Panasonic

Order No. TD831159-11CE

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

85464869259003

REFERENCE NO.**TD831159-03**

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.

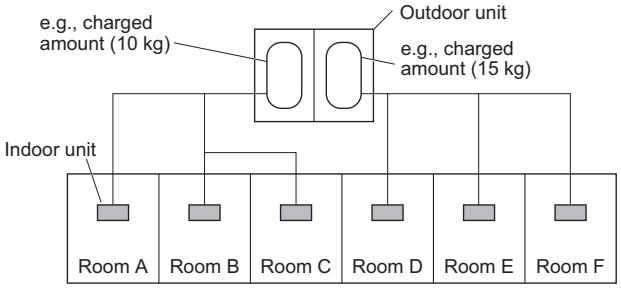
$$\frac{\text{Total amount of refrigerant (kg)}}{\text{Min. volume of the indoor unit installed room (m}^3\text{)}} \leq \text{Density limit (kg/m}^3\text{)}$$

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

NOTE

1. 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.

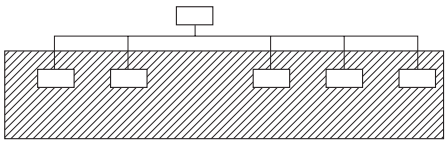
   For the amount of charge in this example:



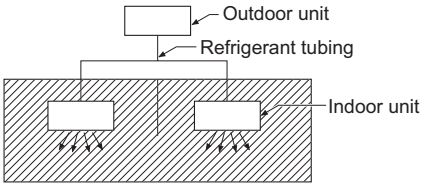
   The possible amount of leaked refrigerant gas in rooms A, B and C is 10 kg.
   The possible amount of leaked refrigerant gas in rooms D, E and F is 15 kg.

2. The standards for minimum room volume are as follows.

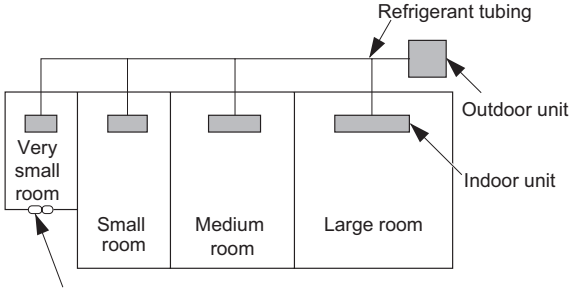
(1) No partition (shaded portion)



(2) 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).

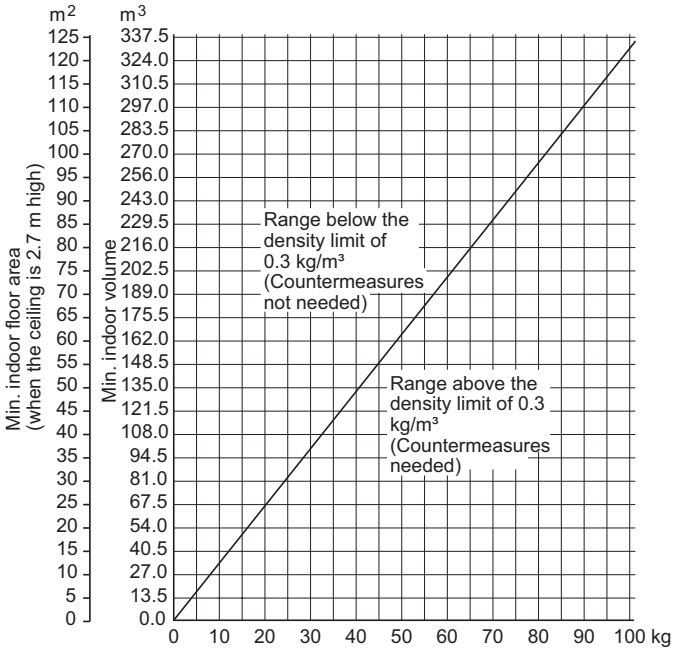


(3) If an indoor unit is installed in each partitioned room and the refrigerant tubing is interconnected, the smallest room of course becomes the object. But when mechanical ventilation is installed interlocked with a gas leakage detector in the smallest room where the density limit is exceeded, the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



Mechanical ventilation device – Gas leak detector

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



Total amount of refrigerant

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

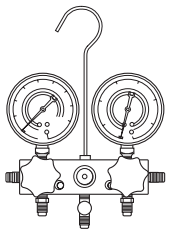
3-1. Tool specifications have been changed due to the characteristics of R410A.

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

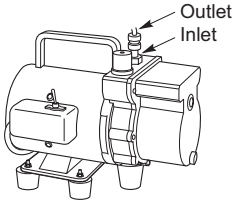
Item	New tool?	R407C tools compatible with R410A?	Remarks
Manifold gauge	Yes	No	Types of refrigerant, refrigerating machine oil, and pressure gauge are different.
Charge hose	Yes	No	To resist higher pressure, material must be changed.
Vacuum pump	Yes	Yes	Use a conventional vacuum pump if it is equipped 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.

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

Manifold gauge

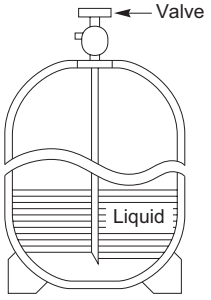


Vacuum pump



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.



Contents

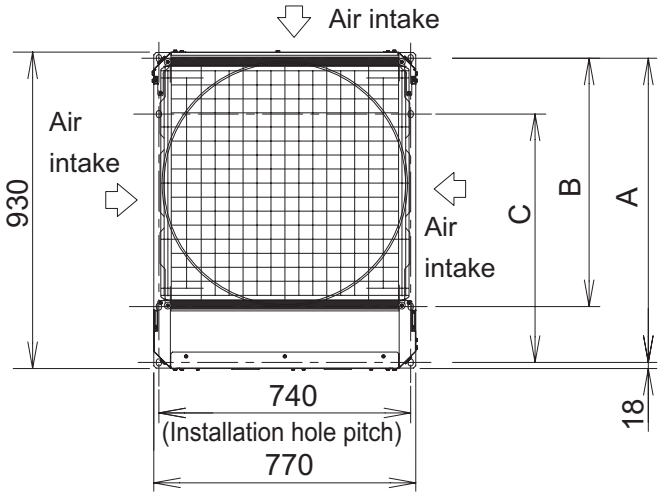
1. OUTLINE OF 2WAY SYSTEM

1. Line-up

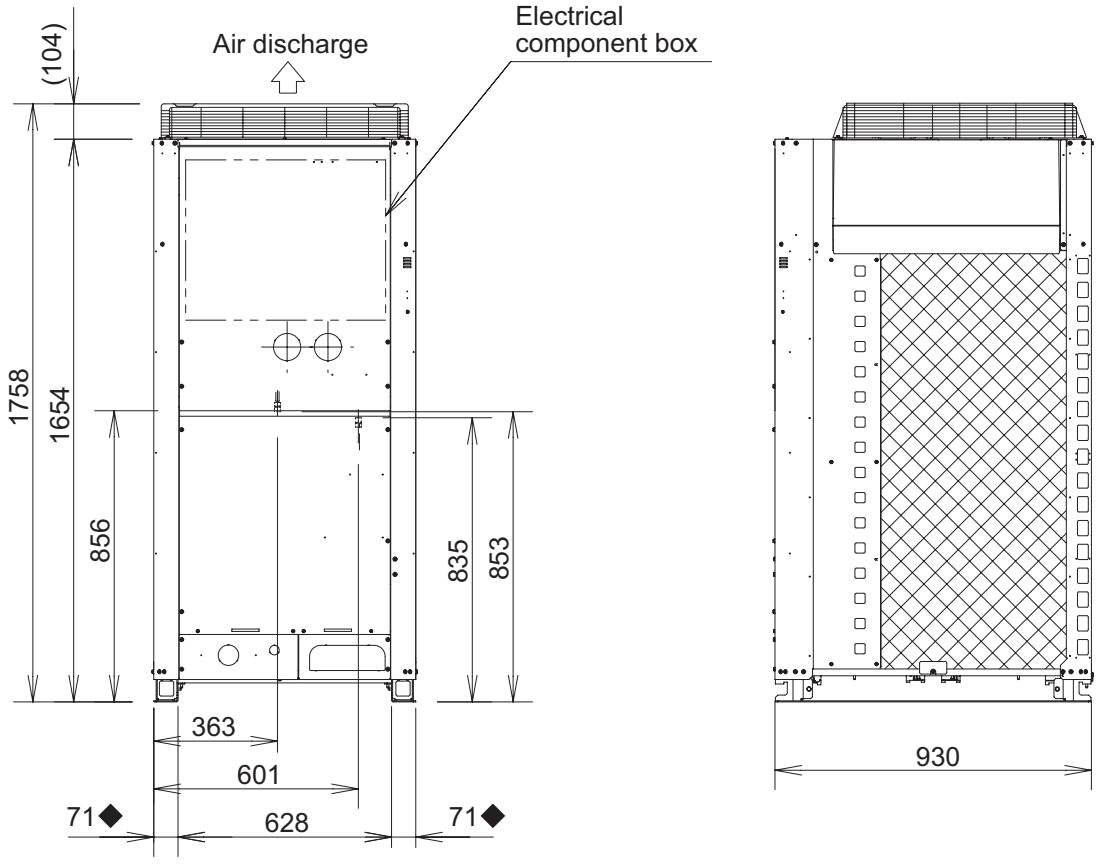
Outdoor units

Model	U-8ME1E81	U-10ME1E81	U-12ME1E81
Capacity: kW (BTU/h) Cooling / Heating	22.4 (76,500)/ 25.0 (85,300)	28.0 (95,600)/ 31.5 (107,500)	33.5 (114,300)/ 37.5 (128,000)

unit: mm



Top view



Front view **Side view**

◆ Installation fixing bracket Installation side

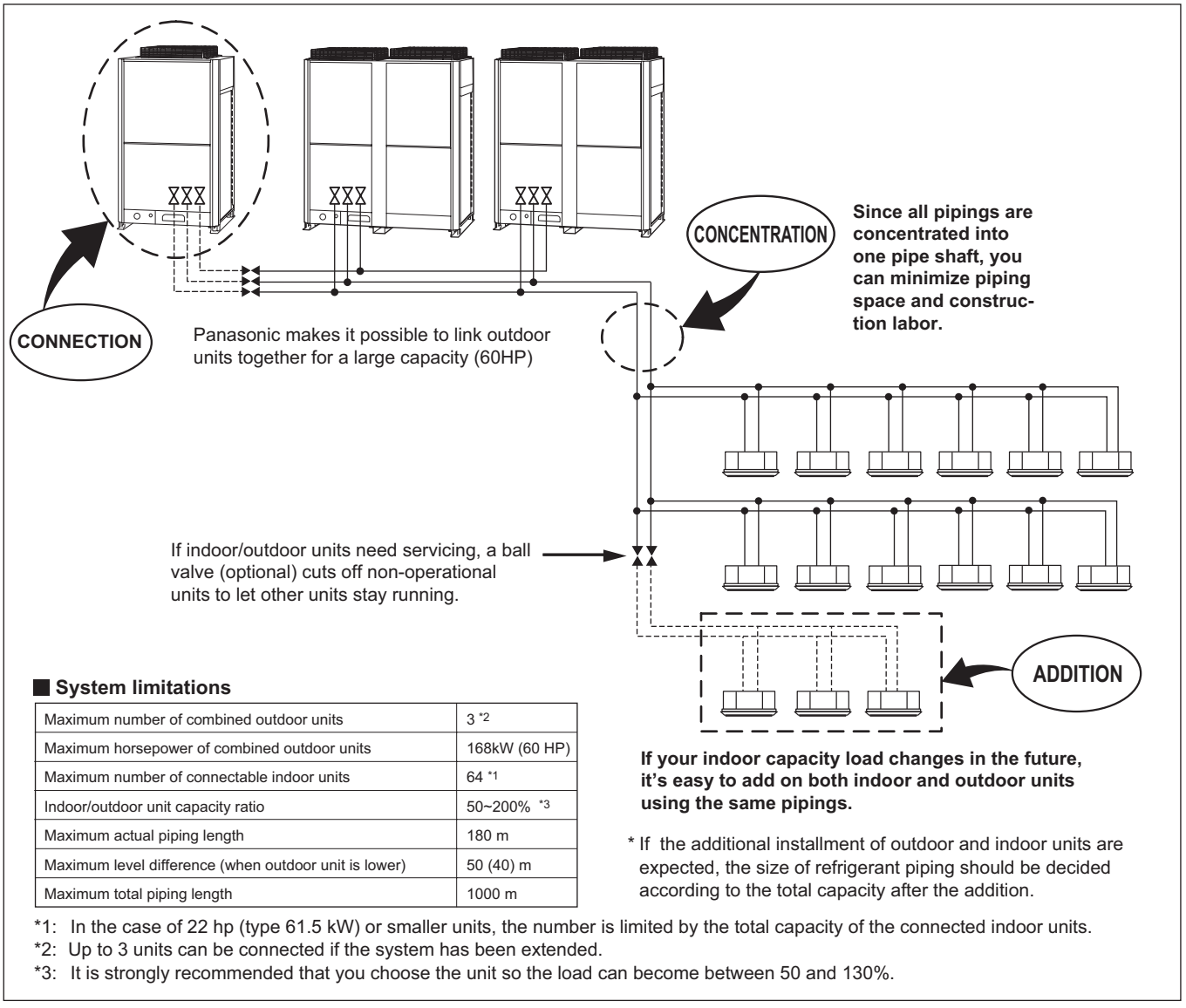
According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from "A", "B" or "C".

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



* If the additional installment of outdoor and indoor units are expected, the size of refrigerant piping should be decided according to the total capacity after the addition.

■ System limitations

Maximum number of combined outdoor units	3 *2
Maximum horsepower of combined outdoor units	168kW (60 HP)
Maximum number of connectable indoor units	64 *1
Indoor/outdoor unit capacity ratio	50~200% *3
Maximum actual piping length	180 m
Maximum level difference (when outdoor unit is lower)	50 (40) m
Maximum total piping length	1000 m

*1: In the case of 22 hp (type 61.5 kW) or smaller units, the number is limited by the total capacity of the connected indoor units.
*2: Up to 3 units can be connected if the system has been extended.
*3: It is strongly recommended that you choose the unit so the load can become between 50 and 130%.

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																			
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

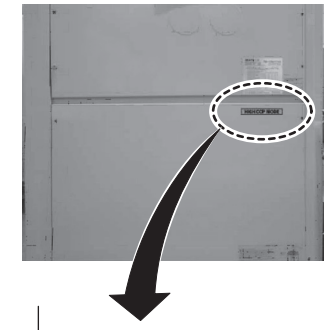
* Be sure that the total load of indoor unit (load when operating the maximum number of units) should not exceed 130% of the outdoor unit capacity.

2. Features of 2WAY SYSTEM

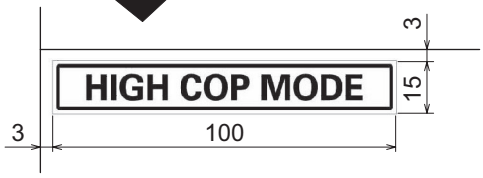
■ Setting procedure for using High-COP mode

(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.



Unit: mm



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

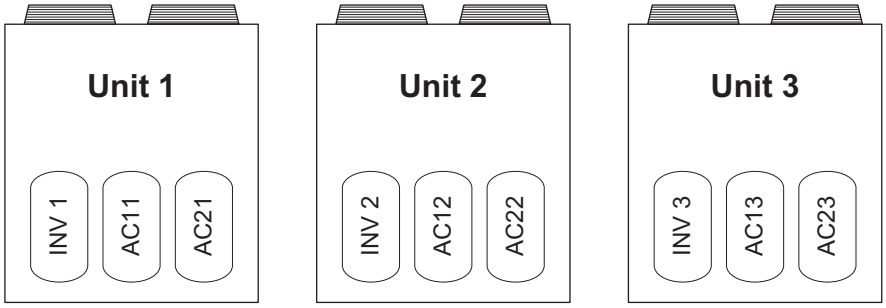
The compressor combination (DC inverter compressor + constant-speed compressor) allows smooth capacity control from 0.8 HP to 60 HP.

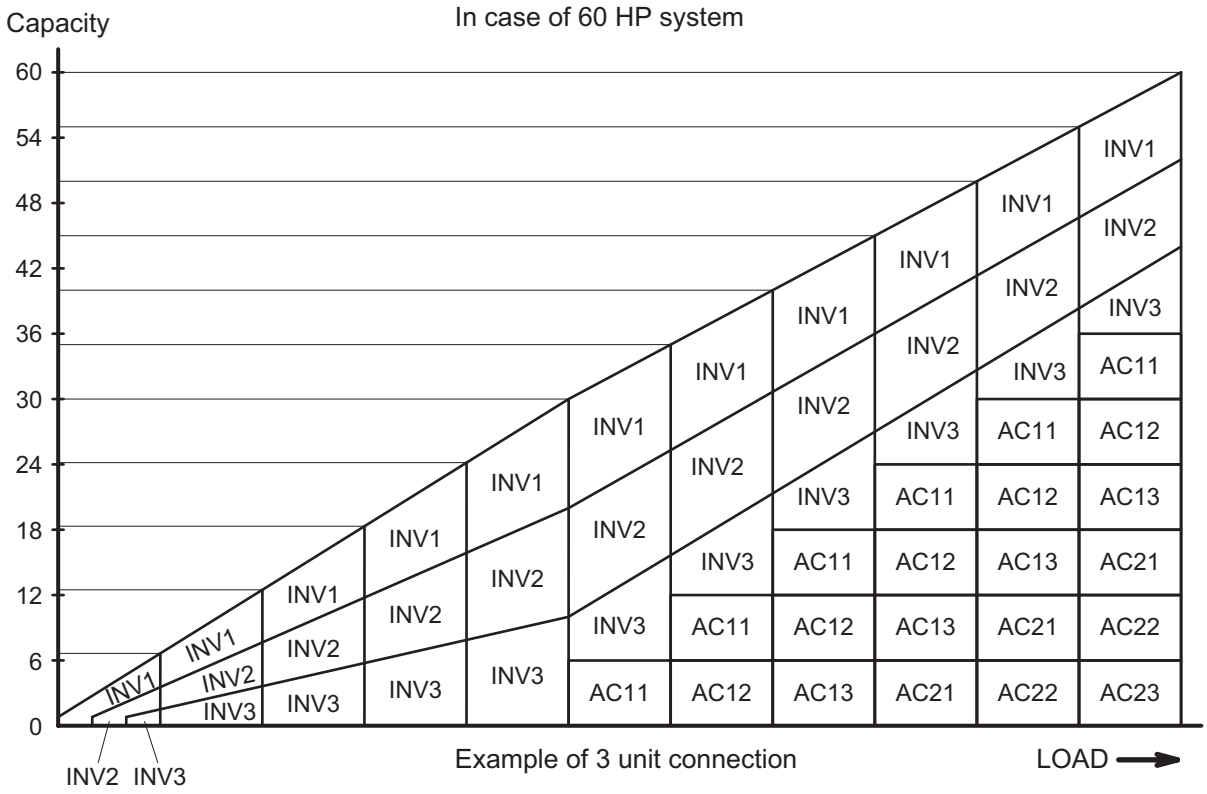
Realization of smooth capacity control from 0.8HP to 60HP

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

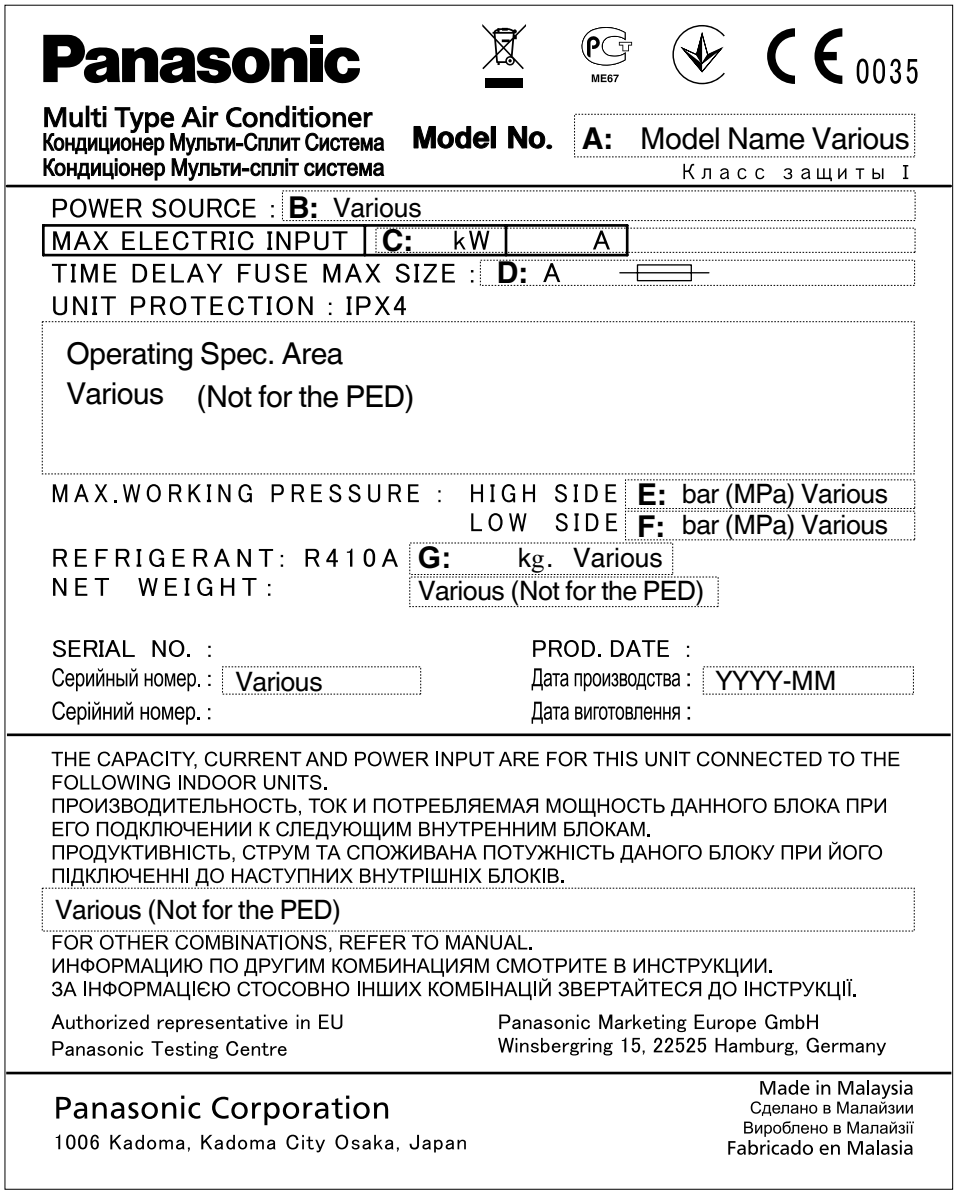
* 60HP = U-20ME1E81 x 3





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

Rating nameplate figure



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

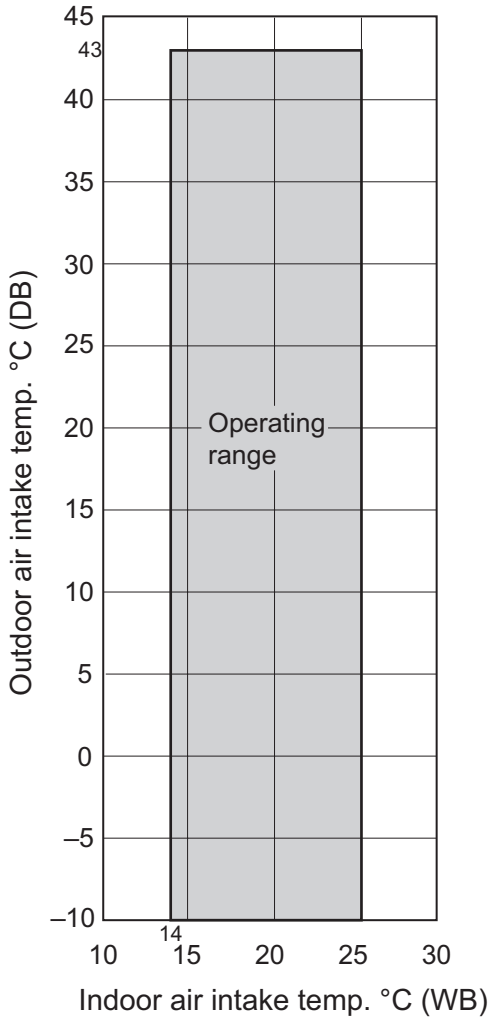
Contents

2. DESIGN OF 2WAY SYSTEM

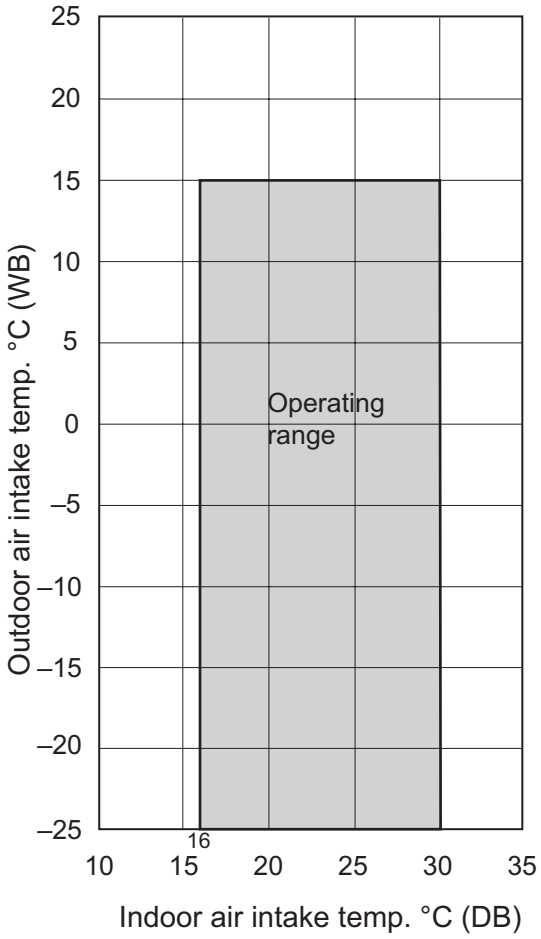
1. Model Selecting and Capacity Calculator

1-1. Operating Range

Cooling



Heating



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.

2

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

Outdoor unit

	(A) Power supply		Time delay fuse or circuit capacity		(A) Power supply		Time delay fuse or circuit capacity
	Wire size	Max. length			Wire size	Max. length	
U-8ME1E81	4 mm²	56 m	25 A		6 mm²	84 m	35 A
U-10ME1E81	4 mm²	46 m	25 A		6 mm²	69 m	35 A
U-12ME1E81	6 mm²	65 m	35 A	or	6 mm²	65 m	35 A
U-14ME1E81	10 mm²	91 m	35 A		10 mm²	91 m	50 A
U-16ME1E81	10 mm²	75 m	45 A		10 mm²	75 m	50 A
U-18ME1E81	10 mm²	70 m	50 A		10 mm²	70 m	50 A
U-20ME1E81	10 mm²	58 m	50 A		10 mm²	58 m	50 A

Indoor unit

Type	(B) Power supply		Time delay fuse or circuit capacity
	Minimum 2 mm²	2.5 mm²	
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

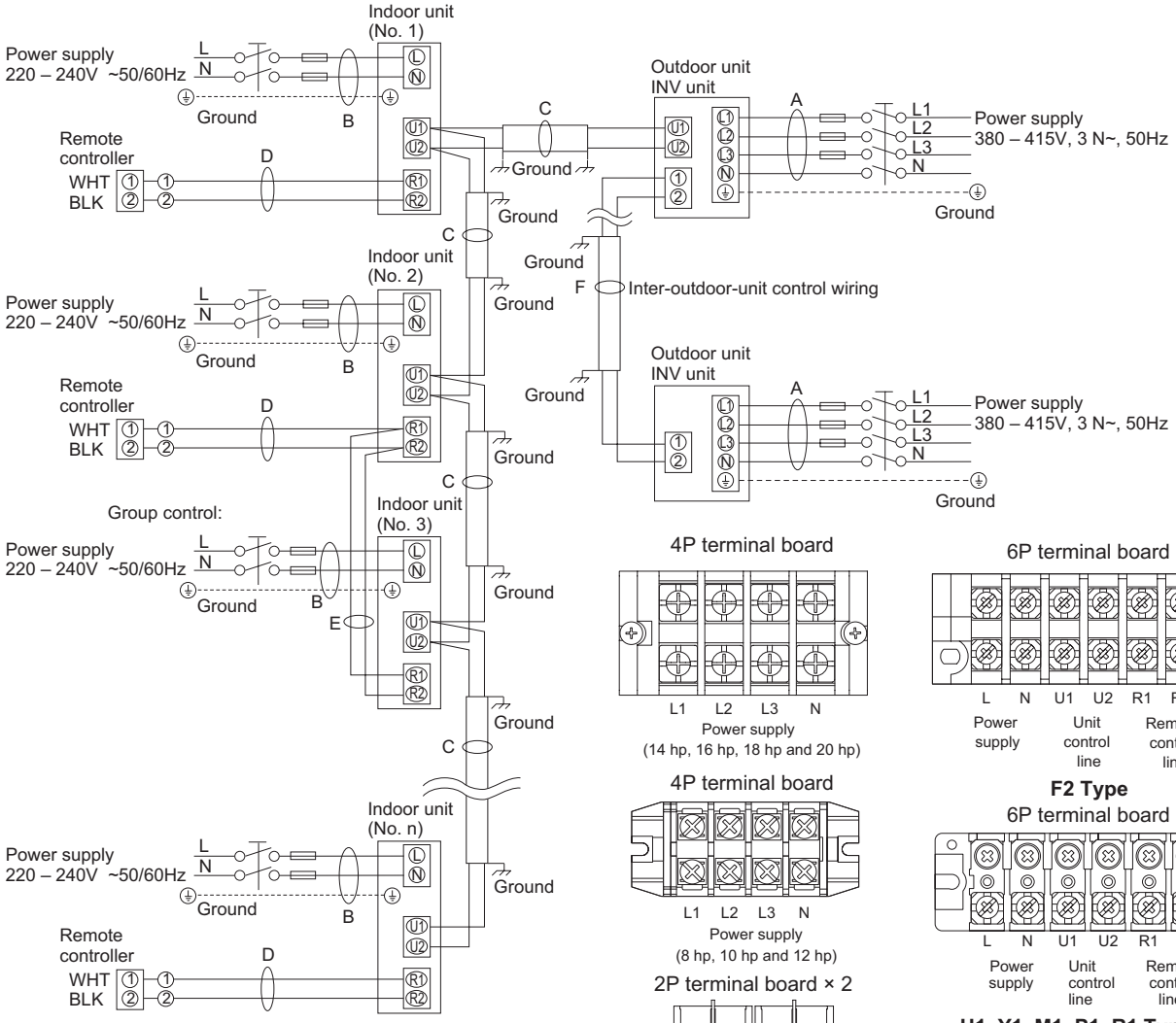
(C) Inter-unit (between outdoor and indoor units) control wiring			(D) Remote control wiring
0.75 mm² (AWG #18) **Use shielded wiring***	or	2.0 mm² (AWG #14) **Use shielded wiring***	0.75 mm² (AWG #18)
Max. 1,000 m		Max. 2,000 m	Max. 500 m

NOTE * With ring-type wire terminal.

