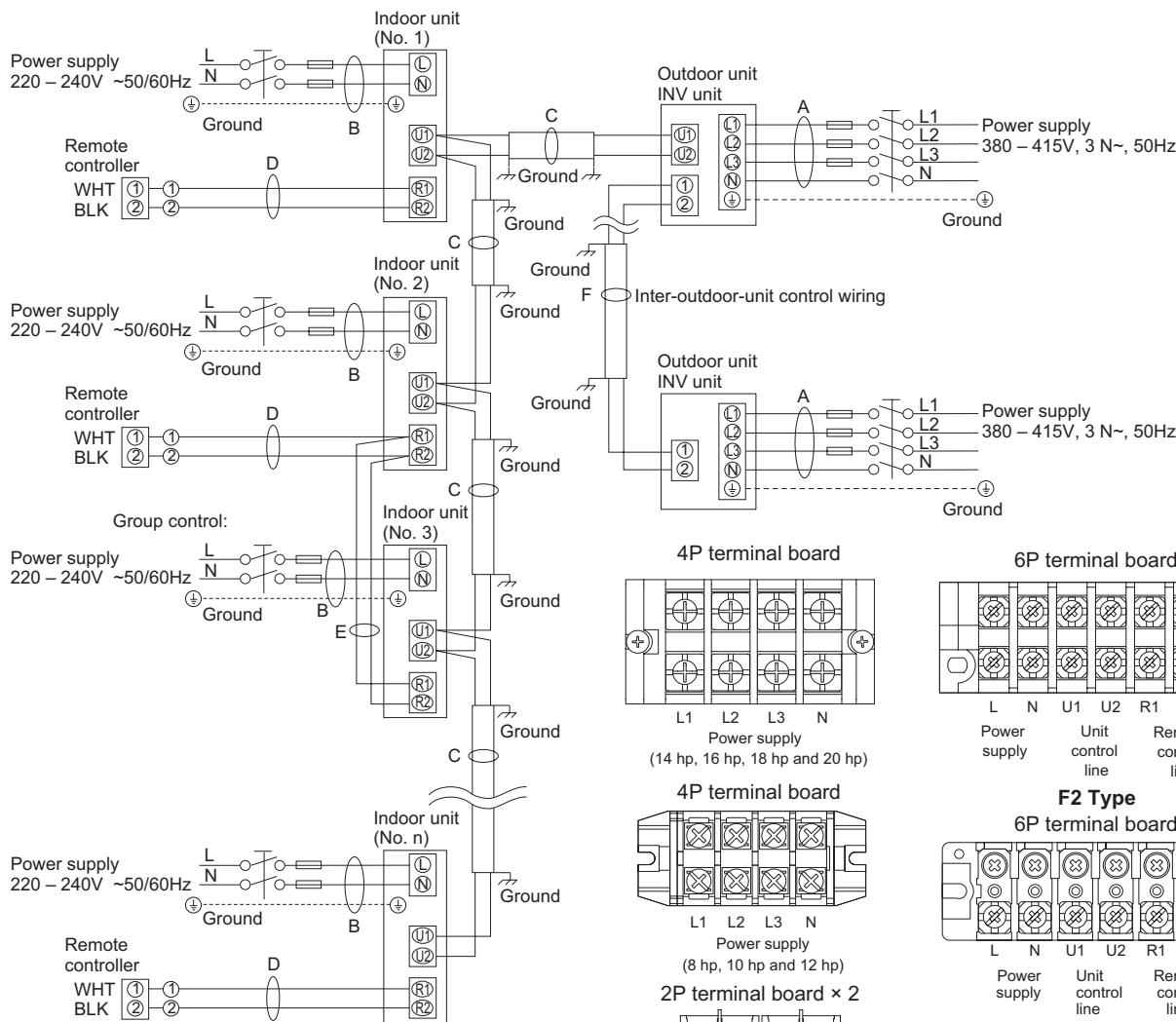
(C) Inter-unit (between outdoor and indoor units) control wiring		(D) Remote control wiring	
0.75 mm <sup>2</sup> (AWG #18) Use shielded wiring*	or	2.0 mm <sup>2</sup> (AWG #14) Use shielded wiring*	0.75 mm <sup>2</sup> (AWG #18)
Max. 1,000 m		Max. 2,000 m	Max. 500 m

**NOTE** \* With ring-type wire terminal.

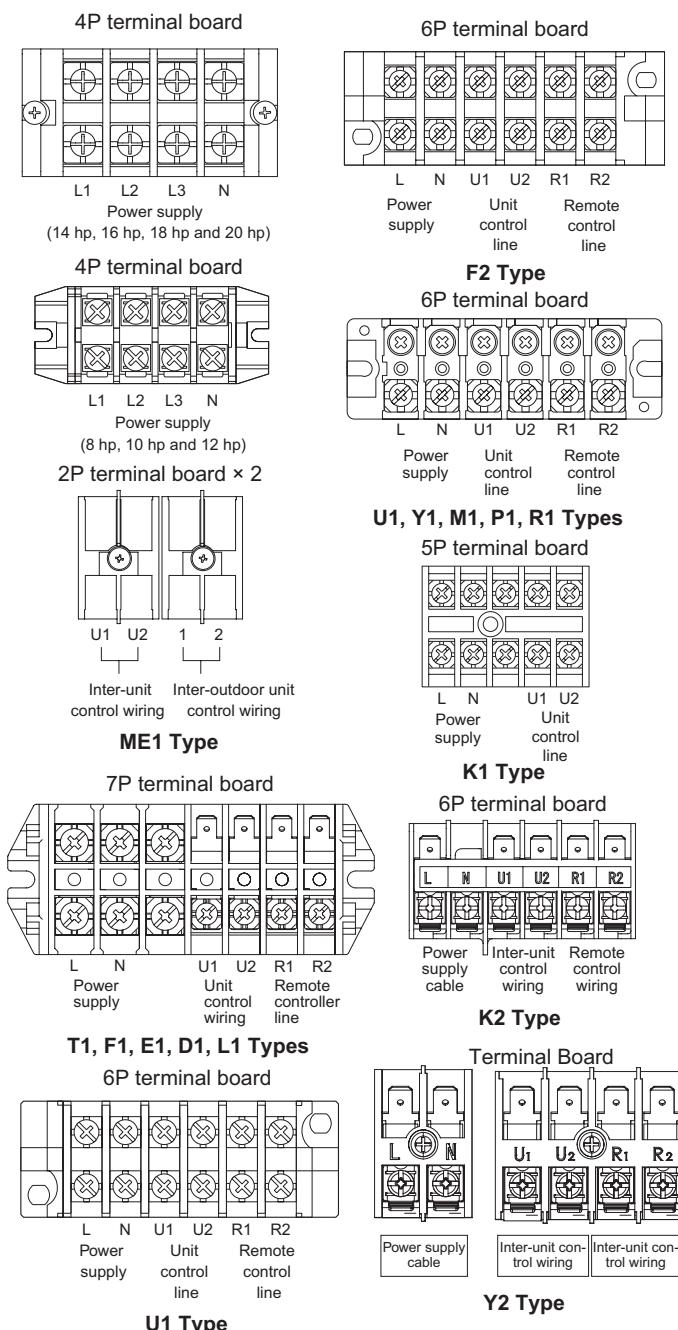
(E) Control wiring for group control	(F) Inter-outdoor unit control wiring
0.75 mm <sup>2</sup> (AWG #18)	0.75 mm <sup>2</sup> (AWG #18) Use shielded wiring
Max. 200 m (Total)	Max. 300 m

### 3. Electrical Wiring

#### 3-3. Wiring System Diagrams



- (1) Refer to Section 3-2. "Recommended Wire Length and Wire Diameter for Power Supply System" for the explanation of "A", "B", "C", "D", "E" and "F" in the above diagram.
- (2) The basic connection diagram of the indoor unit shows the 7P terminal board, so the terminal boards in your equipment may differ from the diagram.
- (3) Refrigerant Circuit (R.C.) address should be set before turning the power on.
- (4) Address setting can be executed by remote controller automatically. Refer to Section 5.
- (5) Regarding S-280ME1E5, the power supply is 220-240V, 50Hz.



### 3. Electrical Wiring



#### CAUTION

- (1) When linking outdoor units in a network, disconnect the terminal extended from the short plug (CN072, 2P Black, location: right bottom on the outdoor main control PCB) from all outdoor units except any one of the outdoor units.  
(When shipping: In shorted condition.)  
For a system without link (no connection wiring between outdoor units), do not remove the short plug.
- (2) Do not install the inter-unit control wiring in a way that forms a loop. (Fig. 2-2)

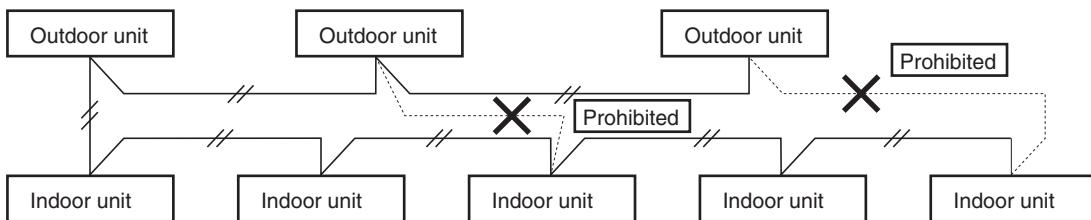


Fig. 2-2

2

- (3) Do not install inter-unit control wiring such as star branch wiring. Star branch wiring causes misaddress setting.

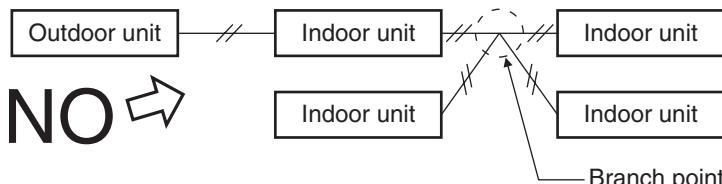


Fig. 2-3

- (4) If branching the inter-unit control wiring, the number of branch points should be 16 or fewer. (Branches less than 1 m are not included in the total branch number.) (Fig. 2-4)

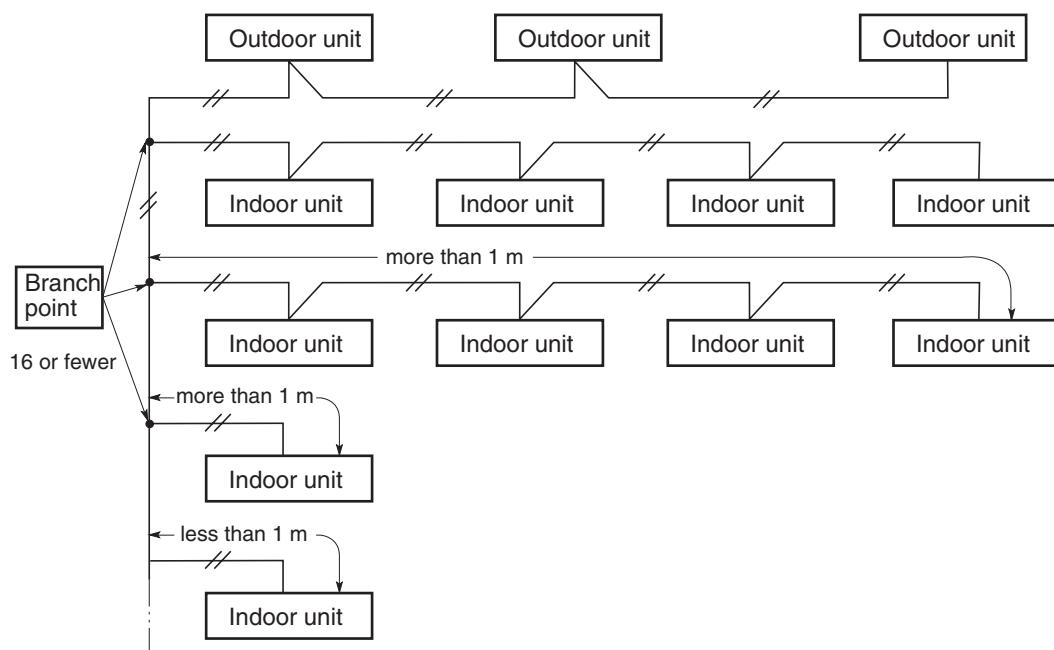


Fig. 2-4

### 3. Electrical Wiring

- (5) Use shielded wires for inter-unit control wiring (c) and ground the shield on both sides, otherwise misoperation from noise may occur. (Fig. 2-5)  
Connect wiring as shown in Section “3-3. Wiring System Diagram.”
- (6) Use the standard power supply cables for Europe (such as H05RN-F or H07RN-F which conforms to CENELEC (HAR) rating specifications) or use the cables based on IEC standard. (60245 IEC57, 60245 IEC66)

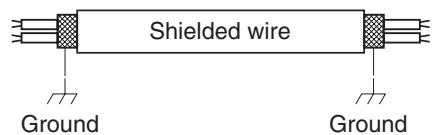


Fig. 2-5


**WARNING**

Loose wiring may cause the terminal to overheat or result in unit malfunction.  
A fire hazard may also exist.  
Therefore, ensure that all wiring is tightly connected.

When connecting each power wire to the terminal, follow the instructions on “How to connect wiring to the terminal” and fasten the wire securely with the fixing screw of the terminal plate.

#### How to connect wiring to the terminal

##### ■ For stranded wiring

- (1) Cut the wire end with cutting pliers, then strip the insulation to expose the stranded wiring about 10 mm and tightly twist the wire ends. (Fig. 2-6)
- (2) Using a Phillips head screwdriver, remove the terminal screw(s) on the terminal plate.
- (3) Using a ring connector fastener or pliers, securely clamp each stripped wire end with a ring pressure terminal.
- (4) Place the ring pressure terminal, and replace and tighten the removed terminal screw using a screwdriver. (Fig. 2-7)

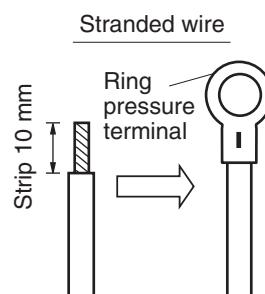


Fig. 2-6

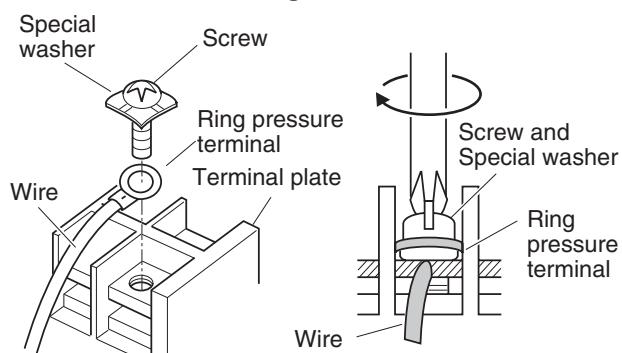


Fig. 2-7

##### ■ Examples of shield wires

- (1) Remove cable coat not to scratch braided shield. (Fig. 2-8)
- (2) Ravel braided shield carefully and put tightly braided shield together. Coat with insulation tube or wrap insulation tape after putting tightly. (Fig. 2-9)
- (3) Remove coat of signal wire. (Fig. 2-10)
- (4) Connect signal wire removed coat and shield wire with pressure terminal. (Fig. 2-11)



Fig. 2-8

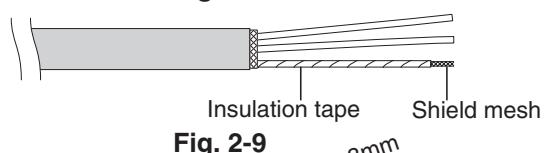


Fig. 2-9

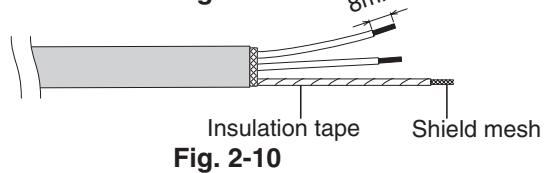


Fig. 2-10

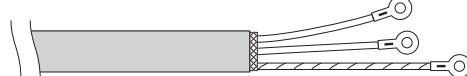


Fig. 2-11

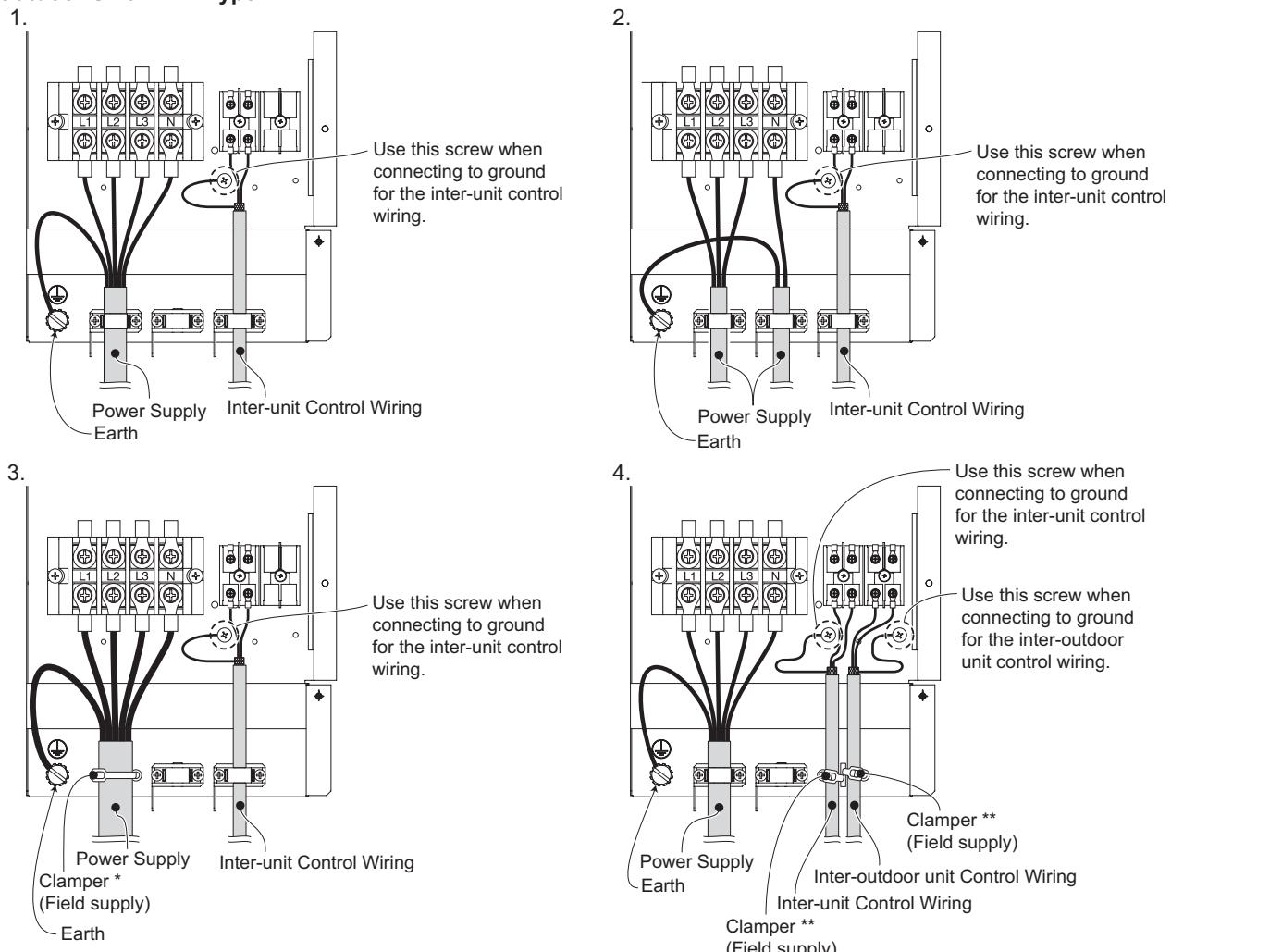
##### ■ Earth wire for power supply

The earth wire should be longer than the other lead wires for electrical safety.

### 3. Electrical Wiring

#### ■ Wiring sample

Outdoor Unit : ME1 Type



\* First remove the attached resin fixture.

Then lead the clamper (field supply) through the screw hole and fix the power supply wire.

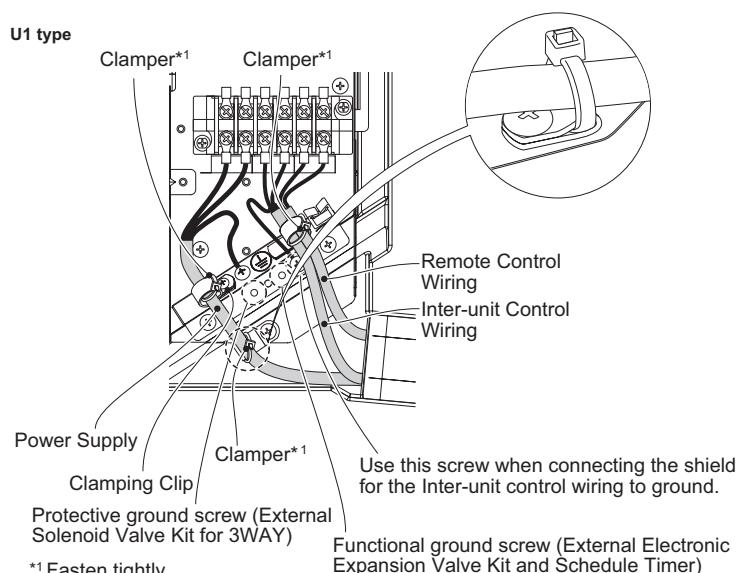
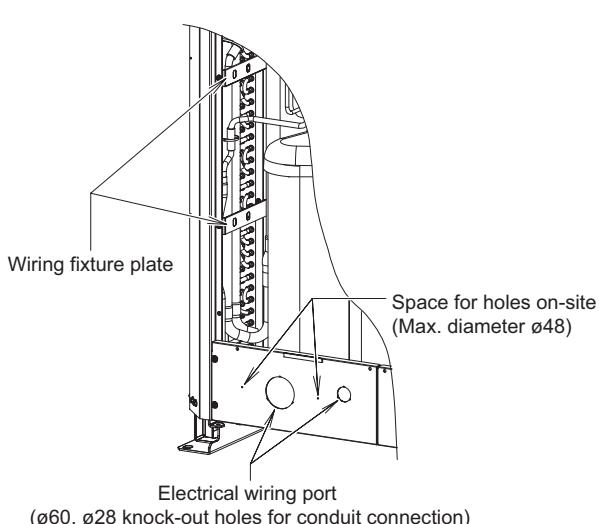
\*\* First remove the attached resin fixture.

Then lead the clamper (field supply) through the screw hole and square hole from top to bottom or vice versa.

Finally fix each inter-outdoor unit control wire and the inter-unit control wire separately with the clamper (field supply).

#### NOTE

- Fix the wires with the clamper (field supply) to the wiring fixture plates (2 locations) and do not allow the refrigerant tubing to touch the compressor.
- Use a waterproof conduit for outdoor unit wiring to avoid damaging the wire and to prevent accumulation of liquid inside the unit.



## Contents

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# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (2)

OUTDOOR		MODEL	U-14ME1E81			U-16ME1E81			U-18ME1E81			
PERFORMANCE TEST CONDITION			EN14511			EN14511			EN14511			
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz			
		V	380	400	415	380	400	415	380	400	415	
C O O L I N G	CAPACITY	KW	40.0	40.0	40.0	45.0	45.0	45.0	50.0	50.0	50.0	
		BTU/h	136500	136500	136500	153600	153600	153600	170600	170600	170600	
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		CURRENT	A	18.00	17.10	16.50	21.80	20.70	19.90	24.00	22.80	22.00
	ANNUAL CONSUMPTION	INPUT POWER	W	11.10k	11.10k	11.10k	13.40k	13.40k	13.40k	14.30k	14.30k	14.30k
		W *4	-	-	-	-	-	-	-	-	-	
	EER/EER CLASS	(W/W)*5/("A"~"G")	3.60	3.60	3.60	3.36	3.36	3.36	3.50	3.50	3.50	
		EER	BTU/hW	-	-	-	-	-	-	-	-	
	POWER FACTOR	%	94	94	94	93	93	94	91	91	90	
		NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	
H E A T I N G	CAPACITY	Power Level dB	-	-	-	-	-	-	-	-	-	
		dB-A	62.0 / -			62.0 / -			60.0 / -			
		Power Level dB	76.5 / -			76.5 / -			74.5 / -			
		KW	45.0	45.0	45.0	50.0	50.0	50.0	56.0	56.0	56.0	
	COP/COP CLASS	BTU/h	153600	153600	153600	170600	170600	170600	191100	191100	191100	
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
	CURRENT	A	17.40	16.50	15.90	21.10	20.10	19.30	24.30	23.10	22.30	
		INPUT POWER	W	10.70k	10.70k	10.70k	13.00k	13.00k	13.00k	14.50k	14.50k	14.50k
	COP/COP CLASS	(W/W)*5/("A"~"G")	4.21	4.21	4.21	3.85	3.85	3.85	3.86	3.86	3.86	
		COP	BTU/hW	-	-	-	-	-	-	-	-	
	POWER FACTOR	%	93	94	94	94	93	94	91	91	90	
		NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	
	NOISE INDOOR (H/L)	Power Level dB	-	-	-	-	-	-	-	-	-	
EXTRALOW TEMP	CAPACITY(KW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-	
	MAX CURRENT(A)/MAX INPUT POWER(W)	23.3 / 14.4k	23.3 / 15.1k	23.3 / 15.7k	28.4 / 17.5k	28.4 / 18.4k	28.4 / 19.1k	30.5 / 18.2k	30.5 / 19.1k	30.5 / 19.8k		
	STARTING CURRENT(A)/COMP OUTPUT(W)	74 / -	77 / -	80 / -	78 / -	81 / -	85 / -	91 / -	93 / -	96 / -		
	NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-		
	FM OUTPUT (I.D./O.D.) W	-	/	750	-	/	750	-	/	750×2		
	MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-		
	External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}		
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-	-		
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-	-		
	O.D. AIR FLOW	m³/min (ft³/min)	212	(7487)	212	(7487)	244	(8617)				
	REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	8.5k / 50.0k (300 / 1764)	R410A	8.5k / 50.0k (300 / 1764)	R410A	9.0k / 50.0k (317 / 1764)					
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)					
R I	WIDTH : W mm(inch) O.D.	1000	(39-3/8)	1000	(39-3/8)	1000	(39-3/8)	1540	(60-5/8)			
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)			
P D	HEIGHT : H mm(inch) O.D.	1873	(73-47/64)	1873	(73-47/64)	1873	(73-47/64)	1873	(73-47/64)			
A I	WIDTH : W mm(inch) O.D.	1108	(43-5/8)	1108	(43-5/8)	1108	(43-5/8)	1695	(66-47/64)			
C M	DEPTH : D mm(inch) O.D.	1030	(40-35/64)	1030	(40-35/64)	1030	(40-35/64)	1030	(40-35/64)			
MASS	(NET) kg(lb) O.D.	309	(681)	309	(681)	421	(928)					
	(GROSS) kg(lb) O.D.	322	(710)	322	(710)	440	(970)					
	LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)					
Operation Condition	Cool O.D. (DBT)	-	-10°C ~ 43°C		-10°C ~ 43°C		-10°C ~ 43°C					
	Heat O.D. (WBT)	-	-25°C ~ 15°C		-25°C ~ 15°C		-25°C ~ 15°C					
P I	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø12.7 (1/2) (Gas) ø25.4 (1 inch) *1 (Balance) ø6.35(1/4) (Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) (Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) (Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4)										
	CONNECT METHOD	flared(Liquid), brazing(Gas), flared(Balance)	flared(Liquid), brazing(Gas), flared(Balance)	flared(Liquid), brazing(Gas), flared(Balance)	flared(Liquid), brazing(Gas), flared(Balance)	flared(Liquid), brazing(Gas), flared(Balance)	flared(Liquid), brazing(Gas), flared(Balance)					
I N G	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)					
	I.D.&O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)					
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2					

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (3)

OUTDOOR		MODEL	U-20ME1E81			U-14ME1E81 / U-8ME1E81			U-14ME1E81 / U-10ME1E81		
PERFORMANCE TEST CONDITION			EN14511			EN14511			EN14511		
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz		
		V	380	400	415	380	400	415	380	400	415
C O O L I N G	CAPACITY	KW	56.0	56.0	56.0	61.5	61.5	61.5	68.0	68.0	68.0
		BTU/h	191100	191100	191100	209900	209900	209900	232100	232100	232100
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	28.20	26.80	25.80	26.60	25.20	24.30	30.90	29.40	28.30
	INPUT POWER	W	16.80k	16.80k	16.80k	16.40k	16.40k	16.40k	18.90k	18.90k	18.90k
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	3.33	3.33	3.33	3.75	3.75	3.75	3.60	3.60	3.60
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	91	90	91	94	94	94	93	93	93
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-
	NOISE OUTDOOR (H/L)	dB-A	63.0 / -			63.0 / -			63.5 / -		
		Power Level dB	77.5 / -			77.5 / -			78.0 / -		
H E A T I N G	CAPACITY	KW	63.0	63.0	63.0	69.0	69.0	69.0	76.5	76.5	76.5
		BTU/h	215000	215000	215000	235500	235500	235500	261100	261100	261100
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	27.70	26.30	25.40	25.80	24.50	23.60	30.60	29.10	28.00
	INPUT POWER	W	16.50k	16.50k	16.50k	15.90k	15.90k	15.90k	18.70k	18.70k	18.70k
	COP/COP CLASS	(W/W)*5/("A"~"G")	3.82	3.82	3.82	4.34	4.34	4.34	4.09	4.09	4.09
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	91	91	90	94	94	94	93	93	93
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-
		Power Level dB	-	-	-	-	-	-	-	-	-
EXTRALOW TEMP	CAPACITY(KW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-
	MAX CURRENT(A)/MAX INPUT POWER(W)	35.4 / 21.1k	35.4 / 22.2k	35.4 / 23.1k	35.0 / 21.6k	35.0 / 22.8k	35.0 / 23.6k	39.7 / 24.3k	39.7 / 25.5k	39.7 / 26.5k	
STARTING CURRENT(A)/COMP OUTPUT(W)	98 / -	101 / -	103 / -	83 / -	86 / -	88 / -	92 / -	94 / -	96 / -		
NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-		
FM OUTPUT (I.D./O.D.) W	-	/	750×2	-	/	750×2	-	/	750×2		
MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-		
External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}		
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-		
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-		
	O.D. AIR FLOW	m³/min (ft³/min)	283	(9994)	359	(12678)	365	(12890)			
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	9.0k / 50.0k (317 / 1764)	R410A	15.0k / 80.0k (529 / 2822)	R410A	15.3k / 80.0k (540 / 2822)					
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)				
R I	WIDTH : W mm(inch) O.D.	1540	(60-5/8)	1830	(72-3/64)	1830	(72-3/64)				
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)				
P D	HEIGHT : H mm(inch) O.D.	1873	(73-47/64)	-	-	-	-				
A I	WIDTH : W mm(inch) O.D.	1696	(66-49/64)	-	-	-	-				
C M	DEPTH : D mm(inch) O.D.	1030	(40-35/64)	-	-	-	-				
MASS	(NET) kg(lb) O.D.	421	(928)	543	(1197)	543	(1197)				
	(GROSS) kg(lb) O.D.	440	(970)	567	(1250)	567	(1250)				
	LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)				
Operation Condition	Cool O.D. (DBT)	-	-10°C ~ 43°C	-	-10°C ~ 43°C	-	-10°C ~ 43°C	-			
	Heat O.D. (WBT)	-	-25°C ~ 15°C	-	-25°C ~ 15°C	-	-25°C ~ 15°C	-			
P I	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4)	(Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4)	(Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4)	(Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4)	(Liquid) ø15.88 (5/8) (Gas) ø28.58 (1-1/8) *1 (Balance) ø6.35(1/4) (Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4)					
P I	CONNECT METHOD	flared(Liquid), brazing(Gas), flared(Balance)	flared(Liquid), brazing(Gas), flared(Balance)								
I N G	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)				
I N G	I.D.&O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)				
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2				

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (4)

OUTDOOR		MODEL	U-14ME1E81 / U-12ME1E81			U-16ME1E81 / U-12ME1E81			U-16ME1E81 / U-14ME1E81			
PERFORMANCE TEST CONDITION			EN14511			EN14511			EN14511			
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz			
		V	380	400	415	380	400	415	380	400	415	
C O O L I N G	CAPACITY	KW	73.0	73.0	73.0	78.5	78.5	78.5	85.0	85.0	85.0	
		BTU/h	249100	249100	249100	267900	267900	267900	290100	290100	290100	
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		CURRENT	A	33.30	31.60	30.50	37.00	35.20	33.90	39.80	37.80	36.50
	ANNUAL CONSUMPTION	INPUT POWER	W	20.30k	20.30k	20.30k	22.60k	22.60k	22.60k	24.50k	24.50k	24.50k
		W *4	-	-	-	-	-	-	-	-	-	
	EER/EER CLASS	(W/W)*5/("A"~"G")	3.60	3.60	3.60	3.47	3.47	3.47	3.47	3.47	3.47	
		EER	BTU/hW	-	-	-	-	-	-	-	-	
	NOISE INDOOR (H/L)	POWER FACTOR	%	93	93	93	93	93	93	94	94	93
		dB-A	-	-	-	-	-	-	-	-	-	
		Power Level dB	-	-	-	-	-	-	-	-	-	
		NOISE OUTDOOR (H/L)	dB-A	64.5 / -			64.5 / -			65.0 / -		
		Power Level dB	-	79.0 / -			79.0 / -			79.5 / -		
H E A T I N G	CAPACITY	KW	81.5	81.5	81.5	87.5	87.5	87.5	95.0	95.0	95.0	
		BTU/h	278200	278200	278200	298600	298600	298600	324200	324200	324200	
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		CURRENT	A	32.50	30.80	29.70	36.20	34.40	33.10	38.30	36.40	35.10
	INPUT POWER	W	19.80k	19.80k	19.80k	22.10k	22.10k	22.10k	23.60k	23.60k	23.60k	
		(W/W)*5/("A"~"G")	4.12	4.12	4.12	3.96	3.96	3.96	4.03	4.03	4.03	
	COP/COP CLASS	COP	BTU/hW	-	-	-	-	-	-	-	-	
		POWER FACTOR	%	93	93	93	93	93	93	94	94	94
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-	
		Power Level dB	-	-	-	-	-	-	-	-	-	
EXTRALOW TEMP	CAPACITY(KW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-	
	MAX CURRENT(A)/MAX INPUT POWER(W)	43.0 / 26.2k	43.0 / 27.6k	43.0 / 28.6k	48.1 / 29.4k	48.1 / 30.9k	48.1 / 32.1k	51.7 / 31.8k	51.7 / 33.5k	51.7 / 34.7k		
STARTING CURRENT(A)/COMP OUTPUT(W)	96 / -	98 / -	101 / -	100 / -	102 / -	105 / -	96 / -	98 / -	101 / -			
NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-			
FM OUTPUT (I.D./O.D.) W	-	/	750×2	-	/	750×2	-	/	750×2			
MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-			
External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}			
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-			
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-			
	O.D. AIR FLOW	m³/min (ft³/min)	402	(14196)	402	(14196)	424	(14973)				
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	15.3k / 80.0k (540 / 2822)	R410A	15.3k / 80.0k (540 / 2822)	R410A	15.3k / 80.0k (540 / 2822)	R410A	17.0k / 80.0k (600 / 2822)				
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)					
R I	WIDTH : W mm(inch) O.D.	1830	(72-3/64)	1830	(72-3/64)	2060	(81-7/64)					
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)					
P D	HEIGHT : H mm(inch) O.D.	-	-	-	-	-	-					
A I	WIDTH : W mm(inch) O.D.	-	-	-	-	-	-					
C M	DEPTH : D mm(inch) O.D.	-	-	-	-	-	-					
MASS	(NET) kg(lb) O.D.	590	(1301)	590	(1301)	618	(1362)					
	(GROSS) kg(lb) O.D.	614	(1354)	614	(1354)	644	(1420)					
LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)						
Operation Condition	Cool O.D. (DBT)	-10°C ~ 43°C		-10°C ~ 43°C		-10°C ~ 43°C						
	Heat O.D. (WBT)	-25°C ~ 15°C		-25°C ~ 15°C		-25°C ~ 15°C						
P I	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø38.1 (1-1/2)		(Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø38.1 (1-1/2)		(Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø38.1 (1-1/2)						
I P	CONNECT METHOD	brazing(Liquid),brazing(Gas),flared(Balance)		brazing(Liquid),brazing(Gas),flared(Balance)		brazing(Liquid),brazing(Gas),flared(Balance)						
N G	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)						
	I.D.&O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)						
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2		0 ~ (0 ~) *2		0 ~ (0 ~) *2						

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (5)

OUTDOOR		MODEL	U-16ME1E81 / U-16ME1E81			U-18ME1E81 / U-16ME1E81			U-20ME1E81 / U-16ME1E81			
PERFORMANCE TEST CONDITION		EN14511			EN14511			EN14511				
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz			
C O O L I N G	CAPACITY	V	380	400	415	380	400	415	380	400	415	
		kW	90.0	90.0	90.0	96.0	96.0	96.0	101.0	101.0	101.0	
		BTU/h	307200	307200	307200	327600	327600	327600	344700	344700	344700	
	CURRENT	kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		A	43.70	41.50	40.00	46.30	44.00	42.40	50.00	47.50	45.80	
		W	26.90k	26.90k	26.90k	28.00k	28.00k	28.00k	30.20k	30.20k	30.20k	
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-	
		EER/EER CLASS	(W/W)*5/("A"~"G")	3.35	3.35	3.35	3.43	3.43	3.43	3.34	3.34	3.34
		BTU/hW	-	-	-	-	-	-	-	-	-	
H E A T I N G	POWER FACTOR	%	94	94	94	92	92	92	92	92	92	
		dB-A	-	-	-	-	-	-	-	-	-	
		Power Level dB	-	-	-	-	-	-	-	-	-	
	NOISE INDOOR (H/L)	dB-A	65.0 / -			64.0 / -			65.5 / -			
		Power Level dB	79.5 / -			78.5 / -			80.0 / -			
		kW	100.0	100.0	100.0	108.0	108.0	108.0	113.0	113.0	113.0	
	CAPACITY	BTU/h	341300	341300	341300	368600	368600	368600	385700	385700	385700	
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		A	42.10	40.00	38.50	46.30	44.00	42.40	48.80	46.40	44.70	
	INPUT POWER	W	25.90k	25.90k	25.90k	28.00k	28.00k	28.00k	29.50k	29.50k	29.50k	
		COP/COP CLASS	(W/W)*5/("A"~"G")	3.86	3.86	3.86	3.86	3.86	3.86	3.83	3.83	3.83
		BTU/hW	-	-	-	-	-	-	-	-	-	
	POWER FACTOR	%	93	93	94	92	92	92	92	92	92	
		dB-A	-	-	-	-	-	-	-	-	-	
		Power Level dB	-	-	-	-	-	-	-	-	-	
EXTRALOW TEMP	CAPACITY(KW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-	
	MAX CURRENT(A)/MAX INPUT POWER(W)	56.8 / 35.0k	56.8 / 36.8k	56.8 / 38.2k	58.9 / 35.6k	58.9 / 37.5k	58.9 / 38.9k	63.8 / 38.5k	63.8 / 40.6k	63.8 / 42.1k		
STARTING CURRENT(A)/COMP OUTPUT(W)	100 / -	102 / -	105 / -	113 / -	114 / -	116 / -	120 / -	122 / -	123 / -			
NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-			
FM OUTPUT (I.D./O.D.) W	-	/	750×2	-	/	750×3	-	/	750×3			
MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-			
External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}			
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-			
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-			
O.D. AIR FLOW	m³/min (ft³/min)	424	(14973)	456	(16103)	495	(17481)					
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	17.0k / 80.0k (600 / 2822)	R410A	17.5k / 80.0k (617 / 2822)	R410A	17.5k / 80.0k (617 / 2822)						
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)					
R I	WIDTH : W mm(inch) O.D.	2060	(81-7/64)	2600	(102-23/64)	2600	(102-23/64)					
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)					
P D	HEIGHT : H mm(inch) O.D.	-	-	-	-	-	-					
A I	WIDTH : W mm(inch) O.D.	-	-	-	-	-	-					
C M	DEPTH : D mm(inch) O.D.	-	-	-	-	-	-					
MASS	(NET) kg(lb) O.D.	618	(1362)	730	(1609)	730	(1609)					
	(GROSS) kg(lb) O.D.	644	(1420)	762	(1680)	762	(1680)					
LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)						
Operation Condition	Cool O.D. (DBT)	-10°C ~ 43°C		-10°C ~ 43°C		-10°C ~ 43°C						
	Heat O.D. (WBT)	-25°C ~ 15°C		-25°C ~ 15°C		-25°C ~ 15°C						
P I	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø38.1 (1-1/2)		(Liquid) ø19.05 (3/4) (Gas) ø31.75 (1-1/4) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø38.1 (1-1/2)		(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)						
I P	CONNECT METHOD	brazing(Liquid),brazing(Gas),flared(Balance)		brazing(Liquid),brazing(Gas),flared(Balance)		brazing(Liquid),brazing(Gas),flared(Balance)						
N G	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)						
	I.D.&O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)						
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2		0 ~ (0 ~) *2		0 ~ (0 ~) *2						

