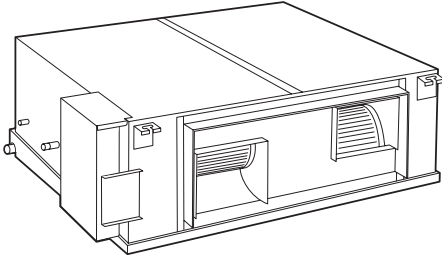
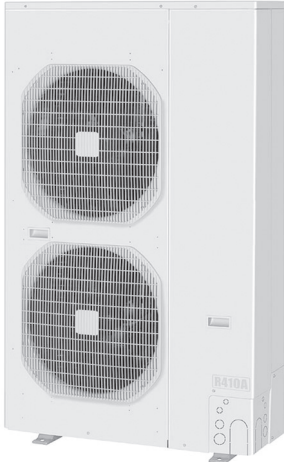


TECHNICAL DATA & SERVICE MANUAL



DC Inverter

Indoor Unit	Outdoor Unit
<div><p>Type E2 S-200PE2E5, S-250PE2E5 Type E1 S-200PE1E8A, S-200PE1E8, S-250PE1E8</p></div>	<div><p>U-200PE1E8, U-250PE1E8</p></div>

## 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, and energy conservation by curtailing heat and carrying power, etc.

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

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

### Total amount of refrigerant (kg)

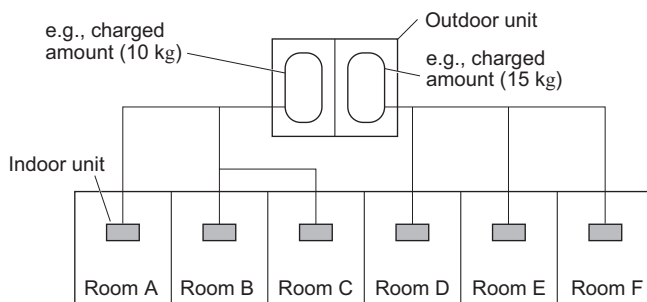
$$\text{Min. volume of the indoor unit installed room (m}^3\text{)} \leq \text{Density limit (kg/m}^3\text{)}$$

The density limit of refrigerant which is used in multi air conditioners is 0.3 kg/m<sup>3</sup> (ISO 5149).

### NOTE

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

For the amount of charge in this example:

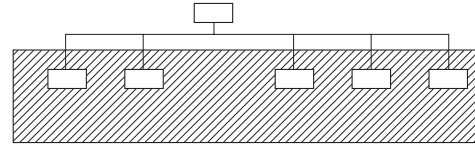


The possible amount of leaked refrigerant gas in rooms A, B and C is 10 kg.

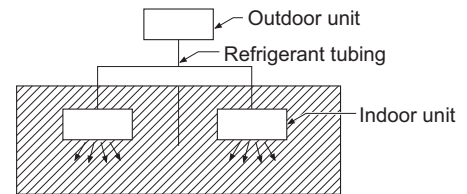
The possible amount of leaked refrigerant gas in rooms D, E and F is 15 kg.

- The standards for minimum room volume are as follows.

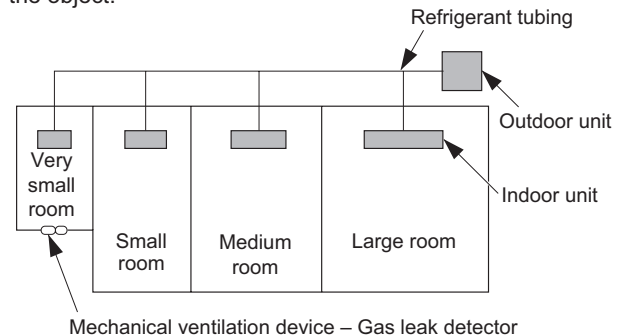
- (1) No partition (shaded portion)



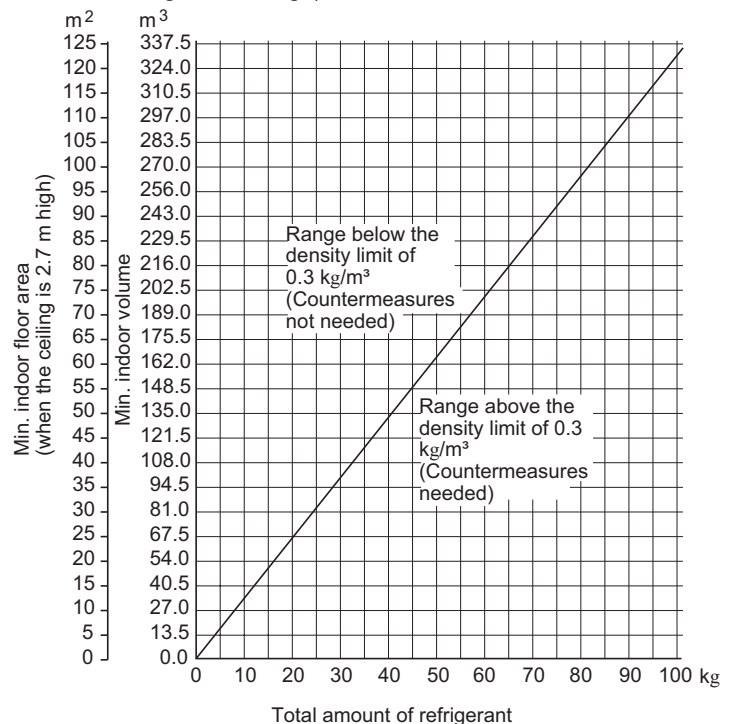
- (2) When there is an effective opening with the adjacent room for ventilation of leaking refrigerant gas (opening without a door, or an opening 0.15% or larger than the respective floor spaces at the top or bottom of the door).



- (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. SPECIFICATIONS

<b>1-1.</b>	<b>Unit Specifications.....</b>	<b>1-2</b>
<b>1-2.</b>	<b>Major Component Specifications .....</b>	<b>1-7</b>
<b>1-3.</b>	<b>Other Component Specifications .....</b>	<b>1-14</b>
<b>1-4.</b>	<b>Dimensional Data .....</b>	<b>1-16</b>
<b>1-5.</b>	<b>Refrigerant Flow Diagram .....</b>	<b>1-21</b>
<b>1-6.</b>	<b>Operating Range .....</b>	<b>1-24</b>
<b>1-7.</b>	<b>Capacity Correction Graph According to Temperature Condition .....</b>	<b>1-25</b>
<b>1-8.</b>	<b>Noise Criterion Curves .....</b>	<b>1-26</b>
<b>1-9.</b>	<b>ELECTRICAL WIRING .....</b>	<b>1-29</b>
<b>1-10.</b>	<b>Installation Instructions .....</b>	<b>1-34</b>
	<b>■ Outdoor Unit</b>	
	1. Tubing Length .....	1-34
	2. Check of limit density .....	1-37
	3. SELECTING THE INSTALLATION SITE .....	1-41
	4. Dimensions of Air-Discharge Chamber.....	1-44
	5. Dimensions of Wind-proof Duct .....	1-50
	6. Dimensions of Snow-proof Duct.....	1-51
	7. HOW TO INSTALL THE OUTDOOR UNIT .....	1-54
	<b>■ Indoor Unit</b>	
	8. SELECTING THE INSTALLATION SITE .....	1-55
	9. HOW TO INSTALL THE INDOOR UNIT .....	1-56
<b>1-11.</b>	<b>HOW TO PROCESS TUBING .....</b>	<b>1-68</b>
<b>1-12.</b>	<b>LEAK TEST, EVACUATION AND ADDITIONAL REFRIGERANT CHARGE .....</b>	<b>1-76</b>
<b>1-13.</b>	<b>How to select AHU system .....</b>	<b>1-78</b>

# Single-Type

## High Static Pressure Ducted Type S-200PE1E8A / U-200PE1E8

MODEL No.		Indoor Unit		S-200PE1E8A				
		Outdoor Unit		U-200PE1E8				
POWER SOURCE		Indoor Unit		220-230-240V, 50Hz, single-phase				
		Outdoor Unit		380-400-415V, 50/60Hz, 3-phase				
PERFORMANCE				Cooling			Heating	
	Capacity [min~max]		kW	20.0 [6.0~22.4]			21.8 [6.0~22.4]	
			BTU / h	68,200 [20,500~76,400]			74,400 [20,500~76,400]	
	Air circulation (Hi / Me / Lo)		m³ / h	4,320 / 4,200 / 3,960				
	Moisture removal (High)		Liters / h	11.1			-	
	External static pressure (High)		Pa (mmAq)	216 (22): at shipment 235 (24): using the booster cable				
ELECTRICAL RATINGS								
Voltage ratings		V	380	400	415	380	400	415
Available voltage range		V	342~456(Outdoor) 198~264(Indoor)					
Running amperes*		A	12.2	11.8	11.5	9.8	9.5	9.3
Max-Running amperes**		A	-	-	-	-	-	-
Power input		kW	7.58	7.64	7.70	6.09	6.15	6.21
C.O.P		W / W	2.64	2.62D	2.60	3.58	3.54B	3.51
Max.Starting amperes		A	-	-	-	-	-	-
FEATURES								
Controls / Thermostat control		Microprocessor / I.C.thermostat						
Timer		ON / OFF 72-hours						
Fan speeds Indoor / Outdoor		3 and Automatic control / Variable						
Airflow direction (Indoor)		-						
Air filter		Field supply						
Remote controller (Option)		Wired: CZ-RTC2 / Wireless: CZ-RWSC2						
Refrigerant control		-						
Drain pump (Drain connection)		25A Male screw (No Drain Pump)						
Compressor		Rotary						
Operation sound	Indoor - Hi / Me / Lo	dB-A	51 / 50 / 49					
	Outdoor - Hi	dB-A	57			57		
Color (Approximate value)	Indoor	-						
	Outdoor	Munsell 1Y 8.5 / 0.5						
REFRIGERANT TUBING				Indoor unit		Outdoor unit		
Limit of tubing length		m (ft.)	100 (328)					
Limit of tubing length at shipment		m (ft.)	5~30(16~98)					
Limit of elevation difference between the two units		m (ft.)	Outdoor unit is higher than indoor unit: 30 (98) Outdoor unit is lower than indoor unit: 30 (98)					
Refrigerant tube outer diameter	Liquid tube	mm (in.)	9.52 (3 / 8)			9.52 (3 / 8)		
	Gas tube	mm (in.)	25.4 (1)*1			25.4 (1)*1		
Refrigerant amount at shipment		kg	-			R410A - 5.3		
DIMENSIONS & WEIGHT				Indoor unit		Outdoor unit		
Unit dimensions	Height	mm (in.)	479 (18-55 / 64)			1526 (60-5 / 64)		
	Width	mm (in.)	1,428 (56-7 / 32)			940 (37-1 / 64)		
	Depth	mm (in.)	1,230 (48-27 / 64)			340 (13-25 / 64)		
Package dimensions	Height	mm (in.)	619 (24-3 / 8)			1676 (65-63 / 64)		
	Width	mm (in.)	1,536 (60-15 / 32)			1076 (42-23 / 64)		
	Depth	mm (in.)	1,339 (52-23 / 32)			420 (16-17 / 32)		
Net weight		kg (lb.)	120 (265)			118 (260)		
Shipping weight		kg (lb.)	144 (317)			128 (282)		
Shipping volume		m³ (cu.ft)	1.273 (44.9)			0.757 (26.7)		

### NOTE

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

\*1 There are two types of supplied tubings. The one tubing port ø19.05 (flare process) is connected to the flared connection of the gas port side's service valve. The other "L" shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing (ø25.4).

#### Cooling:

Rating conditions (\*): Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB  
Full load conditions (\*\*): Indoor air temperature 32°C DB/23°C WB, Outdoor air temperature 43°C DB

#### Heating:

Rating conditions (\*): Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB  
Full load conditions (\*\*): Indoor air temperature 24°C DB, Outdoor air temperature 24°C DB/15.5°C WB

# Single-Type

1

## High Static Pressure Ducted Type S-200PE1E8 / U-200PE1E8

MODEL No.		Indoor Unit		S-200PE1E8					
		Outdoor Unit		U-200PE1E8					
POWER SOURCE		Indoor Unit		220-230-240V, 50/60Hz, single-phase					
		Outdoor Unit		380-400-415V, 50/60Hz, 3-phase					
PERFORMANCE				Cooling			Heating		
	Capacity [min~max]	kW	20.0 [6.0~22.4]			22.4 [6.0~25.0]			
		BTU / h	68,200 [20,500~76,400]			76,400 [20,500~85,300]			
	Air circulation (Hi / Me / Lo)	m³ / h	3,360 / 3,190 / 2,980						
	Moisture removal (High)	Liters / h	11.1			—			
	External static pressure (High)	Pa (mmAq)	176 (18)						
ELECTRICAL RATINGS									
	Voltage ratings	V	380	400	415	380	400	415	
	Available voltage range	V	342~456(Outdoor) 198~264(Indoor)						
	Running amperes*	A	11.4	11.0	10.7	10.4	10.1	9.8	
	Max-Running amperes**	A	—	—	—	—	—	—	
	Power input	kW	7.09	7.12	7.15	6.47	6.50	6.53	
	C.O.P	W / W	2.82	2.81	2.80	3.46	3.45	3.43	
	Max.Starting amperes	A	—	—	—	—	—	—	
FEATURES									
	Controls / Thermostat control		Microprocessor / I.C.thermostat						
	Timer		ON / OFF 72-hours						
	Fan speeds Indoor / Outdoor		3 and Automatic control / Variable						
	Airflow direction (Indoor)		—						
	Air filter		Field supply						
	Remote controller (Option)		Wired: CZ-RTC2 / Wireless: CZ-RWSC2						
	Refrigerant control		—						
	Drain pump (Drain connection)		25A Male screw (No Drain Pump)						
	Compressor		Rotary						
	Operation sound	Indoor - Hi / Me / Lo	dB-A	48 / 47 / 46					
		Outdoor - Hi	dB-A	57			57		
	Color (Approximate value)	Indoor		—					
Outdoor			Munsell 1Y 8.5 / 0.5						
REFRIGERANT TUBING				Indoor unit		Outdoor unit			
	Limit of tubing length		m (ft.)	100 (328)					
	Limit of tubing length at shipment		m (ft.)	5~30(16~98)					
	Limit of elevation difference between the two units		m (ft.)	Outdoor unit is higher than indoor unit: 30 (98) Outdoor unit is lower than indoor unit: 30 (98)					
	Refrigerant tube outer diameter	Liquid tube	mm (in.)	9.52 (3 / 8)			9.52 (3 / 8)		
		Gas tube	mm (in.)	25.4 (1)*1			25.4 (1)*1		
	Refrigerant amount at shipment		kg	—			R410A - 5.3		
DIMENSIONS & WEIGHT				Indoor unit		Outdoor unit			
	Unit dimensions	Height	mm (in.)	467 (18-12 / 32)			1526 (60-5 / 64)		
		Width	mm (in.)	1,428 (56-7 / 32)			940 (37-1 / 64)		
		Depth	mm (in.)	1,230 (48-14 / 32)			340 (13-25 / 64)		
	Package dimensions	Height	mm (in.)	614 (24-11 / 64)			1676 (65-63 / 64)		
		Width	mm (in.)	1,536 (60-15 / 32)			1076 (42-23 / 64)		
		Depth	mm (in.)	1,339 (52-23 / 32)			420 (16-17 / 32)		
Net weight		kg (lb.)	110 (243)			118 (260)			
Shipping weight		kg (lb.)	134 (295)			128 (282)			
Shipping volume		m <sup>3</sup> (cu.ft)	1.268 (44.8)			0.757 (26.7)			

### NOTE

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

\*1 There are two types of supplied tubings. The one tubing port ø19.05 (flare process) is connected to the flared connection of the gas port side's service valve. The other "L" shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing (ø25.4).