(E) Control wiring for group control	(F) Inter-outdoor unit control wiring
0.75 mm² (AWG #18)	0.75 mm² (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.

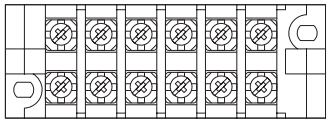
(3) Refrigerant Circuit (R.C.) address should be set before turning the power on.

(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.

4P terminal board

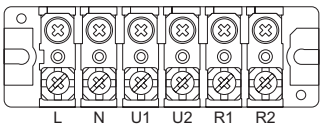
6P terminal board



F2 Type

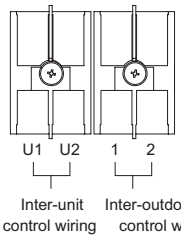
4P terminal board

6P terminal board



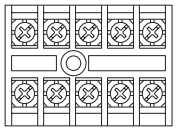
U1, Y1, M1, P1, R1 Types

2P terminal board × 2



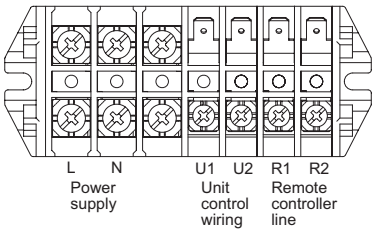
ME1 Type

5P terminal board



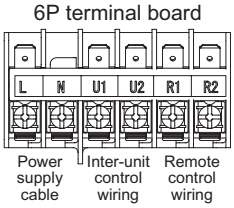
K1 Type

7P terminal board



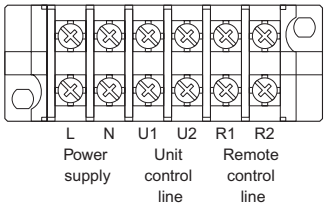
T1, F1, E1, D1, L1 Types

6P terminal board



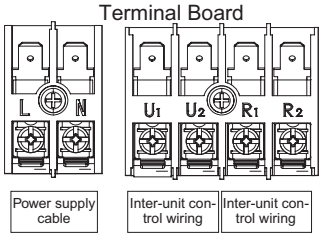
K2 Type

6P terminal board



U1 Type

Terminal Board



Y2 Type

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)

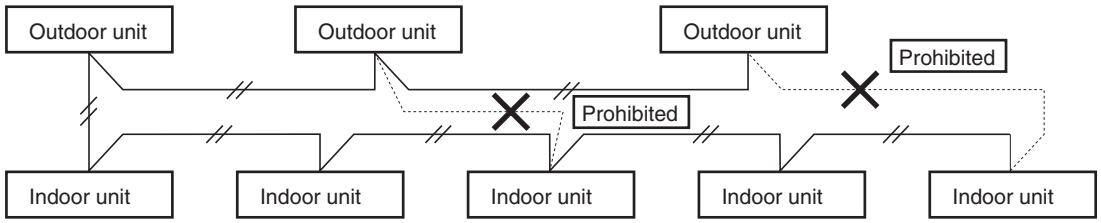


Fig. 2-2

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

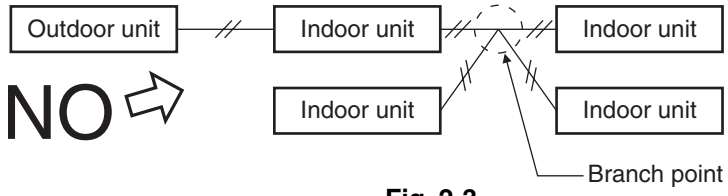


Fig. 2-3

(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)

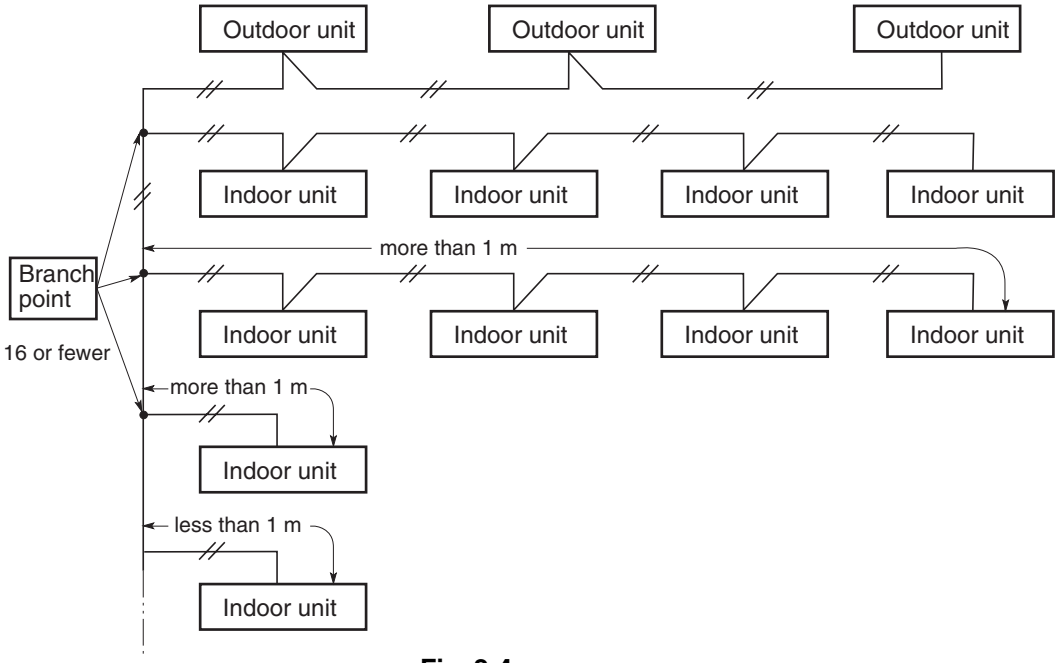


Fig. 2-4

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)

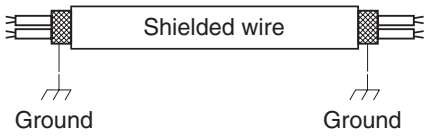


Fig. 2-5

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)

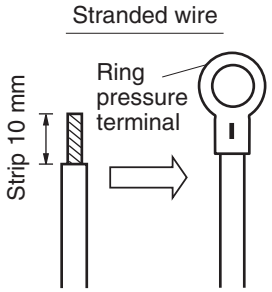


Fig. 2-6

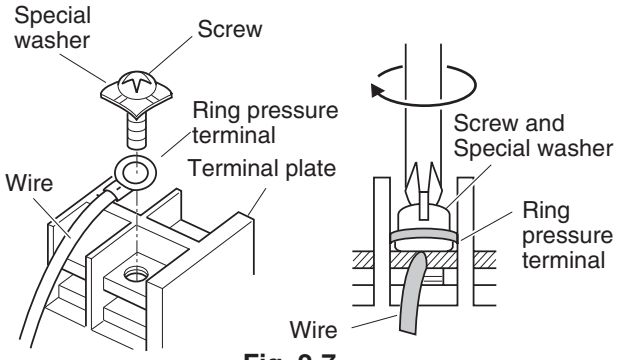


Fig. 2-7

■ 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

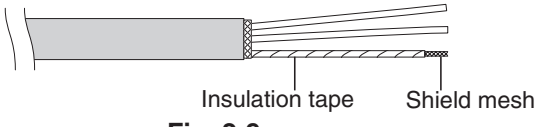


Fig. 2-9

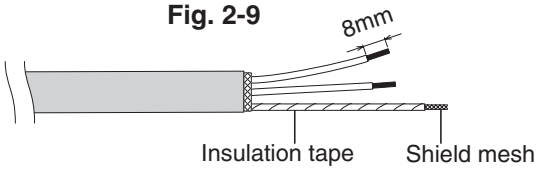


Fig. 2-10

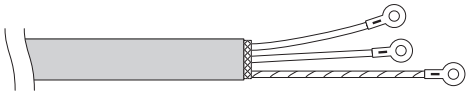


Fig. 2-11

■ Earth wire for power supply

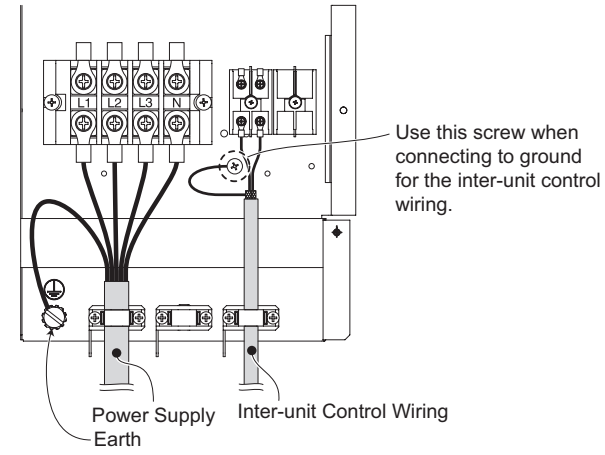
The earth wire should be longer than the other lead wires for electrical safety.

3. Electrical Wiring

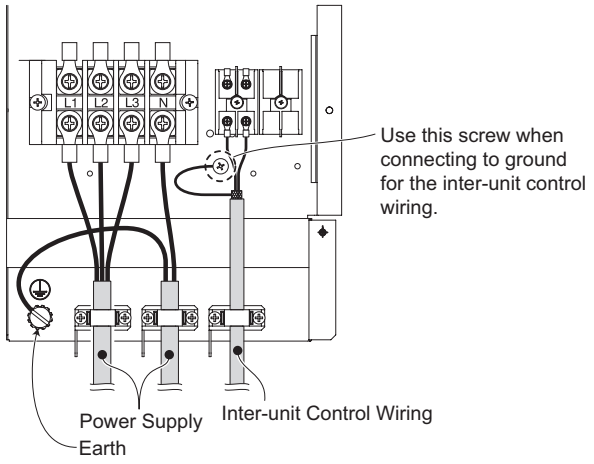
■ Wiring sample

Outdoor Unit : ME1 Type

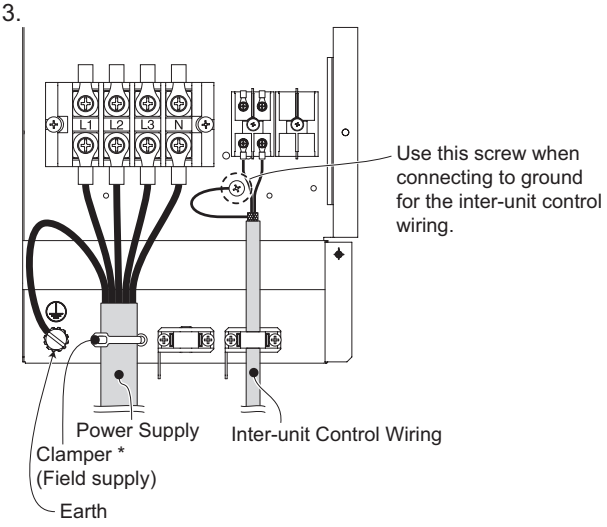
1.



2.

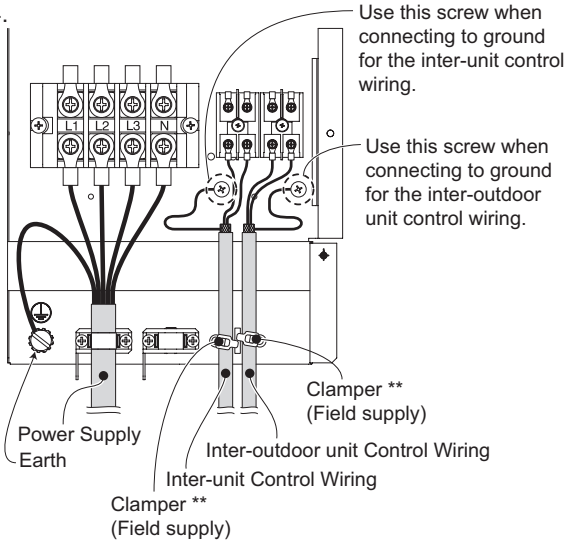


3.



* First remove the attached resin fixture.
Then lead the clamper (field supply) through the screw hole and fix the power supply wire.

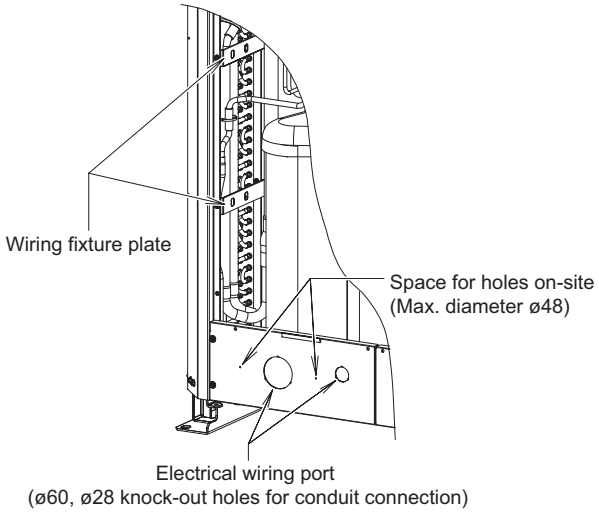
4.



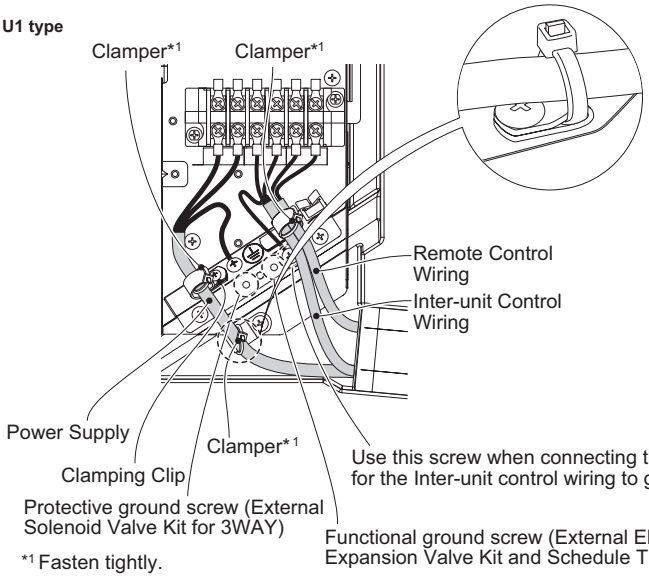
** First remove the attached resin fixture.
Then lead the clamper (field supply) through the screw hole and square hole from top to bottom or vice versa.
Finally fix each inter-outdoor unit control wire and the inter-unit control wire separately with the clamper (field supply).

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.



U1 type



*1 Fasten tightly.

Contents

4. 2WAY SYSTEM UNIT SPECIFICATIONS

1. Outdoor Unit

1-1. Specifications (Standard-COP mode)

Unit specifications (1)

OUTDOOR		MODEL	U-8ME1E81			U-10ME1E81			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
COOLING	CAPACITY	kW	22.4	22.4	22.4	28.0	28.0	28.0	33.5	33.5	33.5
		BTU/h	76500	76500	76500	95600	95600	95600	114300	114300	114300
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	8.90	8.50	8.20	12.90	12.20	11.80	15.40	14.60	14.10
	INPUT POWER	W	5.54k	5.54k	5.54k	7.78k	7.78k	7.78k	9.29k	9.29k	9.29k
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	4.04	4.04	4.04	3.60	3.60	3.60	3.61	3.61	3.61
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	95	94	94	92	92	92	92	92	92
	NOISE INDOOR (H/L)	dB-A	-			-			-		
		Power Level dB	-			-			-		
	NOISE OUTDOOR (H/L)	dB-A	56.5 / -			59.0 / -			61.0 / -		
		Power Level dB	71.0 / -			73.5 / -			75.5 / -		
HEATING	CAPACITY	kW	25.0	25.0	25.0	31.5	31.5	31.5	37.5	37.5	37.5
		BTU/h	85300	85300	85300	107500	107500	107500	128000	128000	128000
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	8.80	8.40	8.10	12.70	12.10	11.60	15.10	14.40	13.90
	INPUT POWER	W	5.48k	5.48k	5.48k	7.68k	7.68k	7.68k	9.15k	9.15k	9.15k
	COP/COP CLASS	(W/W)*5/("A"~"G")	4.56	4.56	4.56	4.10	4.10	4.10	4.10	4.10	4.10
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	95	94	94	92	92	92	92	92	92
	NOISE INDOOR (H/L)	dB-A	-			-			-		
		Power Level dB	-			-			-		
EXTRA LOW TEMP	CAPACITY(kW)/INPUT POWER(W)/COP		-			-			-		
	MAX CURRENT(A)/MAX INPUT POWER(W)		11.7 / 7.3k	11.7 / 7.6k	11.7 / 7.9k	16.4 / 9.9k	16.4 / 10.5k	16.4 / 10.8k	19.7 / 11.9k	19.7 / 12.5k	19.7 / 13.0k
STARTING CURRENT(A)/COMP OUTPUT(W)			1 / -	1 / -	1 / -	1 / -	1 / -	1 / -	78 / -	81 / -	85 / -
NETWORK IMPEDANCE (ΩMAX.) *3			-			-			-		
FM OUTPUT (I.D./O.D.) W			-	/	750	-	/	750	-	/	750
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}
I.D. AIR FLOW	COOL	m^3/min (ft^3/min)	-			-			-		
	HEAT	m^3/min (ft^3/min)	-			-			-		
O.D. AIR FLOW		m^3/min (ft^3/min)	147		(5191)	153		(5403)	190		(6710)
REFRIGERANT TYPE, AMOUNT (O.D. Base / MAX) g(oz)			R410A	6.5k / 50.0k	(229 / 1764)	R410A	6.8k / 50.0k	(240 / 1764)	R410A	6.8k / 50.0k	(240 / 1764)
PRO DIM	HEIGHT : H mm(inch) O.D.		1758		(69-7/32)	1758		(69-7/32)	1758		(69-7/32)
	WIDTH : W mm(inch) O.D.		770		(30-5/16)	770		(30-5/16)	770		(30-5/16)
	DEPTH : D mm(inch) O.D.		930		(36-39/64)	930		(36-39/64)	930		(36-39/64)
PAC DIM	HEIGHT : H mm(inch) O.D.		1873		(73-47/64)	1873		(73-47/64)	1873		(73-47/64)
	WIDTH : W mm(inch) O.D.		878		(34-9/16)	878		(34-9/16)	878		(34-9/16)
	DEPTH : D mm(inch) O.D.		1030		(40-35/64)	1030		(40-35/64)	1030		(40-35/64)
MASS	(NET) kg(lb) O.D.		234		(516)	234		(516)	281		(619)
	(GROSS) kg(lb) O.D.		245		(540)	245		(540)	292		(644)
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		
PIPING	MAIN PIPE DIAMETER (NORMAL) mm (inch) (OVER 90m FOR ULTIMATE I.D.) mm (inch)		(Liquid) ø9.52 (3/8) (Gas) ø19.05 (3/4) *1 (Balance) ø6.35(1/4) (Liquid) ø12.7 (1/2) (Gas) ø22.22 (7/8)			(Liquid) ø9.52 (3/8) (Gas) ø22.22 (7/8) *1 (Balance) ø6.35(1/4) (Liquid) ø12.7 (1/2) (Gas) ø25.4 (1 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)		
	CONNECT METHOD		flared(Liquid) ,brazing(Gas) ,flared(Balance)			flared(Liquid) ,brazing(Gas) ,flared(Balance)			flared(Liquid) ,brazing(Gas) ,flared(Balance)		
	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 (m^3/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
COOLING	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	-			-			-		
		Power Level dB	-			-			-		
	NOISE OUTDOOR (H/L)	dB-A	63.0 / -			63.0 / -			63.5 / -		
		Power Level dB	77.5 / -			77.5 / -			78.0 / -		
HEATING	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	-			-			-		
EXTRA LOW 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}
I.D. AIR FLOW	COOL	m^3/min (ft^3/min)	-			-			-		
	HEAT	m^3/min (ft^3/min)	-			-			-		
O.D. AIR FLOW		m^3/min (ft^3/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)
PRO DIM	HEIGHT : H mm(inch) O.D.		1758		(69-7/32)	1758		(69-7/32)	1758		(69-7/32)
	WIDTH : W mm(inch) O.D.		1540		(60-5/8)	1830		(72-3/64)	1830		(72-3/64)
	DEPTH : D mm(inch) O.D.		930		(36-39/64)	930		(36-39/64)	930		(36-39/64)
PAC DIM	HEIGHT : H mm(inch) O.D.		1873		(73-47/64)	-		-	-		-
	WIDTH : W mm(inch) O.D.		1696		(66-49/64)	-		-	-		-
	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		
PIPING	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)		
	CONNECT METHOD		flared(Liquid) ,brazing(Gas) ,flared(Balance)			flared(Liquid) ,brazing(Gas) ,flared(Balance)			flared(Liquid) ,brazing(Gas) ,flared(Balance)		
	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 (m^3/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
COOLING	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
	INPUT POWER	W	20.30k	20.30k	20.30k	22.60k	22.60k	22.60k	24.50k	24.50k	24.50k
	ANNUAL CONSUMPTION	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	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	93	93	93	93	93	93	94	94	93
	NOISE INDOOR (H/L)	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 / -		
HEATING	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
	COP/COP CLASS	(W/W)*5/("A"~"G")	4.12	4.12	4.12	3.96	3.96	3.96	4.03	4.03	4.03
	COP	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	93	93	93	93	93	93	94	94	94
	NOISE INDOOR (H/L)	dB-A	-			-			-		
		Power Level dB	-			-			-		
EXTRA LOW 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}
I.D. AIR FLOW	COOL	m^3/min (ft^3/min)	-			-			-		
	HEAT	m^3/min (ft^3/min)	-			-			-		
O.D. AIR FLOW		m^3/min (ft^3/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	17.0k / 80.0k (600 / 2822)	
PRO DIM	HEIGHT : H mm(inch) O.D.		1758	(69-7/32)		1758	(69-7/32)		1758	(69-7/32)	
	WIDTH : W mm(inch) O.D.		1830	(72-3/64)		1830	(72-3/64)		2060	(81-7/64)	
	DEPTH : D mm(inch) O.D.		930	(36-39/64)		930	(36-39/64)		930	(36-39/64)	
PAC DIM	HEIGHT : H mm(inch) O.D.		-	-		-	-		-	-	
	WIDTH : W mm(inch) O.D.		-	-		-	-		-	-	
	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		
PIPING	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)		
	CONNECT METHOD		brazing(Liquid) ,brazing(Gas) ,flared(Balance)			brazing(Liquid) ,brazing(Gas) ,flared(Balance)			brazing(Liquid) ,brazing(Gas) ,flared(Balance)		
	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 (m^3/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
COOLING	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	-			-			-		
		Power Level dB	-			-			-		
	NOISE OUTDOOR (H/L)	dB-A	65.0 / -			66.0 / -			66.5 / -		
		Power Level dB	79.5 / -			80.5 / -			81.0 / -		
HEATING	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	-			-			-		
EXTRA LOW 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}
I.D. AIR FLOW	COOL	m^3/min (ft^3/min)	-			-			-		
	HEAT	m^3/min (ft^3/min)	-			-			-		
O.D. AIR FLOW		m^3/min (ft^3/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	23.8k / 105.0k (840 / 3704)	
PRO DIM	HEIGHT : H mm(inch) O.D.		1758	(69-7/32)		1758	(69-7/32)		1758	(69-7/32)	
	WIDTH : W mm(inch) O.D.		3140	(123-5/8)		3140	(123-5/8)		2890	(113-25/32)	
	DEPTH : D mm(inch) O.D.		930	(36-39/64)		930	(36-39/64)		930	(36-39/64)	
PAC DIM	HEIGHT : H mm(inch) O.D.		-	-		-	-		-	-	
	WIDTH : W mm(inch) O.D.		-	-		-	-		-	-	
	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)		
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		
PIPING	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)		
	CONNECT METHOD		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)	
	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 (m^3/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		
POWER SUPPLY		ø, Hz	3ø 50Hz			3ø 50Hz			3ø 50Hz		
		V	380	400	415	380	400	415	380	400	415
COOLING	CAPACITY	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
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	A	59.10	56.20	54.20	61.60	58.50	56.40	65.50	62.20	60.00
	INPUT POWER	W	36.20k	36.20k	36.20k	37.90k	37.90k	37.90k	40.30k	40.30k	40.30k
	ANNUAL CONSUMPTION	W *4	-	-	-	-	-	-	-	-	-
	EER/EER CLASS	(W/W)*5/("A"~"G")	3.43	3.43	3.43	3.43	3.43	3.43	3.35	3.35	3.35
	EER	BTU/hW	-	-	-	-	-	-	-	-	-
	POWER FACTOR	%	93	93	93	93	94	93	93	94	93
	NOISE INDOOR (H/L)	dB-A	-			-			-		
		Power Level dB	-			-			-		
	NOISE OUTDOOR (H/L)	dB-A	66.5 / -			67.0 / -			67.0 / -		
		Power Level dB	81.0 / -			81.5 / -			81.5 / -		
HEATING	CAPACITY	kW	138.0	138.0	138.0	145.0	145.0	145.0	150.0	150.0	150.0
		BTU/h	471000	471000	471000	494900	494900	494900	511900	511900	511900
		kcal/h(Fri./h)	-	-	-	-	-	-	-	-	-
	CURRENT	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	-			-			-		
EXTRA LOW 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}
I.D. AIR FLOW	COOL	m^3/min (ft^3/min)	-			-			-		
	HEAT	m^3/min (ft^3/min)	-			-			-		
O.D. AIR FLOW		m^3/min (ft^3/min)	614		(21683)	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)	
PRO DIM	HEIGHT : H mm(inch) O.D.		1758		(69-7/32)	1758		(69-7/32)	1758		(69-7/32)
	WIDTH : W mm(inch) O.D.		2890		(113-25/32)	3120		(122-53/64)	3120		(122-53/64)
	DEPTH : D mm(inch) O.D.		930		(36-39/64)	930		(36-39/64)	930		(36-39/64)
PAC DIM	HEIGHT : H mm(inch) O.D.		-		-	-		-	-		-
	WIDTH : W mm(inch) O.D.		-		-	-		-	-		-
	DEPTH : D mm(inch) O.D.		-		-	-		-	-		-
MASS	(NET) kg(lb) O.D.		899		(1982)	927		(2044)	927		(2044)
	(GROSS) kg(lb) O.D.		936		(2064)	966		(2130)	966		(2130)
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		
PIPING	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)		
	CONNECT METHOD		brazing(Liquid) ,brazing(Gas) ,flared(Balance)			brazing(Liquid) ,brazing(Gas) ,flared(Balance)			brazing(Liquid) ,brazing(Gas) ,flared(Balance)		
	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	

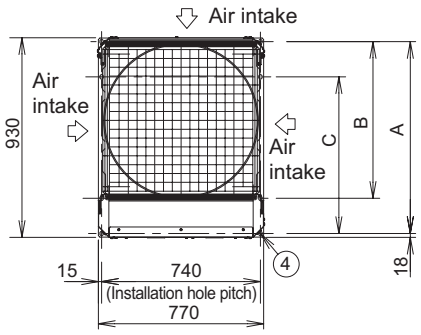
*1: Main Pipe Diameter size-up apply to O.D. to first branch pipe
*2: It's necessary to add Gas corresponding to total liquid pipe length, even if installation condition is shortest pipe length.
*3: Network Impedance shall be applicable for EUROPE and CHINA models.
*4: The annual consumption is calculated 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 (m^3/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

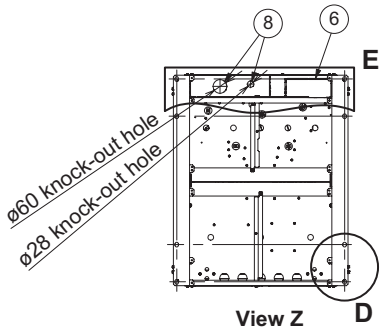
1-2 Dimensional Data

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

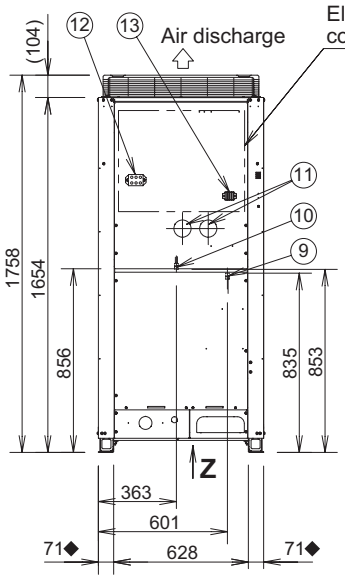
unit: mm



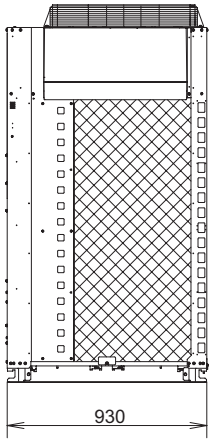
Top view



View Z

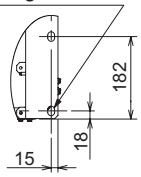


Front view



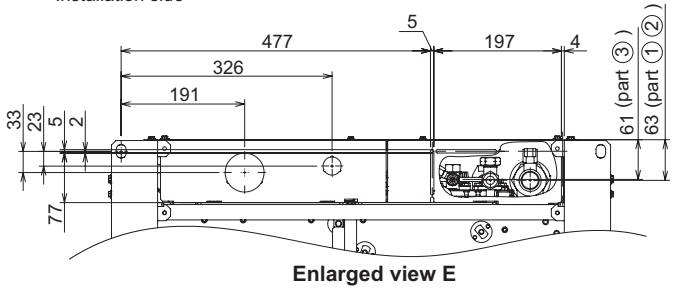
Side view

Installation hole
8 - 15 x 21 elongated hole



Enlarged view D

◆ Installation fixing bracket
Installation side

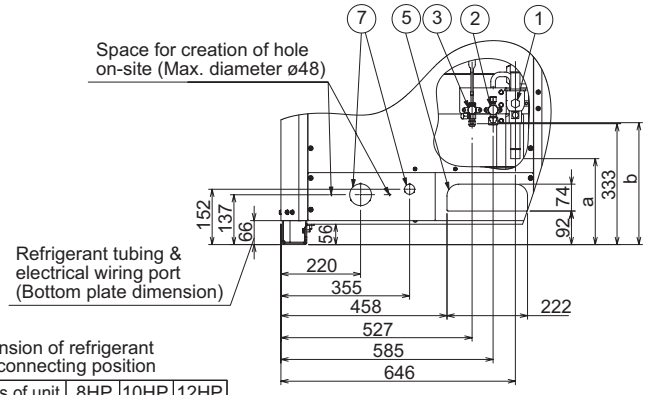


Enlarged view E

- 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		8HP	10HP	12HP
①	Refrigerant tubing (gas tube)	brazed connection	ø19.05	ø22.22	ø25.4
②	Refrigerant tubing (liquid tube)	flared connection	ø9.52	ø9.52	ø12.7
③	Refrigerant tubing (balance tube)	flared connection	ø6.35	ø6.35	ø6.35
④	Installation holes(8-15x21 elongated holes), anchor bolts M12 or larger				
⑤	Refrigerant tubing port (front: knock-out hole)				
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				