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (6)

OUTDOOR	MODEL	U-20ME1E81 / U-18ME1E81			U-20ME1E81 / U-20ME1E81			U-16ME1E81 / U-14ME1E81 / U-12ME1E81			
PERFORMANCE TEST CONDITION		EN14511			EN14511			EN14511			
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz		
		V	380	400	415	380	400	415	380	400	415
C O O L I N G	CAPACITY	KW	107.0	107.0	107.0	113.0	113.0	113.0	118.0	118.0	118.0
		BTU/h	365200	365200	365200	385700	385700	385700	402700	402700	402700
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	52.20	49.60	47.80	56.40	53.60	51.70	54.90	52.10	50.30
	INPUT POWER	W	31.10k	31.10k	31.10k	33.60k	33.60k	33.60k	33.60k	33.60k	33.60k
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	3.44	3.44	3.44	3.36	3.36	3.36	3.51	3.51	3.51
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	91	91	91	91	90	90	93	93	93
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-
H E A T I N G	CAPACITY	Power Level dB	-	-	-	-	-	-	-	-	-
		dB-A	65.0 / -	66.0 / -	66.5 / -	66.5 / -	66.5 / -	66.5 / -	66.5 / -	66.5 / -	66.5 / -
		Power Level dB	79.5 / -	80.5 / -	81.0 / -	81.0 / -	81.0 / -	81.0 / -	81.0 / -	81.0 / -	81.0 / -
	CAPACITY	KW	119.0	119.0	119.0	127.0	127.0	127.0	132.0	132.0	132.0
		BTU/h	406100	406100	406100	433400	433400	433400	450500	450500	450500
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	52.00	49.40	47.70	55.40	52.60	50.70	53.40	50.80	48.90
	INPUT POWER	W	31.00k	31.00k	31.00k	33.00k	33.00k	33.00k	32.70k	32.70k	32.70k
	COP/COP CLASS	(W/W)*5/("A"~"G")	3.84	3.84	3.84	3.85	3.85	3.85	4.04	4.04	4.04
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	91	91	90	91	91	91	93	93	93
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-
	Power Level dB	-	-	-	-	-	-	-	-	-	-
EXTRALOW TEMP	CAPACITY(KW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-
	MAX CURRENT(A)/MAX INPUT POWER(W)	65.9 / 39.3k	65.9 / 41.3k	65.9 / 42.9k	70.8 / 42.2k	70.8 / 44.4k	70.8 / 46.0k	71.4 / 43.7k	71.4 / 46.0k	71.4 / 47.7k	
STARTING CURRENT(A)/COMP OUTPUT(W)	121 / -	123 / -	124 / -	125 / -	127 / -	128 / -	118 / -	119 / -	121 / -		
NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-		
FM OUTPUT (I.D./O.D.) W	-	/	750×4	-	/	750×4	-	/	750×3		
MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-		
External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}		
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-		
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-		
	O.D. AIR FLOW	m³/min (ft³/min)	527	(18611)	566	(19988)	614	(21683)			
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	18.0k / 80.0k (635 / 2822)	R410A	18.0k / 80.0k (635 / 2822)	R410A	18.0k / 80.0k (635 / 2822)	R410A	23.8k / 105.0k (840 / 3704)			
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)		
R I	WIDTH : W mm(inch) O.D.	3140	(123-5/8)	3140	(123-5/8)	3140	(123-5/8)	2890	(113-25/32)		
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)		
P D	HEIGHT : H mm(inch) O.D.	-	-	-	-	-	-	-	-		
A I	WIDTH : W mm(inch) O.D.	-	-	-	-	-	-	-	-		
C M	DEPTH : D mm(inch) O.D.	-	-	-	-	-	-	-	-		
MASS	(NET) kg(lb) O.D.	842	(1856)	842	(1856)	899	(1982)				
	(GROSS) kg(lb) O.D.	880	(1940)	880	(1940)	936	(2064)				
LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)		1 (2)			
Operation Condition	Cool O.D. (DBT)	-10°C ~ 43°C		-10°C ~ 43°C		-10°C ~ 43°C		-10°C ~ 43°C			
	Heat O.D. (WBT)	-25°C ~ 15°C		-25°C ~ 15°C		-25°C ~ 15°C		-25°C ~ 15°C			
P I I N G	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)		(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)		(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)		(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)			
	CONNECT METHOD	brazing(Liquid),brazing(Gas)		brazing(Liquid),brazing(Gas)		brazing(Liquid),brazing(Gas)		brazing(Liquid),brazing(Gas)			
	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)			
	I.D.&O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)			
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2		0 ~ (0 ~) *2		0 ~ (0 ~) *2		0 ~ (0 ~) *2			

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (7)

OUTDOOR		MODEL	U-16ME1E81 / U-16ME1E81 / U-12ME1E81			U-16ME1E81 / U-16ME1E81 / U-14ME1E81			U-16ME1E81 / U-16ME1E81 / U-16ME1E81			
PERFORMANCE TEST CONDITION		EN14511	EN14511			EN14511			EN14511			
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz			
C O O L I N G	CAPACITY	V	380	400	415	380	400	415	380	400	415	
		kW	124.0	124.0	124.0	130.0	130.0	130.0	135.0	135.0	135.0	
		BTU/h	423200	423200	423200	443700	443700	443700	460800	460800	460800	
	CURRENT	kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		A	59.10	56.20	54.20	61.60	58.50	56.40	65.50	62.20	60.00	
		W	36.20k	36.20k	36.20k	37.90k	37.90k	37.90k	40.30k	40.30k	40.30k	
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-	
		(W/W)*5/("A"~"G")	3.43	3.43	3.43	3.43	3.43	3.43	3.35	3.35	3.35	
	EER/EER CLASS	BTU/hW	-	-	-	-	-	-	-	-	-	
H E A T I N G	POWER FACTOR	%	93	93	93	93	94	93	93	94	93	
		dB-A	-	-	-	-	-	-	-	-	-	
		Power Level dB	-	-	-	-	-	-	-	-	-	
	NOISE INDOOR (H/L)	dB-A	66.5 / -			67.0 / -			67.0 / -			
		Power Level dB	81.0 / -			81.5 / -			81.5 / -			
		kW	138.0	138.0	138.0	145.0	145.0	145.0	150.0	150.0	150.0	
	CAPACITY	BTU/h	471000	471000	471000	494900	494900	494900	511900	511900	511900	
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-	
		A	57.50	54.60	52.70	59.50	56.50	54.50	63.20	60.10	57.90	
	INPUT POWER	W	35.20k	35.20k	35.20k	36.60k	36.60k	36.60k	38.90k	38.90k	38.90k	
	COP/COP CLASS	(W/W)*5/("A"~"G")	3.92	3.92	3.92	3.96	3.96	3.96	3.86	3.86	3.86	
	COP	BTU/hW	-	-	-	-	-	-	-	-	-	
	POWER FACTOR	%	93	93	93	93	94	93	94	93	93	
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-	
	Power Level dB	-	-	-	-	-	-	-	-	-	-	
EXTRALOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-	
	MAX CURRENT(A)/MAX INPUT POWER(W)	76.5 / 46.9k	76.5 / 49.3k	76.5 / 51.1k	80.1 / 49.3k	80.1 / 51.9k	80.1 / 53.8k	85.2 / 52.4k	85.2 / 55.2k	85.2 / 57.2k		
STARTING CURRENT(A)/COMP OUTPUT(W)	122 / -	122 / -	125 / -	118 / -	119 / -	121 / -	122 / -	122 / -	125 / -			
NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-			
FM OUTPUT (I.D./O.D.) W	-	/	750×3	-	/	750×3	-	/	750×3			
MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-			
External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}			
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-			
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-			
O.D. AIR FLOW	m³/min (ft³/min)	614	(21683)	636	(22460)	636	(22460)	636	(22460)			
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	23.8k / 105.0k (840 / 3704)	R410A	25.5k / 105.0k (899 / 3704)	R410A	25.5k / 105.0k (899 / 3704)	R410A	25.5k / 105.0k (899 / 3704)	R410A	25.5k / 105.0k (899 / 3704)		
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)			
R I	WIDTH : W mm(inch) O.D.	2890	(113-25/32)	3120	(122-53/64)	3120	(122-53/64)	3120	(122-53/64)			
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)			
P D	HEIGHT : H mm(inch) O.D.	-	-	-	-	-	-	-	-			
A I	WIDTH : W mm(inch) O.D.	-	-	-	-	-	-	-	-			
C M	DEPTH : D mm(inch) O.D.	-	-	-	-	-	-	-	-			
MASS	(NET) kg(lb) O.D.	899	(1982)	927	(2044)	927	(2044)	926	(2130)	926	(2130)	
	(GROSS) kg(lb) O.D.	936	(2064)	966	(2130)	966	(2130)	966	(2130)	966	(2130)	
LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)		1 (2)				
Operation Condition	Cool O.D. (DBT)	-10°C ~ 43°C										
	Heat O.D. (WBT)	-25°C ~ 15°C										
P I	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)	
P I	CONNECT METHOD	brazing(Liquid),brazing(Gas),flared(Balance)										
I N G	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)	7.5 ~ 1000 (24.6 ~ 3280.8)		
I D & O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)	50 / 40 (164.0 / 131.2)			
PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2	0 ~ (0 ~) *2			

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

## 1-1. Specifications (Standard-COP mode)

### Unit specifications (8)

OUTDOOR		MODEL	U-18ME1E81 / U-16ME1E81 / U-16ME1E81			U-20ME1E81 / U-16ME1E81 / U-16ME1E81			U-20ME1E81 / U-18ME1E81 / U-16ME1E81		
PERFORMANCE TEST CONDITION		EN14511	EN14511			EN14511			EN14511		
POWER SUPPLY		Ø, Hz	3Ø 50Hz			3Ø 50Hz			3Ø 50Hz		
C O O L I N G	CAPACITY	V	380	400	415	380	400	415	380	400	415
		kW	140.0	140.0	140.0	145.0	145.0	145.0	151.0	151.0	151.0
		BTU/h	477800	477800	477800	494900	494900	494900	515400	515400	515400
	CURRENT	kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
		A	67.60	64.20	61.90	71.30	67.70	65.30	74.00	70.30	67.70
		W	41.10k	41.10k	41.10k	43.30k	43.30k	43.30k	44.50k	44.50k	44.50k
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
		(W/W)*5/("A"~"G")	3.41	3.41	3.41	3.35	3.35	3.35	3.39	3.39	3.39
	EER/EER CLASS	BTU/hW	-	-	-	-	-	-	-	-	-
H E A T I N G	POWER FACTOR	%	92	92	92	92	92	92	91	91	91
		dB-A	-	-	-	-	-	-	-	-	-
		Power Level dB	-	-	-	-	-	-	-	-	-
	NOISE INDOOR (H/L)	dB-A	66.0 / -			67.0 / -			66.5 / -		
		Power Level dB	80.5 / -			81.5 / -			81.0 / -		
		kW	155.0	155.0	155.0	160.0	160.0	160.0	169.0	169.0	169.0
	CAPACITY	BTU/h	529000	529000	529000	546100	546100	546100	576800	576800	576800
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
		A	66.10	62.80	60.50	68.60	65.20	62.90	73.00	69.30	66.80
	INPUT POWER	W	40.20k	40.20k	40.20k	41.70k	41.70k	41.70k	43.90k	43.90k	43.90k
	COP/COP CLASS	(W/W)*5/("A"~"G")	3.86	3.86	3.86	3.84	3.84	3.84	3.85	3.85	3.85
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	92	92	92	92	92	92	91	91	91
	NOISE INDOOR (H/L)	dB-A	-	-	-	-	-	-	-	-	-
	Power Level dB	-	-	-	-	-	-	-	-	-	-
EXTRALOW TEMP	CAPACITY(KW)/INPUT POWER(W)/COP	-	-	-	-	-	-	-	-	-	-
	MAX CURRENT(A)/MAX INPUT POWER(W)	87.3 / 53.1k	87.3 / 55.9k	87.3 / 58.0k	92.2 / 56.0k	92.2 / 59.0k	92.2 / 61.1k	94.3 / 56.7k	94.3 / 59.7k	94.3 / 62.0k	
STARTING CURRENT(A)/COMP OUTPUT(W)	135 / -	134 / -	136 / -	142 / -	142 / -	143 / -	143 / -	144 / -	144 / -	144 / -	
NETWORK IMPEDANCE (ΩMAX.) *3	-	-	-	-	-	-	-	-	-	-	
FM OUTPUT (I.D./O.D.) W	-	/	750×4	-	/	750×4	-	/	750×5		
MOISTURE REMOVAL VOLUME	L/h(Pt/h)	-	-	-	-	-	-	-	-	-	
External static pressure	Pa {mmAq}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}	0 ~ 80	{0.00 ~ 8.16}		
I.D. AIR FLOW	COOL	m³/min (ft³/min)	-	-	-	-	-	-	-	-	
	HEAT	m³/min (ft³/min)	-	-	-	-	-	-	-	-	
O.D. AIR FLOW	m³/min (ft³/min)	668	(23590)	707	(24967)	739	(26098)				
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)	R410A	26.0k / 105.0k (917 / 3704)	R410A	26.0k / 105.0k (917 / 3704)	R410A	26.0k / 105.0k (917 / 3704)	R410A	26.5k / 105.0k (935 / 3704)			
P D	HEIGHT : H mm(inch) O.D.	1758	(69-7/32)	1758	(69-7/32)	1758	(69-7/32)				
R I	WIDTH : W mm(inch) O.D.	3660	(144-3/32)	3660	(144-3/32)	4200	(165-23/64)				
O M	DEPTH : D mm(inch) O.D.	930	(36-39/64)	930	(36-39/64)	930	(36-39/64)				
P D	HEIGHT : H mm(inch) O.D.	-	-	-	-	-	-				
A I	WIDTH : W mm(inch) O.D.	-	-	-	-	-	-				
C M	DEPTH : D mm(inch) O.D.	-	-	-	-	-	-				
MASS	(NET) kg(lb) O.D.	1039	(2291)	1039	(2291)	1151	(2538)				
	(GROSS) kg(lb) O.D.	1084	(2390)	1084	(2390)	1202	(2650)				
LAYERS LIMIT (actually)		1 (2)		1 (2)		1 (2)					
Operation Condition	Cool O.D. (DBT)	-10°C ~ 43°C		-10°C ~ 43°C		-10°C ~ 43°C					
	Heat O.D. (WBT)	-25°C ~ 15°C		-25°C ~ 15°C		-25°C ~ 15°C					
P I	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)	(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)		(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)		(Liquid) ø19.05 (3/4) (Gas) ø38.1 (1-1/2) *1 (Balance) ø6.35(1/4) (Liquid) ø22.22 (7/8) (Gas) ø41.28 (1-5/8)					
I P	CONNECT METHOD	brazing(Liquid),brazing(Gas),flared(Balance)		brazing(Liquid),brazing(Gas),flared(Balance)		brazing(Liquid),brazing(Gas),flared(Balance)					
N G	PIPE LENGTH RANGE m (ft)	7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)		7.5 ~ 1000 (24.6 ~ 3280.8)					
	I.D.&O.D. HEIGHT DIFFERENCE (O.D. upper / O.D. Lower) m (ft)	50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)		50 / 40 (164.0 / 131.2)					
	PIPE LENGTH FOR ADDITIONAL GAS m (ft)	0 ~ (0 ~) *2		0 ~ (0 ~) *2		0 ~ (0 ~) *2					

\*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe

\*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.

\*3: Network Impedance shall be applicable for EUROPE and CHINA models.

\*4: The annual consumption is calculated by multiplying the input power at 230V(400V) by an average of 500 hours per year in cooling mode.

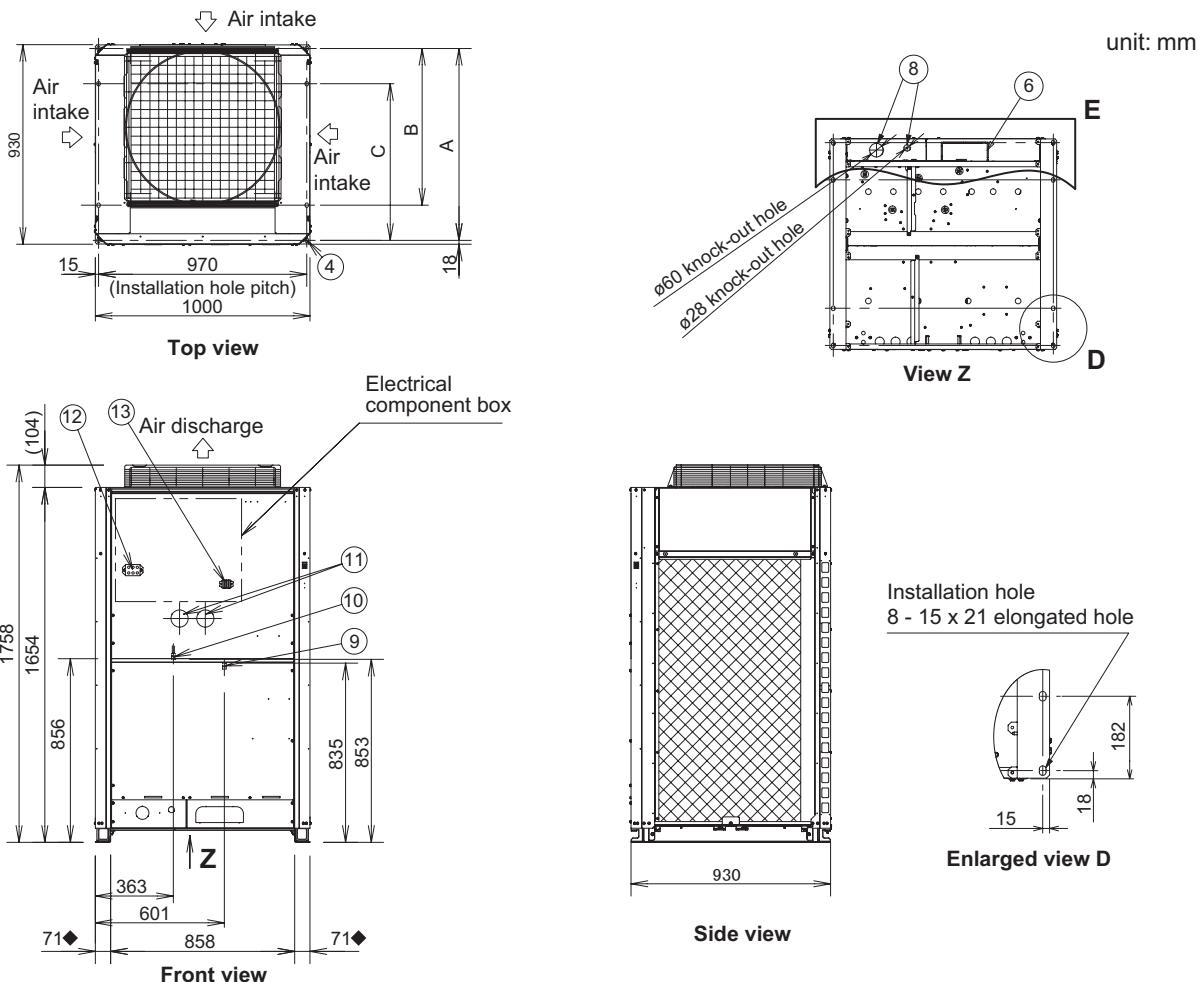
\*5: EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC. (Scope:Cooling capacity less than 12kW)

\* : In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

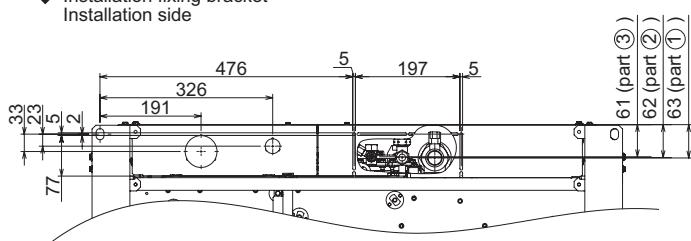
\* : If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

# 1. Outdoor Unit

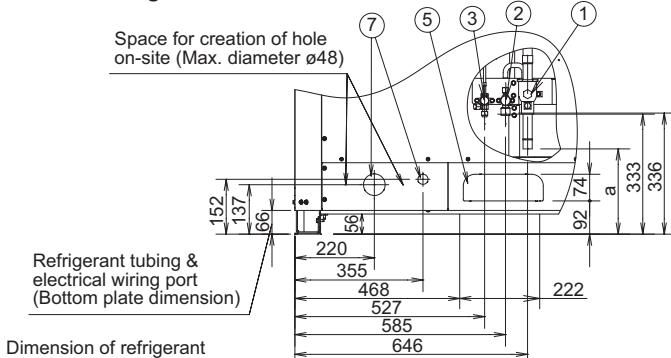
U-14ME1E81, U-16ME1E81



◆ Installation fixing bracket  
Installation side



## Position of refrigerant tube connection



\* 16hp unit dimensions shows a case using the connection tubing supplied with the unit.

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".
- A : 894 (Installation hole pitch) \* The tubing is routed out from the front.
- B : 730 (Installation hole pitch) \* The tubing is routed out from the bottom.
- C : 730 (Installation hole pitch)

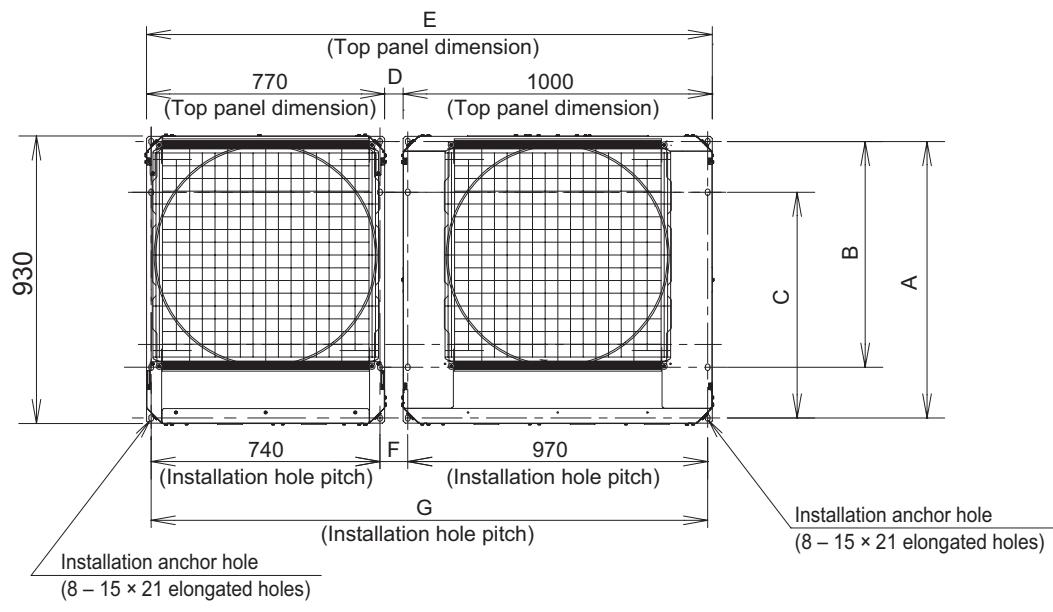
	Types of unit	14HP	16HP
①	Refrigerant tubing (gas tube) brazed connection	ø25.4	ø28.58
②	Refrigerant tubing (liquid tube) flared connection	ø12.7	ø12.7
③	Refrigerant tubing (balance tube) flared connection	ø6.35	ø6.35
④	Installation holes(8-15x21 elongated holes), anchor bolts M12 or larger		
⑤	Refrigerant tubing port (front: knock-out hole and slit)		
⑥	Refrigerant tubing port (bottom: slit hole)		
⑦	Electrical wiring port (front: ø60, ø28 knock-out hole - for conduit connection)		
⑧	Electrical wiring port (bottom: ø60, ø28 knock-out hole - for conduit connection)		
⑨	Pressure outlet port (for high pressure: ø7.94 Schrader-type connection)		
⑩	Pressure outlet port (for low pressure: ø7.94 Schrader-type connection)		
⑪	Knock-out hole for connecting pressure gauge (optional)		
⑫	Terminal plate		
⑬	Terminal plate for inter-unit control wiring and/or inter-outdoor unit control wiring		

# 1. Outdoor Unit

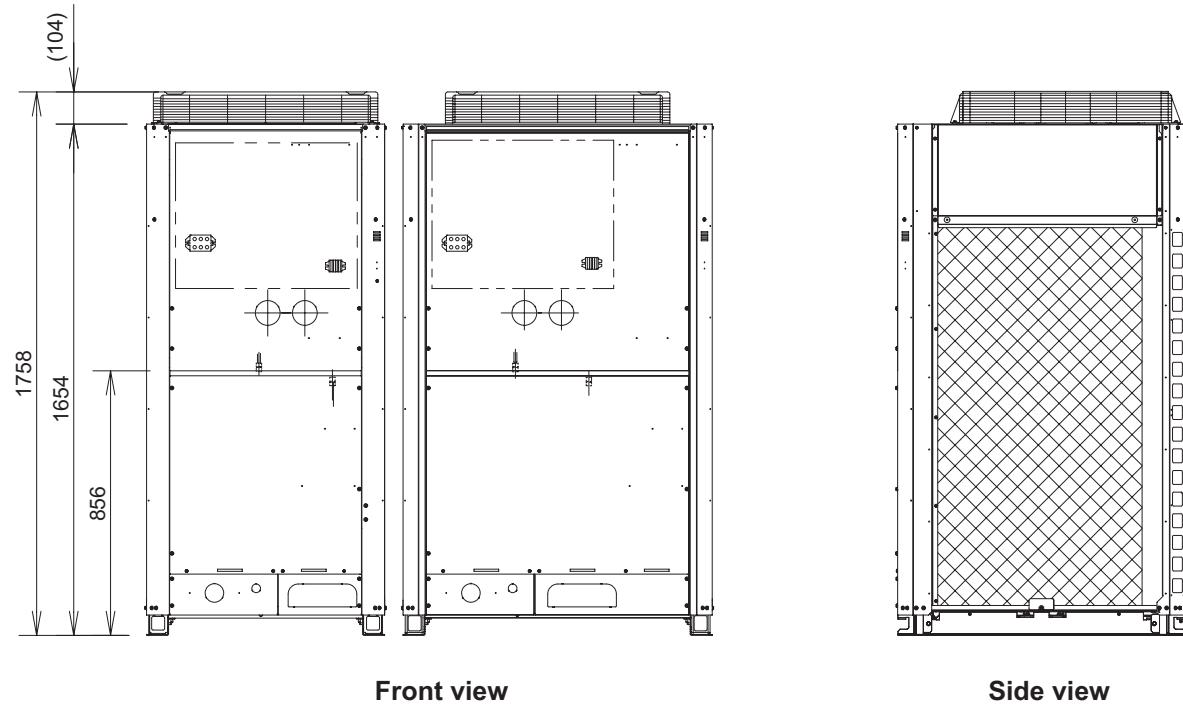
## 1-3. Multiple Unit Installation Example (Standard-COP mode)

- Diagrams for 22hp ~ 28hp

Unit: mm



Top view



Front view

Side view

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		22 hp	24 hp	26 hp	28 hp
8	U-8ME1E81	○	—	—	—
10	U-10ME1E81	—	○	—	—
12	U-12ME1E81	—	—	○	○
14	U-14ME1E81	○	○	○	—
16	U-18ME1E81	—	—	—	○

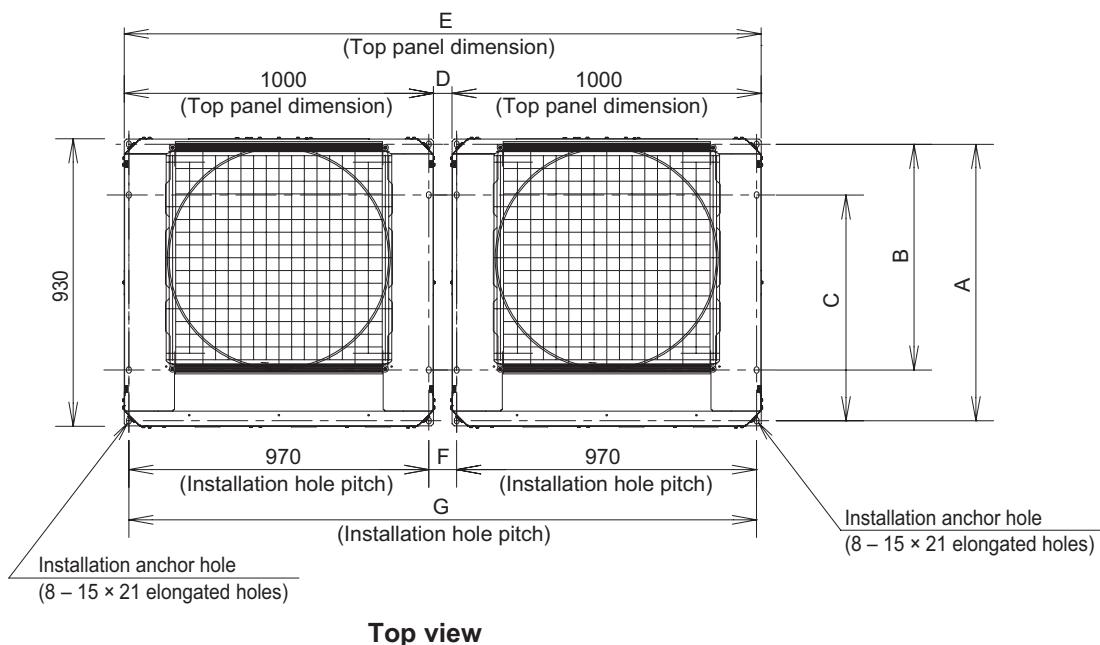
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	1830	90	1800
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	1950	210	1920
C 730 (Installation hole pitch)	180	1950	210	1920

# 1. Outdoor Unit

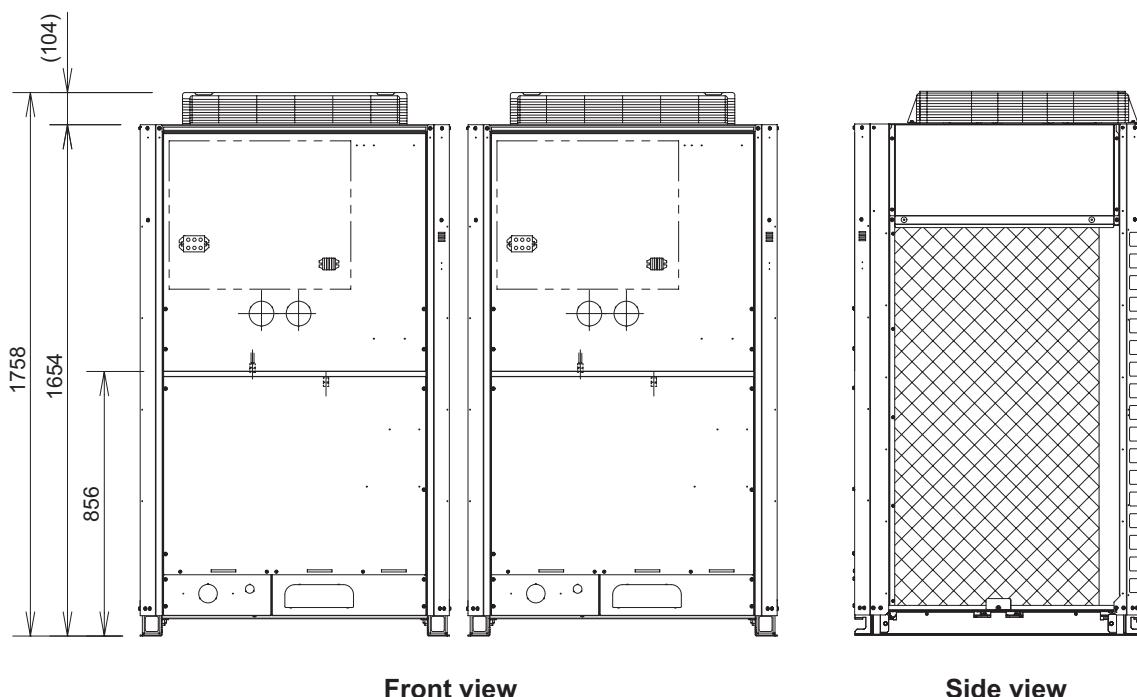
## 1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- Diagrams for 30hp & 32hp

Unit: mm



Top view



Front view

Side view

4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		30 hp	32 hp
14	U-14ME1E81	<input type="radio"/>	—
16	U-16ME1E81	<input type="radio"/>	<input checked="" type="radio"/>

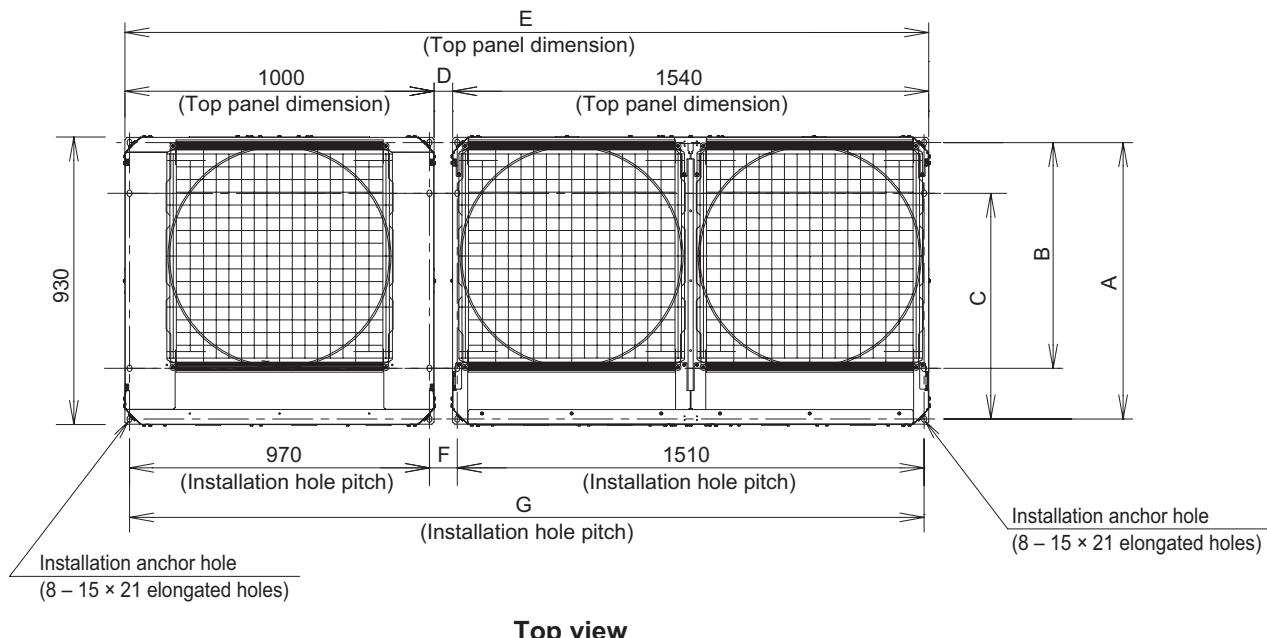
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	2060	90	2030
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	2180	210	2150
C 730 (Installation hole pitch)	180	2180	210	2150

# 1. Outdoor Unit

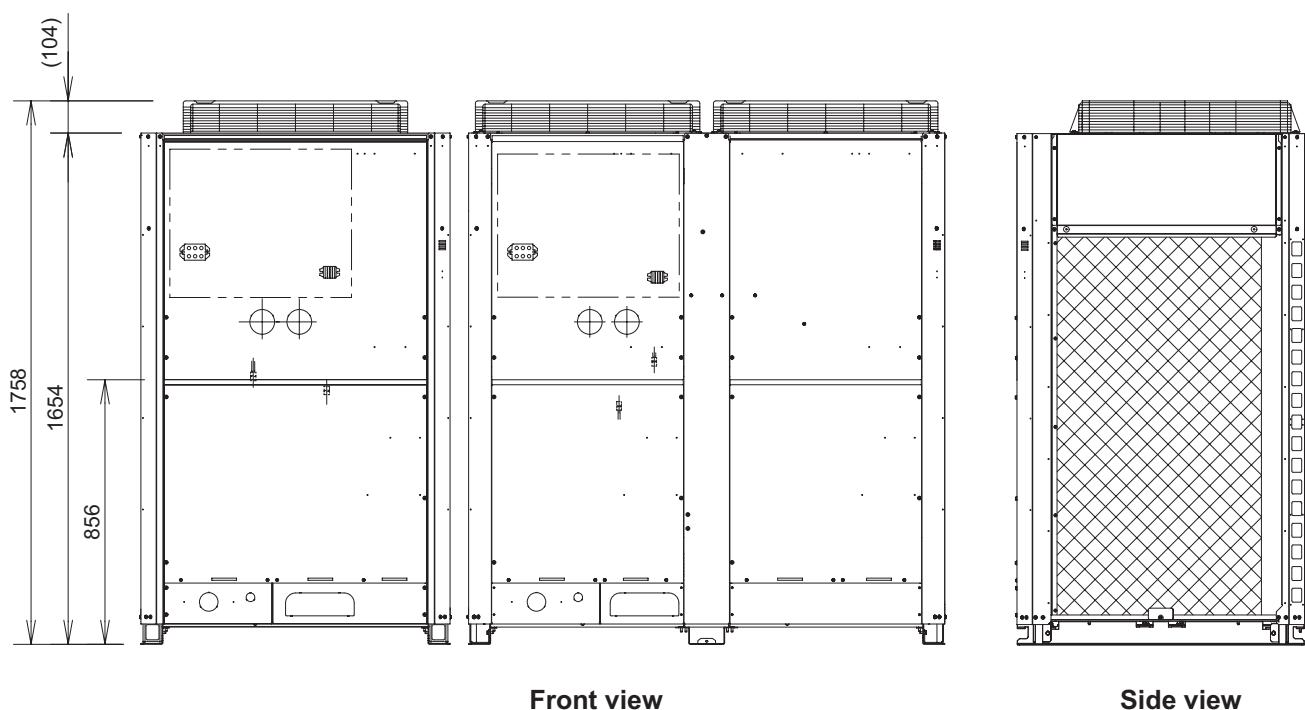
## 1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- Diagrams for 34hp & 36hp

Unit: mm



Top view



Front view

Side view

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		34 hp	36 hp
16	U-16ME1E81	○	○
18	U-18ME1E81	○	—
20	U-20ME1E81	—	○