Cooling:

Rating conditions (\*): Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Full load conditions (\*\*): Indoor air temperature 32°C DB/23°C WB, Outdoor air temperature 43°C DB

Heating:

Rating conditions (\*): Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

Full load conditions (\*\*): Indoor air temperature 24°C DB, Outdoor air temperature 24°C DB/15.5°C WB

# Single-Type

## High Static Pressure Ducted Type S-250PE1E8 / U-250PE1E8

MODEL No.		Indoor Unit	S-250PE1E8						
		Outdoor Unit	U-250PE1E8						
POWER SOURCE		Indoor Unit	220-230-240V, 50/60Hz, single-phase						
		Outdoor Unit	380-400-415V, 50/60Hz, 3-phase						
PERFORMANCE			Cooling			Heating			
	Capacity [min~max]	kW	25.0 [6.0~28.0]			28.0 [6.0~31.5]			
		BTU / h	85,300 [20,500~95,500]			95,500 [20,500~107,500]			
	Air circulation (Hi / Me / Lo)	m³ / h	4,320 / 4,200 / 3,960						
	Moisture removal (High)	Liters / h	13.9			-			
	External static pressure (High)	Pa (mmAq)	216 (22): at shipment 235 (24): using the booster cable						
ELECTRICAL RATINGS									
Voltage ratings		V	380	400	415	380	400	415	
Available voltage range		V	342~456(Outdoor) 198~264(Indoor)						
Running amperes*		A	15.3	14.8	14.3	13.1	12.6	12.3	
Max-Running amperes**		A	-	-	-	-	-	-	
Power input		kW	9.49	9.55	9.61	8.14	8.20	8.26	
C.O.P		W / W	2.63	2.62	2.60	3.44	3.41	3.39	
Max.Starting amperes		A	-	-	-	-	-	-	
FEATURES									
Controls / Thermostat control			Microprocessor / I.C.thermostat						
Timer			ON / OFF 72-hours						
Fan speeds Indoor / Outdoor			3 and Automatic control / Variable						
Airflow direction (Indoor)			-						
Air filter			Field supply						
Remote controller (Option)			Wired: CZ-RTC2 / Wireless: CZ-RWSC2						
Refrigerant control			-						
Drain pump (Drain connection)			25A Male screw (No Drain Pump)						
Compressor			Rotary						
Operation sound	Indoor - Hi / Me / Lo	dB-A	51 / 50 / 49						
	Outdoor - Hi	dB-A	57			58			
Color (Approximate value)	Indoor		-						
	Outdoor		Munsell 1Y 8.5 / 0.5						
REFRIGERANT TUBING			Indoor unit			Outdoor unit			
	Limit of tubing length	m (ft.)	100 (328)						
	Limit of tubing length at shipment	m (ft.)	5~30(16~98)						
	Limit of elevation difference between the two units	m (ft.)	Outdoor unit is higher than indoor unit: 30 (98) Outdoor unit is lower than indoor unit: 30 (98)						
	Refrigerant tube outer diameter	Liquid tube	mm (in.)	12.7 (1 / 2)			12.7 (1 / 2)		
		Gas tube	mm (in.)	25.4 (1)			25.4 (1)*1		
Refrigerant amount at shipment		kg	-			R410A - 6.5			
DIMENSIONS & WEIGHT			Indoor unit			Outdoor unit			
	Unit dimensions	Height	mm (in.)	467 (18-12 / 32)			1526 (60-5 / 64)		
		Width	mm (in.)	1,428 (56-7 / 32)			940 (37-1 / 64)		
		Depth	mm (in.)	1,230 (48-14 / 32)			340 (13-25 / 64)		
	Package dimensions	Height	mm (in.)	614 (24-11 / 64)			1676 (65-63 / 64)		
		Width	mm (in.)	1,536 (60-15 / 32)			1076 (42-23 / 64)		
		Depth	mm (in.)	1,339 (52-23 / 32)			420 (16-17 / 32)		
Net weight		kg (lb.)	120 (256)			128 (282)			
Shipping weight		kg (lb.)	144 (317)			138 (304)			
Shipping volume		m <sup>3</sup> (cu.ft)	1.268 (44.8)			0.757 (26.7)			

### NOTE

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

\*1 There are two types of supplied tubings. The one tubing port ø19.05 (flare process) is connected to the flared connection of the gas port side's service valve. The other "L" shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing (ø25.4).

Cooling:

Rating conditions (\*): Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB

Full load conditions (\*\*): Indoor air temperature 32°C DB/23°C WB, Outdoor air temperature 43°C DB

Heating:

Rating conditions (\*): Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

Full load conditions (\*\*): Indoor air temperature 24°C DB, Outdoor air temperature 24°C DB/15.5°C WB

**(A) Indoor Units****High Static Pressure Ducted Type S-200PE1E8A**

<b>MODEL No.</b>		<b>S-200PE1E8A</b>
<b>Source</b>		220 - 230 - 240V, single-phase, 50Hz
<b>Controller P.C.B. Ass'y</b>		CR-UXRP71B-P (Microprocessor)
<b>Fan (Number...diameter)</b>	mm	Centrifugal (2...ø250)
<b>Fan motor</b>		
Model...Nominal output	W	KFC4X-401B3P...400W
Power source		220 - 230 - 240V, single-phase, 50Hz
No. of pole...r.p.m. (230V, High)	rpm	4P...1,211
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 6.159      ORG – YEL : 0.87 WHT – VLT : 1.08      YEL – BLK : 2.87 VLT – ORG : 0.77      BLK – PNK : 5.98
Safety device		
Operating temperature	Open °C	130 ± 5
	Close °C	(115 ± 5)
Run capacitor	VAC, µF	450 VAC, 5.0 µF
<b>Electronic expansion valve</b>		
Coil		–
Coil resistance (at 20°C)	Ω	–
Valve body		–
<b>Heat exchanger</b>		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	3...2.0
Face area	m <sup>2</sup>	0.655

**(A) Indoor Units****High Static Pressure Ducted Type S-200PE1E8**

<b>MODEL No.</b>		<b>S-200PE1E8</b>
<b>Source</b>		220 - 230 - 240V, single-phase, 50/60Hz
<b>Controller P.C.B. Ass'y</b>		CR-UXRP71B-P (Microprocessor)
<b>Fan (Number...diameter)</b>	mm	Centrifugal (2...ø220)
<b>Fan motor</b>		
Model...Nominal output	W	KFC4X-201B5P...180W
Power source		220 - 230 - 240V, single-phase, 50Hz
No. of pole...r.p.m. (230V, High)	rpm	4P...1,012
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 13.75      ORG – YEL : 2.21 WHT – VLT : 4.47      YEL – BLK : 10.33 VLT – ORG : 1.20      BLK – PNK : 12.90
Safety device		
Operating temperature	Open °C	130 ± 5
	Close °C	(115 ± 5)
Run capacitor	VAC, µF	450 VAC, 7.0 µF
<b>Electronic expansion valve</b>		
Coil		–
Coil resistance (at 20°C)	Ω	–
Valve body		–
<b>Heat exchanger</b>		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	3...2.0
Face area	m <sup>2</sup>	0.540



**(A) Indoor Units****High Static Pressure Ducted Type S-250PE1E8**

<b>MODEL No.</b>		<b>S-250PE1E8</b>
<b>Source</b>		220 - 230 - 240V, single-phase, 50Hz
<b>Controller P.C.B. Ass'y</b>		CR-UXRP71B-P (Microprocessor)
<b>Fan (Number...diameter)</b>	mm	Centrifugal (2...ø250)
<b>Fan motor</b>		
Model...Nominal output	W	KFC4X-401B3P...400W
Power source		220 - 230 - 240V, single-phase, 50Hz
No. of pole...r.p.m. (230V, High)	rpm	4P...1,211
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 6,159      ORG – YEL : 0.87 WHT – VLT : 1.08      YEL – BLK : 2.87 VLT – ORG : 0.77      BLK – PNK : 5.98
Safety device		
Operating temperature	Open °C	130 ± 5
	Close °C	(115 ± 5)
Run capacitor	VAC, μF	450 VAC, 5.0 μF
<b>Electronic expansion valve</b>		
Coil		–
Coil resistance (at 20°C)	Ω	–
Valve body		–
<b>Heat exchanger</b>		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	3...2.0
Face area	m <sup>2</sup>	0.655

## (B) Outdoor Units

## U-200PE1E8

<b>MODEL No.</b>			U-200PE1E8		
<b>Source</b>			380-400-415V, 3-phase, 50/60Hz		
<b>Controller P.C.B. Ass'y</b>			CR-C906VH8P (Microprocessor)		
Control circuit fuse			20A		
<b>Compressor</b>					
Model....number			C-9RVN273H0K		
Source			246V (DC) / 3-phase / 60Hz (Inverter drive)		
Nominal output		W	4,200		
Compressor oil		cc	1,400		
Coil resistance (Ambient temperature 25°C)		Ω	C – R : 0.552                      R – S : 0.552 C – S : 0.552		
Safety control					
Overload relay models			Discharge temperature control		
Operation temperature		Open °C	—		
		Close °C	—		
Crank case heater		W	25		
<b>Refrigerant amount at shipment</b>		kg	R410A - 5.3		
<b>High pressure switch</b>					
Set pressure		OFF MPa	4.15 <sup>0</sup> <sub>-0.15</sub>		
		ON MPa	3.15 ± 0.3		
<b>Fan</b>					
Number...diameter		mm	2...ø490		
Air circulation		m <sup>3</sup> / h	7,740		
<b>Fan speeds (Max.)</b>			~860 rpm (Inverter drive control)		
<b>Fan motor</b>					
Model No.			SIC-71FW-D8120		
Source			~280V / 3-phase		
No. of pole			8		
Nominal output		W	120		
Safety device			—		
Operating temperature		Open °C	—		
		Close °C	—		
Run capacitor		VAC, µF	—		
<b>Heat exchanger</b>					
Coil			Aluminium plate fin / Copper tube		
Rows...fin pitch		mm	2...1.4		
Face area		m <sup>2</sup>	1.27		

## (B) Outdoor Units

## U-250PE1E8

<b>MODEL No.</b>			U-250PE1E8		
<b>Source</b>			380-400-415V, 3-phase, 50/60Hz		
<b>Controller P.C.B. Ass'y</b>			CR-C906VH8P (Microprocessor)		
Control circuit fuse			20A		
<b>Compressor</b>					
Model....number			C-9RVN393H0U		
Source			282V (DC) / 3-phase / 60Hz (Inverter drive)		
Nominal output	W		5,500		
Compressor oil	cc		1,900		
Coil resistance (Ambient temperature 25°C)	Ω		C – R : 0.608                      R – S : 0.608 C – S : 0.608		
Safety control					
Overload relay models			Discharge temperature control		
Operation temperature	Open °C		—		
	Close °C		—		
Crank case heater	W		25		
<b>Refrigerant amount at shipment</b>			R410A - 6.5		
<b>High pressure switch</b>					
Set pressure	OFF	MPa	4.15 <sup>0</sup> <sub>-0.15</sub>		
	ON	MPa	3.15 ± 0.3		
<b>Fan</b>					
Number...diameter	mm		2...ø490		
Air circulation	m <sup>3</sup> / h		7,080		
<b>Fan speeds (Max.)</b>			~860 rpm (Inverter drive control)		
<b>Fan motor</b>					
Model No.			SIC-71FW-D8120		
Source			~280V / 3-phase		
No. of pole			8		
Nominal output	W		120		
Safety device			—		
Operating temperature	Open °C		—		
	Close °C		—		
Run capacitor	VAC, μF		—		
<b>Heat exchanger</b>					
Coil			Aluminium plate fin / Copper tube		
Rows...fin pitch	mm		3...1.4		
Face area	m <sup>2</sup>		1.27		

### 1-3. Other Component Specifications

#### Outdoor Units U-200PE1E8

MODEL No.		Outdoor Unit		U-200PE1E8		
Power Transformer				—		
	Rated		—			
	Source		VAC, Hz			
	Secondary		—			
	Coil resistance		Ω			
	Thermal cut off temperature		—			
Thermistor (Coil / Air sensor): TH1, TH2, TH3, TH4				KTM-35D-S1, DTN-C532G3H		
	Resistance		kΩ		—10°C: 23.7±5% 20°C: 6.5±5%	
					—5°C: 18.8±5% 30°C: 4.4±5%	
					0°C: 15.0±5% 40°C: 3.1±5%	
					5°C: 12.1±5% 45°C: 2.6±5%	
					10°C: 9.7±5% 50°C: 2.1±5%	
Thermistor (Discharge gas sensor): TH5				CM-12		
	Resistance		kΩ		60°C: 12.4±5% 90°C: 4.6±5%	
					70°C: 8.7±5% 100°C: 3.4±7%	
					75°C: 7.4±5% 110°C: 2.5±7%	
					80°C: 6.3±5% 120°C: 1.9±7%	
					85°C: 5.3±5% 130°C: 1.5±7%	
Relay (Comp. Magnetic Contactor)						
	Coil rated		VAC		—	
	Contact rating		VAC, A		—	
	Coil resistance (at 20°C)		Ω		—	
Sol-Control-Valve						
	Sol-control-valve				UKV-25D18	
	Magnetic coil				UKV-A053 (062), DC 12V	
4 way valve						
	4 way valve				STF-0401G	
	Electro magnetic coil				STF-01AI518A1, AC 220-240 V, 50Hz / 60Hz	

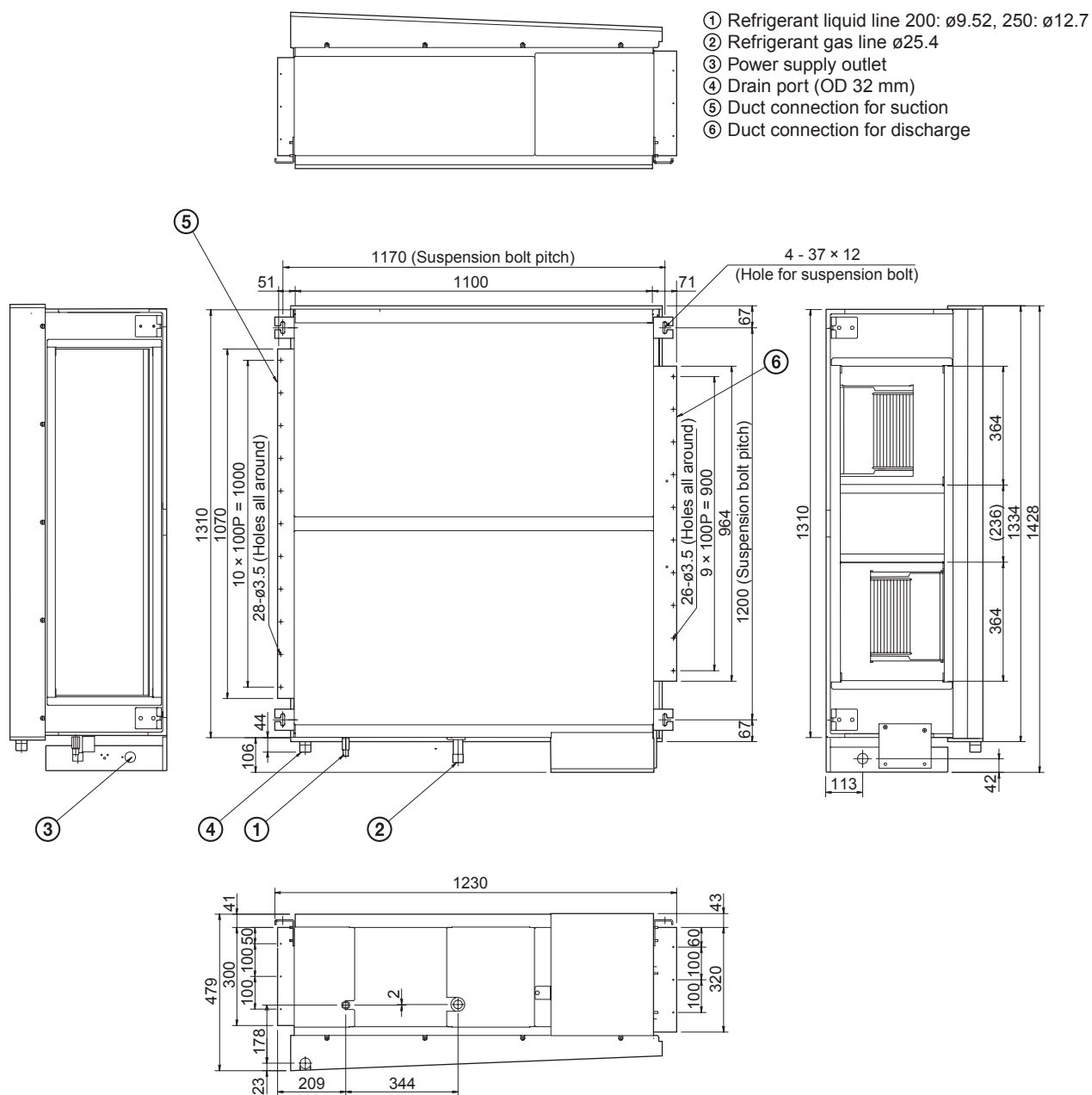
## Outdoor Units U-250PE1E8

MODEL No.		Outdoor Unit	U-250PE1E8	
Power Transformer			—	
	Rated		—	
	Source	VAC, Hz	—	
	Secondary		—	
			—	
	Coil resistance	Ω	—	
Thermal cut off temperature		—		
Thermistor (Coil / Air sensor): TH1, TH2, TH3, TH4			KTM-35D-S1, DTN-C532G3H	
	Resistance	kΩ	–10°C: 23.7±5%	20°C: 6.5±5%
			–5°C: 18.8±5%	30°C: 4.4±5%
			0°C: 15.0±5%	40°C: 3.1±5%
			5°C: 12.1±5%	45°C: 2.6±5%
			10°C: 9.7±5%	50°C: 2.1±5%
Thermistor (Discharge gas sensor): TH5			CM-12	
	Resistance	kΩ	60°C: 12.4±5%	90°C: 4.6±5%
			70°C: 8.7±5%	100°C: 3.4±7%
			75°C: 7.4±5%	110°C: 2.5±7%
			80°C: 6.3±5%	120°C: 1.9±7%
			85°C: 5.3±5%	130°C: 1.5±7%
Relay (Comp. Magnetic Contactor)				
	Coil rated	VAC	—	
	Contact rating	VAC, A	—	
	Coil resistance (at 20°C)	Ω	—	
Sol-Control-Valve				
	Sol-control-valve		UKV-25D18	
	Magnetic coil		UKV-U030E, DC 12 V	
4 way valve				
	4 way valve		STF-0712G	
	Electro magnetic coil		STF-01AI518A1, AC 220-240 V, 50Hz / 60Hz	