Position of refrigerant tube connection



Dimension of refrigerant tube connecting position

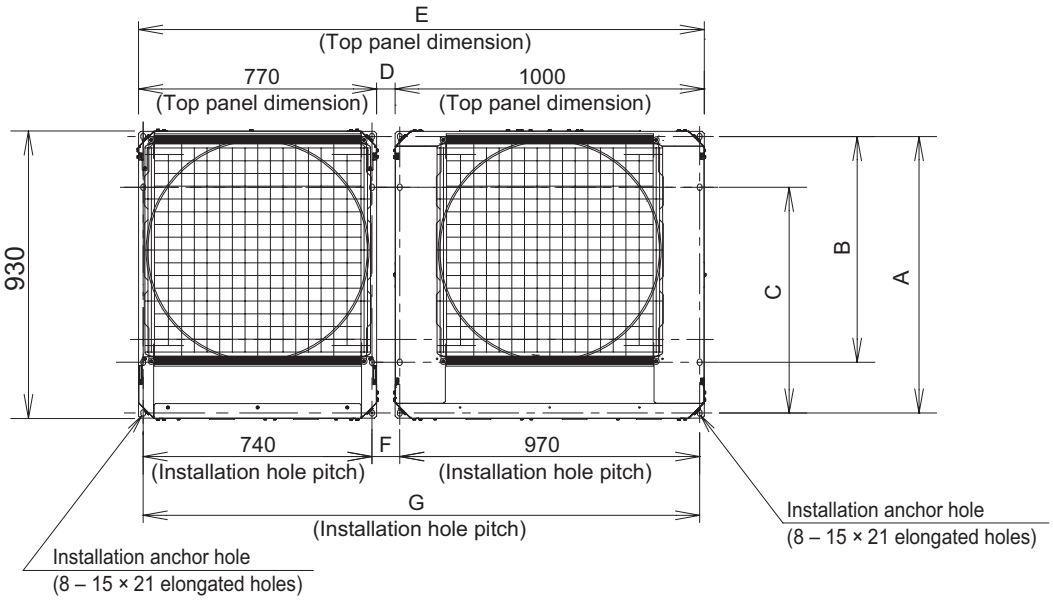
Types of unit	8HP	10HP	12HP
a	278	237	237
b	347	347	336

1. Outdoor Unit

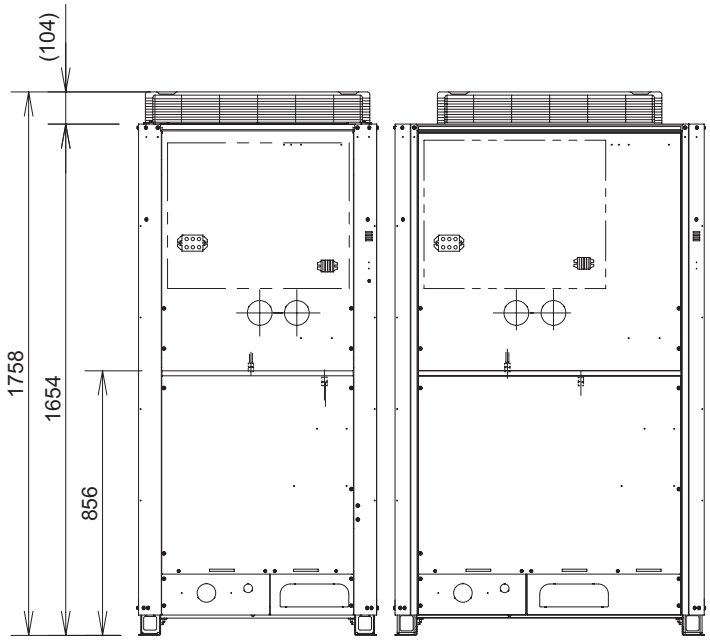
1-3. Multiple Unit Installation Example (Standard-COP mode)

● **Diagrams for 22hp ~ 28hp**

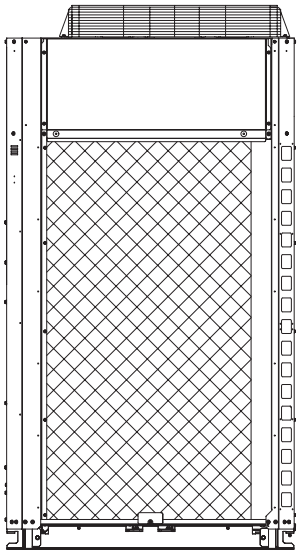
Unit: mm



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	—	—	—	○

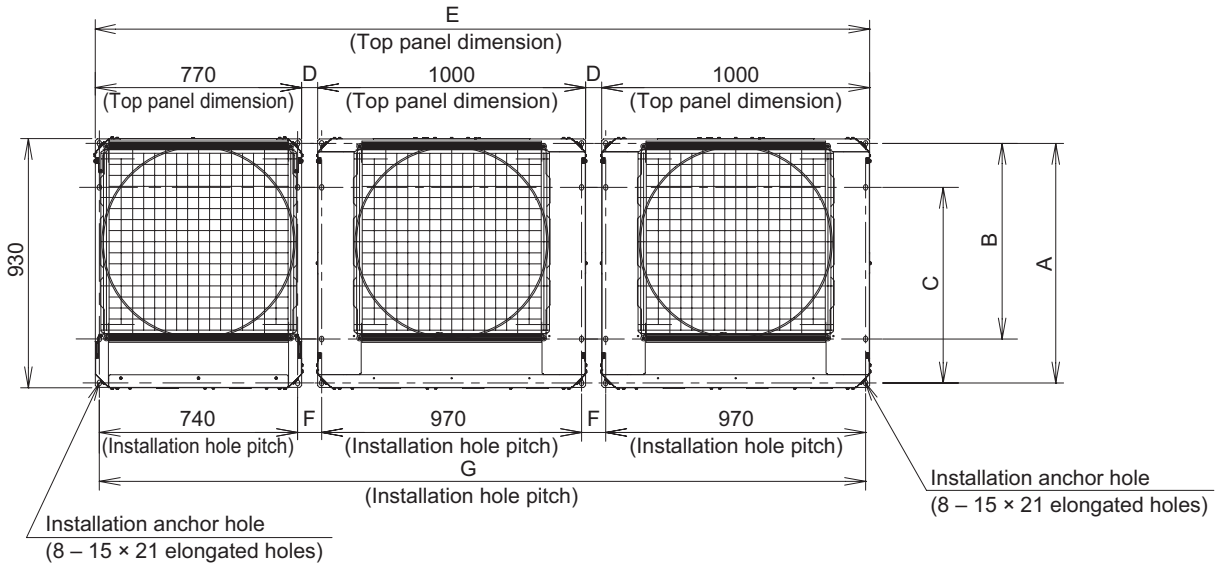
		D	E	F	G
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	1830	90	1800
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	1950	210	1920
C	730 (Installation hole pitch)	180	1950	210	1920

1. Outdoor Unit

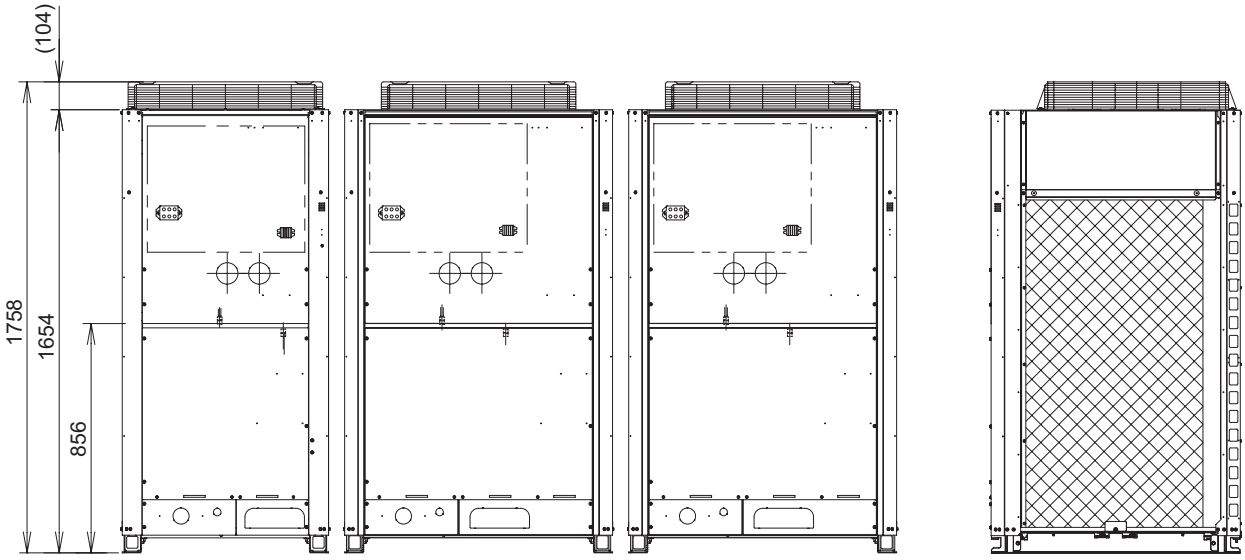
1-3. Multiple Unit Installation Example (Standard-COP mode)(continued)

- **Diagrams for 42hp & 44hp**

Unit: mm



Top view



Front view

Side view

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

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

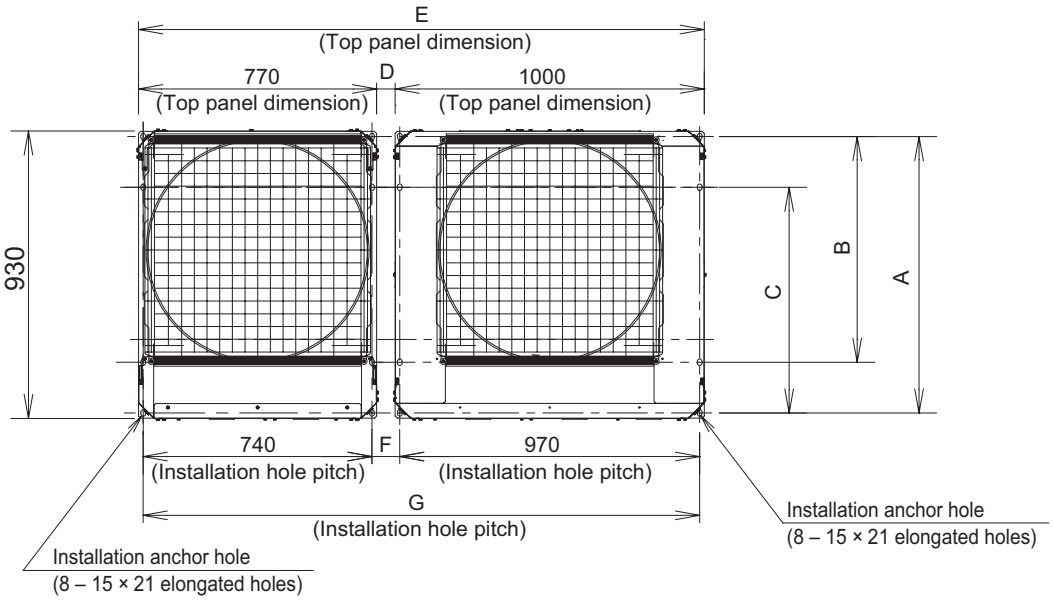
		D	E	F	G
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	2890	90	2860
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3130	210	3100
C	730 (Installation hole pitch)	180	3130	210	3100

1. Outdoor Unit

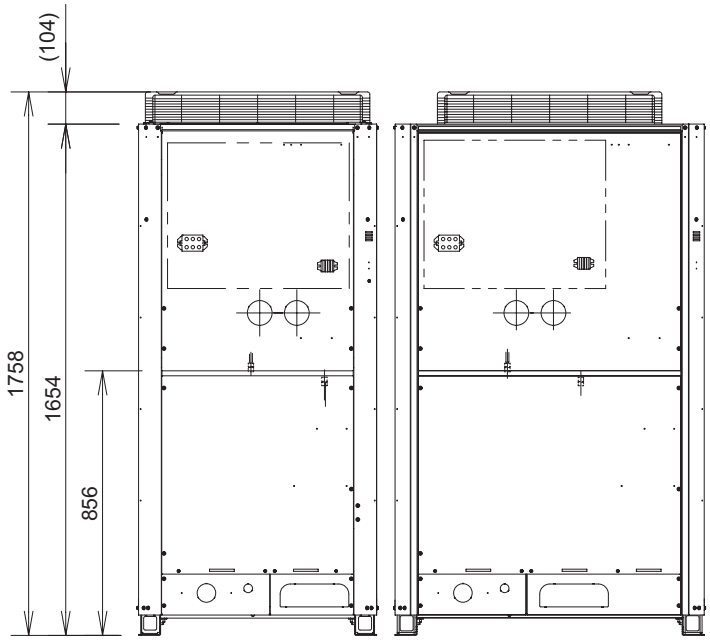
1-3. Multiple Unit Installation Example (High-COP mode)

- **Diagrams for 18hp & 20hp**

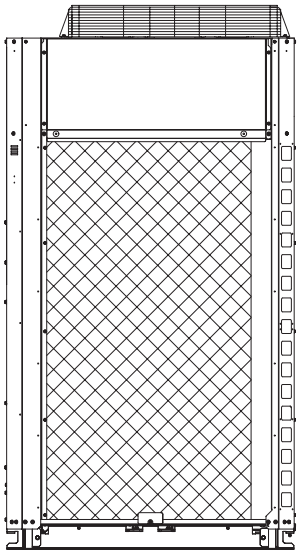
Unit: mm



Top view



Front view



Side view

Equivalent horsepower	18 hp	20 hp
U-8ME1E81	○	○
U-14ME1E81	○	—
U-16ME1E81	—	○

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

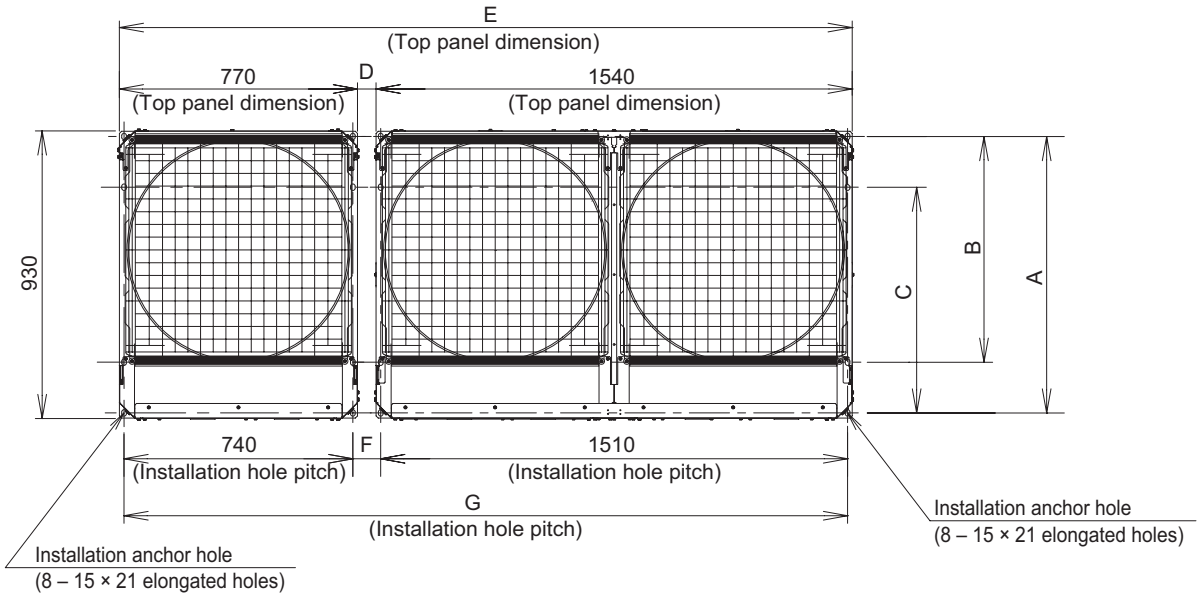
		D	E	F	G
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	1830	90	1800
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	1950	210	1920
C	730 (Installation hole pitch)	180	1950	210	1920

1. Outdoor Unit

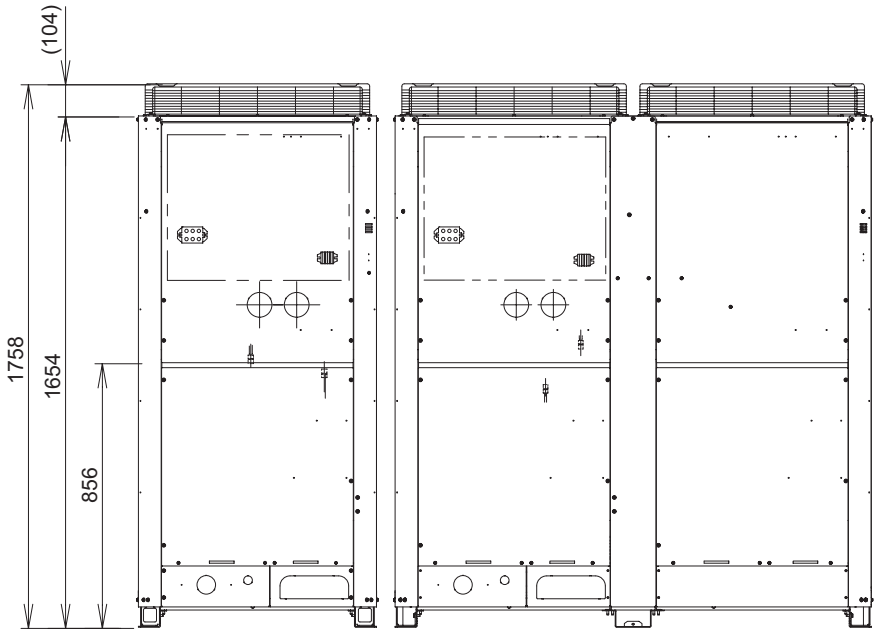
1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- **Diagrams for 22hp**

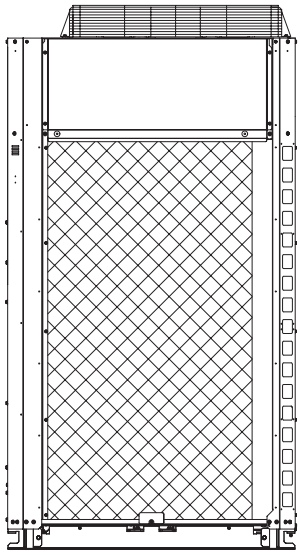
Unit: mm



Top view



Front view



Side view

Equivalent horsepower	22 hp
U-8ME1E81	○
U-18ME1E81	○

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

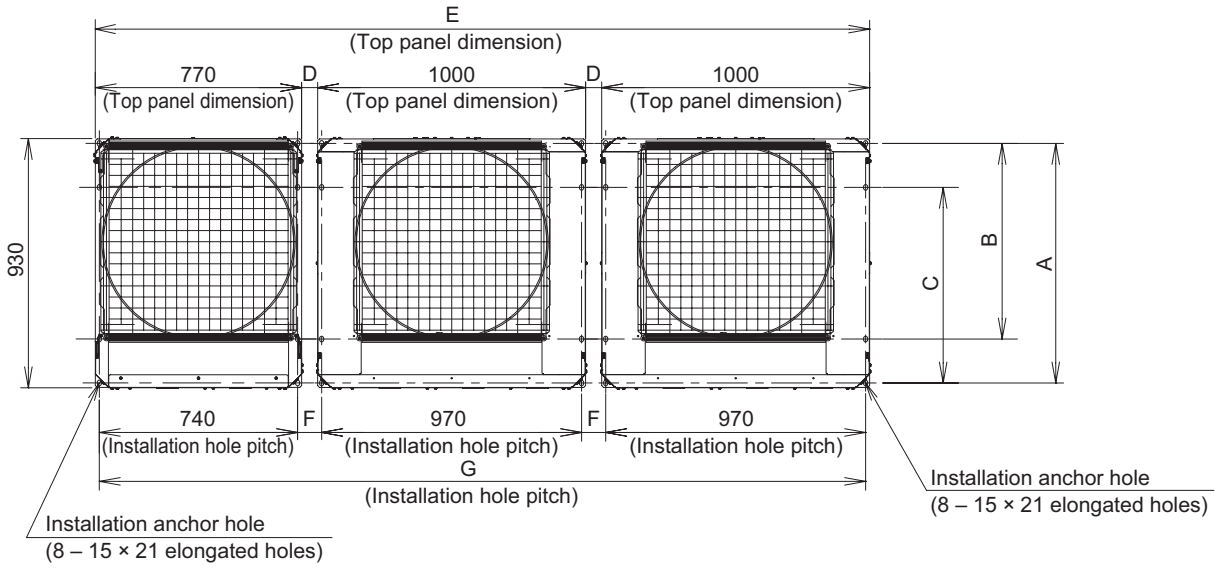
		D	E	F	G
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	2370	90	2340
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	2490	210	2460
C	730 (Installation hole pitch)	180	2490	210	2460

1. Outdoor Unit

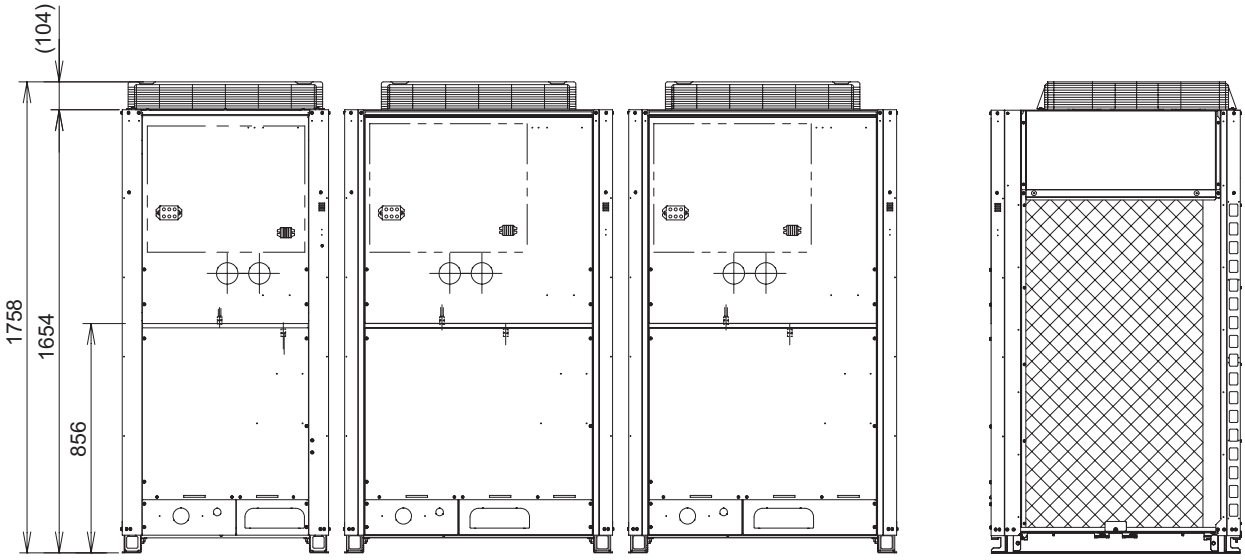
1-3. Multiple Unit Installation Example (High-COP mode)(continued)

- **Diagrams for 34hp**

Unit: mm



Top view



Front view

Side view

Equivalent horsepower	34 hp
U-8ME1E81	○
U-16ME1E81	○
U-18ME1E81	○

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

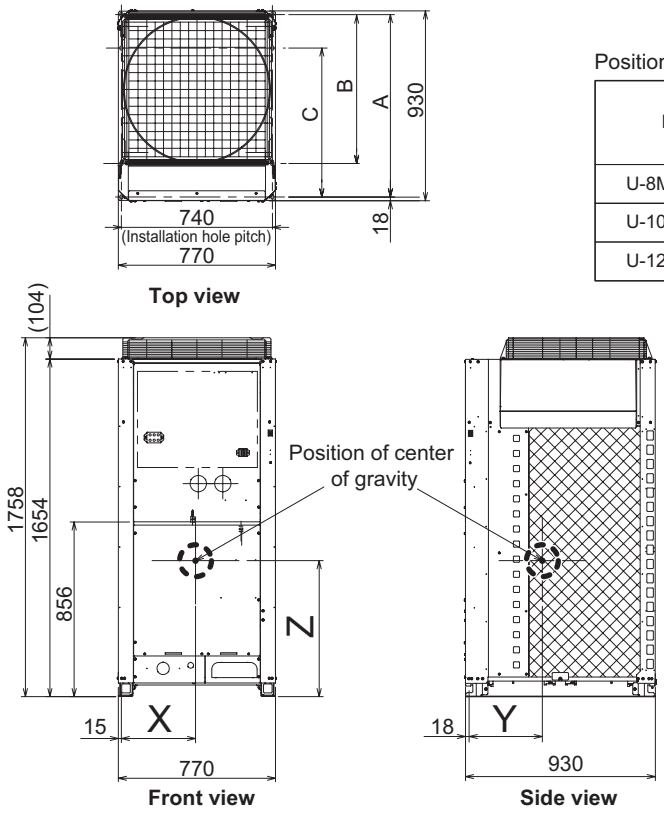
		D	E	F	G
A	894 (Installation hole pitch) * The tubing is routed out from the front.	60	2890	90	2860
B	730 (Installation hole pitch) * The tubing is routed out from the bottom.	180	3130	210	3100
C	730 (Installation hole pitch)	180	3130	210	3100

1. Outdoor Unit

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".

