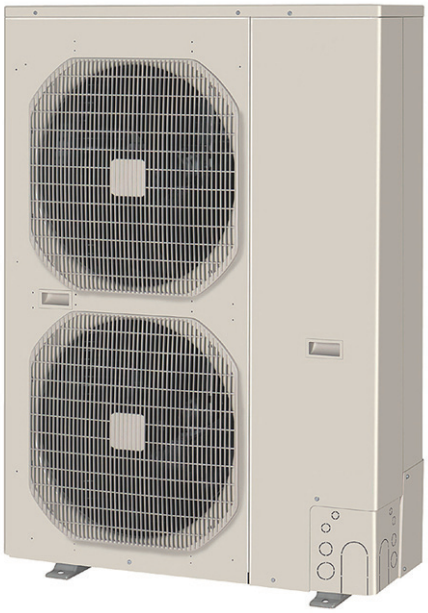
Panasonic

TECHNICAL DATA

Mini VRF System

R410A



Model No.
Outdoor Unit

Class	4HP	5HP	6HP
Model Name	U-4LE1E5 U-4LE1E8	U-5LE1E5 U-5LE1E8	U-6LE1E5 U-6LE1E8

HP = horsepower

85464869255001

REFERENCE NO.**TD831155-01**

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.

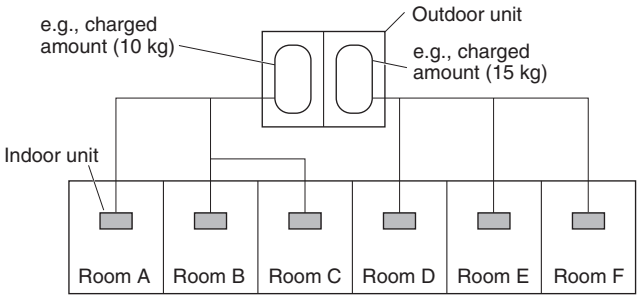
$$\frac{\text{Total amount of refrigerant (kg)}}{\text{Min. volume of the indoor unit installed room (m}^3\text{)}} \leq \text{Density limit (kg/m}^3\text{)}$$

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.

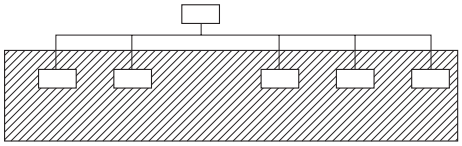
   The possible amount of leaked refrigerant gas in rooms D, E and F is 15 kg.

RoHS
· This product does not contain any hazardous substances prohibited by the RoHS Directive.

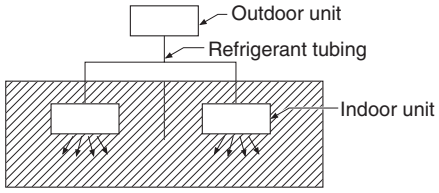
WARNING
· You are requested to use RoHS compliant parts for maintenance or repair.

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

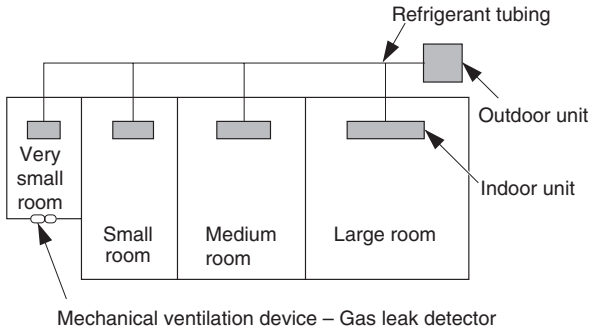
(1) No partition (shaded portion)



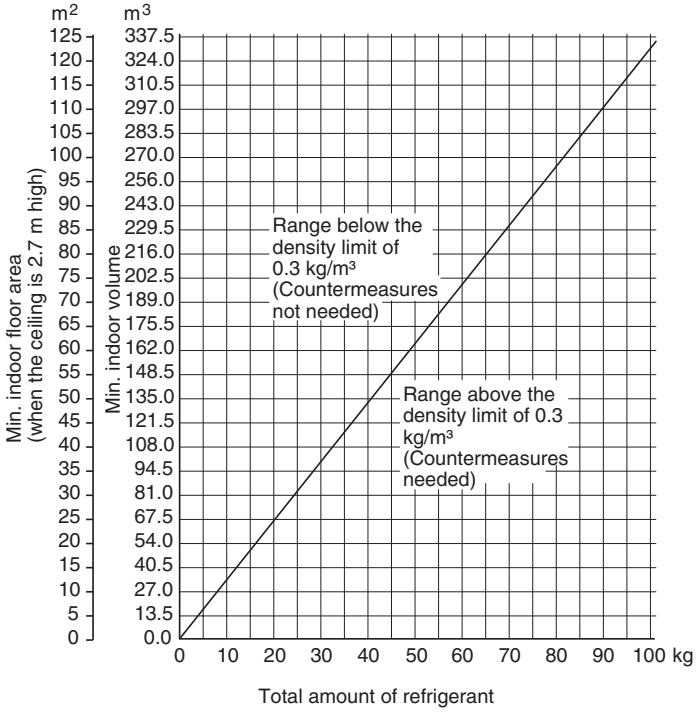
(2) When there is an effective opening with the adjacent room for ventilation of leaking refrigerant gas (opening without a door, or an opening 0.15% or larger than the respective floor spaces at the top or bottom of the door).



(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.

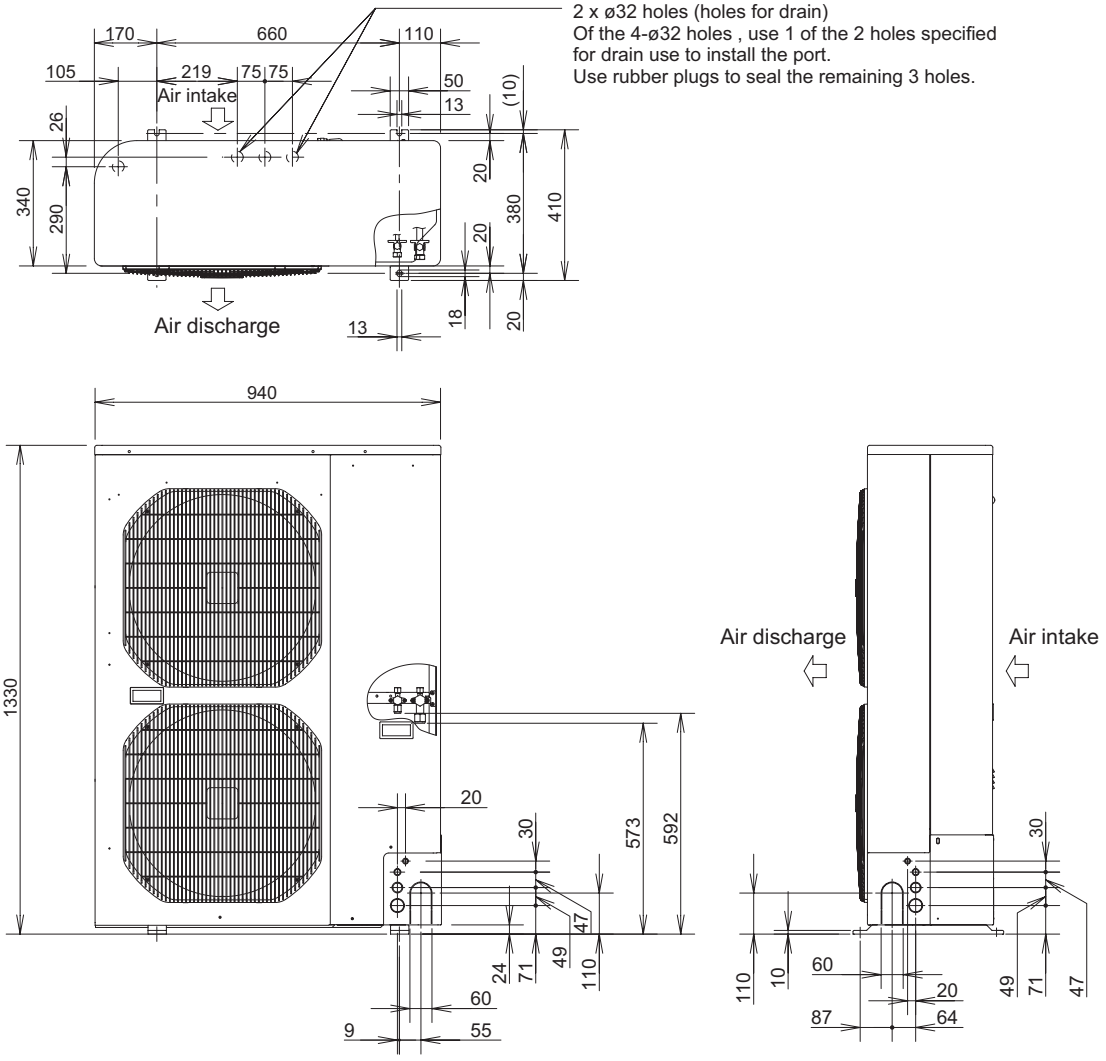


3. The minimum indoor floor space compared with the amount of refrigerant is roughly as follows: (When the ceiling is 2.7 m high)



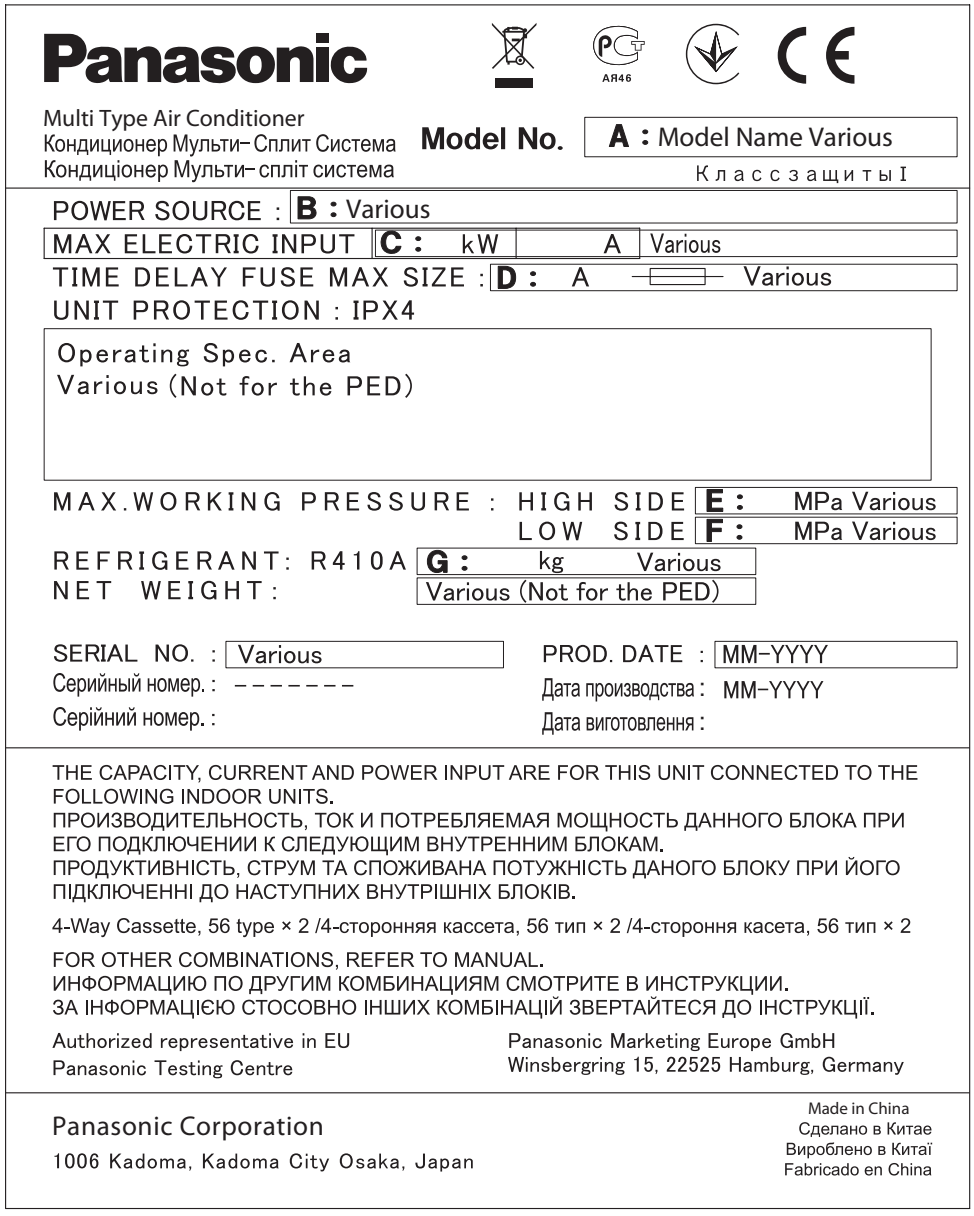
1. Line-up

Outdoor units

Type	DC inverter unit		
	U-4LE1E5, U-4LE1E8	U-5LE1E5, U-5LE1E8	U-6LE1E5, U-6LE1E8
Capacity: kW (BTU/h)	12.1 (41,300)	14.0 (47,800)	15.5 (52,900)
Cooling / Heating	/ 12.5 (42,700)	/ 16.0 (54,600)	/ 18.0 (61,400)
Outdoor Unit	Unit: mm 		

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

Rating nameplate figure



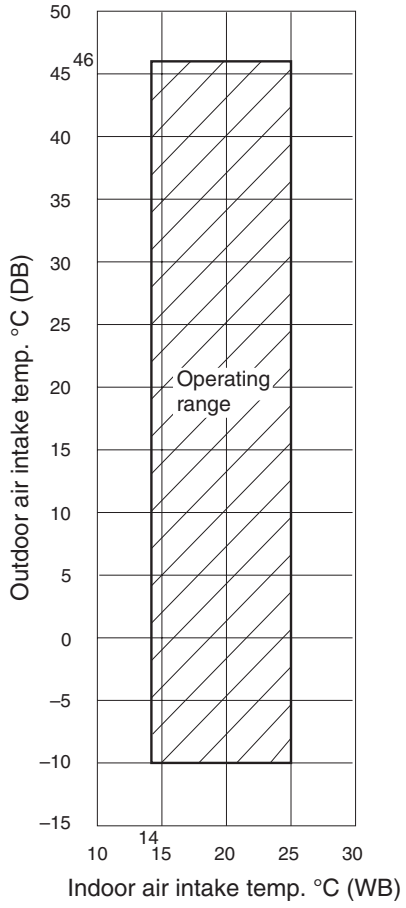
Tabulation of Various data

A	U-4LE1E5	U-5LE1E5	U-6LE1E5	U-4LE1E8	U-5LE1E8	U-6LE1E8
B	220 ~ 240 V, Single phase, 50 Hz			380 / 400 / 415 V 3N ~ 50 Hz		
C	4.84 kW, 21.0 A	5.64 kW, 24.5 A	6.45 kW, 28.0 A	5.62 kW, 8.5 A	6.61 kW, 10.0 A	7.94 kW, 12.0 A
D	25 A	35 A	35 A	20 A	20 A	20 A
E	3.80 MPa			3.80 MPa		
F	2.70 MPa			2.70 MPa		
G	3.5 kg			3.5 kg		

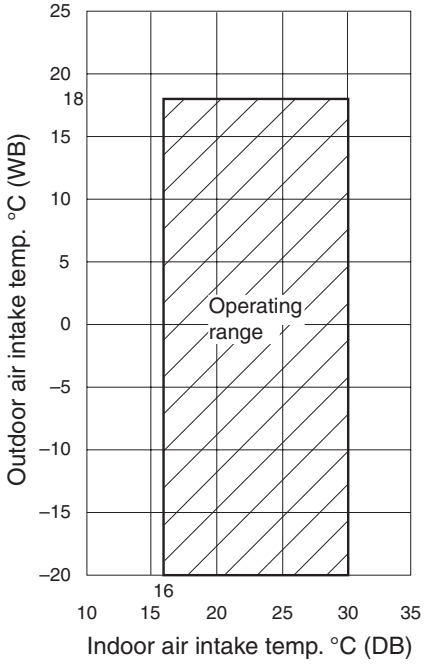
1. Model Selecting and Capacity Calculator

1-1. Operating Range

Cooling



Heating



2

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 disordor 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.