## (A) Indoor Units: High Static Pressure Ducted Type

## S-200PE1E8A

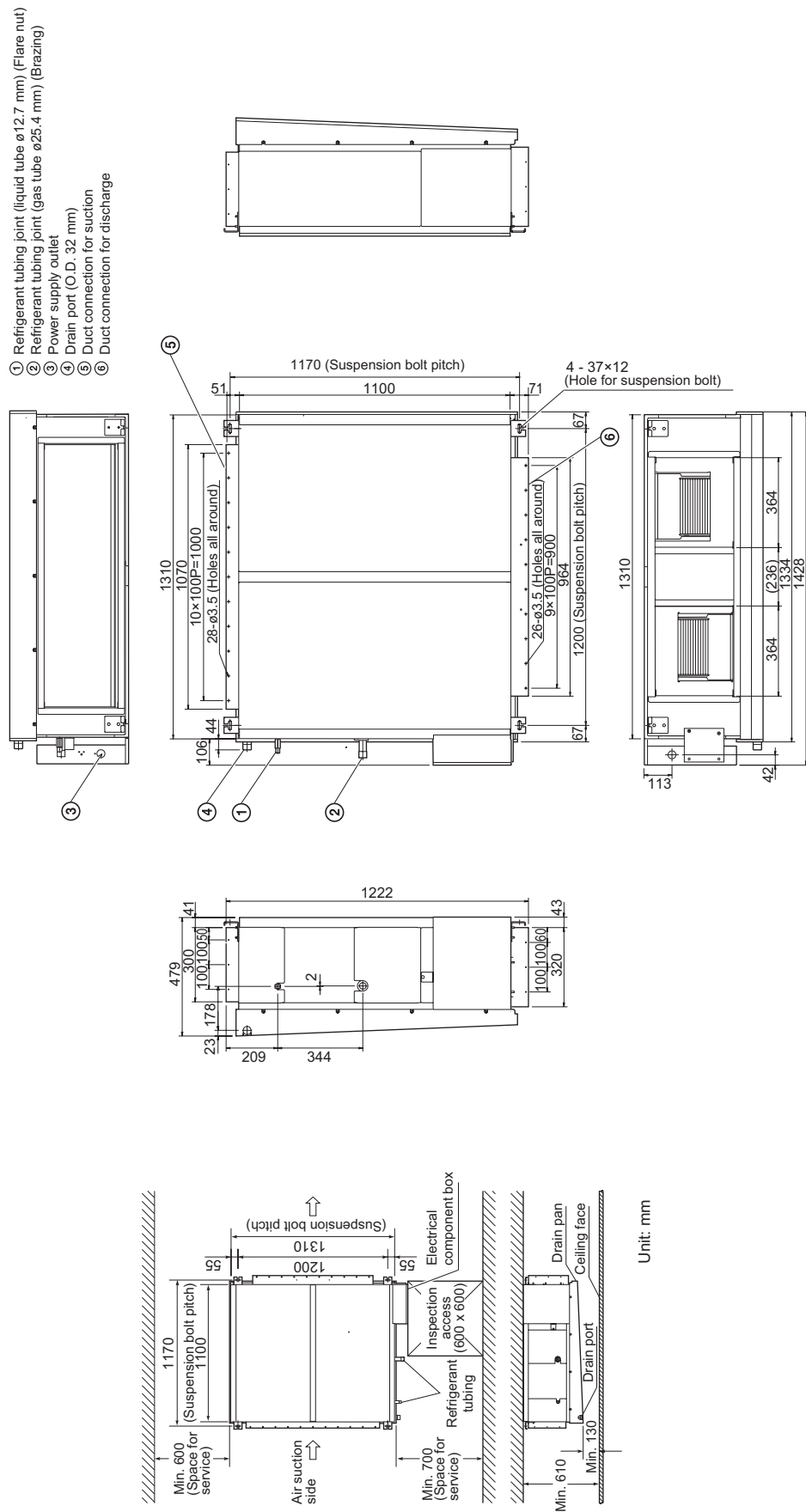
unit: mm



**(A) Indoor Units: High Static Pressure Ducted Type**

**S-200PE1E8**

**S-250PE1E8**





Unit: mm

Unit: mm

**(B) Outdoor Unit: U-200PE1E8**

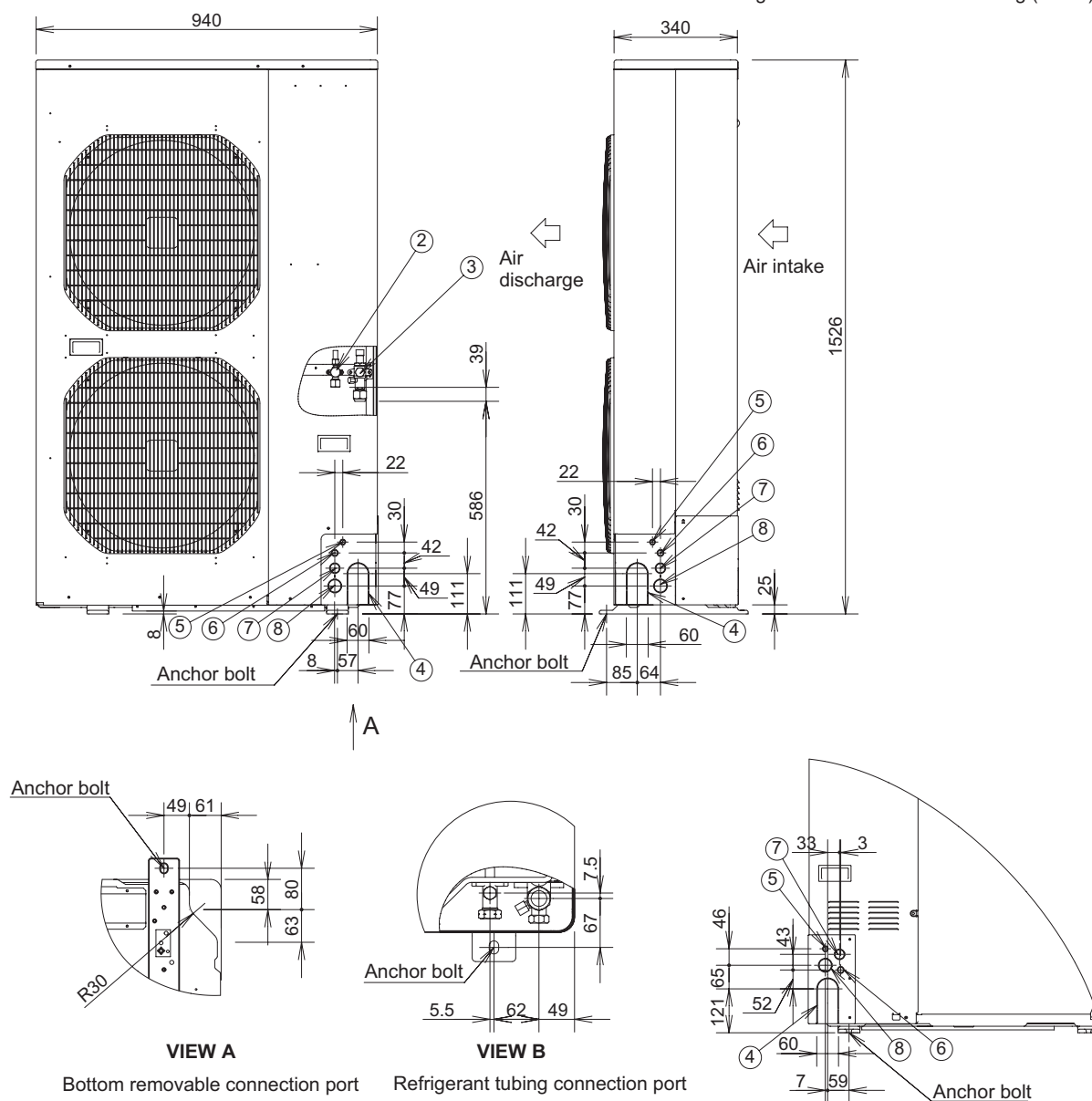
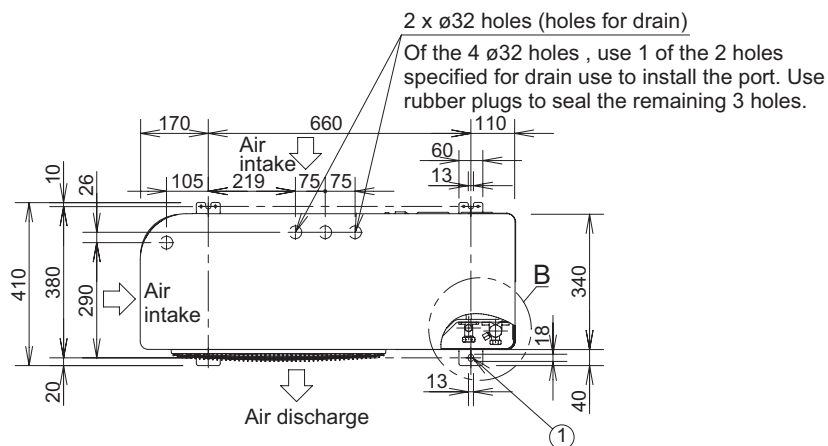
Unit: mm

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 (ø19.05)
④	Refrigerant tubing port
⑤	Electrical wiring port (ø16)
⑥	Electrical wiring port (ø19)
⑦	Electrical wiring port (ø29)
⑧	Electrical wiring port (ø38)

Name	Figure	Q'ty
Reducing Joint Tube (ø19.05 → ø25.4)		1
Joint Tube (ø19.05)		1

Remark:

There are two types of supplied tubings. The one tubing port  $\varnothing 19.05$  (flare process) is connected to the flared connection of the gas port side's service valve. The other "L" shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing ( $\varnothing 25.4$ ).







## (B) Outdoor Unit: U-250PE1E8

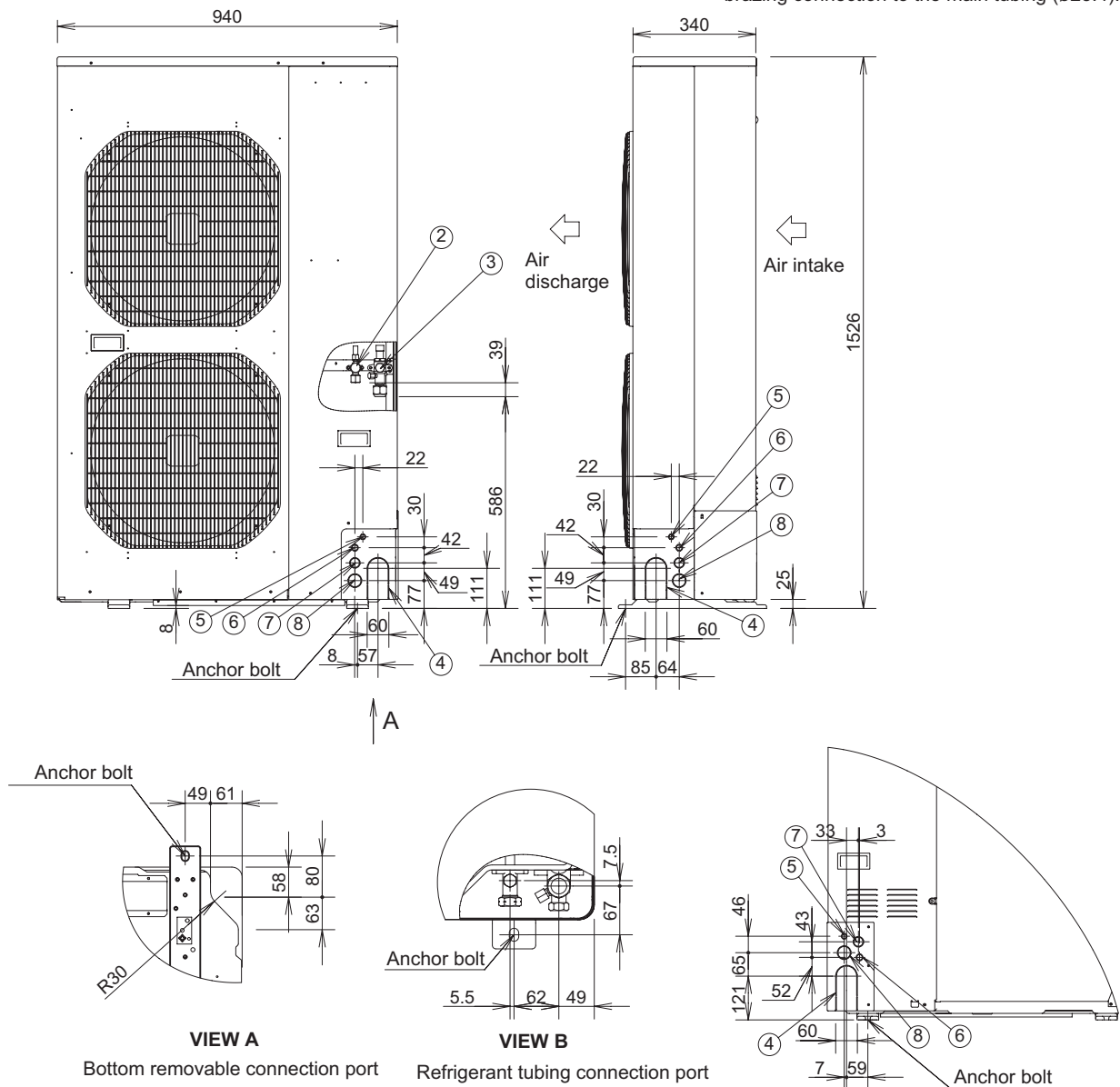
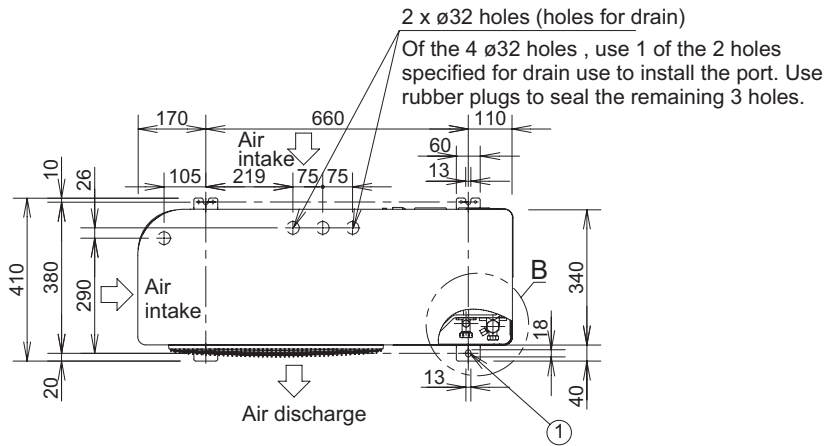
Unit: mm

①	Mounting hole (4-R6.5), anchor bolt : M10
②	Refrigerant tubing (liquid tube), flared connection (ø12.7)
③	Refrigerant tubing (gas tube), flared connection (ø19.05)
④	Refrigerant tubing port
⑤	Electrical wiring port (ø16)
⑥	Electrical wiring port (ø19)
⑦	Electrical wiring port (ø29)
⑧	Electrical wiring port (ø38)

Name	Figure	Q'ty
Reducing Joint Tube (ø19.05 → ø25.4)		1
Joint Tube (ø19.05)		1

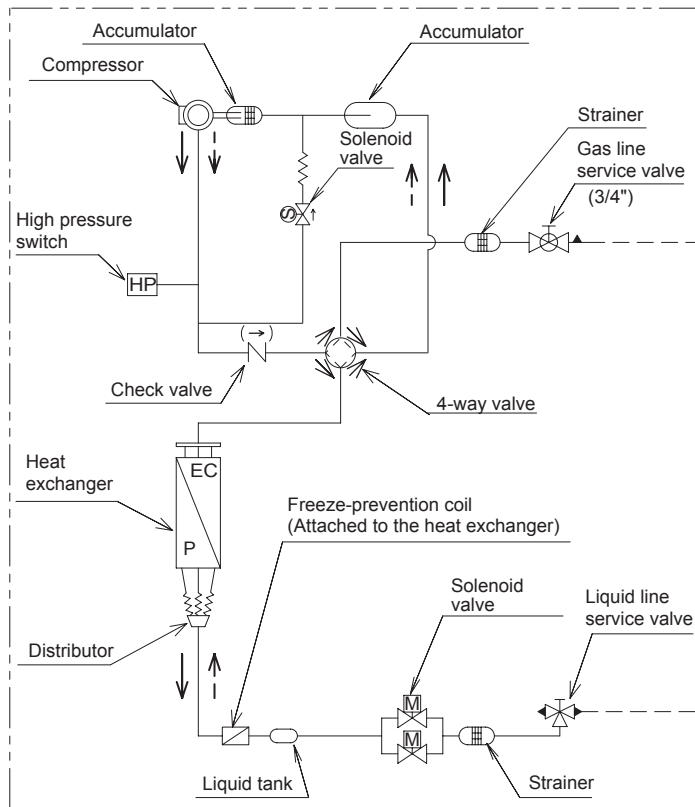
## Remark:

There are two types of supplied tubings. The one tubing port ø19.05 (flare process) is connected to the flared connection of the gas port side's service valve. The other "L" shaped tubing port is brazed in connection after cutting the tube at the proper length. Then make a brazing connection to the main tubing (ø25.4).

