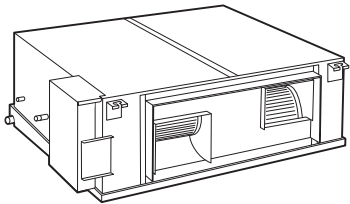
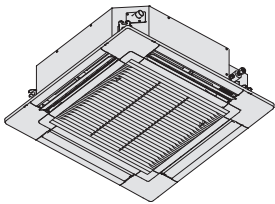
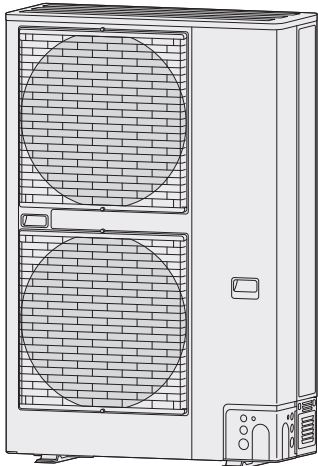


TECHNICAL DATA & SERVICE MANUAL



DC Inverter

Indoor Unit	Outdoor Unit
 High Static Pressure Ducted Type  4-Way Cassette Type Type E2 S-200PE2E5, S-250PE2E5 Type U2 S-100PU2E5A, S-125PU2E5A	 U-200PE2E8A, U-250PE2E8A

Single-Type

1-1. Unit Specifications

High Static Pressure Ducted Type S-200PE2E5 / U-200PE2E8A

INDOOR		MODEL	S-200PE2E5			-			-		
PANEL		MODEL	-			-			-		
OUTDOOR		MODEL	-			U-200PE2E8A			-		
Branch pipe		MODEL	-								
Performance test condition			ISO13253 / EN14511 / EN12102								
Power supply		Ø, Hz	1Ø 50Hz			3Ø 50Hz					
		V	220V	230V	240V	380V	400V	415V	Min	Max	
C O O L I N G	Capacity	kW	19.5	19.5	19.5	-	-	-	5.4	22.4	
		BTU/h	66500	66500	66500	-	-	-	18400	76400	
	Current	A	1.95	1.90	1.85	9.75	9.35	9.00	-	-	
		W	305	305	305	5.965k	5.965k	5.965k	-	-	
	Input power	TOTAL W	-			6.270k	6.270k	6.270k	-	-	
		TOTAL kWh *4	-	-	-	-	3135	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5 / ("A"~"G")	-	-	-	3.11	3.11/B	3.11	-	-
	Erp *6	Pdesign	kW	-	-	-	-	-	-	-	-
		SEER	(W/W)	-	-	-	-	-	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
		Class		-	-	-	-	-	-	-	-
	Power factor		%	-	-	-	93	92	92	-	-
	Noise indoor	dB-A (H/M/L)	43/41/38			-			-	-	-
		Power Level dB	75/73/70			-			-	-	-
Noise outdoor	dB-A (H/L)	-			60/-			-	-	-	
	Power Level dB	-			78/-			-	-	-	
H E A T I N G	Capacity	kW	22.4	22.4	22.4	-	-	-	5.6	25.0	
		BTU/h	76400	76400	76400	-	-	-	19100	85300	
	Current	A	1.95	1.90	1.85	9.85	9.45	9.10	-	-	
		W	305	305	305	6.015k	6.015k	6.015k	-	-	
	Input power	TOTAL W	-			6.320k	6.320k	6.320k	-	-	
		COP/COP CLASS	TOTAL (W/W) *5 / ("A"~"G")	-	-	-	3.54	3.54/B	3.54	-	-
	Erp *6	Pdesign at -10°C	kW	-	-	-	-	-	-	-	-
		Tbivalent	°C	-	-	-	-	-	-	-	-
		SCOP	(W/W)	-	-	-	-	-	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
	Power factor	Class	-	-	-	-	-	-	-	-	-
		%	-	-	-	93	92	92	-	-	-
	Noise indoor	dB-A (H/M/L)	43/41/38			-			-	-	-
		Power Level dB	75/73/70			-			-	-	-
Noise outdoor	dB-A (H/L)	-			62/-			-	-	-	
	Power Level dB	-			80/-			-	-	-	
EXTRA LOW TEMP Total capacity(kW)/Input power(W)/COP			-					-			
Max Current(A) / Max Input power(W)			6.90/1.27k	6.60/1.27k	6.30/1.27k	20.0/12.2k	20.0/12.8k	20.0/13.2k	-		
Starting current(A) / Comp output(W)			-	-	-	9.85/4.2k	9.45/4.2k	9.10/4.2k	-		
Network Impedance(ΩMAX.)			-			-			-		
Fan motor output (Indoor/Outdoor) W			560			120 × 2			-		
Moisture removal volume		L/h(Pt/h)	11.1 (23.3)			-			-		
External static pressure		Pa	60 / (140/270)			-			-		
Indoor Air flow	Cooling	m³/min (m³/h) (H/M/L)	56/51/44 (3360/3060/2640)			-			-	-	
	Heating	m³/min (m³/h) (H/M/L)	56/51/44 (3360/3060/2640)			-			-	-	
Outdoor Air flow	Cooling	m³/min (m³/h)	-			164 (9840)			-	-	
	Heating	m³/min (m³/h)	-			164 (9840)			-	-	
Refrigerant type / amount g(oz)			-			R410A 56.0k (197.5)			-		
Product dimension	Height	mm(inch)	479 (18-27/32)			1500 (59-1/16)			-		
	Width	mm(inch)	1453 (57-7/32)			980 (38-37/64)			-		
	Depth	mm(inch)	1205 (47-7/16)			370 (14-9/16)			-		
Packing dimension	Height	mm(inch)	614 (24-3/16)			1642 (64-41/64)			-		
	Width	mm(inch)	1536 (60-15/32)			1095 (43-7/64)			-		
	Depth	mm(inch)	1339 (52-23/32)			529 (20-53/64)			-		
Weight	(NET)	kg(lb)	100 (221)			127 (280)			-		
	(GROSS)	kg(lb)	132 (291)			139 (306)			-		
Layers limit (actually)			4 (5)			1 (2)			-		
Operation condition	Cool (DBT)	18°C ~ 32°C			-15°C ~ 46°C			-			
	Heat (DBT)	16°C ~ 30°C			-20°C ~ 24°C			-			
P I P E I N G	Pipe diameter mm (inch)		(Liquid)Ø9.52(3/8) (Gas)Ø25.4(1)			(Liquid)Ø9.52(3/8) (Gas)Ø25.4(1)			-		
	Connecting method, Standard length m (ft)		(Liquid)&(Gas)brazing connection, 7.5(24.6)			(Liquid)flared type (Gas)brazing connection, 7.5(24.6)			-		
	Pipe length range m (ft)		5~120m (16.4~393.7)						-		
	Indoor unit & Outdoor unit height difference m (ft)		30m(Outdoor unit located lower)/30m(Outdoor unit located higher) (98.4/98.4)						-		
N G	Add gas amount g/m (oz/ft)		(Liquid)Ø9.52(3/8): 50g (0.54)						-		
	Pipe length for additional gas m (ft)		30m (98.4)						-		

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

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

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

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

*5 EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season. Other fiche data indicates in an attached sheet.