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

Outdoor unit

(Single-phase)

	(A) Power supply		Time delay capacity	
	Wire size	Max. length	Fuse	Circuit breaker
U-4LE1E5	4 mm²	21 m	25 A	30 A
U-5LE1E5	6 mm²	24 m	35 A	40 A
U-6LE1E5	6 mm²	20 m	35 A	40 A

(3-phase)

	(A) Power supply		Time delay capacity	
	Wire size	Max. length	Fuse	Circuit breaker
U-4LE1E8	2.5 mm²	58 m	20 A	20 A
U-5LE1E8	2.5 mm²	49 m	20 A	20 A
U-6LE1E8	2.5 mm²	41 m	20 A	20 A

Indoor unit

Type	(B) Power supply	Time delay fuse or circuit capacity
	2.5 mm²	
K1	Max. 150 m	10 – 16 A
D1, L1, U1, Y1, T1,F1, M1, P1,R1	Max. 130 m	10 – 16 A
E1	Max. 60 m	10 – 16 A

Control wiring

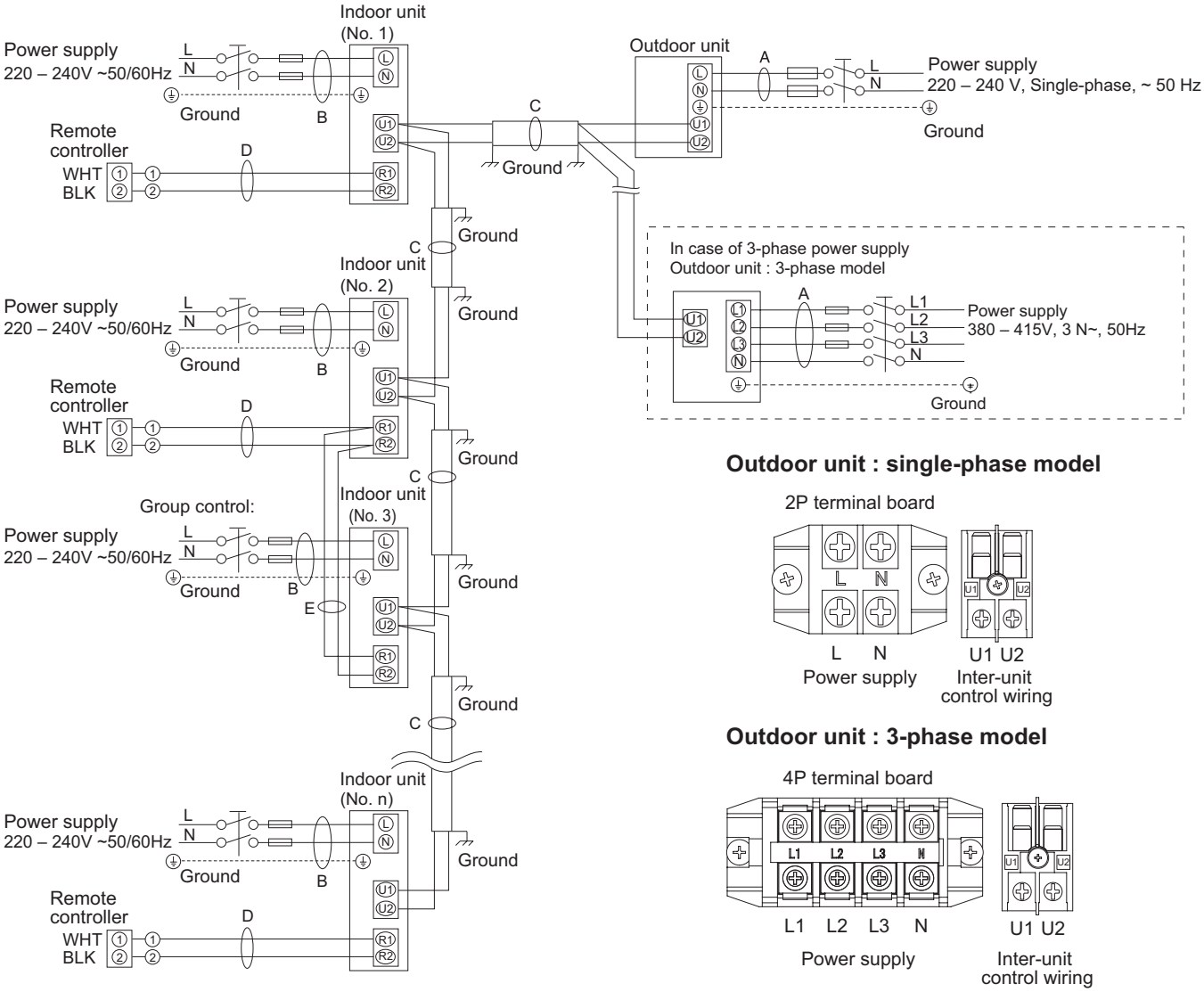
(C) Inter-unit (between outdoor and indoor units) control wiring
0.75 mm² (AWG #18) **Use shielded wiring***
Max. 1,000 m

NOTE * With ring-type wire terminal.

(D) Remote control wiring	(E) Control wiring for group control
0.75 mm² (AWG #18)	0.75 mm² (AWG #18)
Max. 500 m	Max. 200 m (Total)

3. Electrical Wiring

3-3. Wiring System Diagrams



NOTE

(1) Refer to Section 3-2. “Recommended Wire Length and Wire Diameter for Power Supply System” for the explanation of “A”, “B”, “C”, “D” and “E” in the above diagrams.

(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.

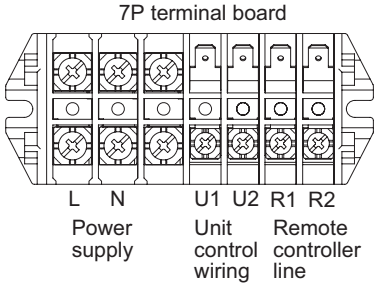
(3) Refrigerant Circuit (R.C.) address should be set before turning the power on.

(4) Regarding the R.C. address setting, refer to Section 5. Address setting can be executed by remote controller automatically.

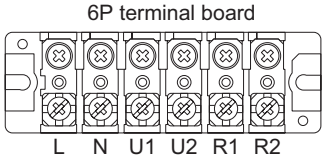
Outdoor unit : single-phase model

Outdoor unit : 3-phase model

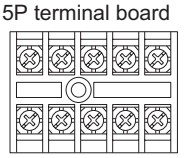
Indoor unit



T1, F1, E1, D1, L1 Types



U1, Y1, M1, P1, R1 Types



K1 Type

Fig. 2-1

3. Electrical Wiring

CAUTION

(1) When linking outdoor units in a network, disconnect the terminal extended from the short plug (CN-TERMINAL, 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)

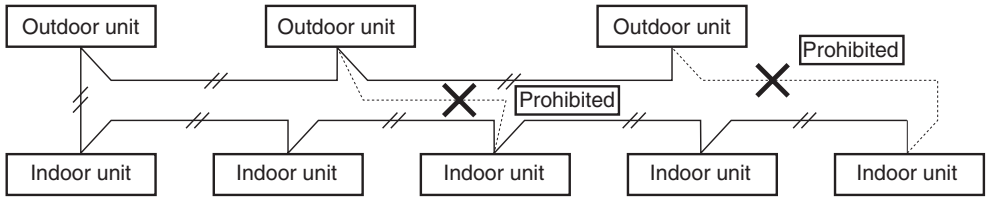


Fig. 2-2

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

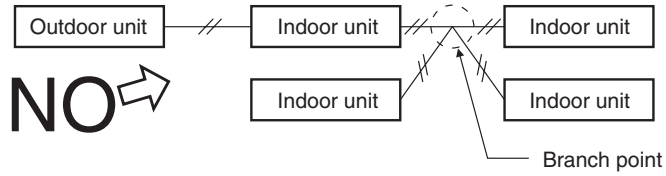


Fig. 2-3

(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)

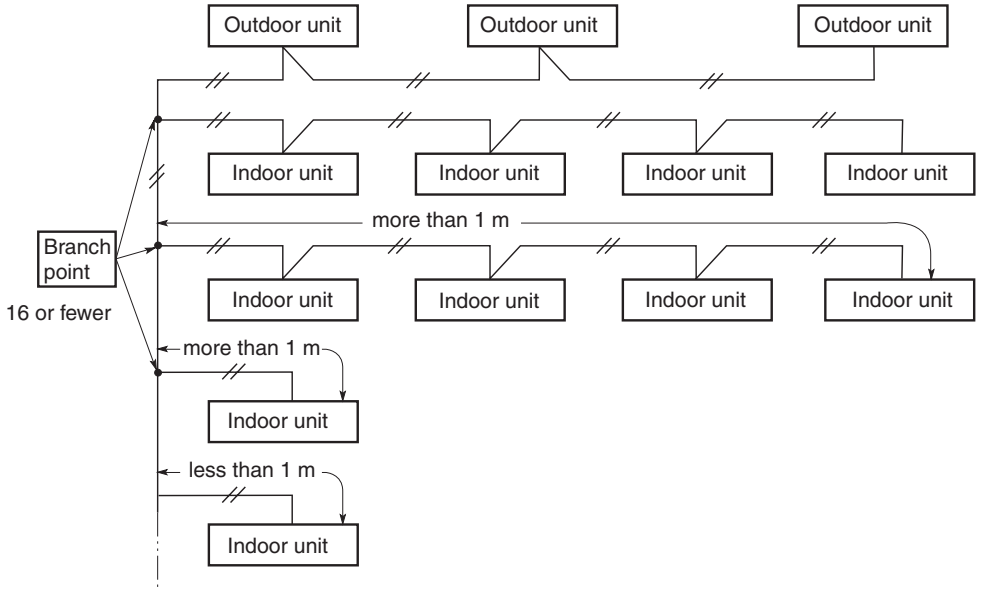


Fig. 2-4

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."

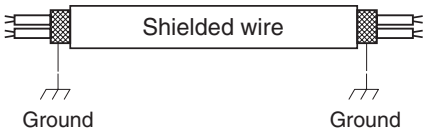


Fig. 2-5

(6) Use the standard power supply cables for Europe (such as H05RN-F or H07RN-F which conform to CENELEC (HAR) rating specifications) or use the cables based on IEC standard. (code designation, 60245 IEC 57, 60245 IEC 66)

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)

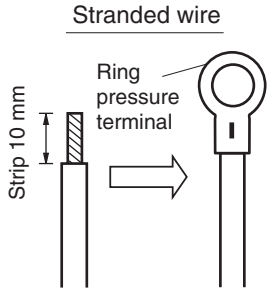


Fig. 2-6

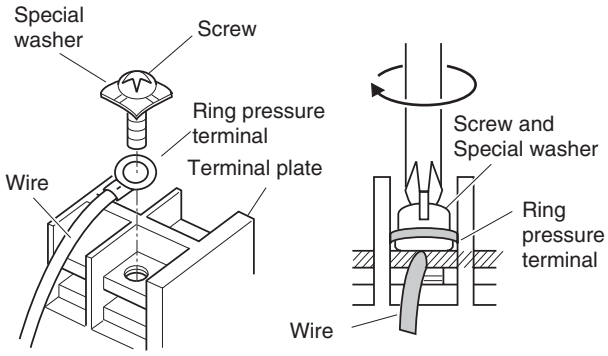


Fig. 2-7

■ Examples of shield wires

(1) Remove cable coat not to scratch braided shield. (Fig. 2-8)

(2) Unbraid the braided shield carefully and twist the unbraided shield wires tightly together. Insulate the shield wires by covering them with an insulation tube or wrapping insulation tape around them. (Fig. 2-9)

(3) Remove coat of signal wire. (Fig. 2-10)

(4) Attach ring pressure terminals to the signal wires and the shield wires insulated in Step (2). (Fig. 2-11)