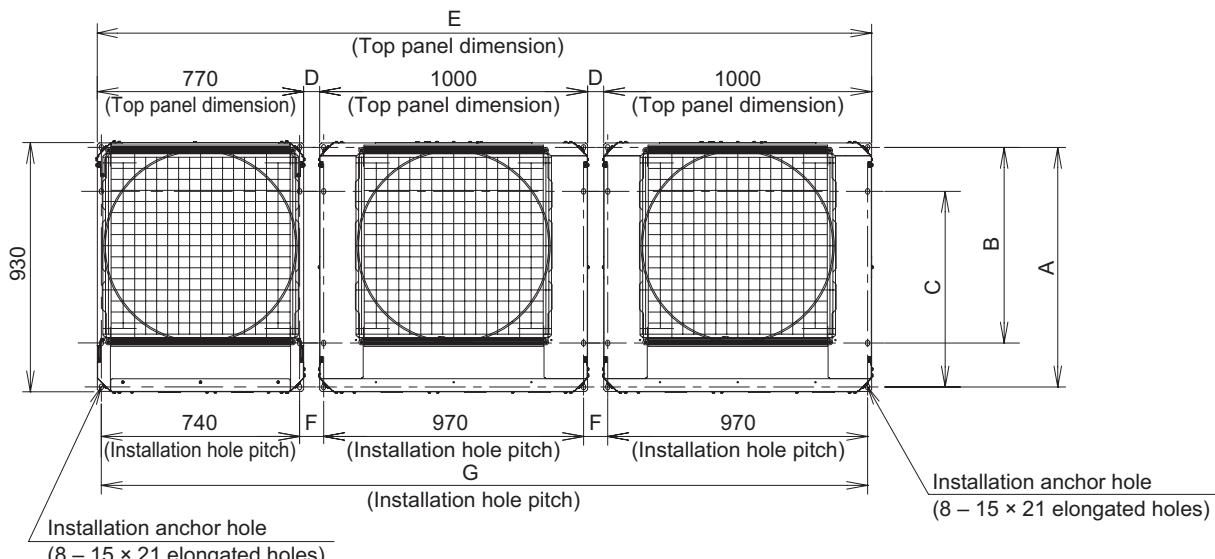
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	2600	90	2570
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	2720	210	2690
C 730 (Installation hole pitch)	180	2720	210	2690

# 1. Outdoor Unit

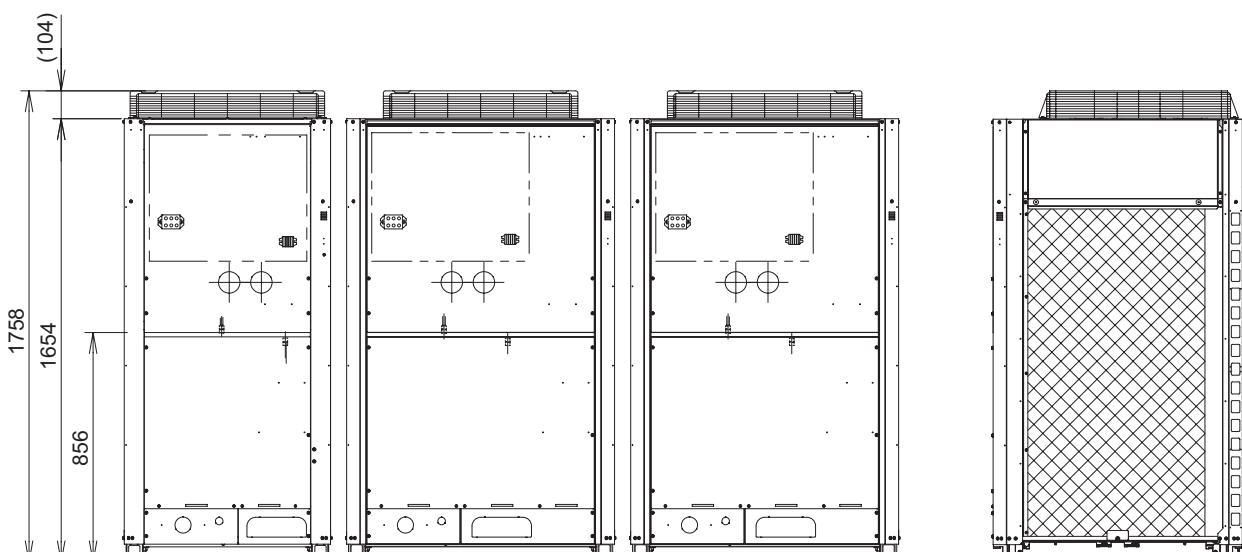
## 1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- Diagrams for 42hp & 44hp

Unit: mm



Top view



Front view

Side view

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		42 hp	44 hp
12	U-12ME1E81	○	○
14	U-14ME1E81	○	—
16	U-16ME1E81	○	○○

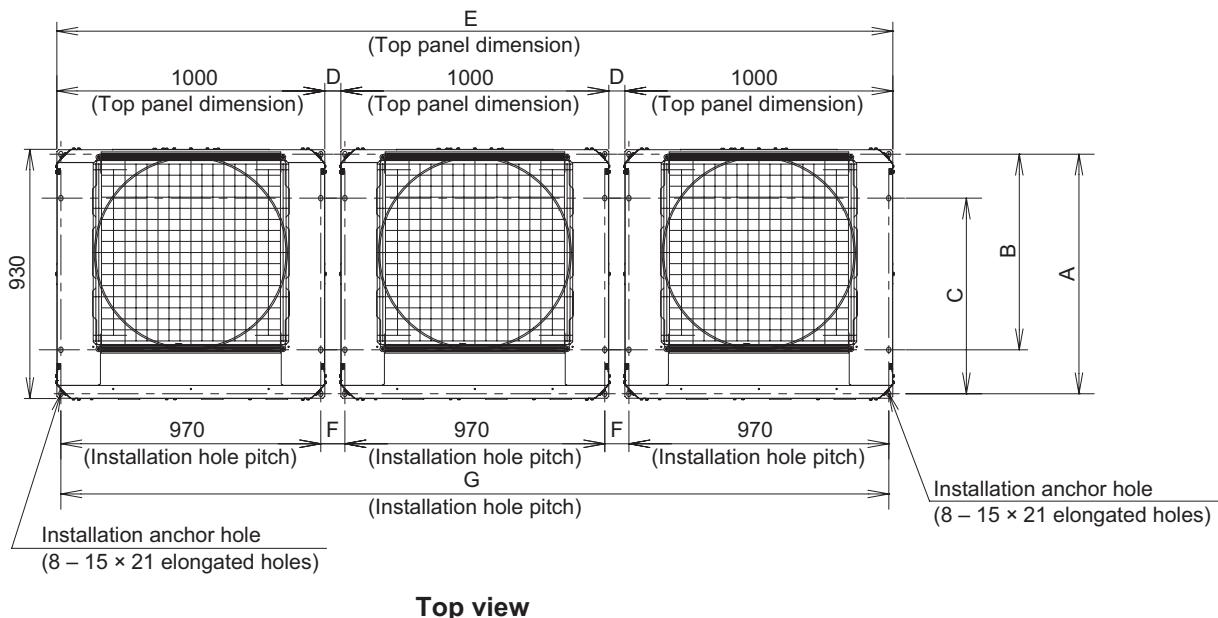
	D	E	F	G	
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	2890	90	2860
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3130	210	3100
C	730 (Installation hole pitch)	180	3130	210	3100

# 1. Outdoor Unit

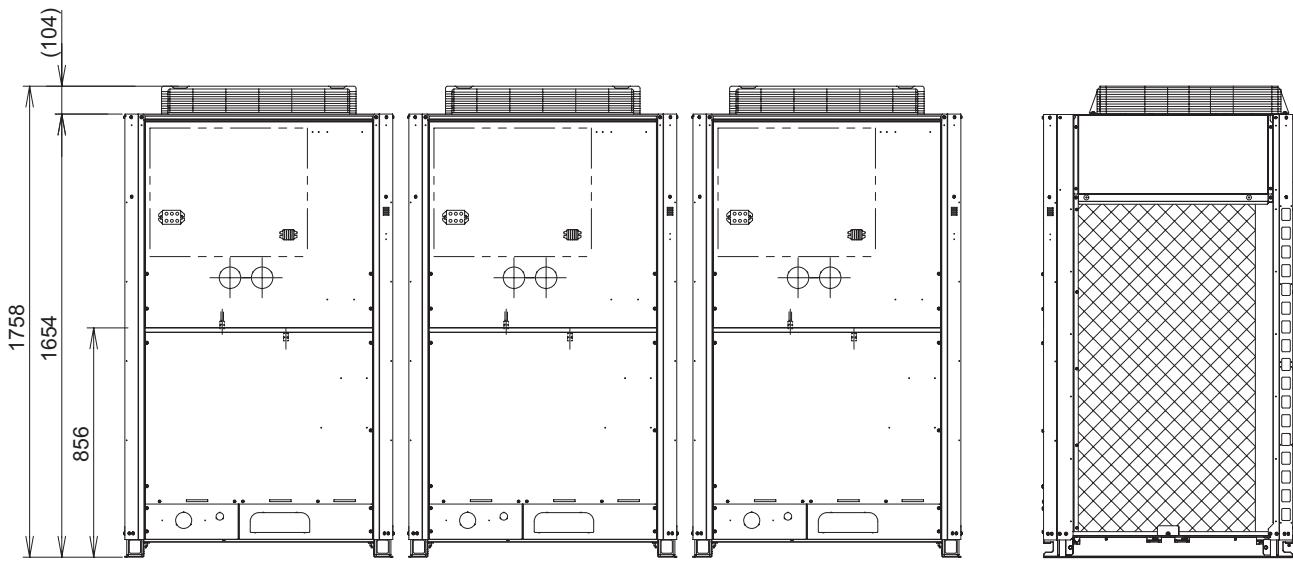
## 1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- Diagrams for 46hp & 48hp

Unit: mm



Top view



Front view

Side view

4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		46 hp	48 hp
14	U-14ME1E81	○	—
16	U-16ME1E81	○○	○○○

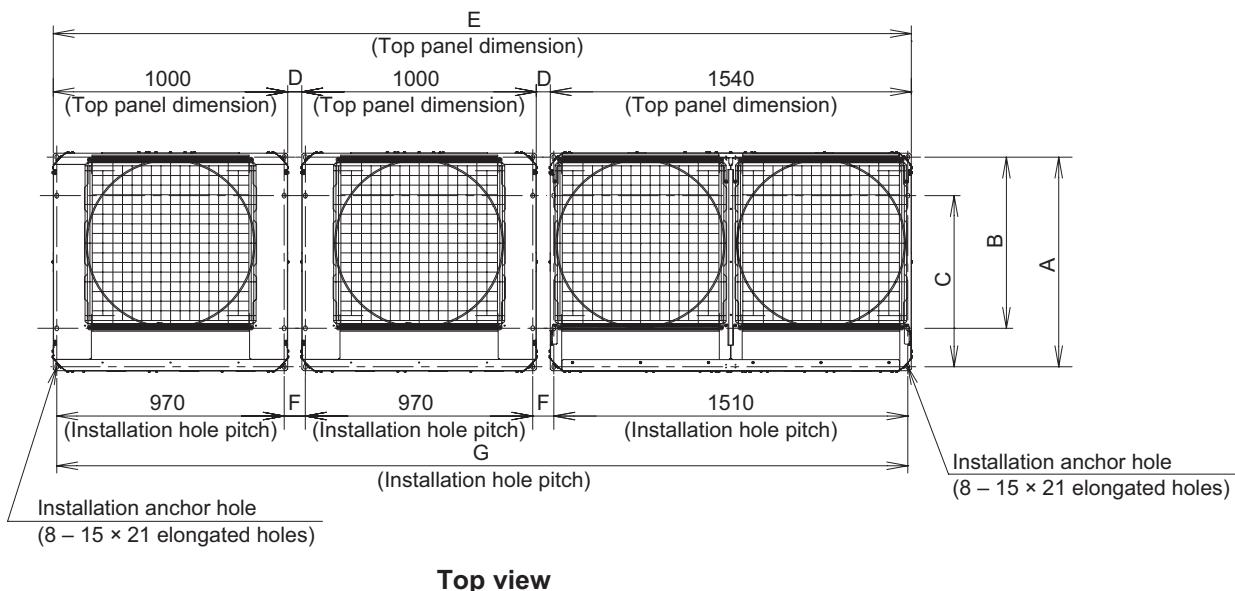
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	3120	90	3090
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3360	210	3330
C 730 (Installation hole pitch)	180	3360	210	3330

# 1. Outdoor Unit

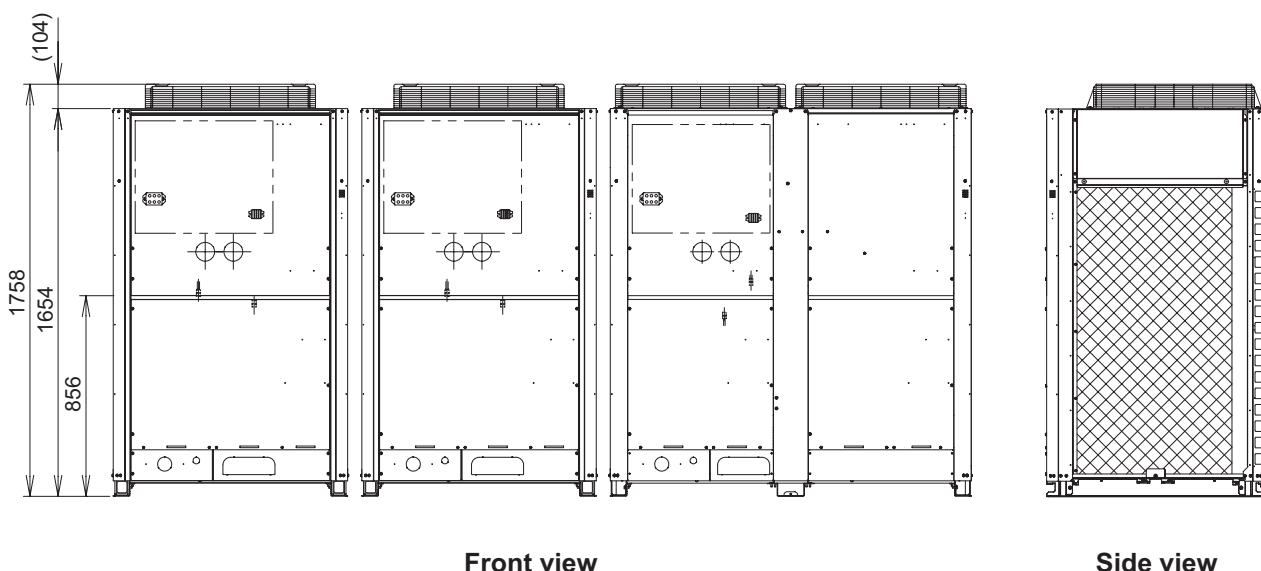
## 1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- Diagrams for 50hp & 52hp

Unit: mm



Top view



Front view

Side view

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		50 hp	52 hp
16	U-16ME1E81	○ ○	○ ○
18	U-18ME1E81	○	—
20	U-20ME1E81	—	○

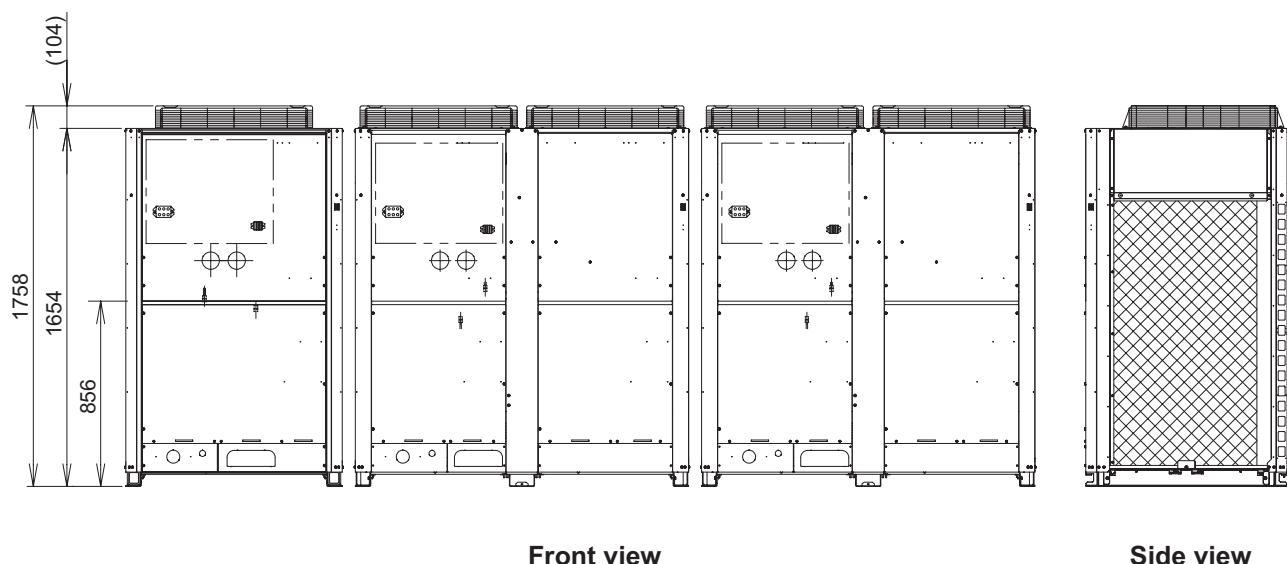
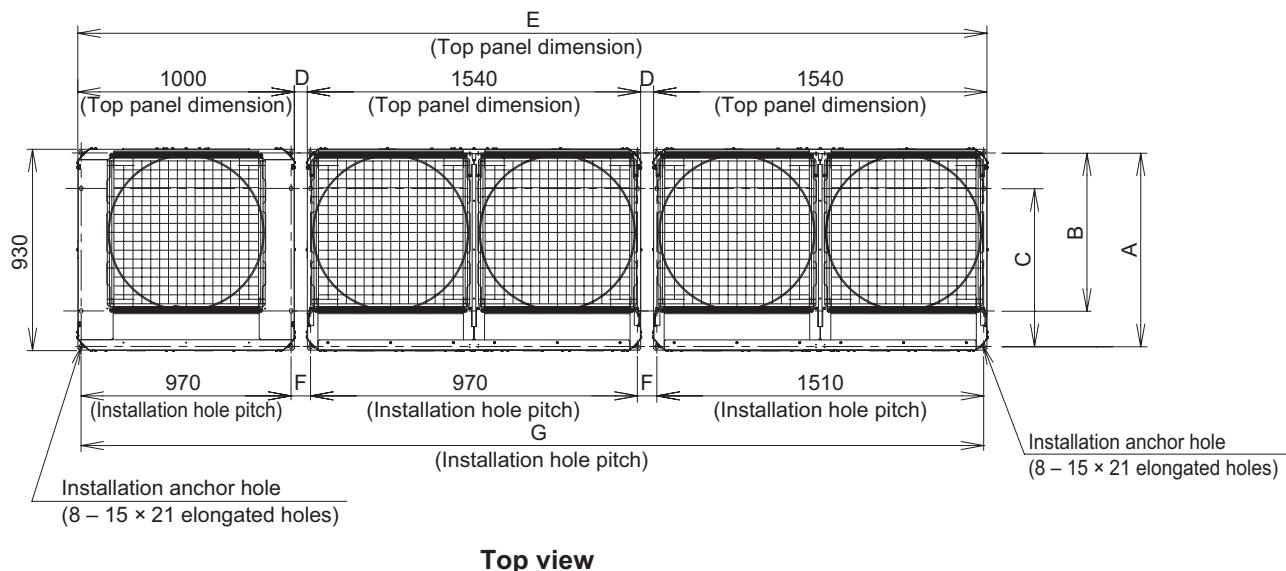
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	3660	90	3630
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3900	210	3870
C 730 (Installation hole pitch)	180	3900	210	3870

# 1. Outdoor Unit

## 1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- Diagrams for 54hp

Unit: mm



4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower		54 hp
16	U-16ME1E81	○
18	U-18ME1E81	○
20	U-20ME1E81	○

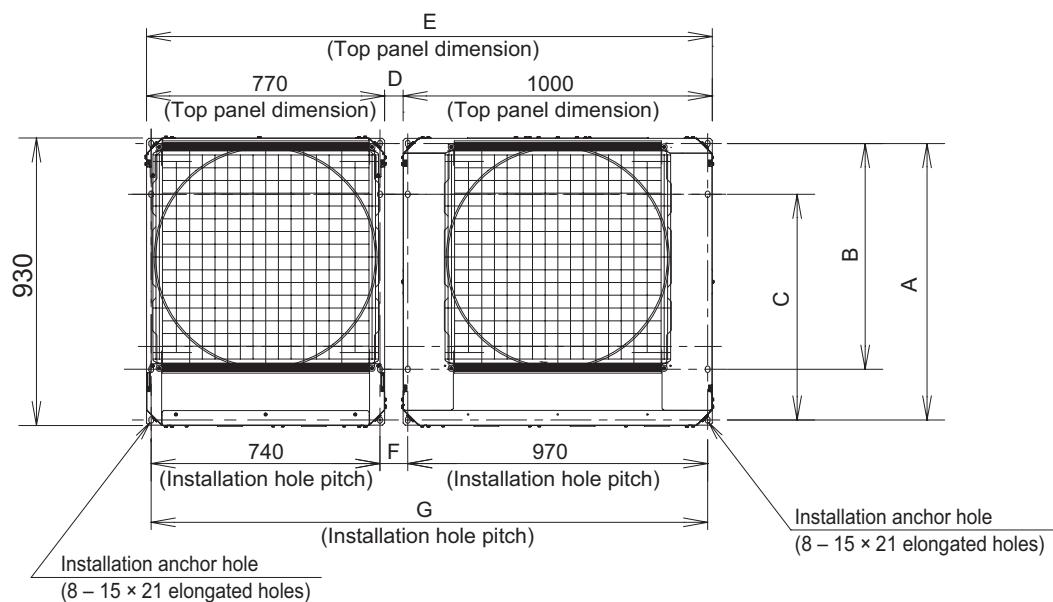
	D	E	F	G
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	4200	90 4170
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	4440	210 4410
C	730 (Installation hole pitch)	180	4440	210 4410

# 1. Outdoor Unit

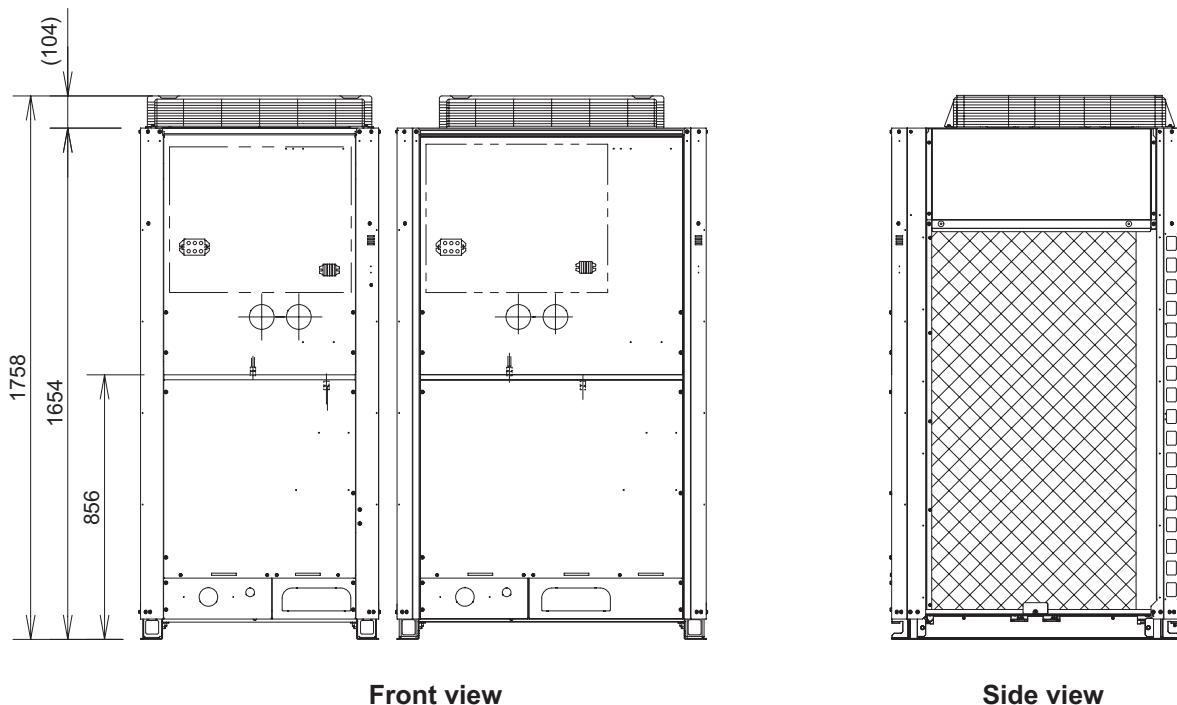
## 1-3. Multiple Unit Installation Example (High-COP mode)

- Diagrams for 18hp & 20hp

Unit: mm



Top view



Front view

Side view

4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	18 hp	20 hp
U-8ME1E81	<input type="radio"/>	<input type="radio"/>
U-14ME1E81	<input type="radio"/>	—
U-16ME1E81	—	<input type="radio"/>

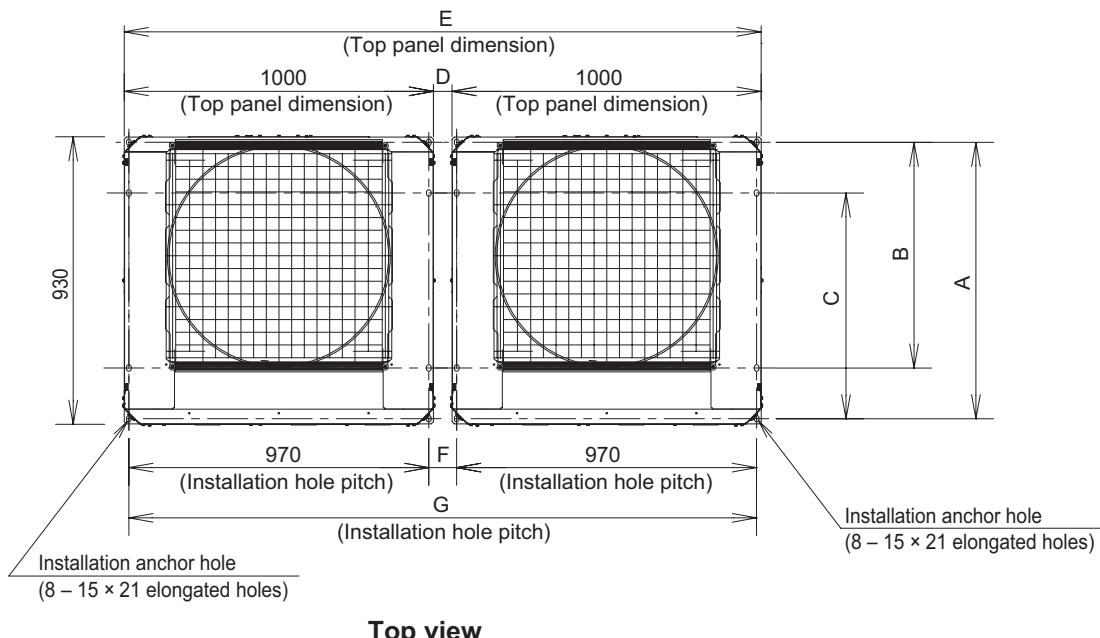
	D	E	F	G	
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	1830	90	1800
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	1950	210	1920
C	730 (Installation hole pitch)	180	1950	210	1920

# 1. Outdoor Unit

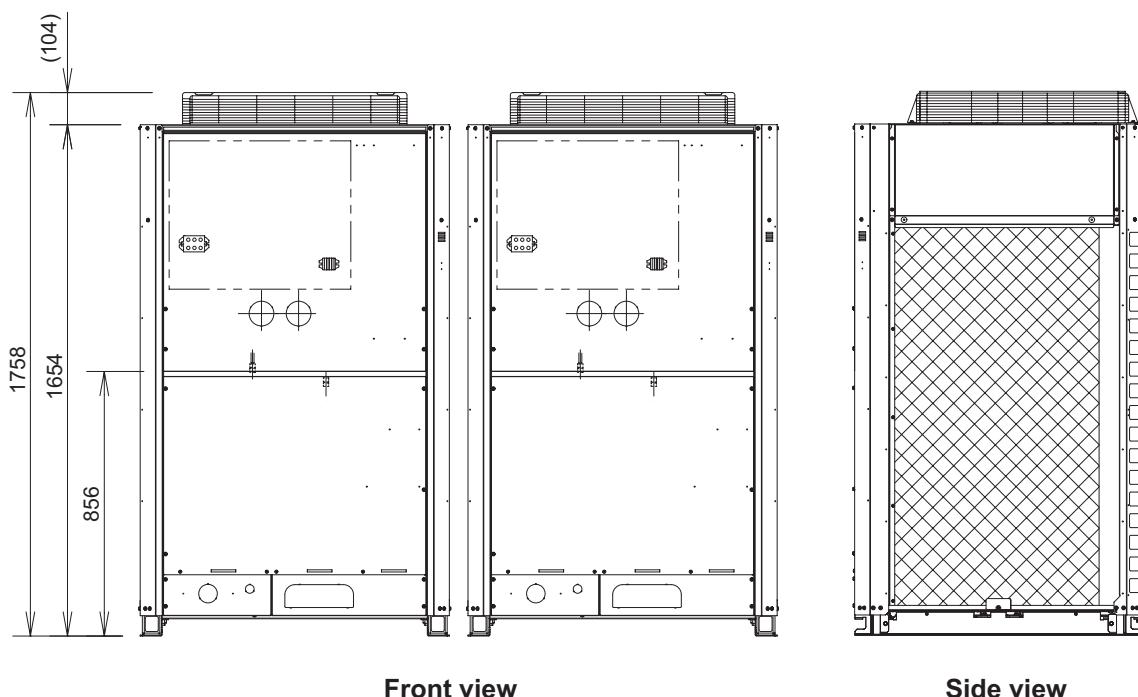
## 1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- Diagrams for 24hp

Unit: mm



Top view



Front view

Side view

4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	24 hp
U-16ME1E81	○○

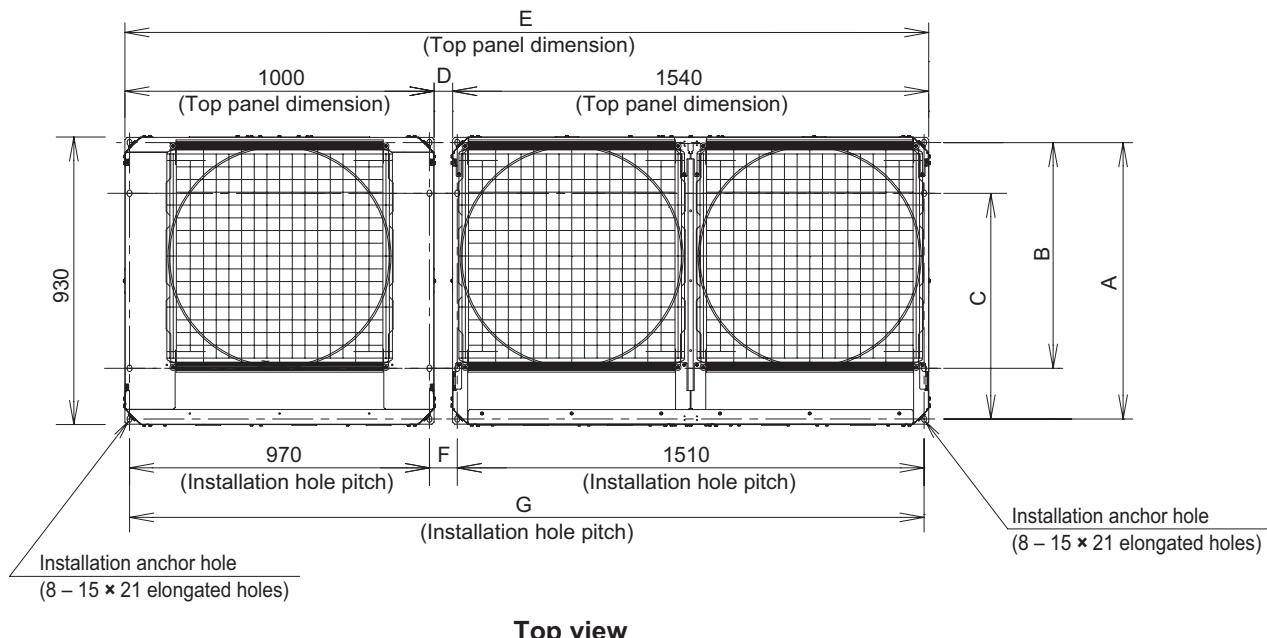
	D	E	F	G	
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	2060	90	2030
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	2180	210	2150
C	730 (Installation hole pitch)	180	2180	210	2150

# 1. Outdoor Unit

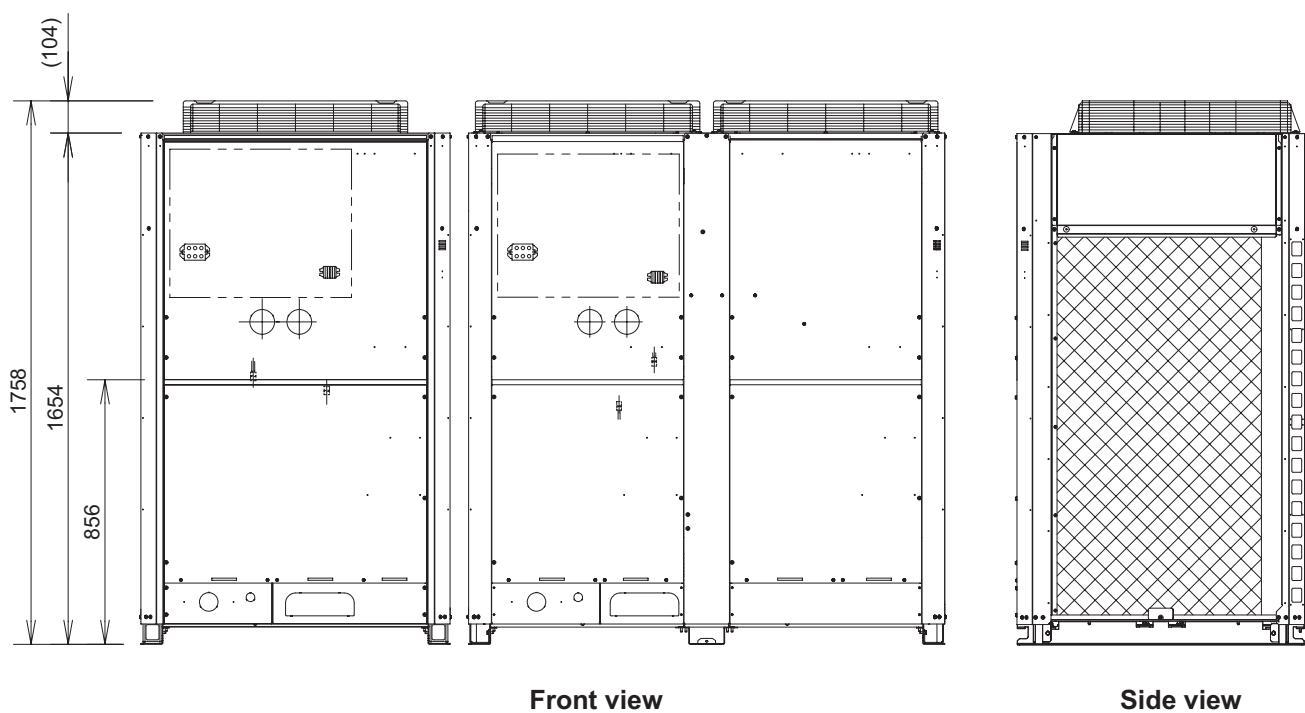
## 1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- Diagrams for 26hp & 28hp

Unit: mm



Top view



Front view

Side view

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	26 hp	28 hp
U-16ME1E81	<input type="radio"/>	<input type="radio"/>
U-18ME1E81	<input type="radio"/>	—
U-20ME1E81	—	<input type="radio"/>

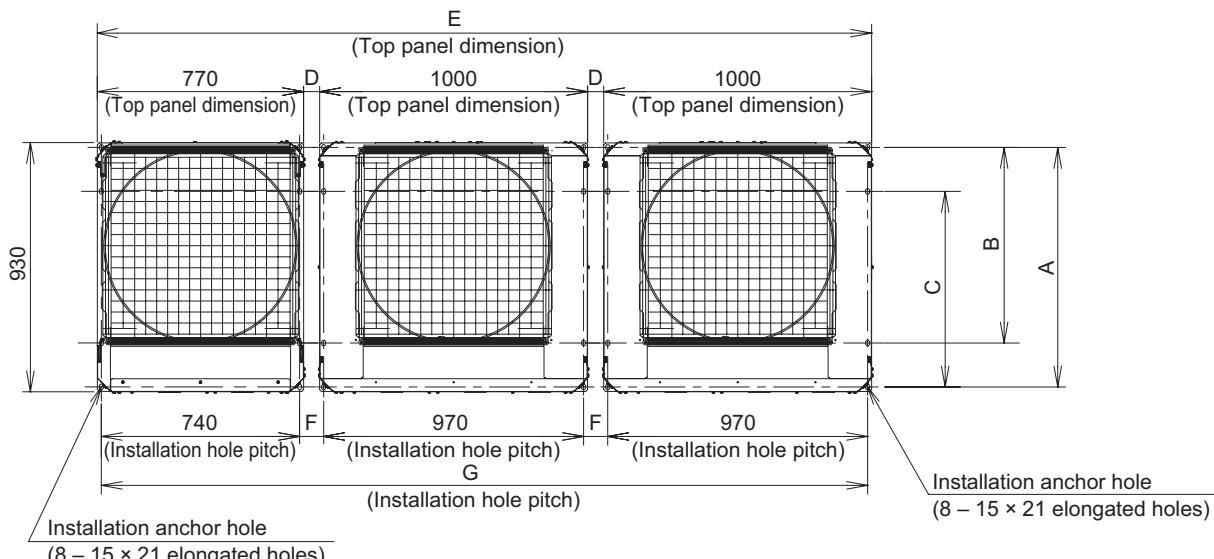
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	2600	90	2570
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	2720	210	2690
C 730 (Installation hole pitch)	180	2720	210	2690

# 1. Outdoor Unit

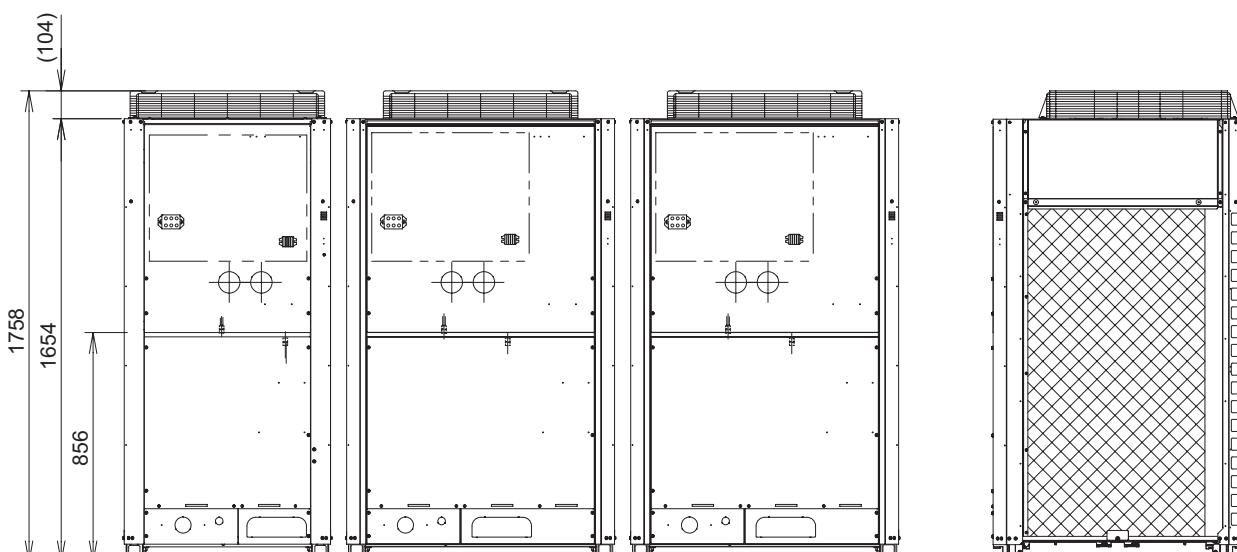
## 1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- Diagrams for 34hp