Single-Type

High Static Pressure Ducted Type S-250PE2E5 / U-250PE2E8A

INDOOR		MODEL	S-250PE2E5			-			-		
PANEL		MODEL	-			-			-		
OUTDOOR		MODEL	-			U-250PE2E8A			-		
Branch pipe		MODEL	-								
Performance test condition			ISO13253 / EN14511 / EN12102								
Power supply		Ø, Hz	1Ø 50Hz			3Ø 50Hz					
		V	220V	230V	240V	380V	400V	415V	Min	Max	
C O O L I N G	Capacity	kW	25.0	25.0	25.0	-	-	-	6.3	28.0	
		BTU/h	85300	85300	85300	-	-	-	21500	95500	
	Current	A	3.30	3.20	3.10	13.0	12.5	12.0	-	-	
		W	560	560	560	8.040k	8.040k	8.040k	-	-	
	Input power	TOTAL W	-			8.600k	8.600k	8.600k	-	-	
		TOTAL kWh *4	-	-	-	-	4300	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5 / ("A"~"G")	-	-	-	2.91	2.91/C	2.91	-	-
	Erp *6	Pdesign	kW	-	-	-	-	-	-	-	-
		SEER	(W/W)	-	-	-	-	-	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
		Class		-	-	-	-	-	-	-	-
		Power factor	%	-	-	-	94	93	93	-	-
		Noise indoor	dB-A (H/M/L)	47/45/42			-			-	-
	Power Level dB		79/77/74			-			-	-	
	Noise outdoor	dB-A (H/L)	-			61/-			-	-	
		Power Level dB	-			80/-			-	-	
H E A T I N G	Capacity	kW	28.0	28.0	28.0	-	-	-	7.1	31.5	
		BTU/h	95500	95500	95500	-	-	-	24200	107500	
	Current	A	3.30	3.20	3.10	11.5	11.1	10.7	-	-	
		W	560	560	560	7.140k	7.140k	7.140k	-	-	
	Input power	TOTAL W	-			7.700k	7.700k	7.700k	-	-	
		COP/COP CLASS	TOTAL (W/W) *5 / ("A"~"G")	-	-	-	3.64	3.64/A	3.64	-	-
	Erp *6	Pdesign at -10°C	kW	-	-	-	-	-	-	-	-
		Tbivalent	°C	-	-	-	-	-	-	-	-
		SCOP	(W/W)	-	-	-	-	-	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
		Class		-	-	-	-	-	-	-	-
		Power factor	%	-	-	-	94	93	93	-	-
	Noise indoor	dB-A (H/M/L)	47/45/42			-			-	-	
		Power Level dB	79/77/74			-			-	-	
	Noise outdoor	dB-A (H/L)	-			63/-			-	-	
		Power Level dB	-			82/-			-	-	
EXTRA LOW TEMP Total capacity(kW)/Input power(W)/COP			-							-	
Max Current(A) / Max Input power(W)			7.30/1.66k	7.30/1.74k	7.30/1.81k	20.0/12.4k	20.0/12.9k	20.0/13.4k	-		
Startring current(A) / Comp output(W)			-	-	-	13.0/5.5k	12.5/5.5k	12.0/5.5k	-		
Network Impedance(QMAX.)			-			-			-		
Fan motor output (Indoor/Outdoor) W			750			120 × 2			-		
Moisture removal volume		L/h(Pt/h)	13.9 (29.2)			-			-		
External static pressure		Pa	72 / (140/270)			-			-		
Indoor Air flow	Cooling	m³/min (m³/h) (H/M/L)	72/63/53 (4320/3780/3180)			-			-	-	
	Heating	m³/min (m³/h) (H/M/L)	72/63/53 (4320/3780/3180)			-			-	-	
Outdoor Air flow	Cooling	m³/min (m³/h)	-			160 (9600)			-	-	
	Heating	m³/min (m³/h)	-			160 (9600)			-	-	
Refrigerant type / amount g(oz)			-			R410A 6.4k (225.8)			-		
Product dimension	Height	mm(inch)	479 (18-27/32)			1500 (59-1/16)			-		
	Width	mm(inch)	1453 (57-7/32)			980 (38-37/64)			-		
	Depth	mm(inch)	1205 (47-7/16)			370 (14-9/16)			-		
Packing dimension	Height	mm(inch)	614 (24-3/16)			1642 (64-41/64)			-		
	Width	mm(inch)	1536 (60-15/32)			1095 (43-7/64)			-		
	Depth	mm(inch)	1339 (52-23/32)			529 (20-53/64)			-		
Weight	(NET)	kg(lb)	104 (230)			138 (304)			-		
	(GROSS)	kg(lb)	136 (300)			150 (331)			-		
Layers limit (actually)			4 (5)			1 (2)			-		
Operation condition	Cool (DBT)		18°C ~ 32°C			-15°C ~ 46°C			-		
	Heat (DBT)		16°C ~ 30°C			-20°C ~ 24°C			-		
P I P E I N G	Pipe diameter mm (inch)		(Liquid)Ø12.7(1/2) (Gas)Ø25.4(1)			(Liquid)Ø12.7(1/2) (Gas)Ø25.4(1)			-		
	Connecting method, Standard length m (ft)		(Liquid)flared type (Gas)brazing connection, 7.5(24.6)			(Liquid)flared type (Gas)brazing connection, 7.5(24.6)			-		
	Pipe length range m (ft)		5~120m (16.4~393.7)						-		
	Indoor unit & Outdoor unit height difference m (ft)		30m(Outdoor unit located lower)/30m(Outdoor unit located higher) (98.4/98.4)						-		
	Add gas amount g/m (oz/ft)		(Liquid)Ø12.7(1/2): 80g (0.860)						-		
Pipe length for additional gas m (ft)			30m (98.4)						-		

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

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

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

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

*5 EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

Twin-Type

4-Way Cassette Type S-100PU2E5A ×2 / U-200PE2E8A

INDOOR		MODEL	S-100PU2E5A×2			-			-		
PANEL		MODEL	Standard type: CZ-KPU3 / ECONAVI type: CZ-KPU3A			-			-		
OUTDOOR		MODEL	-			U-200PE2E8A			-		
Branch pipe		MODEL	-			-			-		
Performance test condition			ISO5151 / EN14511 / EN12102								
Power supply		Ø, Hz	1Ø 50Hz			3Ø 50Hz					
		V	220V	230V	240V	380V	400V	415V	Min	Max	
C O O L I N G	Capacity	kW	20.0	20.0	20.0	-	-	-	5.4	22.4	
		BTU/h	68200	68200	68200	-	-	-	18400	76400	
	Current	A	0.82 ×2	0.79 ×2	0.76 ×2	9.70	9.30	9.00	-	-	
	Input power	W	100 ×2	100 ×2	100 ×2	5.940k	5.940k	5.940k	-	-	
		TOTAL W	-			6.040k	6.040k	6.040k	-	-	
	Annual consumption	TOTAL kWh *4	-	-	-	-	3020	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5 / ("A"~"G")	-	-	-	3.31	3.31/A	3.31	-	-	
	Erp *6	Pdesign	kW	-	-	-	-	-	-	-	-
		SEER	(W/W)	-	-	-	-	-	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
		Class		-	-	-	-	-	-	-	-
	Power factor	%	-	-	-	93	92	92	-	-	
	Noise indoor	dB-A (H/M/L) *7	45/38/32			-			-	-	-
		Power Level dB	60/53/47			-			-	-	-
Noise outdoor	dB-A (H/L)	-			60/-			-	-	-	
	Power Level dB	-			78/-			-	-	-	
H E A T I N G	Capacity	kW	22.4	22.4	22.4	-	-	-	5.6	25.0	
		BTU/h	76400	76400	76400	-	-	-	19100	85300	
	Current	A	0.81 ×2	0.78 ×2	0.75 ×2	8.55	8.20	7.90	-	-	
	Input power	W	95 ×2	95 ×2	95 ×2	5.165k	5.165k	5.165k	-	-	
		TOTAL W	-			5.260k	5.260k	5.260k	-	-	
	COP/COP CLASS	TOTAL (W/W) *5 / ("A"~"G")	-	-	-	4.26	4.26/A	4.26	-	-	
	Erp *6	Pdesign at -10°C	kW	-	-	-	-	-	-	-	-
		Tbivalent	°C	-	-	-	-	-	-	-	-
		SCOP	(W/W)	-	-	-	-	-	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
	Class		-	-	-	-	-	-	-	-	
	Power factor	%	-	-	-	92	91	91	-	-	
	Noise indoor	dB-A (H/M/L) *7	45/38/32			-			-	-	-
		Power Level dB	60/53/47			-			-	-	-
	Noise outdoor	dB-A (H/L)	-			62/-			-	-	-
		Power Level dB	-			80/-			-	-	-
EXTRA LOW TEMP Total capacity(kW)/Input power(W)/COP			-						-		
Max Current(A) / Max Input power(W)			0.82 ×2/ 100 ×2	0.79 ×2/ 100 ×2	0.76 ×2/ 100 ×2	20.0/12.2k	20.0/12.8k	20.0/13.2k	-		
Starting current(A) / Comp output(W)			-	-	-	9.70/4.2k	9.30/4.2k	9.0/4.2k	-		
Network Impedance(ΩMAX.)			-			-			-		
Fan motor output (Indoor/Outdoor) W			90			120 × 2			-		
Moisture removal volume			L/h(Pt/h)			-			-		
External static pressure			Pa			-			-		
Indoor Air flow *7	Cooling	m³/min (m³/h) (H/M/L)	36/26/18×2 (2160/1560/1080 ×2)			-			-	-	
	Heating	m³/min (m³/h) (H/M/L)	36/26/18×2 (2160/1560/1080 ×2)			-			-	-	
Outdoor Air flow	Cooling	m³/min (m³/h)	-			164 (9840)			-	-	
	Heating	m³/min (m³/h)	-			164 (9840)			-	-	
Refrigerant type / amount g(oz)			-			R410A 5.60k (197.5)			-		
Product dimension	Height	mm(inch)	319 (12-9/16)			1500 (59-1/16)			-		
	Width	mm(inch)	840 (33-5/64)			980 (38-37/64)			-		
	Depth	mm(inch)	840 (33-5/64)			370 (14-9/16)			-		
Product dimension (Panel)		H×W×D mm(inch)	33.5×950×950 (1-11/32 × 37-13/32 × 37-13/32)			-			-		
Packing dimension	Height	mm(inch)	365 (14-3/8)			1642 (64-41/64)			-		
	Width	mm(inch)	898 (35-3/8)			1095 (43-7/64)			-		
	Depth	mm(inch)	898 (35-3/8)			529 (20-53/64)			-		
Weight	(NET)	kg(lb)	25 (55)			127 (280)			-		
	(GROSS)	kg(lb)	32 (71)			139 (306)			-		
	Panel (NET)	kg(lb)	5 (11)			-			-		
Layers limit (actually)			11 (12)			1 (2)			-		
Operation condition	Cool (DBT)	18°C ~ 32°C			-15°C ~ 46°C			-			
	Heat (DBT)	16°C ~ 30°C			-20°C ~ 24°C			-			
P I P I N G	Pipe diameter mm (inch)		(Liquid)Ø9.52(3/8) (Gas)Ø15.88(5/8)			(Liquid)Ø9.52(3/8) (Gas)Ø25.4(1)			-		
	Connecting method, Standard length m (ft)		flared type, 7.5(24.6)			(Liquid)flared type (Gas)brazing connection, 7.5(24.6)			-		
	Pipe length range m (ft)		5~120m (16.4~393.7)			-			-		
	Indoor unit & Outdoor unit height difference m (ft)		30m(Outdoor unit located lower)/30m(Outdoor unit located higher) (98.4/98.4)			-			-		
	Add gas amount g/m (oz/ft)		(Liquid)Ø9.52(3/8): 50g (0.54)			-			-		
Pipe length for additional gas m (ft)		30m (98.4)			-			-			

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

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

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

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

*5 EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season. Other fiche data indicates in an attached sheet.