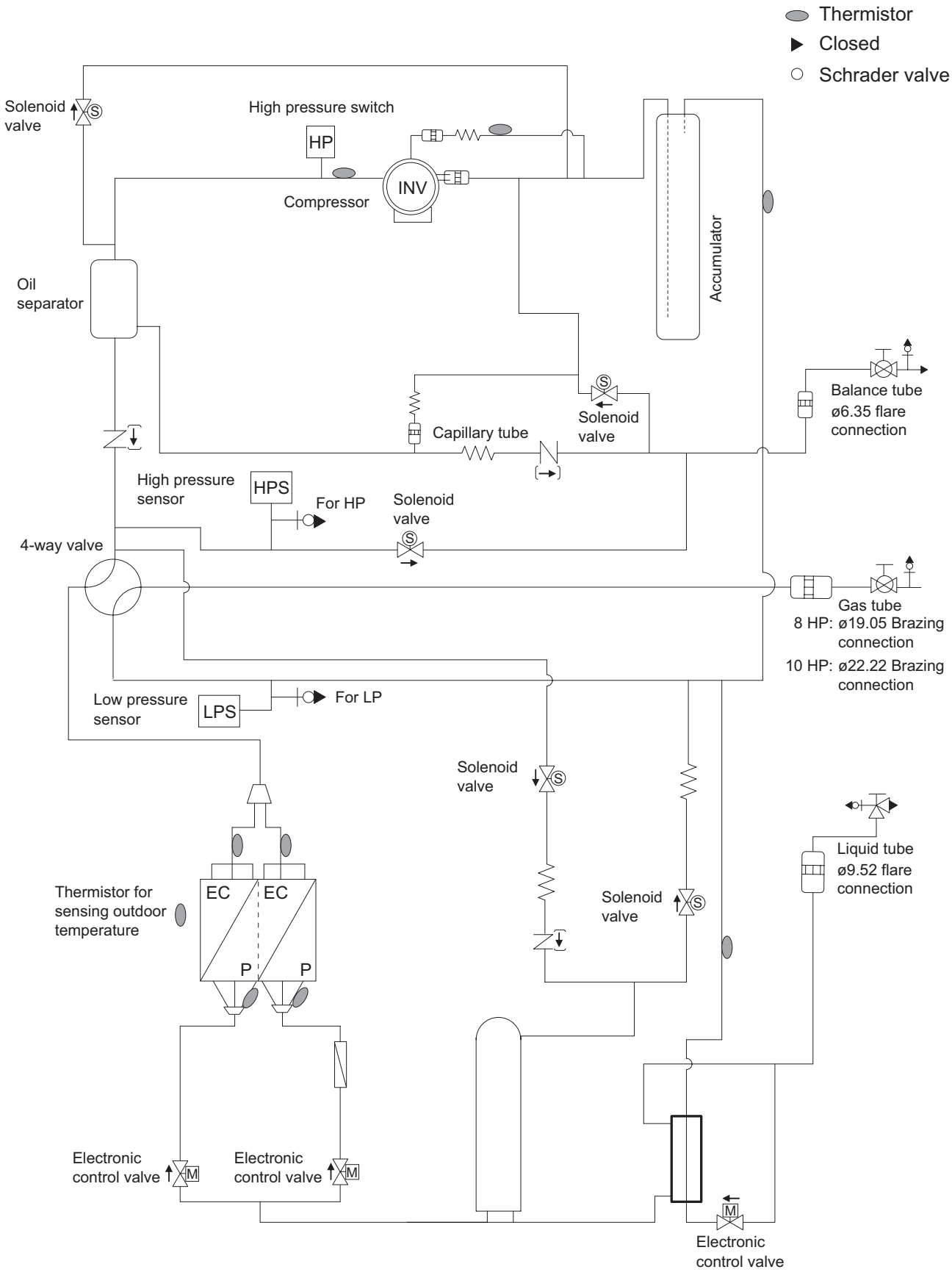
A : 894 (Installation hole pitch) * The tubing is routed out from the front.
B : 730 (Installation hole pitch) * The tubing is routed out from the bottom.
C : 730 (Installation hole pitch)

4

1. Outdoor Unit

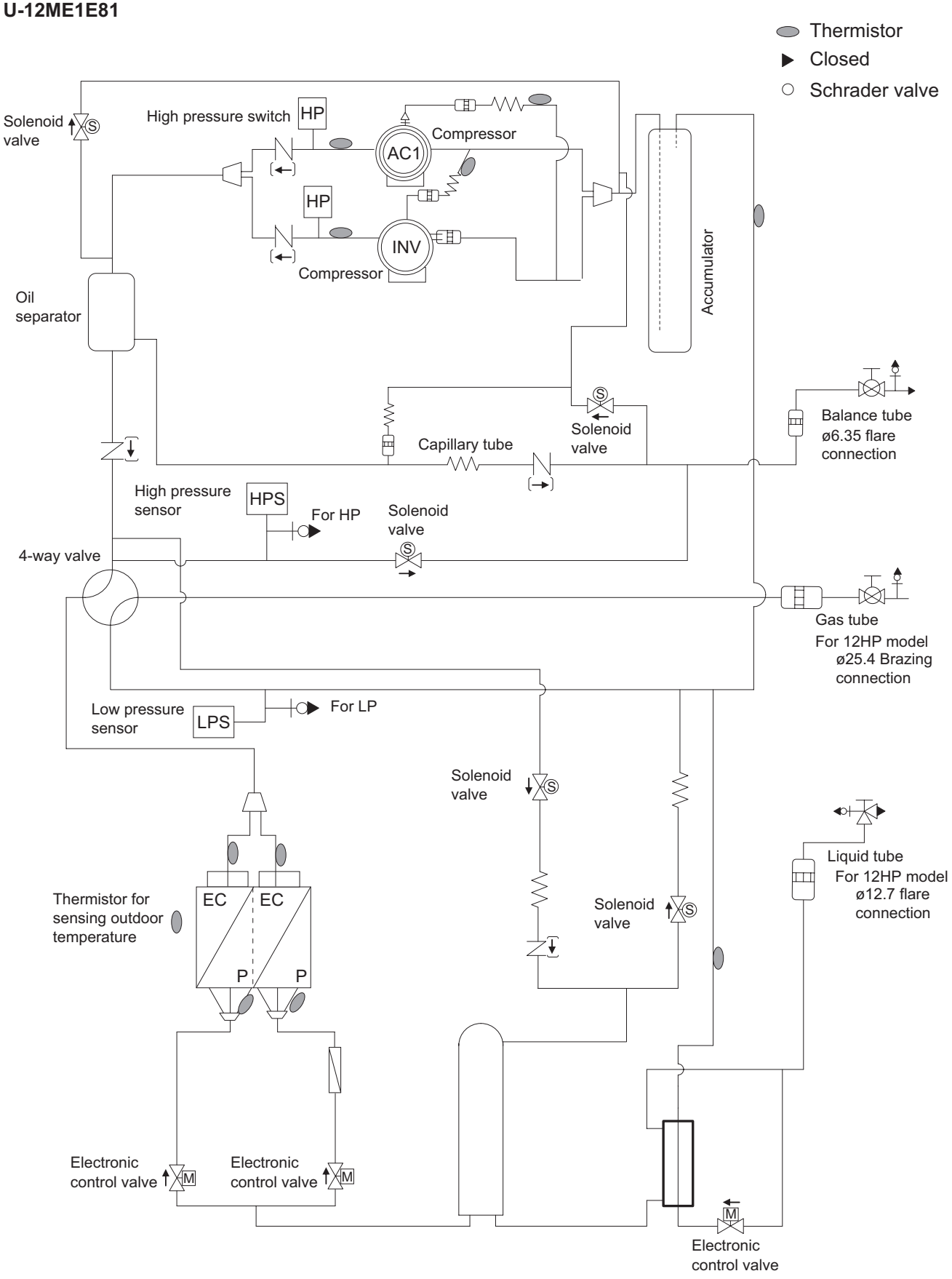
1-4. Refrigerant Flow Diagram

U-8ME1E81, U-10ME1E81



1. Outdoor Unit

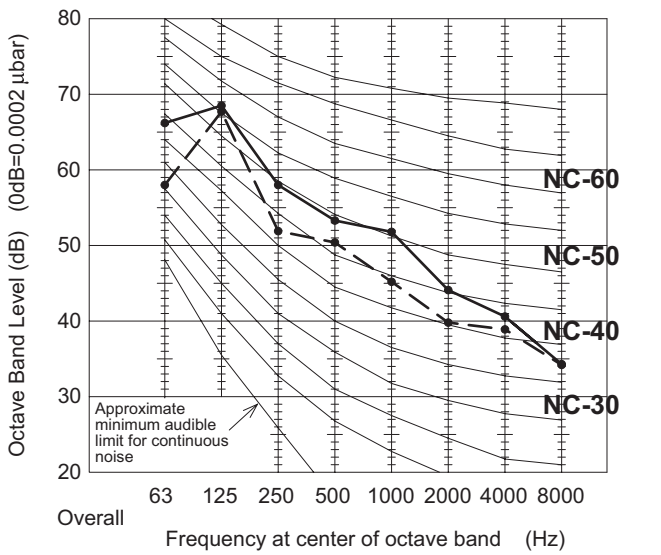
U-12ME1E81



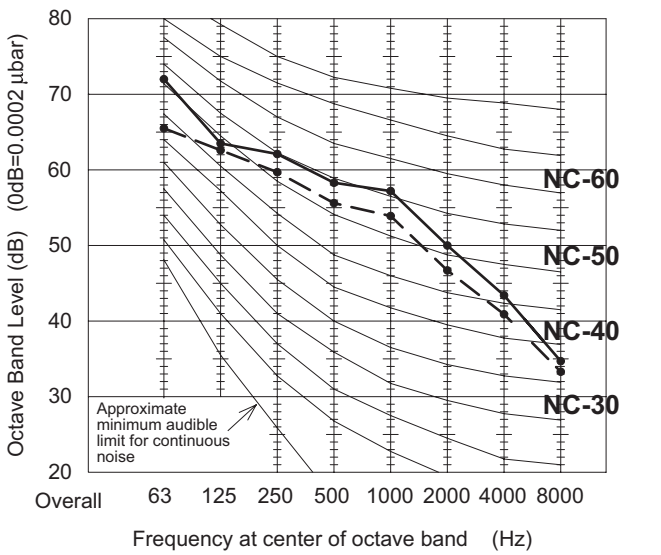
1. Outdoor Unit

1-5. Noise Criterion Curves

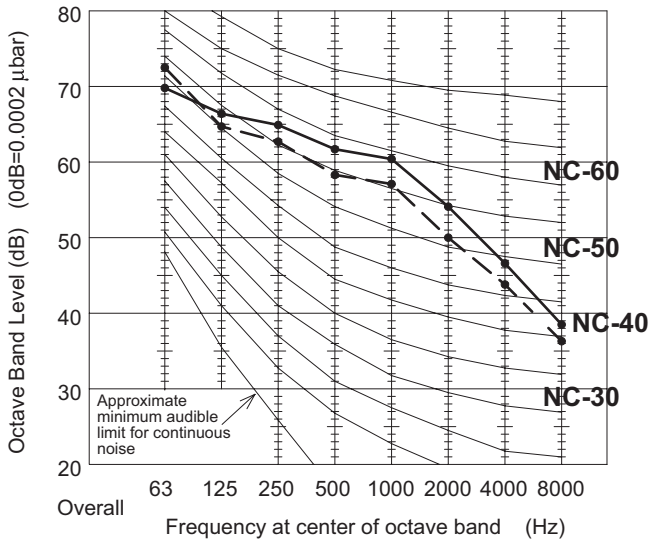
MODEL	U-8ME1E81
SOUND LEVEL dB(A) (Cooling/Heating)	56.5 (Quiet mode 53.5)
CONDITION	1 m in front at height of 1.5 m



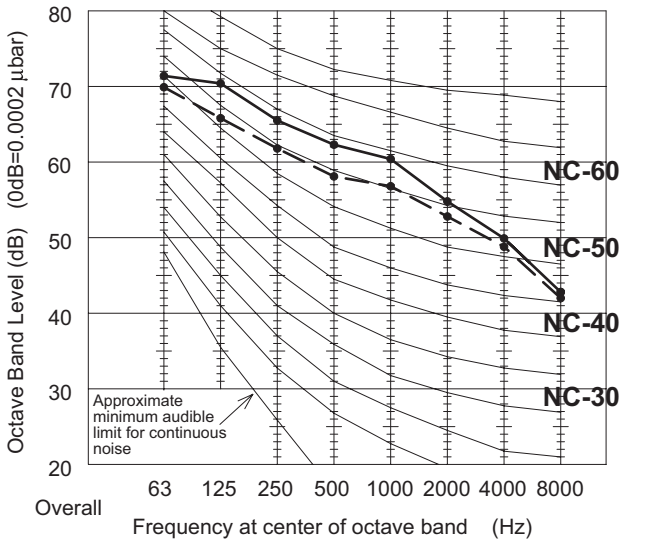
MODEL	U-10ME1E81
SOUND LEVEL dB(A) (Cooling/Heating)	59.0 (Quiet mode 56.0)
CONDITION	1 m in front at height of 1.5 m



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



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

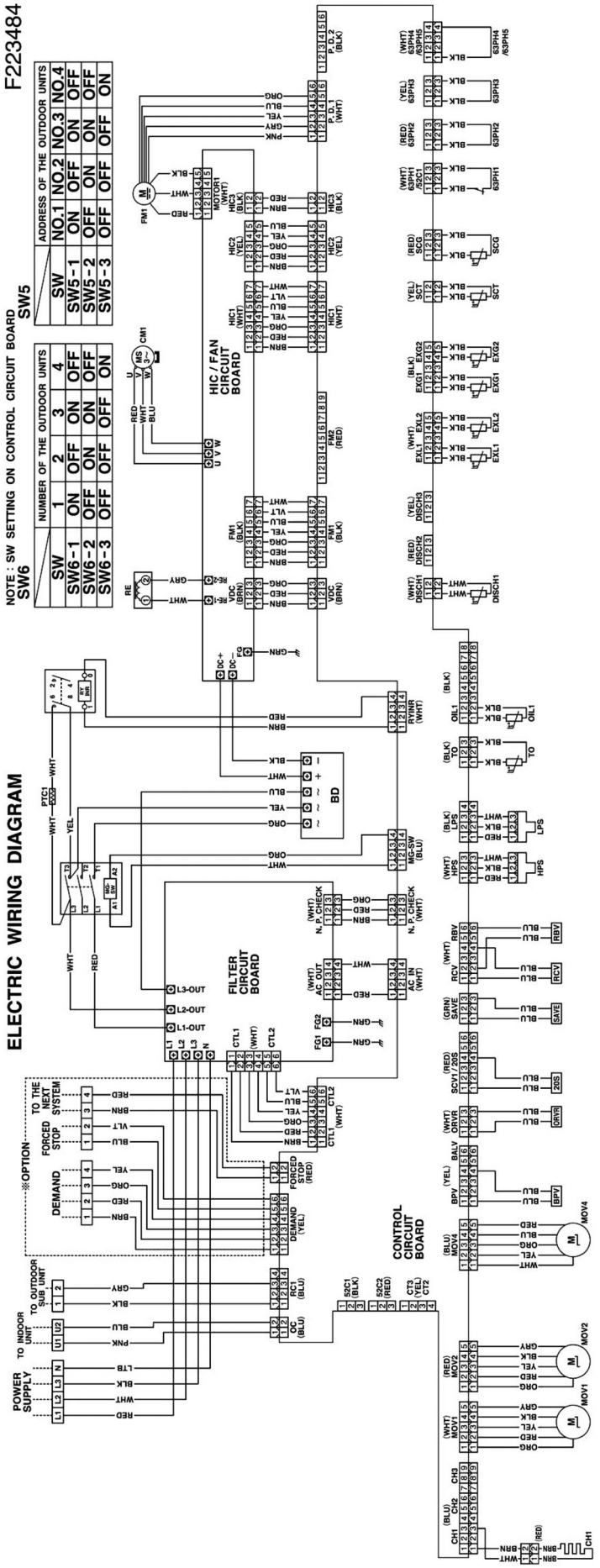


Contents

6. ELECTRICAL DATA

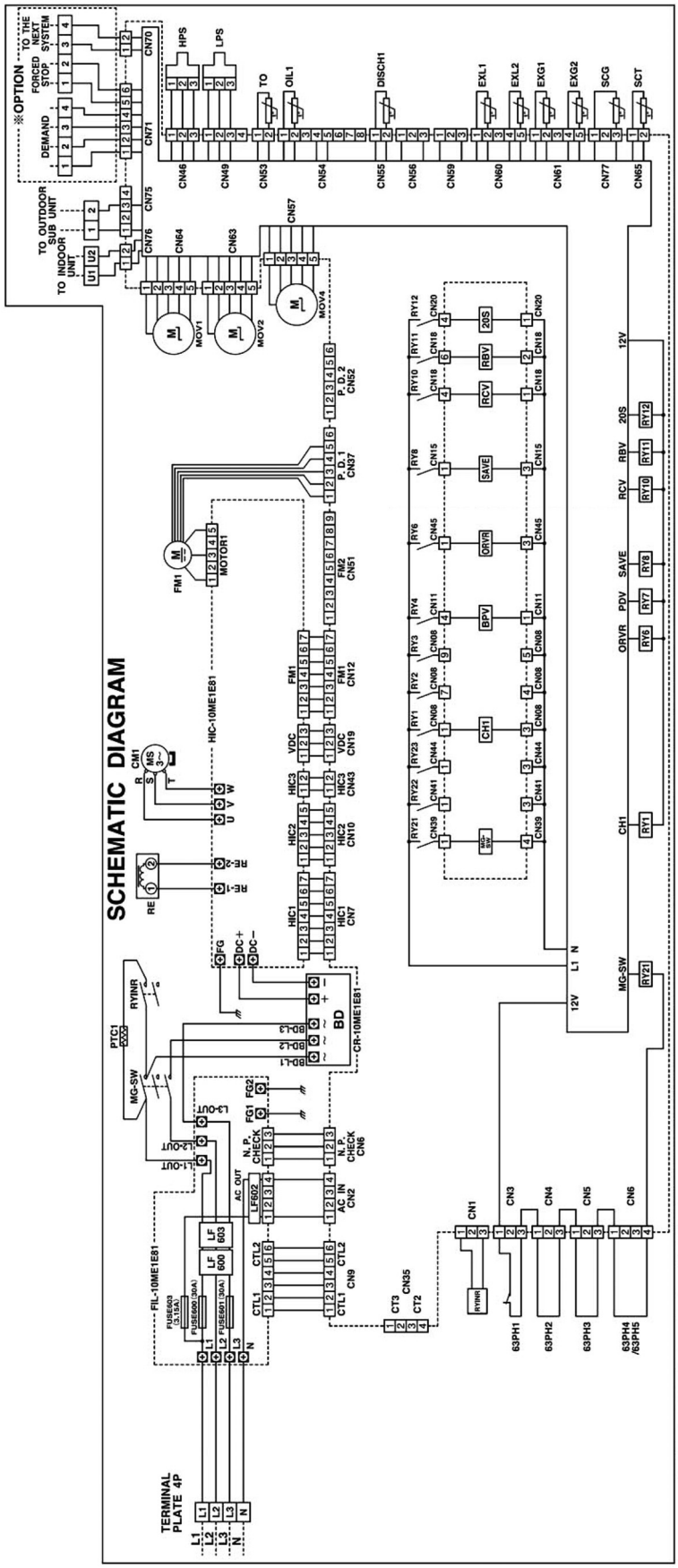
1. Outdoor Unit

(1) Electric Wiring Diagram U-8ME1E81, U-10ME1E81



1. Outdoor Unit

Schematic Diagram U-8ME1E81, U-10ME1E81



SYMBOLS	DESCRIPTION
CM1	COMPRESSOR MOTOR
FM1	OUTDOOR FAN MOTOR
MG-SW	MAGNETIC CONTACTOR
RYINR	MAGNETIC CONTACTOR
BPV	BYPASS VALVE
ORVR	OIL RECOVERY VALVE
PDV	PUMP DOWN VALVE

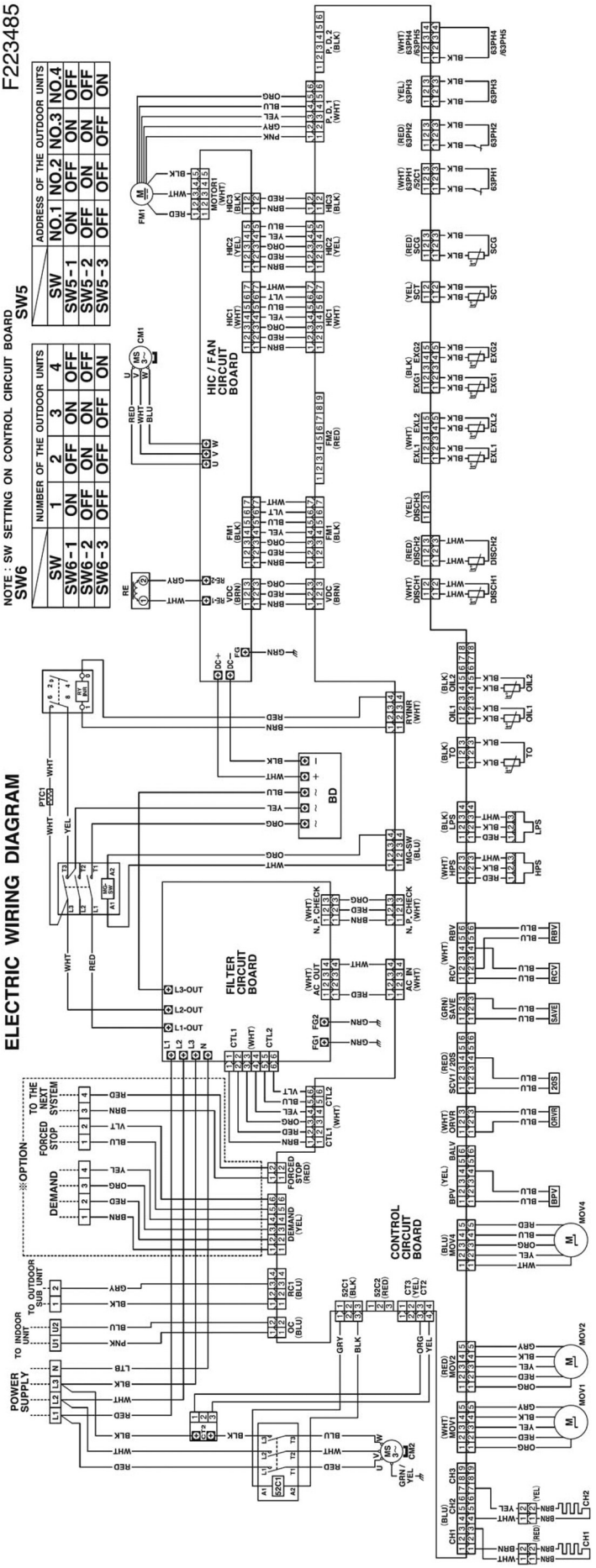
SYMBOLS	DESCRIPTION
SAVE	SAVE VALVE
RCV, RBV	REFRIGERANT CONTROL VALVE
20S	FOUR WAY VALVE
MOV1, 2, 4	MOTOR OPERATED VALVE
FUSE600, 601, 603	OPERATION CIRCUIT FUSE
LF600, 602, 603	NOISE FILTER (ON THE P.C.B.)
BD	BRIDGE DIODE

SYMBOLS	DESCRIPTION
CH1	CRANK CASE HEATER
63PH1	HIGH PRESSURE SWITCH
RE	REACTOR
PTC1	PTC THERMISTOR
RY001~004, 006, 008	RELAY
010~012, 021~023	
CR-10ME1E81	CONTROL CIRCUIT BOARD

SYMBOLS	DESCRIPTION
FIL-10ME1E81	FILTER CIRCUIT BOARD
HIC-10ME1E81	HIC / FAN CIRCUIT BOARD
	THERMISTOR
	CONNECTOR
	TERMINAL
	TERMINAL PLATE

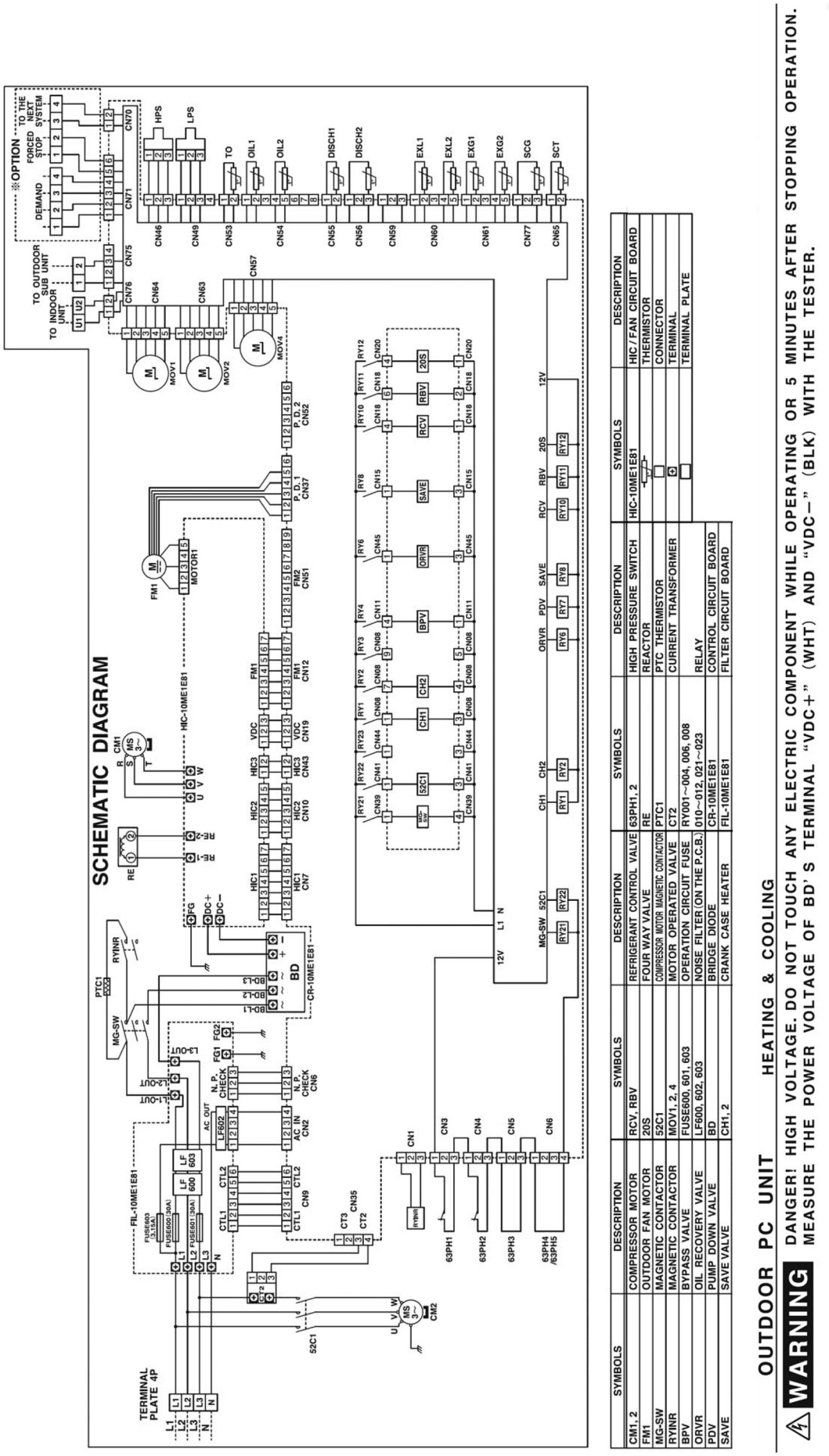
1. Outdoor Unit

(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
CM1, 2	COMPRESSOR MOTOR	RCV, RBV	REFRIGERANT CONTROL VALVE	63PH1, 2	HIGH PRESSURE SWITCH
FM1	OUTDOOR FAN MOTOR	20S	FOUR WAY VALVE	RE	REACTOR
MG-SW	MAGNETIC CONTACTOR	52C1	COMPRESSOR MOTOR MAGNETIC CONTACTOR	PTC1	PTC THERMISTOR
RYINR	MAGNETIC CONTACTOR	MOV1, 2, 4	MOTOR OPERATED VALVE	CT2	CURRENT TRANSFORMER
BPV	BYPASS VALVE	FUSE600, 601, 603	OPERATION CIRCUIT FUSE	RY001~004, 006, 008	RELAY
ORVR	OIL RECOVERY VALVE	LF600, 602, 603	NOISE FILTER (ON THE P.C.B.)	010~012, 021~023	
PDV	PUMP DOWN VALVE	BD	BRIDGE DIODE	CR-10ME1E81	CONTROL CIRCUIT BOARD
SAVE	SAVE VALVE	CH1, 2	CRANK CASE HEATER	FIL-10ME1E81	FILTER CIRCUIT BOARD

SYMBOLS	DESCRIPTION
HIC-10ME1E81	HIC / FAN CIRCUIT BOARD
	THERMISTOR
	CONNECTOR
	TERMINAL
	TERMINAL PLATE

Contents

9. CAPACITY TABLE

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

1-1. U-8ME1E81 (Cooling)

Capacity Ratio 30-130%

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

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-10.0	24.1	3.04	24.1	3.04	24.1	3.04	24.1	3.04	25.7	3.25	27.3	3.45	28.9	3.66
	-5.0	24.1	3.05	24.1	3.05	24.1	3.05	24.1	3.05	25.7	3.25	27.3	3.46	28.9	3.66
	0.0	24.1	3.06	24.1	3.06	24.1	3.06	24.1	3.06	25.7	3.26	27.3	3.47	28.9	3.67
	5.0	24.1	3.07	24.1	3.07	24.1	3.07	24.1	3.07	25.7	3.28	27.3	3.48	28.9	3.70
	10.0	24.1	3.10	24.1	3.10	24.1	3.10	24.1	3.10	25.7	3.31	27.3	3.52	28.9	3.74
	15.0	24.1	3.16	24.1	3.16	24.1	3.16	24.1	3.16	25.7	3.38	27.3	3.61	28.9	3.83
	20.0	24.1	3.35	24.1	3.35	24.1	3.35	24.1	3.35	25.7	3.60	27.3	3.84	28.9	4.17
	25.0	24.1	4.13	24.1	4.13	24.1	4.13	24.1	4.13	25.7	4.49	27.3	4.86	28.9	5.26
	30.0	24.1	5.09	24.1	5.09	24.1	5.09	24.1	5.09	25.7	5.52	27.3	5.97	28.9	6.44
	35.0	24.1	6.13	24.1	6.13	24.1	6.13	24.1	6.13	25.7	6.64	27.3	7.18	27.9	7.20
	40.0	23.9	7.19	23.9	7.19	23.9	7.19	23.9	7.19	24.5	7.20	25.1	7.20	25.6	7.20
	43.0	22.8	7.20	22.8	7.20	22.8	7.20	22.8	7.20	23.3	7.20	23.9	7.20	24.4	7.20

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-10.0	22.6	2.85	23.5	2.97	23.5	2.97	23.5	2.97	25.1	3.17	26.7	3.37	28.2	3.57
	-5.0	22.6	2.85	23.5	2.97	23.5	2.97	23.5	2.97	25.1	3.17	26.7	3.38	28.2	3.58
	0.0	22.6	2.86	23.5	2.99	23.5	2.99	23.5	2.99	25.1	3.19	26.7	3.38	28.2	3.59
	5.0	22.6	2.86	23.5	3.00	23.5	3.00	23.5	3.00	25.1	3.20	26.7	3.40	28.2	3.61
	10.0	22.6	2.88	23.5	3.02	23.5	3.02	23.5	3.02	25.1	3.23	26.7	3.44	28.2	3.65
	15.0	22.6	2.92	23.5	3.09	23.5	3.09	23.5	3.09	25.1	3.30	26.7	3.52	28.2	3.74
	20.0	22.6	3.04	23.5	3.26	23.5	3.26	23.5	3.26	25.1	3.50	26.7	3.74	28.2	4.01
	25.0	22.6	3.56	23.5	3.99	23.5	3.99	23.5	3.99	25.1	4.33	26.7	4.69	28.2	5.06
	30.0	22.6	4.42	23.5	4.91	23.5	4.91	23.5	4.91	25.1	5.34	26.7	5.77	28.2	6.22
	35.0	22.6	5.36	23.5	5.93	23.5	5.93	23.5	5.93	25.1	6.43	26.7	6.94	27.7	7.20
	40.0	22.6	6.38	23.5	7.02	23.5	7.02	23.5	7.02	24.4	7.20	24.9	7.20	25.5	7.20
	43.0	22.6	7.03	22.6	7.20	22.6	7.20	22.6	7.20	23.2	7.20	23.7	7.20	24.2	7.20

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-10.0	20.2	2.55	21.9	2.76	23.0	2.90	23.0	2.90	24.5	3.10	26.0	3.29	27.6	3.48
	-5.0	20.2	2.55	21.9	2.76	23.0	2.91	23.0	2.91	24.5	3.10	26.0	3.30	27.6	3.49
	0.0	20.2	2.56	21.9	2.77	23.0	2.91	23.0	2.91	24.5	3.11	26.0	3.31	27.6	3.50
	5.0	20.2	2.57	21.9	2.78	23.0	2.93	23.0	2.93	24.5	3.12	26.0	3.32	27.6	3.52
	10.0	20.2	2.58	21.9	2.80	23.0	2.95	23.0	2.95	24.5	3.15	26.0	3.35	27.6	3.56
	15.0	20.2	2.61	21.9	2.84	23.0	3.01	23.0	3.01	24.5	3.22	26.0	3.43	27.6	3.64
	20.0	20.2	2.73	21.9	2.97	23.0	3.17	23.0	3.17	24.5	3.40	26.0	3.63	27.6	3.87
	25.0	20.2	3.19	21.9	3.51	23.0	3.85	23.0	3.85	24.5	4.18	26.0	4.52	27.6	4.88
	30.0	20.2	3.96	21.9	4.35	23.0	4.75	23.0	4.75	24.5	5.15	26.0	5.56	27.6	5.99
	35.0	20.2	4.80	21.9	5.27	23.0	5.73	23.0	5.73	24.5	6.21	26.0	6.70	27.4	7.17
	40.0	20.2	5.71	21.9	6.27	23.0	6.80	23.0	6.80	24.2	7.20	24.8	7.20	25.3	7.20
	43.0	20.2	6.28	21.9	6.90	22.5	7.20	22.5	7.20	23.0	7.20	23.5	7.20	24.1	7.20