Unit: mm



Top view



Front view

Side view

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	34 hp
U-8ME1E81	<input type="radio"/>
U-16ME1E81	<input type="radio"/>
U-18ME1E81	<input type="radio"/>

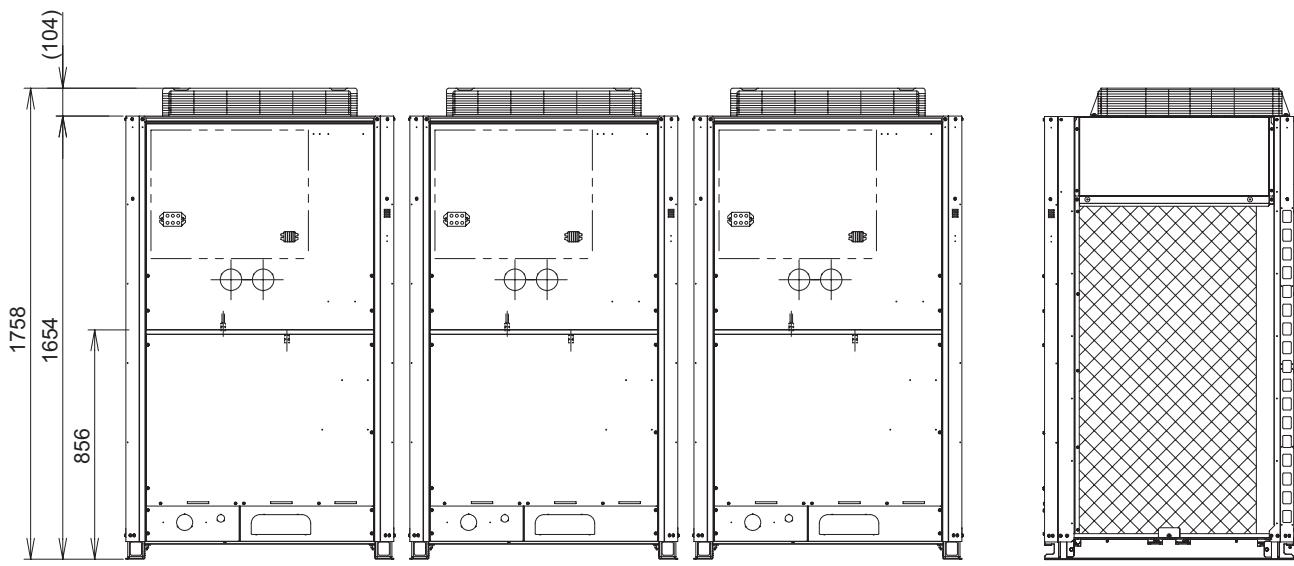
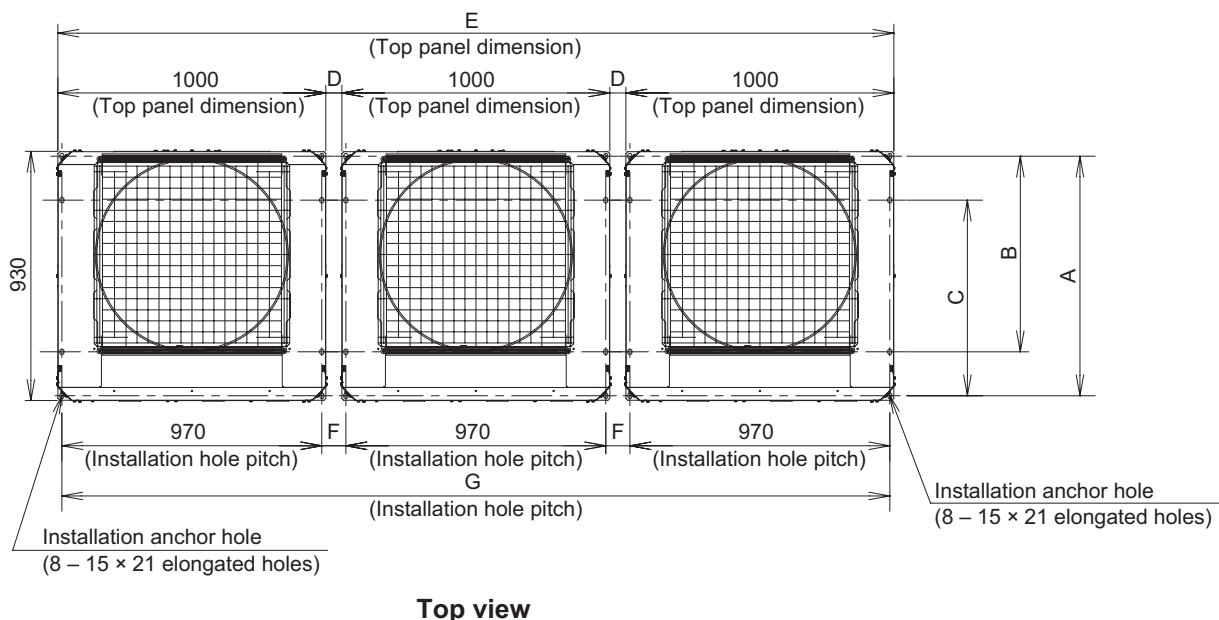
	D	E	F	G	
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	2890	90	2860
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3130	210	3100
C	730 (Installation hole pitch)	180	3130	210	3100

# 1. Outdoor Unit

## 1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- Diagrams for 36hp

Unit: mm



4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	36 hp
U-16ME1E81	○○○

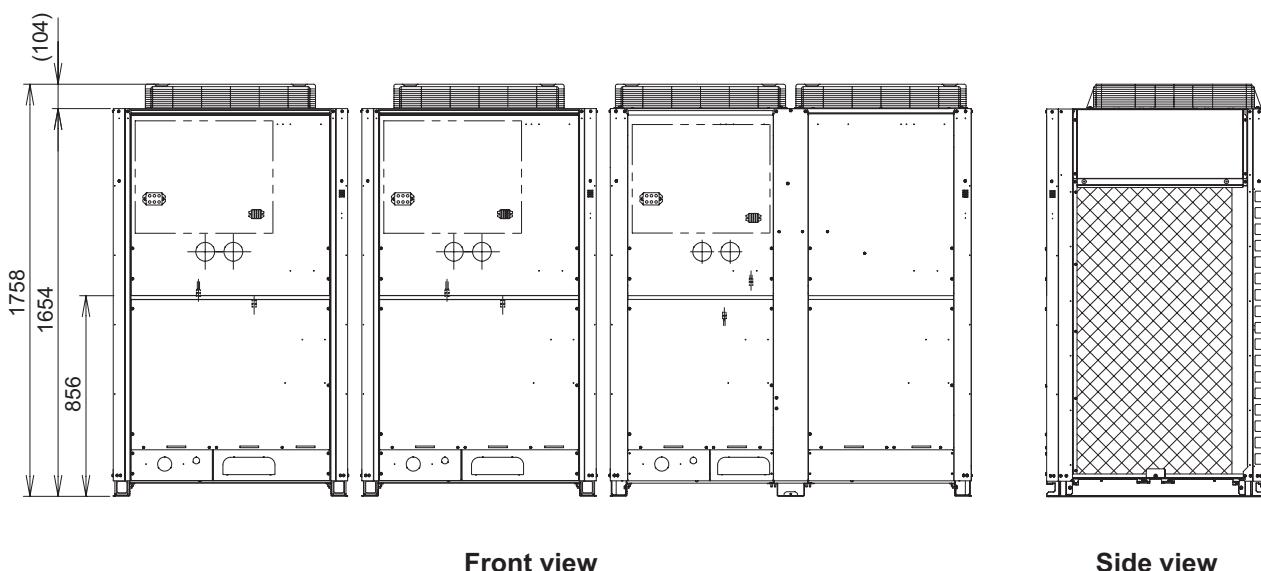
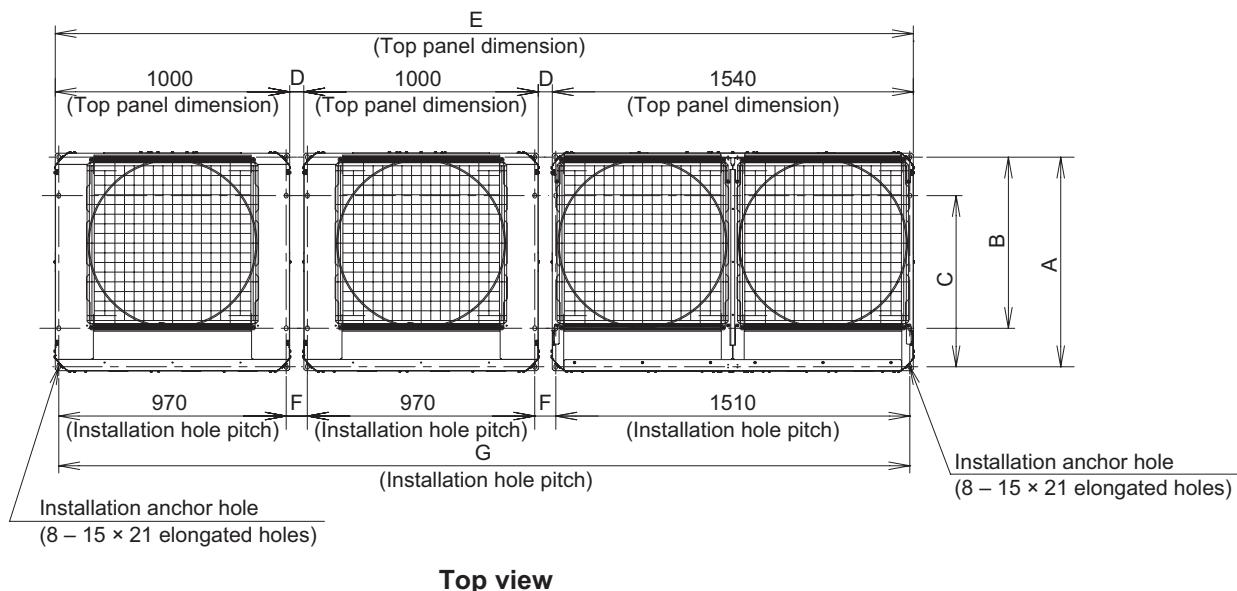
	D	E	F	G	
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	3120	90	3090
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3360	210	3330
C	730 (Installation hole pitch)	180	3360	210	3330

# 1. Outdoor Unit

## 1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- Diagrams for 38hp & 40hp

Unit: mm



- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	38 hp	40 hp
U-16ME1E81	○ ○	○ ○
U-18ME1E81	○	—
U-20ME1E81	—	○

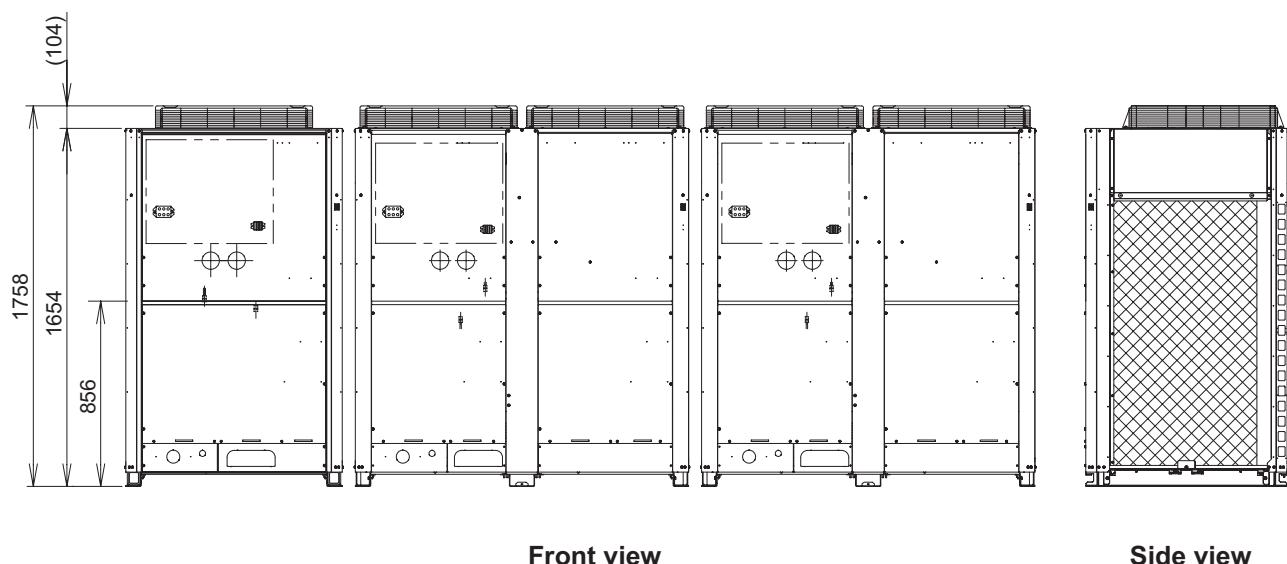
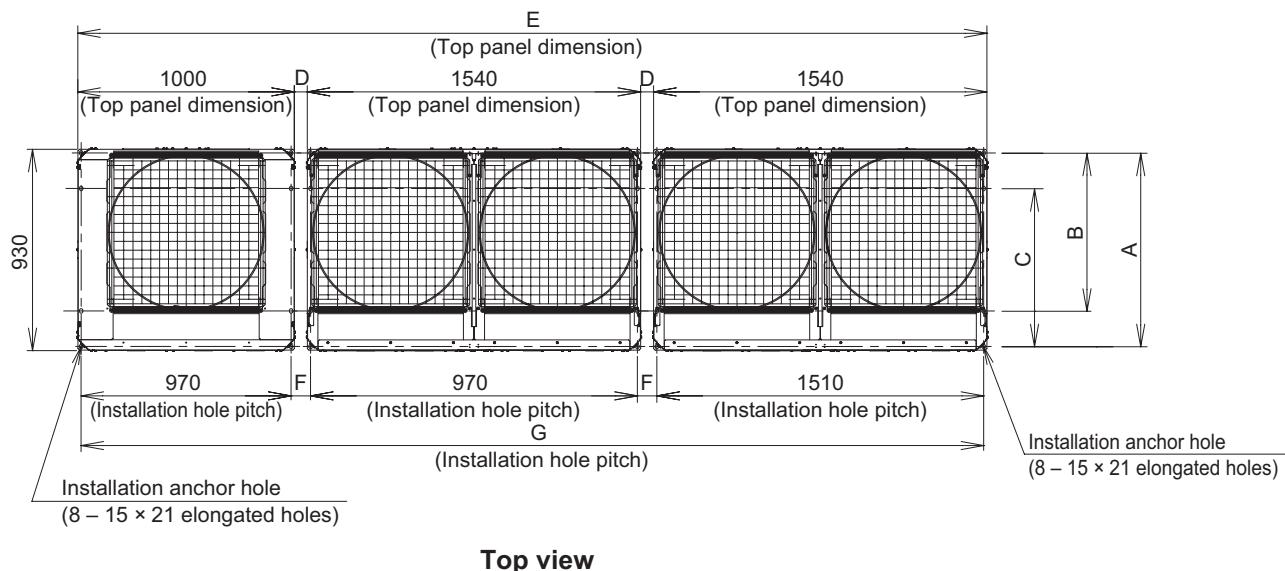
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	3660	90	3630
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3900	210	3870
C 730 (Installation hole pitch)	180	3900	210	3870

# 1. Outdoor Unit

## 1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- Diagrams for 42hp

Unit: mm



4

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

Equivalent horsepower	42 hp
U-16ME1E81	○
U-18ME1E81	○
U-20ME1E81	○

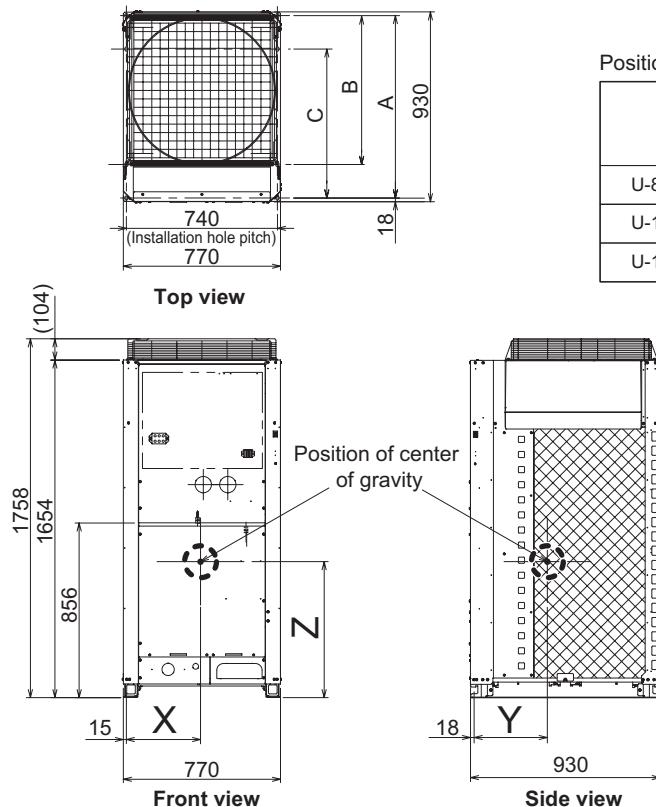
	D	E	F	G
A 894 (Installation hole pitch) * The tubing is routed out from the front.	60	4200	90	4170
B 730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	4440	210	4410
C 730 (Installation hole pitch)	180	4440	210	4410

# 1. Outdoor Unit

## Position of center of gravity

**U-8ME1E81, U-10ME1E81, U-12ME1E81**

unit: mm



Position of center of gravity

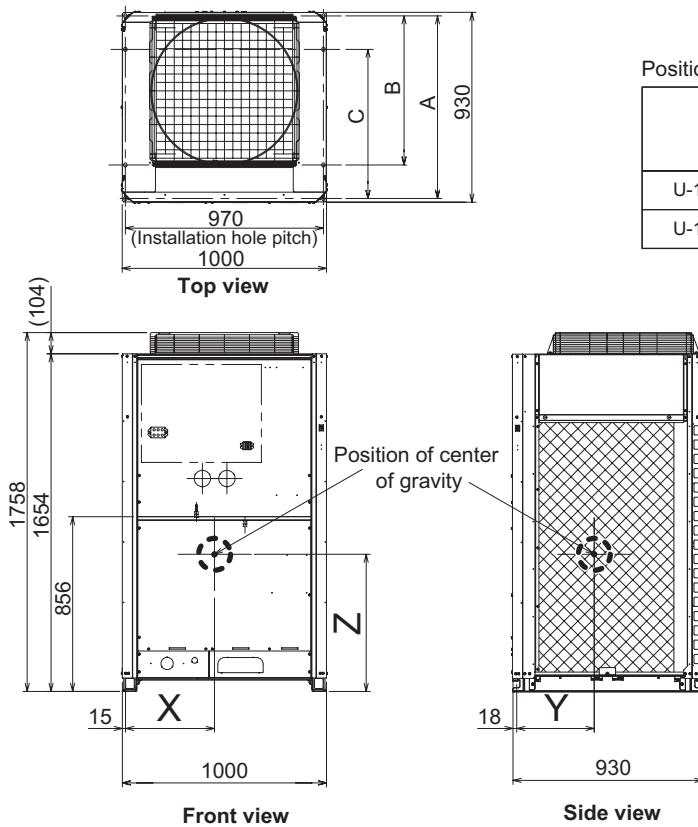
Model	Position of center of gravity			Weight (kg)
	X	Y	Z	
U-8ME1E81	420	407	690	234
U-10ME1E81	420	407	690	234
U-12ME1E81	363	355	650	281

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

A : 894 (Installation hole pitch) * The tubing is routed out from the front.
B : 730 (Installation hole pitch) * The tubing is routed out from the bottom.
C : 730 (Installation hole pitch)

**U-14ME1E81, U-16ME1E81**

unit: mm



Position of center of gravity

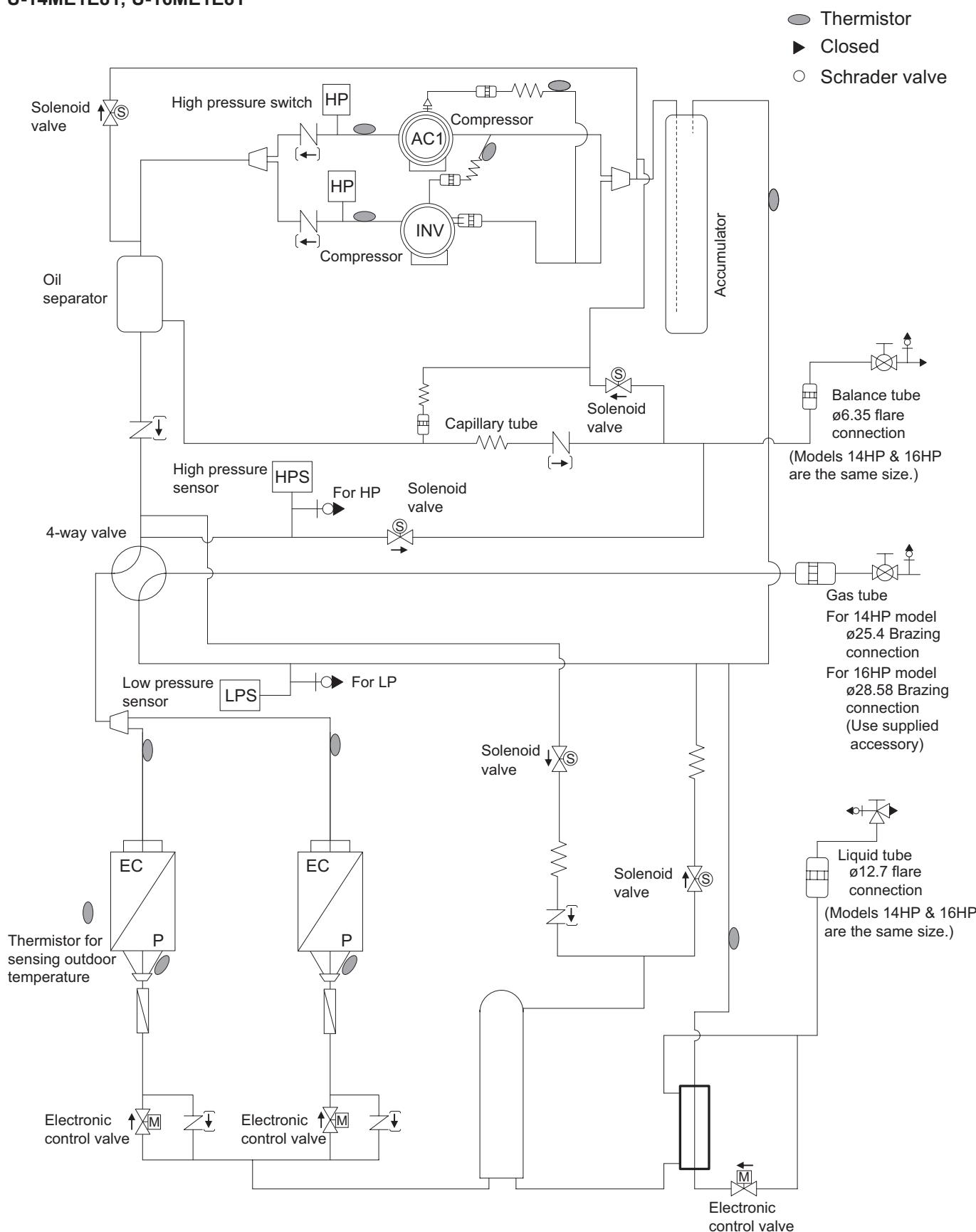
Model	Position of center of gravity			Weight (kg)
	X	Y	Z	
U-14ME1E81	436	359	660	309
U-16ME1E81	436	359	660	309

- According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

A : 894 (Installation hole pitch) * The tubing is routed out from the front.
B : 730 (Installation hole pitch) * The tubing is routed out from the bottom.
C : 730 (Installation hole pitch)

# 1. Outdoor Unit

U-14ME1E81, U-16ME1E81



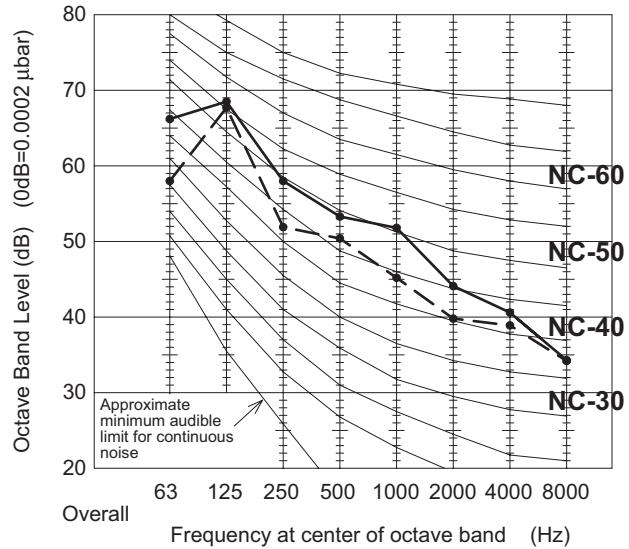
# 1. Outdoor Unit

## 1-5. Noise Criterion Curves

MODEL	U-8ME1E81
SOUND LEVEL dB(A) (Cooling/Heating)	56.5 (Quiet mode 53.5)
CONDITION	1 m in front at height of 1.5 m

50Hz

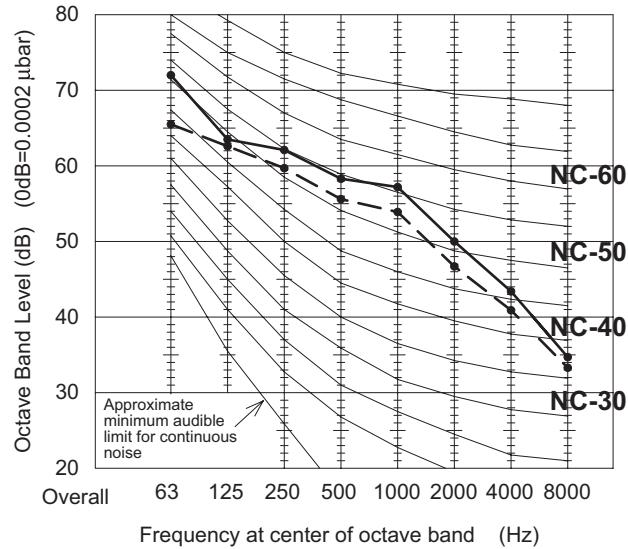
- Standard mode
- Quiet mode



MODEL	U-10ME1E81
SOUND LEVEL dB(A) (Cooling/Heating)	59.0 (Quiet mode 56.0)
CONDITION	1 m in front at height of 1.5 m

50Hz

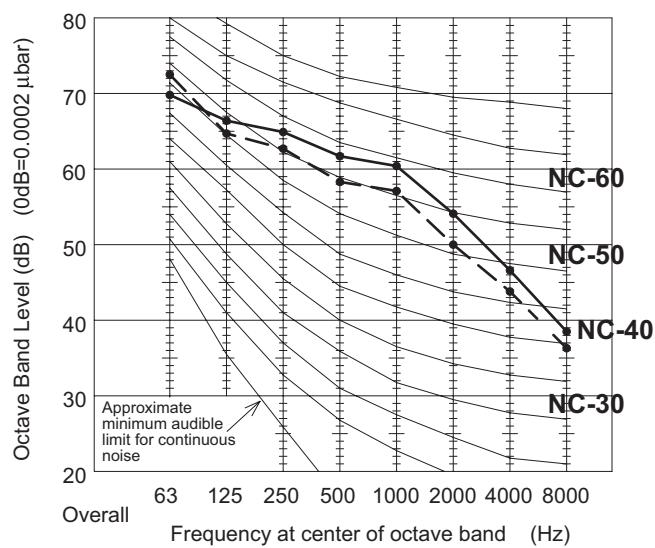
- Standard mode
- Quiet mode



MODEL	U-12ME1E81
SOUND LEVEL dB(A) (Cooling/Heating)	61.0 (Quiet mode 58.0)
CONDITION	1 m in front at height of 1.5 m

50Hz

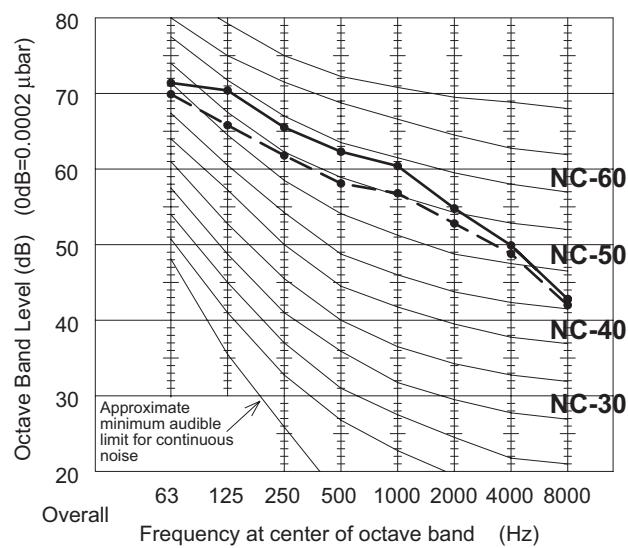
- Standard mode
- Quiet mode



MODEL	U-14ME1E81
SOUND LEVEL dB(A) (Cooling/Heating)	62.0 (Quiet mode 59.0)
CONDITION	1 m in front at height of 1.5 m

50Hz

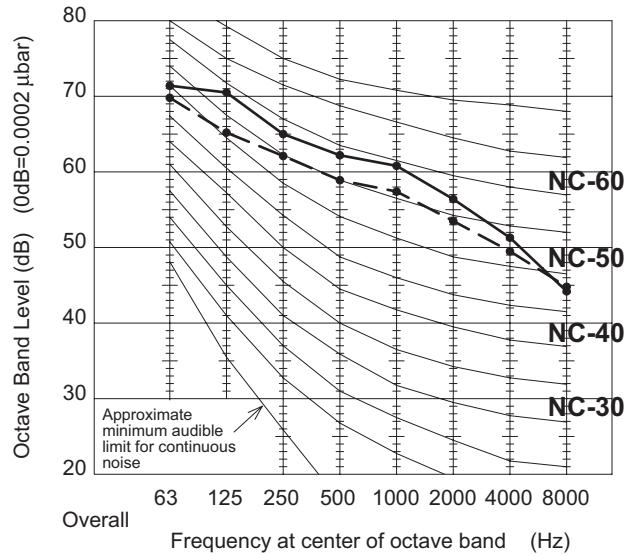
- Standard mode
- Quiet mode



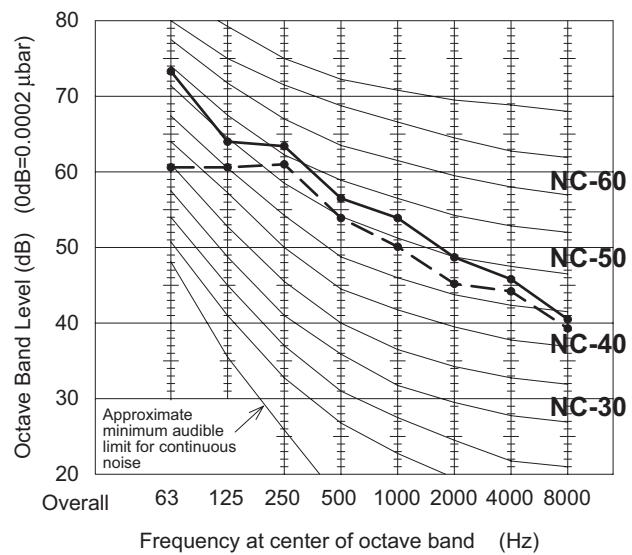
# 1. Outdoor Unit

## 1-5. Noise Criterion Curves (continued)

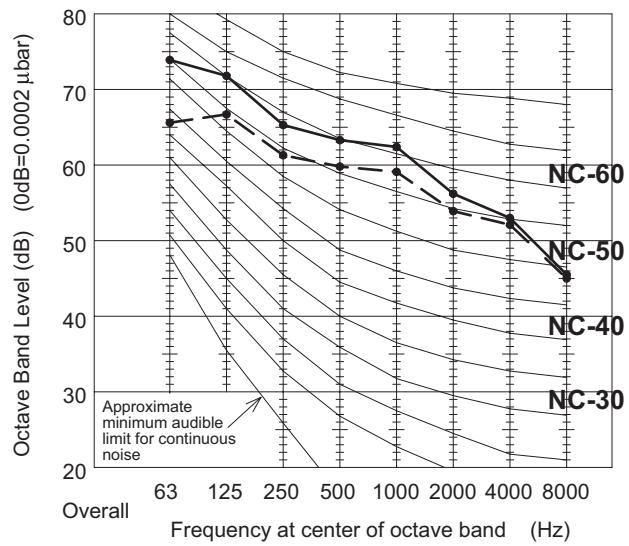
MODEL	U-16ME1E81	50Hz
SOUND LEVEL dB(A) (Cooling/Heating)	62.0 (Quiet mode 59.0)	Standard mode
CONDITION	1 m in front at height of 1.5 m	—●— Quiet mode



MODEL	U-18ME1E81	50Hz
SOUND LEVEL dB(A) (Cooling/Heating)	60.0 (Quiet mode 57.0)	Standard mode
CONDITION	1 m in front at height of 1.5 m	—●— Quiet mode



MODEL	U-20ME1E81	50Hz
SOUND LEVEL dB(A) (Cooling/Heating)	63.0 (Quiet mode 60.0)	Standard mode
CONDITION	1 m in front at height of 1.5 m	—●— Quiet mode



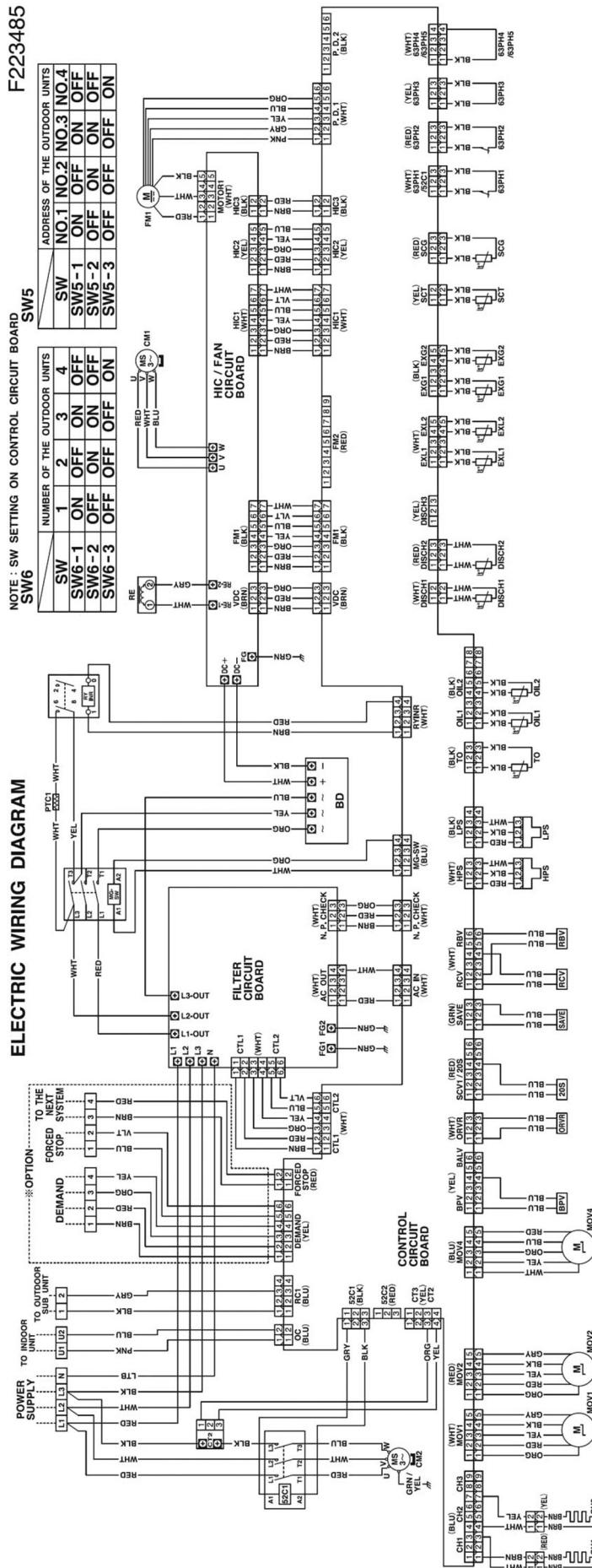
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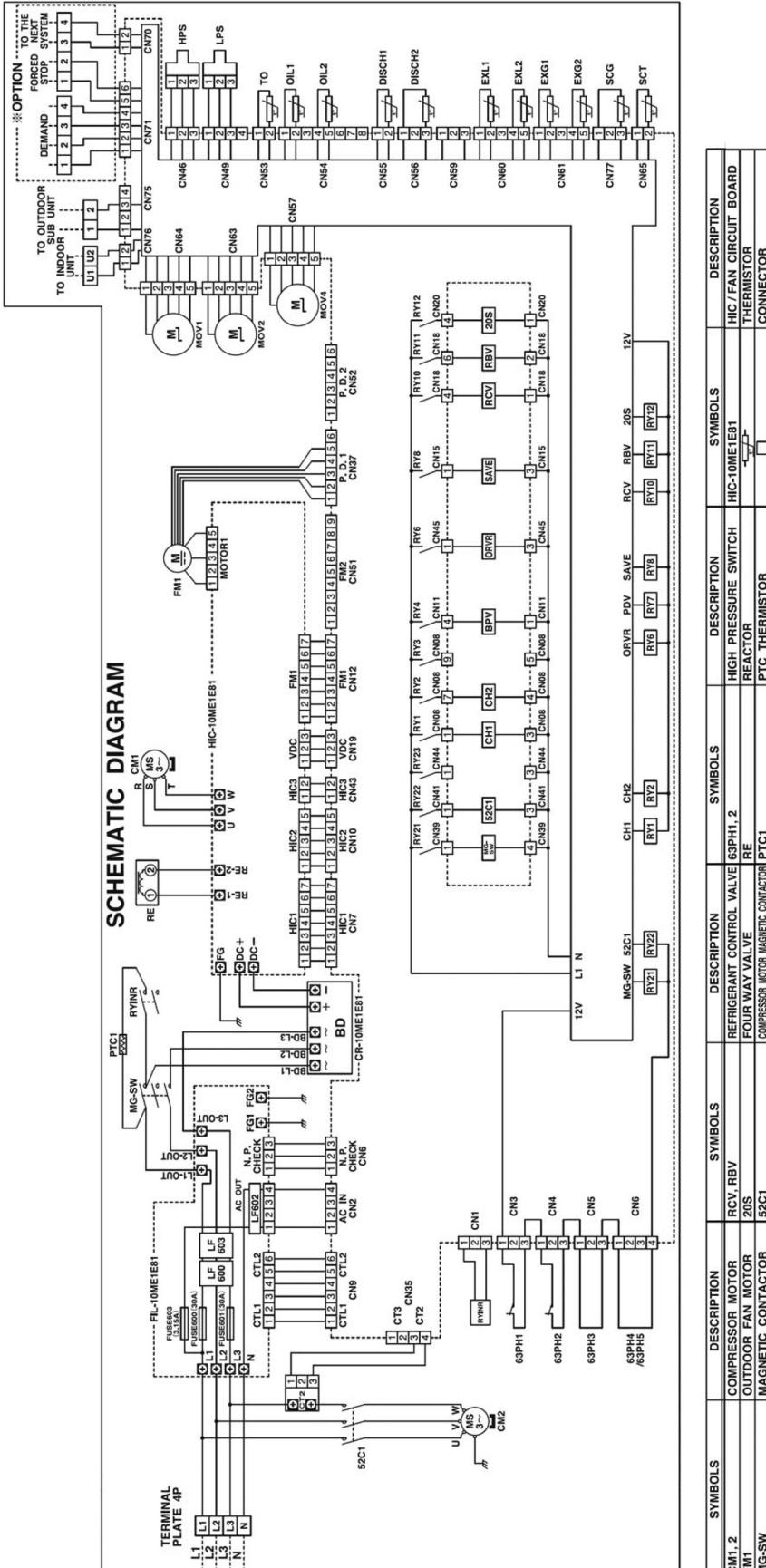
# 1. Outdoor Unit

## (2) Electric Wiring Diagram U-12ME1E81, U-14ME1E81, U-16ME1E81



# 1. Outdoor Unit

Schematic Diagram U-12ME1E81, U-14ME1E81, U-16ME1E81



SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
CMI_2	COMPRESSOR MOTOR	RCV, RBV	REFRIGERANT CONTROL VALVE	6SPHI, 2	HIGH PRESSURE SWITCH	HIC-10ME1E81	HIC / FAN CIRCUIT BOARD
FM1	OUTDOOR FAN MOTOR	20S	FOUR WAY VALVE	RE	REACTOR	-	TERMISTOR CONNECTOR
MG-SW	MAGNETIC CONTACTOR	52C1	COMPRESSOR MOTOR MAGNETIC CONTACTOR	PTC1	PTC THERMISTOR	-	TERMINAL PLATE
RYNR	MAGNETIC CONTACTOR	MOV1_2-4	MOTOR OPERATED VALVE	CT2	CURRENT TRANSFORMER	-	TERMINAL PLATE
BPV	BYPASS VALVE	FUSE600, 601, 603	OPERATION CIRCUIT FUSE	RY001~004, 006, 008	RELAY	-	TERMINAL PLATE
ORV	OIL RECOVERY VALVE	LF600, 602, 603	NOISE FILTER (ON THE P.C.B.)	010~012, 021~023	CONTROL CIRCUIT BOARD	-	TERMINAL PLATE
PDV	PUMP DOWN VALVE	BD	BRIDGE DIODE	CR-10ME1E81	FILTER CIRCUIT BOARD	-	TERMINAL PLATE
SAVE	SAVE VALVE	CH1,2	CRANK CASE HEATER	FIL-10ME1E81	-	-	-

## OUTDOOR PC UNIT

### HEATING & COOLING



**DANGER!** HIGH VOLTAGE. DO NOT TOUCH ANY ELECTRIC COMPONENT WHILE OPERATING OR 5 MINUTES AFTER STOPPING OPERATION. MEASURE THE POWER VOLTAGE OF BD'S TERMINAL "VDC+" (WHT) AND "VDC-" (BLK) WITH THE TESTER.