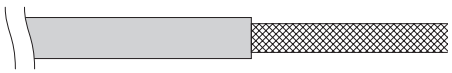


Fig. 2-8

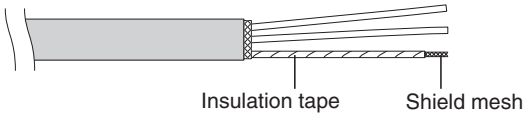


Fig. 2-9

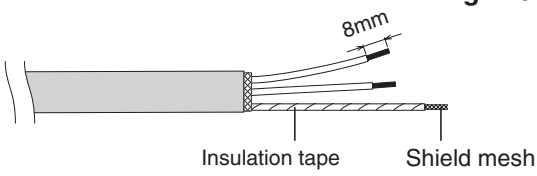


Fig. 2-10

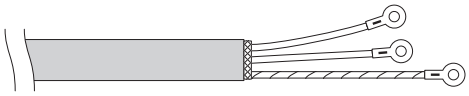


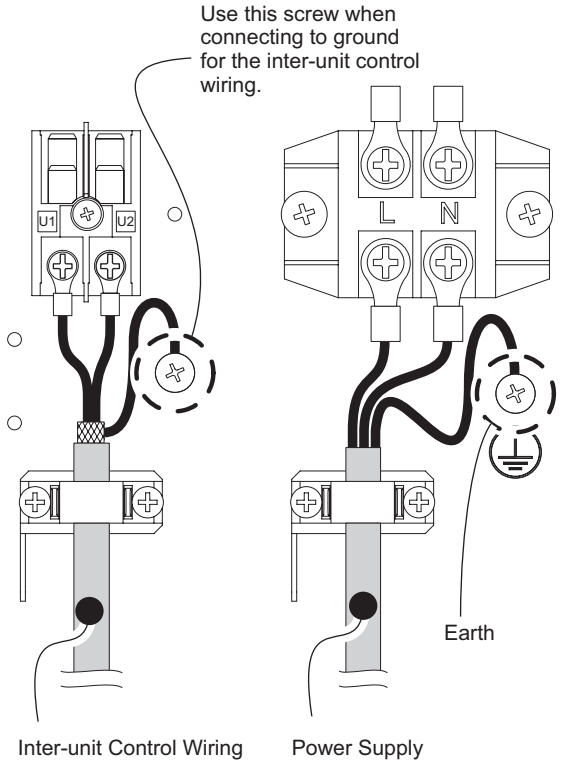
Fig. 2-11

3. Electrical Wiring

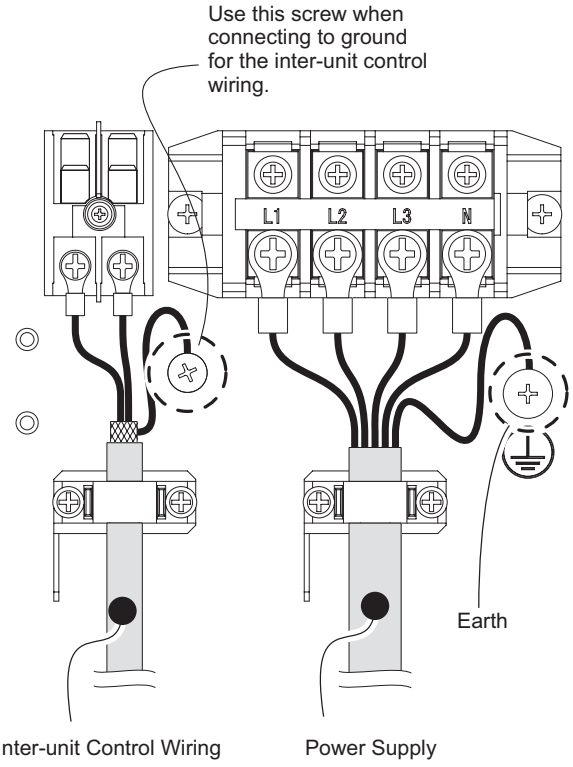
■ Wiring sample

Outdoor Unit : Mini VRF

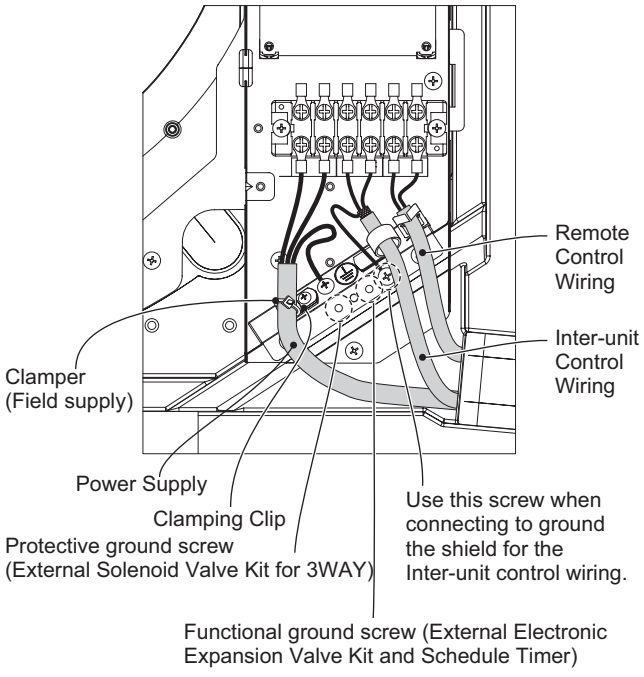
For single-phase : U-4LE1E5, U-5LE1E5, U-6LE1E5



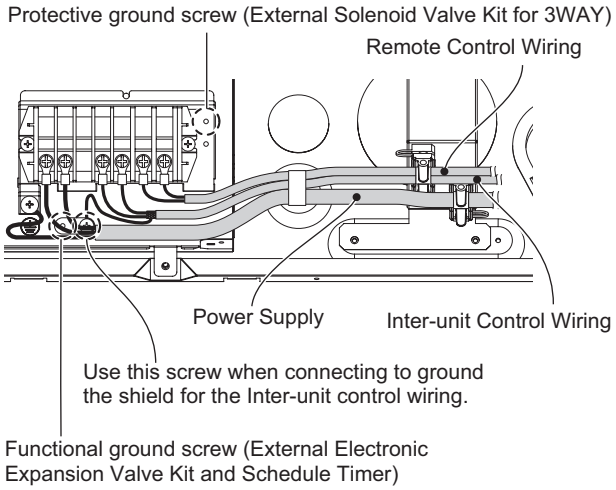
For 3-phase : U-4LE1E8, U-5LE1E8, U-6LE1E8



Indoor Unit : U1 Type



Indoor Unit : T1 type



6. AIR PURGING

Air and moisture in the refrigerant system may have undesirable effects as indicated below.

- pressure in the system rises
- operating current rises
- cooling (or heating) efficiency drops
- moisture in the refrigerant circuit may freeze and block capillary tubing
- water may lead to corrosion of parts in the refrigerant system

Therefore, the indoor unit and tubing between the indoor and outdoor unit must be leak tested and evacuated to remove any noncondensables and moisture from the system. (Figs. 2-33 and 2-34)

Manifold gauge

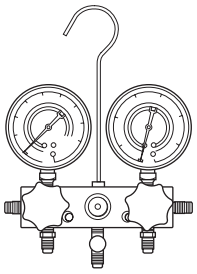


Fig. 2-33

Vacuum pump

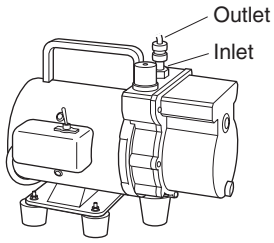


Fig. 2-34

■ Air Purging with a Vacuum Pump (for Test Run) Preparation

Check that each tube (both liquid and gas tubes) between the indoor and outdoor units has been properly connected and all wiring for the test run has been completed.

Remove the valve caps from both the gas tube and liquid tube service valves on the outdoor unit. Note that both liquid and gas tube service valves on the outdoor unit are kept closed at this stage. (Fig. 2-35)

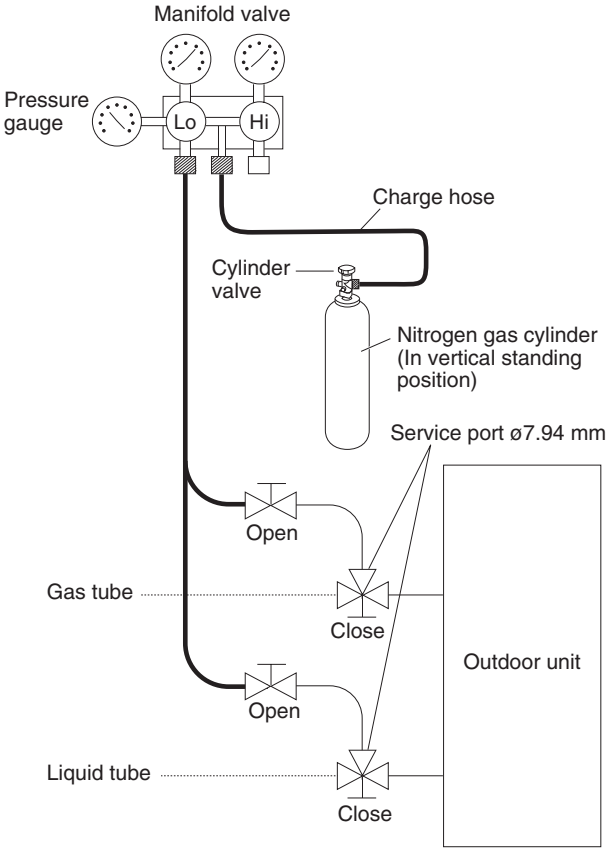


Fig. 2-35

Leak test

(1) Attach a manifold valve (with pressure gauges) and dry nitrogen gas cylinder to this service port with charge hoses.

CAUTION

Use a manifold valve for air purging. If it is not available, use a stop valve for this purpose. The "Hi" knob of the manifold valve must always be kept closed.

(2) Pressurize the system to no more than 3.80MPa with dry nitrogen gas and close the cylinder valve when the gauge reading reaches 3.80MPa. Then, test for leaks with liquid soap.

CAUTION

To avoid nitrogen entering the refrigerant system in a liquid state, the top of the cylinder must be higher than the bottom when you pressurize the system. Usually, the cylinder is used in a vertical standing position.

(3) Do a leak test of all joints of the tubing (both indoor and outdoor) and both gas tube and liquid tube service valves. Bubbles indicate a leak. Wipe off the soap with a clean cloth after the leak test.

(4) After the system is found to be free of leaks, relieve the nitrogen pressure by loosening the charge hose connector at the nitrogen cylinder. When the system pressure is reduced to normal, disconnect the hose from the cylinder.

6. AIR PURGING

Evacuation

(1) Attach the charge hose end described in the preceding steps to the vacuum pump to evacuate the tubing and indoor unit. Confirm that the “Lo” knob of the manifold valve is open. Then, run the vacuum pump. The operation time for evacuation varies with the tubing length and capacity of the pump. The following table shows the amount of time for evacuation:

Required time for evacuation when 30 gal/h vacuum pump is used	
If tubing length is less than 15 m	If tubing length is longer than 15 m
45 min. or more	**90 min. or more**

NOTE

The required time in the left table is calculated based on the assumption that the ideal (or target) vacuum condition is less than –101 kPa (–755 mmHg, 5 Torr).

(2) When the desired vacuum is reached, close the “Lo” knob of the manifold valve and turn off the vacuum pump. Confirm that the gauge pressure is under –101 kPa (–755 mmHg, 5 Torr) after 4 to 5 minutes of vacuum pump operation. (Fig. 2-36)

CAUTION **Use a cylinder designed for use with R410A respectively.**

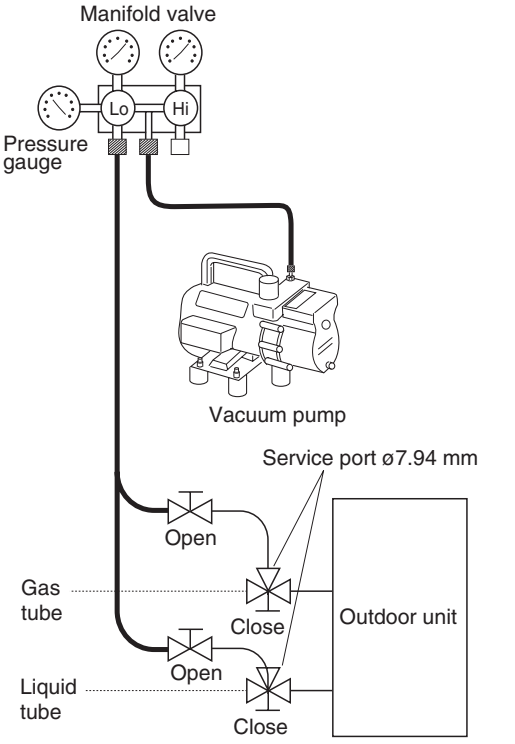


Fig. 2-36

Charging additional refrigerant

- Charging additional refrigerant (calculated from the liquid tube length as shown in Section 1-9 “Additional Refrigerant Charge”) using the liquid tube service valve. (Fig. 2-37)
- Use a balance to measure the refrigerant accurately.
- If the additional refrigerant charge amount cannot be charged at once, charge the remaining refrigerant in liquid form by using the gas tube service valve with the system in cooling operation mode at the time of test run. (Fig. 2-38)

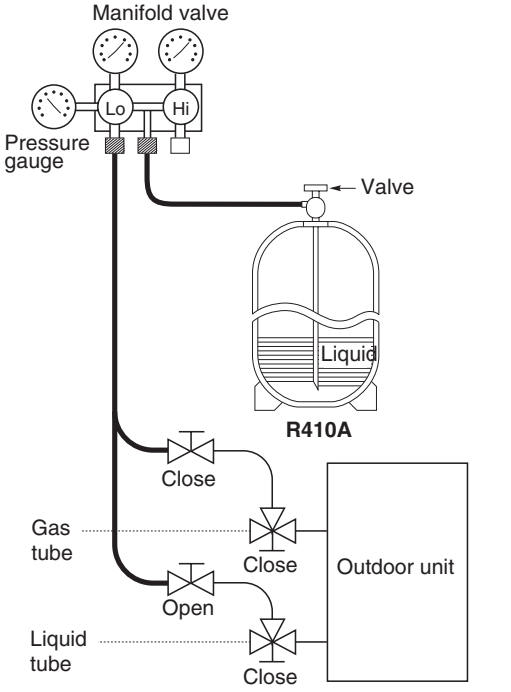


Fig. 2-37

Finishing the job

(1) With a hex wrench, turn the liquid tube service valve stem counterclockwise to fully open the valve.

(2) Turn the gas tube service valve stem counterclockwise to fully open the valve.

CAUTION **To avoid gas from leaking when removing the charge hose, make sure the stem of the gas tube is turned all the way out.**

(3) Loosen the charge hose connected to the gas tube service port (for ø 7.94 mm tube) slightly to release the pressure, then remove the hose.

(4) Replace the service port cap on the gas tube service port and fasten the cap securely with an adjustable wrench or box wrench. This process is very important to prevent gas from leaking from the system.

(5) Replace the valve caps at both gas tube and liquid tube service valves and fasten them securely.

This completes air purging with a vacuum pump. The air conditioner is now ready for a test run. Refer to Section “5. TEST RUN”.