*7 H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

4-Way Cassette Type S-125PU2E5A ×2 / U-250PE2E8A

INDOOR			MODEL	S-125PU2E5A×2			-			-		
PANEL			MODEL	Standard type: CZ-KPU3 / ECONAVI type: CZ-KPU3A						-		
OUTDOOR			MODEL	-			U-250PE2E8A			-		
Branch pipe			MODEL	-								
Performance test condition				ISO5151 / EN14511 / EN12102								
Power supply			Ø, Hz	1Ø 50Hz			3Ø 50Hz					
			V	220V	230V	240V	380V	400V	415V	Min	Max	
C O O L I N G	Capacity	kW	25.0	25.0	25.0	-	-	-	6.3	28.0		
		BTU/h	85300	85300	85300	-	-	-	21500	95500		
	Current	A	0.91 ×2	0.88 ×2	0.85 ×2	13.6	13.1	12.6	-	-		
		W	110 ×2	110 ×2	110 ×2	8.420k	8.420k	8.420k	-	-		
	Input power	TOTAL W	-			8.530k	8.530k	8.530k	-	-		
		Annual consumption	TOTAL kWh *4	-	-	-	-	4265	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5 / ("A"~"G")	-	-	-	2.93	2.93/C	2.93	-	-	
	Erp *6	Pdesign	kW	-	-	-	-	-	-	-	-	
		SEER	(W/W)	-	-	-	-	-	-	-	-	
		Annual consumption	kWh	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	-	-	-	-	
		Power factor	%	-	-	-	94	93	93	-	-	
		Noise indoor	dB-A (H/M/L) *7	46/39/33				-			-	-
	Power Level dB		61/54/48				-			-	-	
	Noise outdoor	dB-A (H/L)	-				61/-			-	-	
		Power Level dB	-				80/-			-	-	
H E A T I N G	Capacity	kW	28.0	28.0	28.0	-	-	-	7.1	31.5		
		BTU/h	95500	95500	95500	-	-	-	24200	107500		
	Current	A	0.90 ×2	0.87 ×2	0.84 ×2	11.6	11.1	10.7	-	-		
		W	105 ×2	105 ×2	105 ×2	7.095k	7.095k	7.095k	-	-		
	Input power	TOTAL W	-			7.200k	7.200k	7.200k	-	-		
		COP/COP CLASS	TOTAL (W/W) *5 / ("A"~"G")	-	-	-	3.89	3.89/A	3.89	-	-	
	Erp *6	Pdesign at -10°C	kW	-	-	-	-	-	-	-	-	
		Tbivalent	°C	-	-	-	-	-	-	-	-	
		SCOP	(W/W)	-	-	-	-	-	-	-	-	
		Annual consumption	kWh	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	-	-	-	-	
		Power factor	%	-	-	-	93	92	92	-	-	
	Noise indoor	dB-A (H/M/L) *7	46/39/33				-			-	-	
		Power Level dB	61/54/48				-			-	-	
	Noise outdoor	dB-A (H/L)	-				63/-			-	-	
		Power Level dB	-				82/-			-	-	
EXTRA LOW TEMP Total capacity(kW)/Input power(W)/COP				-							-	
Max Current(A) / Max Input power(W)			0.91 ×2/ 110 ×2	0.88 ×2/ 110 ×2	0.85 ×2/ 110 ×2	20.0/12.4k	20.0/12.9k	20.0/13.4k	-			
Startring current(A) / Comp output(W)			-	-	-	13.6/5.5k	13.1/5.5k	12.6/5.5k	-			
Network Impedance(ΩMAX.)			-			-			-			
Fan motor output (Indoor/Outdoor) W			90			120 × 2			-			
Moisture removal volume			L/h(Pt/h)			9.6 (4.8×2) (20.2)			-			
External static pressure			Pa			-			-			
Indoor Air flow *7	Cooling	m³/min (m³/h) (H/M/L)	37/27/19 ×2 (2220/1620/1140 ×2)				-			-	-	
	Heating	m³/min (m³/h) (H/M/L)	37/27/19 ×2 (2220/1620/1140 ×2)				-			-	-	
Outdoor Air flow	Cooling	m³/min (m³/h)	-				160 (9600)			-	-	
	Heating	m³/min (m³/h)	-				160 (9600)			-	-	
Refrigerant type / amount g(oz)			-			R410A 6.40k (225.8)			-			
Product dimension		Height mm(inch)	319 (12-9/16)			1500 (59-1/16)			-			
		Width mm(inch)	840 (33-5/64)			980 (38-37/64)			-			
		Depth mm(inch)	840 (33-5/64)			370 (14-9/16)			-			
Product dimension (Panel)		H×W×D mm(inch)	33.5×950×950 (1-11/32 × 37-13/32 × 37-13/32)						-			
Packing dimension		Height mm(inch)	365 (14-3/8)			1642 (64-41/64)			-			
		Width mm(inch)	898 (35-3/8)			1095 (43-7/64)			-			
		Depth mm(inch)	898 (35-3/8)			529 (20-53/64)			-			
Weight		(NET) kg(lb)	25 (55)			138 (304)			-			
		(GROSS) kg(lb)	32 (71)			150 (331)			-			
		Panel (NET) kg(lb)	5 (11)			-			-			
Layers limit (actually)			11 (12)			1 (2)			-			
Operation condition		Cool (DBT)	18°C ~ 32°C			-15°C ~ 46°C			-			
		Heat (DBT)	16°C ~ 30°C			-20°C ~ 24°C			-			
P I P I N G	Pipe diameter mm (inch)		(Liquid)Ø9.52(3/8) (Gas)Ø15.88(5/8)			(Liquid)Ø12.7(1/2) (Gas)Ø25.4(1)			-			
	Connecting method, Standard length m (ft)		flared type, 7.5(24.6)			(Liquid)flared type (Gas)brazing connection, 7.5(24.6)			-			
	Pipe length range m (ft)		5~120m (16.4~393.7)						-			
	Indoor unit & Outdoor unit height difference m (ft)		30m(Outdoor unit located lower)/30m(Outdoor unit located higher) (98.4/98.4)						-			
	Add gas amount g/m (oz/ft)		(Liquid)Ø12.7(1/2): 80g (0.860)						-			
Pipe length for additional gas m (ft)		30m (98.4)						-				

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

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

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

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

*5 EER and COP classification is at 230V(400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season. Other fiche data indicates in an attached sheet.

*7 H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

1-2. Major Component Specifications

(A) Indoor Units

High Static Pressure Ducted Type S-200PE2E5

MODEL No.		S-200PE2E5
Source		220 - 230 - 240V, single-phase, 50Hz
Controller P.C.B. Ass'y		CR-280ME2E5
Fan (Number...diameter)	mm	SIROCCO (2...ø250)
Fan motor		
Model...Nominal output	W	DMUB6D1AC...560W DMUB6D2AC...560W
Power source		100 - 391 VDC
No. of pole...r.p.m. (230V, High)	rpm	8P...860
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		—
Coil resistance (at 20°C)	Ω	—
Valve body		—
Heat exchanger		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	3...1.8
Face area	m ²	0.648

(A) Indoor Units**High Static Pressure Ducted Type S-250PE2E5**

MODEL No.		S-250PE2E5
Source		220 - 230 - 240V, single-phase, 50Hz
Controller P.C.B. Ass'y		CR-280ME2E5
Fan (Number...diameter)	mm	SIROCCO (2...ø250)
Fan motor		
Model...Nominal output	W	DMUB8D1AC...560W DMUB8D2AC...560W
Power source		100 - 391 VDC
No. of pole...r.p.m. (230V, High)	rpm	8P...1020
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		—
Coil resistance (at 20°C)	Ω	—
Valve body		—
Heat exchanger		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	4...1.8
Face area	m ²	0.648

(A) Indoor Units

4-Way Cassette Type S-100PU2E5A

MODEL No.		S-100PU2E5A
Source		220 - 230 - 240 V, single-phase, 50 Hz
Controller P.C.B. Ass'y		ACXA73-02060(Microprocessor)
Fan (Number...diameter)	mm	Turbo (1...ø485)
Fan motor		
Model...Nominal output	W	SIC-72FW-D895-1...90W
Power source		280 VDC
No. of pole...r.p.m. (230V, High)	rpm	8P...600
Run capacitor	VAC, µF	
Safety device		overcurrent, rotating signal detection, fuse
Heat exchanger		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	3...1.15
Face area	m ²	0.560
Panel		
Model No.		CZ-KPU3
Auto louver motor		MSBPC20A20
Coil resistance	Ω	300 Ω ± 7% / phase
Drain pump		
Model No.		PMD-12D13ST-7
Rated	V, W	DC 13 V, 4.2 W
Drain piping rise height from unit bottom, capacity		850 mm, 400 cc/min