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# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## 1-7. U-14ME1E81 (Cooling)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
130%	-10.0	43.0	4.98	43.0	4.98	43.0	4.98	43.0	4.98	45.9	5.32	48.7	5.65	51.6	5.99
	-5.0	43.0	5.00	43.0	5.00	43.0	5.00	43.0	5.00	45.9	5.34	48.7	5.68	51.6	6.03
	0.0	43.0	5.04	43.0	5.04	43.0	5.04	43.0	5.04	45.9	5.38	48.7	5.74	51.6	6.08
	5.0	43.0	5.11	43.0	5.11	43.0	5.11	43.0	5.11	45.9	5.47	48.7	5.84	51.6	6.19
	10.0	43.0	5.26	43.0	5.26	43.0	5.26	43.0	5.26	45.9	5.65	48.7	6.05	51.6	6.45
	15.0	43.0	5.68	43.0	5.68	43.0	5.68	43.0	5.68	45.9	6.15	48.7	6.68	51.6	7.31
	20.0	43.0	6.98	43.0	6.98	43.0	6.98	43.0	6.98	45.9	7.67	48.7	8.40	51.6	9.18
	25.0	43.0	8.59	43.0	8.59	43.0	8.59	43.0	8.59	45.9	9.42	48.7	10.30	51.6	11.22
	30.0	43.0	10.35	43.0	10.35	43.0	10.35	43.0	10.35	45.9	11.33	48.7	12.38	51.6	13.46
	35.0	43.0	12.27	43.0	12.27	43.0	12.27	43.0	12.27	45.9	13.41	48.4	14.43	49.4	14.43
	40.0	43.0	14.33	43.0	14.33	43.0	14.33	43.0	14.33	44.0	14.43	45.0	14.43	45.9	14.43
	43.0	41.2	14.43	41.2	14.43	41.2	14.43	41.2	14.43	42.1	14.43	43.0	14.43	43.9	14.43

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
120%	-10.0	40.3	4.65	42.0	4.86	42.0	4.86	42.0	4.86	44.8	5.19	47.6	5.52	50.4	5.85
	-5.0	40.3	4.66	42.0	4.88	42.0	4.88	42.0	4.88	44.8	5.22	47.6	5.55	50.4	5.88
	0.0	40.3	4.68	42.0	4.92	42.0	4.92	42.0	4.92	44.8	5.25	47.6	5.59	50.4	5.94
	5.0	40.3	4.72	42.0	4.98	42.0	4.98	42.0	4.98	44.8	5.33	47.6	5.68	50.4	6.05
	10.0	40.3	4.80	42.0	5.13	42.0	5.13	42.0	5.13	44.8	5.51	47.6	5.89	50.4	6.28
	15.0	40.3	5.01	42.0	5.52	42.0	5.52	42.0	5.52	44.8	5.97	47.6	6.44	50.4	7.04
	20.0	40.3	5.78	42.0	6.75	42.0	6.75	42.0	6.75	44.8	7.40	47.6	8.10	50.4	8.85
	25.0	40.3	7.20	42.0	8.30	42.0	8.30	42.0	8.30	44.8	9.10	47.6	9.93	50.4	10.82
	30.0	40.3	8.75	42.0	10.01	42.0	10.01	42.0	10.01	44.8	10.96	47.6	11.95	50.4	12.99
	35.0	40.3	10.43	42.0	11.87	42.0	11.87	42.0	11.87	44.8	12.96	47.6	14.12	49.0	14.43
	40.0	40.3	12.27	42.0	13.88	42.0	13.88	42.0	13.88	43.7	14.43	44.6	14.43	45.5	14.43
	43.0	40.3	13.43	41.0	14.43	41.0	14.43	41.0	14.43	41.8	14.43	42.7	14.43	43.6	14.43

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
110%	-10.0	36.1	4.16	39.1	4.52	41.0	4.75	41.0	4.75	43.7	5.06	46.5	5.38	49.2	5.71
	-5.0	36.1	4.17	39.1	4.53	41.0	4.76	41.0	4.76	43.7	5.08	46.5	5.42	49.2	5.74
	0.0	36.1	4.20	39.1	4.55	41.0	4.80	41.0	4.80	43.7	5.13	46.5	5.46	49.2	5.79
	5.0	36.1	4.23	39.1	4.60	41.0	4.86	41.0	4.86	43.7	5.19	46.5	5.54	49.2	5.89
	10.0	36.1	4.30	39.1	4.68	41.0	5.00	41.0	5.00	43.7	5.36	46.5	5.74	49.2	6.12
	15.0	36.1	4.50	39.1	4.93	41.0	5.35	41.0	5.35	43.7	5.79	46.5	6.25	49.2	6.77
	20.0	36.1	5.22	39.1	5.79	41.0	6.52	41.0	6.52	43.7	7.15	46.5	7.81	49.2	8.51
	25.0	36.1	6.48	39.1	7.18	41.0	8.03	41.0	8.03	43.7	8.78	46.5	9.59	49.2	10.43
	30.0	36.1	7.86	39.1	8.70	41.0	9.68	41.0	9.68	43.7	10.58	46.5	11.53	49.2	12.53
	35.0	36.1	9.36	39.1	10.37	41.0	11.48	41.0	11.48	43.7	12.53	46.5	13.64	48.6	14.43
	40.0	36.1	10.98	39.1	12.15	41.0	13.42	41.0	13.42	43.4	14.43	44.3	14.43	45.2	14.43
	43.0	36.1	12.02	39.1	13.30	40.7	14.43	40.7	14.43	41.5	14.43	42.4	14.43	43.2	14.43

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
100%	-10.0	32.0	3.70	34.7	4.01	37.3	4.32	40.0	4.63	42.7	4.94	45.3	5.25	48.0	5.57
	-5.0	32.0	3.71	34.7	4.02	37.3	4.33	40.0	4.64	42.7	4.96	45.3	5.27	48.0	5.59
	0.0	32.0	3.72	34.7	4.04	37.3	4.35	40.0	4.67	42.7	5.00	45.3	5.32	48.0	5.64
	5.0	32.0	3.75	34.7	4.07	37.3	4.41	40.0	4.73	42.7	5.06	45.3	5.39	48.0	5.74
	10.0	32.0	3.82	34.7	4.16	37.3	4.51	40.0	4.86	42.7	5.22	45.3	5.57	48.0	5.95
	15.0	32.0	4.01	34.7	4.40	37.3	4.78	40.0	5.19	42.7	5.62	45.3	6.05	48.0	6.50
	20.0	32.0	4.70	34.7	5.19	37.3	5.72	40.0	6.28	42.7	6.89	45.3	7.53	48.0	8.19
	25.0	32.0	5.79	34.7	6.42	37.3	7.06	40.0	7.75	42.7	8.48	45.3	9.25	48.0	10.05
	30.0	32.0	7.02	34.7	7.75	37.3	8.54	40.0	9.36						

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-14ME1E81 (Cooling)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
90%	-10.0	28.8	3.33	31.2	3.61	33.6	3.89	36.0	4.16	38.4	4.44	40.8	4.72
	-5.0	28.8	3.33	31.2	3.61	33.6	3.90	36.0	4.17	38.4	4.45	40.8	4.74
	0.0	28.8	3.34	31.2	3.63	33.6	3.91	36.0	4.20	38.4	4.48	40.8	4.77
	5.0	28.8	3.36	31.2	3.65	33.6	3.94	36.0	4.24	38.4	4.53	40.8	4.83
	10.0	28.8	3.42	31.2	3.72	33.6	4.02	36.0	4.33	38.4	4.64	40.8	4.96
	15.0	28.8	3.55	31.2	3.89	33.6	4.23	36.0	4.58	38.4	4.94	40.8	5.32
	20.0	28.8	4.06	31.2	4.52	33.6	4.97	36.0	5.44	38.4	5.93	40.8	6.44
	25.0	28.8	5.09	31.2	5.61	33.6	6.15	36.0	6.72	38.4	7.31	40.8	7.94
	30.0	28.8	6.16	31.2	6.78	33.6	7.44	36.0	8.11	38.4	8.82	40.8	9.58
	35.0	28.8	7.33	31.2	8.07	33.6	8.84	36.0	9.65	38.4	10.49	40.8	11.37
	40.0	28.8	8.59	31.2	9.46	33.6	10.36	36.0	11.29	38.4	12.27	40.8	13.29
	43.0	28.8	9.40	31.2	10.33	33.6	11.32	36.0	12.34	38.4	13.41	40.7	14.43

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
80%	-10.0	25.6	2.95	27.7	3.20	29.9	3.45	32.0	3.70	34.1	3.94	36.3	4.20
	-5.0	25.6	2.96	27.7	3.21	29.9	3.45	32.0	3.71	34.1	3.95	36.3	4.21
	0.0	25.6	2.96	27.7	3.22	29.9	3.46	32.0	3.72	34.1	3.97	36.3	4.23
	5.0	25.6	2.99	27.7	3.24	29.9	3.50	32.0	3.75	34.1	4.01	36.3	4.27
	10.0	25.6	3.02	27.7	3.29	29.9	3.55	32.0	3.82	34.1	4.08	36.3	4.36
	15.0	25.6	3.12	27.7	3.41	29.9	3.70	32.0	4.00	34.1	4.31	36.3	4.62
	20.0	25.6	3.49	27.7	3.86	29.9	4.25	32.0	4.66	34.1	5.05	36.3	5.46
	25.0	25.6	4.45	27.7	4.86	29.9	5.31	32.0	5.77	34.1	6.25	36.3	6.76
	30.0	25.6	5.37	27.7	5.88	29.9	6.42	32.0	6.97	34.1	7.56	36.3	8.17
	35.0	25.6	6.38	27.7	6.99	29.9	7.64	32.0	8.29	34.1	8.99	36.3	9.70
	40.0	25.6	7.49	27.7	8.20	29.9	8.95	32.0	9.72	34.1	10.52	36.3	11.37
	43.0	25.6	8.18	27.7	8.97	29.9	9.79	32.0	10.63	34.1	11.51	36.3	12.43

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
70%	-10.0	22.4	2.59	24.3	2.80	26.1	3.02	28.0	3.23	29.9	3.45	31.7	3.66
	-5.0	22.4	2.59	24.3	2.81	26.1	3.02	28.0	3.24	29.9	3.45	31.7	3.67
	0.0	22.4	2.60	24.3	2.81	26.1	3.03	28.0	3.25	29.9	3.46	31.7	3.69
	5.0	22.4	2.61	24.3	2.82	26.1	3.04	28.0	3.27	29.9	3.50	31.7	3.72
	10.0	22.4	2.63	24.3	2.85	26.1	3.09	28.0	3.32	29.9	3.55	31.7	3.79
	15.0	22.4	2.70	24.3	2.94	26.1	3.19	28.0	3.44	29.9	3.70	31.7	3.95
	20.0	22.4	2.95	24.3	3.25	26.1	3.56	28.0	3.90	29.9	4.23	31.7	4.58
	25.0	22.4	3.85	24.3	4.18	26.1	4.54	28.0	4.91	29.9	5.28	31.7	5.68
	30.0	22.4	4.64	24.3	5.05	26.1	5.48	28.0	5.93	29.9	6.39	31.7	6.88
	35.0	22.4	5.51	24.3	6.01	26.1	6.52	28.0	7.05	29.9	7.60	31.7	8.18
	40.0	22.4	6.45	24.3	7.04	26.1	7.65	28.0	8.27	29.9	8.92	31.7	9.59
	43.0	22.4	7.05	24.3	7.69	26.1	8.36	28.0	9.05	29.9	9.76	31.7	10.49

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
60%	-10.0	19.2	2.21	20.8	2.40	22.4	2.59	24.0	2.76	25.6	2.95	27.2	3.14
	-5.0	19.2	2.22	20.8	2.40	22.4	2.59	24.0	2.78	25.6	2.96	27.2	3.14
	0.0	19.2	2.22	20.8	2.41	22.4	2.60	24.0	2.78	25.6	2.96	27.2	3.15
	5.0	19.2	2.23	20.8	2.42	22.4	2.61	24.0	2.80	25.6	2.99	27.2	3.17
	10.0	19.2	2.24	20.8	2.43	22.4	2.63	24.0	2.82	25.6	3.02	27.2	3.22
	15.0	19.2	2.29	20.8	2.49	22.4	2.70	24.0	2.91	25.6	3.11	27.2	3.33
	20.0	19.2	2.45	20.8	2.69	22.4	2.94	24.0	3.20	25.6	3.46	27.2	3.73
	25.0	19.2	3.31	20.8	3.56	22.4	3.84	24.0	4.12	25.6	4.42	27.2	4.72
	30.0	19.2	3.97	20.8	4.30	22.4	4.63	24.0	4.97	25.6	5.34	27.2	5.72
	35.0	19.2	4.70	20.8	5.08	22.4	5.49	24.0	5.91	25.6	6.35	27.2	6.79
	40.0	19.2	5.48	20.8	5.95	22.4	6.43	24.0	6.93	25.6	7.44	27.2	7.97
	43.0	19.2	5.98	20.8	6.50	22.4	7.03	24.0	7.57	25.6	8.14	27.2	8.71

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-14ME1E81 (Cooling)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
50%	-10.0	16.0	1.84	17.3	2.00	18.7	2.15	20.0	2.31	21.3	2.46	22.7	2.61	24.0	2.76
	-5.0	16.0	1.84	17.3	2.00	18.7	2.15	20.0	2.31	21.3	2.46	22.7	2.62	24.0	2.78
	0.0	16.0	1.85	17.3	2.00	18.7	2.15	20.0	2.31	21.3	2.46	22.7	2.62	24.0	2.78
	5.0	16.0	1.85	17.3	2.01	18.7	2.16	20.0	2.32	21.3	2.48	22.7	2.63	24.0	2.80
	10.0	16.0	1.86	17.3	2.02	18.7	2.18	20.0	2.34	21.3	2.50	22.7	2.66	24.0	2.82
	15.0	16.0	1.89	17.3	2.05	18.7	2.22	20.0	2.39	21.3	2.55	22.7	2.73	24.0	2.90
	20.0	16.0	1.99	17.3	2.18	18.7	2.36	20.0	2.56	21.3	2.76	22.7	2.96	24.0	3.17
	25.0	16.0	2.71	17.3	3.01	18.7	3.21	20.0	3.42	21.3	3.64	22.7	3.86	24.0	4.10
	30.0	16.0	3.35	17.3	3.60	18.7	3.85	20.0	4.12	21.3	4.38	22.7	4.66	24.0	4.95
	35.0	16.0	3.94	17.3	4.24	18.7	4.55	20.0	4.86	21.3	5.19	22.7	5.54	24.0	5.88
	40.0	16.0	4.58	17.3	4.94	18.7	5.31	20.0	5.69	21.3	6.08	22.7	6.48	24.0	6.89
	43.0	16.0	5.00	17.3	5.39	18.7	5.79	20.0	6.22	21.3	6.65	22.7	7.08	24.0	7.54

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
40%	-10.0	12.8	1.48	13.9	1.60	14.9	1.72	16.0	1.84	17.1	1.96	18.1	2.09	19.2	2.21
	-5.0	12.8	1.48	13.9	1.60	14.9	1.72	16.0	1.84	17.1	1.96	18.1	2.10	19.2	2.22
	0.0	12.8	1.48	13.9	1.60	14.9	1.72	16.0	1.85	17.1	1.98	18.1	2.10	19.2	2.22
	5.0	12.8	1.48	13.9	1.61	14.9	1.73	16.0	1.85	17.1	1.98	18.1	2.10	19.2	2.23
	10.0	12.8	1.49	13.9	1.61	14.9	1.73	16.0	1.86	17.1	1.99	18.1	2.12	19.2	2.24
	15.0	12.8	1.50	13.9	1.63	14.9	1.75	16.0	1.89	17.1	2.02	18.1	2.15	19.2	2.29
	20.0	12.8	1.55	13.9	1.69	14.9	1.83	16.0	1.98	17.1	2.13	18.1	2.28	19.2	2.43
	25.0	12.8	1.93	13.9	2.16	14.9	2.40	16.0	2.65	17.1	2.92	18.1	3.11	19.2	3.27
	30.0	12.8	2.79	13.9	2.96	14.9	3.14	16.0	3.33	17.1	3.53	18.1	3.73	19.2	3.93
	35.0	12.8	3.24	13.9	3.46	14.9	3.69	16.0	3.92	17.1	4.15	18.1	4.40	19.2	4.65
	40.0	12.8	3.74	13.9	4.01	14.9	4.28	16.0	4.56	17.1	4.84	18.1	5.14	19.2	5.43
	43.0	12.8	4.06	13.9	4.36	14.9	4.66	16.0	4.97	17.1	5.28	18.1	5.61	19.2	5.93

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
30%	-10.0	9.6	1.11	10.4	1.20	11.2	1.29	12.0	1.39	12.8	1.48	13.6	1.57	14.4	1.67
	-5.0	9.6	1.11	10.4	1.20	11.2	1.29	12.0	1.39	12.8	1.48	13.6	1.57	14.4	1.67
	0.0	9.6	1.11	10.4	1.20	11.2	1.29	12.0	1.39	12.8	1.48	13.6	1.57	14.4	1.67
	5.0	9.6	1.11	10.4	1.20	11.2	1.30	12.0	1.39	12.8	1.48	13.6	1.58	14.4	1.67
	10.0	9.6	1.11	10.4	1.21	11.2	1.30	12.0	1.39	12.8	1.49	13.6	1.58	14.4	1.68
	15.0	9.6	1.12	10.4	1.21	11.2	1.31	12.0	1.40	12.8	1.50	13.6	1.60	14.4	1.69
	20.0	9.6	1.14	10.4	1.24	11.2	1.34	12.0	1.44	12.8	1.54	13.6	1.65	14.4	1.75
	25.0	9.6	1.31	10.4	1.45	11.2	1.60	12.0	1.74	12.8	1.90	13.6	2.05	14.4	2.22
	30.0	9.6	2.26	10.4	2.39	11.2	2.51	12.0	2.64	12.8	2.76	13.6	2.90	14.4	3.03
	35.0	9.6	2.61	10.4	2.75	11.2	2.91	12.0	3.06	12.8	3.22	13.6	3.39	14.4	3.55
	40.0	9.6	2.97	10.4	3.15	11.2	3.34	12.0	3.53	12.8	3.72	13.6	3.92	14.4	4.12
	43.0	9.6	3.21	10.4	3.41	11.2	3.62	12.0	3.83	12.8	4.04	13.6	4.26	14.4	4.48

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## 1-8. U-14ME1E81 (Heating)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
130%	-24.9	-25.0	32.1	11.64	30.5	10.92	28.8	10.22	27.9	9.87	27.9	9.87	27.9	9.87
	-19.8	-20.0	33.8	11.76	32.1	11.05	30.3	10.35	29.4	9.99	29.4	9.99	29.4	9.99
	-14.7	-15.0	35.9	11.94	34.1	11.25	32.2	10.54	31.3	10.19	31.3	10.19	31.3	10.19
	-9.6	-10.0	38.5	12.24	36.6	11.53	34.7	10.83	33.8	10.48	33.8	10.48	33.8	10.48
	-4.4	-5.0	42.0	12.69	40.1	11.98	38.1	11.27	37.0	10.91	37.0	10.91	37.0	10.91
	-1.8	-2.5	44.2	12.99	42.3	12.28	40.2	11.56	39.1	11.19	39.1	11.19	39.1	11.19
	0.8	0.0	46.9	13.35	44.9	12.63	42.7	11.90	41.6	11.52	41.6	11.52	41.6	11.52
	2.8	2.0	49.5	13.69	47.3	12.96	45.1	12.22	44.0	11.84	44.0	11.84	44.0	11.84
	6.0	5.0	53.4	13.91	52.0	13.61	49.8	12.91	48.4	12.45	48.4	12.45	48.4	12.45
	7.0	6.0	54.8	13.91	53.7	13.81	50.2	12.64	48.4	12.08	48.4	12.08	48.4	12.08
	8.6	7.5	56.5	13.91	53.7	13.14	50.2	12.06	48.4	11.52	48.4	11.52	48.4	11.52
	11.2	10.0	57.3	13.09	53.7	11.99	50.2	10.96	48.4	10.46	48.4	10.46	48.4	10.46
	16.4	15.0	57.3	10.60	53.7	9.75	50.2	8.92	48.4	8.53	48.4	8.53	48.4	8.53

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
120%	-24.9	-25.0	32.2	11.48	30.5	10.80	28.8	10.10	27.9	9.76	27.9	9.76	27.9	9.76
	-19.8	-20.0	33.9	11.61	32.1	10.92	30.4	10.24	29.5	9.90	29.5	9.90	29.5	9.90
	-14.7	-15.0	35.9	11.81	34.1	11.13	32.3	10.43	31.4	10.09	31.4	10.09	31.4	10.09
	-9.6	-10.0	38.6	12.11	36.7	11.43	34.7	10.73	33.8	10.39	33.8	10.39	33.8	10.39
	-4.4	-5.0	42.1	12.57	40.1	11.88	38.1	11.17	37.0	10.82	37.0	10.82	37.0	10.82
	-1.8	-2.5	44.3	12.87	42.3	12.17	40.2	11.46	39.1	11.10	39.1	11.10	39.1	11.10
	0.8	0.0	47.0	13.23	44.9	12.51	42.7	11.79	41.6	11.42	41.6	11.42	41.6	11.42
	2.8	2.0	49.5	13.55	47.3	12.83	45.1	12.11	44.0	11.74	44.0	11.74	44.0	11.74
	6.0	5.0	53.6	13.91	52.1	13.50	49.0	12.52	47.3	11.96	47.3	11.96	47.3	11.96
	7.0	6.0	55.0	13.91	52.5	13.23	49.0	12.13	47.3	11.61	47.3	11.61	47.3	11.61
	8.6	7.5	56.0	13.67	52.5	12.60	49.0	11.57	47.3	11.04	47.3	11.04	47.3	11.04
	11.2	10.0	56.0	12.47	52.5	11.45	49.0	10.48	47.3	10.02	47.3	10.02	47.3	10.02
	16.4	15.0	56.0	10.09	52.5	9.29	49.0	8.52	47.3	8.15	47.3	8.15	47.3	8.15

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
110%	-24.9	-25.0	32.2	11.33	30.6	10.67	28.8	9.99	27.9	9.65	27.9	9.65	27.8	9.44
	-19.8	-20.0	33.9	11.48	32.2	10.80	30.4	10.13	29.5	9.79	29.5	9.79	29.4	9.59
	-14.7	-15.0	36.0	11.67	34.2	11.01	32.3	10.34	31.4	9.99	31.4	9.99	31.3	9.79
	-9.6	-10.0	38.6	11.98	36.7	11.31	34.8	10.64	33.8	10.29	33.8	10.29	33.8	10.29
	-4.4	-5.0	42.2	12.45	40.2	11.77	38.1	11.07	37.1	10.72	37.1	10.72	37.1	10.72
	-1.8	-2.5	44.4	12.75	42.3	12.06	40.2	11.35	39.2	11.00	39.2	11.00	39.2	11.00
	0.8	0.0	47.1	13.10	44.9	12.39	42.7	11.67	41.6	11.32	41.6	11.32	41.6	11.32
	2.8	2.0	49.5	13.42	47.3	12.71	45.1	11.99	43.9	11.63	43.9	11.63	43.9	11.63
	6.0	5.0	53.9	13.91	51.3	13.08	47.8	12.01	46.1	11.49	46.1	11.49	45.1	10.92
	7.0	6.0	54.7	13.75	51.3	12.68	47.8	11.65	46.1	11.16	46.1	11.16	45.1	10.57
	8.6	7.5	54.7	13.10	51.3	12.07	47.8	11.05	46.1	10.57	46.1	10.57	45.1	9.99
	11.2	10.0	54.7	11.88	51.3	10.92	47.8	10.02	46.1	9.58	46.1	9.58	45.1	9.06
	16.4	15.0	54.7	9.59	51.3	8.84	47.8	8.13	46.1	7.78	46.1	7.78	45.1	7.38

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
100%	-24.9	-25.0	32.3	11.19	30.6	10.54	28.8	9.88	28.0	9.56	27.1	9.22	25.3	8.58
	-19.8	-20.0	34.0	11.34	32.3	10.69	30.5	10.03	29.5	9.69	28.6	9.37	26.7	8.72
	-14.7	-15.0	36.1	11.56	34.2	10.89	32.4	10.24	31.4	9.91	30.5	9.58	28.5	8.91
	-9.6	-10.0	38.7	11.87	36.8	11.21	34.8	10.54	33.8	10.20	32.9	9.87	30.8	9.19
	-4.4	-5.0	42.2	12.33	40.2	11.65	38.2	10.97	37.1	10.63	36.0	10.28	33.8	9.59
	-1.8	-2.5	44.5	12.63	42.4	11.94	40.2	11.25	39.2	10.89	38.0	10.54	35.7	9.83
	0.8	0.0	47.1	12.98	45.0	12.28	42.7	11.58	41.5	11.21	40.4	10.86	38.0	10.13
	2.8	2.0	49.6	13.30	47.4	12.59	45.0	11.89	43.9	11.52	42.7	11.17	40.0	10.38
	6.0	5.0	53.3	13.58	50.0	12.52	46.7	11.51						

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-14ME1E81 (Heating)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
90%	-24.9	-25.0	32.6	10.67	30.8	10.07	29.0	9.48	28.1	9.18	27.2	8.89	25.4	8.30	23.5	7.74
	-19.8	-20.0	34.3	10.85	32.5	10.25	30.6	9.65	29.7	9.34	28.8	9.05	26.8	8.45	24.8	7.86
	-14.7	-15.0	36.4	11.09	34.5	10.49	32.6	9.87	31.6	9.57	30.6	9.26	28.6	8.66	26.5	8.05
	-9.6	-10.0	39.0	11.43	37.0	10.81	35.0	10.19	34.0	9.87	32.9	9.56	30.8	8.92	28.6	8.29
	-4.4	-5.0	42.5	11.89	40.4	11.26	38.3	10.60	37.2	10.27	36.0	9.94	33.7	9.29	31.4	8.62
	-1.8	-2.5	44.7	12.19	42.5	11.52	40.3	10.86	39.1	10.53	37.9	10.19	35.6	9.51	33.0	8.81
	0.8	0.0	47.3	12.52	45.0	11.84	42.0	10.94	40.5	10.49	39.0	10.06	36.0	9.21	33.0	8.41
	2.8	2.0	48.0	12.20	45.0	11.31	42.0	10.46	40.5	10.05	39.0	9.64	36.0	8.86	33.0	8.08
	6.0	5.0	48.0	11.24	45.0	10.41	42.0	9.61	40.5	9.22	39.0	8.84	36.0	8.10	33.0	7.38
	7.0	6.0	48.0	10.82	45.0	10.03	42.0	9.27	40.5	8.89	39.0	8.53	36.0	7.81	33.0	7.13
	8.6	7.5	48.0	10.18	45.0	9.44	42.0	8.73	40.5	8.39	39.0	8.05	36.0	7.38	33.0	6.74
	11.2	10.0	48.0	9.16	45.0	8.51	42.0	7.88	40.5	7.58	39.0	7.27	36.0	6.68	33.0	6.11
	16.4	15.0	48.0	7.31	45.0	6.82	42.0	6.35	40.5	6.11	39.0	5.87	36.0	5.44	33.0	5.00

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
80%	-24.9	-25.0	32.9	10.25	31.1	9.72	29.3	9.17	28.4	8.91	27.4	8.65	25.5	8.12	23.6	7.60
	-19.8	-20.0	34.7	10.45	32.8	9.91	30.9	9.36	29.9	9.08	28.9	8.81	27.0	8.27	25.0	7.74
	-14.7	-15.0	36.8	10.72	34.8	10.17	32.9	9.60	31.8	9.31	30.8	9.03	28.7	8.46	26.6	7.91
	-9.6	-10.0	39.5	11.07	37.4	10.50	35.3	9.91	34.2	9.61	33.1	9.31	30.9	8.72	28.7	8.13
	-4.4	-5.0	42.7	11.45	40.0	10.67	37.4	9.91	36.0	9.54	34.7	9.18	32.0	8.47	29.3	7.79
	-1.8	-2.5	42.7	10.96	40.0	10.22	37.4	9.50	36.0	9.16	34.7	8.82	32.0	8.14	29.3	7.50
	0.8	0.0	42.7	10.44	40.0	9.76	37.4	9.07	36.0	8.74	34.7	8.41	32.0	7.77	29.3	7.14
	2.8	2.0	42.7	9.94	40.0	9.28	37.4	8.62	36.0	8.31	34.7	7.99	32.0	7.38	29.3	6.79
	6.0	5.0	42.7	9.02	40.0	8.43	37.4	7.85	36.0	7.56	34.7	7.29	32.0	6.73	29.3	6.20
	7.0	6.0	42.7	8.68	40.0	8.11	37.4	7.55	36.0	7.29	34.7	7.02	32.0	6.48	29.3	5.97
	8.6	7.5	42.7	8.14	40.0	7.62	37.4	7.10	36.0	6.86	34.7	6.60	32.0	6.12	29.3	5.64
	11.2	10.0	42.7	7.29	40.0	6.84	37.4	6.39	36.0	6.17	34.7	5.95	32.0	5.52	29.3	5.10
	16.4	15.0	42.7	5.77	40.0	5.44	37.4	5.11	36.0	4.95	34.7	4.79	32.0	4.47	29.3	4.16

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
70%	-24.9	-25.0	33.5	10.00	31.6	9.52	29.7	9.03	28.8	8.78	27.8	8.55	25.9	8.07	23.9	7.61
	-19.8	-20.0	35.3	10.24	33.4	9.73	31.4	9.22	30.4	8.98	29.4	8.72	27.4	8.23	25.2	7.74
	-14.7	-15.0	37.4	10.48	35.0	9.83	32.7	9.21	31.5	8.91	30.3	8.61	28.0	8.03	25.7	7.47
	-9.6	-10.0	37.4	9.87	35.0	9.27	32.7	8.69	31.5	8.40	30.3	8.12	28.0	7.58	25.7	7.04
	-4.4	-5.0	37.4	9.22	35.0	8.68	32.7	8.14	31.5	7.88	30.3	7.61	28.0	7.09	25.7	6.59
	-1.8	-2.5	37.4	8.80	35.0	8.27	32.7	7.76	31.5	7.51	30.3	7.27	28.0	6.77	25.7	6.30
	0.8	0.0	37.4	8.29	35.0	7.81	32.7	7.33	31.5	7.09	30.3	6.86	28.0	6.41	25.7	5.96
	2.8	2.0	37.4	7.85	35.0	7.40	32.7	6.96	31.5	6.73	30.3	6.52	28.0	6.08	25.7	5.66
	6.0	5.0	37.4	7.09	35.0	6.70	32.7	6.30	31.5	6.11	30.3	5.91	28.0	5.52	25.7	5.13
	7.0	6.0	37.4	6.82	35.0	6.43	32.7	6.06	31.5	5.86	30.3	5.68	28.0	5.31	25.7	4.93
	8.6	7.5	37.4	6.38	35.0	6.02	32.7	5.68	31.5	5.51	30.3	5.34	28.0	5.00	25.7	4.65
	11.2	10.0	37.4	5.68	35.0	5.39	32.7	5.09	31.5	4.95	30.3	4.80	28.0	4.52	25.7	4.22
	16.4	15.0	37.4	4.45	35.0	4.26	32.7	4.06	31.5	3.95	30.3	3.85	28.0	3.65	25.7	3.43

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	TC °CDB	PI °CWB	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
60%	-24.9	-25.0	32.0	9.05	30.0	8.59	28.0	8.15	27.0	7.94	26.0	7.73	24.0	7.30	22.0	6.89
	-19.8	-20.0	32.0	8.67	30.0	8.23	28.0	7.80	27.0	7.59	26.0	7.37	24.0	6.97	22.0	6.57
	-14.7	-15.0	32.0	8.27	30.0	7.85	28.0	7.44	27.0	7.23	26.0	7.03	24.0	6.63	22.0	6.24
	-9.6	-10.0	32.0	7.83	30.0	7.45	28.0	7.06	27.0	6.87	26.0	6.68	24.0	6.29	22.0	5.91
	-4.4	-5.0	32.0	7.21</td												

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-14ME1E81 (Heating)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
50%	-24.9	-25.0	26.7	7.07	25.0	6.79	23.4	6.52	22.5	6.39	21.6	6.25	20.0	5.97	18.3	5.70
	-19.8	-20.0	26.7	6.82	25.0	6.54	23.4	6.26	22.5	6.13	21.6	5.99	20.0	5.71	18.3	5.45
	-14.7	-15.0	26.7	6.46	25.0	6.23	23.4	5.99	22.5	5.86	21.6	5.74	20.0	5.46	18.3	5.19
	-9.6	-10.0	26.7	6.05	25.0	5.82	23.4	5.61	22.5	5.49	21.6	5.38	20.0	5.15	18.3	4.91
	-4.4	-5.0	26.7	5.53	25.0	5.34	23.4	5.14	22.5	5.04	21.6	4.93	20.0	4.73	18.3	4.52
	-1.8	-2.5	26.7	5.23	25.0	5.05	23.4	4.87	22.5	4.77	21.6	4.68	20.0	4.48	18.3	4.28
	0.8	0.0	26.7	4.90	25.0	4.74	23.4	4.57	22.5	4.48	21.6	4.39	20.0	4.21	18.3	4.01
	2.8	2.0	26.7	4.61	25.0	4.46	23.4	4.30	22.5	4.22	21.6	4.14	20.0	3.95	18.3	3.73
	6.0	5.0	26.7	4.10	25.0	3.97	23.4	3.83	22.5	3.76	21.6	3.68	20.0	3.52	18.3	3.35
	7.0	6.0	26.7	3.92	25.0	3.80	23.4	3.67	22.5	3.61	21.6	3.53	20.0	3.38	18.3	3.23
	8.6	7.5	26.7	3.65	25.0	3.55	23.4	3.43	22.5	3.38	21.6	3.32	20.0	3.19	18.3	3.05
	11.2	10.0	26.7	3.41	25.0	3.26	23.4	3.10	22.5	3.03	21.6	2.99	20.0	2.88	18.3	2.77
	16.4	15.0	26.7	3.41	25.0	3.26	23.4	3.10	22.5	3.03	21.6	2.94	20.0	2.78	18.3	2.63

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
40%	-24.9	-25.0	21.3	5.51	20.0	5.36	18.7	5.19	18.0	5.10	17.3	5.03	16.0	4.86	14.7	4.69
	-19.8	-20.0	21.3	5.24	20.0	5.13	18.7	5.00	18.0	4.91	17.3	4.83	16.0	4.65	14.7	4.47
	-14.7	-15.0	21.3	4.95	20.0	4.84	18.7	4.72	18.0	4.65	17.3	4.59	16.0	4.44	14.7	4.26
	-9.6	-10.0	21.3	4.60	20.0	4.50	18.7	4.40	18.0	4.34	17.3	4.28	16.0	4.15	14.7	4.01
	-4.4	-5.0	21.3	4.18	20.0	4.10	18.7	4.01	18.0	3.96	17.3	3.91	16.0	3.79	14.7	3.67
	-1.8	-2.5	21.3	3.94	20.0	3.86	18.7	3.78	18.0	3.73	17.3	3.68	16.0	3.57	14.7	3.41
	0.8	0.0	21.3	3.67	20.0	3.61	18.7	3.52	18.0	3.47	17.3	3.40	16.0	3.28	14.7	3.15
	2.8	2.0	21.3	3.42	20.0	3.35	18.7	3.26	18.0	3.21	17.3	3.17	16.0	3.06	14.7	2.93
	6.0	5.0	21.3	3.00	20.0	2.95	18.7	2.89	18.0	2.86	17.3	2.81	16.0	2.74	14.7	2.64
	7.0	6.0	21.3	2.91	20.0	2.82	18.7	2.77	18.0	2.74	17.3	2.71	16.0	2.63	14.7	2.55
	8.6	7.5	21.3	2.91	20.0	2.78	18.7	2.66	18.0	2.60	17.3	2.55	16.0	2.48	14.7	2.42
	11.2	10.0	21.3	2.91	20.0	2.78	18.7	2.66	18.0	2.60	17.3	2.54	16.0	2.41	14.7	2.28
	16.4	15.0	21.3	2.91	20.0	2.78	18.7	2.66	18.0	2.60	17.3	2.54	16.0	2.41	14.7	2.28

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0			
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
30%	-24.9	-25.0	16.0	4.19	15.0	4.15	14.0	4.07	13.5	4.01	13.0	3.96	12.0	3.86	11.0	3.76
	-19.8	-20.0	16.0	3.99	15.0	3.95	14.0	3.89	13.5	3.85	13.0	3.81	12.0	3.69	11.0	3.58
	-14.7	-15.0	16.0	3.76	15.0	3.72	14.0	3.67	13.5	3.64	13.0	3.61	12.0	3.53	11.0	3.41
	-9.6	-10.0	16.0	3.48	15.0	3.45	14.0	3.41	13.5	3.38	13.0	3.36	12.0	3.28	11.0	3.20
	-4.4	-5.0	16.0	3.12	15.0	3.11	14.0	3.07	13.5	3.03	13.0	2.99	12.0	2.89	11.0	2.79
	-1.8	-2.5	16.0	2.91	15.0	2.87	14.0	2.81	13.5	2.79	13.0	2.75	12.0	2.68	11.0	2.59
	0.8	0.0	16.0	2.64	15.0	2.62	14.0	2.58	13.5	2.56	13.0	2.54	12.0	2.47	11.0	2.41
	2.8	2.0	16.0	2.44	15.0	2.42	14.0	2.40	13.5	2.38	13.0	2.36	12.0	2.31	11.0	2.26
	6.0	5.0	16.0	2.41	15.0	2.31	14.0	2.23	13.5	2.17	13.0	2.13	12.0	2.09	11.0	2.04
	7.0	6.0	16.0	2.41	15.0	2.31	14.0	2.23	13.5	2.17	13.0	2.13	12.0	2.03	11.0	1.98
	8.6	7.5	16.0	2.41	15.0	2.31	14.0	2.23	13.5	2.17	13.0	2.13	12.0	2.03	11.0	1.94
	11.2	10.0	16.0	2.41	15.0	2.31	14.0	2.23	13.5	2.17	13.0	2.13	12.0	2.03	11.0	1.94
	16.4	15.0	16.0	2.41	15.0	2.31	14.0	2.23	13.5	2.17	13.0	2.13	12.0	2.03	11.0	1.94