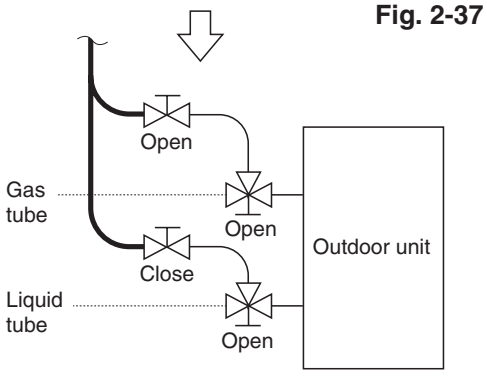


Fig. 2-38

Contents

4. MINI VRF SYSTEM UNIT SPECIFICATIONS

1. Outdoor Unit

Unit specifications (F)

Model No.	Outdoor Unit		U-6LE1E8		
Power Source			380 - 400 - 415 V, 3N, 50Hz		
Performance					
Cooling capacity		kW (BTU / h)	15.5 (52,900)		
Heating capacity		kW (BTU / h)	18.0 (61,400)		
COP	Cooling standard	-	3.45		
	Heating standard	-	3.95		
UNIT DIMENSIONS	Height	mm (in.)	1,330 (52 -23/64)		
	Width	mm (in.)	940 (37)		
	Depth	mm (in.)	340 (13-25 / 64)		
Net weight		kg (lbs.)	103 (227)		
Color (Munsell code)			Munsell 1Y 8.5 / 0.5		
Electrical Ratings					
Voltage rating		V	380	400	415
Cooling	Running amperes	A	7.5	7.1	6.9
	Power input	kW	4.49		
	Power factor	%	91		
Heating (Standard)	Running amperes	A	7.5	7.2	6.9
	Power input	kW	4.56		
	Power factor	%	92		
Starting amperes		A	1	1	1
Max. amperes		A	12.0	12.0	12.0
Max. power input		kW	7.27	7.65	7.94
Max. number of connectable Indoor Units			9		
Compressor					
Type - Q'ty			Hermetic type x 1		
Motor output		kW	3.6		
Refrigeration oil	Type		FV50S (Ether oil)		
	Charge amount	L	1.3		
Crankcase heater		W	28		
Refrigerant amount at shipment		kg	R410A - 3.5		
Refrigerant control			Electronic expansion valve		
Defrost method			Reverse cycle,microprocessor control		
Heat exchanger			Tube with plate fins		
Fan Device					
Type - Q'ty			Propeller fan x 2		
Air circulation		m^3 / min	104		
External static pressure		Pa	-		
Motor output (No. of poles)		kW	0.09 (8P) + 0.09 (8P)		
Protective Devices			High pressure switch, overcurrent (CT method), thermistor by refrigerant gas discharge		
Tubing					
Refrigerant tubing	Gas tube	mm (in.)	ø19.05 (3 / 4) (Flare nut)		
	Liquid tube	mm (in.)	ø9.52 (3 / 8) (Flare nut)		
Drain Port			ø32		
External Air Temperature Operation Range		°C	Cooling: -10 ~ 46 °C (DB) Heating: -20 ~ 24 °C (DB) -20 ~ 18 °C (WB)		
Pressure sound	Cooling mode	dB-A	52 (silent mode 49)		
	Heating mode	dB-A	55 (silent mode 52)		
Power sound	Cooling mode	dB-A	70		
	Heating mode	dB-A	73		
Primary Accessories			Tube Discharge Assy x 1		

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

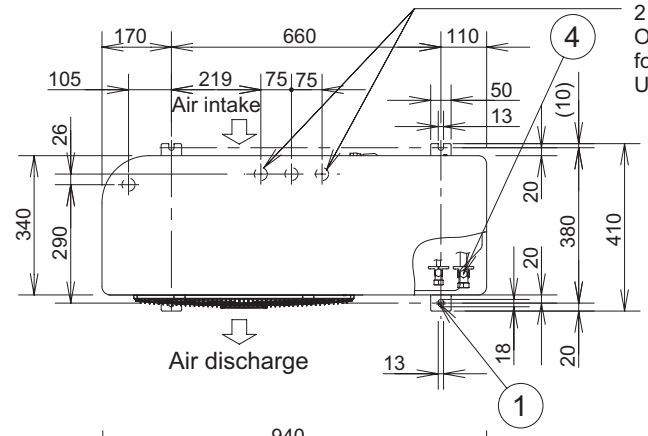
Tested to JIS B8616 based on package A/C, electrical characteristics values and operating sound.
Also test to EN14511.
Rated conditions
(Cooling: Indoor intake air temp. 27°C DB / 19°C WB. Outdoor intake air temp. 35°C DB.)
(Heating [standard]: Indoor intake air temp. 20°C DB. Outdoor intake air temp. 7°C DB / 6°C WB.)

1. Outdoor Unit

1-2. Dimensional Data

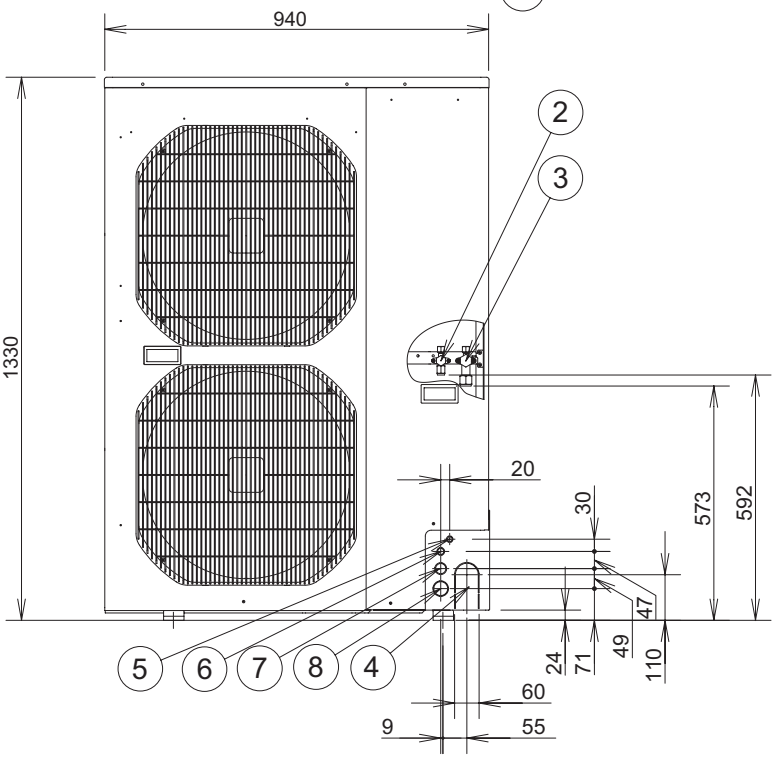
U-4LE1E5, U-4LE1E8
U-5LE1E5, U-5LE1E8
U-6LE1E5, U-6LE1E8

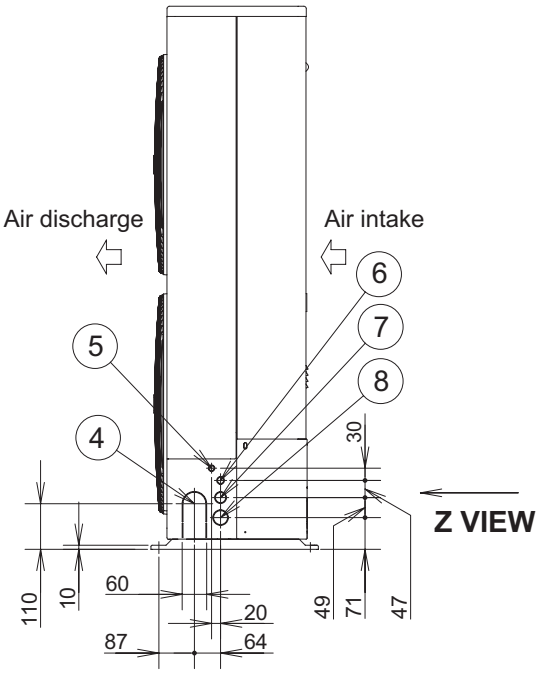
Unit: mm

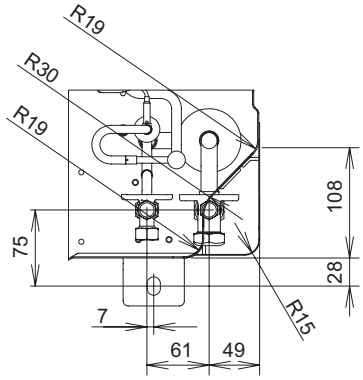


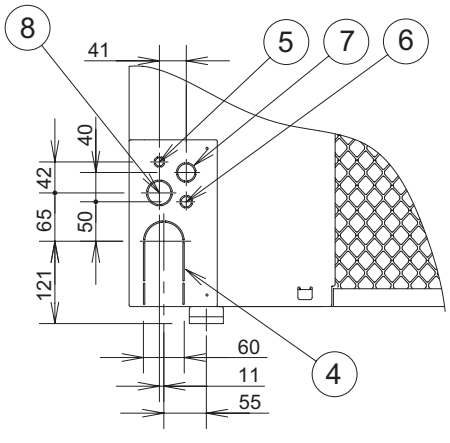
2 x ø32 holes (holes for drain)
Of the 4 ø32 holes , use 1 of the 2 holes specified for drain use to install the port.
Use rubber plugs to seal the remaining 3 holes.

①	Mounting hole (4-R6.5), anchor bolt : M10
②	Refrigerant tubing (liquid tube), flared connection (ø9.52)
③	Refrigerant tubing (gas tube), flared connection (ø15.88)
④	Refrigerant tubing port
⑤	Electrical wiring port (ø16)
⑥	Electrical wiring port (ø19)
⑦	Electrical wiring port (ø29)
⑧	Electrical wiring port (ø38)







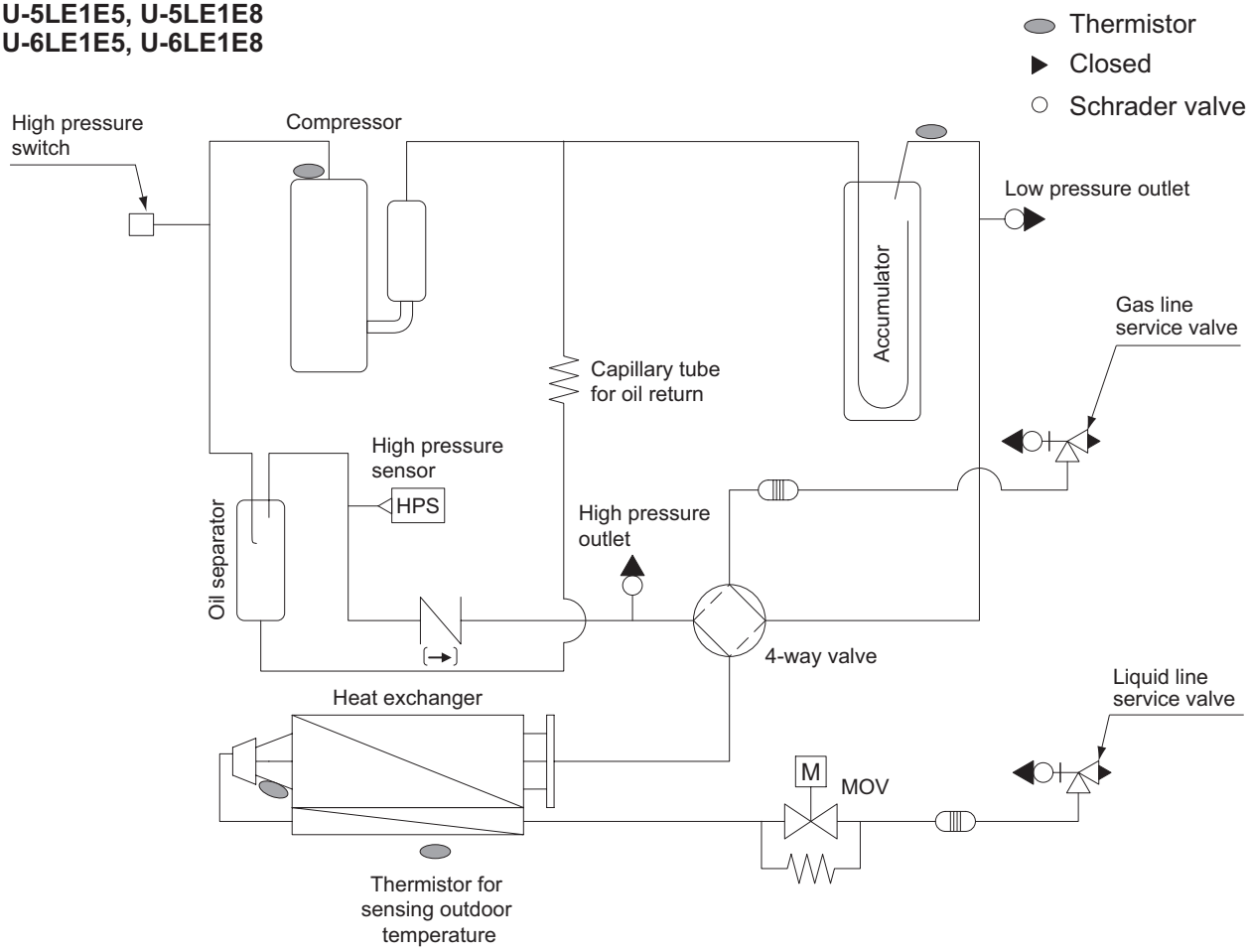


Z VIEW

1. Outdoor Unit

1-3. Refrigerant Flow Diagram

U-4LE1E5, U-4LE1E8
U-5LE1E5, U-5LE1E8
U-6LE1E5, U-6LE1E8



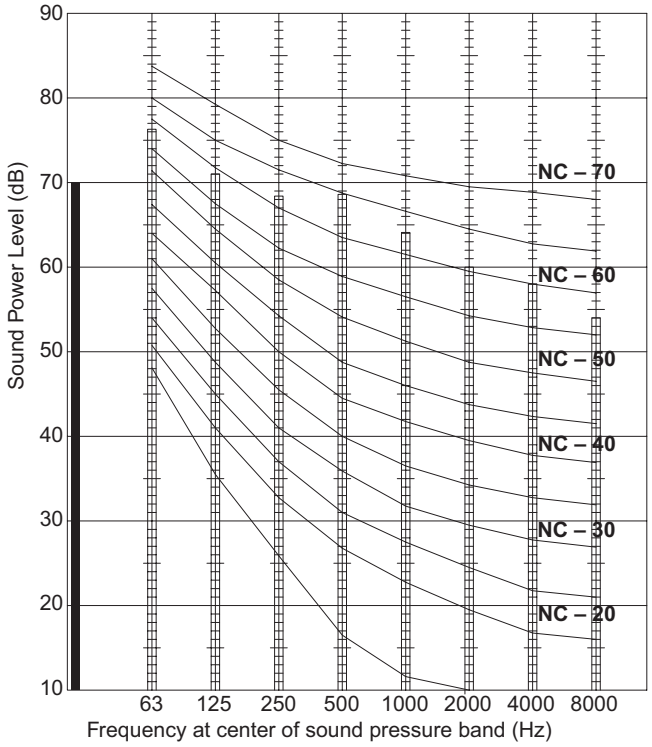
4

1. Outdoor Unit

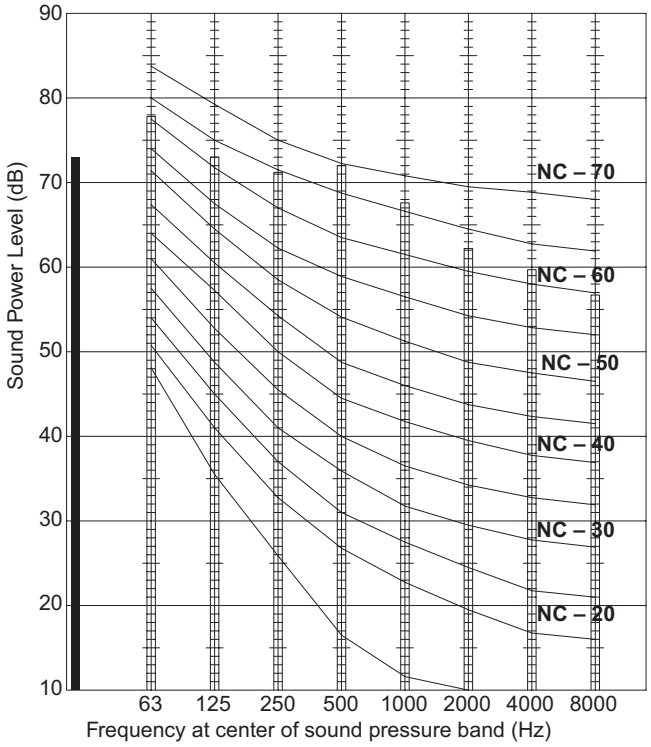
U-6LE1E5, U-6LE1E8

Model	U-6LE1E5 U-6LE1E8
Sound Power Level	Cooling : 70 dB (A) Heating : 73 dB (A)
Condition	1 m in front at height of 1.5 m