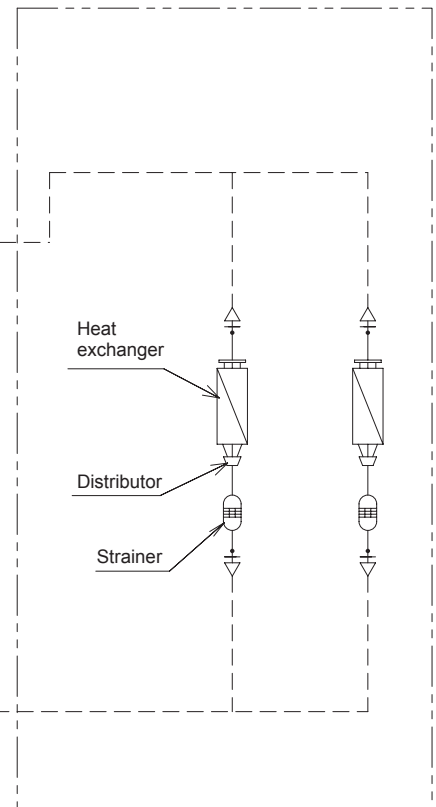


← Cooling cycle  
 ← - - Heating cycle

### Outdoor Unit : U-200PE1E8



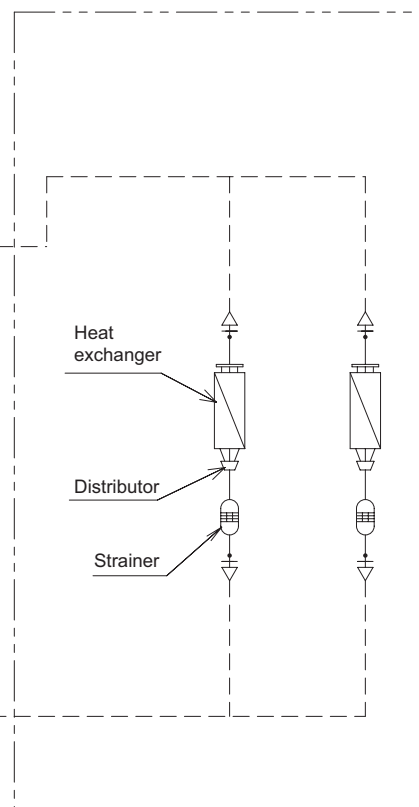
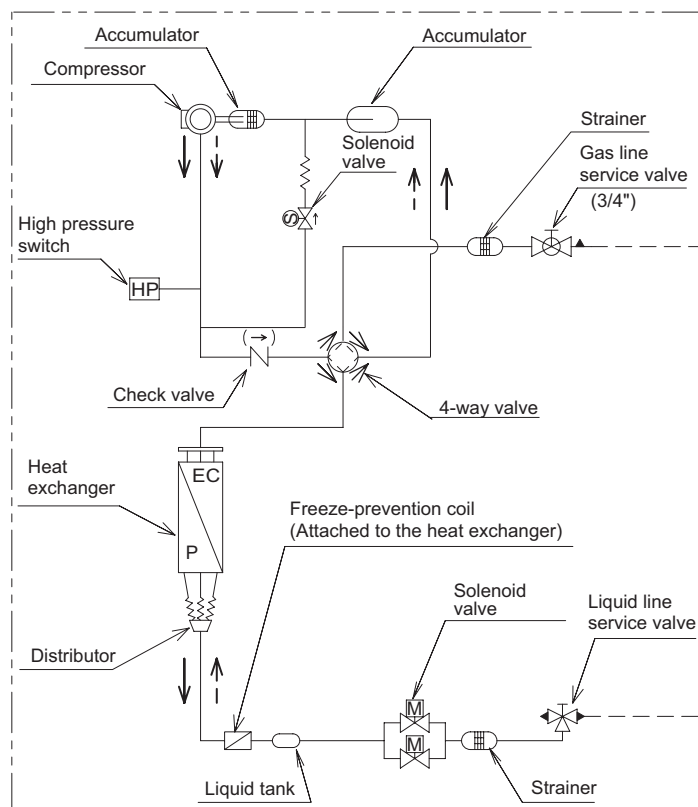
### Indoor Unit : S-200PE1E8A



← Cooling cycle  
 ← - - Heating cycle

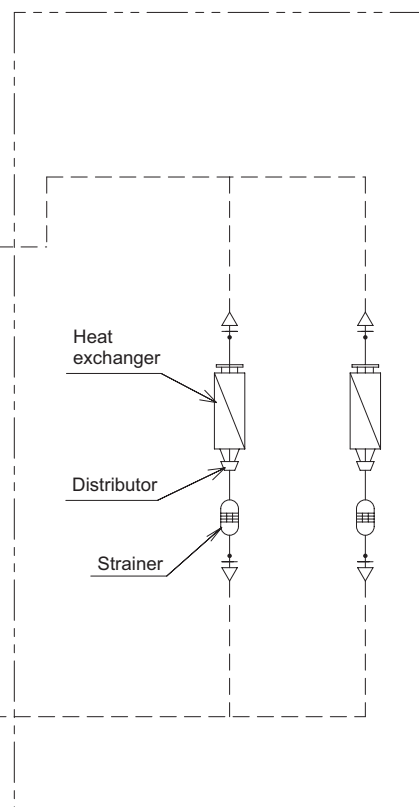
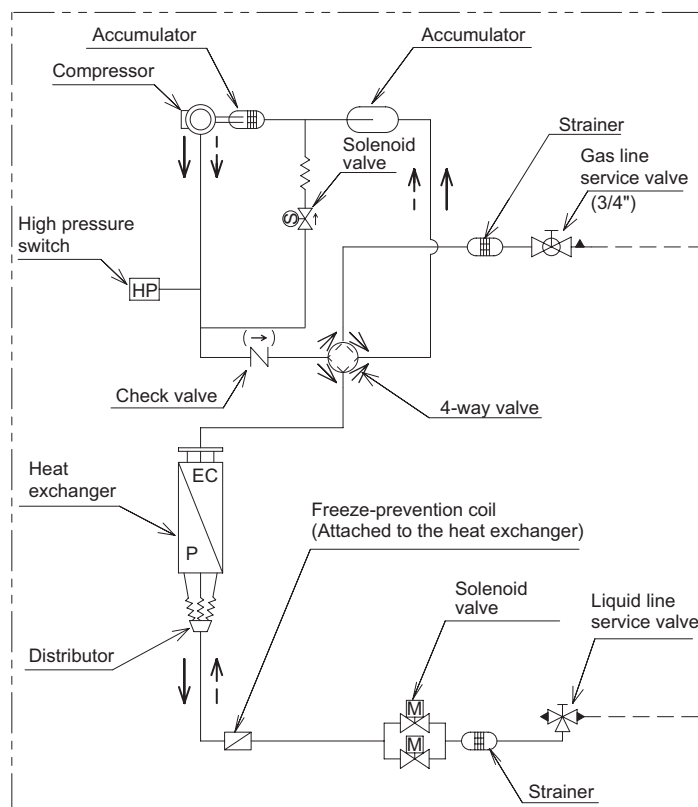
### Outdoor Unit : U-200PE1E8

### Indoor Unit : S-200PE1E8



### Outdoor Unit : U-250PE1E8

### Indoor Unit : S-250PE1E8



## 1-6. Operating Range

**S-200PE2E5 — U-200PE1E8**

**S-250PE2E5 — U-250PE1E8**

**S-200PE1E8A — U-200PE1E8**

	Temperature	Indoor air intake temp.	Outdoor air intake temp.
Cooling	Maximum	32°C DB	43°C DB
	Minimum	18°C DB	–15°C DB
Heating	Maximum	30°C DB	15°C DB
	Minimum	16°C DB	–20°C DB

**S-200PE1E8 — U-200PE1E8**

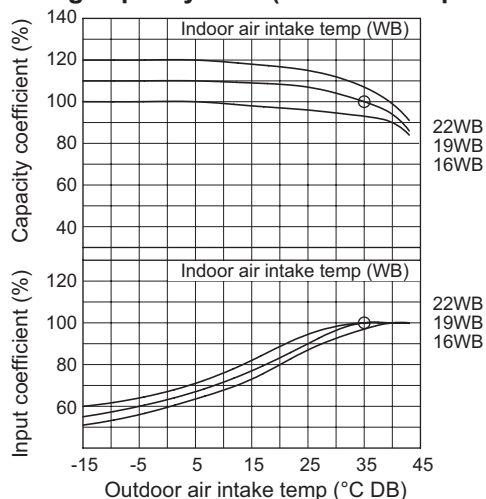
**S-250PE1E8 — U-250PE1E8**

	Temperature	Indoor air intake temp.	Outdoor air intake temp.
Cooling	Maximum	32°C DB / 23°C WB	43°C DB
	Minimum	18°C DB / 14°C WB	–15°C DB
Heating	Maximum	30°C DB / – WB	15°C WB
	Minimum	-	–20°C WB

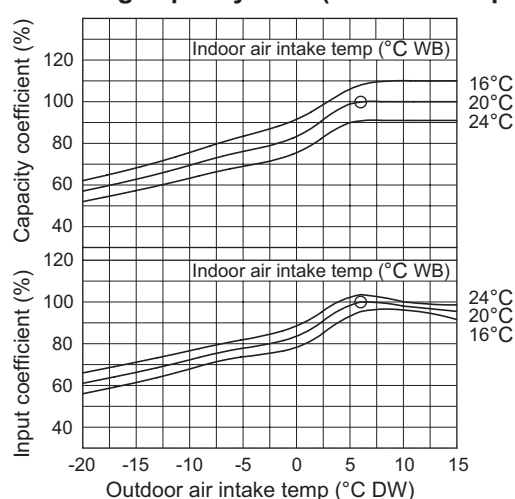
## 1-7. Capacity Correction Graph According to Temperature Condition

### U-200PE1E8 / U-250PE1E8 (For 50 Hz and 60 Hz)

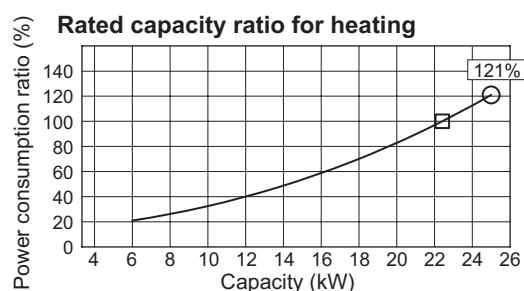
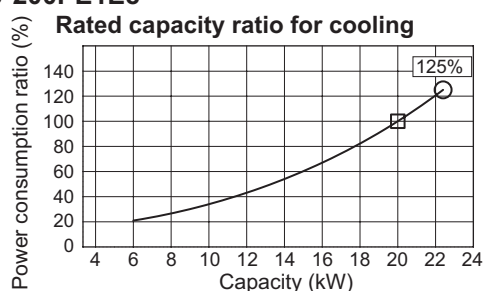
#### ① Cooling capacity ratio (maximum capacity)



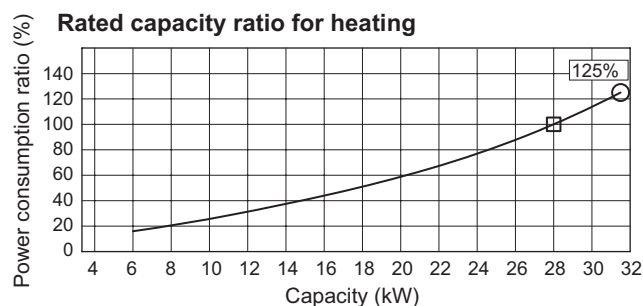
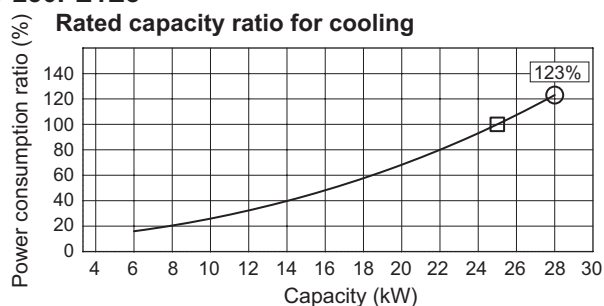
#### Heating capacity ratio (maximum capacity)



#### ② U-200PE1E8



#### ② U-250PE1E8



#### NOTE 1

- The graphs "①" of the characteristics show the value under the following conditions.  
Equivalent tubing length : 7.5m  
Difference of elevation : 0m  
Wind speed : High
- "○" marking indicates the maximum capacity / maximum power consumption under the JIS condition.  
Maximum capacity indicates the maximum value in the parentheses of the specifications (cooling and heating capacity).
- The characteristic of heating capacity excludes the decline of capacity when frosting (including defrost drive).

#### NOTE 2

- The graphs "②" of the characteristics show the value under the following conditions.  
Equivalent tubing length : 7.5m  
Difference of elevation : 0m  
Wind speed : High
- "□" marking indicates the rated capacity / rated power consumption under the JIS condition.  
"○" marking indicates the maximum capacity / maximum power consumption under the JIS condition.
- The characteristic of heating capacity excludes the decline of capacity when frosting (including defrost drive).

Outdoor unit heating capacity correction coefficient during of frosting / defrosting

(RH approximately 85%)

Outdoor intake air temperature °C WB	-20	-15	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
Correction coefficient	1.0	1.0	0.97	0.96	0.96	0.95	0.94	0.91	0.89	0.88	0.87	0.87	0.87	0.88	0.89	0.91	0.92	0.95	1.0

To calculate the heating capacity with consideration for frosting / defrosting operation, multiply the heating capacity found from the capacity graph by the correction coefficient from the table above.