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## 1-9. U-16ME1E81 (Cooling)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
130%	-10.0	48.4	6.15	48.4	6.15	48.4	6.15	48.4	6.15	51.6	6.57	54.8	6.98	58.1	7.40
	-5.0	48.4	6.18	48.4	6.18	48.4	6.18	48.4	6.18	51.6	6.59	54.8	7.02	58.1	7.44
	0.0	48.4	6.22	48.4	6.22	48.4	6.22	48.4	6.22	51.6	6.65	54.8	7.09	58.1	7.52
	5.0	48.4	6.31	48.4	6.31	48.4	6.31	48.4	6.31	51.6	6.75	54.8	7.20	58.1	7.65
	10.0	48.4	6.49	48.4	6.49	48.4	6.49	48.4	6.49	51.6	6.97	54.8	7.45	58.1	7.92
	15.0	48.4	6.94	48.4	6.94	48.4	6.94	48.4	6.94	51.6	7.49	54.8	8.05	58.1	8.79
	20.0	48.4	8.44	48.4	8.44	48.4	8.44	48.4	8.44	51.6	9.26	54.8	10.14	58.1	11.07
	25.0	48.4	10.40	48.4	10.40	48.4	10.40	48.4	10.40	51.6	11.39	54.8	12.44	58.1	13.53
	30.0	48.4	12.53	48.4	12.53	48.4	12.53	48.4	12.53	51.6	13.71	54.8	14.94	58.1	16.24
	35.0	48.4	14.85	48.4	14.85	48.4	14.85	48.4	14.85	51.6	16.21	54.5	17.42	55.6	17.42
	40.0	48.4	17.34	48.4	17.34	48.4	17.34	48.4	17.34	49.5	17.42	50.5	17.42	51.6	17.42
	43.0	46.3	17.42	46.3	17.42	46.3	17.42	46.3	17.42	47.3	17.42	48.3	17.42	49.3	17.42

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
120%	-10.0	45.4	5.75	47.3	6.00	47.3	6.00	47.3	6.00	50.4	6.41	53.6	6.82	56.7	7.22
	-5.0	45.4	5.76	47.3	6.03	47.3	6.03	47.3	6.03	50.4	6.45	53.6	6.85	56.7	7.26
	0.0	45.4	5.79	47.3	6.07	47.3	6.07	47.3	6.07	50.4	6.49	53.6	6.91	56.7	7.33
	5.0	45.4	5.83	47.3	6.15	47.3	6.15	47.3	6.15	50.4	6.58	53.6	7.02	56.7	7.46
	10.0	45.4	5.92	47.3	6.32	47.3	6.32	47.3	6.32	50.4	6.78	53.6	7.25	56.7	7.73
	15.0	45.4	6.18	47.3	6.74	47.3	6.74	47.3	6.74	50.4	7.28	53.6	7.83	56.7	8.44
	20.0	45.4	7.01	47.3	8.13	47.3	8.13	47.3	8.13	50.4	8.92	53.6	9.76	56.7	10.64
	25.0	45.4	8.74	47.3	10.04	47.3	10.04	47.3	10.04	50.4	10.99	53.6	11.98	56.7	13.04
	30.0	45.4	10.61	47.3	12.10	47.3	12.10	47.3	12.10	50.4	13.23	53.6	14.42	56.7	15.65
	35.0	45.4	12.68	47.3	14.35	47.3	14.35	47.3	14.35	50.4	15.66	53.6	17.04	55.2	17.42
	40.0	45.4	14.89	47.3	16.78	47.3	16.78	47.3	16.78	49.2	17.42	50.2	17.42	51.2	17.42
	43.0	45.4	16.31	46.0	17.42	46.0	17.42	46.0	17.42	47.0	17.42	48.0	17.42	49.0	17.42

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
110%	-10.0	40.6	5.15	44.0	5.57	46.1	5.86	46.1	5.86	49.2	6.26	52.3	6.65	55.4	7.05
	-5.0	40.6	5.16	44.0	5.59	46.1	5.88	46.1	5.88	49.2	6.28	52.3	6.69	55.4	7.09
	0.0	40.6	5.17	44.0	5.61	46.1	5.92	46.1	5.92	49.2	6.32	52.3	6.74	55.4	7.16
	5.0	40.6	5.23	44.0	5.67	46.1	6.00	46.1	6.00	49.2	6.42	52.3	6.85	55.4	7.28
	10.0	40.6	5.31	44.0	5.78	46.1	6.16	46.1	6.16	49.2	6.61	52.3	7.06	55.4	7.52
	15.0	40.6	5.55	44.0	6.06	46.1	6.55	46.1	6.55	49.2	7.06	52.3	7.58	55.4	8.13
	20.0	40.6	6.31	44.0	7.01	46.1	7.85	46.1	7.85	49.2	8.60	52.3	9.39	55.4	10.22
	25.0	40.6	7.85	44.0	8.70	46.1	9.69	46.1	9.69	49.2	10.59	52.3	11.54	55.4	12.54
	30.0	40.6	9.53	44.0	10.53	46.1	11.68	46.1	11.68	49.2	12.77	52.3	13.90	55.4	15.08
	35.0	40.6	11.35	44.0	12.56	46.1	13.87	46.1	13.87	49.2	15.13	52.3	16.44	54.8	17.42
	40.0	40.6	13.32	44.0	14.73	46.1	16.21	46.1	16.21	48.8	17.42	49.9	17.42	50.9	17.42
	43.0	40.6	14.58	44.0	16.11	45.7	17.42	45.7	17.42	46.7	17.42	47.7	17.42	48.6	17.42

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. :°CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
100%	-10.0	36.0	4.57	39.0	4.94	42.0	5.33	45.0	5.72	48.0	6.10	51.0	6.49	54.0	6.87
	-5.0	36.0	4.57	39.0	4.96	42.0	5.35	45.0	5.74	48.0	6.12	51.0	6.51	54.0	6.91
	0.0	36.0	4.60	39.0	4.98	42.0	5.37	45.0	5.78	48.0	6.16	51.0	6.57	54.0	6.97
	5.0	36.0	4.64	39.0	5.04	42.0	5.44	45.0	5.84	48.0	6.26	51.0	6.66	54.0	7.08
	10.0	36.0	4.72	39.0	5.15	42.0	5.56	45.0	5.99	48.0	6.43	51.0	6.86	54.0	7.32
	15.0	36.0	4.93	39.0	5.40	42.0	5.87	45.0	6.37	48.0	6.86	51.0	7.36	54.0	7.88
	20.0	36.0	5.64	39.0	6.26	42.0	6.89	45.0	7.57	48.0	8.28	51.0	9.03	54.0	9.82
	25.0	36.0	7.01	39.0	7.75	42.0	8.52	45.0	9.34	48.0	10.21	51.0	11.11	54.0	12.06
	30.0	36.0	8.50	39.0	9.38	42.0	10.30	45.0	11.28	48.0	12.31	51.0	13.39	54.0	14.51
	35.0	36.0	10.10	39.0	11.15	42.0	12.25	45.0	13.40	48.0	14.61	51.0	15.85	54.0	17.15
	40.0	36.0	11.85	39.0	13.07	42.0	14.34	45.0	15.66	48.0	17.06	49.5	17.42	50.5	17.42
	43.0	36.0	12.96	39.0	14.2										

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-16ME1E81 (Cooling)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
90%	-10.0	32.4	4.10	35.1	4.45	37.8	4.80	40.5	5.13	43.2	5.48	45.9	5.83	48.6	6.18
	-5.0	32.4	4.11	35.1	4.46	37.8	4.81	40.5	5.16	43.2	5.51	45.9	5.86	48.6	6.20
	0.0	32.4	4.13	35.1	4.48	37.8	4.82	40.5	5.19	43.2	5.53	45.9	5.90	48.6	6.24
	5.0	32.4	4.15	35.1	4.52	37.8	4.88	40.5	5.24	43.2	5.60	45.9	5.96	48.6	6.32
	10.0	32.4	4.22	35.1	4.60	37.8	4.97	40.5	5.35	43.2	5.72	45.9	6.11	48.6	6.50
	15.0	32.4	4.38	35.1	4.78	37.8	5.20	40.5	5.61	43.2	6.04	45.9	6.47	48.6	6.91
	20.0	32.4	4.90	35.1	5.41	37.8	5.95	40.5	6.50	43.2	7.08	45.9	7.68	48.6	8.32
	25.0	32.4	6.14	35.1	6.74	37.8	7.38	40.5	8.05	43.2	8.76	45.9	9.50	48.6	10.26
	30.0	32.4	7.44	35.1	8.17	37.8	8.94	40.5	9.74	43.2	10.59	45.9	11.47	48.6	12.40
	35.0	32.4	8.84	35.1	9.73	37.8	10.64	40.5	11.59	43.2	12.58	45.9	13.63	48.6	14.70
	40.0	32.4	10.39	35.1	11.40	37.8	12.48	40.5	13.59	43.2	14.74	45.9	15.93	48.6	17.18
	43.0	32.4	11.35	35.1	12.48	37.8	13.64	40.5	14.85	43.2	16.11	45.9	17.41	46.8	17.42

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
80%	-10.0	28.8	3.64	31.2	3.95	33.6	4.26	36.0	4.56	38.4	4.86	40.8	5.17	43.2	5.48
	-5.0	28.8	3.66	31.2	3.95	33.6	4.26	36.0	4.57	38.4	4.88	40.8	5.19	43.2	5.51
	0.0	28.8	3.66	31.2	3.97	33.6	4.29	36.0	4.60	38.4	4.90	40.8	5.21	43.2	5.53
	5.0	28.8	3.69	31.2	3.99	33.6	4.31	36.0	4.64	38.4	4.94	40.8	5.27	43.2	5.59
	10.0	28.8	3.73	31.2	4.06	33.6	4.38	36.0	4.70	38.4	5.04	40.8	5.37	43.2	5.71
	15.0	28.8	3.85	31.2	4.19	33.6	4.54	36.0	4.90	38.4	5.27	40.8	5.64	43.2	6.02
	20.0	28.8	4.22	31.2	4.65	33.6	5.08	36.0	5.53	38.4	5.99	40.8	6.47	43.2	6.98
	25.0	28.8	5.33	31.2	5.83	33.6	6.34	36.0	6.87	38.4	7.44	40.8	8.03	43.2	8.64
	30.0	28.8	6.46	31.2	7.06	33.6	7.68	36.0	8.33	38.4	9.02	40.8	9.73	43.2	10.47
	35.0	28.8	7.68	31.2	8.40	33.6	9.15	36.0	9.93	38.4	10.73	40.8	11.58	43.2	12.45
	40.0	28.8	9.02	31.2	9.86	33.6	10.75	36.0	11.64	38.4	12.60	40.8	13.56	43.2	14.58
	43.0	28.8	9.86	31.2	10.79	33.6	11.75	36.0	12.74	38.4	13.78	40.8	14.83	43.2	15.93

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
70%	-10.0	25.2	3.19	27.3	3.46	29.4	3.73	31.5	3.99	33.6	4.26	35.7	4.53	37.8	4.80
	-5.0	25.2	3.19	27.3	3.46	29.4	3.73	31.5	3.99	33.6	4.26	35.7	4.53	37.8	4.81
	0.0	25.2	3.20	27.3	3.47	29.4	3.74	31.5	4.01	33.6	4.27	35.7	4.56	37.8	4.82
	5.0	25.2	3.22	27.3	3.48	29.4	3.77	31.5	4.03	33.6	4.31	35.7	4.58	37.8	4.86
	10.0	25.2	3.24	27.3	3.52	29.4	3.81	31.5	4.09	33.6	4.37	35.7	4.66	37.8	4.94
	15.0	25.2	3.32	27.3	3.62	29.4	3.93	31.5	4.22	33.6	4.53	35.7	4.84	37.8	5.16
	20.0	25.2	3.58	27.3	3.93	29.4	4.29	31.5	4.65	33.6	5.03	35.7	5.40	37.8	5.79
	25.0	25.2	4.60	27.3	4.98	29.4	5.40	31.5	5.82	33.6	6.26	35.7	6.71	37.8	7.20
	30.0	25.2	5.56	27.3	6.04	29.4	6.54	31.5	7.05	33.6	7.60	35.7	8.15	37.8	8.72
	35.0	25.2	6.61	27.3	7.18	29.4	7.79	31.5	8.40	33.6	9.05	35.7	9.72	37.8	10.40
	40.0	25.2	7.75	27.3	8.43	29.4	9.14	31.5	9.88	33.6	10.63	35.7	11.40	37.8	12.21
	43.0	25.2	8.47	27.3	9.22	29.4	10.00	31.5	10.80	33.6	11.62	35.7	12.48	37.8	13.35

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
60%	-10.0	21.6	2.73	23.4	2.96	25.2	3.19	27.0	3.42	28.8	3.64	30.6	3.87	32.4	4.10
	-5.0	21.6	2.73	23.4	2.96	25.2	3.19	27.0	3.42	28.8	3.64	30.6	3.89	32.4	4.11
	0.0	21.6	2.73	23.4	2.97	25.2	3.20	27.0	3.43	28.8	3.66	30.6	3.90	32.4	4.13
	5.0	21.6	2.75	23.4	2.97	25.2	3.22	27.0	3.44	28.8	3.69	30.6	3.91	32.4	4.15
	10.0	21.6	2.77	23.4	3.00	25.2	3.24	27.0	3.48	28.8	3.73	30.6	3.97	32.4	4.21
	15.0	21.6	2.81	23.4	3.07	25.2	3.32	27.0	3.56	28.8	3.82	30.6	4.07	32.4	4.34
	20.0	21.6	2.99	23.4	3.27	25.2	3.55	27.0	3.85	28.8	4.14	30.6	4.44	32.4	4.74
	25.0	21.6	3.95	23.4	4.23	25.2	4.54	27.0	4.86	28.8	5.20	30.6	5.55	32.4	5.91
	30.0	21.6	4.73	23.4	5.11	25.2	5.49	27.0	5.90	28.8	6.31	30.6	6.73	32.	

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-16ME1E81 (Cooling)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
50%	-10.0	18.0	2.28	19.5	2.47	21.0	2.65	22.5	2.84	24.0	3.04	25.5	3.23
	-5.0	18.0	2.28	19.5	2.47	21.0	2.65	22.5	2.85	24.0	3.04	25.5	3.23
	0.0	18.0	2.28	19.5	2.47	21.0	2.67	22.5	2.85	24.0	3.04	25.5	3.24
	5.0	18.0	2.29	19.5	2.48	21.0	2.67	22.5	2.87	24.0	3.06	25.5	3.26
	10.0	18.0	2.30	19.5	2.49	21.0	2.69	22.5	2.88	24.0	3.08	25.5	3.28
	15.0	18.0	2.33	19.5	2.53	21.0	2.73	22.5	2.93	24.0	3.14	25.5	3.35
	20.0	18.0	2.43	19.5	2.65	21.0	2.88	22.5	3.10	24.0	3.34	25.5	3.56
	25.0	18.0	3.00	19.5	3.32	21.0	3.64	22.5	3.98	24.0	4.26	25.5	4.52
	30.0	18.0	3.98	19.5	4.26	21.0	4.54	22.5	4.85	24.0	5.16	25.5	5.47
	35.0	18.0	4.69	19.5	5.04	21.0	5.39	22.5	5.75	24.0	6.12	25.5	6.50
	40.0	18.0	5.45	19.5	5.87	21.0	6.30	22.5	6.74	24.0	7.18	25.5	7.64
	43.0	18.0	5.95	19.5	6.42	21.0	6.89	22.5	7.37	24.0	7.85	25.5	8.36

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
40%	-10.0	14.4	1.82	15.6	1.97	16.8	2.12	18.0	2.28	19.2	2.43	20.4	2.57
	-5.0	14.4	1.82	15.6	1.97	16.8	2.13	18.0	2.28	19.2	2.43	20.4	2.59
	0.0	14.4	1.82	15.6	1.97	16.8	2.13	18.0	2.28	19.2	2.44	20.4	2.59
	5.0	14.4	1.82	15.6	1.98	16.8	2.13	18.0	2.29	19.2	2.44	20.4	2.60
	10.0	14.4	1.84	15.6	1.98	16.8	2.14	18.0	2.29	19.2	2.45	20.4	2.61
	15.0	14.4	1.85	15.6	2.01	16.8	2.17	18.0	2.32	19.2	2.48	20.4	2.64
	20.0	14.4	1.90	15.6	2.08	16.8	2.24	18.0	2.41	19.2	2.59	20.4	2.76
	25.0	14.4	2.21	15.6	2.43	16.8	2.65	18.0	2.88	19.2	3.11	20.4	3.34
	30.0	14.4	3.30	15.6	3.50	16.8	3.70	18.0	3.91	19.2	4.13	20.4	4.34
	35.0	14.4	3.85	15.6	4.10	16.8	4.36	18.0	4.61	19.2	4.88	20.4	5.15
	40.0	14.4	4.45	15.6	4.76	16.8	5.07	18.0	5.37	19.2	5.70	20.4	6.02
	43.0	14.4	4.84	15.6	5.17	16.8	5.52	18.0	5.87	19.2	6.22	20.4	6.58

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB											
		16.0		17.0		18.0		19.0		20.0		21.0	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
30%	-10.0	10.8	1.37	11.7	1.47	12.6	1.59	13.5	1.70	14.4	1.82	15.3	1.93
	-5.0	10.8	1.37	11.7	1.47	12.6	1.59	13.5	1.70	14.4	1.82	15.3	1.93
	0.0	10.8	1.37	11.7	1.49	12.6	1.59	13.5	1.72	14.4	1.82	15.3	1.94
	5.0	10.8	1.37	11.7	1.49	12.6	1.59	13.5	1.72	14.4	1.82	15.3	1.94
	10.0	10.8	1.37	11.7	1.49	12.6	1.61	13.5	1.72	14.4	1.84	15.3	1.94
	15.0	10.8	1.38	11.7	1.50	12.6	1.61	13.5	1.73	14.4	1.85	15.3	1.97
	20.0	10.8	1.41	11.7	1.53	12.6	1.65	13.5	1.77	14.4	1.89	15.3	2.01
	25.0	10.8	1.54	11.7	1.69	12.6	1.82	13.5	1.97	14.4	2.12	15.3	2.28
	30.0	10.8	2.68	11.7	2.81	12.6	2.95	13.5	3.08	14.4	3.23	15.3	3.36
	35.0	10.8	3.08	11.7	3.26	12.6	3.42	13.5	3.59	14.4	3.77	15.3	3.95
	40.0	10.8	3.52	11.7	3.73	12.6	3.94	13.5	4.15	14.4	4.37	15.3	4.58
	43.0	10.8	3.81	11.7	4.03	12.6	4.27	13.5	4.50	14.4	4.74	15.3	4.98

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## 1-10. U-16ME1E81 (Heating)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
130%	-24.9	-25.0	34.5	14.08	32.7	13.16	30.9	12.25	30.0	11.80	30.0	11.80	30.0	11.80
	-19.8	-20.0	36.2	14.17	34.4	13.26	32.6	12.36	31.6	11.92	31.6	11.92	31.6	11.92
	-14.7	-15.0	38.4	14.33	36.6	13.44	34.7	12.55	33.7	12.12	33.7	12.12	33.7	12.12
	-9.6	-10.0	41.2	14.61	39.3	13.73	37.3	12.86	36.3	12.42	36.3	12.42	36.3	12.42
	-4.4	-5.0	45.0	15.09	43.0	14.22	41.0	13.35	39.9	12.91	39.9	12.91	39.9	12.91
	-1.8	-2.5	47.5	15.43	45.4	14.56	43.3	13.69	42.2	13.26	42.2	13.26	42.2	13.26
	0.8	0.0	50.4	15.85	48.3	14.98	46.2	14.11	45.0	13.66	45.0	13.66	45.0	13.66
	2.8	2.0	53.3	16.25	51.1	15.37	48.9	14.50	47.7	14.05	47.7	14.05	47.7	14.05
	6.0	5.0	58.3	16.90	56.2	16.09	53.9	15.26	52.8	14.83	52.8	14.83	52.8	14.83
	7.0	6.0	59.9	16.90	58.4	16.43	55.8	15.47	53.8	14.74	53.8	14.74	53.8	14.74
	8.6	7.5	62.4	16.90	59.7	16.09	55.8	14.68	53.8	14.01	53.8	14.01	53.8	14.01
	11.2	10.0	63.7	16.12	59.7	14.81	55.8	13.49	53.8	12.86	53.8	12.86	53.8	12.86
	16.4	15.0	63.7	13.20	59.7	12.08	55.8	11.02	53.8	10.52	53.8	10.52	53.8	10.52

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
120%	-24.9	-25.0	34.5	13.87	32.8	12.97	31.0	12.09	30.0	11.66	30.0	11.66	30.0	11.66
	-19.8	-20.0	36.3	13.96	34.5	13.08	32.7	12.22	31.7	11.78	31.7	11.78	31.7	11.78
	-14.7	-15.0	38.5	14.14	36.7	13.27	34.7	12.42	33.7	11.99	33.7	11.99	33.7	11.99
	-9.6	-10.0	41.3	14.43	39.4	13.57	37.4	12.73	36.4	12.30	36.4	12.30	36.4	12.30
	-4.4	-5.0	45.1	14.92	43.1	14.08	41.0	13.22	40.0	12.79	40.0	12.79	40.0	12.79
	-1.8	-2.5	47.6	15.28	45.5	14.42	43.4	13.56	42.3	13.13	42.3	13.13	42.3	13.13
	0.8	0.0	50.6	15.69	48.4	14.83	46.2	13.96	45.0	13.53	45.0	13.53	45.0	13.53
	2.8	2.0	53.4	16.08	51.2	15.22	48.9	14.35	47.7	13.91	47.7	13.91	47.7	13.91
	6.0	5.0	58.5	16.77	56.3	15.95	53.9	15.12	52.5	14.61	52.5	14.61	52.5	14.61
	7.0	6.0	60.3	16.90	58.4	16.26	54.5	14.81	52.5	14.13	52.5	14.13	52.5	14.13
	8.6	7.5	62.2	16.81	58.4	15.41	54.5	14.09	52.5	13.46	52.5	13.46	52.5	13.46
	11.2	10.0	62.2	15.44	58.4	14.14	54.5	12.90	52.5	12.30	52.5	12.30	52.5	12.30
	16.4	15.0	62.2	12.56	58.4	11.52	54.5	10.52	52.5	10.05	52.5	10.05	52.5	10.05

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
110%	-24.9	-25.0	34.6	13.65	32.8	12.79	31.0	11.95	30.1	11.52	30.1	11.52	30.0	11.18
	-19.8	-20.0	36.4	13.77	34.6	12.91	32.7	12.06	31.8	11.65	31.8	11.65	31.7	11.32
	-14.7	-15.0	38.6	13.96	36.7	13.12	34.8	12.27	33.8	11.86	33.8	11.86	33.8	11.86
	-9.6	-10.0	41.4	14.27	39.5	13.43	37.5	12.58	36.4	12.17	36.4	12.17	36.4	12.17
	-4.4	-5.0	45.3	14.77	43.2	13.94	41.1	13.09	40.0	12.68	40.0	12.68	40.0	12.68
	-1.8	-2.5	47.7	15.12	45.6	14.27	43.4	13.43	42.3	13.00	42.3	13.00	42.3	13.00
	0.8	0.0	50.6	15.54	48.5	14.68	46.2	13.83	45.1	13.39	45.1	13.39	45.1	13.39
	2.8	2.0	53.4	15.91	51.2	15.07	48.9	14.20	47.6	13.77	47.6	13.77	47.6	13.77
	6.0	5.0	58.6	16.61	56.3	15.80	53.2	14.66	51.3	13.99	51.3	13.99	50.1	13.20
	7.0	6.0	60.6	16.90	57.0	15.52	53.2	14.18	51.3	13.55	51.3	13.55	50.1	12.82
	8.6	7.5	60.8	16.04	57.0	14.74	53.2	13.52	51.3	12.94	51.3	12.94	50.1	12.18
	11.2	10.0	60.8	14.72	57.0	13.49	53.2	12.32	51.3	11.75	51.3	11.75	50.1	11.06
	16.4	15.0	60.8	11.93	57.0	10.96	53.2	10.04	51.3	9.59	51.3	9.59	50.1	9.05

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB											
			15.0		17.0		19.0		20.0		21.0		23.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
100%	-24.9	-25.0	34.7	13.46	32.9	12.61	31.1	11.78	30.1	11.38	29.2	10.96	27.3	10.15
	-19.8	-20.0	36.5	13.57	34.7	12.75	32.8	11.92	31.8	11.52	30.8	11.10	28.8	10.30
	-14.7	-15.0	38.7	13.78	36.8	12.95	34.8	12.13	33.8	11.73	32.8	11.32	30.8	10.50
	-9.6	-10.0	41.5	14.09	39.6	13.29	37.5	12.47	36.5	12.05	35.4	11.65	33.2	10.83
	-4.4	-5.0	45.4	14.61	43.3	13.79	41.1	12.96	40.0	12.55	38.9	12.13	36.6	11.30
	-1.8	-2.5	47.8	14.96	45.7	14.13	43.5	13.30	42.3	12.87	41.2	12.45	38.8	11.60
	0.8	0.0	50.7	15.38	48.5	14.53	46.2	13.69	45.0	13.26	43.8	12.83	41.3	11.96
	2.8	2.0	53.5	15.76	51.2	14.91	48.8	14.05	47.6	13.62	46.4	13.20	43.8	12.34
	6.0	5.0	58.6	16.46	55.6	15.34	51.9	14.03	50.0	13.40	48.2	12.79	44.5	11.64
	7.0	6.0	59.3	16.15	55.6	14.83	51.9	13.59	50.0	13.00	48.2	12.43	44.5	11.31
	8.6	7.5	59.3	15.31	55.6	14.12	51.9	12.96	50.0	12.39	48.2	11.82	44.5	10.71
	11.2	10.0	59.3											

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-16ME1E81 (Heating)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
90%	-24.9	-25.0	35.0	12.70	33.1	11.96	31.3	11.22	30.3	10.84	29.3	10.48	27.4	9.75	25.4	9.04
	-19.8	-20.0	36.8	12.87	34.9	12.13	33.0	11.38	32.0	11.01	31.0	10.65	28.9	9.91	26.8	9.18
	-14.7	-15.0	39.1	13.12	37.1	12.38	35.1	11.62	34.0	11.25	33.0	10.87	30.8	10.13	28.7	9.40
	-9.6	-10.0	41.9	13.48	39.9	12.73	37.7	11.97	36.7	11.58	35.5	11.21	33.3	10.44	31.0	9.69
	-4.4	-5.0	45.7	14.01	43.5	13.23	41.3	12.47	40.1	12.06	39.0	11.67	36.6	10.88	34.1	10.10
	-1.8	-2.5	48.2	14.35	45.9	13.57	43.6	12.78	42.3	12.38	41.1	11.97	38.6	11.17	36.0	10.36
	0.8	0.0	51.0	14.74	48.6	13.95	46.2	13.14	45.0	12.73	43.4	12.19	40.0	11.12	36.7	10.10
	2.8	2.0	53.4	14.98	50.0	13.81	46.7	12.70	45.0	12.17	43.4	11.65	40.0	10.65	36.7	9.70
	6.0	5.0	53.4	13.74	50.0	12.74	46.7	11.75	45.0	11.26	43.4	10.78	40.0	9.84	36.7	8.93
	7.0	6.0	53.4	13.34	50.0	12.32	46.7	11.34	45.0	10.87	43.4	10.40	40.0	9.49	36.7	8.63
	8.6	7.5	53.4	12.57	50.0	11.61	46.7	10.70	45.0	10.26	43.4	9.82	40.0	8.97	36.7	8.16
	11.2	10.0	53.4	11.34	50.0	10.49	46.7	9.67	45.0	9.28	43.4	8.89	40.0	8.14	36.7	7.42
	16.4	15.0	53.4	9.09	50.0	8.44	46.7	7.81	45.0	7.51	43.4	7.22	40.0	6.63	36.7	6.07

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
80%	-24.9	-25.0	35.3	12.06	33.4	11.40	31.5	10.73	30.5	10.40	29.5	10.08	27.5	9.43	25.4	8.78
	-19.8	-20.0	37.2	12.27	35.2	11.60	33.2	10.92	32.2	10.58	31.1	10.24	29.0	9.58	26.9	8.93
	-14.7	-15.0	39.5	12.56	37.4	11.87	35.3	11.18	34.2	10.84	33.1	10.49	30.9	9.82	28.7	9.14
	-9.6	-10.0	42.3	12.95	40.2	12.23	37.9	11.53	36.8	11.18	35.7	10.83	33.3	10.11	31.0	9.41
	-4.4	-5.0	46.1	13.48	43.8	12.74	41.4	12.01	40.0	11.56	38.5	11.09	35.6	10.19	32.6	9.32
	-1.8	-2.5	47.4	13.38	44.5	12.43	41.5	11.51	40.0	11.05	38.5	10.62	35.6	9.76	32.6	8.94
	0.8	0.0	47.4	12.70	44.5	11.82	41.5	10.96	40.0	10.56	38.5	10.14	35.6	9.35	32.6	8.58
	2.8	2.0	47.4	12.16	44.5	11.34	41.5	10.50	40.0	10.10	38.5	9.70	35.6	8.93	32.6	8.18
	6.0	5.0	47.4	11.09	44.5	10.32	41.5	9.58	40.0	9.22	38.5	8.85	35.6	8.15	32.6	7.48
	7.0	6.0	47.4	10.67	44.5	9.93	41.5	9.23	40.0	8.88	38.5	8.54	35.6	7.87	32.6	7.22
	8.6	7.5	47.4	10.04	44.5	9.35	41.5	8.68	40.0	8.36	38.5	8.05	35.6	7.42	32.6	6.81
	11.2	10.0	47.4	9.00	44.5	8.41	41.5	7.83	40.0	7.54	38.5	7.27	35.6	6.72	32.6	6.19
	16.4	15.0	47.4	7.15	44.5	6.72	41.5	6.29	40.0	6.07	38.5	5.86	35.6	5.46	32.6	5.06

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
70%	-24.9	-25.0	35.8	11.58	33.8	10.99	31.8	10.39	30.8	10.10	29.8	9.80	27.7	9.22	25.6	8.65
	-19.8	-20.0	37.7	11.82	35.7	11.22	33.6	10.60	32.5	10.30	31.4	10.00	29.3	9.39	27.1	8.80
	-14.7	-15.0	40.0	12.13	37.9	11.51	35.7	10.87	34.6	10.56	33.4	10.24	31.1	9.59	28.5	8.88
	-9.6	-10.0	41.5	11.99	38.9	11.22	36.3	10.47	35.0	10.10	33.7	9.74	31.1	9.04	28.5	8.36
	-4.4	-5.0	41.5	11.14	38.9	10.45	36.3	9.76	35.0	9.43	33.7	9.10	31.1	8.45	28.5	7.83
	-1.8	-2.5	41.5	10.71	38.9	10.05	36.3	9.39	35.0	9.07	33.7	8.75	31.1	8.13	28.5	7.51
	0.8	0.0	41.5	10.14	38.9	9.50	36.3	8.89	35.0	8.58	33.7	8.28	31.1	7.70	28.5	7.12
	2.8	2.0	41.5	9.61	38.9	9.02	36.3	8.44	35.0	8.15	33.7	7.87	31.1	7.32	28.5	6.77
	6.0	5.0	41.5	8.71	38.9	8.18	36.3	7.67	35.0	7.41	33.7	7.16	31.1	6.67	28.5	6.18
	7.0	6.0	41.5	8.36	38.9	7.87	36.3	7.37	35.0	7.14	33.7	6.89	31.1	6.42	28.5	5.95
	8.6	7.5	41.5	7.84	38.9	7.38	36.3	6.93	35.0	6.71	33.7	6.49	31.1	6.06	28.5	5.62
	11.2	10.0	41.5	7.01	38.9	6.62	36.3	6.23	35.0	6.03	33.7	5.85	31.1	5.47	28.5	5.10
	16.4	15.0	41.5	5.51	38.9	5.25	36.3	4.98	35.0	4.84	33.7	4.71	31.1	4.43	28.5	4.16

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	°CDB	°CWB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
60%	-24.9	-25.0	35.6	10.93	33.4	10.34	31.1	9.75	30.0	9.46	28.9	9.18	26.7	8.63	24.5	8.11
	-19.8	-20.0	35.6	10.44	33.4	9.87	31.1	9.31	30.0	9.04	28.9	8.76	26.7	8.24	24.5	7.72
	-14.7	-15.0	35.6	9.93	33.4	9.40	31.1	8.87	30.0	8.61	28.9	8.35	26.7	7.84	24.5	7.35
	-9.6	-10.0	35.6	9.43	33.4	8.92	31.1	8.41	30.0	8.16	28.9	7.92	26.7	7.44	24.5	6.96
	-4.4	-5.0	35.6	8.74	33.4	8.28	31.1	7.81	30.0	7.59	28.9	7.37	26.7	6.93	24.5	6.50
	-1.8	-2.5	35.6	8.												

# 1. Capacity Ratio of Outdoor Unit (Standard-COP mode)

## U-16ME1E81 (Heating)

### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW
50%	-24.9	-25.0	29.7	8.40	27.8	8.05	26.0	7.68	25.0	7.51	24.1	7.33	22.2	6.99	20.4	6.66
	-19.8	-20.0	29.7	8.09	27.8	7.74	26.0	7.38	25.0	7.22	24.1	7.03	22.2	6.70	20.4	6.36
	-14.7	-15.0	29.7	7.72	27.8	7.41	26.0	7.07	25.0	6.90	24.1	6.73	22.2	6.40	20.4	6.07
	-9.6	-10.0	29.7	7.23	27.8	6.94	26.0	6.64	25.0	6.50	24.1	6.36	22.2	6.06	20.4	5.76
	-4.4	-5.0	29.7	6.64	27.8	6.38	26.0	6.12	25.0	5.98	24.1	5.85	22.2	5.58	20.4	5.30
	-1.8	-2.5	29.7	6.29	27.8	6.06	26.0	5.81	25.0	5.68	24.1	5.56	22.2	5.30	20.4	5.04
	0.8	0.0	29.7	5.92	27.8	5.69	26.0	5.46	25.0	5.36	24.1	5.24	22.2	4.99	20.4	4.76
	2.8	2.0	29.7	5.58	27.8	5.37	26.0	5.16	25.0	5.06	24.1	4.95	22.2	4.72	20.4	4.47
	6.0	5.0	29.7	4.99	27.8	4.82	26.0	4.63	25.0	4.54	24.1	4.43	22.2	4.24	20.4	4.02
	7.0	6.0	29.7	4.78	27.8	4.62	26.0	4.45	25.0	4.36	24.1	4.26	22.2	4.07	20.4	3.87
	8.6	7.5	29.7	4.46	27.8	4.32	26.0	4.17	25.0	4.10	24.1	4.00	22.2	3.85	20.4	3.67
	11.2	10.0	29.7	4.00	27.8	3.85	26.0	3.73	25.0	3.68	24.1	3.61	22.2	3.47	20.4	3.33
	16.4	15.0	29.7	4.00	27.8	3.82	26.0	3.64	25.0	3.55	24.1	3.46	22.2	3.28	20.4	3.09

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW
40%	-24.9	-25.0	23.7	6.47	22.2	6.28	20.8	6.06	20.0	5.95	19.3	5.85	17.8	5.64	16.3	5.43
	-19.8	-20.0	23.7	6.18	22.2	6.02	20.8	5.84	20.0	5.73	19.3	5.63	17.8	5.41	16.3	5.20
	-14.7	-15.0	23.7	5.84	22.2	5.69	20.8	5.54	20.0	5.45	19.3	5.37	17.8	5.19	16.3	4.97
	-9.6	-10.0	23.7	5.45	22.2	5.32	20.8	5.17	20.0	5.10	19.3	5.02	17.8	4.85	16.3	4.68
	-4.4	-5.0	23.7	4.97	22.2	4.85	20.8	4.73	20.0	4.67	19.3	4.60	17.8	4.45	16.3	4.29
	-1.8	-2.5	23.7	4.69	22.2	4.59	20.8	4.47	20.0	4.41	19.3	4.34	17.8	4.21	16.3	4.06
	0.8	0.0	23.7	4.38	22.2	4.29	20.8	4.19	20.0	4.13	19.3	4.08	17.8	3.93	16.3	3.74
	2.8	2.0	23.7	4.12	22.2	4.03	20.8	3.93	20.0	3.86	19.3	3.80	17.8	3.65	16.3	3.51
	6.0	5.0	23.7	3.64	22.2	3.56	20.8	3.48	20.0	3.43	19.3	3.39	17.8	3.29	16.3	3.16
	7.0	6.0	23.7	3.48	22.2	3.42	20.8	3.34	20.0	3.30	19.3	3.26	17.8	3.16	16.3	3.06
	8.6	7.5	23.7	3.42	22.2	3.28	20.8	3.15	20.0	3.11	19.3	3.07	17.8	2.99	16.3	2.90
	11.2	10.0	23.7	3.42	22.2	3.28	20.8	3.12	20.0	3.06	19.3	2.98	17.8	2.83	16.3	2.69
	16.4	15.0	23.7	3.42	22.2	3.28	20.8	3.12	20.0	3.06	19.3	2.98	17.8	2.83	16.3	2.69

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW	TC °CDB	PI kW	TC °CWB	PI kW
30%	-24.9	-25.0	17.8	4.89	16.7	4.82	15.6	4.72	15.0	4.67	14.5	4.60	13.4	4.47	12.2	4.34
	-19.8	-20.0	17.8	4.65	16.7	4.59	15.6	4.52	15.0	4.47	14.5	4.42	13.4	4.29	12.2	4.16
	-14.7	-15.0	17.8	4.38	16.7	4.33	15.6	4.28	15.0	4.24	14.5	4.20	13.4	4.10	12.2	3.97
	-9.6	-10.0	17.8	4.07	16.7	4.03	15.6	3.98	15.0	3.95	14.5	3.91	13.4	3.84	12.2	3.73
	-4.4	-5.0	17.8	3.68	16.7	3.65	15.6	3.61	15.0	3.59	14.5	3.56	13.4	3.45	12.2	3.32
	-1.8	-2.5	17.8	3.46	16.7	3.45	15.6	3.37	15.0	3.33	14.5	3.29	13.4	3.20	12.2	3.08
	0.8	0.0	17.8	3.19	16.7	3.15	15.6	3.09	15.0	3.06	14.5	3.03	13.4	2.95	12.2	2.86
	2.8	2.0	17.8	2.94	16.7	2.91	15.6	2.87	15.0	2.85	14.5	2.82	13.4	2.77	12.2	2.69
	6.0	5.0	17.8	2.83	16.7	2.73	15.6	2.61	15.0	2.56	14.5	2.54	13.4	2.50	12.2	2.44
	7.0	6.0	17.8	2.83	16.7	2.73	15.6	2.61	15.0	2.56	14.5	2.51	13.4	2.42	12.2	2.37
	8.6	7.5	17.8	2.83	16.7	2.73	15.6	2.61	15.0	2.56	14.5	2.51	13.4	2.39	12.2	2.29
	11.2	10.0	17.8	2.83	16.7	2.73	15.6	2.61	15.0	2.56	14.5	2.51	13.4	2.39	12.2	2.29
	16.4	15.0	17.8	2.83	16.7	2.73	15.6	2.61	15.0	2.56	14.5	2.51	13.4	2.39	12.2	2.29