(A) Indoor Units

4-Way Cassette Type S-125PU2E5A

MODEL No.		S-125PU2E5A
Source		220 - 230 - 240 V, single-phase, 50 Hz
Controller P.C.B. Ass'y		ACXA73-02060(Microprocessor)
Fan (Number...diameter)	mm	Turbo (1...ø485)
Fan motor		
Model...Nominal output	W	SIC-72FW-D895-1...90W
Power source		280 VDC
No. of pole...r.p.m. (230V, High)	rpm	8P...620
Run capacitor	VAC, µF	
Safety device		overcurrent, rotating signal detection, fuse
Heat exchanger		
Coil		Aluminium plate fin / Copper tube
Rows...fin pitch	mm	3...1.15
Face area	m ²	0.560
Panel		
Model No.		CZ-KPU3
Auto louver motor		MSBPC20A20
Coil resistance	Ω	300 Ω ± 7% / phase
Drain pump		
Model No.		PMD-12D13ST-7
Rated	V, W	DC 13 V, 4.2 W
Drain piping rise height from unit bottom, capacity		850 mm, 400 cc/min

(B) Outdoor Units

U-200PE2E8A

MODEL No.			U-200PE2E8A		
Source			380/400/415V 3-Phase 50Hz		
Controller P.C.B. Ass'y			ACXA73C07280		
Control circuit fuse			30A		
Compressor					
Model....number			5JD650XDB22		
Source			520V DC MOTOR		
Nominal output		W	4,200		
Compressor oil		cc	2,050		
Coil resistance (Ambient temperature 25°C)		Ω	U-V 0.678	U-W 0.700	V-W 0.691
Safety control			Discharge temperature control		
Overload relay models			—		
Operation temperature		Open °C	—		
		Close °C	—		
Crank case heater		W	230V-36W		
Refrigerant amount at shipment			kg		
High pressure switch					
Set pressure		OFF MPa	4.15 ⁺⁰ _{-0.2}		
		ON MPa	3.05±0.2		
Fan					
Number...diameter		mm	2...ø540		
Air circulation		m³ / h	164		
Fan speeds (Max.)					
Fan motor					
Model No.			NFD-81FW-D8120-1, NFD-81FW-D8120-2		
Source			~280V / 1-phase		
No. of pole			8		
Nominal output		W	120		
Safety device			—		
Operating temperature		Open °C	—		
		Close °C	—		
Run capacitor		VAC, µF	—		
Heat exchanger					
Coil			Aluminium plate fin / Copper tube		
Rows...fin pitch		mm	2..17FPI		
Face area		m²	1.367		

(B) Outdoor Units

U-250PE2E8A

MODEL No.			U-250PE2E8A		
Source			380/400/415V 3-Phase 50Hz		
Controller P.C.B. Ass'y			ACXA73C07260		
Control circuit fuse			30A		
Compressor					
Model....number			5JD650XDB22		
Source			520V DC MOTOR		
Nominal output		W	5,500		
Compressor oil		cc	2,050		
Coil resistance (Ambient temperature 25°C)		Ω	U-V 0.678	U-W 0.700	V-W 0.691
Safety control			Discharge temperature control		
Overload relay models			—		
Operation temperature		Open °C	—		
		Close °C	—		
Crank case heater		W	230V-36W		
Refrigerant amount at shipment			kg		
High pressure switch					
Set pressure		OFF MPa	4.15 ⁺⁰ _{-0.2}		
		ON MPa	3.05±0.2		
Fan					
Number...diameter		mm	2...ø540		
Air circulation		m³ / h	160		
Fan speeds (Max.)					
Fan motor					
Model No.			NFD-81FW-D8120-1, NFD-81FW-D8120-2		
Source			~280V / 1-phase		
No. of pole			8		
Nominal output		W	120		
Safety device			—		
Operating temperature		Open °C	—		
		Close °C	—		
Run capacitor		VAC, µF	—		
Heat exchanger					
Coil			Aluminium plate fin / Copper tube		
Rows...fin pitch		mm	3..17FPI		
Face area		m²	1.367		

1-3. Other Component Specifications

Outdoor Units U-200PE2E8A

MODEL No.		Outdoor Unit	U-200PE2E8A		
Power Transformer					
	Rated		—		
	Source	VAC, Hz	—		
	Secondary		—		
			—		
	Coil resistance		Ω		
Thermal cut off temperature				—	
Thermistor (Coil / Air sensor): TH1, TH2, TH3, TH4					
	Resistance		kΩ	-20℃ : 38.48±2%	20℃ : 6.517±2%
				-10℃ : 23.67±2%	30℃ : 4.448±2%
				0℃ : 15.00±2%	40℃ : 3.100±2%
				5℃ : 12.06±2%	45℃ : 2.607±2%
				10℃ : 9.765±2%	50℃ : 2.203±2%
Thermistor (Discharge gas sensor): TH5					
	Resistance		kΩ	60℃ : 1.593±2%	85℃ : 0.7598±2%
				65℃ : 1.363±2%	90℃ : 0.6623±2%
				70℃ : 1.171±2%	95℃ : 0.5793±2%
				75℃ : 1.010±2%	100℃ : 0.5083±2%
				80℃ : 0.8746±2%	105℃ : 0.4473±2%
Relay (Comp. Magnetic Contactor)					
	Coil rated	VAC	—		
	Contact rating	VAC, A	—		
	Coil resistance (at 20℃)	Ω	—		
Sol-Control-Valve					
	Sol-control-valve		UKV32D322		
	Magnetic coil		UKV-A392		
4 way valve					
	4 way valve		SHF-20B-46-DC		
	Electro magnetic coil		SQ-D23015-002283 DC15.4V(898mA)		

Outdoor Units U-250PE2E8A

MODEL No.		Outdoor Unit	U-250PE2E8A		
Power Transformer					
	Rated		—		
	Source	VAC, Hz	—		
	Secondary		—		
			—		
	Coil resistance		Ω	—	
Thermal cut off temperature			—		
Thermistor (Coil / Air sensor): TH1, TH2, TH3, TH4					
	Resistance		kΩ	-20°C : 38.48±2% 20°C : 6.517±2%	
				-10°C : 23.67±2% 30°C : 4.448±2%	
				0°C : 15.00±2% 40°C : 3.100±2%	
				5°C : 12.06±2% 45°C : 2.607±2%	
				10°C : 9.765±2% 50°C : 2.203±2%	
Thermistor (Discharge gas sensor): TH5					
	Resistance		kΩ	60°C : 1.593±2% 85°C : 0.7598±2%	
				65°C : 1.363±2% 90°C : 0.6623±2%	
				70°C : 1.171±2% 95°C : 0.5793±2%	
				75°C : 1.010±2% 100°C : 0.5083±2%	
				80°C : 0.8746±2% 105°C : 0.4473±2%	
Relay (Comp. Magnetic Contactor)					
	Coil rated	VAC	—		
	Contact rating	VAC, A	—		
	Coil resistance (at 20°C)	Ω	—		
Sol-Control-Valve					
	Sol-control-valve		UKV32D322		
	Magnetic coil		UKV-A392		
4 way valve					
	4 way valve		SHF-35B-67-03		
	Electro magnetic coil		SQ-A2522G-005129 AC220-240V 50/60Hz		