## 1-8. Noise Criterion Curves

High Static Pressure Ducted Type

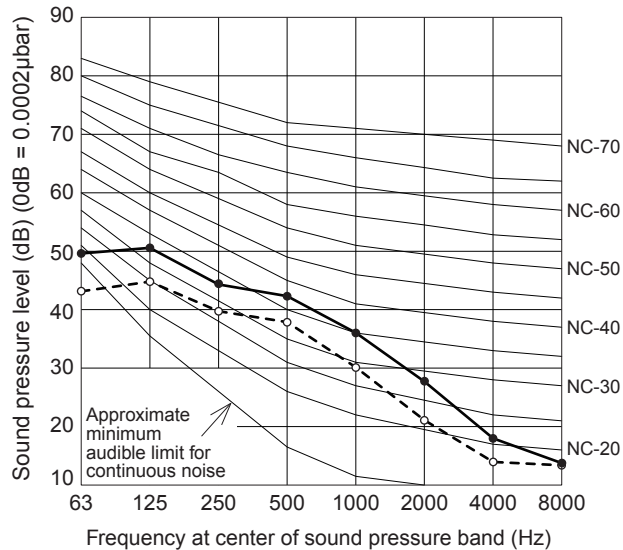
—●— HIGH  
- -○- - LOW

MODEL : S-200PE2E5

SOUND LEVEL : HIGH 43 dB(A)

LOW 38 dB(A)

CONDITION : Under the unit 1.5 m

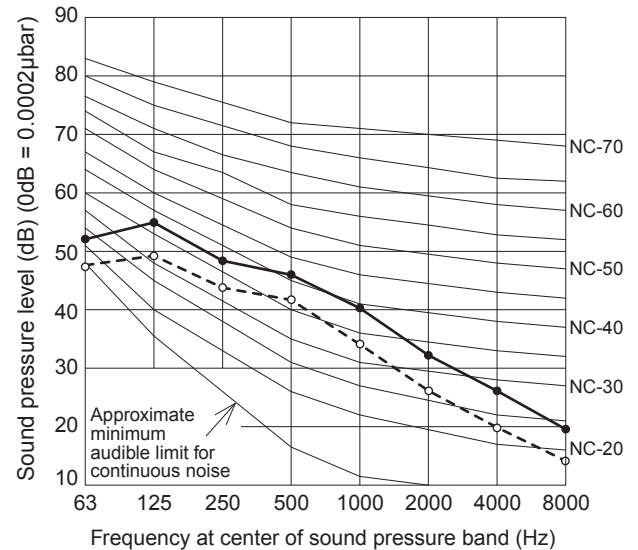


MODEL : S-250PE2E5

SOUND LEVEL : HIGH 47 dB(A)

LOW 42 dB(A)

CONDITION : Under the unit 1.5 m

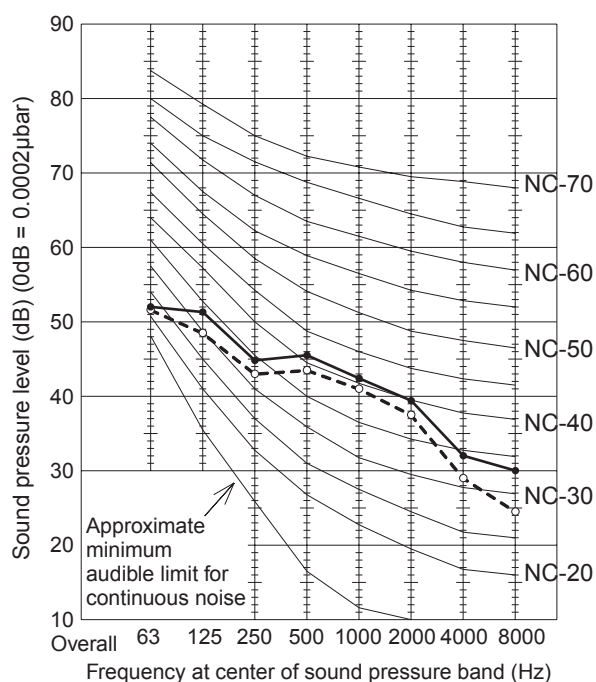


MODEL : S-200PE1E8

SOUND LEVEL : HIGH 48 dB(A)

LOW 45 dB(A)

CONDITION : Under the unit 1.5 m

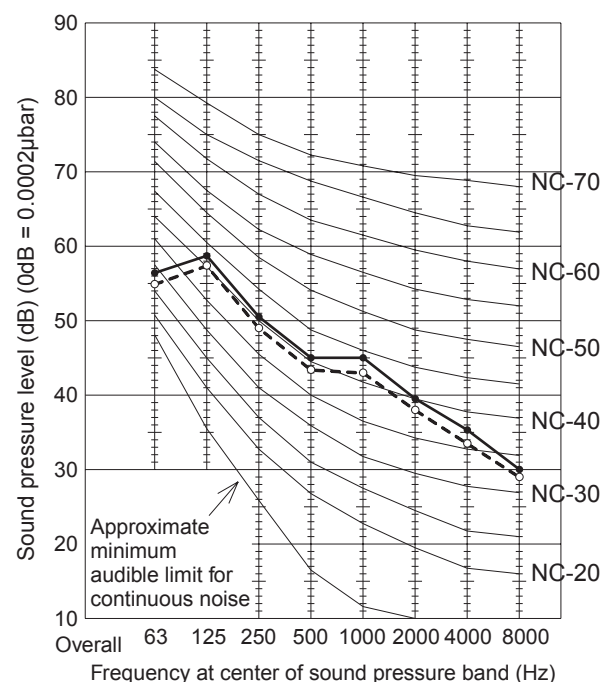


MODEL : S-200PE1E8A , 250PE1E8

SOUND LEVEL : HIGH 50 dB(A)

LOW 48 dB(A)

CONDITION : Under the unit 1.5 m

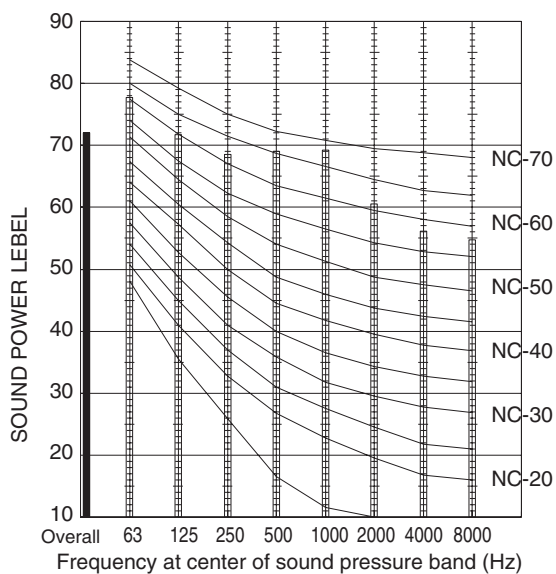


**(B) Outdoor Unit**

MODEL : U-200PE1E8

SOUND : 72 dB(A)

POWER LEVEL : Cooling

**COOLING**

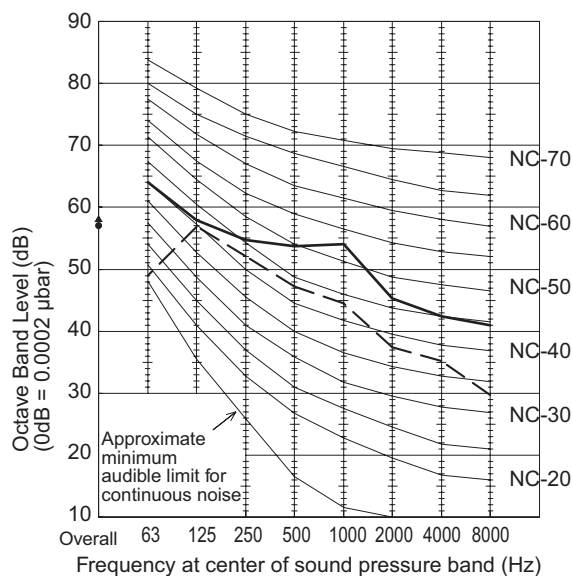
— Standard  
- - - Quiet mode

MODEL : U-200PE1E8

SOUND LEVEL : STANDARD 57 dB(A)

QUIET MODE 50 dB(A)

CONDITION : 1 m in front at height of 1.5 m

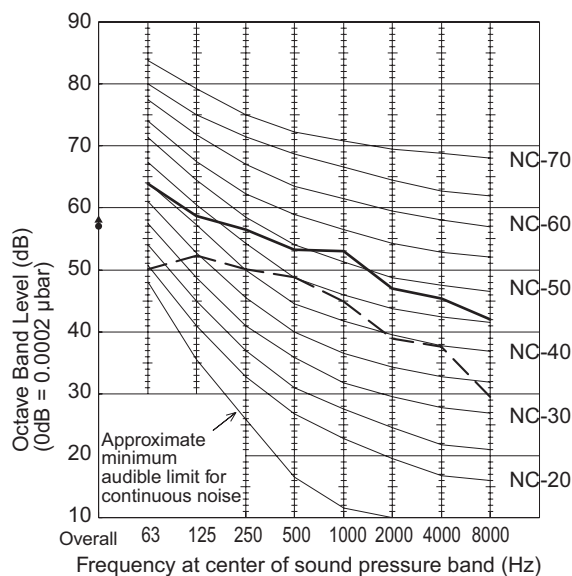
**HEATING**

MODEL : U-200PE1E8

SOUND LEVEL : STANDARD 57 dB(A)

QUIET MODE 50 dB(A)

CONDITION : 1 m in front at height of 1.5 m

**REMARKS:**

1. Value obtained in the actual place where the unit is installed may be slightly higher than the values shown in this graph because of the conditions of operation, the structure of the building, the background noise and other factors.
2. The test results were obtained from an anechoic room.

**NOTE**

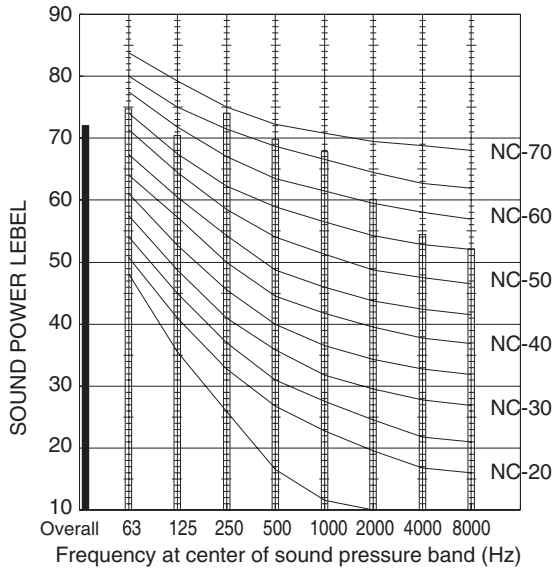
To evaluate "Noise level" the maximum number of the measured OCTAVE BAND SOUND PRESSURE LEVEL is used. Read the number on each BAND CENTER FREQUENCIES (horizontal axis) ranging from 63 Hz to 8000 Hz and select the maximum value (vertical axis) among them.

**(B) Outdoor Unit**

MODEL : U-250PE1E8

SOUND : 72 dB(A)

POWER LEVEL : Cooling

**COOLING**

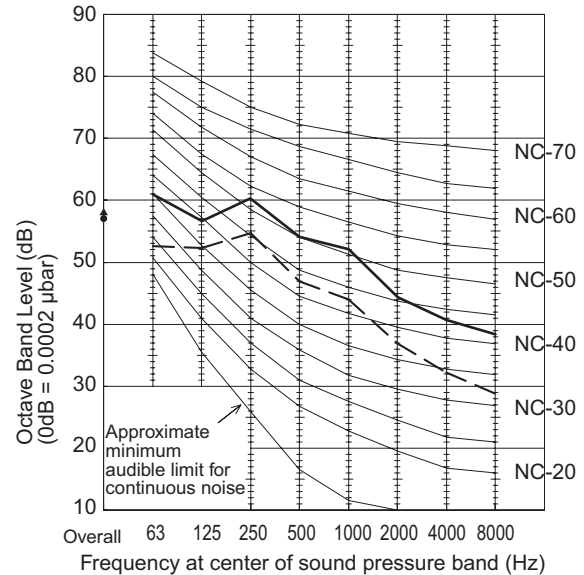
— Standard  
 - - - Quiet mode

MODEL : U-250PE1E8

SOUND LEVEL : STANDARD 57 dB(A)

QUIET MODE 50 dB(A)

CONDITION : 1 m in front at height of 1.5 m

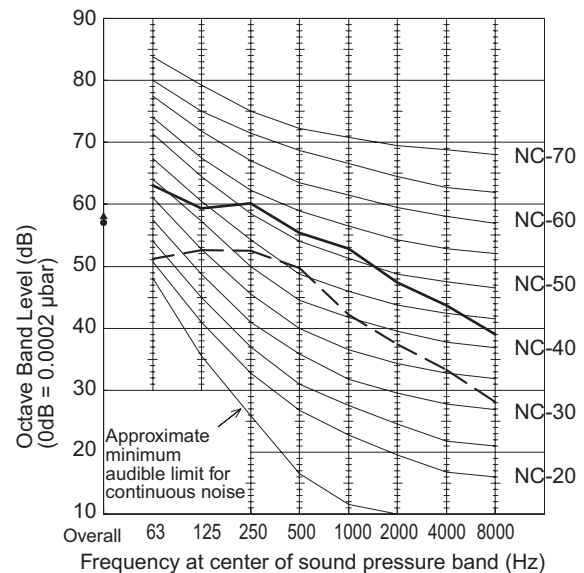
**HEATING**

MODEL : U-250PE1E8

SOUND LEVEL : STANDARD 58 dB(A)

QUIET MODE 50 dB(A)

CONDITION : 1 m in front at height of 1.5 m

**REMARKS:**

1. Value obtained in the actual place where the unit is installed may be slightly higher than the values shown in this graph because of the conditions of operation, the structure of the building, the background noise and other factors.
2. The test results were obtained from an anechoic room.

**NOTE**

To evaluate "Noise level" the maximum number of the measured OCTAVE BAND SOUND PRESSURE LEVEL is used. Read the number on each BAND CENTER FREQUENCIES (horizontal axis) ranging from 63 Hz to 8000 Hz and select the maximum value (vertical axis) among them.



## 1-9. ELECTRICAL WIRING

### ● 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.



#### WARNING

- (2) This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown. Earth Leakage Circuit Breaker (ELCB) must be incorporated in the fixed wiring in accordance with the wiring regulations. The Earth Leakage Circuit Breaker (ELCB) must be an approved 10-16 A, having a contact separation in all poles.
- (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 designated by the manufacturer, because special-purpose tools are required.

### Recommended Wire Length and Wire Diameter for Power Supply System

#### Outdoor unit (3-Phase)

	(A) Power supply		Time delay fuse or circuit capacity
	Wire size	Max. length	
U-200PE1E8	14 mm <sup>2</sup>	116 m	15 A
U-250PE1E8	14 mm <sup>2</sup>	96 m	20 A

#### Indoor unit

		(B) Power supply	Time delay fuse or circuit capacity
		2.5 mm <sup>2</sup>	
E2	S-200PE2E5	Max. 30 m	10-16 A
	S-250PE2E5		
E1	S-200PE1E8A	Max. 50/30 m	10/16 A
	S-200PE1E8	Max. 50/30 m	10/16 A
	S-250PE1E8		

#### Control wiring

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

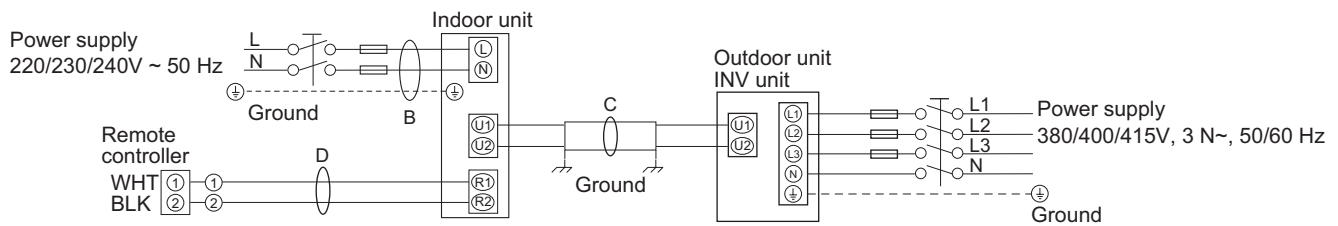
#### NOTE

\*1 With ring-type wire terminal.

\*2 When the type "E1" is used with maximum length of 500 m for group control, and if the remote controller for the group control is wireless, the maximum length will be 400 m.

## ■ Wiring System Diagrams

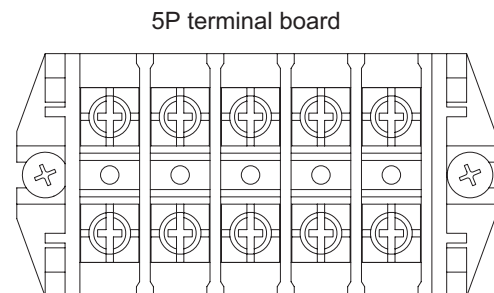
### <Type E2>



#### NOTE

- (1) Refer to "Recommended Wire Length and Wire Diameter for Power Supply System" for the explanation of "B", "C" and "D" in the above diagram.
- (2) The basic connection diagram of the indoor unit shows the terminal boards, 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 R.C. address setting, refer to the installation instructions supplied with the outdoor unit. Auto address setting can be executed by remote controller automatically. Refer to the installation instructions supplied with the remote controller (optional).