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-10.0	17.9	2.27	19.4	2.45	20.9	2.64	22.4	2.83	23.9	3.02	25.4	3.21	26.9	3.40
	-5.0	17.9	2.27	19.4	2.45	20.9	2.64	22.4	2.84	23.9	3.02	25.4	3.21	26.9	3.41
	0.0	17.9	2.27	19.4	2.46	20.9	2.65	22.4	2.84	23.9	3.03	25.4	3.22	26.9	3.41
	5.0	17.9	2.28	19.4	2.47	20.9	2.66	22.4	2.85	23.9	3.05	25.4	3.24	26.9	3.43
	10.0	17.9	2.29	19.4	2.49	20.9	2.68	22.4	2.88	23.9	3.07	25.4	3.27	26.9	3.47
	15.0	17.9	2.33	19.4	2.53	20.9	2.73	22.4	2.93	23.9	3.14	25.4	3.34	26.9	3.55
	20.0	17.9	2.43	19.4	2.64	20.9	2.86	22.4	3.09	23.9	3.31	25.4	3.53	26.9	3.76
	25.0	17.9	2.85	19.4	3.12	20.9	3.41	22.4	3.72	23.9	4.03	25.4	4.35	26.9	4.69
	30.0	17.9	3.52	19.4	3.87	20.9	4.22	22.4	4.59	23.9	4.97	25.4	5.36	26.9	5.77
	35.0	17.9	4.26	19.4	4.68	20.9	5.10	22.4	5.54	23.9	5.99	25.4	6.47	26.9	6.95
	40.0	17.9	5.07	19.4	5.55	20.9	6.06	22.4	6.57	23.9	7.10	24.6	7.20	25.2	7.20
	43.0	17.9	5.58	19.4	6.11	20.9	6.66	22.3	7.19	22.9	7.20	23.4	7.20	23.9	7.20

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

U-8ME1E81 (Cooling) **Capacity Ratio 30-130%**

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

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-10.0	16.1	2.04	17.5	2.20	18.8	2.38	20.2	2.55	21.5	2.71	22.8	2.89	24.2	3.06
	-5.0	16.1	2.04	17.5	2.21	18.8	2.38	20.2	2.55	21.5	2.72	22.8	2.89	24.2	3.06
	0.0	16.1	2.04	17.5	2.21	18.8	2.38	20.2	2.55	21.5	2.73	22.8	2.90	24.2	3.07
	5.0	16.1	2.05	17.5	2.22	18.8	2.39	20.2	2.57	21.5	2.74	22.8	2.91	24.2	3.08
	10.0	16.1	2.06	17.5	2.23	18.8	2.40	20.2	2.58	21.5	2.76	22.8	2.93	24.2	3.11
	15.0	16.1	2.08	17.5	2.26	18.8	2.44	20.2	2.62	21.5	2.80	22.8	2.99	24.2	3.16
	20.0	16.1	2.16	17.5	2.35	18.8	2.54	20.2	2.74	21.5	2.93	22.8	3.12	24.2	3.32
	25.0	16.1	2.49	17.5	2.72	18.8	2.96	20.2	3.21	21.5	3.46	22.8	3.73	24.2	4.00
	30.0	16.1	3.09	17.5	3.37	18.8	3.67	20.2	3.97	21.5	4.29	22.8	4.61	24.2	4.95
	35.0	16.1	3.74	17.5	4.08	18.8	4.44	20.2	4.81	21.5	5.19	22.8	5.57	24.2	5.97
	40.0	16.1	4.45	17.5	4.86	18.8	5.28	20.2	5.71	21.5	6.16	22.8	6.61	24.2	7.08
	43.0	16.1	4.90	17.5	5.35	18.8	5.81	20.2	6.29	21.5	6.78	22.7	7.20	23.2	7.20

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-10.0	14.3	1.81	15.5	1.96	16.7	2.11	17.9	2.27	19.1	2.42	20.3	2.57	21.5	2.71
	-5.0	14.3	1.81	15.5	1.96	16.7	2.12	17.9	2.27	19.1	2.42	20.3	2.57	21.5	2.72
	0.0	14.3	1.81	15.5	1.97	16.7	2.12	17.9	2.27	19.1	2.42	20.3	2.58	21.5	2.73
	5.0	14.3	1.82	15.5	1.97	16.7	2.12	17.9	2.28	19.1	2.43	20.3	2.58	21.5	2.74
	10.0	14.3	1.83	15.5	1.98	16.7	2.13	17.9	2.29	19.1	2.44	20.3	2.60	21.5	2.75
	15.0	14.3	1.84	15.5	2.00	16.7	2.16	17.9	2.32	19.1	2.48	20.3	2.64	21.5	2.79
	20.0	14.3	1.89	15.5	2.06	16.7	2.23	17.9	2.40	19.1	2.57	20.3	2.74	21.5	2.91
	25.0	14.3	2.14	15.5	2.34	16.7	2.54	17.9	2.74	19.1	2.94	20.3	3.16	21.5	3.37
	30.0	14.3	2.68	15.5	2.92	16.7	3.16	17.9	3.41	19.1	3.66	20.3	3.92	21.5	4.19
	35.0	14.3	3.25	15.5	3.53	16.7	3.83	17.9	4.13	19.1	4.43	20.3	4.75	21.5	5.07
	40.0	14.3	3.87	15.5	4.20	16.7	4.55	17.9	4.91	19.1	5.28	20.3	5.65	21.5	6.03
	43.0	14.3	4.26	15.5	4.64	16.7	5.02	17.9	5.41	19.1	5.81	20.3	6.22	21.5	6.64

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-10.0	12.5	1.58	13.6	1.72	14.6	1.85	15.7	1.98	16.7	2.11	17.8	2.24	18.8	2.38
	-5.0	12.5	1.58	13.6	1.72	14.6	1.85	15.7	1.98	16.7	2.12	17.8	2.25	18.8	2.38
	0.0	12.5	1.58	13.6	1.72	14.6	1.85	15.7	1.98	16.7	2.12	17.8	2.25	18.8	2.38
	5.0	12.5	1.59	13.6	1.72	14.6	1.86	15.7	1.99	16.7	2.12	17.8	2.25	18.8	2.39
	10.0	12.5	1.60	13.6	1.73	14.6	1.86	15.7	2.00	16.7	2.13	17.8	2.27	18.8	2.40
	15.0	12.5	1.61	13.6	1.75	14.6	1.88	15.7	2.02	16.7	2.16	17.8	2.29	18.8	2.43
	20.0	12.5	1.65	13.6	1.79	14.6	1.93	15.7	2.07	16.7	2.22	17.8	2.36	18.8	2.51
	25.0	12.5	1.81	13.6	1.98	14.6	2.14	15.7	2.31	16.7	2.47	17.8	2.64	18.8	2.81
	30.0	12.5	2.30	13.6	2.49	14.6	2.69	15.7	2.88	16.7	3.09	17.8	3.29	18.8	3.50
	35.0	12.5	2.79	13.6	3.02	14.6	3.26	15.7	3.50	16.7	3.75	17.8	3.99	18.8	4.25
	40.0	12.5	3.32	13.6	3.60	14.6	3.88	15.7	4.17	16.7	4.47	17.8	4.76	18.8	5.07
	43.0	12.5	3.66	13.6	3.97	14.6	4.28	15.7	4.60	16.7	4.92	17.8	5.25	18.8	5.58

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-10.0	10.8	1.36	11.6	1.47	12.5	1.58	13.4	1.70	14.3	1.81	15.2	1.92	16.1	2.04
	-5.0	10.8	1.36	11.6	1.47	12.5	1.58	13.4	1.70	14.3	1.81	15.2	1.92	16.1	2.04
	0.0	10.8	1.36	11.6	1.47	12.5	1.58	13.4	1.70	14.3	1.81	15.2	1.93	16.1	2.04
	5.0	10.8	1.36	11.6	1.47	12.5	1.59	13.4	1.70	14.3	1.82	15.2	1.93	16.1	2.04
	10.0	10.8	1.36	11.6	1.48	12.5	1.60	13.4	1.71	14.3	1.82	15.2	1.94	16.1	2.06
	15.0	10.8	1.37	11.6	1.49	12.5	1.61	13.4	1.72	14.3	1.84	15.2	1.96	16.1	2.07
	20.0	10.8	1.40	11.6	1.52	12.5	1.64	13.4	1.76	14.3	1.88	15.2	2.00	16.1	2.12
	25.0	10.8	1.51	11.6	1.64	12.5	1.77	13.4	1.91	14.3	2.04	15.2	2.18	16.1	2.32
	30.0	10.8	1.96	11.6	2.11	12.5	2.25	13.4	2.40	14.3	2.56	15.2	2.72	16.1	2.88
	35.0	10.8	2.37	11.6	2.55	12.5	2.73	13.4	2.92	14.3	3.11	15.2	3.31	16.1	3.50
	40.0	10.8	2.81	11.6	3.03	12.5	3.25	13.4	3.48	14.3	3.71	15.2	3.94	16.1	4.18
	43.0	10.8	3.10	11.6	3.34	12.5	3.59	13.4	3.84	14.3	4.09	15.2	4.35	16.1	4.61

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

U-8ME1E81 (Cooling) **Capacity Ratio 30-130%**

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

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-10.0	9.0	1.13	9.7	1.22	10.5	1.32	11.2	1.41	11.9	1.51	12.7	1.60	13.4	1.70
	-5.0	9.0	1.13	9.7	1.22	10.5	1.32	11.2	1.41	11.9	1.51	12.7	1.60	13.4	1.70
	0.0	9.0	1.13	9.7	1.23	10.5	1.32	11.2	1.42	11.9	1.51	12.7	1.61	13.4	1.70
	5.0	9.0	1.14	9.7	1.23	10.5	1.32	11.2	1.42	11.9	1.51	12.7	1.61	13.4	1.70
	10.0	9.0	1.14	9.7	1.23	10.5	1.33	11.2	1.42	11.9	1.52	12.7	1.61	13.4	1.71
	15.0	9.0	1.14	9.7	1.24	10.5	1.34	11.2	1.43	11.9	1.52	12.7	1.62	13.4	1.72
	20.0	9.0	1.16	9.7	1.25	10.5	1.35	11.2	1.45	11.9	1.55	12.7	1.65	13.4	1.75
	25.0	9.0	1.22	9.7	1.33	10.5	1.43	11.2	1.54	11.9	1.65	12.7	1.76	13.4	1.86
	30.0	9.0	1.64	9.7	1.75	10.5	1.86	11.2	1.97	11.9	2.09	12.7	2.20	13.4	2.32
	35.0	9.0	1.97	9.7	2.11	10.5	2.25	11.2	2.39	11.9	2.54	12.7	2.68	13.4	2.83
	40.0	9.0	2.33	9.7	2.50	10.5	2.68	11.2	2.85	11.9	3.02	12.7	3.20	13.4	3.37
	43.0	9.0	2.57	9.7	2.75	10.5	2.95	11.2	3.14	11.9	3.33	12.7	3.53	13.4	3.73

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-10.0	7.2	0.90	7.8	0.98	8.4	1.06	9.0	1.13	9.6	1.21	10.1	1.28	10.8	1.36
	-5.0	7.2	0.90	7.8	0.98	8.4	1.06	9.0	1.13	9.6	1.21	10.1	1.29	10.8	1.36
	0.0	7.2	0.91	7.8	0.98	8.4	1.06	9.0	1.13	9.6	1.21	10.1	1.29	10.8	1.36
	5.0	7.2	0.91	7.8	0.98	8.4	1.06	9.0	1.14	9.6	1.21	10.1	1.29	10.8	1.36
	10.0	7.2	0.91	7.8	0.99	8.4	1.06	9.0	1.14	9.6	1.21	10.1	1.29	10.8	1.36
	15.0	7.2	0.91	7.8	0.99	8.4	1.06	9.0	1.14	9.6	1.22	10.1	1.30	10.8	1.37
	20.0	7.2	0.92	7.8	1.00	8.4	1.07	9.0	1.15	9.6	1.23	10.1	1.31	10.8	1.39
	25.0	7.2	0.95	7.8	1.04	8.4	1.12	9.0	1.20	9.6	1.29	10.1	1.36	10.8	1.45
	30.0	7.2	1.35	7.8	1.42	8.4	1.51	9.0	1.58	9.6	1.67	10.1	1.75	10.8	1.83
	35.0	7.2	1.61	7.8	1.71	8.4	1.81	9.0	1.91	9.6	2.02	10.1	2.12	10.8	2.22
	40.0	7.2	1.89	7.8	2.02	8.4	2.14	9.0	2.27	9.6	2.39	10.1	2.52	10.8	2.64
	43.0	7.2	2.07	7.8	2.21	8.4	2.35	9.0	2.49	9.6	2.63	10.1	2.78	10.8	2.91

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-10.0	5.4	0.68	5.8	0.74	6.3	0.79	6.7	0.85	7.2	0.90	7.6	0.96	8.1	1.02
	-5.0	5.4	0.68	5.8	0.74	6.3	0.79	6.7	0.85	7.2	0.90	7.6	0.96	8.1	1.02
	0.0	5.4	0.68	5.8	0.74	6.3	0.79	6.7	0.85	7.2	0.91	7.6	0.96	8.1	1.02
	5.0	5.4	0.68	5.8	0.74	6.3	0.79	6.7	0.85	7.2	0.91	7.6	0.96	8.1	1.02
	10.0	5.4	0.68	5.8	0.74	6.3	0.79	6.7	0.85	7.2	0.91	7.6	0.96	8.1	1.02
	15.0	5.4	0.68	5.8	0.74	6.3	0.80	6.7	0.85	7.2	0.91	7.6	0.97	8.1	1.02
	20.0	5.4	0.69	5.8	0.74	6.3	0.80	6.7	0.86	7.2	0.92	7.6	0.98	8.1	1.03
	25.0	5.4	0.70	5.8	0.76	6.3	0.82	6.7	0.88	7.2	0.94	7.6	1.00	8.1	1.06
	30.0	5.4	0.92	5.8	0.98	6.3	1.04	6.7	1.10	7.2	1.16	7.6	1.22	8.1	1.28
	35.0	5.4	1.27	5.8	1.34	6.3	1.41	6.7	1.47	7.2	1.55	7.6	1.61	8.1	1.68
	40.0	5.4	1.48	5.8	1.56	6.3	1.65	6.7	1.73	7.2	1.82	7.6	1.91	8.1	1.99
	43.0	5.4	1.61	5.8	1.71	6.3	1.81	6.7	1.90	7.2	1.99	7.6	2.09	8.1	2.18

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

1-2. U-8ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-24.9	-25.0	18.0	5.70	17.0	5.41	16.0	5.12	15.5	4.97	15.5	4.97	15.5	4.97	15.5	4.97
	-19.8	-20.0	19.0	5.82	17.9	5.52	16.9	5.22	16.4	5.07	16.4	5.07	16.4	5.07	16.4	5.07
	-14.7	-15.0	20.1	5.97	19.1	5.67	18.0	5.36	17.4	5.21	17.4	5.21	17.4	5.21	17.4	5.21
	-9.6	-10.0	21.6	6.18	20.4	5.86	19.3	5.54	18.7	5.38	18.7	5.38	18.7	5.38	18.7	5.38
	-4.4	-5.0	23.5	6.44	22.3	6.12	21.0	5.78	20.4	5.61	20.4	5.61	20.4	5.61	20.4	5.61
	-1.8	-2.5	24.6	6.61	23.4	6.27	22.1	5.92	21.4	5.75	21.4	5.75	21.4	5.75	21.4	5.75
	0.8	0.0	26.0	6.77	24.7	6.42	23.4	6.07	22.7	5.89	22.7	5.89	22.7	5.89	22.7	5.89
	2.8	2.0	27.4	6.92	26.1	6.58	24.7	6.23	24.0	6.05	24.0	6.05	24.0	6.05	24.0	6.05
	6.0	5.0	29.8	7.12	28.9	6.98	27.5	6.64	26.8	6.46	26.8	6.46	26.8	6.46	26.8	6.46
	7.0	6.0	30.6	7.12	29.9	7.10	27.9	6.54	26.9	6.26	26.9	6.26	26.9	6.26	26.9	6.26
	8.6	7.5	31.7	7.12	29.9	6.67	27.9	6.14	26.9	5.89	26.9	5.89	26.9	5.89	26.9	5.89
	11.2	10.0	31.9	6.46	29.9	5.97	27.9	5.51	26.9	5.28	26.9	5.28	26.9	5.28	26.9	5.28
	16.4	15.0	31.9	5.09	29.9	4.72	27.9	4.37	26.9	4.19	26.9	4.19	26.9	4.19	26.9	4.19

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-24.9	-25.0	18.1	5.67	17.1	5.39	16.1	5.10	15.5	4.95	15.5	4.95	15.5	4.95	15.5	5.05
	-19.8	-20.0	19.0	5.79	18.0	5.50	16.9	5.21	16.4	5.06	16.4	5.06	16.4	5.06	16.4	5.14
	-14.7	-15.0	20.2	5.95	19.1	5.65	18.0	5.34	17.4	5.19	17.4	5.19	17.4	5.19	17.4	5.19
	-9.6	-10.0	21.6	6.15	20.5	5.84	19.3	5.52	18.7	5.36	18.7	5.36	18.7	5.36	18.7	5.36
	-4.4	-5.0	23.5	6.42	22.3	6.09	21.1	5.76	20.4	5.59	20.4	5.59	20.4	5.59	20.4	5.59
	-1.8	-2.5	24.7	6.59	23.4	6.25	22.1	5.90	21.5	5.73	21.5	5.73	21.5	5.73	21.5	5.73
	0.8	0.0	26.1	6.73	24.8	6.40	23.4	6.04	22.7	5.87	22.7	5.87	22.7	5.87	22.7	5.87
	2.8	2.0	27.4	6.89	26.1	6.55	24.7	6.20	24.1	6.03	24.1	6.03	24.1	6.03	24.1	6.03
	6.0	5.0	29.9	7.12	28.9	6.97	27.2	6.51	26.3	6.24	26.3	6.24	26.3	6.24	25.7	5.90
	7.0	6.0	30.7	7.12	29.2	6.78	27.2	6.26	26.3	6.00	26.3	6.00	26.3	6.00	25.7	5.67
	8.6	7.5	31.1	6.87	29.2	6.37	27.2	5.87	26.3	5.63	26.3	5.63	26.3	5.63	25.7	5.33
	11.2	10.0	31.1	6.14	29.2	5.69	27.2	5.26	26.3	5.05	26.3	5.05	26.3	5.05	25.7	4.78
	16.4	15.0	31.1	4.83	29.2	4.49	27.2	4.16	26.3	3.99	26.3	3.99	26.3	3.99	25.7	3.81

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-24.9	-25.0	18.1	5.64	17.1	5.36	16.1	5.08	15.6	4.94	15.6	4.94	15.4	4.95	14.2	4.64
	-19.8	-20.0	19.1	5.77	18.0	5.48	17.0	5.19	16.4	5.05	16.4	5.05	16.3	5.05	15.1	4.73
	-14.7	-15.0	20.3	5.93	19.2	5.63	18.0	5.33	17.5	5.18	17.5	5.18	17.3	5.17	16.0	4.84
	-9.6	-10.0	21.7	6.14	20.6	5.83	19.4	5.51	18.8	5.35	18.8	5.35	18.7	5.34	17.3	4.99
	-4.4	-5.0	23.6	6.41	22.4	6.08	21.1	5.75	20.5	5.58	20.5	5.58	20.3	5.56	18.9	5.18
	-1.8	-2.5	24.8	6.57	23.5	6.23	22.2	5.89	21.5	5.71	21.5	5.71	21.4	5.69	19.9	5.30
	0.8	0.0	26.2	6.71	24.8	6.37	23.5	6.02	22.8	5.85	22.8	5.85	22.7	5.83	21.2	5.44
	2.8	2.0	27.5	6.87	26.2	6.53	24.8	6.19	24.1	6.01	24.1	6.01	24.1	6.01	22.5	5.61
	6.0	5.0	30.1	7.12	28.5	6.75	26.6	6.23	25.6	5.97	25.6	5.97	25.1	5.74	23.0	5.22
	7.0	6.0	30.4	6.99	28.5	6.48	26.6	5.98	25.6	5.74	25.6	5.74	25.1	5.51	23.0	5.01
	8.6	7.5	30.4	6.55	28.5	6.07	26.6	5.61	25.6	5.39	25.6	5.39	25.1	5.18	23.0	4.71
	11.2	10.0	30.4	5.84	28.5	5.43	26.6	5.02	25.6	4.82	25.6	4.82	25.1	4.64	23.0	4.23
	16.4	15.0	30.4	4.58	28.5	4.27	26.6	3.96	25.6	3.81	25.6	3.81	25.1	3.68	23.0	3.36

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-24.9	-25.0	18.2	5.62	17.2	5.35	16.1	5.07	15.6	4.93	15.1	4.79	14.1	4.52	13.0	4.24
	-19.8	-20.0	19.2	5.75	18.1	5.46	17.0	5.18	16.5	5.04	16.0	4.89	14.9	4.60	13.7	4.32
	-14.7	-15.0	20.3	5.91	19.2	5.62	18.1	5.32	17.5	5.17	17.0	5.02	15.8	4.72	14.6	4.42
	-9.6	-10.0	21.8	6.12	20.6	5.81	19.4	5.50	18.8	5.34	18.2	5.19	17.0	4.87	15.7	4.55
	-4.4	-5.0	23.7	6.39	22.4	6.07	21.2	5.74	20.5	5.57	19.9	5.40	18.5	5.06	17.2	4.72
	-1.8	-2.5	24.8	6.54	23.5	6.21	22.2	5.87	21.6	5.70	20.9	5.52	19.5	5.18	18.1	4.83
	0.8	0.0	26.2	6.69	24.9	6.35	23.5	6.01	22.9	5.84	22.2	5.66	20.7	5.31	19.3	4.95
	2.8	2.0	27.6	6.86	26.3	6.52	24.9	6.18	24.2	6.01	23.5	5.83	22.0	5.47	20.4	5.07
	6.0	5.0	29.6	6.93	27.8	6.43	25.9	5.95	25.0	5.72	24.1	5.48	22.2	5.02	20.4	4.58
	7.0	6.0	29.6	6.65	27.8	6.18	25.9	5.72	25.0	5.48	24.1	5.27	22.2	4.82	20.4	4.39
	8.6	7.5	29.6	6.23	27.8	5.79	25.9	5.36	25.0	5.15	24.1	4.94	22.2	4.53	20.4	4.13
	11.2	10.0	29.6	5.55	27.8	5.16	25.9	4.78	25.0	4.60	24.1	4.42	22.2	4.06	20.4	3.70
	16.4	15.0	29.6	4.33	27.8	4.05	25.9	3.76	25.0	3.62	24.1	3.49	22.2	3.21	20.4	2.94

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

U-8ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-24.9	-25.0	18.5	5.58	17.5	5.32	16.4	5.06	15.9	4.93	15.3	4.80	14.3	4.54	13.2	4.29
	-19.8	-20.0	19.5	5.72	18.4	5.45	17.3	5.18	16.8	5.04	16.2	4.90	15.1	4.64	13.9	4.37
	-14.7	-15.0	20.7	5.90	19.6	5.61	18.4	5.33	17.8	5.18	17.2	5.04	16.0	4.75	14.8	4.47
	-9.6	-10.0	22.2	6.11	21.0	5.81	19.8	5.51	19.1	5.36	18.5	5.21	17.2	4.90	15.9	4.59
	-4.4	-5.0	24.1	6.38	22.8	6.07	21.5	5.74	20.8	5.58	20.2	5.42	18.8	5.09	17.4	4.76
	-1.8	-2.5	25.3	6.52	24.0	6.19	22.6	5.86	21.9	5.69	21.2	5.53	19.8	5.20	18.3	4.86
	0.8	0.0	26.7	6.65	25.0	6.21	23.3	5.79	22.5	5.57	21.7	5.37	20.0	4.96	18.3	4.57
	2.8	2.0	26.7	6.28	25.0	5.87	23.3	5.47	22.5	5.27	21.7	5.07	20.0	4.69	18.3	4.31
	6.0	5.0	26.7	5.64	25.0	5.28	23.3	4.92	22.5	4.74	21.7	4.56	20.0	4.21	18.3	3.86
	7.0	6.0	26.7	5.41	25.0	5.06	23.3	4.71	22.5	4.54	21.7	4.37	20.0	4.03	18.3	3.70
	8.6	7.5	26.7	5.04	25.0	4.72	23.3	4.40	22.5	4.24	21.7	4.09	20.0	3.78	18.3	3.47
	11.2	10.0	26.7	4.47	25.0	4.19	23.3	3.91	22.5	3.78	21.7	3.64	20.0	3.37	18.3	3.10
	16.4	15.0	26.7	3.44	25.0	3.24	23.3	3.04	22.5	2.94	21.7	2.84	20.0	2.65	18.3	2.45

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-24.9	-25.0	19.0	5.64	17.9	5.40	16.8	5.15	16.3	5.03	15.7	4.90	14.6	4.66	13.5	4.42
	-19.8	-20.0	20.1	5.79	18.9	5.53	17.8	5.28	17.2	5.15	16.6	5.01	15.4	4.76	14.3	4.50
	-14.7	-15.0	21.3	5.98	20.1	5.70	18.9	5.43	18.3	5.29	17.7	5.15	16.5	4.88	15.2	4.59
	-9.6	-10.0	22.9	6.21	21.6	5.92	20.3	5.62	19.7	5.47	19.0	5.33	17.7	5.02	16.3	4.71
	-4.4	-5.0	23.7	6.05	22.2	5.70	20.8	5.36	20.0	5.19	19.3	5.02	17.8	4.69	16.3	4.36
	-1.8	-2.5	23.7	5.73	22.2	5.40	20.8	5.07	20.0	4.91	19.3	4.75	17.8	4.43	16.3	4.13
	0.8	0.0	23.7	5.37	22.2	5.06	20.8	4.76	20.0	4.61	19.3	4.46	17.8	4.16	16.3	3.86
	2.8	2.0	23.7	5.05	22.2	4.77	20.8	4.48	20.0	4.34	19.3	4.20	17.8	3.91	16.3	3.63
	6.0	5.0	23.7	4.51	22.2	4.25	20.8	3.99	20.0	3.86	19.3	3.73	17.8	3.47	16.3	3.21
	7.0	6.0	23.7	4.30	22.2	4.06	20.8	3.81	20.0	3.69	19.3	3.57	17.8	3.32	16.3	3.07
	8.6	7.5	23.7	4.00	22.2	3.78	20.8	3.55	20.0	3.44	19.3	3.33	17.8	3.10	16.3	2.87
	11.2	10.0	23.7	3.51	22.2	3.33	20.8	3.14	20.0	3.05	19.3	2.95	17.8	2.76	16.3	2.56
	16.4	15.0	23.7	2.82	22.2	2.65	20.8	2.49	20.0	2.41	19.3	2.33	17.8	2.16	16.3	2.01

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-24.9	-25.0	19.8	5.84	18.6	5.61	17.5	5.38	16.9	5.26	16.3	5.14	15.2	4.91	14.0	4.68
	-19.8	-20.0	20.8	5.96	19.5	5.67	18.2	5.38	17.5	5.24	16.9	5.10	15.6	4.82	14.3	4.54
	-14.7	-15.0	20.8	5.68	19.5	5.39	18.2	5.11	17.5	4.97	16.9	4.83	15.6	4.55	14.3	4.28
	-9.6	-10.0	20.8	5.32	19.5	5.06	18.2	4.81	17.5	4.68	16.9	4.55	15.6	4.28	14.3	4.01
	-4.4	-5.0	20.8	4.84	19.5	4.61	18.2	4.38	17.5	4.26	16.9	4.15	15.6	3.91	14.3	3.68
	-1.8	-2.5	20.8	4.56	19.5	4.35	18.2	4.13	17.5	4.02	16.9	3.91	15.6	3.69	14.3	3.46
	0.8	0.0	20.8	4.26	19.5	4.06	18.2	3.85	17.5	3.75	16.9	3.65	15.6	3.44	14.3	3.23
	2.8	2.0	20.8	3.99	19.5	3.80	18.2	3.61	17.5	3.51	16.9	3.41	15.6	3.21	14.3	2.98
	6.0	5.0	20.8	3.52	19.5	3.35	18.2	3.17	17.5	3.09	16.9	2.99	15.6	2.81	14.3	2.62
	7.0	6.0	20.8	3.34	19.5	3.19	18.2	3.02	17.5	2.94	16.9	2.86	15.6	2.69	14.3	2.51
	8.6	7.5	20.8	3.10	19.5	2.95	18.2	2.81	17.5	2.73	16.9	2.66	15.6	2.50	14.3	2.34
	11.2	10.0	20.8	2.70	19.5	2.58	18.2	2.47	17.5	2.41	16.9	2.34	15.6	2.21	14.3	2.08
	16.4	15.0	20.8	2.49	19.5	2.35	18.2	2.20	17.5	2.13	16.9	2.06	15.6	1.92	14.3	1.78

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-24.9	-25.0	17.8	5.05	16.7	4.85	15.6	4.65	15.0	4.55	14.5	4.45	13.3	4.25	12.2	4.06
	-19.8	-20.0	17.8	4.84	16.7	4.64	15.6	4.43	15.0	4.33	14.5	4.24	13.3	4.03	12.2	3.83
	-14.7	-15.0	17.8	4.56	16.7	4.39	15.6	4.22	15.0	4.12	14.5	4.02	13.3	3.81	12.2	3.61
	-9.6	-10.0	17.8	4.23	16.7	4.07	15.6	3.91	15.0	3.83	14.5	3.75	13.3	3.57	12.2	3.39
	-4.4	-5.0	17.8	3.81	16.7	3.68	15.6	3.53	15.0	3.46	14.5	3.39	13.3	3.23	12.2	3.06
	-1.8	-2.5	17.8	3.57	16.7	3.45	15.6	3.32	15.0	3.24	14.5	3.17	13.3	3.02	12.2	2.87
	0.8	0.0	17.8	3.31	16.7	3.19	15.6	3.07	15.0	3.01	14.5	2.94	13.3	2.78	12.2	2.60
	2.8	2.0	17.8	3.08	16.7	2.97	15.6	2.84	15.0	2.77	14.5	2.70	13.3	2.55	12.2	2.39
	6.0	5.0	17.8	2.66	16.7	2.56	15.6	2.46	15.0	2.41	14.5	2.35	13.3	2.22	12.2	2.10
	7.0	6.0	17.8	2.53	16.7	2.44	15.6	2.34	15.0	2.29	14.5	2.24	13.3	2.13	12.2	2.01
	8.6	7.5	17.8	2.32	16.7	2.25	15.6	2.16	15.0	2.12	14.5	2.07	13.3	1.97	12.2	1.87
	11.2	10.0	17.8	2.16	16.7	2.04	15.6	1.92	15.0	1.86	14.5	1.81	13.3	1.74	12.2	1.65
	16.4	15.0	17.8	2.16	16.7	2.04	15.6	1.92	15.0	1.86	14.5	1.80	13.3	1.68	12.2	1.55