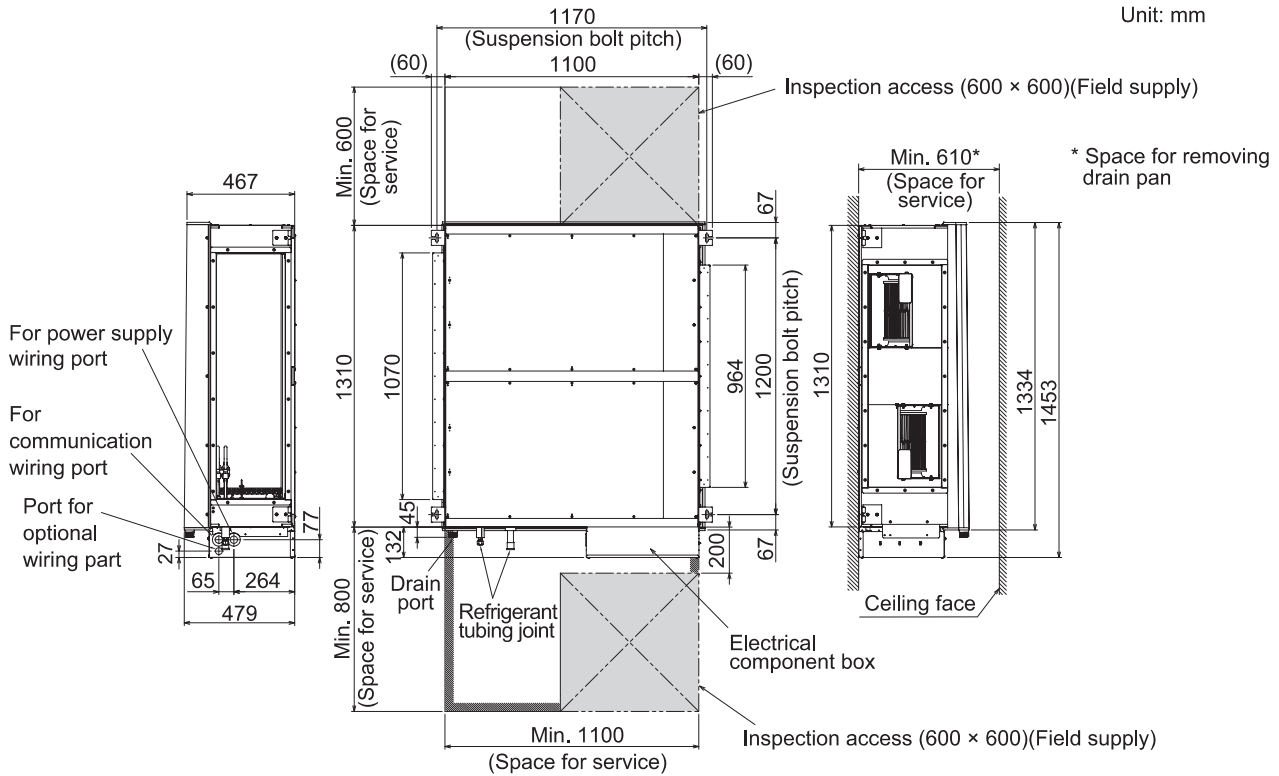
1-4. Dimensional Data

(A) Indoor Units: High Static Pressure Ducted Type

Required Minimum Space for Installation and Service

(1) Dimensions of suspension bolt pitch and unit

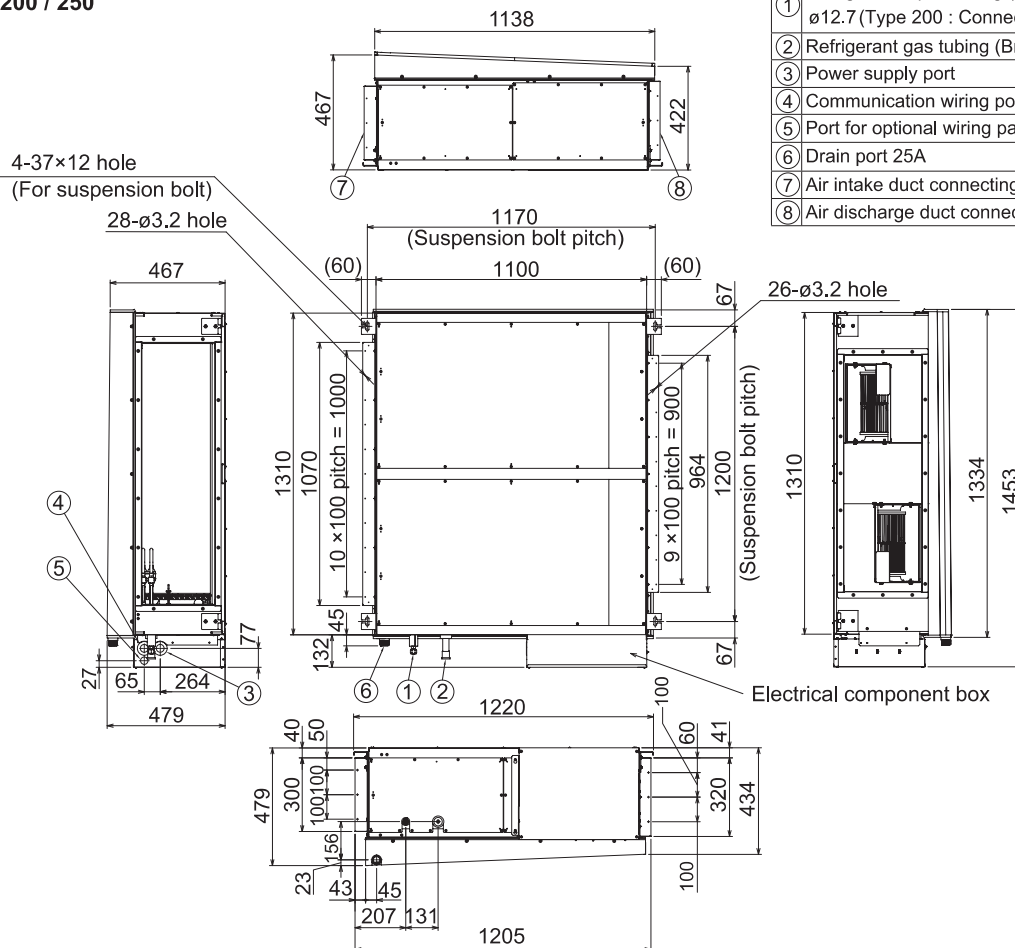
Unit: mm



(2) Dimensions of indoor unit

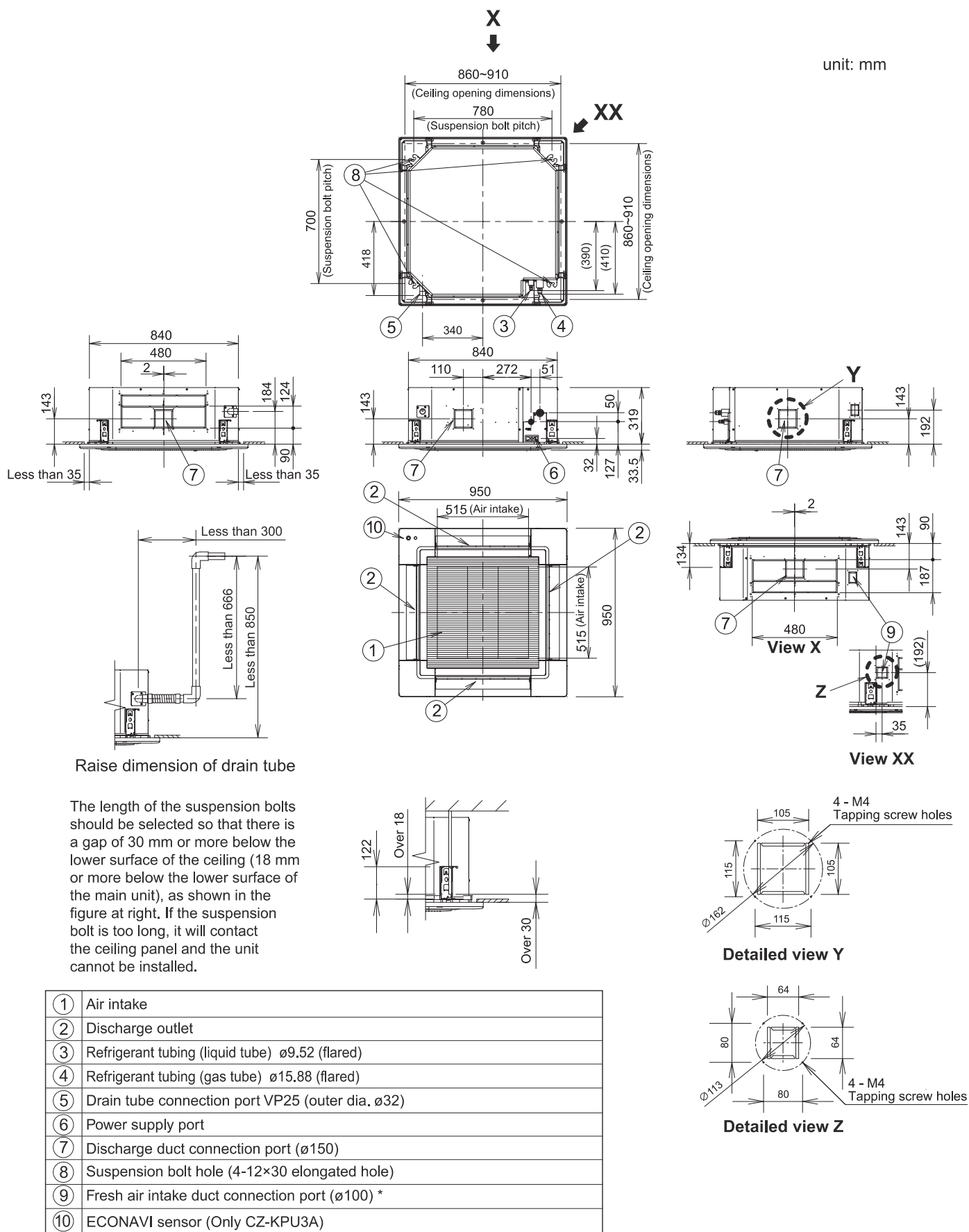
Types 200 / 250

Unit : mm



①	Refrigerant liquid tubing (Flare) ø12.7 (Type 200 : Connection Tubing ø12.7 → ø9.52)
②	Refrigerant gas tubing (Brazing) ø25.4
③	Power supply port
④	Communication wiring port
⑤	Port for optional wiring part
⑥	Drain port 25A
⑦	Air intake duct connecting side flange
⑧	Air discharge duct connecting side flange

(A) Indoor Units: 4-Way Cassette Type
S-100PU2E5A / S-125PU2E5A



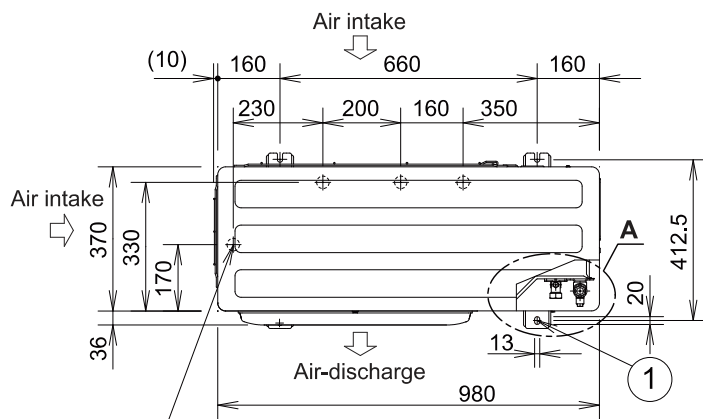
* Necessary to attach duct connecting flange(field supplied).