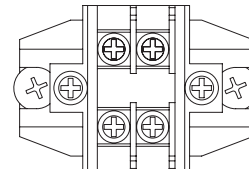
#### Outdoor Unit



L1 L2 L3 N

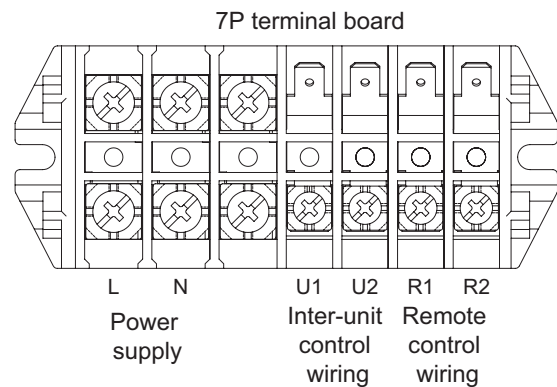
Power  
supply

#### 2P terminal board



Inter-unit  
control wiring

#### Indoor Unit



L N U1 U2 R1 R2  
Power supply Inter-unit control wiring Remote control wiring

#### Type E2



# CAUTION

- (1) When linking the outdoor units in a network, disconnect the terminal extended from the short plug from all outdoor units except any one of the outdoor units.  
(When shipping: In shorted condition.)  
For a system without link (no wiring connection 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. 1-1)

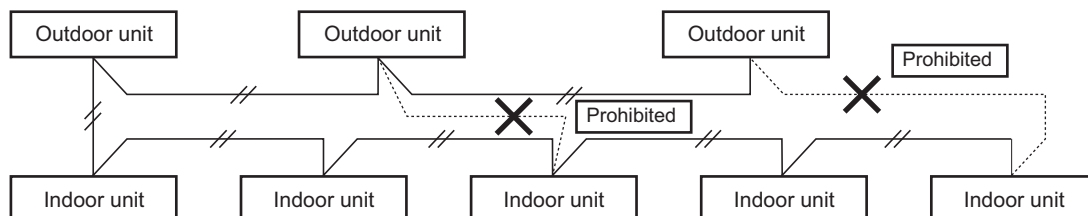


Fig. 1-1

- (3) Do not install inter-unit control wiring such as star branch wiring. Star branch wiring causes mis-address setting. (Fig. 1-2)

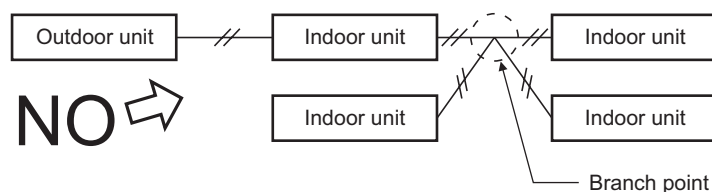


Fig. 1-2

- (4) If branching the inter-unit control wiring, the number of branch points should be 16 or fewer.

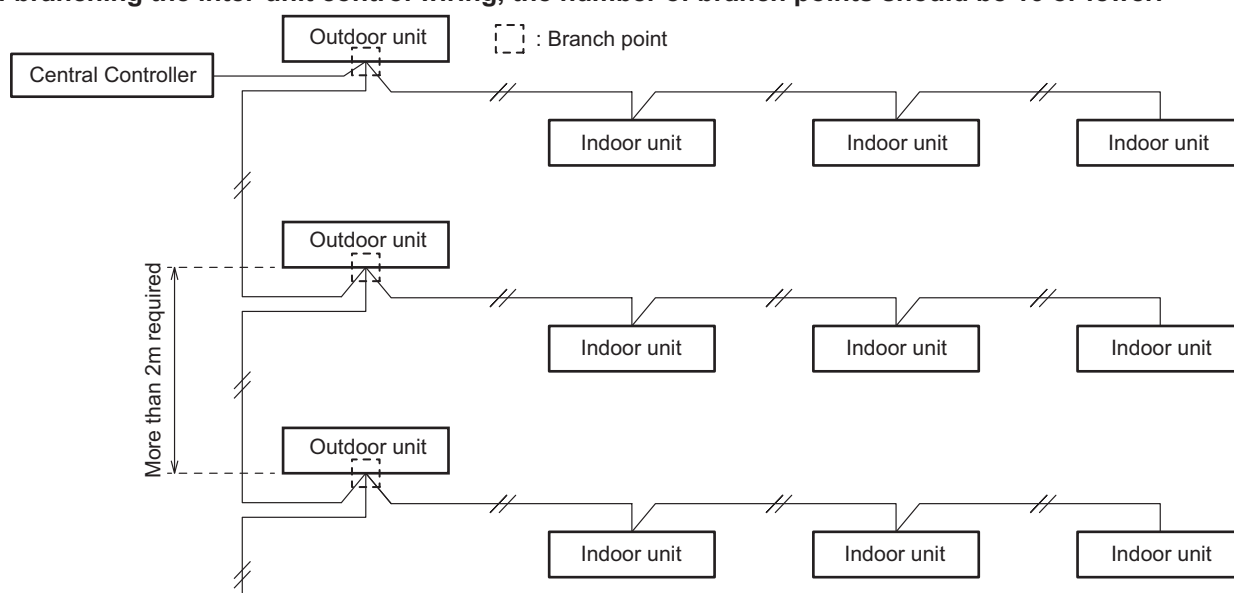


Fig. 1-3

- (5) Use shielded wires for inter-unit control wiring (c) and ground the shield on both sides, otherwise misoperation from noise may occur. (Fig. 1-4)

Connect wiring as shown in Section “Wiring System Diagrams”.

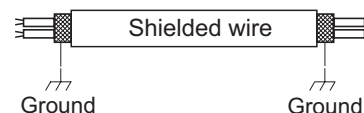


Fig. 1-4

- (6) • Connecting cable between indoor unit and outdoor unit shall be approved polychloroprene sheathed 5 or 3 \*1.5 mm<sup>2</sup> flexible cord. Type designation 60245 IEC 57 (H05RN-F, GP85PCP etc.) or heavier cord.  
• 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. (60245 IEC57, 60245 IEC66)

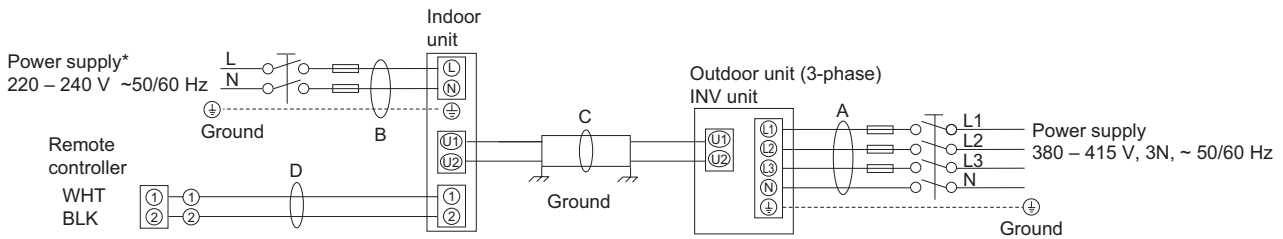


# WARNING

Loose wiring may cause the terminal to overheat or result in unit malfunction.  
A fire hazard may also occur. 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 terminal screw.

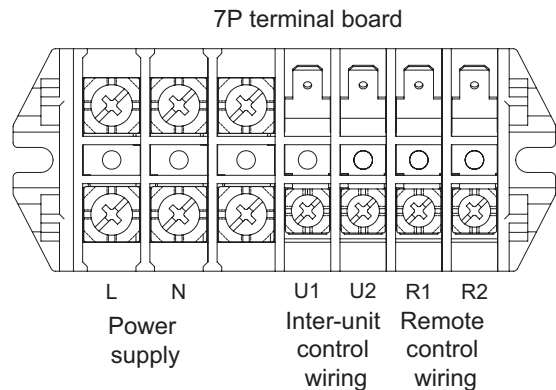
## &lt;Type E1&gt;



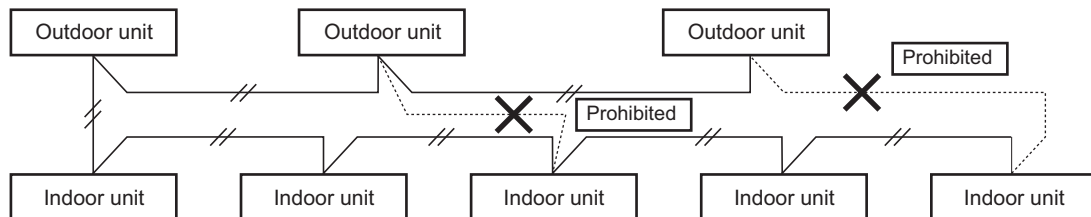
\* Regarding S-250PE1E8, the power supply is 220-240V, 50Hz only.

**NOTE**

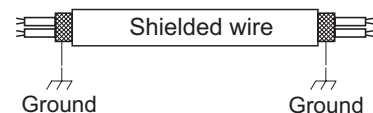
- (1) Refer to “Recommended Wire Length and Wire Diameter for Power Supply System” for the explanation of “A”, “B”, “C” and “D” in the above diagrams.
- (2) The basic connection diagram of the indoor unit shows the 7P terminal board, so the terminal boards in your equipment may differ from the diagram.
- (3) Refrigerant Circuit (R.C.) address should be set before turning the power on.
- (4) Regarding R.C. address setting, refer to the installation instructions supplied with the outdoor unit. Auto address setting can be executed by remote controller automatically. Refer to the installation instructions supplied with the remote controller (optional).

**Type E1****CAUTION**

- (1) When linking the outdoor units in a network, disconnect the terminal extended from the short plug (CN003, 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.)
- (2) Do not install the inter-unit control wiring in a way that forms a loop. (Fig. 1-5)

**Fig. 1-5**

- (3) Use shielded wires for inter-unit control wiring (c) and ground the shield on both sides, otherwise misoperation from noise may occur. (Fig. 1-6)  
Connect wiring as shown in Wiring System Diagram.”

**Fig. 1-6**

- (4) • Connecting cable between indoor unit and outdoor unit shall be approved polychloroprene sheathed 5 or 3 \*1.5 mm<sup>2</sup> flexible cord. Type designation 60245 IEC 57 (H05RN-F, GP85PCP etc.) or heavier cord.  
• 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. (60245 IEC57, 60245 IEC66)

**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. 1-7)
- (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. 1-8)

### Stranded wire

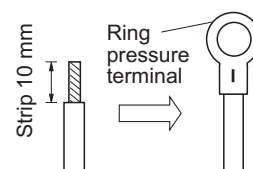


Fig. 1-7

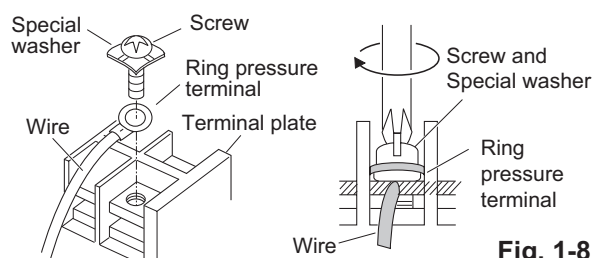


Fig. 1-8

### ■ Examples of shield wires

- (1) Remove cable coat not to scratch braided shield. (Fig. 1-9)
- (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. 1-10)
- (3) Remove coat of signal wire. (Fig. 1-11)
- (4) Attach ring pressure terminals to the signal wires and the shield wires insulated in Step (2). (Fig. 1-12)

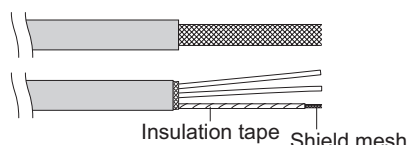


Fig. 1-9

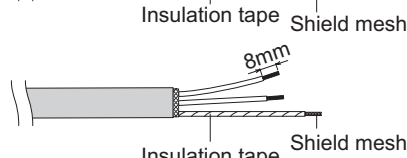


Fig. 1-10

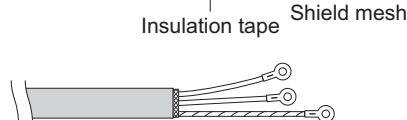


Fig. 1-11

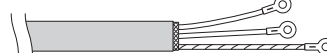
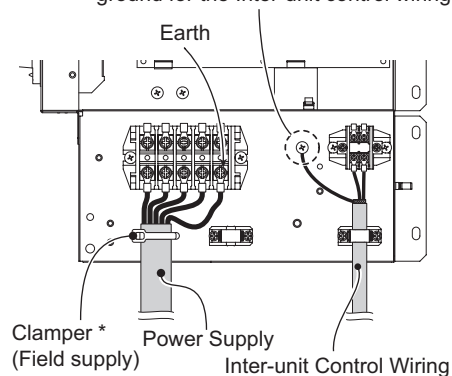
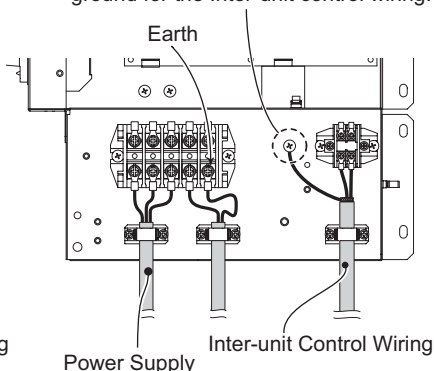
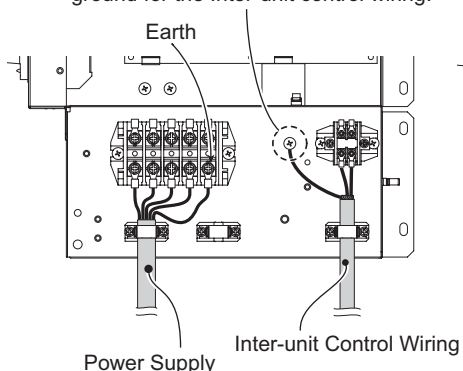


Fig. 1-12

### ■ Wiring sample

#### Outdoor Unit

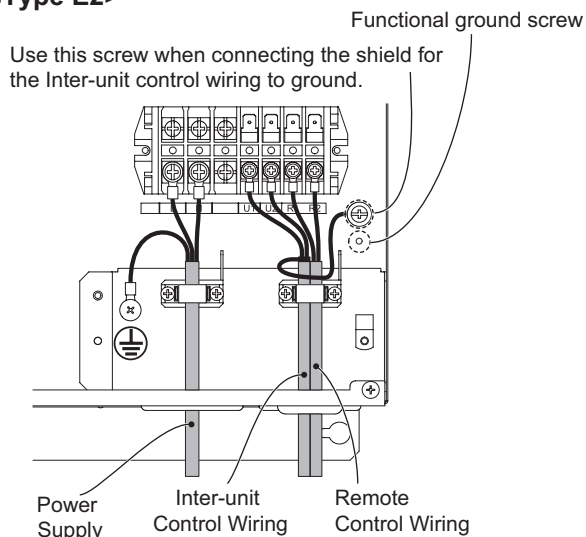
1. Use this screw when connecting to ground for the Inter-unit control wiring.
2. Use this screw when connecting to ground for the Inter-unit control wiring.
3. Use this screw when connecting to ground for the Inter-unit control wiring.



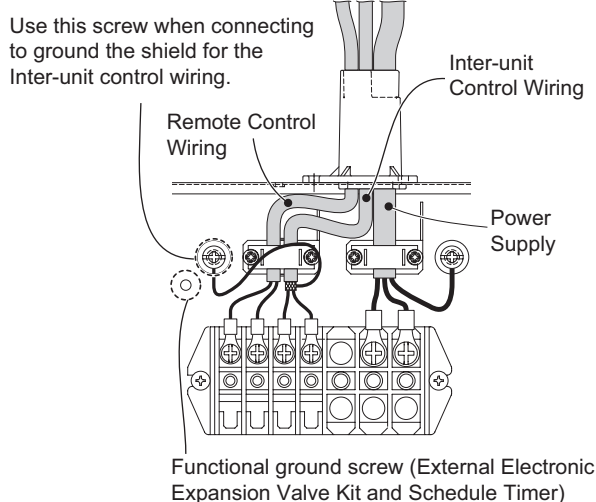
\* First remove the attached resin fixture. Then lead the clamper (field supply) through the screw hole and fix the power supply wire.