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

U-8ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-24.9	-25.0	14.8	4.06	13.9	3.92	13.0	3.79	12.5	3.72	12.0	3.66	11.1	3.52	10.2	3.38
	-19.8	-20.0	14.8	3.85	13.9	3.75	13.0	3.62	12.5	3.55	12.0	3.47	11.1	3.33	10.2	3.19
	-14.7	-15.0	14.8	3.60	13.9	3.51	13.0	3.41	12.5	3.35	12.0	3.29	11.1	3.15	10.2	3.00
	-9.6	-10.0	14.8	3.31	13.9	3.23	13.0	3.13	12.5	3.09	12.0	3.04	11.1	2.93	10.2	2.81
	-4.4	-5.0	14.8	2.95	13.9	2.88	13.0	2.81	12.5	2.76	12.0	2.72	11.1	2.62	10.2	2.48
	-1.8	-2.5	14.8	2.75	13.9	2.69	13.0	2.61	12.5	2.58	12.0	2.52	11.1	2.39	10.2	2.26
	0.8	0.0	14.8	2.52	13.9	2.45	13.0	2.36	12.5	2.31	12.0	2.26	11.1	2.15	10.2	2.04
	2.8	2.0	14.8	2.29	13.9	2.22	13.0	2.15	12.5	2.11	12.0	2.07	11.1	1.98	10.2	1.87
	6.0	5.0	14.8	1.95	13.9	1.90	13.0	1.85	12.5	1.82	12.0	1.79	11.1	1.72	10.2	1.64
	7.0	6.0	14.8	1.84	13.9	1.80	13.0	1.75	12.5	1.73	12.0	1.70	11.1	1.64	10.2	1.57
	8.6	7.5	14.8	1.84	13.9	1.74	13.0	1.63	12.5	1.59	12.0	1.57	11.1	1.52	10.2	1.45
	11.2	10.0	14.8	1.84	13.9	1.74	13.0	1.63	12.5	1.58	12.0	1.53	11.1	1.43	10.2	1.33
	16.4	15.0	14.8	1.84	13.9	1.74	13.0	1.63	12.5	1.58	12.0	1.53	11.1	1.43	10.2	1.33

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-24.9	-25.0	11.9	3.18	11.1	3.11	10.4	3.02	10.0	2.98	9.6	2.94	8.9	2.84	8.2	2.75
	-19.8	-20.0	11.9	3.00	11.1	2.95	10.4	2.89	10.0	2.84	9.6	2.79	8.9	2.69	8.2	2.59
	-14.7	-15.0	11.9	2.79	11.1	2.75	10.4	2.70	10.0	2.66	9.6	2.63	8.9	2.54	8.2	2.43
	-9.6	-10.0	11.9	2.54	11.1	2.51	10.4	2.47	10.0	2.44	9.6	2.41	8.9	2.34	8.2	2.24
	-4.4	-5.0	11.9	2.24	11.1	2.21	10.4	2.15	10.0	2.11	9.6	2.07	8.9	1.98	8.2	1.89
	-1.8	-2.5	11.9	2.04	11.1	1.99	10.4	1.93	10.0	1.90	9.6	1.87	8.9	1.80	8.2	1.72
	0.8	0.0	11.9	1.80	11.1	1.77	10.4	1.73	10.0	1.70	9.6	1.68	8.9	1.62	8.2	1.55
	2.8	2.0	11.9	1.62	11.1	1.60	10.4	1.57	10.0	1.55	9.6	1.53	8.9	1.48	8.2	1.42
	6.0	5.0	11.9	1.51	11.1	1.43	10.4	1.35	10.0	1.33	9.6	1.32	8.9	1.28	8.2	1.24
	7.0	6.0	11.9	1.51	11.1	1.43	10.4	1.35	10.0	1.30	9.6	1.27	8.9	1.22	8.2	1.18
	8.6	7.5	11.9	1.51	11.1	1.43	10.4	1.35	10.0	1.30	9.6	1.27	8.9	1.18	8.2	1.10
	11.2	10.0	11.9	1.51	11.1	1.43	10.4	1.35	10.0	1.30	9.6	1.27	8.9	1.18	8.2	1.10
	16.4	15.0	11.9	1.51	11.1	1.43	10.4	1.35	10.0	1.30	9.6	1.27	8.9	1.18	8.2	1.10

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-24.9	-25.0	8.9	2.42	8.3	2.38	7.8	2.32	7.5	2.30	7.2	2.26	6.7	2.20	6.1	2.14
	-19.8	-20.0	8.9	2.26	8.3	2.24	7.8	2.21	7.5	2.18	7.2	2.15	6.7	2.08	6.1	2.01
	-14.7	-15.0	8.9	2.10	8.3	2.08	7.8	2.06	7.5	2.04	7.2	2.02	6.7	1.96	6.1	1.87
	-9.6	-10.0	8.9	1.90	8.3	1.87	7.8	1.82	7.5	1.80	7.2	1.76	6.7	1.70	6.1	1.62
	-4.4	-5.0	8.9	1.55	8.3	1.53	7.8	1.50	7.5	1.48	7.2	1.46	6.7	1.41	6.1	1.36
	-1.8	-2.5	8.9	1.38	8.3	1.36	7.8	1.35	7.5	1.33	7.2	1.32	6.7	1.28	6.1	1.24
	0.8	0.0	8.9	1.21	8.3	1.21	7.8	1.20	7.5	1.19	7.2	1.18	6.7	1.16	6.1	1.12
	2.8	2.0	8.9	1.18	8.3	1.12	7.8	1.09	7.5	1.08	7.2	1.07	6.7	1.05	6.1	1.03
	6.0	5.0	8.9	1.18	8.3	1.12	7.8	1.06	7.5	1.03	7.2	1.00	6.7	0.94	6.1	0.90
	7.0	6.0	8.9	1.18	8.3	1.12	7.8	1.06	7.5	1.03	7.2	1.00	6.7	0.94	6.1	0.88
	8.6	7.5	8.9	1.18	8.3	1.12	7.8	1.06	7.5	1.03	7.2	1.00	6.7	0.94	6.1	0.88
	11.2	10.0	8.9	1.18	8.3	1.12	7.8	1.06	7.5	1.03	7.2	1.00	6.7	0.94	6.1	0.88
	16.4	15.0	8.9	1.18	8.3	1.12	7.8	1.06	7.5	1.03	7.2	1.00	6.7	0.94	6.1	0.88

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

1-3. U-10ME1E81 (Cooling)

Capacity Ratio 30-130%

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

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-10.0	30.1	3.61	30.1	3.61	30.1	3.61	30.1	3.61	32.1	3.86	34.1	4.10	36.1	4.34
	-5.0	30.1	3.63	30.1	3.63	30.1	3.63	30.1	3.63	32.1	3.87	34.1	4.11	36.1	4.36
	0.0	30.1	3.64	30.1	3.64	30.1	3.64	30.1	3.64	32.1	3.88	34.1	4.13	36.1	4.38
	5.0	30.1	3.67	30.1	3.67	30.1	3.67	30.1	3.67	32.1	3.92	34.1	4.18	36.1	4.43
	10.0	30.1	3.74	30.1	3.74	30.1	3.74	30.1	3.74	32.1	4.01	34.1	4.28	36.1	4.54
	15.0	30.1	3.93	30.1	3.93	30.1	3.93	30.1	3.93	32.1	4.23	34.1	4.57	36.1	5.03
	20.0	30.1	4.79	30.1	4.79	30.1	4.79	30.1	4.79	32.1	5.30	34.1	5.83	36.1	6.39
	25.0	30.1	5.96	30.1	5.96	30.1	5.96	30.1	5.96	32.1	6.57	34.1	7.20	36.1	7.87
	30.0	30.1	7.24	30.1	7.24	30.1	7.24	30.1	7.24	32.1	7.96	34.1	8.71	36.1	9.50
	35.0	30.1	8.63	30.1	8.63	30.1	8.63	30.1	8.63	32.1	9.46	33.8	10.11	34.4	10.11
	40.0	30.0	10.08	30.0	10.08	30.0	10.08	30.0	10.08	30.7	10.11	31.3	10.11	32.0	10.11
	43.0	28.7	10.11	28.7	10.11	28.7	10.11	28.7	10.11	29.3	10.11	30.0	10.11	30.6	10.11

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-10.0	28.2	3.38	29.4	3.52	29.4	3.52	29.4	3.52	31.4	3.77	33.3	4.00	35.3	4.24
	-5.0	28.2	3.38	29.4	3.54	29.4	3.54	29.4	3.54	31.4	3.77	33.3	4.01	35.3	4.26
	0.0	28.2	3.39	29.4	3.56	29.4	3.56	29.4	3.56	31.4	3.80	33.3	4.04	35.3	4.28
	5.0	28.2	3.41	29.4	3.58	29.4	3.58	29.4	3.58	31.4	3.83	33.3	4.08	35.3	4.33
	10.0	28.2	3.45	29.4	3.65	29.4	3.65	29.4	3.65	31.4	3.91	33.3	4.17	35.3	4.43
	15.0	28.2	3.54	29.4	3.82	29.4	3.82	29.4	3.82	31.4	4.12	33.3	4.41	35.3	4.83
	20.0	28.2	3.93	29.4	4.62	29.4	4.62	29.4	4.62	31.4	5.10	33.3	5.61	35.3	6.15
	25.0	28.2	4.96	29.4	5.76	29.4	5.76	29.4	5.76	31.4	6.33	33.3	6.94	35.3	7.58
	30.0	28.2	6.08	29.4	6.99	29.4	6.99	29.4	6.99	31.4	7.68	33.3	8.39	35.3	9.16
	35.0	28.2	7.31	29.4	8.34	29.4	8.34	29.4	8.34	31.4	9.14	33.3	9.97	34.2	10.11
	40.0	28.2	8.63	29.4	9.80	29.4	9.80	29.4	9.80	30.5	10.11	31.1	10.11	31.8	10.11
	43.0	28.2	9.48	28.5	10.11	28.5	10.11	28.5	10.11	29.1	10.11	29.8	10.11	30.4	10.11

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-10.0	25.3	3.03	27.4	3.28	28.7	3.45	28.7	3.45	30.6	3.67	32.5	3.91	34.4	4.14
	-5.0	25.3	3.03	27.4	3.28	28.7	3.45	28.7	3.45	30.6	3.69	32.5	3.92	34.4	4.15
	0.0	25.3	3.03	27.4	3.29	28.7	3.46	28.7	3.46	30.6	3.70	32.5	3.94	34.4	4.18
	5.0	25.3	3.05	27.4	3.31	28.7	3.49	28.7	3.49	30.6	3.73	32.5	3.98	34.4	4.22
	10.0	25.3	3.09	27.4	3.35	28.7	3.56	28.7	3.56	30.6	3.80	32.5	4.06	34.4	4.32
	15.0	25.3	3.17	27.4	3.47	28.7	3.72	28.7	3.72	30.6	4.00	32.5	4.29	34.4	4.64
	20.0	25.3	3.52	27.4	3.94	28.7	4.45	28.7	4.45	30.6	4.91	32.5	5.39	34.4	5.91
	25.0	25.3	4.43	27.4	4.94	28.7	5.55	28.7	5.55	30.6	6.10	32.5	6.68	34.4	7.29
	30.0	25.3	5.43	27.4	6.05	28.7	6.75	28.7	6.75	30.6	7.41	32.5	8.09	34.4	8.81
	35.0	25.3	6.52	27.4	7.25	28.7	8.06	28.7	8.06	30.6	8.82	32.5	9.62	33.9	10.11
	40.0	25.3	7.70	27.4	8.54	28.7	9.47	28.7	9.47	30.3	10.11	30.9	10.11	31.5	10.11
	43.0	25.3	8.45	27.4	9.37	28.3	10.11	28.3	10.11	28.9	10.11	29.5	10.11	30.2	10.11

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃DB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-10.0	22.4	2.68	24.3	2.91	26.1	3.14	28.0	3.36	29.9	3.59	31.7	3.81	33.6	4.04
	-5.0	22.4	2.69	24.3	2.92	26.1	3.14	28.0	3.37	29.9	3.59	31.7	3.82	33.6	4.05
	0.0	22.4	2.70	24.3	2.93	26.1	3.15	28.0	3.38	29.9	3.61	31.7	3.84	33.6	4.07
	5.0	22.4	2.71	24.3	2.94	26.1	3.17	28.0	3.41	29.9	3.64	31.7	3.87	33.6	4.12
	10.0	22.4	2.74	24.3	2.98	26.1	3.22	28.0	3.46	29.9	3.71	31.7	3.96	33.6	4.21
	15.0	22.4	2.82	24.3	3.08	26.1	3.35	28.0	3.62	29.9	3.89	31.7	4.17	33.6	4.45
	20.0	22.4	3.14	24.3	3.49	26.1	3.87	28.0	4.29	29.9	4.72	31.7	5.18	33.6	5.67
	25.0	22.4	3.94	24.3	4.38	26.1	4.85	28.0	5.35	29.9	5.87	31.7	6.43	33.6	7.01
	30.0	22.4	4.82	24.3	5.35	26.1	5.92	28.0	6.51	29.9	7.14	31.7	7.80	33.6	8.49
	35.0	22.4	5.78	24.3	6.41	26.1	7.08	28.0	7.78	29.9	8.51	31.7	9.27	33.6	10.08
	40.0	22.4	6.82	24.3	7.55	26.1	8.33	28.0	9.14	29.9	9.99	30.7	10.11	31.3	10.11
	43.0	22.4	7.48	24.3	8.29	26.1	9.13	28.0	10.01	28.7	10.11	29.3	10.11	29.9	10.11

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

U-10ME1E81 (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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-10.0	20.2	2.41	21.8	2.61	23.5	2.82	25.2	3.02	26.9	3.22	28.6	3.42	30.2	3.63
	-5.0	20.2	2.42	21.8	2.62	23.5	2.82	25.2	3.03	26.9	3.23	28.6	3.43	30.2	3.64
	0.0	20.2	2.43	21.8	2.63	23.5	2.83	25.2	3.03	26.9	3.24	28.6	3.45	30.2	3.66
	5.0	20.2	2.44	21.8	2.64	23.5	2.85	25.2	3.06	26.9	3.27	28.6	3.48	30.2	3.69
	10.0	20.2	2.46	21.8	2.67	23.5	2.89	25.2	3.10	26.9	3.31	28.6	3.53	30.2	3.76
	15.0	20.2	2.52	21.8	2.75	23.5	2.98	25.2	3.21	26.9	3.45	28.6	3.69	30.2	3.94
	20.0	20.2	2.75	21.8	3.03	23.5	3.33	25.2	3.66	26.9	4.02	28.6	4.40	30.2	4.79
	25.0	20.2	3.42	21.8	3.80	23.5	4.19	25.2	4.60	26.9	5.03	28.6	5.48	30.2	5.96
	30.0	20.2	4.19	21.8	4.64	23.5	5.11	25.2	5.61	26.9	6.13	28.6	6.67	30.2	7.24
	35.0	20.2	5.04	21.8	5.58	23.5	6.14	25.2	6.72	26.9	7.33	28.6	7.97	30.2	8.63
	40.0	20.2	5.96	21.8	6.58	23.5	7.24	25.2	7.91	26.9	8.62	28.6	9.36	30.1	10.08
	43.0	20.2	6.54	21.8	7.23	23.5	7.94	25.2	8.68	26.9	9.45	28.4	10.11	29.0	10.11

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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-10.0	17.9	2.15	19.4	2.33	20.9	2.51	22.4	2.68	23.9	2.86	25.4	3.04	26.9	3.22
	-5.0	17.9	2.15	19.4	2.33	20.9	2.51	22.4	2.69	23.9	2.87	25.4	3.05	26.9	3.23
	0.0	17.9	2.16	19.4	2.33	20.9	2.51	22.4	2.69	23.9	2.88	25.4	3.06	26.9	3.24
	5.0	17.9	2.16	19.4	2.34	20.9	2.53	22.4	2.71	23.9	2.89	25.4	3.08	26.9	3.27
	10.0	17.9	2.18	19.4	2.37	20.9	2.55	22.4	2.74	23.9	2.93	25.4	3.12	26.9	3.31
	15.0	17.9	2.23	19.4	2.42	20.9	2.62	22.4	2.82	23.9	3.03	25.4	3.24	26.9	3.45
	20.0	17.9	2.39	19.4	2.62	20.9	2.86	22.4	3.11	23.9	3.38	25.4	3.68	26.9	4.00
	25.0	17.9	2.95	19.4	3.25	20.9	3.57	22.4	3.91	23.9	4.26	25.4	4.62	26.9	5.00
	30.0	17.9	3.63	19.4	3.99	20.9	4.37	22.4	4.78	23.9	5.20	25.4	5.64	26.9	6.10
	35.0	17.9	4.36	19.4	4.80	20.9	5.26	22.4	5.73	23.9	6.24	25.4	6.75	26.9	7.30
	40.0	17.9	5.16	19.4	5.67	20.9	6.21	22.4	6.77	23.9	7.35	25.4	7.96	26.9	8.58
	43.0	17.9	5.66	19.4	6.23	20.9	6.82	22.4	7.43	23.9	8.07	25.4	8.73	26.9	9.41

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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-10.0	15.7	1.87	17.0	2.03	18.3	2.19	19.6	2.35	20.9	2.51	22.2	2.66	23.5	2.82
	-5.0	15.7	1.88	17.0	2.04	18.3	2.19	19.6	2.35	20.9	2.51	22.2	2.67	23.5	2.82
	0.0	15.7	1.88	17.0	2.04	18.3	2.20	19.6	2.36	20.9	2.51	22.2	2.68	23.5	2.83
	5.0	15.7	1.89	17.0	2.05	18.3	2.21	19.6	2.37	20.9	2.53	22.2	2.68	23.5	2.85
	10.0	15.7	1.90	17.0	2.06	18.3	2.23	19.6	2.39	20.9	2.55	22.2	2.72	23.5	2.88
	15.0	15.7	1.93	17.0	2.10	18.3	2.27	19.6	2.44	20.9	2.61	22.2	2.79	23.5	2.97
	20.0	15.7	2.04	17.0	2.23	18.3	2.44	19.6	2.64	20.9	2.85	22.2	3.07	23.5	3.29
	25.0	15.7	2.51	17.0	2.75	18.3	3.01	19.6	3.28	20.9	3.55	22.2	3.84	23.5	4.14
	30.0	15.7	3.09	17.0	3.38	18.3	3.70	19.6	4.02	20.9	4.36	22.2	4.70	23.5	5.06
	35.0	15.7	3.72	17.0	4.08	18.3	4.44	19.6	4.83	20.9	5.24	22.2	5.65	23.5	6.08
	40.0	15.7	4.40	17.0	4.82	18.3	5.26	19.6	5.72	20.9	6.19	22.2	6.67	23.5	7.17
	43.0	15.7	4.83	17.0	5.30	18.3	5.78	19.6	6.28	20.9	6.79	22.2	7.32	23.5	7.87

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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-10.0	13.4	1.61	14.6	1.74	15.7	1.87	16.8	2.02	17.9	2.15	19.0	2.28	20.2	2.41
	-5.0	13.4	1.61	14.6	1.74	15.7	1.88	16.8	2.02	17.9	2.15	19.0	2.28	20.2	2.42
	0.0	13.4	1.61	14.6	1.75	15.7	1.88	16.8	2.02	17.9	2.16	19.0	2.29	20.2	2.43
	5.0	13.4	1.62	14.6	1.75	15.7	1.89	16.8	2.02	17.9	2.16	19.0	2.30	20.2	2.44
	10.0	13.4	1.63	14.6	1.76	15.7	1.90	16.8	2.04	17.9	2.18	19.0	2.32	20.2	2.46
	15.0	13.4	1.64	14.6	1.79	15.7	1.93	16.8	2.07	17.9	2.22	19.0	2.37	20.2	2.51
	20.0	13.4	1.72	14.6	1.87	15.7	2.04	16.8	2.20	17.9	2.37	19.0	2.54	20.2	2.72
	25.0	13.4	2.12	14.6	2.31	15.7	2.51	16.8	2.71	17.9	2.92	19.0	3.14	20.2	3.37
	30.0	13.4	2.60	14.6	2.83	15.7	3.07	16.8	3.33	17.9	3.59	19.0	3.86	20.2	4.13
	35.0	13.4	3.13	14.6	3.41	15.7	3.70	16.8	4.00	17.9	4.32	19.0	4.64	20.2	4.97
	40.0	13.4	3.70	14.6	4.03	15.7	4.38	16.8	4.74	17.9	5.11	19.0	5.48	20.2	5.88
	43.0	13.4	4.06	14.6	4.43	15.7	4.82	16.8	5.20	17.9	5.61	19.0	6.03	20.2	6.46

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

U-10ME1E81 (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. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-10.0	11.2	1.34	12.1	1.45	13.1	1.56	14.0	1.67	14.9	1.79	15.9	1.90	16.8	2.02
	-5.0	11.2	1.34	12.1	1.45	13.1	1.56	14.0	1.68	14.9	1.79	15.9	1.90	16.8	2.02
	0.0	11.2	1.35	12.1	1.45	13.1	1.56	14.0	1.68	14.9	1.79	15.9	1.91	16.8	2.02
	5.0	11.2	1.35	12.1	1.45	13.1	1.57	14.0	1.68	14.9	1.80	15.9	1.91	16.8	2.02
	10.0	11.2	1.35	12.1	1.46	13.1	1.58	14.0	1.69	14.9	1.80	15.9	1.92	16.8	2.04
	15.0	11.2	1.36	12.1	1.48	13.1	1.59	14.0	1.71	14.9	1.83	15.9	1.95	16.8	2.07
	20.0	11.2	1.41	12.1	1.53	13.1	1.66	14.0	1.79	14.9	1.92	15.9	2.05	16.8	2.19
	25.0	11.2	1.71	12.1	1.91	13.1	2.05	14.0	2.19	14.9	2.36	15.9	2.51	16.8	2.68
	30.0	11.2	2.15	12.1	2.33	13.1	2.51	14.0	2.70	14.9	2.89	15.9	3.10	16.8	3.30
	35.0	11.2	2.58	12.1	2.79	13.1	3.02	14.0	3.24	14.9	3.48	15.9	3.73	16.8	3.98
	40.0	11.2	3.04	12.1	3.30	13.1	3.57	14.0	3.84	14.9	4.12	15.9	4.41	16.8	4.71
	43.0	11.2	3.34	12.1	3.63	13.1	3.92	14.0	4.22	14.9	4.53	15.9	4.85	16.8	5.17

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-10.0	9.0	1.07	9.7	1.16	10.4	1.25	11.2	1.34	12.0	1.43	12.7	1.52	13.4	1.61
	-5.0	9.0	1.07	9.7	1.16	10.4	1.25	11.2	1.34	12.0	1.43	12.7	1.52	13.4	1.61
	0.0	9.0	1.07	9.7	1.17	10.4	1.25	11.2	1.35	12.0	1.43	12.7	1.52	13.4	1.61
	5.0	9.0	1.07	9.7	1.17	10.4	1.25	11.2	1.35	12.0	1.44	12.7	1.52	13.4	1.62
	10.0	9.0	1.08	9.7	1.17	10.4	1.26	11.2	1.35	12.0	1.44	12.7	1.53	13.4	1.63
	15.0	9.0	1.09	9.7	1.17	10.4	1.27	11.2	1.36	12.0	1.45	12.7	1.55	13.4	1.64
	20.0	9.0	1.10	9.7	1.21	10.4	1.31	11.2	1.40	12.0	1.50	12.7	1.60	13.4	1.70
	25.0	9.0	1.28	9.7	1.41	10.4	1.54	11.2	1.68	12.0	1.83	12.7	1.98	13.4	2.09
	30.0	9.0	1.73	9.7	1.87	10.4	2.00	11.2	2.13	12.0	2.27	12.7	2.41	13.4	2.56
	35.0	9.0	2.07	9.7	2.23	10.4	2.39	11.2	2.56	12.0	2.73	12.7	2.90	13.4	3.08
	40.0	9.0	2.44	9.7	2.62	10.4	2.82	11.2	3.02	12.0	3.23	12.7	3.43	13.4	3.65
	43.0	9.0	2.67	9.7	2.88	10.4	3.10	11.2	3.31	12.0	3.54	12.7	3.77	13.4	4.01

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-10.0	6.7	0.80	7.3	0.87	7.8	0.94	8.4	1.00	9.0	1.07	9.5	1.14	10.1	1.21
	-5.0	6.7	0.80	7.3	0.87	7.8	0.94	8.4	1.00	9.0	1.07	9.5	1.14	10.1	1.21
	0.0	6.7	0.81	7.3	0.87	7.8	0.94	8.4	1.00	9.0	1.07	9.5	1.14	10.1	1.21
	5.0	6.7	0.81	7.3	0.87	7.8	0.94	8.4	1.01	9.0	1.07	9.5	1.14	10.1	1.21
	10.0	6.7	0.81	7.3	0.88	7.8	0.94	8.4	1.01	9.0	1.08	9.5	1.14	10.1	1.21
	15.0	6.7	0.81	7.3	0.88	7.8	0.95	8.4	1.02	9.0	1.08	9.5	1.15	10.1	1.22
	20.0	6.7	0.82	7.3	0.89	7.8	0.96	8.4	1.03	9.0	1.10	9.5	1.17	10.1	1.25
	25.0	6.7	0.89	7.3	0.98	7.8	1.07	8.4	1.16	9.0	1.25	9.5	1.35	10.1	1.44
	30.0	6.7	1.36	7.3	1.45	7.8	1.54	8.4	1.63	9.0	1.72	9.5	1.81	10.1	1.91
	35.0	6.7	1.61	7.3	1.72	7.8	1.83	8.4	1.94	9.0	2.05	9.5	2.17	10.1	2.29
	40.0	6.7	1.87	7.3	2.01	7.8	2.14	8.4	2.27	9.0	2.41	9.5	2.55	10.1	2.70
	43.0	6.7	2.05	7.3	2.19	7.8	2.34	8.4	2.49	9.0	2.65	9.5	2.80	10.1	2.96

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

1-4. U-10ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-24.9	-25.0	25.4	9.90	24.1	9.24	22.7	8.58	22.0	8.26	22.0	8.26	22.0	8.26	22.0	8.26
	-19.8	-20.0	26.7	9.98	25.4	9.38	23.9	8.72	23.2	8.39	23.2	8.39	23.2	8.39	23.2	8.39
	-14.7	-15.0	28.0	9.98	26.9	9.58	25.5	8.92	24.7	8.59	24.7	8.59	24.7	8.59	24.7	8.59
	-9.6	-10.0	29.6	9.98	28.9	9.88	27.4	9.21	26.6	8.87	26.6	8.87	26.6	8.87	26.6	8.87
	-4.4	-5.0	31.7	9.98	31.1	9.98	30.0	9.62	29.2	9.27	29.2	9.27	29.2	9.27	29.2	9.27
	-1.8	-2.5	32.9	9.98	32.4	9.98	31.7	9.88	30.8	9.52	30.8	9.52	30.8	9.52	30.8	9.52
	0.8	0.0	34.4	9.98	33.8	9.98	33.2	9.98	32.7	9.82	32.7	9.82	32.7	9.82	32.7	9.82
	2.8	2.0	35.7	9.98	35.1	9.98	34.5	9.98	33.9	9.82	33.9	9.82	33.9	9.82	33.9	9.82
	6.0	5.0	37.6	9.98	37.0	9.98	35.1	9.42	33.9	8.98	33.9	8.98	33.9	8.98	33.9	8.98
	7.0	6.0	38.3	9.98	37.6	9.97	35.1	9.12	33.9	8.71	33.9	8.71	33.9	8.71	33.9	8.71
	8.6	7.5	39.4	9.98	37.6	9.49	35.1	8.69	33.9	8.29	33.9	8.29	33.9	8.29	33.9	8.29
	11.2	10.0	40.1	9.43	37.6	8.63	35.1	7.87	33.9	7.51	33.9	7.51	33.9	7.51	33.9	7.51
	16.4	15.0	40.1	7.62	37.6	6.99	35.1	6.38	33.9	6.09	33.9	6.09	33.9	6.09	33.9	6.09

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-24.9	-25.0	25.5	9.77	24.1	9.12	22.7	8.49	22.0	8.17	22.0	8.17	22.0	8.17	22.0	8.17
	-19.8	-20.0	26.8	9.91	25.4	9.27	24.0	8.63	23.2	8.31	23.2	8.31	23.2	8.31	23.2	8.31
	-14.7	-15.0	28.2	9.98	27.0	9.48	25.5	8.83	24.8	8.51	24.8	8.51	24.8	8.51	24.8	8.51
	-9.6	-10.0	29.8	9.98	29.0	9.78	27.4	9.12	26.6	8.79	26.6	8.79	26.6	8.79	26.6	8.79
	-4.4	-5.0	31.8	9.98	31.3	9.98	30.0	9.52	29.2	9.19	29.2	9.19	29.2	9.19	29.2	9.19
	-1.8	-2.5	33.1	9.98	32.5	9.98	31.7	9.78	30.8	9.43	30.8	9.43	30.8	9.43	30.8	9.43
	0.8	0.0	34.6	9.98	34.0	9.98	33.4	9.98	32.7	9.72	32.7	9.72	32.7	9.72	32.4	9.05
	2.8	2.0	35.8	9.98	35.2	9.98	34.3	9.85	33.1	9.38	33.1	9.38	33.1	9.38	32.4	8.64
	6.0	5.0	37.7	9.98	36.8	9.86	34.3	9.02	33.1	8.62	33.1	8.62	33.1	8.62	32.4	8.01
	7.0	6.0	38.4	9.98	36.8	9.55	34.3	8.75	33.1	8.36	33.1	8.36	33.1	8.36	32.4	7.73
	8.6	7.5	39.2	9.88	36.8	9.10	34.3	8.32	33.1	7.93	33.1	7.93	33.1	7.93	32.4	7.30
	11.2	10.0	39.2	8.98	36.8	8.23	34.3	7.52	33.1	7.18	33.1	7.18	33.1	7.18	32.4	6.60
	16.4	15.0	39.2	7.24	36.8	6.65	34.3	6.08	33.1	5.81	33.1	5.81	33.1	5.81	32.4	5.37