<Cooling>



<Heating>



NOTE

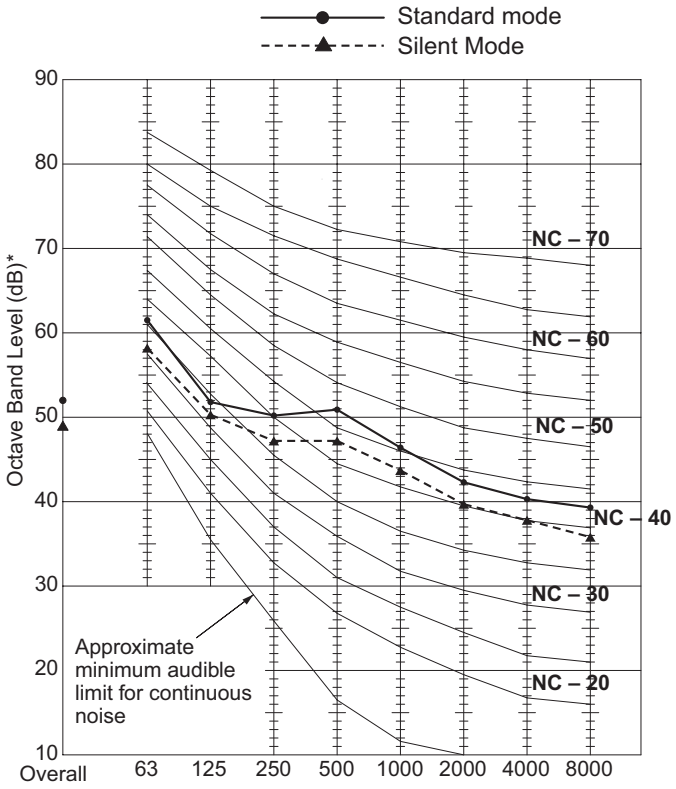
1. dBA = A – weighted sound power level (A – scale according to IEC)
2. Reference acoustic intensity 0 dB = 10^{-12} W/m^2

1. Outdoor Unit

U-6LE1E5, U-6LE1E8

<Cooling>

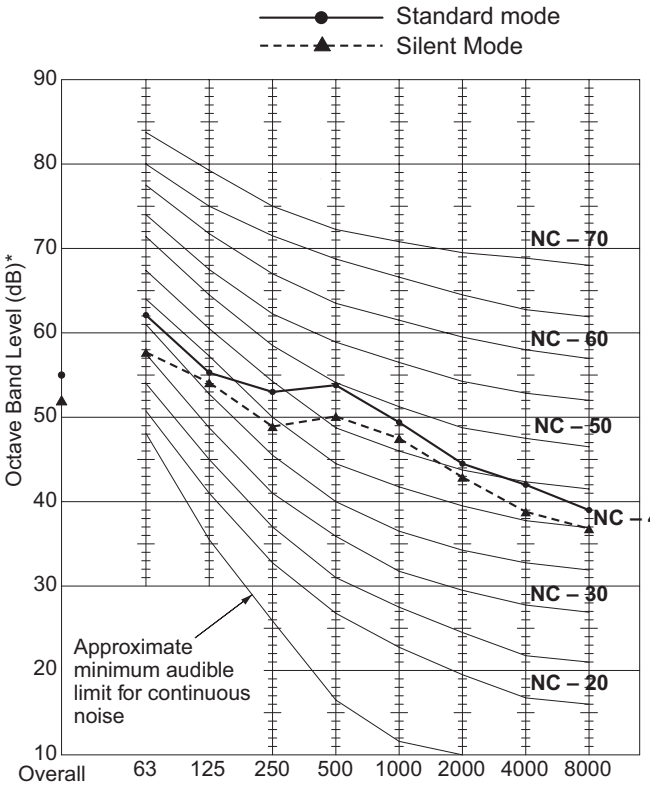
Model	U-6LE1E5 U-6LE1E8
Sound Pressure Level	Standard mode : 52 dB (A) Silent Mode : 49 dB (A)
Condition	1 m in front at height of 1.5 m



Frequency at center of sound pressure band (Hz)

<Heating>

Model	U-6LE1E5 U-6LE1E8
Sound Pressure Level	Standard mode : 55 dB (A) Silent Mode : 52 dB (A)
Condition	1 m in front at height of 1.5 m



Frequency at center of sound pressure band (Hz)

* 0 dB = 0.0002 bar

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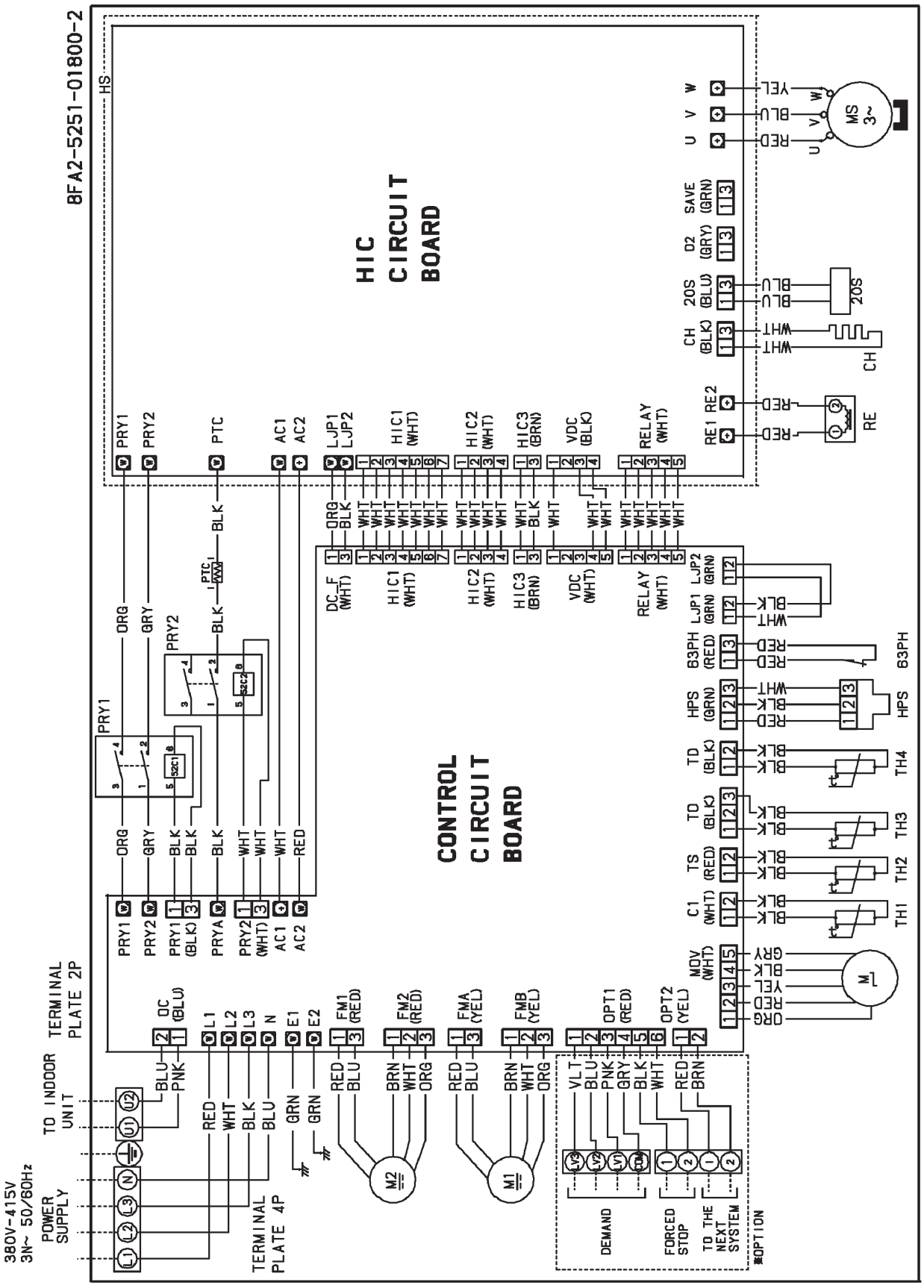
Contents

6. ELECTRICAL DATA

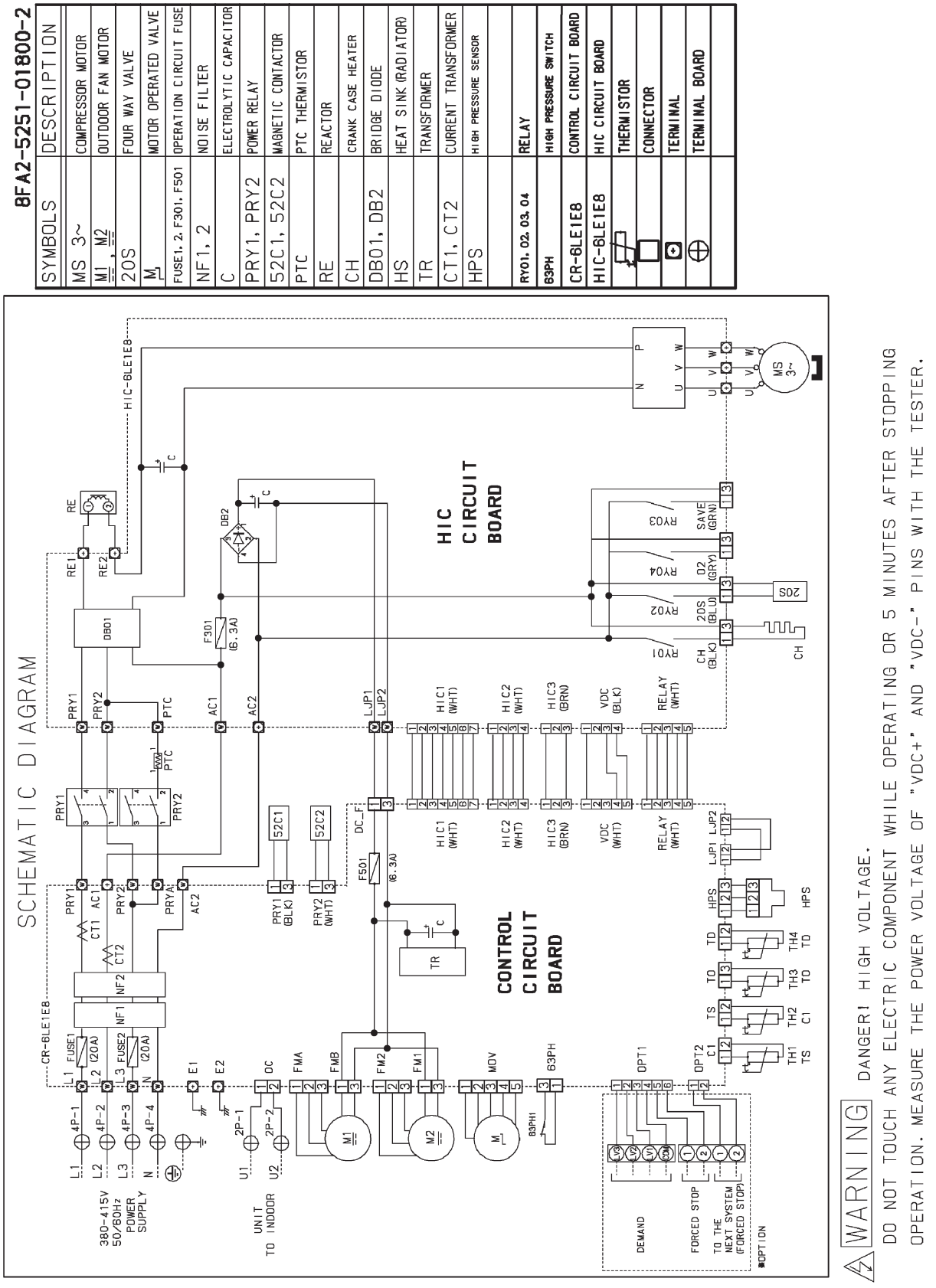
1. Outdoor Unit

(1) Electric Wiring Diagram U-4LE1E8 / U-5LE1E8 / U-6LE1E8



1. Outdoor Unit

Schematic Diagram U-4LE1E8 / U-5LE1E8 / U-6LE1E8



Contents

8. CAPACITY TABLE

1. Capacity Ratio of Outdoor Unit

1-11. U-6LE1E8 (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
130%	-10.0	16.7	2.87	16.7	2.87	16.7	2.87	16.7	2.87	17.8	3.06	18.9	3.25	20.0	3.45
	-5.0	16.7	2.87	16.7	2.87	16.7	2.87	16.7	2.87	17.8	3.06	18.9	3.26	20.0	3.45
	0.0	16.7	2.88	16.7	2.88	16.7	2.88	16.7	2.88	17.8	3.07	18.9	3.26	20.0	3.45
	5.0	16.7	2.88	16.7	2.88	16.7	2.88	16.7	2.88	17.8	3.07	18.9	3.26	20.0	3.48
	10.0	16.7	2.91	16.7	2.91	16.7	2.91	16.7	2.91	17.8	3.10	18.9	3.30	20.0	3.49
	15.0	16.7	2.93	16.7	2.93	16.7	2.93	16.7	2.93	17.8	3.13	18.9	3.33	20.0	3.53
	20.0	16.7	3.00	16.7	3.00	16.7	3.00	16.7	3.00	17.8	3.21	18.9	3.42	20.0	3.68
	25.0	16.7	3.47	16.7	3.47	16.7	3.47	16.7	3.47	17.8	3.76	18.9	4.07	20.0	4.39
	30.0	16.7	4.15	16.7	4.15	16.7	4.15	16.7	4.15	17.8	4.51	18.9	4.88	20.0	5.27
	35.0	16.7	5.00	16.7	5.00	16.7	5.00	16.7	5.00	17.8	5.45	18.7	5.84	19.2	5.84
	40.0	16.1	5.84	16.1	5.84	16.1	5.84	16.1	5.84	16.4	5.74	16.4	5.38	16.4	5.09
	43.0	13.0	4.26	13.0	4.26	13.0	4.26	13.0	4.26	13.0	4.04	13.0	3.84	13.0	3.67
	46.0	9.7	2.89	9.7	2.89	9.7	2.89	9.7	2.89	9.7	2.76	9.7	2.65	9.7	2.54