<Filter dimension>

520 x 520 x 15

(B) Outdoor Unit: U-200PE2E8A

Unit: mm



4× ϕ 32 holes (holes for drain)

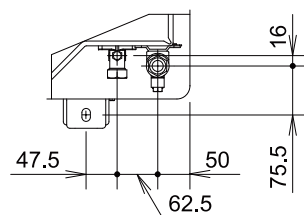
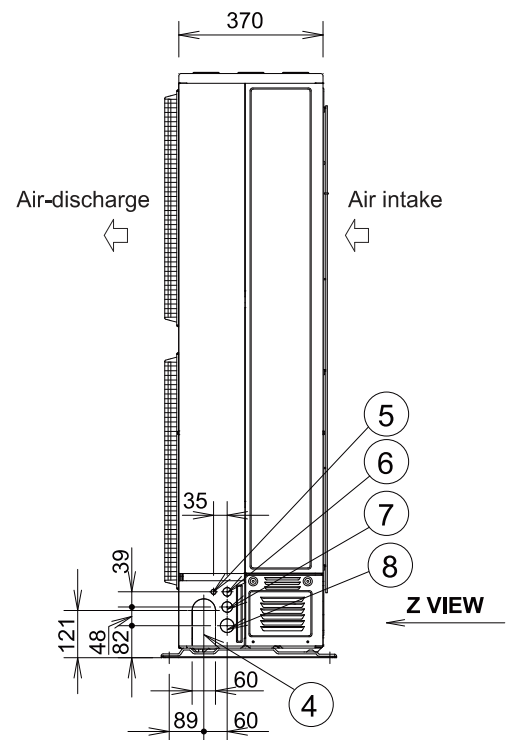
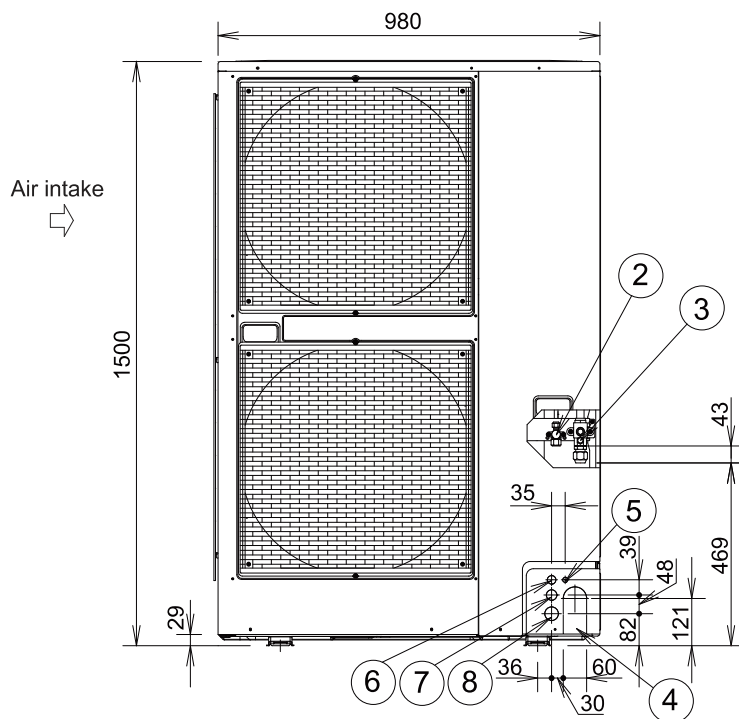
When using a drain pipe, install the drain socket (field supply) onto the drain port. Seal the other drain port with the rubber cap.

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) *1
④	Refrigerant tubing port
⑤	Electrical wiring port (ø13)
⑥	Electrical wiring port (ø22)
⑦	Electrical wiring port (ø27)
⑧	Electrical wiring port (ø35)

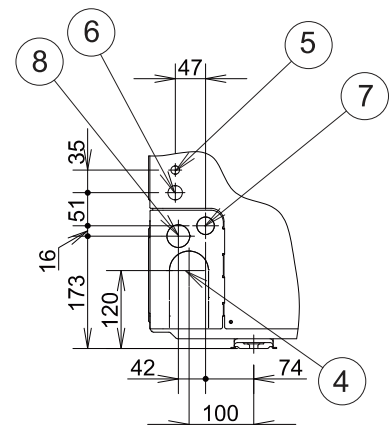
Specification for pipe connecting indoor unit to outdoor unit.

Model name		U-200PE2E8A
Piping Connections	Liquid side	ø9.52
	Gas side	ø25.4

*1 (Gas piping connection) While the main gas side pipe is $\phi 25.4$, since connecting the outdoor unit's 3-way valve requires a $\phi 19.05$ flare, please be sure to use standard accessories joint piping B or A for connection (brazing), and connect as follows.



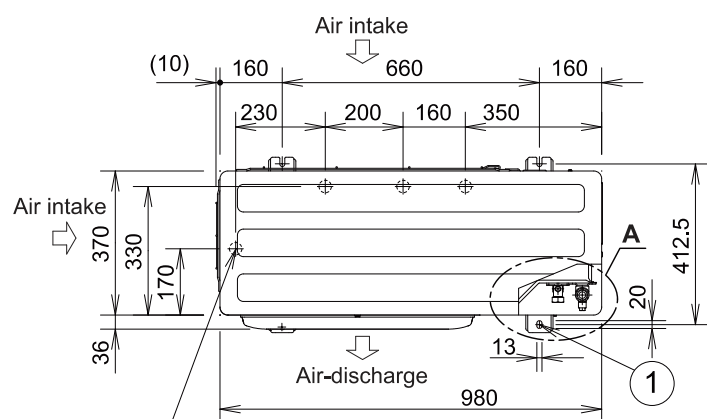
A VIEW



Z VIEW

(B) Outdoor Unit: U-250PE2E8A

Unit: mm

4× ϕ 32 holes (holes for drain)

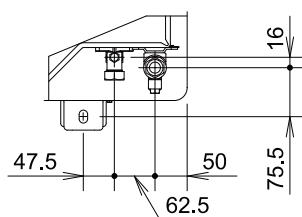
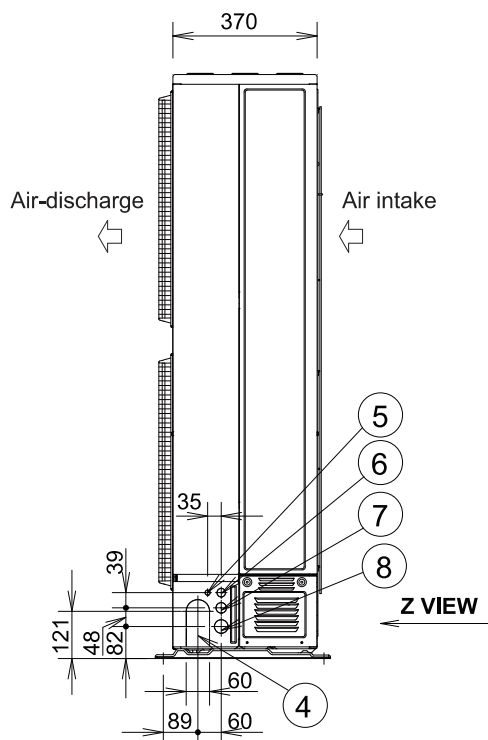
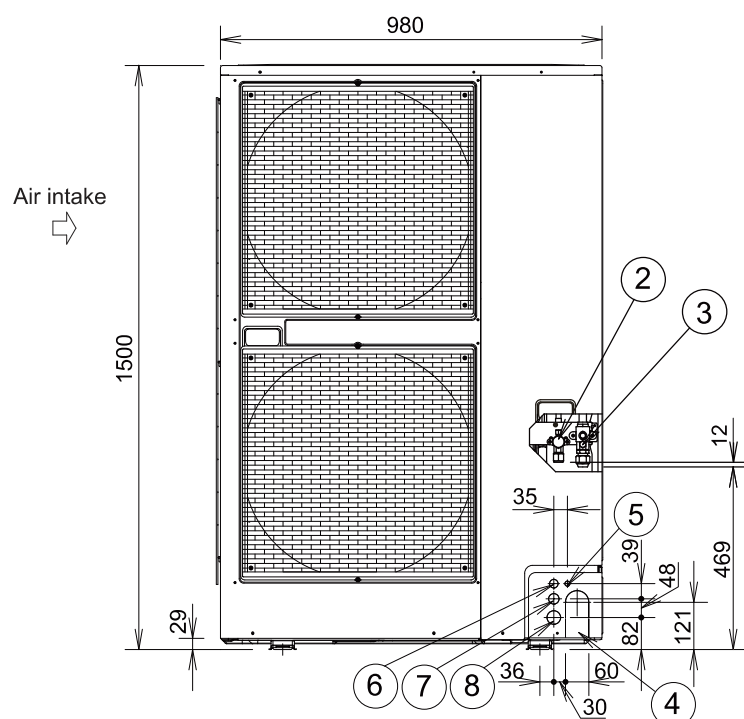
When using a drain pipe, install the drain socket (field supply) onto the drain port. Seal the other drain port with the rubber cap.