#### Indoor Unit

##### <Type E2>



##### <Type E1>

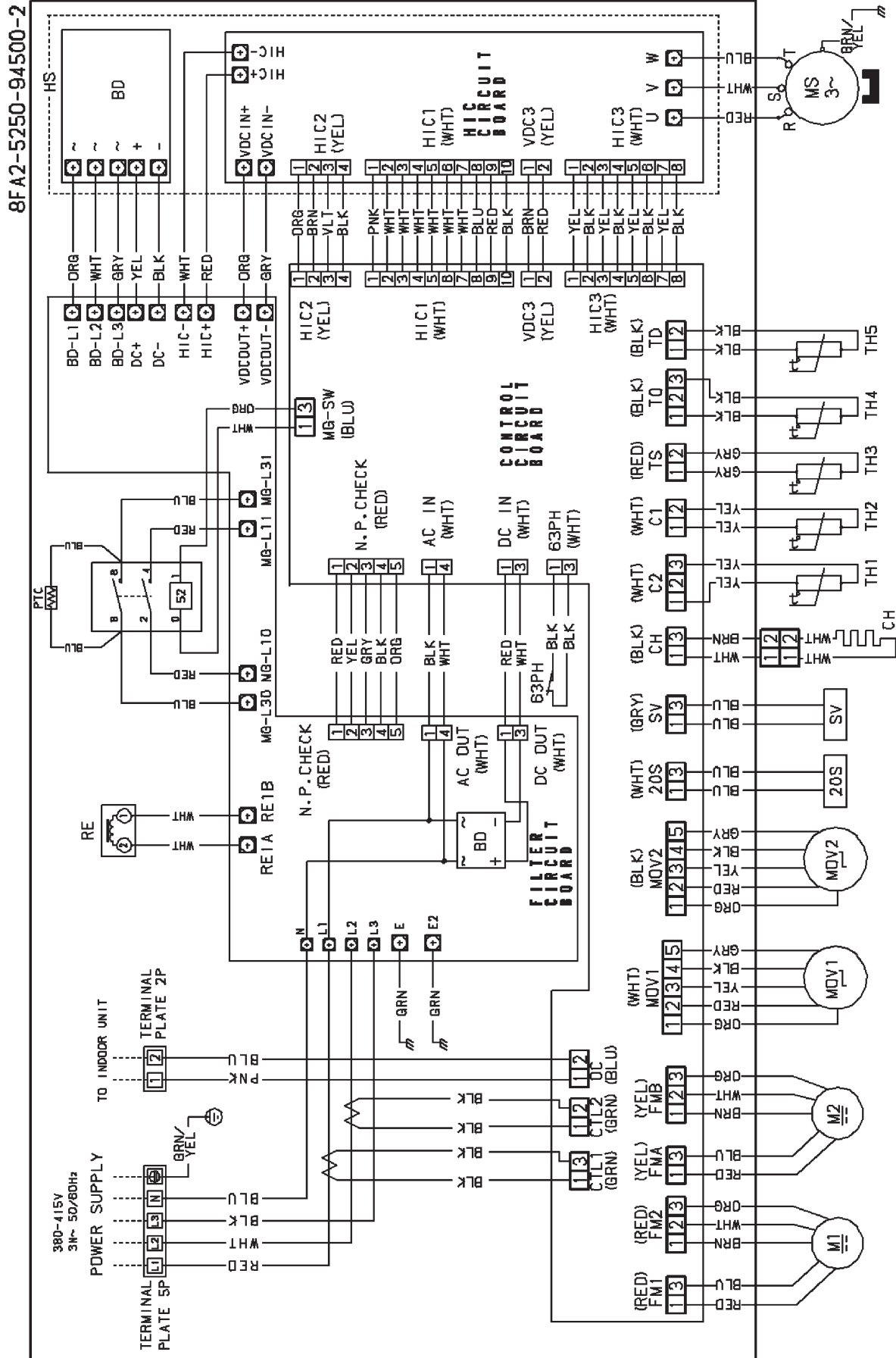


### 3. ELECTRICAL DATA

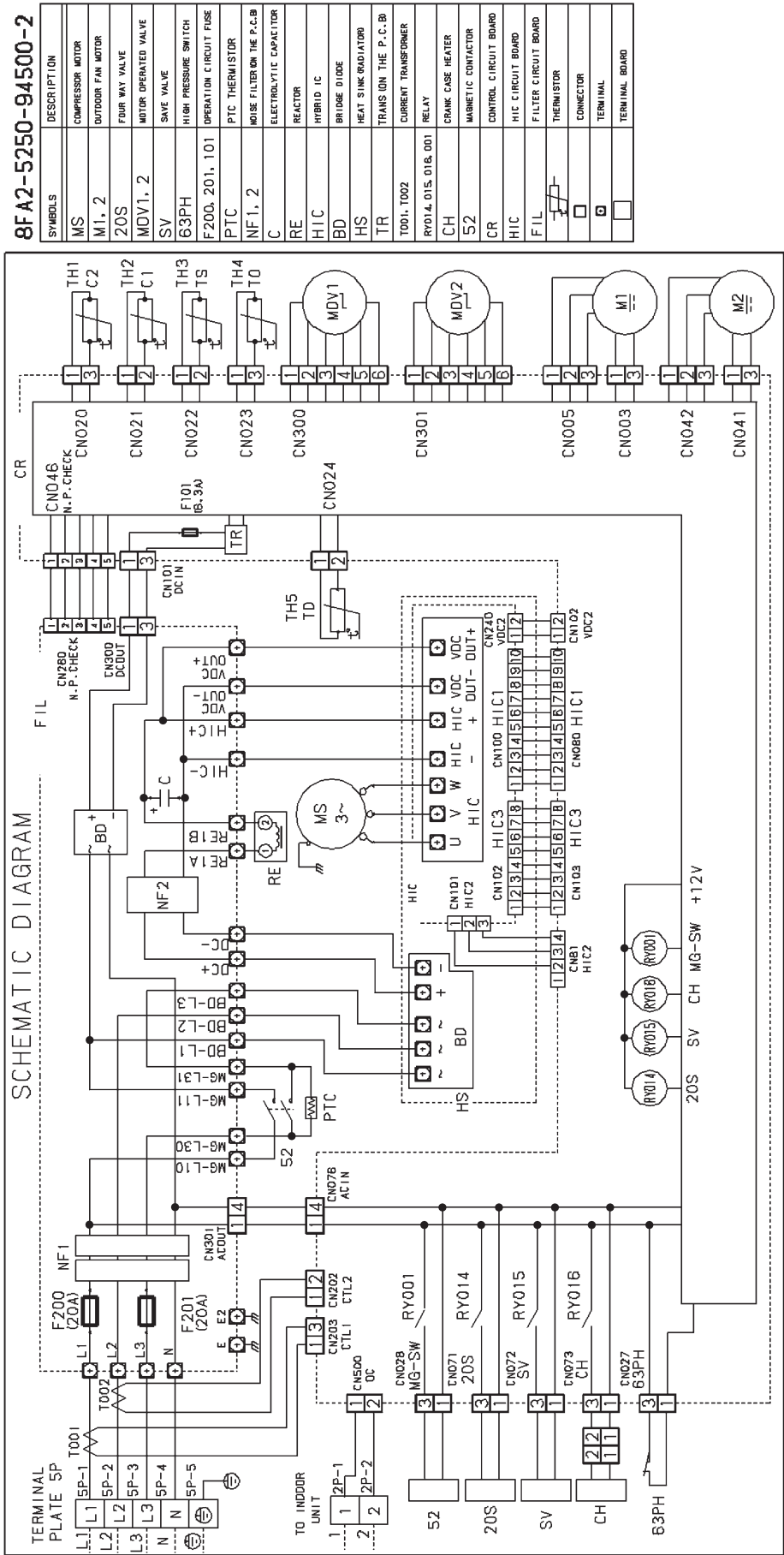
3-1.	Outdoor Units (Electric Wiring Diagram, Schematic Diagram).....	3-2
3-2.	Indoor Units (Electric Wiring Diagram, Schematic Diagram).....	3-4
	High Static Pressure Ducted Type	

### 3-1. Outdoor Units

#### Electric Wiring Diagram U-200PE1E8 / U-250PE1E8



Schematic Diagram U-200PE1E8 / U-250PE1E8

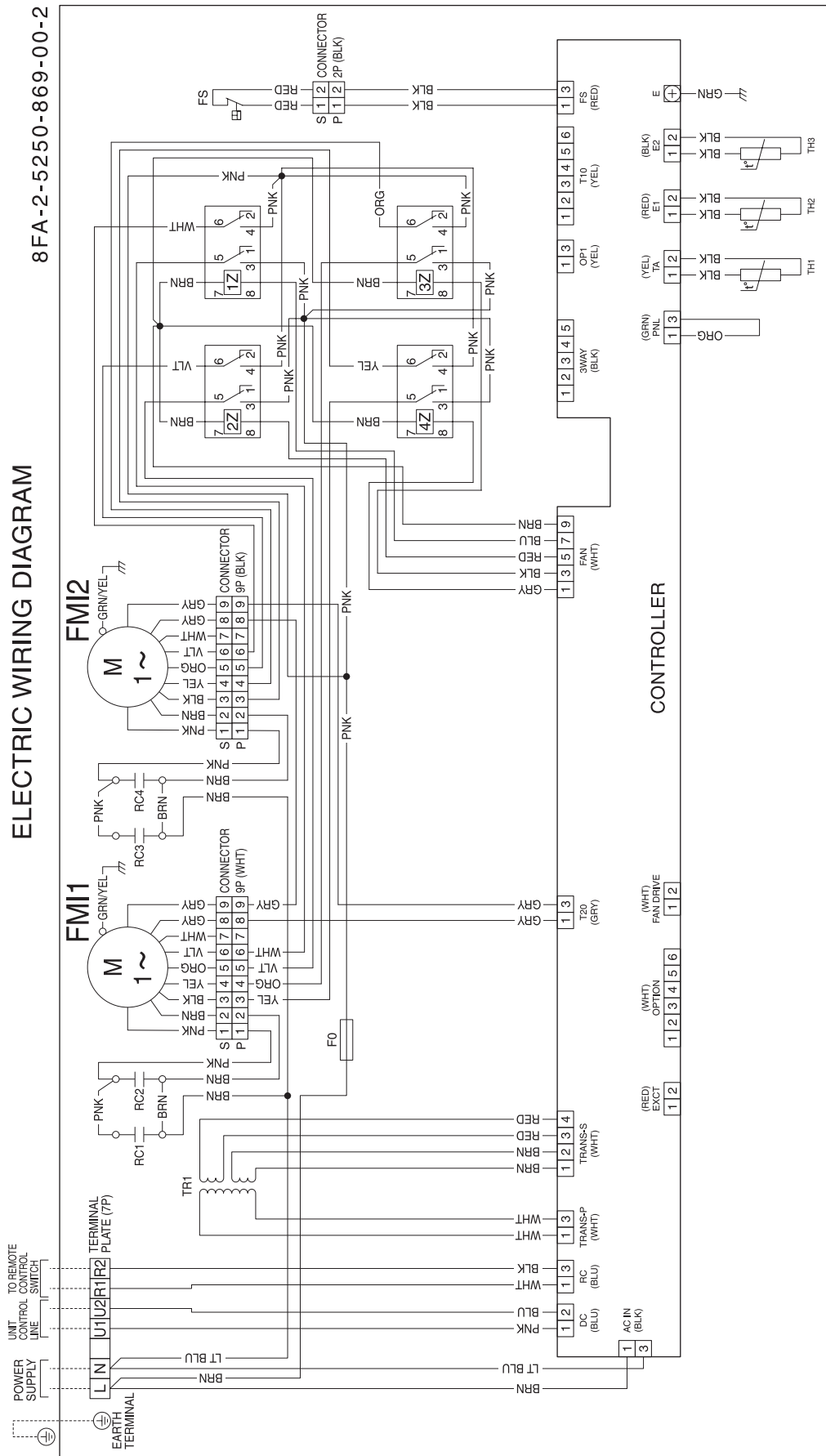


**WARNING**

TURN OFF THE MAIN POWER SUPPLY SWITCH WHEN CHANGING P.C.B.. CONFIRM ALL THE L.E.D.S ON THE P.C.B. ARE OFF AND START TO REWORK. OTHERWISE YOU MAY BE KILLED BY AN ELECTRIC SHOCK.



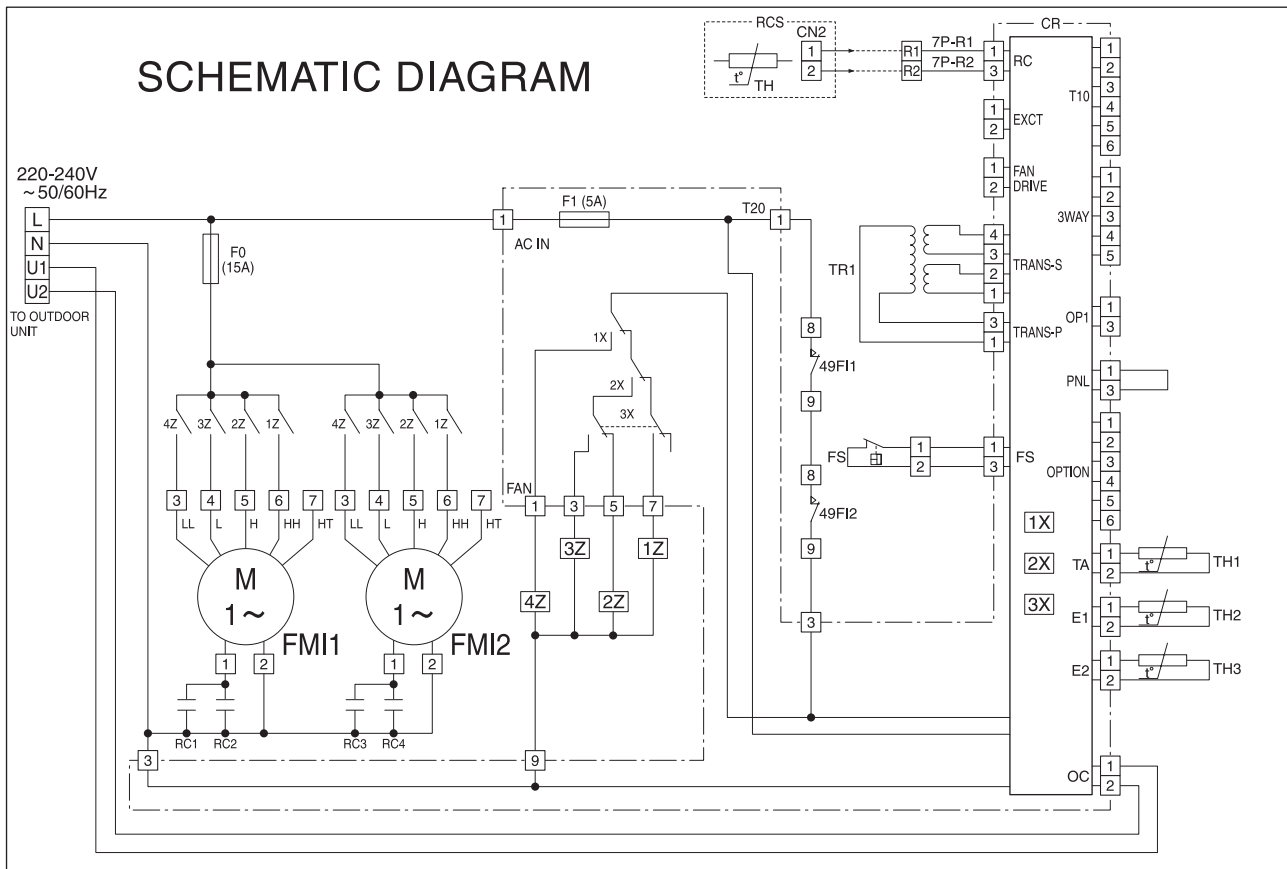
■ High Static Pressure Ducted Type S-200PE1E8A  
Electric Wiring Diagram



SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
FMI 1,2	INDOOR FAN MOTOR	F0, 1	FUSE
49FI 1,2	INDOOR MOTOR THERMAL PROTECTOR	CR	INDOOR CONTROLLER
RC1-4	RUNNING CAPACITOR	1X-3X	AUXILIARY RELAY
TR1	POWER TRANSFORMER	1Z-4Z	CONNECTOR, TERMINAL PLATE
FS	FLOAT SWITCH	+	TERMINAL
TH1	ROOM THERMISTOR	(RCS)	REMOTE CONTROL SWITCH (OPTION)
TH2	THERMISTOR (INDOOR COIL E1)		TH-ROOM THERMISTOR
TH3	THERMISTOR (INDOOR COIL E2)		