Combination(%):Indoor/ outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		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	15.6	2.69	16.3	2.80	16.3	2.80	16.3	2.80	17.4	2.99	18.4	3.18	19.5	3.37
	-5.0	15.6	2.69	16.3	2.81	16.3	2.81	16.3	2.81	17.4	2.99	18.4	3.18	19.5	3.37
	0.0	15.6	2.69	16.3	2.81	16.3	2.81	16.3	2.81	17.4	3.00	18.4	3.18	19.5	3.37
	5.0	15.6	2.70	16.3	2.81	16.3	2.81	16.3	2.81	17.4	3.00	18.4	3.19	19.5	3.38
	10.0	15.6	2.70	16.3	2.84	16.3	2.84	16.3	2.84	17.4	3.03	18.4	3.22	19.5	3.41
	15.0	15.6	2.73	16.3	2.86	16.3	2.86	16.3	2.86	17.4	3.06	18.4	3.25	19.5	3.45
	20.0	15.6	2.78	16.3	2.93	16.3	2.93	16.3	2.93	17.4	3.13	18.4	3.33	19.5	3.56
	25.0	15.6	3.04	16.3	3.35	16.3	3.35	16.3	3.35	17.4	3.64	18.4	3.93	19.5	4.23
	30.0	15.6	3.62	16.3	4.01	16.3	4.01	16.3	4.01	17.4	4.35	18.4	4.71	19.5	5.08
	35.0	15.6	4.34	16.3	4.82	16.3	4.82	16.3	4.82	17.4	5.25	18.4	5.70	19.1	5.84
	40.0	15.6	5.35	15.9	5.84	15.9	5.84	15.9	5.84	16.4	5.83	16.4	5.47	16.4	5.16
	43.0	13.0	4.31	13.0	4.31	13.0	4.31	13.0	4.31	13.0	4.08	13.0	3.88	13.0	3.70
	46.0	9.7	2.91	9.7	2.91	9.7	2.91	9.7	2.91	9.7	2.78	9.7	2.66	9.7	2.55

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
110%	-10.0	14.0	2.41	15.1	2.61	15.9	2.74	15.9	2.74	16.9	2.92	18.0	3.10	19.1	3.29
	-5.0	14.0	2.41	15.1	2.61	15.9	2.74	15.9	2.74	16.9	2.92	18.0	3.11	19.1	3.29
	0.0	14.0	2.41	15.1	2.61	15.9	2.74	15.9	2.74	16.9	2.92	18.0	3.11	19.1	3.29
	5.0	14.0	2.41	15.1	2.61	15.9	2.74	15.9	2.74	16.9	2.93	18.0	3.11	19.1	3.30
	10.0	14.0	2.42	15.1	2.62	15.9	2.77	15.9	2.77	16.9	2.96	18.0	3.14	19.1	3.33
	15.0	14.0	2.45	15.1	2.65	15.9	2.79	15.9	2.79	16.9	2.98	18.0	3.17	19.1	3.36
	20.0	14.0	2.49	15.1	2.70	15.9	2.86	15.9	2.86	16.9	3.05	18.0	3.25	19.1	3.45
	25.0	14.0	2.71	15.1	2.98	15.9	3.24	15.9	3.24	16.9	3.51	18.0	3.79	19.1	4.08
	30.0	14.0	3.23	15.1	3.55	15.9	3.87	15.9	3.87	16.9	4.20	18.0	4.54	19.1	4.89
	35.0	14.0	3.87	15.1	4.26	15.9	4.65	15.9	4.65	16.9	5.05	18.0	5.48	18.9	5.84
	40.0	14.0	4.74	15.1	5.27	15.8	5.82	15.8	5.82	16.3	5.83	16.4	5.56	16.4	5.24
	43.0	13.0	4.37	13.0	4.37	13.0	4.37	13.0	4.37	13.0	4.13	13.0	3.92	13.0	3.74
	46.0	9.7	2.93	9.7	2.93	9.7	2.93	9.7	2.93	9.7	2.80	9.7	2.68	9.7	2.57

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
100%	-10.0	12.4	2.14	13.4	2.32	14.5	2.49	15.5	2.67	16.5	2.85	17.6	3.03	18.6	3.21
	-5.0	12.4	2.14	13.4	2.32	14.5	2.49	15.5	2.67	16.5	2.85	17.6	3.03	18.6	3.21
	0.0	12.4	2.14	13.4	2.32	14.5	2.50	15.5	2.67	16.5	2.85	17.6	3.03	18.6	3.21
	5.0	12.4	2.14	13.4	2.32	14.5	2.50	15.5	2.68	16.5	2.86	17.6	3.04	18.6	3.21
	10.0	12.4	2.15	13.4	2.32	14.5	2.50	15.5	2.68	16.5	2.89	17.6	3.07	18.6	3.25
	15.0	12.4	2.18	13.4	2.36	14.5	2.54	15.5	2.72	16.5	2.91	17.6	3.09	18.6	3.28
	20.0	12.4	2.21	13.4	2.40	14.5	2.59	15.5	2.78	16.5	2.97	17.6	3.16	18.6	3.36
	25.0	12.4	2.41	13.4	2.64	14.5	2.88	15.5	3.13	16.5	3.39	17.6	3.66	18.6	3.93
	30.0	12.4	2.86	13.4	3.14	14.5	3.43	15.5	3.74	16.5	4.05	17.6	4.37	18.6	4.71
	35.0	12.4	3.41	13.4	3.76	14.4	4.11	15.5	4.49	16.5	4.84	17.5	5.23	18.5	5.64
	40.0	12.4	4.17	13.4	4.62	14.5	5.10	15.5	5.63	16.2	5.83	16.4	5.66	16.4	5.32
	43.0	12.4	4.97	13.0	5.18	13.0	4.75	13.0	4.43	13.0	4.17	13.0	3.96	13.0	3.78
	46.0	9.7	3.50	9.7	3.28	9.7	3.11	9.7	2.95	9.7	2.82	9.7	2.70	9.7	2.59

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	11.2	1.92	12.1	2.08	13.0	2.24	14.0	2.40	14.9	2.57	15.8	2.73	16.7	2.89
	-5.0	11.2	1.92	12.1	2.09	13.0	2.25	14.0	2.41	14.9	2.57	15.8	2.73	16.7	2.89
	0.0	11.2	1.93	12.1	2.09	13.0	2.25	14.0	2.41	14.9	2.57	15.8	2.73	16.7	2.89
	5.0	11.2	1.93	12.1	2.09	13.0	2.25	14.0	2.41	14.9	2.57	15.8	2.73	16.7	2.89
	10.0	11.2	1.93	12.1	2.09	13.0	2.25	14.0	2.41	14.9	2.58	15.8	2.74	16.7	2.92
	15.0	11.2	1.94	12.1	2.12	13.0	2.28	14.0	2.45	14.9	2.61	15.8	2.78	16.7	2.94
	20.0	11.2	1.98	12.1	2.15	13.0	2.32	14.0	2.49	14.9	2.66	15.8	2.83	16.7	3.00
	25.0	11.2	2.11	12.1	2.31	13.0	2.51	14.0	2.71	14.9	2.93	15.8	3.15	16.7	3.37
	30.0	11.2	2.50	12.1	2.73	13.0	2.98	14.0	3.23	14.9	3.48	15.8	3.75	16.7	4.02
	35.0	11.2	2.98	12.1	3.26	13.0	3.55	14.0	3.86	14.9	4.17	15.8	4.49	16.7	4.82
	40.0	11.2	3.59	12.1	3.95	13.0	4.33	14.0	4.72	14.9	5.14	15.8	5.58	16.4	5.77
	43.0	11.2	4.17	12.1	4.63	13.0	5.14	13.0	4.75	13.0	4.43	13.0	4.18	13.0	3.96
	46.0	9.7	3.71	9.7	3.44	9.7	3.24	9.7	3.07	9.7	2.92	9.7	2.79	9.7	2.67

Combination(%):Indoor/ outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC	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	9.9	1.71	10.7	1.85	11.6	2.00	12.4	2.14	13.2	2.28	14.1	2.42	14.9	2.57
	-5.0	9.9	1.71	10.7	1.85	11.6	2.00	12.4	2.14	13.2	2.28	14.1	2.42	14.9	2.57
	0.0	9.9	1.71	10.7	1.85	11.6	2.00	12.4	2.14	13.2	2.28	14.1	2.43	14.9	2.57
	5.0	9.9	1.71	10.7	1.86	11.6	2.00	12.4	2.14	13.2	2.28	14.1	2.43	14.9	2.57
	10.0	9.9	1.72	10.7	1.86	11.6	2.00	12.4	2.15	13.2	2.29	14.1	2.43	14.9	2.58
	15.0	9.9	1.72	10.7	1.86	11.6	2.01	12.4	2.17	13.2	2.32	14.1	2.46	14.9	2.61
	20.0	9.9	1.76	10.7	1.91	11.6	2.05	12.4	2.20	13.2	2.35	14.1	2.50	14.9	2.65
	25.0	9.9	1.84	10.7	2.00	11.6	2.16	12.4	2.33	13.2	2.50	14.1	2.68	14.9	2.86
	30.0	9.9	2.16	10.7	2.35	11.6	2.55	12.4	2.76	13.2	2.97	14.1	3.18	14.9	3.40
	35.0	9.9	2.57	10.7	2.80	11.6	3.04	12.4	3.29	13.2	3.54	14.1	3.80	14.9	4.06
	40.0	9.9	3.07	10.7	3.36	11.6	3.66	12.4	3.97	13.2	4.28	14.1	4.61	14.9	4.96
	43.0	9.9	3.50	10.7	3.85	11.6	4.22	12.4	4.61	13.0	4.85	13.0	4.50	13.0	4.24
	46.0	9.7	4.06	9.7	3.69	9.7	3.43	9.7	3.22	9.7	3.06	9.7	2.91	9.7	2.78

1. Capacity Ratio of Outdoor Unit

U-6LE1E8 (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
70%	-10.0	8.7	1.50	9.4	1.62	10.1	1.75	10.9	1.87	11.6	2.00	12.3	2.12	13.0	2.25
	-5.0	8.7	1.50	9.4	1.62	10.1	1.75	10.9	1.87	11.6	2.00	12.3	2.12	13.0	2.25
	0.0	8.7	1.50	9.4	1.62	10.1	1.75	10.9	1.87	11.6	2.00	12.3	2.12	13.0	2.25
	5.0	8.7	1.50	9.4	1.62	10.1	1.75	10.9	1.87	11.6	2.00	12.3	2.12	13.0	2.25
	10.0	8.7	1.50	9.4	1.63	10.1	1.75	10.9	1.88	11.6	2.00	12.3	2.13	13.0	2.25
	15.0	8.7	1.50	9.4	1.63	10.1	1.76	10.9	1.88	11.6	2.01	12.3	2.13	13.0	2.28
	20.0	8.7	1.54	9.4	1.66	10.1	1.79	10.9	1.92	11.6	2.05	12.3	2.18	13.0	2.31
	25.0	8.7	1.59	9.4	1.73	10.1	1.86	10.9	2.00	11.6	2.14	12.3	2.27	13.0	2.41
	30.0	8.7	1.84	9.4	2.00	10.1	2.16	10.9	2.33	11.6	2.49	12.3	2.66	13.0	2.84
	35.0	8.7	2.18	9.4	2.37	10.1	2.57	10.9	2.76	11.6	2.97	12.3	3.17	13.0	3.38
	40.0	8.7	2.60	9.4	2.83	10.1	3.07	10.9	3.31	11.6	3.55	12.3	3.80	13.0	4.06
	43.0	8.7	2.93	9.4	3.20	10.1	3.47	10.9	3.76	11.6	4.05	12.3	4.36	13.0	4.67
	46.0	8.7	3.44	9.4	3.79	9.7	3.76	9.7	3.48	9.7	3.26	9.7	3.09	9.7	2.94

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	7.4	1.29	8.1	1.39	8.7	1.50	9.3	1.61	9.9	1.71	10.5	1.82	11.2	1.93
	-5.0	7.4	1.29	8.1	1.39	8.7	1.50	9.3	1.61	9.9	1.71	10.5	1.82	11.2	1.93
	0.0	7.4	1.29	8.1	1.39	8.7	1.50	9.3	1.61	9.9	1.71	10.5	1.82	11.2	1.93
	5.0	7.4	1.29	8.1	1.39	8.7	1.50	9.3	1.61	9.9	1.71	10.5	1.82	11.2	1.93
	10.0	7.4	1.29	8.1	1.39	8.7	1.50	9.3	1.61	9.9	1.72	10.5	1.82	11.2	1.93
	15.0	7.4	1.29	8.1	1.40	8.7	1.50	9.3	1.61	9.9	1.72	10.5	1.83	11.2	1.94
	20.0	7.4	1.30	8.1	1.40	8.7	1.51	9.3	1.64	9.9	1.75	10.5	1.86	11.2	1.97
	25.0	7.4	1.35	8.1	1.46	8.7	1.58	9.3	1.69	9.9	1.81	10.5	1.92	11.2	2.03
	30.0	7.4	1.55	8.1	1.68	8.7	1.81	9.3	1.93	9.9	2.06	10.5	2.20	11.2	2.33
	35.0	7.4	1.83	8.1	1.98	8.7	2.13	9.3	2.29	9.9	2.44	10.5	2.60	11.2	2.76
	40.0	7.4	2.17	8.1	2.35	8.7	2.53	9.3	2.72	9.9	2.91	10.5	3.10	11.2	3.29
	43.0	7.4	2.42	8.1	2.62	8.7	2.83	9.3	3.05	9.9	3.26	10.5	3.49	11.2	3.71
	46.0	7.4	2.78	8.1	3.02	8.7	3.28	9.3	3.54	9.7	3.64	9.7	3.39	9.7	3.19