①	Mounting hole (4-R6.5), anchor bolt : M10
②	Refrigerant tubing (liquid tube), flared connection (ϕ 12.7)
③	Refrigerant tubing (gas tube), flared connection (ϕ 19.05)*1
④	Refrigerant tubing port
⑤	Electrical wiring port (ϕ 13)
⑥	Electrical wiring port (ϕ 22)
⑦	Electrical wiring port (ϕ 27)
⑧	Electrical wiring port (ϕ 35)

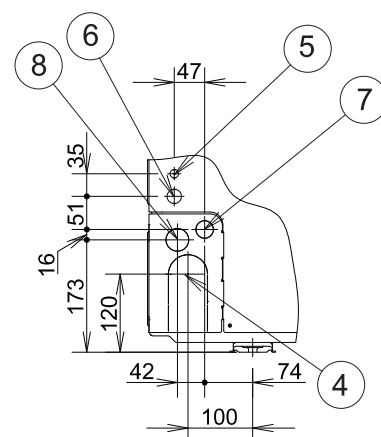
Specification for pipe connecting indoor unit to outdoor unit.

Model name		U-250PE2E8A
Piping Connections	Liquid side	ϕ 12.7
	Gas side	ϕ 25.4

*1 (Gas piping connection) While the main gas side pipe is ϕ 25.4, since connecting the outdoor unit's 3-way valve requires a ϕ 19.05 flare, please be sure to use standard accessories joint piping B or A for connection (brazing), and connect as follows.



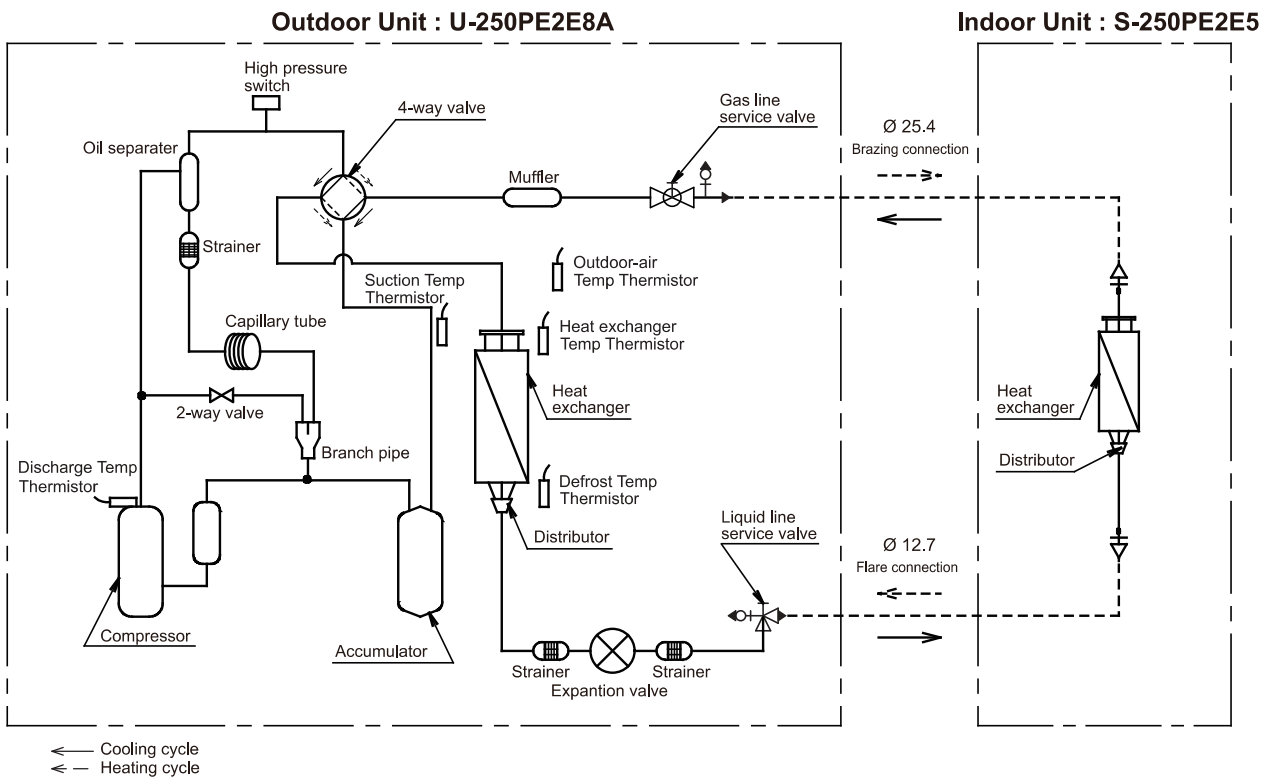
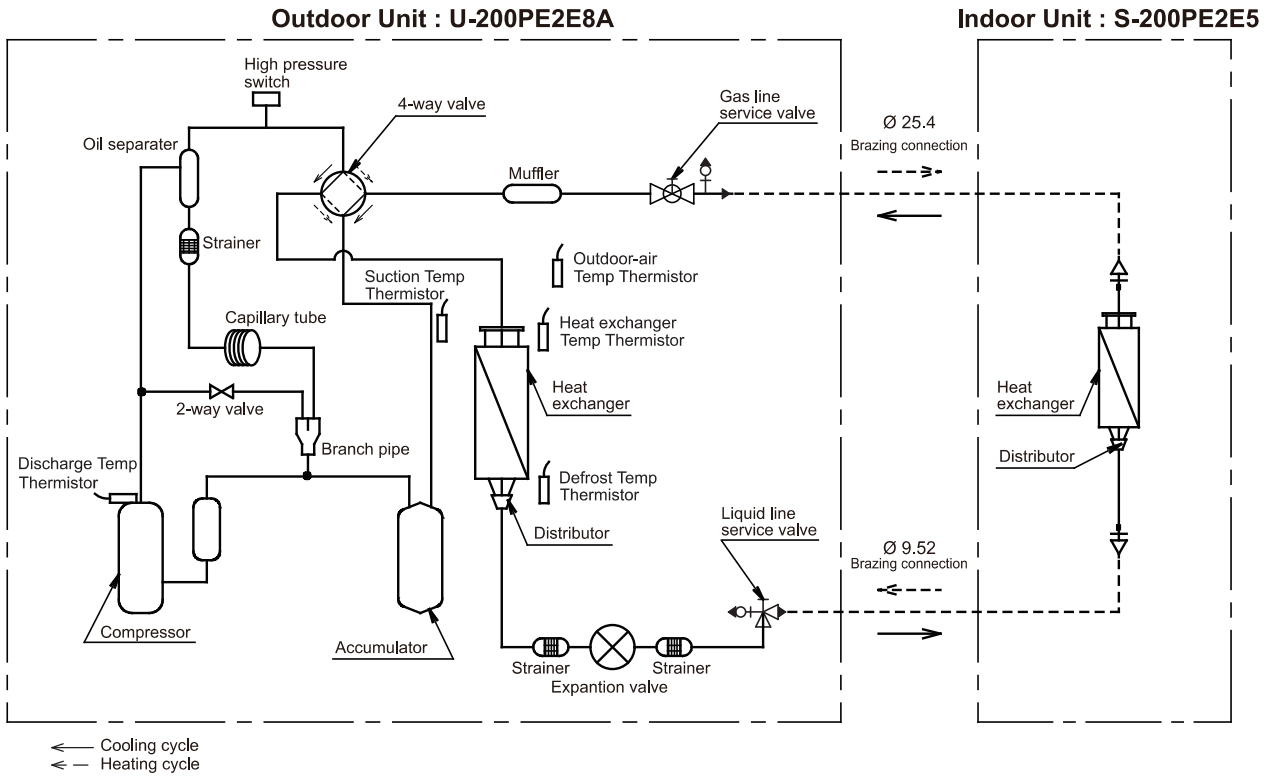
A VIEW