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

### 2-1. U-14ME1E81 (Cooling)

#### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
130% or more	-10.0	30.1	3.47	30.1	3.47	30.1	3.47	30.1	3.47	32.1	3.70	34.1	3.93	36.1	4.17
	-5.0	30.1	3.47	30.1	3.47	30.1	3.47	30.1	3.47	32.1	3.71	34.1	3.94	36.1	4.17
	0.0	30.1	3.48	30.1	3.48	30.1	3.48	30.1	3.48	32.1	3.72	34.1	3.95	36.1	4.19
	5.0	30.1	3.50	30.1	3.50	30.1	3.50	30.1	3.50	32.1	3.74	34.1	3.98	36.1	4.22
	10.0	30.1	3.54	30.1	3.54	30.1	3.54	30.1	3.54	32.1	3.79	34.1	4.04	36.1	4.28
	15.0	30.1	3.65	30.1	3.65	30.1	3.65	30.1	3.65	32.1	3.91	34.1	4.18	36.1	4.45
	20.0	30.1	4.11	30.1	4.11	30.1	4.11	30.1	4.11	32.1	4.52	34.1	4.95	36.1	5.40
	25.0	30.1	5.18	30.1	5.18	30.1	5.18	30.1	5.18	32.1	5.67	34.1	6.20	36.1	6.73
	30.0	30.1	6.34	30.1	6.34	30.1	6.34	30.1	6.34	32.1	6.93	34.1	7.56	36.1	8.20
	35.0	30.1	7.62	30.1	7.62	30.1	7.62	30.1	7.62	32.1	8.31	34.0	8.97	34.7	8.97
40.0	29.9	8.92	29.9	8.92	29.9	8.92	29.9	8.92	30.7	8.97	31.4	8.97	32.1	8.97	8.97
	43.0	28.6	8.97	28.6	8.97	28.6	8.97	28.6	8.97	29.3	8.97	29.9	8.97	30.6	8.97

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
120%	-10.0	28.2	3.25	29.4	3.39	29.4	3.39	29.4	3.39	31.4	3.62	33.3	3.84	35.3	4.06
	-5.0	28.2	3.25	29.4	3.39	29.4	3.39	29.4	3.39	31.4	3.62	33.3	3.85	35.3	4.08
	0.0	28.2	3.26	29.4	3.40	29.4	3.40	29.4	3.40	31.4	3.63	33.3	3.86	35.3	4.09
	5.0	28.2	3.26	29.4	3.42	29.4	3.42	29.4	3.42	31.4	3.65	33.3	3.88	35.3	4.12
	10.0	28.2	3.28	29.4	3.46	29.4	3.46	29.4	3.46	31.4	3.70	33.3	3.94	35.3	4.18
	15.0	28.2	3.34	29.4	3.55	29.4	3.55	29.4	3.55	31.4	3.82	33.3	4.08	35.3	4.34
	20.0	28.2	3.54	29.4	3.97	29.4	3.97	29.4	3.97	31.4	4.36	33.3	4.77	35.3	5.20
	25.0	28.2	4.37	29.4	5.01	29.4	5.01	29.4	5.01	31.4	5.48	33.3	5.98	35.3	6.50
	30.0	28.2	5.41	29.4	6.13	29.4	6.13	29.4	6.13	31.4	6.71	33.3	7.30	35.3	7.92
	35.0	28.2	6.55	29.4	7.38	29.4	7.38	29.4	7.38	31.4	8.05	33.3	8.74	34.4	8.97
40.0	28.2	7.78	29.4	8.71	29.4	8.71	29.4	8.71	30.5	8.97	31.2	8.97	31.8	8.97	8.97
	43.0	28.2	8.56	28.4	8.97	28.4	8.97	28.4	8.97	29.1	8.97	29.7	8.97	30.4	8.97

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
110%	-10.0	25.3	2.90	27.4	3.15	28.7	3.31	28.7	3.31	30.6	3.53	32.5	3.75	34.4	3.97
	-5.0	25.3	2.91	27.4	3.15	28.7	3.31	28.7	3.31	30.6	3.53	32.5	3.75	34.4	3.97
	0.0	25.3	2.91	27.4	3.16	28.7	3.32	28.7	3.32	30.6	3.54	32.5	3.77	34.4	3.99
	5.0	25.3	2.93	27.4	3.17	28.7	3.33	28.7	3.33	30.6	3.56	32.5	3.79	34.4	4.02
	10.0	25.3	2.94	27.4	3.19	28.7	3.37	28.7	3.37	30.6	3.60	32.5	3.84	34.4	4.08
	15.0	25.3	2.99	27.4	3.26	28.7	3.46	28.7	3.46	30.6	3.71	32.5	3.97	34.4	4.22
	20.0	25.3	3.18	27.4	3.49	28.7	3.84	28.7	3.84	30.6	4.20	32.5	4.60	34.4	5.00
	25.0	25.3	3.93	27.4	4.35	28.7	4.84	28.7	4.84	30.6	5.29	32.5	5.77	34.4	6.27
	30.0	25.3	4.84	27.4	5.37	28.7	5.93	28.7	5.93	30.6	6.48	32.5	7.05	34.4	7.65
	35.0	25.3	5.85	27.4	6.47	28.7	7.13	28.7	7.13	30.6	7.78	32.5	8.45	34.1	8.97
40.0	25.3	6.95	27.4	7.68	28.7	8.42	28.7	8.42	30.3	8.97	30.9	8.97	31.6	8.97	8.97
	43.0	25.3	7.65	27.4	8.44	28.2	8.97	28.2	8.97	28.9	8.97	29.5	8.97	30.1	8.97

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-14ME1E81 (Cooling)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
100%	-10.0	22.4	2.58	24.3	2.79	26.1	3.01	28.0	3.22	29.9	3.44	31.7	3.66	33.6	3.87
	-5.0	22.4	2.58	24.3	2.79	26.1	3.02	28.0	3.23	29.9	3.44	31.7	3.66	33.6	3.88
	0.0	22.4	2.59	24.3	2.80	26.1	3.02	28.0	3.24	29.9	3.46	31.7	3.67	33.6	3.89
	5.0	22.4	2.59	24.3	2.82	26.1	3.03	28.0	3.25	29.9	3.47	31.7	3.69	33.6	3.92
	10.0	22.4	2.62	24.3	2.84	26.1	3.06	28.0	3.28	29.9	3.51	31.7	3.74	33.6	3.97
	15.0	22.4	2.66	24.3	2.90	26.1	3.13	28.0	3.37	29.9	3.62	31.7	3.86	33.6	4.11
	20.0	22.4	2.84	24.3	3.11	26.1	3.39	28.0	3.70	29.9	4.05	31.7	4.42	33.6	4.82
	25.0	22.4	3.49	24.3	3.86	26.1	4.26	28.0	4.67	29.9	5.11	31.7	5.56	33.6	6.04
	30.0	22.4	4.31	24.3	4.76	26.1	5.24	28.0	5.73	29.9	6.26	31.7	6.80	33.6	7.37
	35.0	22.4	5.20	24.3	5.74	26.1	6.31	28.0	6.90	29.9	7.51	31.7	8.16	33.6	8.83
	40.0	22.4	6.16	24.3	6.80	26.1	7.47	28.0	8.16	29.9	8.87	30.7	8.97	31.3	8.97
	43.0	22.4	6.78	24.3	7.47	26.1	8.20	28.0	8.96	28.6	8.97	29.3	8.97	29.9	8.97

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
90%	-10.0	20.2	2.32	21.8	2.51	23.5	2.70	25.2	2.90	26.9	3.10	28.6	3.29	30.2	3.48
	-5.0	20.2	2.33	21.8	2.52	23.5	2.71	25.2	2.90	26.9	3.10	28.6	3.29	30.2	3.49
	0.0	20.2	2.33	21.8	2.52	23.5	2.72	25.2	2.91	26.9	3.11	28.6	3.31	30.2	3.50
	5.0	20.2	2.33	21.8	2.53	23.5	2.73	25.2	2.92	26.9	3.12	28.6	3.32	30.2	3.52
	10.0	20.2	2.35	21.8	2.55	23.5	2.75	25.2	2.95	26.9	3.15	28.6	3.35	30.2	3.55
	15.0	20.2	2.38	21.8	2.59	23.5	2.80	25.2	3.01	26.9	3.22	28.6	3.44	30.2	3.66
	20.0	20.2	2.51	21.8	2.75	23.5	2.99	25.2	3.24	26.9	3.50	28.6	3.79	30.2	4.11
	25.0	20.2	3.06	21.8	3.37	23.5	3.70	25.2	4.04	26.9	4.40	28.6	4.78	30.2	5.17
	30.0	20.2	3.78	21.8	4.16	23.5	4.56	25.2	4.97	26.9	5.41	28.6	5.87	30.2	6.33
	35.0	20.2	4.56	21.8	5.02	23.5	5.50	25.2	6.00	26.9	6.51	28.6	7.05	30.2	7.61
	40.0	20.2	5.42	21.8	5.96	23.5	6.52	25.2	7.11	26.9	7.71	28.6	8.34	30.0	8.92
	43.0	20.2	5.96	21.8	6.56	23.5	7.17	25.2	7.81	26.9	8.47	28.3	8.97	28.9	8.97

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
80%	-10.0	17.9	2.06	19.4	2.24	20.9	2.41	22.4	2.58	23.9	2.75	25.4	2.93	26.9	3.10
	-5.0	17.9	2.06	19.4	2.24	20.9	2.41	22.4	2.58	23.9	2.75	25.4	2.93	26.9	3.10
	0.0	17.9	2.06	19.4	2.24	20.9	2.42	22.4	2.59	23.9	2.76	25.4	2.93	26.9	3.11
	5.0	17.9	2.07	19.4	2.24	20.9	2.42	22.4	2.59	23.9	2.77	25.4	2.95	26.9	3.12
	10.0	17.9	2.08	19.4	2.26	20.9	2.44	22.4	2.61	23.9	2.79	25.4	2.97	26.9	3.15
	15.0	17.9	2.10	19.4	2.29	20.9	2.47	22.4	2.66	23.9	2.84	25.4	3.03	26.9	3.22
	20.0	17.9	2.20	19.4	2.40	20.9	2.61	22.4	2.82	23.9	3.04	25.4	3.26	26.9	3.48
	25.0	17.9	2.66	19.4	2.91	20.9	3.18	22.4	3.46	23.9	3.75	25.4	4.06	26.9	4.38
	30.0	17.9	3.28	19.4	3.60	20.9	3.93	22.4	4.27	23.9	4.63	25.4	5.00	26.9	5.38
	35.0	17.9	3.97	19.4	4.35	20.9	4.75	22.4	5.16	23.9	5.59	25.4	6.03	26.9	6.49
	40.0	17.9	4.71	19.4	5.17	20.9	5.64	22.4	6.12	23.9	6.62	25.4	7.14	26.9	7.67
	43.0	17.9	5.19	19.4	5.69	20.9	6.20	22.4	6.73	23.9	7.28	25.4	7.85	26.9	8.43

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
70%	-10.0	15.7	1.80	17.0	1.95	18.3	2.10	19.6	2.26	20.9	2.41	22.2	2.56	23.5	2.70
	-5.0	15.7	1.81	17.0	1.96	18.3	2.10	19.6	2.26	20.9	2.41	22.2	2.56	23.5	2.71
	0.0	15.7	1.81	17.0	1.96	18.3	2.11	19.6	2.26	20.9	2.42	22.2	2.57	23.5	2.72
	5.0	15.7	1.81	17.0	1.96	18.3	2.11	19.6	2.26	20.9	2.42	22.2	2.57	23.5	2.73
	10.0	15.7	1.81	17.0	1.97	18.3	2.13	19.6	2.28	20.9	2.44	22.2	2.59	23.5	2.75
	15.0	15.7	1.84	17.0	1.99	18.3	2.15	19.6	2.31	20.9	2.47	22.2	2.63	23.5	2.79
	20.0	15.7	1.90	17.0	2.07	18.3	2.25	19.6	2.42	20.9	2.61	22.2	2.79	23.5	2.97
	25.0	15.7	2.28	17.0	2.49	18.3	2.70	19.6	2.93	20.9	3.17	22.2	3.41	23.5	3.66
	30.0	15.7	2.82	17.0	3.08	18.3	3.35	19.6	3.62	20.9	3.91	22.2	4.21	23.5	4.51
	35.0	15.7	3.41	17.0	3.72	18.3	4.04	19.6	4.38	20.9	4.73	22.2	5.08	23.5	5.45
	40.0	15.7	4.05	17.0	4.42	18.3	4.80	19.6	5.20	20.9	5.61	22.2	6.03	23.5	6.47

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-14ME1E81 (Cooling)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
60%	-10.0	13.4	1.55	14.6	1.68	15.7	1.80	16.8	1.93	17.9	2.06	19.0	2.19	20.2	2.32
	-5.0	13.4	1.55	14.6	1.68	15.7	1.81	16.8	1.93	17.9	2.06	19.0	2.19	20.2	2.33
	0.0	13.4	1.55	14.6	1.68	15.7	1.81	16.8	1.94	17.9	2.06	19.0	2.19	20.2	2.33
	5.0	13.4	1.55	14.6	1.68	15.7	1.81	16.8	1.94	17.9	2.07	19.0	2.20	20.2	2.33
	10.0	13.4	1.55	14.6	1.68	15.7	1.81	16.8	1.95	17.9	2.08	19.0	2.21	20.2	2.35
	15.0	13.4	1.57	14.6	1.70	15.7	1.84	16.8	1.97	17.9	2.10	19.0	2.24	20.2	2.38
	20.0	13.4	1.61	14.6	1.75	15.7	1.90	16.8	2.04	17.9	2.19	19.0	2.34	20.2	2.49
	25.0	13.4	1.90	14.6	2.11	15.7	2.27	16.8	2.45	17.9	2.63	19.0	2.82	20.2	3.01
	30.0	13.4	2.39	14.6	2.59	15.7	2.81	16.8	3.03	17.9	3.25	19.0	3.48	20.2	3.72
	35.0	13.4	2.88	14.6	3.13	15.7	3.39	16.8	3.66	17.9	3.93	19.0	4.21	20.2	4.50
	40.0	13.4	3.42	14.6	3.72	15.7	4.03	16.8	4.35	17.9	4.67	19.0	5.00	20.2	5.34
	43.0	13.4	3.77	14.6	4.10	15.7	4.44	16.8	4.78	17.9	5.14	19.0	5.51	20.2	5.88

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
50%	-10.0	11.2	1.29	12.1	1.39	13.1	1.50	14.0	1.61	14.9	1.72	15.9	1.83	16.8	1.93
	-5.0	11.2	1.29	12.1	1.39	13.1	1.50	14.0	1.61	14.9	1.72	15.9	1.83	16.8	1.93
	0.0	11.2	1.29	12.1	1.40	13.1	1.50	14.0	1.61	14.9	1.72	15.9	1.83	16.8	1.94
	5.0	11.2	1.29	12.1	1.40	13.1	1.51	14.0	1.61	14.9	1.73	15.9	1.84	16.8	1.94
	10.0	11.2	1.30	12.1	1.40	13.1	1.51	14.0	1.62	14.9	1.73	15.9	1.84	16.8	1.95
	15.0	11.2	1.30	12.1	1.41	13.1	1.52	14.0	1.64	14.9	1.75	15.9	1.86	16.8	1.97
	20.0	11.2	1.32	12.1	1.44	13.1	1.56	14.0	1.68	14.9	1.79	15.9	1.92	16.8	2.04
	25.0	11.2	1.50	12.1	1.66	13.1	1.81	14.0	1.98	14.9	2.15	15.9	2.28	16.8	2.43
	30.0	11.2	1.99	12.1	2.15	13.1	2.31	14.0	2.48	14.9	2.65	15.9	2.82	16.8	3.00
	35.0	11.2	2.39	12.1	2.59	13.1	2.79	14.0	2.99	14.9	3.20	15.9	3.41	16.8	3.63
	40.0	11.2	2.84	12.1	3.07	13.1	3.31	14.0	3.55	14.9	3.80	15.9	4.06	16.8	4.31
	43.0	11.2	3.11	12.1	3.37	13.1	3.64	14.0	3.91	14.9	4.18	15.9	4.46	16.8	4.75

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
40%	-10.0	9.0	1.03	9.7	1.12	10.4	1.20	11.2	1.29	12.0	1.37	12.7	1.46	13.4	1.55
	-5.0	9.0	1.03	9.7	1.12	10.4	1.20	11.2	1.29	12.0	1.37	12.7	1.46	13.4	1.55
	0.0	9.0	1.04	9.7	1.12	10.4	1.21	11.2	1.29	12.0	1.37	12.7	1.46	13.4	1.55
	5.0	9.0	1.04	9.7	1.12	10.4	1.21	11.2	1.29	12.0	1.38	12.7	1.46	13.4	1.55
	10.0	9.0	1.04	9.7	1.12	10.4	1.21	11.2	1.30	12.0	1.38	12.7	1.47	13.4	1.55
	15.0	9.0	1.04	9.7	1.12	10.4	1.21	11.2	1.30	12.0	1.39	12.7	1.48	13.4	1.57
	20.0	9.0	1.06	9.7	1.15	10.4	1.24	11.2	1.32	12.0	1.41	12.7	1.51	13.4	1.60
	25.0	9.0	1.15	9.7	1.26	10.4	1.37	11.2	1.48	12.0	1.60	12.7	1.73	13.4	1.85
	30.0	9.0	1.63	9.7	1.74	10.4	1.86	11.2	1.98	12.0	2.10	12.7	2.23	13.4	2.35
	35.0	9.0	1.94	9.7	2.08	10.4	2.23	11.2	2.38	12.0	2.53	12.7	2.68	13.4	2.84
	40.0	9.0	2.28	9.7	2.46	10.4	2.64	11.2	2.82	12.0	3.00	12.7	3.19	13.4	3.37
	43.0	9.0	2.50	9.7	2.70	10.4	2.90	11.2	3.10	12.0	3.30	12.7	3.51	13.4	3.72

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
30%	-10.0	6.7	0.77	7.3	0.83	7.8	0.90	8.4	0.97	9.0	1.03	9.5	1.10	10.1	1.16
	-5.0	6.7	0.77	7.3	0.83	7.8	0.90	8.4	0.97	9.0	1.03	9.5	1.10	10.1	1.16
	0.0	6.7	0.77	7.3	0.83	7.8	0.90	8.4	0.97	9.0	1.04	9.5	1.10	10.1	1.16
	5.0	6.7	0.77	7.3	0.84	7.8	0.90	8.4	0.97	9.0	1.04	9.5	1.10	10.1	1.16
	10.0	6.7	0.77	7.3	0.84	7.8	0.90	8.4	0.97	9.0	1.04	9.5	1.10	10.1	1.17
	15.0	6.7	0.78	7.3	0.84	7.8	0.91	8.4	0.97	9.0	1.04	9.5	1.10	10.1	1.17
	20.0	6.7	0.79	7.3	0.85	7.8	0.92	8.4	0.99	9.0	1.05	9.5	1.12	10.1	1.19
	25.0	6.7	0.83	7.3	0.90	7.8	0.98	8.4	1.06	9.0	1.13	9.5	1.21	10.1	1.30
	30.0	6.7	1.28	7.3	1.37	7.8	1.45	8.4	1.52	9.0	1.61	9.5	1.69	10.1	1.78
	35.0	6.7	1.52	7.3	1.61	7.8	1.72	8.4	1.82	9.0	1.93	9.5	2.03	10.1	2.13
	40.0	6.7	1.77	7.3	1.89	7.8	2.01	8.4	2.14	9.0	2.26	9.5	2.39	10.1	2.52
	43.0	6.7	1.93	7.3	2.07	7.8	2.21	8.4	2.35	9.0	2				

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

### 2-2. U-14ME1E81 (Heatling)

#### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB												
		15.0		17.0		19.0		20.0		21.0		23.0		
		TC °CDB	PI kW	TC kW	PI kW									
130% or more	-24.9	-25.0	26.0	9.20	25.5	9.20	25.1	9.20	25.0	9.20	25.0	9.20	25.0	9.20
	-19.8	-20.0	27.6	9.20	27.1	9.20	26.6	9.20	26.4	9.20	26.4	9.20	26.4	9.20
	-14.7	-15.0	29.3	9.20	28.7	9.20	28.2	9.20	27.9	9.20	27.9	9.20	27.9	9.20
	-9.6	-10.0	31.1	9.20	30.5	9.20	29.9	9.20	29.5	9.20	29.5	9.20	29.5	9.20
	-4.4	-5.0	33.0	9.20	32.3	9.20	31.7	9.20	31.3	9.20	31.3	9.20	31.3	9.20
	-1.8	-2.5	34.0	9.20	33.3	9.20	32.6	9.20	32.3	9.20	32.3	9.20	32.3	9.20
	0.8	0.0	35.1	9.20	34.4	9.20	33.7	9.20	33.4	9.20	33.4	9.20	33.4	9.20
	2.8	2.0	36.1	9.20	35.4	9.20	34.7	9.20	33.9	8.98	33.9	8.98	33.9	8.98
	6.0	5.0	37.8	9.20	37.0	9.20	35.1	8.69	33.9	8.33	33.9	8.33	33.9	8.33
	7.0	6.0	38.5	9.20	37.6	9.18	35.1	8.43	33.9	8.06	33.9	8.06	33.9	8.06
	8.6	7.5	39.6	9.20	37.6	8.69	35.1	7.97	33.9	7.63	33.9	7.63	33.9	7.63
	11.2	10.0	40.1	8.56	37.6	7.89	35.1	7.24	33.9	6.92	33.9	6.92	33.9	6.92
	16.4	15.0	40.1	6.96	37.6	6.42	35.1	5.90	33.9	5.64	33.9	5.64	33.9	5.64

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB												
		15.0		17.0		19.0		20.0		21.0		23.0		
		TC °CDB	PI kW	TC kW	PI kW									
120%	-24.9	-25.0	26.1	9.20	25.7	9.20	25.3	9.20	25.1	9.20	25.1	9.20	25.1	9.20
	-19.8	-20.0	27.7	9.20	27.2	9.20	26.7	9.20	26.5	9.20	26.5	9.20	26.5	9.20
	-14.7	-15.0	29.4	9.20	28.8	9.20	28.3	9.20	28.0	9.20	28.0	9.20	28.0	9.20
	-9.6	-10.0	31.2	9.20	30.6	9.20	29.9	9.20	29.6	9.20	29.6	9.20	29.6	9.20
	-4.4	-5.0	33.0	9.20	32.4	9.20	31.7	9.20	31.3	9.20	31.3	9.20	31.3	9.20
	-1.8	-2.5	34.1	9.20	33.4	9.20	32.7	9.20	32.3	9.20	32.3	9.20	32.3	9.20
	0.8	0.0	35.2	9.20	34.5	9.20	33.8	9.20	33.1	9.04	33.1	9.04	33.1	9.04
	2.8	2.0	36.1	9.20	35.4	9.20	34.3	9.02	33.1	8.64	33.1	8.64	33.1	8.64
	6.0	5.0	37.8	9.20	36.8	9.08	34.3	8.37	33.1	8.01	33.1	8.01	33.1	8.01
	7.0	6.0	38.5	9.20	36.8	8.80	34.3	8.08	33.1	7.73	33.1	7.73	33.1	7.73
	8.6	7.5	39.2	9.01	36.8	8.31	34.3	7.63	33.1	7.30	33.1	7.30	33.1	7.30
	11.2	10.0	39.2	8.16	36.8	7.53	34.3	6.92	33.1	6.62	33.1	6.62	33.1	6.62
	16.4	15.0	39.2	6.62	36.8	6.12	34.3	5.63	33.1	5.39	33.1	5.39	33.1	5.39

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB												
		15.0		17.0		19.0		20.0		21.0		23.0		
		TC °CDB	PI kW	TC kW	PI kW									
110%	-24.9	-25.0	26.3	9.20	25.8	9.20	25.4	9.20	25.2	9.20	25.2	9.20	25.2	9.20
	-19.8	-20.0	27.9	9.20	27.3	9.20	26.8	9.20	26.6	9.20	26.6	9.20	26.6	9.20
	-14.7	-15.0	29.5	9.20	28.9	9.20	28.4	9.20	28.1	9.20	28.1	9.20	28.1	9.20
	-9.6	-10.0	31.3	9.20	30.6	9.20	30.0	9.20	29.7	9.20	29.7	9.20	29.7	9.20
	-4.4	-5.0	33.1	9.20	32.4	9.20	31.7	9.20	31.4	9.20	31.4	9.20	31.4	9.20
	-1.8	-2.5	34.1	9.20	33.4	9.20	32.7	9.20	32.3	9.15	32.3	9.15	31.6	8.73
	0.8	0.0	35.2	9.20	34.5	9.20	33.5	9.06	32.3	8.68	32.3	8.68	31.6	8.29
	2.8	2.0	36.1	9.20	35.4	9.20	33.5	8.66	32.3	8.30	32.3	8.30	31.6	7.94
	6.0	5.0	37.8	9.20	35.9	8.71	33.5	8.01	32.3	7.67	32.3	7.67	31.6	7.31
	7.0	6.0	38.3	9.11	35.9	8.41	33.5	7.73	32.3	7.40	32.3	7.40	31.6	7.04
	8.6	7.5	38.3	8.60	35.9	7.94	33.5	7.30	32.3	6.99	32.3	6.99	31.6	6.66
	11.2	10.0	38.3	7.77	35.9	7.19	33.5	6.61	32.3	6.33	32.3	6.33	31.6	6.03
	16.4	15.0	38.3	6.29	35.9	5.82	33.5	5.37	32.3	5.15	32.3	5.15	31.6	4.91

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-14ME1E81 (Heating)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
100%	-24.9	-25.0	26.4	9.20	26.0	9.20	25.5	9.20	25.4	9.20	25.2	9.20	24.8	9.20	24.3	9.10
	-19.8	-20.0	28.0	9.20	27.5	9.20	27.0	9.20	26.7	9.20	26.5	9.20	26.0	9.20	25.5	9.20
	-14.7	-15.0	29.7	9.20	29.1	9.20	28.5	9.20	28.2	9.20	27.9	9.20	27.4	9.20	25.7	8.63
	-9.6	-10.0	31.3	9.20	30.7	9.20	30.1	9.20	29.8	9.20	29.5	9.20	28.0	8.79	25.7	7.98
	-4.4	-5.0	33.1	9.20	32.4	9.20	31.8	9.20	31.4	9.20	30.3	8.81	28.0	8.04	25.7	7.31
	-1.8	-2.5	34.1	9.20	33.4	9.20	32.7	9.15	31.5	8.77	30.3	8.40	28.0	7.67	25.7	6.98
	0.8	0.0	35.2	9.20	34.5	9.20	32.7	8.69	31.5	8.33	30.3	7.97	28.0	7.30	25.7	6.65
	2.8	2.0	36.2	9.20	35.0	9.01	32.7	8.31	31.5	7.97	30.3	7.64	28.0	7.00	25.7	6.39
	6.0	5.0	37.3	9.00	35.0	8.33	32.7	7.67	31.5	7.34	30.3	7.03	28.0	6.41	25.7	5.82
	7.0	6.0	37.3	8.68	35.0	8.03	32.7	7.39	31.5	7.08	30.3	6.78	28.0	6.18	25.7	5.61
	8.6	7.5	37.3	8.18	35.0	7.57	32.7	6.97	31.5	6.68	30.3	6.40	28.0	5.84	25.7	5.30
	11.2	10.0	37.3	7.40	35.0	6.85	32.7	6.31	31.5	6.05	30.3	5.79	28.0	5.30	25.7	4.81
	16.4	15.0	37.3	5.97	35.0	5.54	32.7	5.11	31.5	4.91	30.3	4.71	28.0	4.31	25.7	3.93

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
90%	-24.9	-25.0	27.1	9.20	26.6	9.20	26.2	9.20	26.0	9.20	25.8	9.20	25.2	9.08	23.1	8.36
	-19.8	-20.0	28.7	9.20	28.2	9.20	27.7	9.20	27.4	9.20	27.2	9.20	25.2	8.52	23.1	7.84
	-14.7	-15.0	30.2	9.20	29.6	9.20	29.0	9.20	28.4	9.01	27.3	8.66	25.2	7.98	23.1	7.33
	-9.6	-10.0	31.7	9.20	31.1	9.20	29.4	8.72	28.4	8.38	27.3	8.05	25.2	7.42	23.1	6.82
	-4.4	-5.0	33.4	9.20	31.5	8.65	29.4	8.03	28.4	7.72	27.3	7.43	25.2	6.85	23.1	6.29
	-1.8	-2.5	33.6	8.89	31.5	8.27	29.4	7.68	28.4	7.39	27.3	7.11	25.2	6.55	23.1	6.02
	0.8	0.0	33.6	8.46	31.5	7.89	29.4	7.33	28.4	7.06	27.3	6.79	25.2	6.26	23.1	5.74
	2.8	2.0	33.6	8.10	31.5	7.54	29.4	7.00	28.4	6.73	27.3	6.46	25.2	5.95	23.1	5.45
	6.0	5.0	33.6	7.36	31.5	6.85	29.4	6.35	28.4	6.11	27.3	5.87	25.2	5.39	23.1	4.93
	7.0	6.0	33.6	7.09	31.5	6.60	29.4	6.12	28.4	5.88	27.3	5.65	25.2	5.19	23.1	4.74
	8.6	7.5	33.6	6.67	31.5	6.21	29.4	5.76	28.4	5.54	27.3	5.32	25.2	4.89	23.1	4.47
	11.2	10.0	33.6	5.99	31.5	5.59	29.4	5.19	28.4	4.99	27.3	4.80	25.2	4.42	23.1	4.05
	16.4	15.0	33.6	4.78	31.5	4.47	29.4	4.17	28.4	4.02	27.3	3.87	25.2	3.58	23.1	3.29

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
80%	-24.9	-25.0	28.3	9.20	27.9	9.20	26.1	8.67	25.2	8.38	24.3	8.10	22.4	7.57	20.5	7.06
	-19.8	-20.0	29.6	9.20	28.0	8.74	26.1	8.18	25.2	7.91	24.3	7.65	22.4	7.14	20.5	6.65
	-14.7	-15.0	29.9	8.77	28.0	8.23	26.1	7.70	25.2	7.45	24.3	7.19	22.4	6.70	20.5	6.24
	-9.6	-10.0	29.9	8.21	28.0	7.70	26.1	7.21	25.2	6.97	24.3	6.73	22.4	6.27	20.5	5.81
	-4.4	-5.0	29.9	7.63	28.0	7.16	26.1	6.70	25.2	6.47	24.3	6.25	22.4	5.81	20.5	5.39
	-1.8	-2.5	29.9	7.32	28.0	6.87	26.1	6.43	25.2	6.21	24.3	6.00	22.4	5.57	20.5	5.16
	0.8	0.0	29.9	6.91	28.0	6.49	26.1	6.07	25.2	5.86	24.3	5.66	22.4	5.25	20.5	4.86
	2.8	2.0	29.9	6.54	28.0	6.14	26.1	5.74	25.2	5.55	24.3	5.35	22.4	4.97	20.5	4.60
	6.0	5.0	29.9	5.91	28.0	5.55	26.1	5.18	25.2	5.01	24.3	4.82	22.4	4.47	20.5	4.11
	7.0	6.0	29.9	5.68	28.0	5.32	26.1	4.98	25.2	4.81	24.3	4.64	22.4	4.30	20.5	3.96
	8.6	7.5	29.9	5.32	28.0	4.99	26.1	4.67	25.2	4.52	24.3	4.35	22.4	4.04	20.5	3.73
	11.2	10.0	29.9	4.75	28.0	4.47	26.1	4.19	25.2	4.05	24.3	3.92	22.4	3.64	20.5	3.36
	16.4	15.0	29.9	3.75	28.0	3.54	26.1	3.33	25.2	3.24	24.3	3.13	22.4	2.92	20.5	2.73

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
70%	-24.9	-25.0	26.1	7.84	24.5	7.45	22.9	7.06	22.1	6.87	21.2	6.68	19.6	6.32	18.0	5.96
	-19.8	-20.0	26.1	7.46	24.5	7.07	22.9	6.70	22.1	6.51	21.2	6.33	19.6	5.98	18.0	5.62
	-14.7	-15.0	26.1	7.07	24.5	6.70	22.9	6.34	22.1	6.16	21.2	5.98	19.6	5.63	18.0	5.29
	-9.6	-10.0	26.1	6.68	24.5	6.32	22.9	5.97	22.1	5.79	21.2	5.62	19.6	5.28	18.0	4.94
	-4.4	-5.0	26.1	6.18	24.5	5.86	22.9	5.54	22.1	5.37	21.2	5.22	19.6	4.90	18.0	4.59
	-1.8	-2.5	26.1	5.86	24.5	5.55	22.9	5.25	22.1	5.10	21.2	4.9				

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-14ME1E81 (Heating)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
60%	-24.9	-25.0	22.4	6.27	21.0	6.02	19.6	5.76	18.9	5.64	18.2	5.51	16.8	5.26	15.4	5.01
	-19.8	-20.0	22.4	6.00	21.0	5.73	19.6	5.49	18.9	5.36	18.2	5.23	16.8	4.98	15.4	4.73
	-14.7	-15.0	22.4	5.71	21.0	5.46	19.6	5.21	18.9	5.08	18.2	4.96	16.8	4.71	15.4	4.45
	-9.6	-10.0	22.4	5.35	21.0	5.13	19.6	4.91	18.9	4.79	18.2	4.67	16.8	4.43	15.4	4.17
	-4.4	-5.0	22.4	4.88	21.0	4.68	19.6	4.47	18.9	4.37	18.2	4.27	16.8	4.06	15.4	3.84
	-1.8	-2.5	22.4	4.60	21.0	4.42	19.6	4.22	18.9	4.13	18.2	4.03	16.8	3.82	15.4	3.62
	0.8	0.0	22.4	4.30	21.0	4.12	19.6	3.94	18.9	3.85	18.2	3.76	16.8	3.54	15.4	3.31
	2.8	2.0	22.4	4.03	21.0	3.87	19.6	3.68	18.9	3.58	18.2	3.48	16.8	3.29	15.4	3.07
	6.0	5.0	22.4	3.55	21.0	3.40	19.6	3.24	18.9	3.16	18.2	3.08	16.8	2.91	15.4	2.73
	7.0	6.0	22.4	3.39	21.0	3.25	19.6	3.10	18.9	3.02	18.2	2.95	16.8	2.79	15.4	2.63
	8.6	7.5	22.4	3.15	21.0	3.03	19.6	2.90	18.9	2.83	18.2	2.76	16.8	2.62	15.4	2.47
	11.2	10.0	22.4	2.78	21.0	2.68	19.6	2.58	18.9	2.52	18.2	2.46	16.8	2.34	15.4	2.22
	16.4	15.0	22.4	2.65	21.0	2.51	19.6	2.37	18.9	2.30	18.2	2.24	16.8	2.10	15.4	1.96

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
50%	-24.9	-25.0	18.7	5.01	17.5	4.84	16.3	4.68	15.8	4.59	15.2	4.51	14.0	4.35	12.8	4.18
	-19.8	-20.0	18.7	4.80	17.5	4.63	16.3	4.46	15.8	4.38	15.2	4.29	14.0	4.11	12.8	3.94
	-14.7	-15.0	18.7	4.53	17.5	4.40	16.3	4.24	15.8	4.16	15.2	4.07	14.0	3.89	12.8	3.71
	-9.6	-10.0	18.7	4.20	17.5	4.08	16.3	3.94	15.8	3.87	15.2	3.81	14.0	3.65	12.8	3.48
	-4.4	-5.0	18.7	3.79	17.5	3.68	16.3	3.57	15.8	3.50	15.2	3.44	14.0	3.31	12.8	3.12
	-1.8	-2.5	18.7	3.55	17.5	3.46	16.3	3.35	15.8	3.29	15.2	3.21	14.0	3.04	12.8	2.87
	0.8	0.0	18.7	3.29	17.5	3.19	16.3	3.06	15.8	2.99	15.2	2.92	14.0	2.78	12.8	2.63
	2.8	2.0	18.7	3.03	17.5	2.93	16.3	2.82	15.8	2.76	15.2	2.70	14.0	2.57	12.8	2.44
	6.0	5.0	18.7	2.63	17.5	2.56	16.3	2.47	15.8	2.43	15.2	2.38	14.0	2.27	12.8	2.17
	7.0	6.0	18.7	2.51	17.5	2.44	16.3	2.36	15.8	2.32	15.2	2.27	14.0	2.18	12.8	2.08
	8.6	7.5	18.7	2.32	17.5	2.27	16.3	2.20	15.8	2.17	15.2	2.12	14.0	2.05	12.8	1.95
	11.2	10.0	18.7	2.28	17.5	2.17	16.3	2.05	15.8	1.99	15.2	1.93	14.0	1.83	12.8	1.76
	16.4	15.0	18.7	2.28	17.5	2.17	16.3	2.05	15.8	1.99	15.2	1.93	14.0	1.82	12.8	1.71

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
40%	-24.9	-25.0	14.9	3.95	14.0	3.85	13.1	3.75	12.6	3.69	12.1	3.63	11.2	3.52	10.3	3.41
	-19.8	-20.0	14.9	3.76	14.0	3.68	13.1	3.57	12.6	3.51	12.1	3.46	11.2	3.33	10.3	3.21
	-14.7	-15.0	14.9	3.53	14.0	3.46	13.1	3.38	12.6	3.33	12.1	3.28	11.2	3.15	10.3	3.02
	-9.6	-10.0	14.9	3.24	14.0	3.19	13.1	3.12	12.6	3.08	12.1	3.04	11.2	2.94	10.3	2.82
	-4.4	-5.0	14.9	2.90	14.0	2.85	13.1	2.76	12.6	2.70	12.1	2.66	11.2	2.53	10.3	2.41
	-1.8	-2.5	14.9	2.66	14.0	2.59	13.1	2.51	12.6	2.47	12.1	2.42	11.2	2.32	10.3	2.22
	0.8	0.0	14.9	2.39	14.0	2.34	13.1	2.27	12.6	2.24	12.1	2.20	11.2	2.12	10.3	2.02
	2.8	2.0	14.9	2.19	14.0	2.14	13.1	2.09	12.6	2.06	12.1	2.03	11.2	1.96	10.3	1.88
	6.0	5.0	14.9	1.91	14.0	1.86	13.1	1.83	12.6	1.81	12.1	1.78	11.2	1.73	10.3	1.67
	7.0	6.0	14.9	1.91	14.0	1.82	13.1	1.74	12.6	1.73	12.1	1.71	11.2	1.66	10.3	1.61
	8.6	7.5	14.9	1.91	14.0	1.82	13.1	1.73	12.6	1.69	12.1	1.64	11.2	1.56	10.3	1.52
	11.2	10.0	14.9	1.91	14.0	1.82	13.1	1.73	12.6	1.69	12.1	1.64	11.2	1.54	10.3	1.45
	16.4	15.0	14.9	1.91	14.0	1.82	13.1	1.73	12.6	1.69	12.1	1.64	11.2	1.54	10.3	1.45

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
30%	-24.9	-25.0	11.2	3.03	10.5	2.96	9.8	2.90	9.5	2.86	9.1	2.82	8.4	2.75	7.7	2.68
	-19.8	-20.0	11.2	2.86	10.5	2.82	9.8	2.76	9.5	2.72	9.1	2.68	8.4	2.61	7.7	2.52
	-14.7	-15.0	11.2	2.67	10.5	2.64	9.8	2.60	9.5	2.57	9.1	2.54	8.4	2.46	7.7	2.36
	-9.6	-10.0	11.2	2.44	10.5	2.41	9.8	2.34	9.5	2.30	9.1	2.27	8.4	2.18	7.7	2.08
	-4.4	-5.0	11.2	2.05	10.5	2.01	9.8	1.97	9.5	1.95	9.1	1.92	8.4	1.85	7.7	1.79
	-1.8	-2.5	11.2	1.85	10.5	1.83	9.8	1.79	9.5	1.77	9.1	1.76	8.4	1.71	7.7	