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
50%	-10.0	6.2	1.07	6.7	1.16	7.2	1.25	7.8	1.34	8.3	1.43	8.8	1.52	9.3	1.61
	-5.0	6.2	1.07	6.7	1.16	7.2	1.25	7.8	1.34	8.3	1.43	8.8	1.52	9.3	1.61
	0.0	6.2	1.07	6.7	1.16	7.2	1.25	7.8	1.34	8.3	1.43	8.8	1.52	9.3	1.61
	5.0	6.2	1.07	6.7	1.16	7.2	1.25	7.8	1.34	8.3	1.43	8.8	1.52	9.3	1.61
	10.0	6.2	1.07	6.7	1.16	7.2	1.25	7.8	1.34	8.3	1.43	8.8	1.52	9.3	1.61
	15.0	6.2	1.07	6.7	1.16	7.2	1.25	7.8	1.34	8.3	1.43	8.8	1.52	9.3	1.61
	20.0	6.2	1.08	6.7	1.17	7.2	1.26	7.8	1.35	8.3	1.44	8.8	1.53	9.3	1.62
	25.0	6.2	1.12	6.7	1.21	7.2	1.30	7.8	1.40	8.3	1.49	8.8	1.58	9.3	1.67
	30.0	6.2	1.28	6.7	1.38	7.2	1.48	7.8	1.57	8.3	1.67	8.8	1.77	9.3	1.87
	35.0	6.2	1.50	6.7	1.62	7.2	1.73	7.8	1.85	8.3	1.97	8.8	2.09	9.3	2.21
	40.0	6.2	1.77	6.7	1.91	7.2	2.05	7.8	2.19	8.3	2.33	8.8	2.47	9.3	2.61
	43.0	6.2	1.96	6.7	2.12	7.2	2.27	7.8	2.43	8.3	2.59	8.8	2.75	9.3	2.91
	46.0	6.2	2.21	6.7	2.39	7.2	2.58	7.8	2.76	8.3	2.94	8.8	3.13	9.3	3.32

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
40%	-10.0	5.0	0.86	5.4	0.93	5.8	1.00	6.2	1.07	6.6	1.14	7.0	1.21	7.4	1.29
	-5.0	5.0	0.86	5.4	0.93	5.8	1.00	6.2	1.07	6.6	1.14	7.0	1.21	7.4	1.29
	0.0	5.0	0.86	5.4	0.93	5.8	1.00	6.2	1.07	6.6	1.14	7.0	1.22	7.4	1.29
	5.0	5.0	0.86	5.4	0.93	5.8	1.00	6.2	1.07	6.6	1.14	7.0	1.22	7.4	1.29
	10.0	5.0	0.86	5.4	0.93	5.8	1.00	6.2	1.07	6.6	1.14	7.0	1.22	7.4	1.29
	15.0	5.0	0.86	5.4	0.93	5.8	1.00	6.2	1.07	6.6	1.15	7.0	1.22	7.4	1.29
	20.0	5.0	0.86	5.4	0.93	5.8	1.01	6.2	1.08	6.6	1.15	7.0	1.22	7.4	1.29
	25.0	5.0	0.87	5.4	0.94	5.8	1.02	6.2	1.11	6.6	1.18	7.0	1.26	7.4	1.33
	30.0	5.0	1.02	5.4	1.09	5.8	1.17	6.2	1.25	6.6	1.32	7.0	1.39	7.4	1.46
	35.0	5.0	1.19	5.4	1.28	5.8	1.36	6.2	1.45	6.6	1.54	7.0	1.62	7.4	1.71
	40.0	5.0	1.40	5.4	1.50	5.8	1.60	6.2	1.70	6.6	1.81	7.0	1.91	7.4	2.01
	43.0	5.0	1.54	5.4	1.66	5.8	1.77	6.2	1.88	6.6	2.00	7.0	2.11	7.4	2.23
	46.0	5.0	1.72	5.4	1.85	5.8	1.98	6.2	2.11	6.6	2.23	7.0	2.36	7.4	2.49

Combination(%):Indoor/ outdoor capacity ratio	Outdoor air temp. °CDB	Indoor air temp. : °CWB													
		16.0		17.0		18.0		19.0		20.0		21.0		22.0	
		TC	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	3.7	0.65	4.0	0.70	4.3	0.75	4.7	0.81	5.0	0.86	5.3	0.91	5.6	0.97
	-5.0	3.7	0.65	4.0	0.70	4.3	0.75	4.7	0.81	5.0	0.86	5.3	0.91	5.6	0.97
	0.0	3.7	0.65	4.0	0.70	4.3	0.75	4.7	0.81	5.0	0.86	5.3	0.91	5.6	0.97
	5.0	3.7	0.65	4.0	0.70	4.3	0.75	4.7	0.81	5.0	0.86	5.3	0.91	5.6	0.97
	10.0	3.7	0.65	4.0	0.70	4.3	0.75	4.7	0.81	5.0	0.86	5.3	0.91	5.6	0.97
	15.0	3.7	0.65	4.0	0.70	4.3	0.75	4.7	0.81	5.0	0.86	5.3	0.91	5.6	0.97
	20.0	3.7	0.65	4.0	0.70	4.3	0.76	4.7	0.81	5.0	0.86	5.3	0.92	5.6	0.97
	25.0	3.7	0.65	4.0	0.71	4.3	0.76	4.7	0.81	5.0	0.87	5.3	0.92	5.6	0.98
	30.0	3.7	0.72	4.0	0.78	4.3	0.83	4.7	0.89	5.0	0.94	5.3	1.00	5.6	1.05
	35.0	3.7	0.91	4.0	0.97	4.3	1.03	4.7	1.09	5.0	1.14	5.3	1.20	5.6	1.26
	40.0	3.7	1.06	4.0	1.13	4.3	1.20	4.7	1.27	5.0	1.34	5.3	1.40	5.6	1.47
	43.0	3.7	1.16	4.0	1.24	4.3	1.32	4.7	1.39	5.0	1.47	5.3	1.55	5.6	1.62
	46.0	3.7	1.28	4.0	1.37	4.3	1.45	4.7	1.54	5.0	1.62	5.3	1.71	5.6	1.79

1. Capacity Ratio of Outdoor Unit

1-12. U-6LE1E8 (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													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.8	5.40	12.5	5.27	11.9	5.01	11.5	4.87	11.5	4.87	11.5	4.87	10.3	4.37
	-14.7	-15.0	14.3	5.93	14.2	5.93	13.7	5.74	13.3	5.59	13.3	5.59	13.3	5.59	12.0	4.94
	-9.6	-10.0	15.5	5.93	15.4	5.93	15.1	5.93	14.9	5.93	14.9	5.93	14.9	5.93	14.0	5.35
	-4.4	-5.0	17.1	5.93	17.0	5.93	16.6	5.93	16.5	5.93	16.5	5.93	16.5	5.93	15.8	5.49
	-1.8	-2.5	18.0	5.93	17.8	5.93	17.5	5.93	17.3	5.93	17.3	5.93	17.3	5.93	15.8	5.06
	0.8	0.0	18.8	5.93	18.7	5.93	18.3	5.93	18.2	5.93	18.2	5.93	18.2	5.93	15.8	4.67
	2.8	2.0	19.6	5.93	19.4	5.93	19.1	5.93	18.9	5.93	18.9	5.93	18.9	5.93	15.8	4.37
	6.0	5.0	20.8	5.93	20.6	5.93	20.1	5.83	19.4	5.54	19.4	5.54	19.4	5.54	15.8	3.94
	7.0	6.0	21.2	5.93	21.0	5.93	20.1	5.62	19.4	5.34	19.4	5.34	19.4	5.34	15.8	3.80
	8.6	7.5	21.8	5.93	21.5	5.85	20.1	5.31	19.4	5.05	19.4	5.05	19.4	5.05	15.8	3.60
	11.2	10.0	22.2	5.55	21.5	5.30	20.1	4.81	19.4	4.58	19.4	4.58	19.4	4.58	15.8	3.30
	16.4	15.0	22.2	4.54	21.5	4.34	20.1	3.96	19.4	3.78	19.4	3.78	19.4	3.78	15.8	2.81
	24.0	18.0	22.2	4.05	21.5	3.89	20.1	3.56	19.4	3.41	19.4	3.41	19.4	3.41	15.8	2.58

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.8	5.38	12.5	5.26	11.8	4.99	11.5	4.86	11.5	4.86	11.5	4.86	9.4	4.03
	-14.7	-15.0	14.3	5.93	14.2	5.93	13.7	5.71	13.3	5.56	13.3	5.56	13.3	5.56	11.0	4.53
	-9.6	-10.0	15.6	5.93	15.5	5.93	15.2	5.93	15.0	5.93	15.0	5.93	15.0	5.93	12.9	4.89
	-4.4	-5.0	17.2	5.93	17.1	5.93	16.7	5.93	16.6	5.93	16.6	5.93	16.6	5.93	14.3	4.87
	-1.8	-2.5	18.1	5.93	17.9	5.93	17.6	5.93	17.4	5.93	17.4	5.93	17.4	5.93	14.3	4.50
	0.8	0.0	19.0	5.93	18.8	5.93	18.4	5.93	18.3	5.93	18.3	5.93	18.3	5.93	14.3	4.15
	2.8	2.0	19.7	5.93	19.5	5.93	19.2	5.93	18.9	5.87	18.9	5.87	18.5	5.34	14.3	3.88
	6.0	5.0	20.9	5.93	20.7	5.93	19.6	5.53	18.9	5.26	18.9	5.26	18.5	4.80	14.3	3.50
	7.0	6.0	21.3	5.93	21.0	5.86	19.6	5.33	18.9	5.07	18.9	5.07	18.5	4.63	14.3	3.38
	8.6	7.5	21.7	5.79	21.0	5.53	19.6	5.03	18.9	4.79	18.9	4.79	18.5	4.38	14.3	3.21
	11.2	10.0	21.7	5.24	21.0	5.01	19.6	4.56	18.9	4.35	18.9	4.35	18.5	3.99	14.3	2.94
	16.4	15.0	21.7	4.30	21.0	4.12	19.6	3.77	18.9	3.60	18.9	3.60	18.5	3.35	14.3	2.51
	24.0	18.0	21.7	3.85	21.0	3.70	19.6	3.40	18.9	3.25	18.9	3.25	18.5	3.05	14.3	2.31

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.8	5.37	12.4	5.24	11.8	4.98	11.5	4.84	11.5	4.84	10.7	4.53	8.6	3.69
	-14.7	-15.0	14.4	5.93	14.3	5.93	13.6	5.67	13.3	5.52	13.3	5.52	12.4	5.13	10.1	4.13
	-9.6	-10.0	15.7	5.93	15.6	5.93	15.3	5.93	15.1	5.93	15.1	5.93	14.4	5.61	11.7	4.45
	-4.4	-5.0	17.3	5.93	17.2	5.93	16.8	5.93	16.7	5.93	16.7	5.93	16.5	5.93	12.8	4.29
	-1.8	-2.5	18.2	5.93	18.0	5.93	17.7	5.93	17.5	5.93	17.5	5.93	16.5	5.45	12.8	3.97
	0.8	0.0	19.1	5.93	18.9	5.93	18.5	5.93	18.4	5.93	18.0	5.60	16.5	5.01	12.8	3.66
	2.8	2.0	19.8	5.93	19.6	5.93	19.1	5.85	18.5	5.57	18.0	5.23	16.5	4.68	12.8	3.43
	6.0	5.0	21.0	5.93	20.5	5.75	19.1	5.24	18.5	4.99	18.0	4.70	16.5	4.21	12.8	3.10
	7.0	6.0	21.2	5.80	20.5	5.54	19.1	5.05	18.5	4.81	18.0	4.53	16.5	4.06	12.8	2.99
	8.6	7.5	21.2	5.47	20.5	5.23	19.1	4.77	18.5	4.54	18.0	4.28	16.5	3.84	12.8	2.84
	11.2	10.0	21.2	4.95	20.5	4.74	19.1	4.33	18.5	4.13	18.0	3.90	16.5	3.51	12.8	2.61
	16.4	15.0	21.2	4.07	20.5	3.90	19.1	3.58	18.5	3.43	18.0	3.26	16.5	2.95	12.8	2.23
	24.0	18.0	21.2	3.66	20.5	3.52	19.1	3.24	18.5	3.11	18.0	2.97	16.5	2.70	12.8	2.06

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.7	5.36	12.4	5.23	11.8	4.96	11.4	4.83	10.4	4.41	9.7	4.12	7.8	3.35
	-14.7	-15.0	14.4	5.93	14.3	5.93	13.6	5.62	13.2	5.47	12.1	4.98	11.2	4.63	9.1	3.73
	-9.6	-10.0	15.8	5.93	15.7	5.93	15.3	5.93	15.2	5.93	14.0	5.45	13.1	5.05	10.6	4.01
	-4.4	-5.0	17.4	5.93	17.2	5.93	16.9	5.93	16.7	5.93	16.0	5.77	14.7	5.15	11.3	3.76
	-1.8	-2.5	18.3	5.93	18.1	5.93	17.8	5.93	17.6	5.93	16.0	5.29	14.7	4.74	11.3	3.48
	0.8	0.0	19.2	5.93	19.0	5.93	18.6	5.93	18.0	5.66	16.0	4.86	14.7	4.36	11.3	3.21
	2.8	2.0	19.9	5.93	19.7	5.93	18.7	5.54	18.0	5.28	16.0	4.54	14.7	4.07	11.3	3.01
	6.0	5.0	20.7	5.68	20.0	5.44	18.7	4.96	18.0	4.74	16.0	4.04	14.7	3.63	11.3	2.70
	7.0	6.0	20.7	5.47	20.0	5.24	18.7	4.78	18.0	4.56	16.0	3.93	14.7	3.53	11.3	2.62
	8.6	7.5	20.7	5.16	20.0	4.94	18.7	4.51	18.0	4.31	16.0	3.72	14.7	3.35	11.3	2.49
	11.2	10.0	20.7	4.67	20.0	4.47	18.7	4.09	18.0	3.91	16.0	3.39	14.7	3.06	11.3	2.30
	16.4	15.0	20.7	3.86	20.0	3.71	18.7	3.41	18.0	3.27	16.0	2.86	14.7	2.59	11.3	1.97
	24.0	18.0	20.7	3.47	20.0	3.34	18.7	3.08	18.0	2.95	16.0	2.58	14.7	2.34	11.3	1.77