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-24.9	-25.0	25.5	9.64	24.2	9.02	22.8	8.39	22.1	8.09	22.1	8.09	21.9	7.86	20.3	7.23
	-19.8	-20.0	26.9	9.80	25.5	9.16	24.0	8.54	23.3	8.23	23.3	8.23	23.2	8.00	21.5	7.36
	-14.7	-15.0	28.4	9.98	27.0	9.38	25.5	8.74	24.8	8.42	24.8	8.42	24.7	8.21	22.9	7.54
	-9.6	-10.0	30.0	9.98	29.0	9.68	27.5	9.03	26.7	8.71	26.7	8.71	26.6	8.49	24.8	7.80
	-4.4	-5.0	32.0	9.98	31.5	9.98	30.1	9.43	29.2	9.10	29.2	9.10	29.2	9.10	27.2	8.16
	-1.8	-2.5	33.3	9.98	32.7	9.98	31.7	9.68	30.8	9.35	30.8	9.35	30.8	9.35	28.7	8.37
	0.8	0.0	34.7	9.98	34.1	9.98	33.5	9.94	32.3	9.46	32.3	9.46	31.6	8.91	28.9	8.01
	2.8	2.0	35.9	9.98	35.2	9.98	33.5	9.42	32.3	8.99	32.3	8.99	31.6	8.49	28.9	7.66
	6.0	5.0	37.7	9.98	35.9	9.43	33.5	8.65	32.3	8.27	32.3	8.27	31.6	7.86	28.9	7.08
	7.0	6.0	38.3	9.93	35.9	9.15	33.5	8.40	32.3	8.03	32.3	8.03	31.6	7.60	28.9	6.84
	8.6	7.5	38.3	9.45	35.9	8.69	33.5	7.94	32.3	7.58	32.3	7.58	31.6	7.17	28.9	6.45
	11.2	10.0	38.3	8.54	35.9	7.84	33.5	7.18	32.3	6.86	32.3	6.86	31.6	6.48	28.9	5.84
	16.4	15.0	38.3	6.87	35.9	6.32	33.5	5.79	32.3	5.54	32.3	5.54	31.6	5.25	28.9	4.74

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-24.9	-25.0	25.5	9.52	24.2	8.90	22.8	8.30	22.1	8.00	21.4	7.70	19.9	7.12	18.5	6.56
	-19.8	-20.0	26.9	9.68	25.5	9.06	24.0	8.45	23.3	8.15	22.6	7.85	21.1	7.25	19.5	6.68
	-14.7	-15.0	28.5	9.91	27.1	9.28	25.6	8.66	24.8	8.35	24.0	8.04	22.5	7.43	20.8	6.84
	-9.6	-10.0	30.2	9.98	29.1	9.58	27.5	8.95	26.7	8.63	25.9	8.31	24.2	7.69	22.5	7.07
	-4.4	-5.0	32.2	9.98	31.7	9.98	30.1	9.35	29.2	9.02	28.3	8.69	26.6	8.03	24.7	7.39
	-1.8	-2.5	33.5	9.98	32.9	9.98	31.7	9.59	30.8	9.25	29.9	8.92	28.0	8.25	25.7	7.42
	0.8	0.0	34.9	9.98	34.2	9.98	32.7	9.48	31.5	9.04	30.3	8.61	28.0	7.80	25.7	7.03
	2.8	2.0	35.9	9.98	35.0	9.84	32.7	8.99	31.5	8.59	30.3	8.20	28.0	7.45	25.7	6.74
	6.0	5.0	37.3	9.79	35.0	9.02	32.7	8.29	31.5	7.94	30.3	7.60	28.0	6.89	25.7	6.21
	7.0	6.0	37.3	9.48	35.0	8.76	32.7	8.04	31.5	7.68	30.3	7.33	28.0	6.64	25.7	5.99
	8.6	7.5	37.3	9.00	35.0	8.27	32.7	7.58	31.5	7.24	30.3	6.91	28.0	6.27	25.7	5.66
	11.2	10.0	37.3	8.11	35.0	7.46	32.7	6.84	31.5	6.54	30.3	6.24	28.0	5.68	25.7	5.12
	16.4	15.0	37.3	6.50	35.0	6.00	32.7	5.51	31.5	5.28	30.3	5.04	28.0	4.59	25.7	4.16

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

U-10ME1E81 (Heating) **Capacity Ratio 30-130%**

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

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-24.9	-25.0	25.8	9.09	24.4	8.53	22.9	7.99	22.2	7.72	21.5	7.45	20.0	6.92	18.5	6.41
	-19.8	-20.0	27.2	9.27	25.7	8.71	24.2	8.15	23.5	7.87	22.7	7.60	21.2	7.06	19.6	6.53
	-14.7	-15.0	28.8	9.52	27.3	8.94	25.7	8.36	24.9	8.08	24.2	7.80	22.5	7.23	20.9	6.69
	-9.6	-10.0	30.9	9.85	29.3	9.25	27.7	8.66	26.8	8.36	26.0	8.06	24.3	7.48	22.5	6.91
	-4.4	-5.0	33.0	9.98	31.5	9.47	29.4	8.69	28.4	8.32	27.3	7.95	25.2	7.25	23.1	6.59
	-1.8	-2.5	33.6	9.75	31.5	8.99	29.4	8.27	28.4	7.93	27.3	7.58	25.2	6.93	23.1	6.30
	0.8	0.0	33.6	9.21	31.5	8.52	29.4	7.85	28.4	7.53	27.3	7.21	25.2	6.60	23.1	6.01
	2.8	2.0	33.6	8.78	31.5	8.13	29.4	7.51	28.4	7.21	27.3	6.91	25.2	6.32	23.1	5.75
	6.0	5.0	33.6	8.06	31.5	7.46	29.4	6.87	28.4	6.59	27.3	6.31	25.2	5.76	23.1	5.24
	7.0	6.0	33.6	7.76	31.5	7.17	29.4	6.61	28.4	6.34	27.3	6.07	25.2	5.55	23.1	5.05
	8.6	7.5	33.6	7.28	31.5	6.74	29.4	6.22	28.4	5.97	27.3	5.71	25.2	5.23	23.1	4.75
	11.2	10.0	33.6	6.54	31.5	6.06	29.4	5.59	28.4	5.37	27.3	5.15	25.2	4.71	23.1	4.29
	16.4	15.0	33.6	5.18	31.5	4.82	29.4	4.46	28.4	4.29	27.3	4.12	25.2	3.79	23.1	3.46

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-24.9	-25.0	26.1	8.79	24.7	8.28	23.2	7.78	22.5	7.53	21.7	7.29	20.2	6.81	18.7	6.35
	-19.8	-20.0	27.5	8.99	26.0	8.47	24.5	7.96	23.7	7.70	22.9	7.45	21.4	6.95	19.8	6.47
	-14.7	-15.0	29.2	9.25	27.6	8.72	26.0	8.18	25.2	7.91	24.3	7.60	22.4	6.99	20.5	6.42
	-9.6	-10.0	29.9	8.92	28.0	8.29	26.1	7.68	25.2	7.38	24.3	7.10	22.4	6.54	20.5	6.00
	-4.4	-5.0	29.9	8.22	28.0	7.65	26.1	7.10	25.2	6.84	24.3	6.57	22.4	6.06	20.5	5.56
	-1.8	-2.5	29.9	7.86	28.0	7.33	26.1	6.80	25.2	6.55	24.3	6.30	22.4	5.81	20.5	5.34
	0.8	0.0	29.9	7.50	28.0	6.98	26.1	6.48	25.2	6.24	24.3	5.99	22.4	5.52	20.5	5.07
	2.8	2.0	29.9	7.10	28.0	6.62	26.1	6.14	25.2	5.91	24.3	5.68	22.4	5.24	20.5	4.80
	6.0	5.0	29.9	6.43	28.0	5.99	26.1	5.57	25.2	5.36	24.3	5.15	22.4	4.75	20.5	4.35
	7.0	6.0	29.9	6.17	28.0	5.76	26.1	5.35	25.2	5.15	24.3	4.95	22.4	4.56	20.5	4.19
	8.6	7.5	29.9	5.78	28.0	5.39	26.1	5.02	25.2	4.83	24.3	4.65	22.4	4.29	20.5	3.93
	11.2	10.0	29.9	5.15	28.0	4.82	26.1	4.49	25.2	4.33	24.3	4.17	22.4	3.86	20.5	3.54
	16.4	15.0	29.9	4.03	28.0	3.79	26.1	3.55	25.2	3.43	24.3	3.31	22.4	3.08	20.5	2.85

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-24.9	-25.0	26.1	8.38	24.5	7.86	22.9	7.37	22.1	7.13	21.2	6.88	19.6	6.43	18.0	5.98
	-19.8	-20.0	26.1	7.94	24.5	7.46	22.9	6.99	22.1	6.76	21.2	6.53	19.6	6.09	18.0	5.67
	-14.7	-15.0	26.1	7.51	24.5	7.05	22.9	6.60	22.1	6.39	21.2	6.17	19.6	5.75	18.0	5.35
	-9.6	-10.0	26.1	7.07	24.5	6.64	22.9	6.21	22.1	6.01	21.2	5.81	19.6	5.41	18.0	5.02
	-4.4	-5.0	26.1	6.60	24.5	6.19	22.9	5.80	22.1	5.61	21.2	5.42	19.6	5.05	18.0	4.68
	-1.8	-2.5	26.1	6.27	24.5	5.89	22.9	5.51	22.1	5.33	21.2	5.15	19.6	4.80	18.0	4.45
	0.8	0.0	26.1	5.90	24.5	5.54	22.9	5.19	22.1	5.02	21.2	4.85	19.6	4.52	18.0	4.19
	2.8	2.0	26.1	5.57	24.5	5.24	22.9	4.92	22.1	4.75	21.2	4.59	19.6	4.28	18.0	3.96
	6.0	5.0	26.1	5.01	24.5	4.72	22.9	4.42	22.1	4.28	21.2	4.13	19.6	3.84	18.0	3.56
	7.0	6.0	26.1	4.79	24.5	4.52	22.9	4.24	22.1	4.10	21.2	3.96	19.6	3.69	18.0	3.41
	8.6	7.5	26.1	4.47	24.5	4.22	22.9	3.96	22.1	3.84	21.2	3.71	19.6	3.46	18.0	3.20
	11.2	10.0	26.1	3.96	24.5	3.75	22.9	3.53	22.1	3.43	21.2	3.32	19.6	3.10	18.0	2.88
	16.4	15.0	26.1	3.06	24.5	2.91	22.9	2.76	22.1	2.69	21.2	2.61	19.6	2.46	18.0	2.30

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-24.9	-25.0	22.4	6.50	21.0	6.17	19.6	5.85	18.9	5.70	18.2	5.54	16.8	5.24	15.4	4.95
	-19.8	-20.0	22.4	6.21	21.0	5.89	19.6	5.58	18.9	5.43	18.2	5.28	16.8	4.98	15.4	4.69
	-14.7	-15.0	22.4	5.91	21.0	5.61	19.6	5.31	18.9	5.16	18.2	5.02	16.8	4.72	15.4	4.44
	-9.6	-10.0	22.4	5.58	21.0	5.30	19.6	5.02	18.9	4.88	18.2	4.74	16.8	4.46	15.4	4.18
	-4.4	-5.0	22.4	5.11	21.0	4.85	19.6	4.60	18.9	4.48	18.2	4.35	16.8	4.11	15.4	3.86
	-1.8	-2.5	22.4	4.83	21.0	4.60	19.6	4.36	18.9	4.24	18.2	4.12	16.8	3.89	15.4	3.65
	0.8	0.0	22.4	4.53	21.0	4.31	19.6	4.09	18.9	3.98	18.2	3.87	16.8	3.65	15.4	3.43
	2.8	2.0	22.4	4.26	21.0	4.06	19.6	3.85	18.9	3.75	18.2	3.64	16.8	3.43	15.4	3.21
	6.0	5.0	22.4	3.79	21.0	3.62	19.6	3.43	18.9	3.33	18.2	3.24	16.8	3.05	15.4	2.85
	7.0	6.0	22.4	3.62	21.0	3.46	19.6	3.28	18.9	3.19	18.2	3.10	16.8	2.92	15.4	2.73
	8.6	7.5	22.4	3.36	21.0	3.22	19.6	3.06	18.9	2.98	18.2	2.90	16.8	2.73	15.4	2.57
	11.2	10.0	22.4	2.96	21.0	2.84	19.6	2.71	18.9	2.64	18.2	2.58	16.8	2.44	15.4	2.30
	16.4	15.0	22.4	2.66	21.0	2.53	19.6	2.38	18.9	2.31	18.2	2.24	16.8	2.10	15.4	1.96

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

U-10ME1E81 (Heating) **Capacity Ratio 30-130%**

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

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-24.9	-25.0	18.7	5.05	17.5	4.85	16.3	4.65	15.8	4.55	15.2	4.45	14.0	4.26	12.8	4.06
	-19.8	-20.0	18.7	4.85	17.5	4.65	16.3	4.45	15.8	4.35	15.2	4.25	14.0	4.06	12.8	3.86
	-14.7	-15.0	18.7	4.58	17.5	4.42	16.3	4.25	15.8	4.15	15.2	4.06	14.0	3.86	12.8	3.66
	-9.6	-10.0	18.7	4.26	17.5	4.11	16.3	3.95	15.8	3.87	15.2	3.79	14.0	3.62	12.8	3.44
	-4.4	-5.0	18.7	3.88	17.5	3.74	16.3	3.59	15.8	3.52	15.2	3.45	14.0	3.29	12.8	3.13
	-1.8	-2.5	18.7	3.65	17.5	3.52	16.3	3.39	15.8	3.32	15.2	3.25	14.0	3.10	12.8	2.96
	0.8	0.0	18.7	3.39	17.5	3.28	16.3	3.16	15.8	3.10	15.2	3.03	14.0	2.90	12.8	2.72
	2.8	2.0	18.7	3.17	17.5	3.06	16.3	2.95	15.8	2.89	15.2	2.82	14.0	2.67	12.8	2.52
	6.0	5.0	18.7	2.79	17.5	2.69	16.3	2.59	15.8	2.53	15.2	2.47	14.0	2.36	12.8	2.23
	7.0	6.0	18.7	2.65	17.5	2.57	16.3	2.47	15.8	2.42	15.2	2.37	14.0	2.26	12.8	2.14
	8.6	7.5	18.7	2.45	17.5	2.37	16.3	2.30	15.8	2.25	15.2	2.20	14.0	2.11	12.8	2.00
	11.2	10.0	18.7	2.29	17.5	2.17	16.3	2.05	15.8	2.00	15.2	1.96	14.0	1.88	12.8	1.80
	16.4	15.0	18.7	2.29	17.5	2.17	16.3	2.05	15.8	2.00	15.2	1.94	14.0	1.81	12.8	1.70

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-24.9	-25.0	14.9	3.90	14.0	3.79	13.1	3.66	12.6	3.60	12.1	3.54	11.2	3.42	10.3	3.29
	-19.8	-20.0	14.9	3.70	14.0	3.62	13.1	3.51	12.6	3.45	12.1	3.39	11.2	3.26	10.3	3.12
	-14.7	-15.0	14.9	3.47	14.0	3.39	13.1	3.31	12.6	3.26	12.1	3.21	11.2	3.10	10.3	2.96
	-9.6	-10.0	14.9	3.21	14.0	3.14	13.1	3.06	12.6	3.02	12.1	2.97	11.2	2.88	10.3	2.77
	-4.4	-5.0	14.9	2.88	14.0	2.83	13.1	2.76	12.6	2.72	12.1	2.68	11.2	2.60	10.3	2.48
	-1.8	-2.5	14.9	2.69	14.0	2.64	13.1	2.58	12.6	2.55	12.1	2.50	11.2	2.40	10.3	2.27
	0.8	0.0	14.9	2.49	14.0	2.43	13.1	2.36	12.6	2.31	12.1	2.27	11.2	2.17	10.3	2.07
	2.8	2.0	14.9	2.28	14.0	2.23	13.1	2.17	12.6	2.13	12.1	2.09	11.2	2.01	10.3	1.92
	6.0	5.0	14.9	1.97	14.0	1.93	13.1	1.88	12.6	1.86	12.1	1.84	11.2	1.77	10.3	1.70
	7.0	6.0	14.9	1.91	14.0	1.84	13.1	1.80	12.6	1.77	12.1	1.75	11.2	1.70	10.3	1.64
	8.6	7.5	14.9	1.91	14.0	1.81	13.1	1.72	12.6	1.67	12.1	1.63	11.2	1.59	10.3	1.54
	11.2	10.0	14.9	1.91	14.0	1.81	13.1	1.72	12.6	1.67	12.1	1.63	11.2	1.53	10.3	1.44
	16.4	15.0	14.9	1.91	14.0	1.81	13.1	1.72	12.6	1.67	12.1	1.63	11.2	1.53	10.3	1.44

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. :℃DB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃DB	℃WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-24.9	-25.0	11.2	2.93	10.5	2.89	9.8	2.81	9.5	2.77	9.1	2.74	8.4	2.66	7.7	2.58
	-19.8	-20.0	11.2	2.76	10.5	2.73	9.8	2.69	9.5	2.66	9.1	2.61	8.4	2.53	7.7	2.44
	-14.7	-15.0	11.2	2.58	10.5	2.56	9.8	2.52	9.5	2.50	9.1	2.47	8.4	2.40	7.7	2.31
	-9.6	-10.0	11.2	2.37	10.5	2.34	9.8	2.31	9.5	2.30	9.1	2.27	8.4	2.22	7.7	2.12
	-4.4	-5.0	11.2	2.10	10.5	2.07	9.8	2.02	9.5	1.99	9.1	1.96	8.4	1.89	7.7	1.81
	-1.8	-2.5	11.2	1.90	10.5	1.87	9.8	1.84	9.5	1.81	9.1	1.78	8.4	1.73	7.7	1.67
	0.8	0.0	11.2	1.70	10.5	1.68	9.8	1.65	9.5	1.64	9.1	1.62	8.4	1.57	7.7	1.52
	2.8	2.0	11.2	1.54	10.5	1.54	9.8	1.52	9.5	1.51	9.1	1.49	8.4	1.46	7.7	1.41
	6.0	5.0	11.2	1.53	10.5	1.46	9.8	1.39	9.5	1.35	9.1	1.32	8.4	1.29	7.7	1.26
	7.0	6.0	11.2	1.53	10.5	1.46	9.8	1.39	9.5	1.35	9.1	1.32	8.4	1.25	7.7	1.21
	8.6	7.5	11.2	1.53	10.5	1.46	9.8	1.39	9.5	1.35	9.1	1.32	8.4	1.25	7.7	1.18
	11.2	10.0	11.2	1.53	10.5	1.46	9.8	1.39	9.5	1.35	9.1	1.32	8.4	1.25	7.7	1.18
	16.4	15.0	11.2	1.53	10.5	1.46	9.8	1.39	9.5	1.35	9.1	1.32	8.4	1.25	7.7	1.18

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

1-5. U-12ME1E81 (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. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-10.0	36.0	4.65	36.0	4.65	36.0	4.65	36.0	4.65	38.4	4.95	40.8	5.27	43.2	5.57
	-5.0	36.0	4.65	36.0	4.65	36.0	4.65	36.0	4.65	38.4	4.97	40.8	5.28	43.2	5.59
	0.0	36.0	4.67	36.0	4.67	36.0	4.67	36.0	4.67	38.4	4.99	40.8	5.30	43.2	5.63
	5.0	36.0	4.71	36.0	4.71	36.0	4.71	36.0	4.71	38.4	5.04	40.8	5.36	43.2	5.69
	10.0	36.0	4.79	36.0	4.79	36.0	4.79	36.0	4.79	38.4	5.13	40.8	5.47	43.2	5.82
	15.0	36.0	4.99	36.0	4.99	36.0	4.99	36.0	4.99	38.4	5.36	40.8	5.73	43.2	6.11
	20.0	36.0	5.66	36.0	5.66	36.0	5.66	36.0	5.66	38.4	6.17	40.8	6.72	43.2	7.28
	25.0	36.0	7.05	36.0	7.05	36.0	7.05	36.0	7.05	38.4	7.68	40.8	8.34	43.2	9.04
	30.0	36.0	8.58	36.0	8.58	36.0	8.58	36.0	8.58	38.4	9.34	40.8	10.13	43.2	10.94
	35.0	36.0	10.25	36.0	10.25	36.0	10.25	36.0	10.25	38.4	11.14	40.8	12.07	41.7	12.08
	40.0	36.0	12.04	36.0	12.04	36.0	12.04	36.0	12.04	36.9	12.08	37.7	12.08	38.5	12.08
	43.0	34.3	12.08	34.3	12.08	34.3	12.08	34.3	12.08	35.1	12.08	35.9	12.08	36.7	12.08

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-10.0	33.8	4.34	35.2	4.53	35.2	4.53	35.2	4.53	37.5	4.84	39.9	5.14	42.2	5.44
	-5.0	33.8	4.35	35.2	4.54	35.2	4.54	35.2	4.54	37.5	4.85	39.9	5.16	42.2	5.46
	0.0	33.8	4.36	35.2	4.56	35.2	4.56	35.2	4.56	37.5	4.87	39.9	5.18	42.2	5.49
	5.0	33.8	4.38	35.2	4.60	35.2	4.60	35.2	4.60	37.5	4.91	39.9	5.23	42.2	5.55
	10.0	33.8	4.42	35.2	4.67	35.2	4.67	35.2	4.67	37.5	5.00	39.9	5.33	42.2	5.67
	15.0	33.8	4.53	35.2	4.86	35.2	4.86	35.2	4.86	37.5	5.22	39.9	5.58	42.2	5.95
	20.0	33.8	4.89	35.2	5.47	35.2	5.47	35.2	5.47	37.5	5.96	39.9	6.48	42.2	7.02
	25.0	33.8	6.04	35.2	6.83	35.2	6.83	35.2	6.83	37.5	7.43	39.9	8.06	42.2	8.72
	30.0	33.8	7.39	35.2	8.31	35.2	8.31	35.2	8.31	37.5	9.03	39.9	9.78	42.2	10.57
	35.0	33.8	8.88	35.2	9.92	35.2	9.92	35.2	9.92	37.5	10.78	39.9	11.67	41.4	12.08
	40.0	33.8	10.50	35.2	11.66	35.2	11.66	35.2	11.66	36.6	12.08	37.4	12.08	38.2	12.08
	43.0	33.8	11.52	34.1	12.08	34.1	12.08	34.1	12.08	34.9	12.08	35.6	12.08	36.4	12.08

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-10.0	30.2	3.88	32.7	4.21	34.3	4.42	34.3	4.42	36.6	4.72	38.9	5.02	41.2	5.31
	-5.0	30.2	3.89	32.7	4.22	34.3	4.43	34.3	4.43	36.6	4.73	38.9	5.04	41.2	5.33
	0.0	30.2	3.90	32.7	4.23	34.3	4.45	34.3	4.45	36.6	4.76	38.9	5.05	41.2	5.36
	5.0	30.2	3.92	32.7	4.25	34.3	4.49	34.3	4.49	36.6	4.79	38.9	5.10	41.2	5.42
	10.0	30.2	3.97	32.7	4.30	34.3	4.55	34.3	4.55	36.6	4.88	38.9	5.19	41.2	5.52
	15.0	30.2	4.06	32.7	4.43	34.3	4.73	34.3	4.73	36.6	5.07	38.9	5.43	41.2	5.79
	20.0	30.2	4.40	32.7	4.83	34.3	5.28	34.3	5.28	36.6	5.75	38.9	6.24	41.2	6.76
	25.0	30.2	5.43	32.7	5.99	34.3	6.61	34.3	6.61	36.6	7.18	38.9	7.78	41.2	8.41
	30.0	30.2	6.65	32.7	7.32	34.3	8.04	34.3	8.04	36.6	8.72	38.9	9.45	41.2	10.20
	35.0	30.2	7.97	32.7	8.77	34.3	9.61	34.3	9.61	36.6	10.42	38.9	11.27	41.0	12.06
	40.0	30.2	9.41	32.7	10.35	34.3	11.30	34.3	11.30	36.3	12.08	37.2	12.08	38.0	12.08
	43.0	30.2	10.32	32.7	11.35	33.9	12.08	33.9	12.08	34.6	12.08	35.4	12.08	36.2	12.08

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-10.0	26.8	3.45	29.0	3.73	31.3	4.02	33.5	4.31	35.7	4.61	38.0	4.90	40.2	5.18
	-5.0	26.8	3.46	29.0	3.74	31.3	4.03	33.5	4.32	35.7	4.62	38.0	4.91	40.2	5.20
	0.0	26.8	3.47	29.0	3.75	31.3	4.05	33.5	4.34	35.7	4.64	38.0	4.93	40.2	5.23
	5.0	26.8	3.48	29.0	3.78	31.3	4.08	33.5	4.38	35.7	4.67	38.0	4.97	40.2	5.28
	10.0	26.8	3.52	29.0	3.83	31.3	4.13	33.5	4.44	35.7	4.75	38.0	5.06	40.2	5.38
	15.0	26.8	3.61	29.0	3.94	31.3	4.26	33.5	4.60	35.7	4.93	38.0	5.28	40.2	5.62
	20.0	26.8	3.93	29.0	4.31	31.3	4.71	33.5	5.11	35.7	5.55	38.0	6.02	40.2	6.51
	25.0	26.8	4.88	29.0	5.35	31.3	5.85	33.5	6.38	35.7	6.93	38.0	7.51	40.2	8.10
	30.0	26.8	5.95	29.0	6.53	31.3	7.13	33.5	7.77	35.7	8.44	38.0	9.12	40.2	9.84
	35.0	26.8	7.12	29.0	7.81	31.3	8.54	33.5	9.29	35.7	10.07	38.0	10.89	40.2	11.73
	40.0	26.8	8.38	29.0	9.20	31.3	10.05	33.5	10.93	35.7	11.84	36.9	12.08	37.7	12.08
	43.0	26.8	9.19	29.0	10.08	31.3	11.01	33.5	11.97	34.4	12.08	35.1	12.08	35.9	12.08

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

U-12ME1E81 (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. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-10.0	24.1	3.10	26.1	3.36	28.1	3.62	30.2	3.88	32.2	4.14	34.2	4.40	36.2	4.66
	-5.0	24.1	3.10	26.1	3.36	28.1	3.62	30.2	3.89	32.2	4.15	34.2	4.41	36.2	4.67
	0.0	24.1	3.11	26.1	3.37	28.1	3.64	30.2	3.90	32.2	4.16	34.2	4.43	36.2	4.69
	5.0	24.1	3.13	26.1	3.39	28.1	3.66	30.2	3.92	32.2	4.19	34.2	4.46	36.2	4.73
	10.0	24.1	3.16	26.1	3.43	28.1	3.70	30.2	3.98	32.2	4.25	34.2	4.52	36.2	4.80
	15.0	24.1	3.22	26.1	3.51	28.1	3.80	30.2	4.10	32.2	4.38	34.2	4.68	36.2	4.99
	20.0	24.1	3.46	26.1	3.79	28.1	4.12	30.2	4.47	32.2	4.82	34.2	5.18	36.2	5.56
	25.0	24.1	4.30	26.1	4.69	28.1	5.11	30.2	5.55	32.2	5.99	34.2	6.47	36.2	6.96
	30.0	24.1	5.24	26.1	5.73	28.1	6.23	30.2	6.76	32.2	7.31	34.2	7.88	36.2	8.47
	35.0	24.1	6.27	26.1	6.86	28.1	7.46	30.2	8.09	32.2	8.74	34.2	9.42	36.2	10.13
	40.0	24.1	7.39	26.1	8.08	28.1	8.80	30.2	9.54	32.2	10.30	34.2	11.09	36.2	11.90
	43.0	24.1	8.10	26.1	8.86	28.1	9.64	30.2	10.45	32.2	11.29	34.1	12.08	34.8	12.08

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-10.0	21.4	2.76	23.2	2.99	25.0	3.21	26.8	3.45	28.6	3.68	30.4	3.91	32.2	4.14
	-5.0	21.4	2.76	23.2	2.99	25.0	3.22	26.8	3.46	28.6	3.69	30.4	3.92	32.2	4.15
	0.0	21.4	2.77	23.2	3.00	25.0	3.23	26.8	3.47	28.6	3.70	30.4	3.93	32.2	4.16
	5.0	21.4	2.78	23.2	3.01	25.0	3.24	26.8	3.47	28.6	3.72	30.4	3.95	32.2	4.19
	10.0	21.4	2.80	23.2	3.04	25.0	3.27	26.8	3.51	28.6	3.75	30.4	3.99	32.2	4.25
	15.0	21.4	2.84	23.2	3.09	25.0	3.34	26.8	3.60	28.6	3.86	30.4	4.12	32.2	4.38
	20.0	21.4	3.01	23.2	3.30	25.0	3.58	26.8	3.87	28.6	4.17	30.4	4.47	32.2	4.78
	25.0	21.4	3.76	23.2	4.09	25.0	4.42	26.8	4.78	28.6	5.14	30.4	5.52	32.2	5.91
	30.0	21.4	4.59	23.2	4.99	25.0	5.40	26.8	5.83	28.6	6.28	30.4	6.74	32.2	7.22
	35.0	21.4	5.48	23.2	5.96	25.0	6.47	26.8	6.99	28.6	7.52	30.4	8.07	32.2	8.64
	40.0	21.4	6.46	23.2	7.03	25.0	7.63	26.8	8.24	28.6	8.86	30.4	9.51	32.2	10.18
	43.0	21.4	7.08	23.2	7.71	25.0	8.36	26.8	9.03	28.6	9.72	30.4	10.43	32.2	11.16

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-10.0	18.8	2.42	20.3	2.61	21.9	2.81	23.5	3.02	25.0	3.21	26.6	3.42	28.1	3.62
	-5.0	18.8	2.42	20.3	2.62	21.9	2.81	23.5	3.02	25.0	3.22	26.6	3.43	28.1	3.62
	0.0	18.8	2.42	20.3	2.62	21.9	2.82	23.5	3.03	25.0	3.23	26.6	3.43	28.1	3.63
	5.0	18.8	2.42	20.3	2.63	21.9	2.83	23.5	3.04	25.0	3.24	26.6	3.45	28.1	3.65
	10.0	18.8	2.43	20.3	2.65	21.9	2.85	23.5	3.07	25.0	3.27	26.6	3.48	28.1	3.69
	15.0	18.8	2.47	20.3	2.68	21.9	2.90	23.5	3.12	25.0	3.34	26.6	3.56	28.1	3.78
	20.0	18.8	2.58	20.3	2.82	21.9	3.07	23.5	3.31	25.0	3.56	26.6	3.80	28.1	4.06
	25.0	18.8	3.23	20.3	3.53	21.9	3.80	23.5	4.08	25.0	4.37	26.6	4.65	28.1	4.97
	30.0	18.8	3.98	20.3	4.30	21.9	4.64	23.5	4.98	25.0	5.33	26.6	5.69	28.1	6.08
	35.0	18.8	4.74	20.3	5.14	21.9	5.54	23.5	5.95	25.0	6.38	26.6	6.83	28.1	7.28
	40.0	18.8	5.57	20.3	6.05	21.9	6.53	23.5	7.02	25.0	7.53	26.6	8.05	28.1	8.59
	43.0	18.8	6.11	20.3	6.63	21.9	7.16	23.5	7.71	25.0	8.27	26.6	8.83	28.1	9.42