■ High Static Pressure Ducted Type S-200PE1E8A  
Schematic Diagram

8FA-2-5250-869-00-2

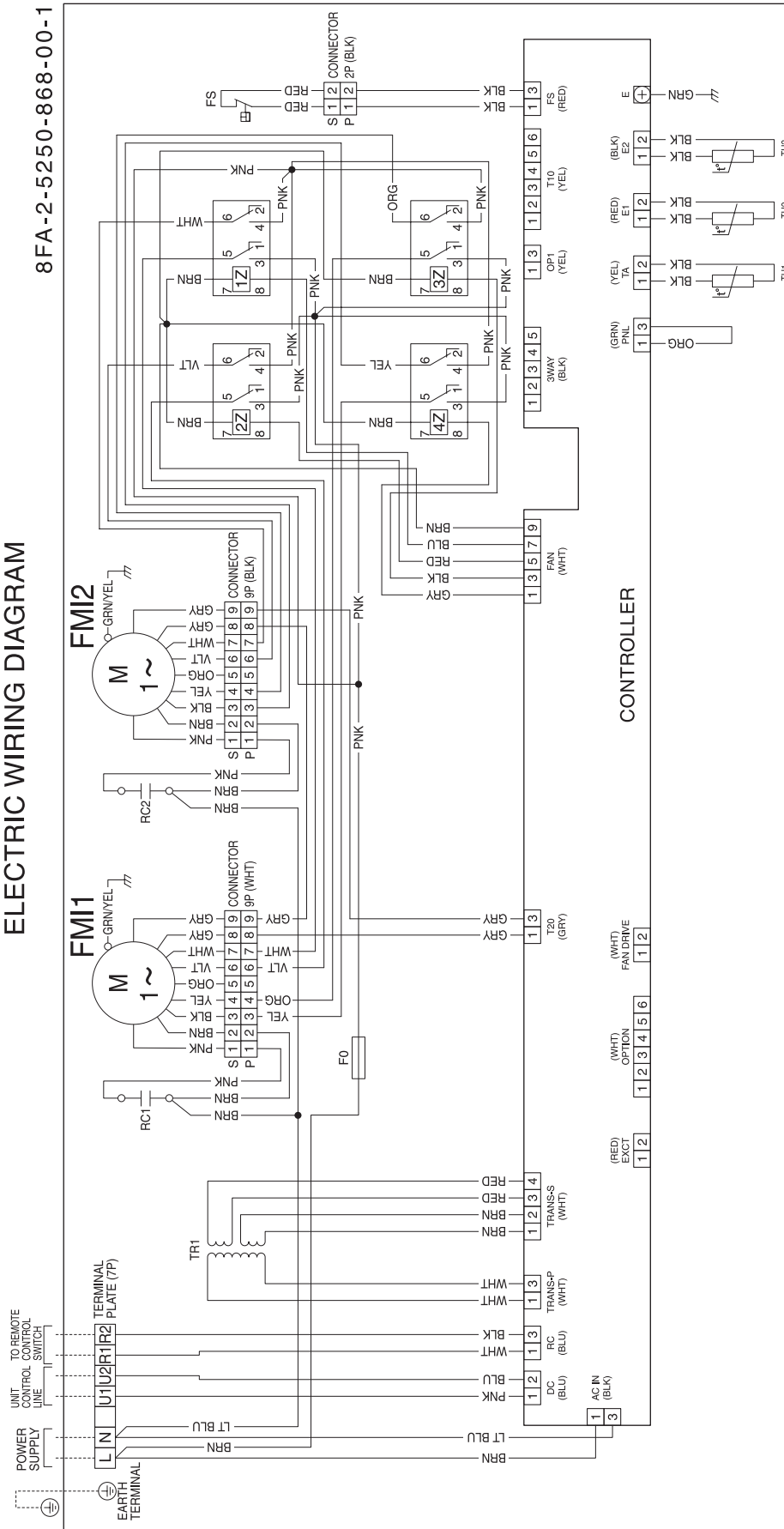


INDOOR UNIT

SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
FMI 1,2	INDOOR FAN MOTOR	F0, 1	FUSE
49FI 1,2	INDOOR MOTOR THERMAL PROTECTOR	CR	INDOOR CONTROLLER
RC1~4	RUNNING CAPACITOR	1X~3X	AUXILIARY RELAY
TR1	POWER TRANSFORMER	1Z~4Z	AUXILIARY RELAY
FS	FLOAT SWITCH	□	CONNECTOR, TERMINAL PLATE
TH1	ROOM THERMISTOR	⊕	TERMINAL
TH2	THERMISTOR (INDOOR COIL E1)	(RCS)	REMOTE CONTROL SWITCH (OPTION)
TH3	THERMISTOR (INDOOR COIL E2)	TH:	ROOM THERMISTOR

**High Static Pressure Ducted Type S-200PE1E8**  
**Electric Wiring Diagram**

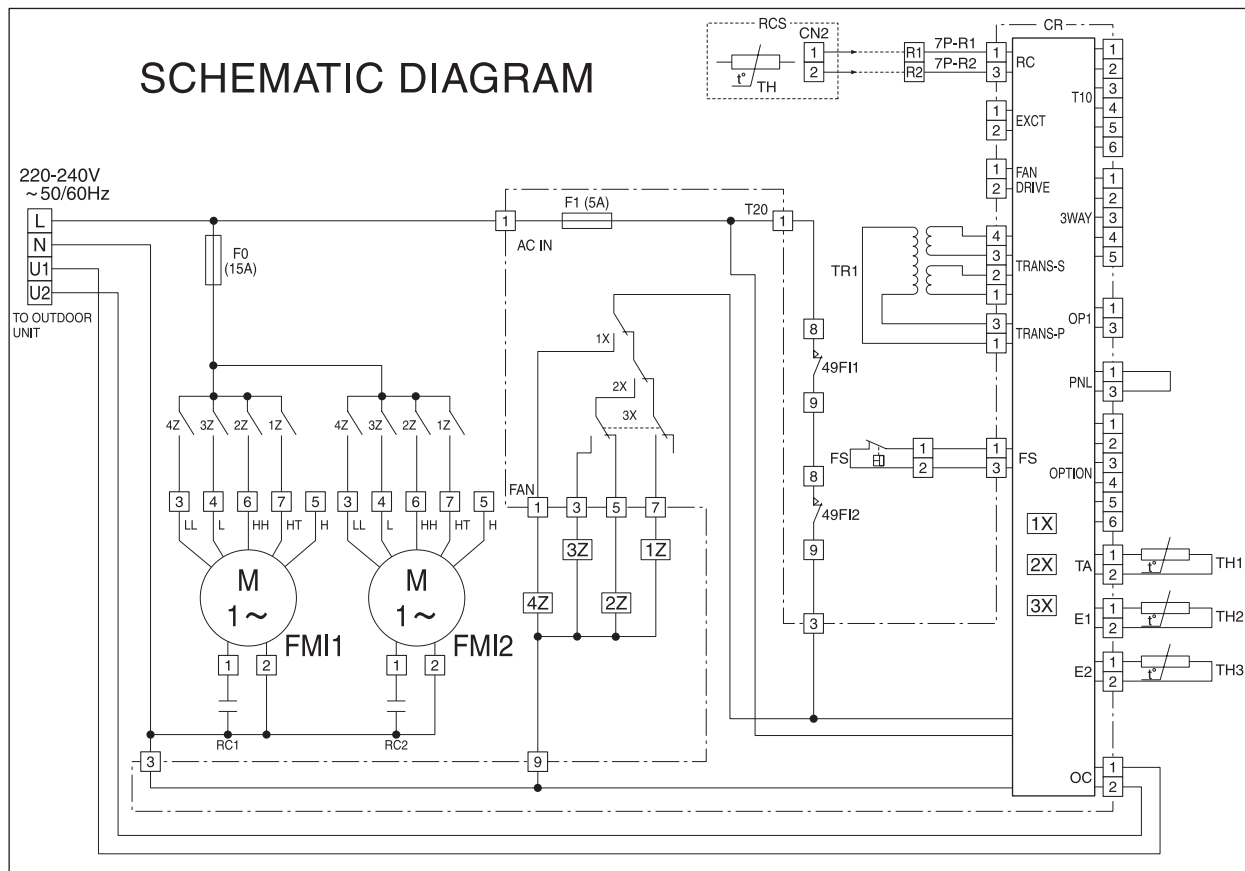
**ELECTRIC WIRING DIAGRAM**



SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
FMI 1,2	INDOOR FAN MOTOR	F0, 1	FUSE
49FT 1,2	INDOOR MOTOR THERMAL PROTECTOR	CR	INDOOR CONTROLLER
RC1,2	RUNNING CAPACITOR	1X-3X	AUXILIARY RELAY
TR1	POWER TRANSFORMER	1Z-4Z	CONNECTOR, TERMINAL PLATE
FS	FLOAT SWITCH		TERMINAL
TH1	ROOM THERMISTOR		REMOTE CONTROL SWITCH (OPTION)
TH2	THERMISTOR (INDOOR COIL E1)	(RCS)	TH-ROOM THERMISTOR
TH3	THERMISTOR (INDOOR COIL E2)		

■ High Static Pressure Ducted Type S-200PE1E8  
Schematic Diagram

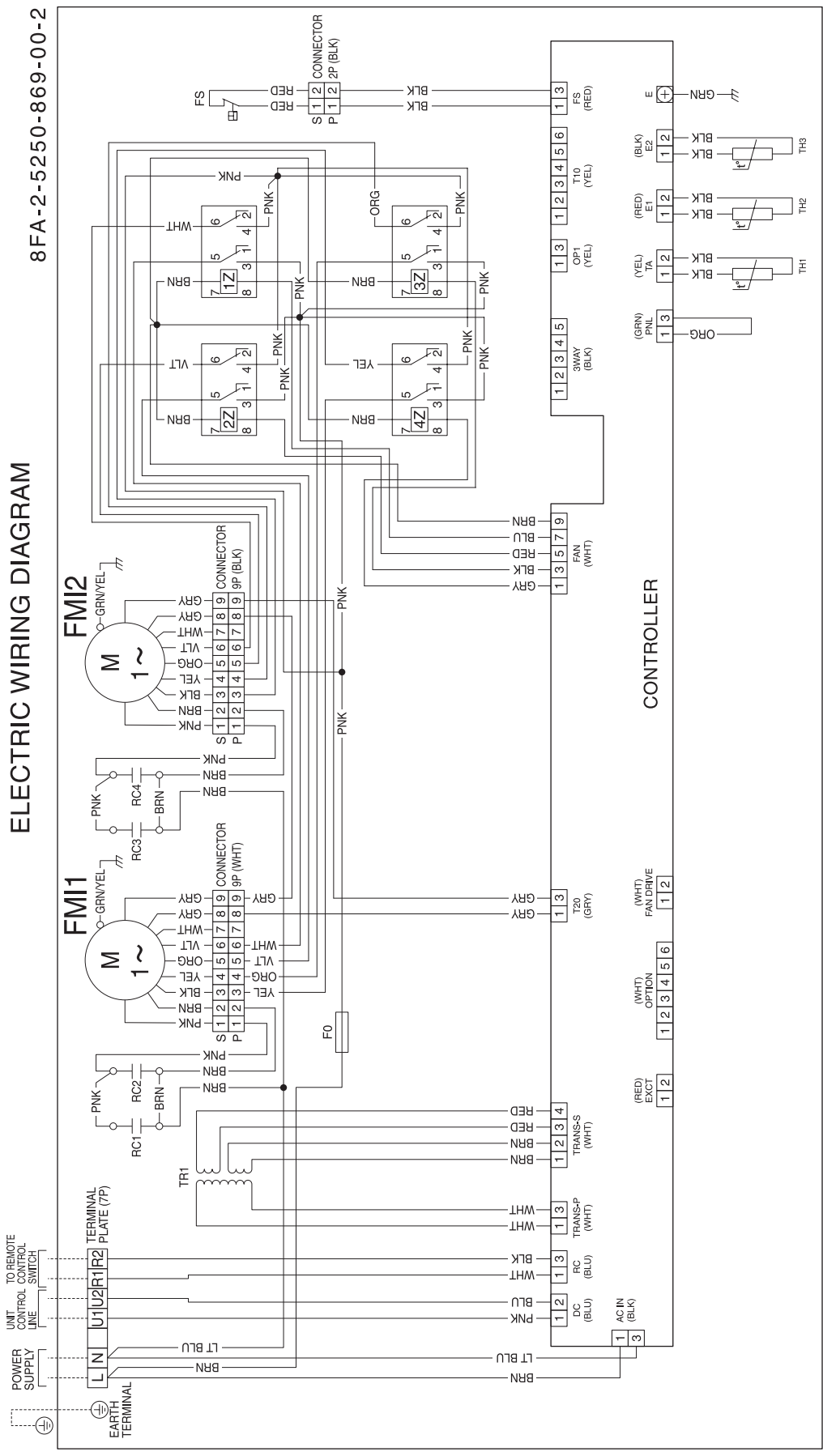
8FA-2-5250-868-00-1



INDOOR UNIT

SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
FMI 1,2	INDOOR FAN MOTOR	F0, 1	FUSE
49FI 1,2	INDOOR MOTOR THERMAL PROTECTOR	CR	INDOOR CONTROLLER
RC1,2	RUNNING CAPACITOR	1X-3X	AUXILIARY RELAY
TR1	POWER TRANSFORMER	1Z-4Z	CONNECTOR, TERMINAL PLATE
FS	FLOAT SWITCH	□	CONNECTOR, TERMINAL PLATE
TH1	ROOM THERMISTOR	⊕	TERMINAL
TH2	THERMISTOR (INDOOR COIL E1)	(RCS)	REMOTE CONTROL SWITCH (OPTION)
TH3	THERMISTOR (INDOOR COIL E2)	TH:ROOM THERMISTOR	

# High Static Pressure Ducted Type S-250PE1E8 Electric Wiring Diagram



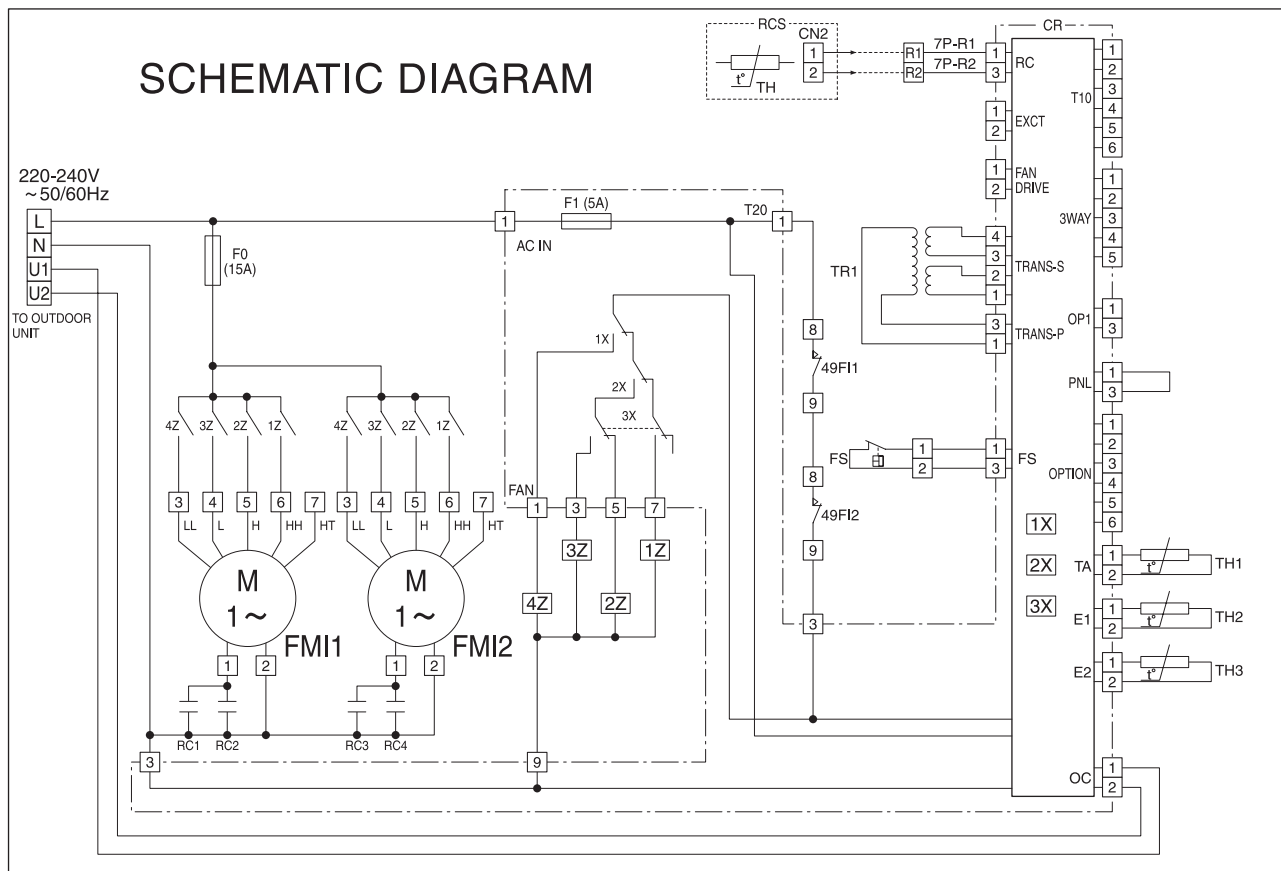
ELECTRIC WIRING DIAGRAM

8FA-2-5250-869-00-2

SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
FMI 1,2	INDOOR FAN MOTOR	F0, 1	FUSE
49FI 1,2	INDOOR MOTOR THERMAL PROTECTOR	CR	INDOOR CONTROLLER
RC1-4	RUNNING CAPACITOR	1X-3X	AUXILIARY RELAY
TR1	POWER TRANSFORMER	1Z-4Z	CONNECTOR, TERMINAL PLATE
FS	FLOAT SWITCH	+	TERMINAL
TH1	ROOM THERMISTOR	(RCS)	REMOTE CONTROL SWITCH (OPTION)
TH2	THERMISTOR (INDOOR COIL E1)		TH-ROOM THERMISTOR
TH3	THERMISTOR (INDOOR COIL E2)		

■ High Static Pressure Ducted Type S-250PE1E8  
Schematic Diagram

8FA-2-5250-869-00-2



INDOOR UNIT

SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
FMI 1,2	INDOOR FAN MOTOR	F0, 1	FUSE
49FI 1,2	INDOOR MOTOR THERMAL PROTECTOR	CR	INDOOR CONTROLLER
RC1~4	RUNNING CAPACITOR	1X~3X	AUXILIARY RELAY
TR1	POWER TRANSFORMER	1Z~4Z	AUXILIARY RELAY
FS	FLOAT SWITCH	□	CONNECTOR, TERMINAL PLATE
TH1	ROOM THERMISTOR	⊕	TERMINAL
TH2	THERMISTOR (INDOOR COIL E1)	(RCS)	REMOTE CONTROL SWITCH (OPTION)
TH3	THERMISTOR (INDOOR COIL E2)	TH:	ROOM THERMISTOR