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

### 2-3. U-16ME1E81 (Cooling)

#### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
130% or more	-10.0	36.0	4.16	36.0	4.16	36.0	4.16	36.0	4.16	38.4	4.44	40.8	4.72	43.2	5.00
	-5.0	36.0	4.17	36.0	4.17	36.0	4.17	36.0	4.17	38.4	4.45	40.8	4.73	43.2	5.01
	0.0	36.0	4.19	36.0	4.19	36.0	4.19	36.0	4.19	38.4	4.47	40.8	4.76	43.2	5.04
	5.0	36.0	4.22	36.0	4.22	36.0	4.22	36.0	4.22	38.4	4.51	40.8	4.80	43.2	5.09
	10.0	36.0	4.29	36.0	4.29	36.0	4.29	36.0	4.29	38.4	4.58	40.8	4.89	43.2	5.19
	15.0	36.0	4.45	36.0	4.45	36.0	4.45	36.0	4.45	38.4	4.77	40.8	5.11	43.2	5.44
	20.0	36.0	4.99	36.0	4.99	36.0	4.99	36.0	4.99	38.4	5.44	40.8	5.91	43.2	6.40
	25.0	36.0	6.23	36.0	6.23	36.0	6.23	36.0	6.23	38.4	6.78	40.8	7.36	43.2	7.96
	30.0	36.0	7.59	36.0	7.59	36.0	7.59	36.0	7.59	38.4	8.25	40.8	8.94	43.2	9.66
	35.0	36.0	9.07	36.0	9.07	36.0	9.07	36.0	9.07	38.4	9.85	40.8	10.67	41.7	10.70
40.0	36.0	10.67	36.0	10.67	36.0	10.67	36.0	10.67	36.9	10.70	37.7	10.70	38.5	10.70	
	43.0	34.3	10.70	34.3	10.70	34.3	10.70	34.3	10.70	35.1	10.70	35.9	10.70	36.7	10.70

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
120%	-10.0	33.8	3.89	35.2	4.07	35.2	4.07	35.2	4.07	37.5	4.34	39.9	4.61	42.2	4.88
	-5.0	33.8	3.90	35.2	4.07	35.2	4.07	35.2	4.07	37.5	4.35	39.9	4.62	42.2	4.90
	0.0	33.8	3.91	35.2	4.09	35.2	4.09	35.2	4.09	37.5	4.36	39.9	4.64	42.2	4.92
	5.0	33.8	3.93	35.2	4.12	35.2	4.12	35.2	4.12	37.5	4.40	39.9	4.68	42.2	4.97
	10.0	33.8	3.96	35.2	4.18	35.2	4.18	35.2	4.18	37.5	4.47	39.9	4.77	42.2	5.06
	15.0	33.8	4.05	35.2	4.33	35.2	4.33	35.2	4.33	37.5	4.65	39.9	4.97	42.2	5.30
	20.0	33.8	4.35	35.2	4.82	35.2	4.82	35.2	4.82	37.5	5.25	39.9	5.70	42.2	6.17
	25.0	33.8	5.34	35.2	6.03	35.2	6.03	35.2	6.03	37.5	6.56	39.9	7.11	42.2	7.69
	30.0	33.8	6.56	35.2	7.35	35.2	7.35	35.2	7.35	37.5	7.98	39.9	8.64	42.2	9.33
	35.0	33.8	7.88	35.2	8.78	35.2	8.78	35.2	8.78	37.5	9.54	39.9	10.31	41.4	10.70
40.0	33.8	9.32	35.2	10.34	35.2	10.34	35.2	10.34	36.6	10.70	37.4	10.70	38.2	10.70	
	43.0	33.8	10.24	34.1	10.70	34.1	10.70	34.1	10.70	34.9	10.70	35.6	10.70	36.4	10.70

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
110%	-10.0	30.2	3.48	32.7	3.78	34.3	3.97	34.3	3.97	36.6	4.23	38.9	4.49	41.2	4.77
	-5.0	30.2	3.49	32.7	3.79	34.3	3.98	34.3	3.98	36.6	4.24	38.9	4.51	41.2	4.77
	0.0	30.2	3.50	32.7	3.79	34.3	3.99	34.3	3.99	36.6	4.25	38.9	4.53	41.2	4.80
	5.0	30.2	3.51	32.7	3.81	34.3	4.02	34.3	4.02	36.6	4.29	38.9	4.57	41.2	4.85
	10.0	30.2	3.55	32.7	3.85	34.3	4.07	34.3	4.07	36.6	4.36	38.9	4.65	41.2	4.94
	15.0	30.2	3.63	32.7	3.95	34.3	4.21	34.3	4.21	36.6	4.53	38.9	4.84	41.2	5.15
	20.0	30.2	3.91	32.7	4.29	34.3	4.67	34.3	4.67	36.6	5.07	38.9	5.50	41.2	5.95
	25.0	30.2	4.81	32.7	5.30	34.3	5.84	34.3	5.84	36.6	6.34	38.9	6.86	41.2	7.42
	30.0	30.2	5.90	32.7	6.49	34.3	7.11	34.3	7.11	36.6	7.72	38.9	8.35	41.2	9.00
	35.0	30.2	7.08	32.7	7.78	34.3	8.50	34.3	8.50	36.6	9.23	38.9	9.97	41.0	10.67
40.0	30.2	8.36	32.7	9.18	34.3	10.01	34.3	10.01	36.3	10.70	37.2	10.70	38.0	10.70	
	43.0	30.2	9.18	32.7	10.07	33.9	10.70	33.9	10.70	34.6	10.70	35.4	10.70	36.2	10.70

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-16ME1E81 (Cooling)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
100%	-10.0	26.8	3.09	29.0	3.35	31.3	3.60	33.5	3.87	35.7	4.12	38.0	4.39	40.2	4.65
	-5.0	26.8	3.09	29.0	3.36	31.3	3.61	33.5	3.88	35.7	4.14	38.0	4.39	40.2	4.66
	0.0	26.8	3.10	29.0	3.37	31.3	3.63	33.5	3.89	35.7	4.16	38.0	4.42	40.2	4.68
	5.0	26.8	3.12	29.0	3.38	31.3	3.65	33.5	3.92	35.7	4.18	38.0	4.45	40.2	4.72
	10.0	26.8	3.15	29.0	3.42	31.3	3.70	33.5	3.97	35.7	4.25	38.0	4.53	40.2	4.81
	15.0	26.8	3.23	29.0	3.51	31.3	3.81	33.5	4.11	35.7	4.40	38.0	4.71	40.2	5.01
	20.0	26.8	3.49	29.0	3.83	31.3	4.17	33.5	4.53	35.7	4.89	38.0	5.30	40.2	5.73
	25.0	26.8	4.32	29.0	4.74	31.3	5.18	33.5	5.64	35.7	6.12	38.0	6.63	40.2	7.14
	30.0	26.8	5.28	29.0	5.79	31.3	6.32	33.5	6.88	35.7	7.46	38.0	8.07	40.2	8.69
	35.0	26.8	6.31	29.0	6.93	31.3	7.56	33.5	8.23	35.7	8.92	38.0	9.63	40.2	10.37
	40.0	26.8	7.45	29.0	8.17	31.3	8.91	33.5	9.69	35.7	10.49	36.9	10.70	37.7	10.70
	43.0	26.8	8.16	29.0	8.95	31.3	9.77	33.5	10.62	34.4	10.70	35.1	10.70	35.9	10.70

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
90%	-10.0	24.1	2.78	26.1	3.01	28.1	3.24	30.2	3.48	32.2	3.71	34.2	3.94	36.2	4.18
	-5.0	24.1	2.78	26.1	3.02	28.1	3.25	30.2	3.48	32.2	3.72	34.2	3.95	36.2	4.19
	0.0	24.1	2.79	26.1	3.03	28.1	3.26	30.2	3.50	32.2	3.73	34.2	3.97	36.2	4.21
	5.0	24.1	2.80	26.1	3.04	28.1	3.28	30.2	3.51	32.2	3.75	34.2	3.99	36.2	4.23
	10.0	24.1	2.82	26.1	3.07	28.1	3.31	30.2	3.56	32.2	3.80	34.2	4.05	36.2	4.30
	15.0	24.1	2.88	26.1	3.14	28.1	3.39	30.2	3.65	32.2	3.92	34.2	4.18	36.2	4.44
	20.0	24.1	3.08	26.1	3.37	28.1	3.66	30.2	3.97	32.2	4.28	34.2	4.59	36.2	4.91
	25.0	24.1	3.81	26.1	4.16	28.1	4.53	30.2	4.91	32.2	5.30	34.2	5.71	36.2	6.14
	30.0	24.1	4.66	26.1	5.09	28.1	5.53	30.2	5.99	32.2	6.47	34.2	6.97	36.2	7.49
	35.0	24.1	5.57	26.1	6.09	28.1	6.63	30.2	7.18	32.2	7.75	34.2	8.35	36.2	8.96
	40.0	24.1	6.58	26.1	7.18	28.1	7.81	30.2	8.47	32.2	9.14	34.2	9.83	36.2	10.54
	43.0	24.1	7.21	26.1	7.88	28.1	8.57	30.2	9.28	32.2	10.02	34.0	10.70	34.8	10.70

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
80%	-10.0	21.4	2.47	23.2	2.67	25.0	2.88	26.8	3.09	28.6	3.30	30.4	3.51	32.2	3.71
	-5.0	21.4	2.48	23.2	2.68	25.0	2.89	26.8	3.09	28.6	3.30	30.4	3.51	32.2	3.72
	0.0	21.4	2.48	23.2	2.68	25.0	2.90	26.8	3.10	28.6	3.31	30.4	3.52	32.2	3.73
	5.0	21.4	2.49	23.2	2.70	25.0	2.91	26.8	3.12	28.6	3.32	30.4	3.54	32.2	3.75
	10.0	21.4	2.50	23.2	2.72	25.0	2.93	26.8	3.14	28.6	3.36	30.4	3.58	32.2	3.79
	15.0	21.4	2.54	23.2	2.77	25.0	2.99	26.8	3.22	28.6	3.44	30.4	3.67	32.2	3.90
	20.0	21.4	2.68	23.2	2.93	25.0	3.19	26.8	3.44	28.6	3.70	30.4	3.97	32.2	4.24
	25.0	21.4	3.34	23.2	3.63	25.0	3.93	26.8	4.23	28.6	4.55	30.4	4.88	32.2	5.23
	30.0	21.4	4.07	23.2	4.43	25.0	4.80	26.8	5.18	28.6	5.56	30.4	5.97	32.2	6.39
	35.0	21.4	4.87	23.2	5.30	25.0	5.74	26.8	6.20	28.6	6.67	30.4	7.15	32.2	7.65
	40.0	21.4	5.74	23.2	6.25	25.0	6.78	26.8	7.32	28.6	7.88	30.4	8.44	32.2	9.03
	43.0	21.4	6.30	23.2	6.86	25.0	7.43	26.8	8.02	28.6	8.63	30.4	9.26	32.2	9.90

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
70%	-10.0	18.8	2.16	20.3	2.35	21.9	2.53	23.5	2.71	25.0	2.88	26.6	3.06	28.1	3.24
	-5.0	18.8	2.16	20.3	2.35	21.9	2.53	23.5	2.71	25.0	2.89	26.6	3.07	28.1	3.25
	0.0	18.8	2.16	20.3	2.35	21.9	2.53	23.5	2.72	25.0	2.90	26.6	3.08	28.1	3.26
	5.0	18.8	2.17	20.3	2.35	21.9	2.53	23.5	2.72	25.0	2.91	26.6	3.09	28.1	3.28
	10.0	18.8	2.18	20.3	2.37	21.9	2.55	23.5	2.74	25.0	2.93	26.6	3.12	28.1	3.30
	15.0	18.8	2.21	20.3	2.40	21.9	2.59	23.5	2.79	25.0	2.99	26.6	3.19	28.1	3.37
	20.0	18.8	2.30	20.3	2.52	21.9	2.73	23.5	2.95	25.0	3.16	26.6	3.38	28.1	3.60
	25.0	18.8	2.84	20.3	3.14	21.9	3.37	23.5	3.61	25.0	3.87	26.6	4.13	28.1	4.39
	30.0	18.8	3.54	20.3	3.83	21.9	4.12	23.5	4.42	25.0	4.73	26.6	5.05	28.1	5.38
	35.0	18.8	4.22												

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-16ME1E81 (Cooling)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
60%	-10.0	16.1	1.85	17.4	2.01	18.8	2.16	20.1	2.32	21.4	2.47	22.8	2.63	24.1	2.78
	-5.0	16.1	1.85	17.4	2.01	18.8	2.16	20.1	2.32	21.4	2.48	22.8	2.63	24.1	2.78
	0.0	16.1	1.86	17.4	2.01	18.8	2.16	20.1	2.32	21.4	2.48	22.8	2.63	24.1	2.79
	5.0	16.1	1.86	17.4	2.02	18.8	2.17	20.1	2.33	21.4	2.49	22.8	2.64	24.1	2.80
	10.0	16.1	1.87	17.4	2.02	18.8	2.18	20.1	2.35	21.4	2.50	22.8	2.66	24.1	2.82
	15.0	16.1	1.88	17.4	2.05	18.8	2.21	20.1	2.37	21.4	2.53	22.8	2.70	24.1	2.86
	20.0	16.1	1.95	17.4	2.12	18.8	2.30	20.1	2.48	21.4	2.65	22.8	2.83	24.1	3.01
	25.0	16.1	2.29	17.4	2.52	18.8	2.76	20.1	3.00	21.4	3.23	22.8	3.45	24.1	3.65
	30.0	16.1	3.04	17.4	3.26	18.8	3.49	20.1	3.73	21.4	3.98	22.8	4.22	24.1	4.48
	35.0	16.1	3.61	17.4	3.89	18.8	4.17	20.1	4.46	21.4	4.76	22.8	5.06	24.1	5.37
	40.0	16.1	4.24	17.4	4.57	18.8	4.91	20.1	5.26	21.4	5.61	22.8	5.97	24.1	6.35
	43.0	16.1	4.64	17.4	5.01	18.8	5.38	20.1	5.77	21.4	6.16	22.8	6.56	24.1	6.96

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
50%	-10.0	13.4	1.55	14.5	1.67	15.6	1.80	16.8	1.93	17.9	2.06	19.0	2.19	20.1	2.31
	-5.0	13.4	1.55	14.5	1.67	15.6	1.80	16.8	1.93	17.9	2.06	19.0	2.19	20.1	2.32
	0.0	13.4	1.55	14.5	1.68	15.6	1.80	16.8	1.93	17.9	2.07	19.0	2.19	20.1	2.32
	5.0	13.4	1.55	14.5	1.68	15.6	1.81	16.8	1.93	17.9	2.07	19.0	2.20	20.1	2.33
	10.0	13.4	1.56	14.5	1.69	15.6	1.82	16.8	1.94	17.9	2.07	19.0	2.21	20.1	2.34
	15.0	13.4	1.56	14.5	1.70	15.6	1.83	16.8	1.97	17.9	2.10	19.0	2.23	20.1	2.37
	20.0	13.4	1.60	14.5	1.74	15.6	1.88	16.8	2.02	17.9	2.16	19.0	2.31	20.1	2.45
	25.0	13.4	1.81	14.5	1.98	15.6	2.16	16.8	2.34	17.9	2.52	19.0	2.70	20.1	2.88
	30.0	13.4	2.58	14.5	2.75	15.6	2.92	16.8	3.10	17.9	3.28	19.0	3.47	20.1	3.66
	35.0	13.4	3.05	14.5	3.26	15.6	3.47	16.8	3.70	17.9	3.92	19.0	4.15	20.1	4.38
	40.0	13.4	3.56	14.5	3.81	15.6	4.07	16.8	4.35	17.9	4.61	19.0	4.89	20.1	5.17
	43.0	13.4	3.88	14.5	4.17	15.6	4.46	16.8	4.76	17.9	5.05	19.0	5.36	20.1	5.67

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
40%	-10.0	10.7	1.23	11.6	1.34	12.5	1.44	13.4	1.55	14.3	1.65	15.2	1.75	16.1	1.85
	-5.0	10.7	1.23	11.6	1.34	12.5	1.44	13.4	1.55	14.3	1.65	15.2	1.75	16.1	1.85
	0.0	10.7	1.23	11.6	1.34	12.5	1.44	13.4	1.55	14.3	1.65	15.2	1.75	16.1	1.86
	5.0	10.7	1.23	11.6	1.34	12.5	1.45	13.4	1.55	14.3	1.65	15.2	1.75	16.1	1.86
	10.0	10.7	1.24	11.6	1.34	12.5	1.45	13.4	1.56	14.3	1.65	15.2	1.76	16.1	1.87
	15.0	10.7	1.25	11.6	1.35	12.5	1.46	13.4	1.56	14.3	1.67	15.2	1.78	16.1	1.88
	20.0	10.7	1.27	11.6	1.37	12.5	1.48	13.4	1.60	14.3	1.70	15.2	1.82	16.1	1.93
	25.0	10.7	1.37	11.6	1.51	12.5	1.63	13.4	1.76	14.3	1.89	15.2	2.02	16.1	2.16
	30.0	10.7	2.16	11.6	2.28	12.5	2.40	13.4	2.53	14.3	2.66	15.2	2.79	16.1	2.93
	35.0	10.7	2.52	11.6	2.67	12.5	2.83	13.4	3.00	14.3	3.16	15.2	3.32	16.1	3.49
	40.0	10.7	2.92	11.6	3.11	12.5	3.30	13.4	3.50	14.3	3.70	15.2	3.89	16.1	4.10
	43.0	10.7	3.18	11.6	3.39	12.5	3.60	13.4	3.82	14.3	4.04	15.2	4.26	16.1	4.49

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
30%	-10.0	8.0	0.93	8.7	1.00	9.4	1.08	10.1	1.16	10.7	1.23	11.4	1.31	12.1	1.39
	-5.0	8.0	0.93	8.7	1.00	9.4	1.08	10.1	1.16	10.7	1.23	11.4	1.32	12.1	1.39
	0.0	8.0	0.93	8.7	1.00	9.4	1.08	10.1	1.16	10.7	1.23	11.4	1.32	12.1	1.39
	5.0	8.0	0.93	8.7	1.00	9.4	1.09	10.1	1.16	10.7	1.23	11.4	1.32	12.1	1.39
	10.0	8.0	0.93	8.7	1.00	9.4	1.09	10.1	1.16	10.7	1.24	11.4	1.32	12.1	1.40
	15.0	8.0	0.93	8.7	1.01	9.4	1.09	10.1	1.17	10.7	1.24	11.4	1.33	12.1	1.41
	20.0	8.0	0.95	8.7	1.02	9.4	1.10	10.1	1.19	10.7	1.26	11.4	1.34	12.1	1.42
	25.0	8.0	0.99	8.7	1.08	9.4	1.17	10.1	1.26	10.7	1.34	11.4	1.43	12.1	1.52
	30.0	8.0	1.77	8.7	1.85	9.4	1.93	10.1	2.02	10.7	2.11	11.4	2.19	12.1	2.28
	35.0	8.0	2.03	8.7	2.14	9.4	2.25	10.1</							

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

### 2-4. U-16ME1E81 (Heatling)

#### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB												
		15.0		17.0		19.0		20.0		21.0		23.0		
		TC °CDB	PI °CWB	TC kW	PI kW									
130% or more	-24.9	-25.0	31.0	10.96	30.6	10.96	30.4	10.96	29.7	10.69	29.7	10.69	29.7	10.69
	-19.8	-20.0	32.6	10.96	32.1	10.96	31.7	10.96	31.3	10.89	31.3	10.89	31.3	10.89
	-14.7	-15.0	34.3	10.96	33.7	10.96	33.2	10.96	32.9	10.96	32.9	10.96	32.9	10.96
	-9.6	-10.0	36.3	10.96	35.7	10.96	35.0	10.96	34.7	10.96	34.7	10.96	34.7	10.96
	-4.4	-5.0	38.8	10.96	38.1	10.96	37.4	10.96	37.0	10.96	37.0	10.96	37.0	10.96
	-1.8	-2.5	40.2	10.96	39.5	10.96	38.7	10.96	38.3	10.96	38.3	10.96	38.3	10.96
	0.8	0.0	41.6	10.96	40.8	10.96	40.0	10.96	39.6	10.96	39.6	10.96	39.6	10.96
	2.8	2.0	42.8	10.96	42.0	10.96	41.1	10.96	40.3	10.77	40.3	10.77	40.3	10.77
	6.0	5.0	44.9	10.96	44.0	10.96	41.8	10.41	40.3	9.96	40.3	9.96	40.3	9.96
	7.0	6.0	45.8	10.96	44.8	10.95	41.8	10.05	40.3	9.61	40.3	9.61	40.3	9.61
	8.6	7.5	47.3	10.96	44.8	10.32	41.8	9.47	40.3	9.06	40.3	9.06	40.3	9.06
	11.2	10.0	47.8	10.09	44.8	9.31	41.8	8.56	40.3	8.19	40.3	8.19	40.3	8.19
	16.4	15.0	47.8	8.09	44.8	7.48	41.8	6.90	40.3	6.61	40.3	6.61	40.3	6.61

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB												
		15.0		17.0		19.0		20.0		21.0		23.0		
		TC °CDB	PI °CWB	TC kW	PI kW									
120%	-24.9	-25.0	31.3	10.96	30.9	10.96	30.6	10.96	29.7	10.60	29.7	10.60	29.7	10.60
	-19.8	-20.0	32.8	10.96	32.3	10.96	31.9	10.96	31.4	10.81	31.4	10.81	31.4	10.81
	-14.7	-15.0	34.5	10.96	33.9	10.96	33.3	10.96	33.1	10.96	33.1	10.96	33.1	10.96
	-9.6	-10.0	36.5	10.96	35.9	10.96	35.2	10.96	34.9	10.96	34.9	10.96	34.9	10.96
	-4.4	-5.0	39.0	10.96	38.3	10.96	37.5	10.96	37.2	10.96	37.2	10.96	37.2	10.96
	-1.8	-2.5	40.4	10.96	39.5	10.96	38.7	10.96	38.3	10.96	38.3	10.96	38.3	10.96
	0.8	0.0	41.6	10.96	40.8	10.96	40.0	10.96	39.4	10.84	39.4	10.84	39.4	10.84
	2.8	2.0	42.8	10.96	42.0	10.96	40.8	10.81	39.4	10.35	39.4	10.35	39.4	10.35
	6.0	5.0	44.9	10.96	43.8	10.86	40.8	9.98	39.4	9.56	39.4	9.56	39.4	9.56
	7.0	6.0	45.9	10.96	43.8	10.47	40.8	9.62	39.4	9.21	39.4	9.21	39.4	9.21
	8.6	7.5	46.7	10.68	43.8	9.85	40.8	9.06	39.4	8.68	39.4	8.68	39.4	8.68
	11.2	10.0	46.7	9.62	43.8	8.89	40.8	8.18	39.4	7.84	39.4	7.84	39.4	7.84
	16.4	15.0	46.7	7.70	43.8	7.12	40.8	6.58	39.4	6.31	39.4	6.31	39.4	6.31

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB												
		15.0		17.0		19.0		20.0		21.0		23.0		
		TC °CDB	PI °CWB	TC kW	PI kW									
110%	-24.9	-25.0	31.5	10.96	31.2	10.96	30.7	10.90	29.8	10.52	29.8	10.52	29.5	10.30
	-19.8	-20.0	33.0	10.96	32.6	10.96	32.1	10.96	31.4	10.73	31.4	10.73	31.2	10.50
	-14.7	-15.0	34.8	10.96	34.1	10.96	33.6	10.96	33.3	10.96	33.3	10.96	33.2	10.77
	-9.6	-10.0	36.7	10.96	36.0	10.96	35.4	10.96	35.0	10.96	35.0	10.96	35.0	10.96
	-4.4	-5.0	39.2	10.96	38.4	10.96	37.6	10.96	37.2	10.96	37.2	10.96	37.2	10.96
	-1.8	-2.5	40.4	10.96	39.6	10.96	38.8	10.96	38.4	10.96	38.4	10.96	37.6	10.46
	0.8	0.0	41.7	10.96	40.9	10.96	39.9	10.87	38.4	10.40	38.4	10.40	37.6	9.95
	2.8	2.0	42.8	10.96	42.0	10.96	39.9	10.38	38.4	9.96	38.4	9.96	37.6	9.54
	6.0	5.0	45.0	10.96	42.7	10.38	39.9	9.55	38.4	9.15	38.4	9.15	37.6	8.73
	7.0	6.0	45.6	10.82	42.7	10.00	39.9	9.21	38.4	8.82	38.4	8.82	37.6	8.41
	8.6	7.5	45.6	10.18	42.7	9.41	39.9	8.67	38.4	8.31	38.4	8.31	37.6	7.93
	11.2	10.0	45.6	9.15	42.7	8.47	39.9	7.81	38.4	7.49	38.4	7.49	37.6	7.16
	16.4	15.0	45.6	7.31	42.7	6.79	39.9	6.27	38.4	6.03	38.4	6.03	37.6	5.77

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

U-16ME1E81 (Heating)

Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
100%	-24.9	-25.0	31.8	10.96	31.4	10.96	30.8	10.82	29.8	10.44	28.8	10.08	26.9	9.37	24.8	8.67
	-19.8	-20.0	33.3	10.96	32.8	10.96	32.3	10.96	31.5	10.66	30.5	10.28	28.4	9.55	26.3	8.84
	-14.7	-15.0	35.0	10.96	34.4	10.96	33.8	10.96	33.5	10.95	32.4	10.56	30.2	9.80	28.0	9.06
	-9.6	-10.0	36.9	10.96	36.2	10.96	35.6	10.96	35.2	10.96	34.8	10.93	32.6	10.12	30.2	9.35
	-4.4	-5.0	39.3	10.96	38.5	10.96	37.7	10.96	37.3	10.96	36.1	10.55	33.3	9.63	30.6	8.75
	-1.8	-2.5	40.4	10.96	39.6	10.96	38.8	10.96	37.5	10.51	36.1	10.07	33.3	9.20	30.6	8.37
	0.8	0.0	41.7	10.96	40.9	10.96	38.9	10.41	37.5	9.99	36.1	9.57	33.3	8.76	30.6	7.98
	2.8	2.0	42.9	10.96	41.7	10.79	38.9	9.97	37.5	9.57	36.1	9.18	33.3	8.40	30.6	7.65
	6.0	5.0	44.4	10.71	41.7	9.91	38.9	9.14	37.5	8.76	36.1	8.39	33.3	7.66	30.6	6.97
	7.0	6.0	44.4	10.31	41.7	9.54	38.9	8.80	37.5	8.43	36.1	8.08	33.3	7.38	30.6	6.72
	8.6	7.5	44.4	9.69	41.7	8.98	38.9	8.29	37.5	7.95	36.1	7.61	33.3	6.96	30.6	6.34
	11.2	10.0	44.4	8.71	41.7	8.08	38.9	7.46	37.5	7.16	36.1	6.86	33.3	6.29	30.6	5.73
	16.4	15.0	44.4	6.94	41.7	6.45	38.9	5.98	37.5	5.75	36.1	5.52	33.3	5.07	30.6	4.64

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
90%	-24.9	-25.0	32.8	10.96	32.4	10.96	31.1	10.57	30.1	10.23	29.1	9.90	27.1	9.25	25.0	8.62
	-19.8	-20.0	34.2	10.96	33.6	10.96	32.8	10.81	31.8	10.46	30.8	10.12	28.6	9.43	26.5	8.78
	-14.7	-15.0	35.8	10.96	35.2	10.96	34.5	10.96	33.8	10.73	32.5	10.30	30.0	9.48	27.5	8.69
	-9.6	-10.0	37.6	10.96	36.9	10.96	35.0	10.41	33.8	10.01	32.5	9.61	30.0	8.84	27.5	8.12
	-4.4	-5.0	39.5	10.96	37.5	10.37	35.0	9.62	33.8	9.26	32.5	8.89	30.0	8.19	27.5	7.52
	-1.8	-2.5	40.0	10.66	37.5	9.92	35.0	9.21	33.8	8.87	32.5	8.52	30.0	7.87	27.5	7.22
	0.8	0.0	40.0	10.16	37.5	9.47	35.0	8.79	33.8	8.46	32.5	8.13	30.0	7.49	27.5	6.87
	2.8	2.0	40.0	9.67	37.5	9.00	35.0	8.35	33.8	8.03	32.5	7.72	30.0	7.11	27.5	6.52
	6.0	5.0	40.0	8.76	37.5	8.16	35.0	7.58	33.8	7.29	32.5	7.01	30.0	6.46	27.5	5.92
	7.0	6.0	40.0	8.41	37.5	7.85	35.0	7.29	33.8	7.01	32.5	6.74	30.0	6.21	27.5	5.69
	8.6	7.5	40.0	7.89	37.5	7.36	35.0	6.85	33.8	6.59	32.5	6.34	30.0	5.84	27.5	5.36
	11.2	10.0	40.0	7.05	37.5	6.59	35.0	6.14	33.8	5.92	32.5	5.69	30.0	5.26	27.5	4.83
	16.4	15.0	40.0	5.56	37.5	5.22	35.0	4.88	33.8	4.71	32.5	4.55	30.0	4.22	27.5	3.90

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
80%	-24.9	-25.0	33.7	10.96	33.3	10.96	31.1	10.25	30.0	9.91	28.9	9.57	26.7	8.90	24.5	8.28
	-19.8	-20.0	35.2	10.96	33.3	10.39	31.1	9.71	30.0	9.38	28.9	9.05	26.7	8.43	24.5	7.83
	-14.7	-15.0	35.6	10.47	33.3	9.80	31.1	9.17	30.0	8.86	28.9	8.56	26.7	7.96	24.5	7.38
	-9.6	-10.0	35.6	9.82	33.3	9.21	31.1	8.62	30.0	8.32	28.9	8.03	26.7	7.47	24.5	6.92
	-4.4	-5.0	35.6	9.15	33.3	8.59	31.1	8.03	30.0	7.76	28.9	7.49	26.7	6.96	24.5	6.45
	-1.8	-2.5	35.6	8.75	33.3	8.21	31.1	7.68	30.0	7.42	28.9	7.16	26.7	6.65	24.5	6.16
	0.8	0.0	35.6	8.24	33.3	7.74	31.1	7.24	30.0	7.00	28.9	6.75	26.7	6.28	24.5	5.81
	2.8	2.0	35.6	7.80	33.3	7.32	31.1	6.85	30.0	6.63	28.9	6.40	26.7	5.94	24.5	5.50
	6.0	5.0	35.6	7.03	33.3	6.61	31.1	6.19	30.0	5.98	28.9	5.77	26.7	5.36	24.5	4.95
	7.0	6.0	35.6	6.74	33.3	6.34	31.1	5.93	30.0	5.74	28.9	5.54	26.7	5.15	24.5	4.75
	8.6	7.5	35.6	6.30	33.3	5.93	31.1	5.56	30.0	5.38	28.9	5.20	26.7	4.84	24.5	4.48
	11.2	10.0	35.6	5.60	33.3	5.29	31.1	4.97	30.0	4.81	28.9	4.65	26.7	4.34	24.5	4.03
	16.4	15.0	35.6	4.36	33.3	4.14	31.1	3.91	30.0	3.80	28.9	3.69	26.7	3.46	24.5	3.24

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC °CDB	PI kW	TC kW	PI kW											
70%	-24.9	-25.0	31.1	9.31	29.2	8.82	27.2	8.34	26.3	8.10	25.3	7.87	23.3	7.42	21.4	6.98
	-19.8	-20.0	31.1	8.88	29.2	8.40	27.2	7.94	26.3	7.71	25.3	7.49	23.3	7.05	21.4	6.62
	-14.7	-15.0	31.1	8.44	29.2	7.99	27.2	7.54	26.3	7.33	25.3	7.11	23.3	6.68	21.4	6.26
	-9.6	-10.0	31.1	7.99	29.2	7.56	27.2	7.13	26.3	6.92	25.3	6.71	23.3	6.30	21.4	5.89
	-4.4	-5.0	31.1	7.36	29.2	6.97	27.2	6.58	26.3	6.40	25.3	6.20	23.3	5.83	21.4	5.46
	-1.8	-2.5	31.1	6.98												

## 2. Capacity Ratio of Outdoor Unit (High-COP mode)

### U-16ME1E81 (Heating)

#### Capacity Ratio 30-130%

TC: Total capacity (kW), PI: Power input (kW)

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI			
60%	-24.9	-25.0	26.7	7.44	25.0	7.11	23.3	6.79	22.5	6.64	21.7	6.48	20.0	6.18	18.3	5.88
	-19.8	-20.0	26.7	7.12	25.0	6.81	23.3	6.50	22.5	6.34	21.7	6.19	20.0	5.88	18.3	5.58
	-14.7	-15.0	26.7	6.80	25.0	6.51	23.3	6.20	22.5	6.04	21.7	5.89	20.0	5.59	18.3	5.28
	-9.6	-10.0	26.7	6.35	25.0	6.08	23.3	5.82	22.5	5.68	21.7	5.55	20.0	5.27	18.3	4.97
	-4.4	-5.0	26.7	5.79	25.0	5.56	23.3	5.31	22.5	5.19	21.7	5.07	20.0	4.81	18.3	4.56
	-1.8	-2.5	26.7	5.47	25.0	5.24	23.3	5.02	22.5	4.91	21.7	4.79	20.0	4.55	18.3	4.31
	0.8	0.0	26.7	5.11	25.0	4.91	23.3	4.70	22.5	4.59	21.7	4.48	20.0	4.26	18.3	4.02
	2.8	2.0	26.7	4.80	25.0	4.60	23.3	4.41	22.5	4.31	21.7	4.21	20.0	3.97	18.3	3.73
	6.0	5.0	26.7	4.24	25.0	4.07	23.3	3.89	22.5	3.80	21.7	3.71	20.0	3.52	18.3	3.31
	7.0	6.0	26.7	4.05	25.0	3.89	23.3	3.73	22.5	3.64	21.7	3.55	20.0	3.37	18.3	3.19
	8.6	7.5	26.7	3.76	25.0	3.62	23.3	3.47	22.5	3.40	21.7	3.32	20.0	3.16	18.3	2.99
	11.2	10.0	26.7	3.30	25.0	3.19	23.3	3.08	22.5	3.02	21.7	2.95	20.0	2.82	18.3	2.68
	16.4	15.0	26.7	3.27	25.0	3.10	23.3	2.93	22.5	2.85	21.7	2.77	20.0	2.60	18.3	2.43

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI			
50%	-24.9	-25.0	22.2	5.93	20.9	5.73	19.5	5.52	18.8	5.42	18.0	5.32	16.7	5.11	15.3	4.91
	-19.8	-20.0	22.2	5.67	20.9	5.50	19.5	5.29	18.8	5.18	18.0	5.08	16.7	4.87	15.3	4.65
	-14.7	-15.0	22.2	5.34	20.9	5.18	19.5	5.02	18.8	4.93	18.0	4.84	16.7	4.63	15.3	4.41
	-9.6	-10.0	22.2	4.96	20.9	4.81	19.5	4.66	18.8	4.59	18.0	4.50	16.7	4.33	15.3	4.15
	-4.4	-5.0	22.2	4.48	20.9	4.36	19.5	4.23	18.8	4.16	18.0	4.09	16.7	3.93	15.3	3.77
	-1.8	-2.5	22.2	4.21	20.9	4.10	19.5	3.97	18.8	3.91	18.0	3.84	16.7	3.70	15.3	3.51
	0.8	0.0	22.2	3.91	20.9	3.80	19.5	3.69	18.8	3.62	18.0	3.55	16.7	3.38	15.3	3.20
	2.8	2.0	22.2	3.64	20.9	3.53	19.5	3.41	18.8	3.35	18.0	3.27	16.7	3.13	15.3	2.97
	6.0	5.0	22.2	3.16	20.9	3.08	19.5	2.98	18.8	2.93	18.0	2.88	16.7	2.77	15.3	2.64
	7.0	6.0	22.2	3.01	20.9	2.93	19.5	2.85	18.8	2.81	18.0	2.76	16.7	2.65	15.3	2.54
	8.6	7.5	22.2	2.82	20.9	2.72	19.5	2.66	18.8	2.61	18.0	2.57	16.7	2.48	15.3	2.38
	11.2	10.0	22.2	2.82	20.9	2.68	19.5	2.54	18.8	2.47	18.0	2.40	16.7	2.26	15.3	2.14
	16.4	15.0	22.2	2.82	20.9	2.68	19.5	2.54	18.8	2.47	18.0	2.40	16.7	2.26	15.3	2.12

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI			
40%	-24.9	-25.0	17.8	4.67	16.7	4.56	15.6	4.43	15.0	4.37	14.4	4.30	13.4	4.16	12.2	4.02
	-19.8	-20.0	17.8	4.43	16.7	4.34	15.6	4.25	15.0	4.18	14.4	4.11	13.4	3.96	12.2	3.82
	-14.7	-15.0	17.8	4.15	16.7	4.08	15.6	4.00	15.0	3.95	14.4	3.89	13.4	3.77	12.2	3.61
	-9.6	-10.0	17.8	3.82	16.7	3.76	15.6	3.69	15.0	3.65	14.4	3.60	13.4	3.50	12.2	3.38
	-4.4	-5.0	17.8	3.42	16.7	3.37	15.6	3.31	15.0	3.28	14.4	3.25	13.4	3.10	12.2	2.96
	-1.8	-2.5	17.8	3.19	16.7	3.15	15.6	3.06	15.0	3.01	14.4	2.96	13.4	2.84	12.2	2.72
	0.8	0.0	17.8	2.91	16.7	2.84	15.6	2.77	15.0	2.73	14.4	2.69	13.4	2.60	12.2	2.49
	2.8	2.0	17.8	2.66	16.7	2.60	15.6	2.55	15.0	2.51	14.4	2.48	13.4	2.40	12.2	2.31
	6.0	5.0	17.8	2.37	16.7	2.26	15.6	2.23	15.0	2.21	14.4	2.18	13.4	2.12	12.2	2.06
	7.0	6.0	17.8	2.37	16.7	2.26	15.6	2.15	15.0	2.11	14.4	2.09	13.4	2.04	12.2	1.97
	8.6	7.5	17.8	2.37	16.7	2.26	15.6	2.15	15.0	2.09	14.4	2.04	13.4	1.92	12.2	1.86
	11.2	10.0	17.8	2.37	16.7	2.26	15.6	2.15	15.0	2.09	14.4	2.04	13.4	1.92	12.2	1.81
	16.4	15.0	17.8	2.37	16.7	2.26	15.6	2.15	15.0	2.09	14.4	2.04	13.4	1.92	12.2	1.81

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.	Indoor air temp. : °CWB														
		15.0		17.0		19.0		20.0		21.0		23.0				
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI			
30%	-24.9	-25.0	13.4	3.57	12.5	3.53	11.7	3.46	11.3	3.41	10.8	3.37	10.0	3.29	9.2	3.19
	-19.8	-20.0	13.4	3.38	12.5	3.35	11.7	3.30	11.3	3.26	10.8	3.22	10.0	3.12	9.2	3.02
	-14.7	-15.0	13.4	3.16	12.5	3.14	11.7	3.09	11.3	3.07	10.8	3.04	10.0	2.96	9.2	2.86
	-9.6	-10.0	13.4	2.89	12.5	2.87	11.7	2.85	11.3	2.83	10.8	2.78	10.0	2.68	9.2	2.57
	-4.4	-5.0	13.4	2.51	12.5	2.47	11.7	2.42	11.3	2.39	10.8	2.36	10.0	2.29	9.2	2.21
	-1.8	-2.5	13.4	2.27	12.5	2.24	11.7	2.21	11.3	2.18	10.8	2.16	10.0	2.11	9.2	2.04
	0.8	0.0	13.4	2.03	12.5	2.02	11.7	2.00	11.3	1.98	10.8	1.96	10.0	1.92	9.2	1.87
	2.8	2.0	13.4	1.92	12.5	1.85	11.7	1.84	11.3	1.83	10.8	1.82	10.0	1.79	9.2	1.75
	6.0	5.0	13.4	1.92	12.5	1.84	1									