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-10.0	16.1	2.06	17.4	2.24	18.8	2.42	20.1	2.58	21.4	2.76	22.8	2.93	24.1	3.10
	-5.0	16.1	2.07	17.4	2.24	18.8	2.42	20.1	2.58	21.4	2.76	22.8	2.94	24.1	3.10
	0.0	16.1	2.07	17.4	2.25	18.8	2.42	20.1	2.59	21.4	2.77	22.8	2.94	24.1	3.11
	5.0	16.1	2.07	17.4	2.25	18.8	2.42	20.1	2.60	21.4	2.78	22.8	2.94	24.1	3.12
	10.0	16.1	2.08	17.4	2.26	18.8	2.43	20.1	2.61	21.4	2.79	22.8	2.97	24.1	3.15
	15.0	16.1	2.11	17.4	2.29	18.8	2.47	20.1	2.65	21.4	2.83	22.8	3.02	24.1	3.21
	20.0	16.1	2.18	17.4	2.38	18.8	2.57	20.1	2.78	21.4	2.97	22.8	3.18	24.1	3.38
	25.0	16.1	2.59	17.4	2.86	18.8	3.13	20.1	3.40	21.4	3.66	22.8	3.88	24.1	4.12
	30.0	16.1	3.41	17.4	3.66	18.8	3.92	20.1	4.19	21.4	4.47	22.8	4.75	24.1	5.04
	35.0	16.1	4.05	17.4	4.37	18.8	4.68	20.1	5.01	21.4	5.35	22.8	5.69	24.1	6.04
	40.0	16.1	4.76	17.4	5.13	18.8	5.51	20.1	5.91	21.4	6.31	22.8	6.72	24.1	7.13
	43.0	16.1	5.20	17.4	5.62	18.8	6.04	20.1	6.48	21.4	6.92	22.8	7.37	24.1	7.83

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

U-12ME1E81 (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. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-10.0	13.4	1.72	14.5	1.87	15.6	2.01	16.8	2.16	17.9	2.29	19.0	2.44	20.1	2.58
	-5.0	13.4	1.72	14.5	1.87	15.6	2.01	16.8	2.16	17.9	2.29	19.0	2.44	20.1	2.58
	0.0	13.4	1.73	14.5	1.87	15.6	2.02	16.8	2.16	17.9	2.30	19.0	2.44	20.1	2.59
	5.0	13.4	1.73	14.5	1.88	15.6	2.02	16.8	2.16	17.9	2.30	19.0	2.45	20.1	2.60
	10.0	13.4	1.74	14.5	1.88	15.6	2.03	16.8	2.17	17.9	2.32	19.0	2.46	20.1	2.61
	15.0	13.4	1.75	14.5	1.90	15.6	2.04	16.8	2.19	17.9	2.34	19.0	2.50	20.1	2.65
	20.0	13.4	1.79	14.5	1.95	15.6	2.11	16.8	2.27	17.9	2.42	19.0	2.59	20.1	2.75
	25.0	13.4	2.03	14.5	2.24	15.6	2.43	16.8	2.64	17.9	2.85	19.0	3.06	20.1	3.27
	30.0	13.4	2.89	14.5	3.08	15.6	3.28	16.8	3.48	17.9	3.69	19.0	3.90	20.1	4.12
	35.0	13.4	3.41	14.5	3.65	15.6	3.89	16.8	4.14	17.9	4.40	19.0	4.65	20.1	4.92
	40.0	13.4	3.99	14.5	4.27	15.6	4.57	16.8	4.87	17.9	5.17	19.0	5.49	20.1	5.81
	43.0	13.4	4.35	14.5	4.67	15.6	5.00	16.8	5.33	17.9	5.68	19.0	6.02	20.1	6.36

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-10.0	10.7	1.37	11.6	1.50	12.5	1.61	13.4	1.72	14.3	1.84	15.2	1.95	16.1	2.06
	-5.0	10.7	1.37	11.6	1.50	12.5	1.61	13.4	1.72	14.3	1.84	15.2	1.95	16.1	2.07
	0.0	10.7	1.37	11.6	1.50	12.5	1.61	13.4	1.73	14.3	1.84	15.2	1.95	16.1	2.07
	5.0	10.7	1.38	11.6	1.50	12.5	1.62	13.4	1.73	14.3	1.84	15.2	1.96	16.1	2.07
	10.0	10.7	1.38	11.6	1.50	12.5	1.62	13.4	1.74	14.3	1.85	15.2	1.97	16.1	2.08
	15.0	10.7	1.39	11.6	1.51	12.5	1.63	13.4	1.75	14.3	1.87	15.2	1.98	16.1	2.10
	20.0	10.7	1.41	11.6	1.54	12.5	1.66	13.4	1.78	14.3	1.90	15.2	2.03	16.1	2.16
	25.0	10.7	1.55	11.6	1.69	12.5	1.84	13.4	1.99	14.3	2.13	15.2	2.28	16.1	2.43
	30.0	10.7	2.42	11.6	2.55	12.5	2.69	13.4	2.83	14.3	2.98	15.2	3.13	16.1	3.29
	35.0	10.7	2.82	11.6	3.00	12.5	3.18	13.4	3.35	14.3	3.54	15.2	3.73	16.1	3.91
	40.0	10.7	3.27	11.6	3.48	12.5	3.70	13.4	3.92	14.3	4.14	15.2	4.37	16.1	4.60
	43.0	10.7	3.56	11.6	3.79	12.5	4.04	13.4	4.28	14.3	4.52	15.2	4.78	16.1	5.04

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp. ℃CDB	Indoor air temp. :℃WB													
		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
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-10.0	8.0	1.03	8.7	1.11	9.4	1.21	10.1	1.29	10.7	1.37	11.4	1.47	12.1	1.55
	-5.0	8.0	1.03	8.7	1.12	9.4	1.21	10.1	1.29	10.7	1.37	11.4	1.47	12.1	1.55
	0.0	8.0	1.03	8.7	1.12	9.4	1.21	10.1	1.29	10.7	1.37	11.4	1.47	12.1	1.55
	5.0	8.0	1.03	8.7	1.12	9.4	1.21	10.1	1.29	10.7	1.38	11.4	1.47	12.1	1.55
	10.0	8.0	1.04	8.7	1.12	9.4	1.21	10.1	1.30	10.7	1.38	11.4	1.47	12.1	1.56
	15.0	8.0	1.04	8.7	1.12	9.4	1.22	10.1	1.30	10.7	1.39	11.4	1.48	12.1	1.57
	20.0	8.0	1.05	8.7	1.14	9.4	1.23	10.1	1.32	10.7	1.41	11.4	1.50	12.1	1.59
	25.0	8.0	1.11	8.7	1.21	9.4	1.31	10.1	1.41	10.7	1.51	11.4	1.61	12.1	1.71
	30.0	8.0	1.98	8.7	2.07	9.4	2.16	10.1	2.26	10.7	2.36	11.4	2.45	12.1	2.55
	35.0	8.0	2.28	8.7	2.40	9.4	2.52	10.1	2.64	10.7	2.76	11.4	2.89	12.1	3.01
	40.0	8.0	2.60	8.7	2.75	9.4	2.90	10.1	3.05	10.7	3.21	11.4	3.35	12.1	3.50
	43.0	8.0	2.81	8.7	2.98	9.4	3.15	10.1	3.32	10.7	3.48	11.4	3.65	12.1	3.83

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

1-6. U-12ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-24.9	-25.0	28.2	10.64	26.8	10.02	25.2	9.41	24.5	9.10	24.5	9.10	24.5	9.10	24.5	9.10
	-19.8	-20.0	29.7	10.75	28.2	10.14	26.6	9.53	25.8	9.21	25.8	9.21	25.8	9.21	25.8	9.21
	-14.7	-15.0	31.5	10.93	30.0	10.31	28.4	9.70	27.5	9.40	27.5	9.40	27.5	9.40	27.5	9.40
	-9.6	-10.0	33.8	11.20	32.2	10.59	30.5	9.97	29.6	9.66	29.6	9.66	29.6	9.66	29.6	9.66
	-4.4	-5.0	36.9	11.60	35.2	10.99	33.4	10.36	32.5	10.05	32.5	10.05	32.5	10.05	32.5	10.05
	-1.8	-2.5	38.9	11.88	37.1	11.25	35.3	10.62	34.4	10.29	34.4	10.29	34.4	10.29	34.4	10.29
	0.8	0.0	40.7	11.90	39.4	11.57	37.5	10.92	36.5	10.60	36.5	10.60	36.5	10.60	36.5	10.60
	2.8	2.0	42.3	11.90	41.6	11.85	39.6	11.21	38.6	10.88	38.6	10.88	38.6	10.88	38.6	10.88
	6.0	5.0	45.1	11.90	44.3	11.90	41.8	11.14	40.3	10.67	40.3	10.67	40.3	10.67	40.3	10.67
	7.0	6.0	46.0	11.90	44.8	11.73	41.8	10.82	40.3	10.38	40.3	10.38	40.3	10.38	40.3	10.38
	8.6	7.5	47.3	11.90	44.8	11.17	41.8	10.26	40.3	9.82	40.3	9.82	40.3	9.82	40.3	9.82
	11.2	10.0	47.8	10.97	44.8	10.12	41.8	9.31	40.3	8.91	40.3	8.91	40.3	8.91	40.3	8.91
	16.4	15.0	47.8	8.88	44.8	8.21	41.8	7.58	40.3	7.27	40.3	7.27	40.3	7.27	40.3	7.27

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
120%	-24.9	-25.0	28.3	10.51	26.8	9.91	25.3	9.31	24.5	9.00	24.5	9.00	24.5	9.00	24.5	9.00
	-19.8	-20.0	29.8	10.63	28.2	10.03	26.7	9.43	25.9	9.13	25.9	9.13	25.9	9.13	25.9	9.13
	-14.7	-15.0	31.6	10.82	30.0	10.22	28.4	9.62	27.5	9.31	27.5	9.31	27.5	9.31	27.5	9.31
	-9.6	-10.0	33.9	11.09	32.3	10.49	30.5	9.88	29.7	9.58	29.7	9.58	29.7	9.58	29.7	9.58
	-4.4	-5.0	37.0	11.50	35.3	10.89	33.5	10.28	32.5	9.96	32.5	9.96	32.5	9.96	32.5	9.96
	-1.8	-2.5	39.0	11.78	37.2	11.15	35.3	10.53	34.4	10.21	34.4	10.21	34.4	10.21	34.4	10.21
	0.8	0.0	40.9	11.90	39.4	11.46	37.5	10.82	36.5	10.50	36.5	10.50	36.5	10.50	36.5	10.50
	2.8	2.0	42.5	11.90	41.6	11.75	39.6	11.11	38.6	10.79	38.6	10.79	38.6	10.79	38.5	10.34
	6.0	5.0	45.2	11.90	43.8	11.62	40.8	10.71	39.4	10.28	39.4	10.28	39.4	10.28	38.5	9.58
	7.0	6.0	46.0	11.90	43.8	11.28	40.8	10.40	39.4	9.96	39.4	9.96	39.4	9.96	38.5	9.25
	8.6	7.5	46.7	11.58	43.8	10.69	40.8	9.83	39.4	9.42	39.4	9.42	39.4	9.42	38.5	8.76
	11.2	10.0	46.7	10.48	43.8	9.68	40.8	8.91	39.4	8.55	39.4	8.55	39.4	8.55	38.5	7.96
	16.4	15.0	46.7	8.46	43.8	7.84	40.8	7.25	39.4	6.96	39.4	6.96	39.4	6.96	38.5	6.52

Combination(%) :Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : ℃CDB													
			15.0		17.0		19.0		20.0		21.0		23.0		25.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-24.9	-25.0	28.4	10.38	26.9	9.80	25.3	9.20	24.6	8.92	24.6	8.92	24.4	8.74	22.6	8.12
	-19.8	-20.0	29.9	10.51	28.3	9.93	26.7	9.34	25.9	9.05	25.9	9.05	25.8	8.88	23.9	8.24
	-14.7	-15.0	31.7	10.71	30.0	10.12	28.4	9.53	27.6	9.23	27.6	9.23	27.5	9.07	25.5	8.43
	-9.6	-10.0	34.0	10.99	32.3	10.39	30.6	9.80	29.7	9.50	29.7	9.50	29.7	9.34	27.6	8.68
	-4.4	-5.0	37.1	11.40	35.3	10.80	33.5	10.19	32.6	9.88	32.6	9.88	32.6	9.88	30.4	9.05
	-1.8	-2.5	39.0	11.68	37.2	11.06	35.3	10.44	34.4	10.12	34.4	10.12	34.4	10.12	32.2	9.28
	0.8	0.0	41.1	11.90	39.5	11.36	37.5	10.73	36.5	10.41	36.5	10.41	36.5	10.41	34.3	9.57
	2.8	2.0	42.7	11.90	41.6	11.65	39.6	11.02	38.4	10.67	38.4	10.67	37.6	10.16	34.5	9.24
	6.0	5.0	45.2	11.90	42.7	11.15	39.9	10.31	38.4	9.89	38.4	9.89	37.6	9.41	34.5	8.55
	7.0	6.0	45.6	11.68	42.7	10.82	39.9	9.97	38.4	9.55	38.4	9.55	37.6	9.09	34.5	8.25
	8.6	7.5	45.6	11.06	42.7	10.22	39.9	9.42	38.4	9.03	38.4	9.03	37.6	8.59	34.5	7.81
	11.2	10.0	45.6	9.99	42.7	9.25	39.9	8.54	38.4	8.19	38.4	8.19	37.6	7.80	34.5	7.11
	16.4	15.0	45.6	8.05	42.7	7.48	39.9	6.94	38.4	6.66	38.4	6.66	37.6	6.38	34.5	5.84

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-24.9	-25.0	28.4	10.26	26.9	9.69	25.4	9.12	24.6	8.83	23.8	8.55	22.2	7.98	20.6	7.42
	-19.8	-20.0	29.9	10.39	28.4	9.83	26.7	9.25	26.0	8.97	25.1	8.67	23.5	8.11	21.8	7.54
	-14.7	-15.0	31.7	10.60	30.1	10.02	28.5	9.44	27.6	9.15	26.7	8.87	25.0	8.28	23.2	7.70
	-9.6	-10.0	34.1	10.89	32.4	10.30	30.6	9.72	29.7	9.42	28.8	9.12	27.0	8.53	25.1	7.94
	-4.4	-5.0	37.1	11.31	35.3	10.71	33.5	10.10	32.6	9.80	31.6	9.50	29.6	8.88	27.6	8.26
	-1.8	-2.5	39.1	11.57	37.2	10.96	35.3	10.35	34.4	10.04	33.3	9.73	31.3	9.10	29.2	8.46
	0.8	0.0	41.4	11.88	39.5	11.26	37.5	10.64	36.5	10.32	35.4	10.00	33.3	9.37	30.6	8.55
	2.8	2.0	42.9	11.90	41.6	11.55	38.9	10.68	37.5	10.25	36.1	9.83	33.3	9.00	30.6	8.22
	6.0	5.0	44.4	11.54	41.7	10.71	38.9	9.89	37.5	9.49	36.1	9.10	33.3	8.32	30.6	7.58
	7.0	6.0	44.4	11.19	41.7	10.35	38.9	9.55	37.5	9.15	36.1	8.77	33.3	8.03	30.6	7.32
	8.6	7.5	44.4	10.55	41.7	9.76	38.9	9.01	37.5	8.65	36.1	8.29	33.3	7.60	30.6	6.94
	11.2	10.0	44.4	9.53	41.7	8.83	38.9	8.16	37.5	7.84	36.1	7.52	33.3	6.91	30.6	6.31
	16.4	15.0	44.4	7.67	41.7	7.14	38.9	6.62	37.5	6.38	36.1	6.13	33.3	5.66	30.6	5.21

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

U-12ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-24.9	-25.0	28.7	9.82	27.1	9.31	25.5	8.78	24.7	8.52	23.9	8.26	22.3	7.75	20.6	7.25
	-19.8	-20.0	30.2	9.98	28.5	9.46	26.9	8.93	26.1	8.67	25.2	8.41	23.6	7.89	21.8	7.37
	-14.7	-15.0	32.0	10.21	30.3	9.67	28.6	9.14	27.8	8.87	26.9	8.60	25.1	8.06	23.3	7.53
	-9.6	-10.0	34.3	10.51	32.6	9.97	30.8	9.42	29.9	9.14	28.9	8.86	27.0	8.30	25.1	7.75
	-4.4	-5.0	37.4	10.93	35.5	10.37	33.6	9.79	32.6	9.50	31.6	9.20	29.6	8.63	27.5	8.04
	-1.8	-2.5	39.3	11.19	37.4	10.61	35.0	9.89	33.8	9.51	32.5	9.14	30.0	8.42	27.5	7.72
	0.8	0.0	40.0	10.91	37.5	10.16	35.0	9.43	33.8	9.09	32.5	8.74	30.0	8.06	27.5	7.41
	2.8	2.0	40.0	10.44	37.5	9.74	35.0	9.05	33.8	8.71	32.5	8.37	30.0	7.71	27.5	7.07
	6.0	5.0	40.0	9.54	37.5	8.89	35.0	8.26	33.8	7.95	32.5	7.65	30.0	7.06	27.5	6.49
	7.0	6.0	40.0	9.20	37.5	8.57	35.0	7.97	33.8	7.68	32.5	7.38	30.0	6.82	27.5	6.27
	8.6	7.5	40.0	8.66	37.5	8.08	35.0	7.51	33.8	7.24	32.5	6.97	30.0	6.44	27.5	5.93
	11.2	10.0	40.0	7.79	37.5	7.27	35.0	6.79	33.8	6.55	32.5	6.31	30.0	5.85	27.5	5.40
	16.4	15.0	40.0	6.22	37.5	5.86	35.0	5.49	33.8	5.31	32.5	5.13	30.0	4.79	27.5	4.45

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	-24.9	-25.0	29.0	9.48	27.4	9.01	25.8	8.54	24.9	8.30	24.1	8.07	22.4	7.60	20.7	7.15
	-19.8	-20.0	30.5	9.66	28.8	9.19	27.2	8.70	26.3	8.45	25.5	8.22	23.7	7.74	21.9	7.27
	-14.7	-15.0	32.4	9.91	30.6	9.42	28.9	8.91	28.0	8.67	27.1	8.42	25.2	7.91	23.4	7.42
	-9.6	-10.0	34.7	10.23	32.9	9.72	31.0	9.20	30.0	8.90	28.9	8.59	26.7	7.97	24.5	7.37
	-4.4	-5.0	35.6	9.84	33.3	9.21	31.1	8.61	30.0	8.32	28.9	8.02	26.7	7.46	24.5	6.90
	-1.8	-2.5	35.6	9.44	33.3	8.86	31.1	8.29	30.0	8.01	28.9	7.73	26.7	7.18	24.5	6.65
	0.8	0.0	35.6	8.99	33.3	8.42	31.1	7.87	30.0	7.60	28.9	7.34	26.7	6.82	24.5	6.31
	2.8	2.0	35.6	8.52	33.3	8.00	31.1	7.48	30.0	7.23	28.9	6.98	26.7	6.50	24.5	6.02
	6.0	5.0	35.6	7.74	33.3	7.27	31.1	6.82	30.0	6.60	28.9	6.37	26.7	5.93	24.5	5.50
	7.0	6.0	35.6	7.45	33.3	7.00	31.1	6.57	30.0	6.35	28.9	6.14	26.7	5.72	24.5	5.31
	8.6	7.5	35.6	6.99	33.3	6.58	31.1	6.19	30.0	5.98	28.9	5.79	26.7	5.41	24.5	5.02
	11.2	10.0	35.6	6.27	33.3	5.92	31.1	5.57	30.0	5.41	28.9	5.23	26.7	4.90	24.5	4.58
	16.4	15.0	35.6	4.98	33.3	4.74	31.1	4.49	30.0	4.37	28.9	4.25	26.7	4.01	24.5	3.77

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-24.9	-25.0	29.5	9.30	27.9	8.87	26.2	8.44	25.4	8.23	24.5	8.01	22.8	7.59	21.0	7.18
	-19.8	-20.0	31.1	9.51	29.2	8.98	27.2	8.45	26.3	8.19	25.3	7.94	23.3	7.45	21.4	6.98
	-14.7	-15.0	31.1	9.04	29.2	8.54	27.2	8.04	26.3	7.80	25.3	7.56	23.3	7.09	21.4	6.63
	-9.6	-10.0	31.1	8.56	29.2	8.09	27.2	7.62	26.3	7.39	25.3	7.16	23.3	6.73	21.4	6.29
	-4.4	-5.0	31.1	8.00	29.2	7.56	27.2	7.13	26.3	6.92	25.3	6.71	23.3	6.30	21.4	5.89
	-1.8	-2.5	31.1	7.62	29.2	7.20	27.2	6.80	26.3	6.60	25.3	6.41	23.3	6.01	21.4	5.63
	0.8	0.0	31.1	7.19	29.2	6.81	27.2	6.43	26.3	6.25	25.3	6.06	23.3	5.70	21.4	5.33
	2.8	2.0	31.1	6.82	29.2	6.46	27.2	6.11	26.3	5.94	25.3	5.76	23.3	5.42	21.4	5.08
	6.0	5.0	31.1	6.17	29.2	5.86	27.2	5.54	26.3	5.39	25.3	5.24	23.3	4.93	21.4	4.62
	7.0	6.0	31.1	5.92	29.2	5.63	27.2	5.33	26.3	5.19	25.3	5.04	23.3	4.75	21.4	4.46
	8.6	7.5	31.1	5.55	29.2	5.29	27.2	5.02	26.3	4.89	25.3	4.76	23.3	4.48	21.4	4.22
	11.2	10.0	31.1	4.97	29.2	4.75	27.2	4.52	26.3	4.41	25.3	4.30	23.3	4.07	21.4	3.84
	16.4	15.0	31.1	4.14	29.2	3.95	27.2	3.76	26.3	3.66	25.3	3.57	23.3	3.38	21.4	3.18

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
60%	-24.9	-25.0	26.7	7.91	25.0	7.55	23.3	7.19	22.5	7.02	21.7	6.84	20.0	6.50	18.3	6.17
	-19.8	-20.0	26.7	7.60	25.0	7.25	23.3	6.90	22.5	6.73	21.7	6.56	20.0	6.22	18.3	5.90
	-14.7	-15.0	26.7	7.28	25.0	6.94	23.3	6.61	22.5	6.44	21.7	6.28	20.0	5.95	18.3	5.63
	-9.6	-10.0	26.7	6.87	25.0	6.56	23.3	6.26	22.5	6.11	21.7	5.96	20.0	5.66	18.3	5.35
	-4.4	-5.0	26.7	6.33	25.0	6.06	23.3	5.78	22.5	5.65	21.7	5.51	20.0	5.23	18.3	4.97
	-1.8	-2.5	26.7	6.02	25.0	5.76	23.3	5.51	22.5	5.38	21.7	5.25	20.0	4.99	18.3	4.73
	0.8	0.0	26.7	5.67	25.0	5.44	23.3	5.20	22.5	5.08	21.7	4.96	20.0	4.72	18.3	4.47
	2.8	2.0	26.7	5.36	25.0	5.14	23.3	4.92	22.5	4.81	21.7	4.70	20.0	4.47	18.3	4.25
	6.0	5.0	26.7	4.83	25.0	4.65	23.3	4.46	22.5	4.36	21.7	4.25	20.0	4.04	18.3	3.83
	7.0	6.0	26.7	4.64	25.0	4.46	23.3	4.28	22.5	4.18	21.7	4.09	20.0	3.90	18.3	3.70
	8.6	7.5	26.7	4.34	25.0	4.19	23.3	4.03	22.5	3.94	21.7	3.86	20.0	3.69	18.3	3.50
	11.2	10.0	26.7	3.87	25.0	3.75	23.3	3.62	22.5	3.56	21.7	3.49	20.0	3.35	18.3	3.20
	16.4	15.0	26.7	3.71	25.0	3.54	23.3	3.38	22.5	3.29	21.7	3.21	20.0	3.05	18.3	2.88

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

U-12ME1E81 (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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-24.9	-25.0	22.2	6.31	20.9	6.08	19.5	5.86	18.8	5.75	18.0	5.64	16.7	5.41	15.3	5.19
	-19.8	-20.0	22.2	6.07	20.9	5.87	19.5	5.65	18.8	5.54	18.0	5.42	16.7	5.20	15.3	4.97
	-14.7	-15.0	22.2	5.76	20.9	5.57	19.5	5.39	18.8	5.29	18.0	5.20	16.7	4.98	15.3	4.75
	-9.6	-10.0	22.2	5.40	20.9	5.22	19.5	5.05	18.8	4.97	18.0	4.88	16.7	4.69	15.3	4.50
	-4.4	-5.0	22.2	4.95	20.9	4.80	19.5	4.65	18.8	4.58	18.0	4.49	16.7	4.33	15.3	4.15
	-1.8	-2.5	22.2	4.69	20.9	4.56	19.5	4.42	18.8	4.35	18.0	4.27	16.7	4.12	15.3	3.95
	0.8	0.0	22.2	4.41	20.9	4.28	19.5	4.15	18.8	4.09	18.0	4.02	16.7	3.88	15.3	3.71
	2.8	2.0	22.2	4.15	20.9	4.04	19.5	3.93	18.8	3.86	18.0	3.80	16.7	3.64	15.3	3.48
	6.0	5.0	22.2	3.72	20.9	3.62	19.5	3.52	18.8	3.46	18.0	3.40	16.7	3.28	15.3	3.15
	7.0	6.0	22.2	3.57	20.9	3.48	19.5	3.39	18.8	3.33	18.0	3.28	16.7	3.17	15.3	3.04
	8.6	7.5	22.2	3.34	20.9	3.27	19.5	3.18	18.8	3.14	18.0	3.09	16.7	2.99	15.3	2.89
	11.2	10.0	22.2	3.27	20.9	3.13	19.5	2.99	18.8	2.93	18.0	2.85	16.7	2.73	15.3	2.64
	16.4	15.0	22.2	3.27	20.9	3.13	19.5	2.99	18.8	2.93	18.0	2.85	16.7	2.73	15.3	2.59

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40%	-24.9	-25.0	17.8	5.00	16.7	4.90	15.6	4.76	15.0	4.68	14.4	4.62	13.4	4.47	12.2	4.33
	-19.8	-20.0	17.8	4.77	16.7	4.68	15.6	4.58	15.0	4.52	14.4	4.45	13.4	4.30	12.2	4.15
	-14.7	-15.0	17.8	4.51	16.7	4.43	15.6	4.34	15.0	4.29	14.4	4.24	13.4	4.12	12.2	3.97
	-9.6	-10.0	17.8	4.21	16.7	4.14	15.6	4.06	15.0	4.02	14.4	3.97	13.4	3.86	12.2	3.75
	-4.4	-5.0	17.8	3.84	16.7	3.79	15.6	3.71	15.0	3.68	14.4	3.64	13.4	3.55	12.2	3.45
	-1.8	-2.5	17.8	3.63	16.7	3.58	15.6	3.51	15.0	3.49	14.4	3.45	13.4	3.35	12.2	3.21
	0.8	0.0	17.8	3.39	16.7	3.36	15.6	3.28	15.0	3.24	14.4	3.19	13.4	3.09	12.2	2.98
	2.8	2.0	17.8	3.18	16.7	3.13	15.6	3.07	15.0	3.03	14.4	2.99	13.4	2.90	12.2	2.81
	6.0	5.0	17.8	2.83	16.7	2.78	15.6	2.75	15.0	2.72	14.4	2.69	13.4	2.63	12.2	2.55
	7.0	6.0	17.8	2.83	16.7	2.73	15.6	2.64	15.0	2.62	14.4	2.60	13.4	2.54	12.2	2.48
	8.6	7.5	17.8	2.83	16.7	2.73	15.6	2.62	15.0	2.56	14.4	2.51	13.4	2.42	12.2	2.36
	11.2	10.0	17.8	2.83	16.7	2.73	15.6	2.62	15.0	2.56	14.4	2.51	13.4	2.40	12.2	2.29
	16.4	15.0	17.8	2.83	16.7	2.73	15.6	2.62	15.0	2.56	14.4	2.51	13.4	2.40	12.2	2.29

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	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	℃CDB	℃CWB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
30%	-24.9	-25.0	13.4	3.91	12.5	3.87	11.7	3.81	11.3	3.76	10.8	3.72	10.0	3.63	9.2	3.54
	-19.8	-20.0	13.4	3.72	12.5	3.70	11.7	3.65	11.3	3.62	10.8	3.59	10.0	3.50	9.2	3.39
	-14.7	-15.0	13.4	3.52	12.5	3.50	11.7	3.46	11.3	3.43	10.8	3.41	10.0	3.35	9.2	3.25
	-9.6	-10.0	13.4	3.28	12.5	3.26	11.7	3.23	11.3	3.21	10.8	3.19	10.0	3.14	9.2	3.06
	-4.4	-5.0	13.4	2.97	12.5	2.96	11.7	2.92	11.3	2.89	10.8	2.85	10.0	2.78	9.2	2.70
	-1.8	-2.5	13.4	2.78	12.5	2.75	11.7	2.71	11.3	2.68	10.8	2.66	10.0	2.60	9.2	2.53
	0.8	0.0	13.4	2.54	12.5	2.53	11.7	2.51	11.3	2.49	10.8	2.47	10.0	2.42	9.2	2.36
	2.8	2.0	13.4	2.40	12.5	2.36	11.7	2.34	11.3	2.33	10.8	2.32	10.0	2.29	9.2	2.24
	6.0	5.0	13.4	2.40	12.5	2.31	11.7	2.23	11.3	2.19	10.8	2.15	10.0	2.09	9.2	2.06
	7.0	6.0	13.4	2.40	12.5	2.31	11.7	2.23	11.3	2.19	10.8	2.15	10.0	2.07	9.2	2.00
	8.6	7.5	13.4	2.40	12.5	2.31	11.7	2.23	11.3	2.19	10.8	2.15	10.0	2.07	9.2	1.99
	11.2	10.0	13.4	2.40	12.5	2.31	11.7	2.23	11.3	2.19	10.8	2.15	10.0	2.07	9.2	1.99
	16.4	15.0	13.4	2.40	12.5	2.31	11.7	2.23	11.3	2.19	10.8	2.15	10.0	2.07	9.2	1.99