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.6	5.27	12.3	5.14	11.6	4.88	11.3	4.74	10.2	4.32	9.5	4.03	7.6	3.27
	-14.7	-15.0	14.6	5.82	14.2	5.67	13.4	5.38	13.1	5.23	11.9	4.75	11.1	4.42	8.9	3.55
	-9.6	-10.0	16.2	5.93	16.0	5.93	15.6	5.89	15.2	5.71	13.9	5.17	12.9	4.79	10.2	3.68
	-4.4	-5.0	17.8	5.93	17.7	5.93	16.8	5.63	16.2	5.38	14.4	4.67	13.2	4.22	10.2	3.16
	-1.8	-2.5	18.6	5.87	18.0	5.64	16.8	5.18	16.2	4.95	14.4	4.31	13.2	3.90	10.2	2.93
	0.8	0.0	18.6	5.39	18.0	5.17	16.8	4.76	16.2	4.55	14.4	3.97	13.2	3.59	10.2	2.68
	2.8	2.0	18.6	5.02	18.0	4.82	16.8	4.43	16.2	4.25	14.4	3.67	13.2	3.33	10.2	2.53
	6.0	5.0	18.6	4.59	18.0	4.40	16.8	4.05	16.2	3.88	14.4	3.38	13.2	3.06	10.2	2.33
	7.0	6.0	18.6	4.46	18.0	4.29	16.8	3.94	16.2	3.77	14.4	3.29	13.2	2.98	10.2	2.26
	8.6	7.5	18.6	4.20	18.0	4.04	16.8	3.72	16.2	3.56	14.4	3.11	13.2	2.82	10.2	2.15
	11.2	10.0	18.6	3.81	18.0	3.67	16.8	3.38	16.2	3.24	14.4	2.85	13.2	2.59	10.2	1.98
	16.4	15.0	18.6	3.18	18.0	3.07	16.8	2.85	16.2	2.74	14.4	2.42	13.2	2.21	10.2	1.71
	24.0	18.0	18.6	2.88	18.0	2.78	16.8	2.58	16.2	2.48	14.4	2.19	13.2	2.00	10.2	1.54

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.4	5.07	12.1	4.95	11.4	4.70	11.1	4.58	10.0	4.18	9.3	3.90	7.4	3.16
	-14.7	-15.0	14.4	5.52	14.1	5.38	13.3	5.11	12.9	4.96	11.7	4.52	10.9	4.20	8.7	3.38
	-9.6	-10.0	16.5	5.89	16.0	5.67	14.9	5.24	14.4	5.03	12.8	4.41	11.7	4.01	9.1	3.06
	-4.4	-5.0	16.5	4.99	16.0	4.81	14.9	4.46	14.4	4.29	12.8	3.78	11.7	3.45	9.1	2.65
	-1.8	-2.5	16.5	4.59	16.0	4.43	14.9	4.11	14.4	3.95	12.8	3.49	11.7	3.18	9.1	2.46
	0.8	0.0	16.5	4.24	16.0	4.09	14.9	3.79	14.4	3.65	12.8	3.22	11.7	2.95	9.1	2.29
	2.8	2.0	16.5	4.01	16.0	3.87	14.9	3.58	14.4	3.45	12.8	3.04	11.7	2.78	9.1	2.17
	6.0	5.0	16.5	3.68	16.0	3.55	14.9	3.29	14.4	3.17	12.8	2.80	11.7	2.56	9.1	1.99
	7.0	6.0	16.5	3.58	16.0	3.45	14.9	3.20	14.4	3.08	12.8	2.72	11.7	2.48	9.1	1.92
	8.6	7.5	16.5	3.38	16.0	3.26	14.9	3.03	14.4	2.91	12.8	2.58	11.7	2.36	9.1	1.83
	11.2	10.0	16.5	3.08	16.0	2.97	14.9	2.77	14.4	2.67	12.8	2.37	11.7	2.17	9.1	1.70
	16.4	15.0	16.5	2.61	16.0	2.52	14.9	2.36	14.4	2.28	12.8	2.03	11.7	1.87	9.1	1.47
	24.0	18.0	16.5	2.37	16.0	2.30	14.9	2.15	14.4	2.08	12.8	1.87	11.7	1.73	9.1	1.38

1. Capacity Ratio of Outdoor Unit

U-6LE1E8 (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													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.4	4.87	12.0	4.76	11.3	4.52	11.0	4.40	9.9	4.03	9.2	3.76	7.3	3.05
	-14.7	-15.0	14.4	5.27	14.0	5.14	13.1	4.79	12.6	4.62	11.2	4.10	10.3	3.76	7.9	2.93
	-9.6	-10.0	14.5	4.53	14.0	4.39	13.1	4.10	12.6	3.95	11.2	3.52	10.3	3.24	7.9	2.53
	-4.4	-5.0	14.5	3.87	14.0	3.74	13.1	3.51	12.6	3.39	11.2	3.03	10.3	2.80	7.9	2.22
	-1.8	-2.5	14.5	3.62	14.0	3.50	13.1	3.28	12.6	3.16	11.2	2.83	10.3	2.61	7.9	2.08
	0.8	0.0	14.5	3.37	14.0	3.26	13.1	3.05	12.6	2.95	11.2	2.64	10.3	2.44	7.9	1.94
	2.8	2.0	14.5	3.18	14.0	3.08	13.1	2.88	12.6	2.78	11.2	2.49	10.3	2.30	7.9	1.83
	6.0	5.0	14.5	2.92	14.0	2.82	13.1	2.64	12.6	2.55	11.2	2.29	10.3	2.11	7.9	1.67
	7.0	6.0	14.5	2.84	14.0	2.75	13.1	2.57	12.6	2.48	11.2	2.22	10.3	2.05	7.9	1.62
	8.6	7.5	14.5	2.68	14.0	2.60	13.1	2.44	12.6	2.35	11.2	2.11	10.3	1.95	7.9	1.55
	11.2	10.0	14.5	2.46	14.0	2.39	13.1	2.24	12.6	2.17	11.2	1.95	10.3	1.81	7.9	1.44
	16.4	15.0	14.5	2.12	14.0	2.06	13.1	1.93	12.6	1.87	11.2	1.69	10.3	1.57	7.9	1.26
	24.0	18.0	14.5	2.09	14.0	2.03	13.1	1.91	12.6	1.85	11.2	1.66	10.3	1.54	7.9	1.23

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	12.4	4.73	12.0	4.60	11.2	4.32	10.8	4.18	9.6	3.76	8.8	3.48	6.8	2.76
	-14.7	-15.0	12.4	4.04	12.0	3.92	11.2	3.69	10.8	3.58	9.6	3.22	8.8	2.99	6.8	2.38
	-9.6	-10.0	12.4	3.47	12.0	3.37	11.2	3.19	10.8	3.09	9.6	2.80	8.8	2.61	6.8	2.11
	-4.4	-5.0	12.4	3.03	12.0	2.95	11.2	2.79	10.8	2.70	9.6	2.46	8.8	2.29	6.8	1.86
	-1.8	-2.5	12.4	2.82	12.0	2.75	11.2	2.60	10.8	2.52	9.6	2.29	8.8	2.13	6.8	1.73
	0.8	0.0	12.4	2.63	12.0	2.55	11.2	2.41	10.8	2.34	9.6	2.13	8.8	1.98	6.8	1.62
	2.8	2.0	12.4	2.48	12.0	2.41	11.2	2.28	10.8	2.21	9.6	2.01	8.8	1.88	6.8	1.52
	6.0	5.0	12.4	2.28	12.0	2.22	11.2	2.09	10.8	2.03	9.6	1.85	8.8	1.72	6.8	1.38
	7.0	6.0	12.4	2.21	12.0	2.15	11.2	2.03	10.8	1.97	9.6	1.79	8.8	1.66	6.8	1.34
	8.6	7.5	12.4	2.11	12.0	2.05	11.2	1.94	10.8	1.88	9.6	1.71	8.8	1.59	6.8	1.29
	11.2	10.0	12.4	1.95	12.0	1.90	11.2	1.80	10.8	1.74	9.6	1.59	8.8	1.48	6.8	1.21
	16.4	15.0	12.4	1.82	12.0	1.77	11.2	1.66	10.8	1.61	9.6	1.45	8.8	1.35	6.8	1.08
	24.0	18.0	12.4	1.82	12.0	1.77	11.2	1.66	10.8	1.61	9.6	1.45	8.8	1.35	6.8	1.08

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	10.3	3.53	10.0	3.44	9.3	3.26	9.0	3.17	8.0	2.89	7.3	2.70	5.7	2.19
	-14.7	-15.0	10.3	3.05	10.0	2.98	9.3	2.83	9.0	2.76	8.0	2.53	7.3	2.37	5.7	1.94
	-9.6	-10.0	10.3	2.67	10.0	2.61	9.3	2.49	9.0	2.43	8.0	2.23	7.3	2.09	5.7	1.72
	-4.4	-5.0	10.3	2.32	10.0	2.27	9.3	2.17	9.0	2.11	8.0	1.94	7.3	1.83	5.7	1.51
	-1.8	-2.5	10.3	2.16	10.0	2.11	9.3	2.01	9.0	1.97	8.0	1.81	7.3	1.70	5.7	1.41
	0.8	0.0	10.3	2.01	10.0	1.96	9.3	1.88	9.0	1.83	8.0	1.69	7.3	1.59	5.7	1.31
	2.8	2.0	10.3	1.90	10.0	1.86	9.3	1.77	9.0	1.73	8.0	1.60	7.3	1.50	5.7	1.23
	6.0	5.0	10.3	1.75	10.0	1.71	9.3	1.63	9.0	1.59	8.0	1.46	7.3	1.37	5.7	1.13
	7.0	6.0	10.3	1.70	10.0	1.66	9.3	1.58	9.0	1.54	8.0	1.41	7.3	1.33	5.7	1.10
	8.6	7.5	10.3	1.63	10.0	1.59	9.3	1.51	9.0	1.48	8.0	1.36	7.3	1.27	5.7	1.06
	11.2	10.0	10.3	1.55	10.0	1.50	9.3	1.42	9.0	1.38	8.0	1.27	7.3	1.19	5.7	0.99
	16.4	15.0	10.3	1.55	10.0	1.50	9.3	1.42	9.0	1.37	8.0	1.24	7.3	1.15	5.7	0.93
	24.0	18.0	10.3	1.55	10.0	1.50	9.3	1.42	9.0	1.37	8.0	1.24	7.3	1.15	5.7	0.93

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	8.3	2.60	8.0	2.55	7.5	2.44	7.2	2.39	6.4	2.21	5.9	2.08	4.5	1.74
	-14.7	-15.0	8.3	2.28	8.0	2.24	7.5	2.15	7.2	2.10	6.4	1.95	5.9	1.84	4.5	1.54
	-9.6	-10.0	8.3	1.99	8.0	1.96	7.5	1.88	7.2	1.84	6.4	1.72	5.9	1.62	4.5	1.36
	-4.4	-5.0	8.3	1.73	8.0	1.70	7.5	1.64	7.2	1.60	6.4	1.50	5.9	1.42	4.5	1.19
	-1.8	-2.5	8.3	1.61	8.0	1.58	7.5	1.52	7.2	1.49	6.4	1.39	5.9	1.32	4.5	1.11
	0.8	0.0	8.3	1.50	8.0	1.48	7.5	1.42	7.2	1.39	6.4	1.30	5.9	1.22	4.5	1.03
	2.8	2.0	8.3	1.43	8.0	1.40	7.5	1.35	7.2	1.32	6.4	1.22	5.9	1.15	4.5	0.97
	6.0	5.0	8.3	1.31	8.0	1.29	7.5	1.24	7.2	1.21	6.4	1.12	5.9	1.06	4.5	0.90
	7.0	6.0	8.3	1.28	8.0	1.25	7.5	1.20	7.2	1.18	6.4	1.09	5.9	1.03	4.5	0.88
	8.6	7.5	8.3	1.28	8.0	1.24	7.5	1.17	7.2	1.13	6.4	1.05	5.9	1.00	4.5	0.85
	11.2	10.0	8.3	1.28	8.0	1.24	7.5	1.17	7.2	1.13	6.4	1.03	5.9	0.96	4.5	0.80
	16.4	15.0	8.3	1.28	8.0	1.24	7.5	1.17	7.2	1.13	6.4	1.03	5.9	0.96	4.5	0.78
	24.0	18.0	8.3	1.28	8.0	1.24	7.5	1.17	7.2	1.13	6.4	1.03	5.9	0.96	4.5	0.78

Combination(%): Indoor/outdoor capacity ratio	Outdoor air temp.		Indoor air temp. : °CDB													
			16.0		17.0		19.0		20.0		23.0		25.0		30.0	
			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%	-19.8	-20.0	6.2	1.86	6.0	1.83	5.6	1.76	5.4	1.73	4.8	1.62	4.4	1.53	3.4	1.30
	-14.7	-15.0	6.2	1.63	6.0	1.60	5.6	1.55	5.4	1.52	4.8	1.43	4.4	1.36	3.4	1.16
	-9.6	-10.0	6.2	1.42	6.0	1.40	5.6	1.36	5.4	1.33	4.8	1.26	4.4	1.20	3.4	1.02
	-4.4	-5.0	6.2	1.24	6.0	1.22	5.6	1.18	5.4	1.16	4.8	1.09	4.4	1.04	3.4	0.89
	-1.8	-2.5	6.2	1.16	6.0	1.14	5.6	1.10	5.4	1.08	4.8	1.02	4.4	0.97	3.4	0.83
	0.8	0.0	6.2	1.08	6.0	1.06	5.6	1.03	5.4	1.01	4.8	0.95	4.4	0.90	3.4	0.78
	2.8	2.0	6.2	1.02	6.0	1.01	5.6	0.97	5.4	0.96	4.8	0.90	4.4	0.86	3.4	0.74
	6.0	5.0	6.2	1.00	6.0	0.98	5.6	0.92	5.4	0.90	4.8	0.83	4.4	0.80	3.4	0.69
	7.0	6.0	6.2	1.00	6.0	0.98	5.6	0.92	5.4	0.90	4.8	0.82	4.4	0.78	3.4	0.68
	8.6	7.5	6.2	1.00	6.0	0.98	5.6	0.92	5.4	0.90	4.8	0.82	4.4	0.77	3.4	0.66
	11.2	10.0	6.2	1.00	6.0	0.98	5.6	0.92	5.4	0.90	4.8	0.82	4.4	0.77	3.4	0.63
	16.4	15.0	6.2	1.00	6.0	0.98	5.6	0.92	5.4	0.90	4.8	0.82	4.4	0.77	3.4	0.63
	24.0	18.0	6.2	1.00	6.0	0.98	5.6	0.92	5.4	0.90	4.8	0.82	4.4	0.77	3.4	0.63