Z VIEW

1-5. Refrigerant Flow Diagram

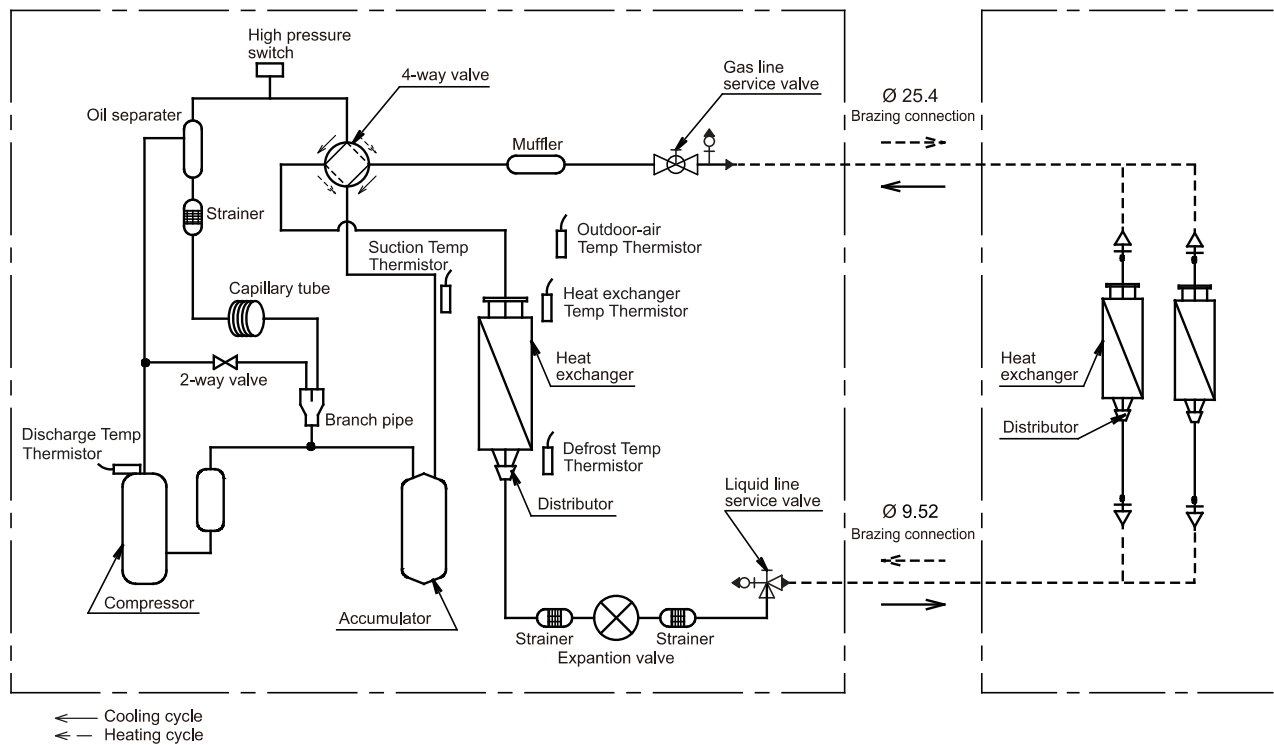
← Cooling cycle
 ← - Heating cycle



← Cooling cycle
 ← - Heating cycle

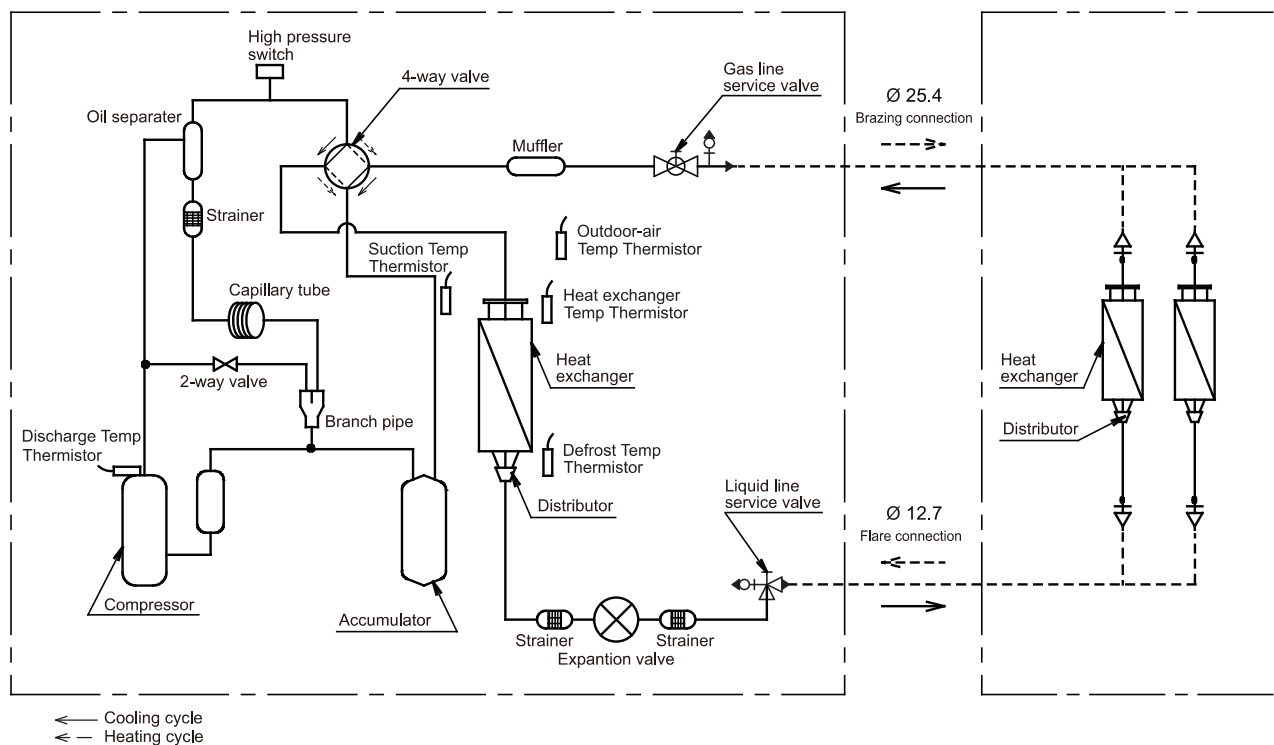
Outdoor Unit : U-200PE2E8A

Indoor Unit : S-100PU2E5A×2



Outdoor Unit : U-250PE2E8A

Indoor Unit : S-125PU2E5A×2



1-6. Operating Range

S-200PE2E5 – U-200PE2E8A

S-250PE2E5 – U-250PE2E8A

	Temperature	Indoor air intake temp.	Outdoor air intake temp.
Cooling	Maximum	32°C DB	46°C DB
	Minimum	18°C DB	-15°C DB
Heating	Maximum	30°C DB	24°C DB
	Minimum	16°C DB	-20°C DB

S-100PU2E5A ×2 – U-200PE2E8A

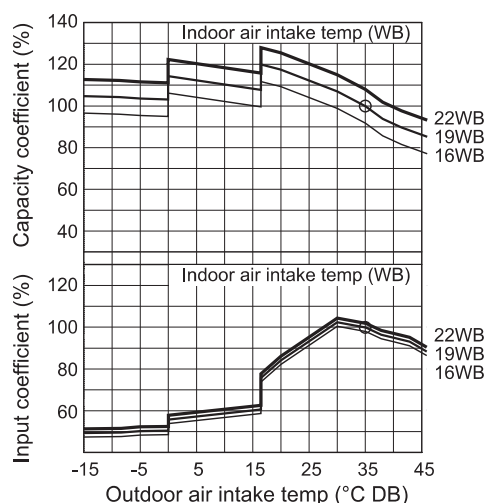
S-125PU2E5A ×2 – U-250PE2E8A

	Temperature	Indoor air intake temp.	Outdoor air intake temp.
Cooling	Maximum	32°C DB	46°C DB
	Minimum	18°C DB	-15°C DB
Heating	Maximum	30°C DB	24°C DB
	Minimum	16°C DB	-20°C DB

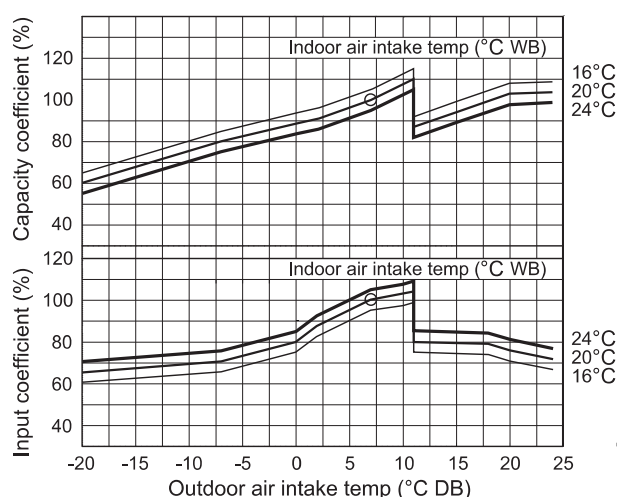
1-7. Capacity Correction Graph According to Temperature Condition

U-200PE2E8A / U-250PE2E8A (For 50 Hz)

① Cooling capacity ratio (maximum capacity)



Heating capacity ratio (maximum capacity)



NOTE 1

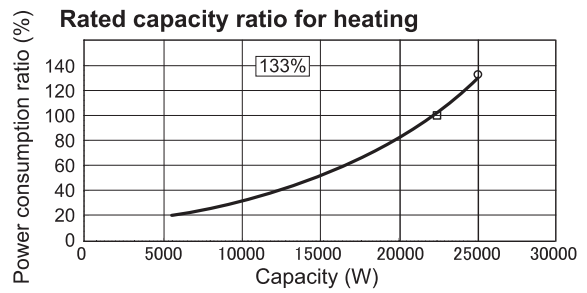
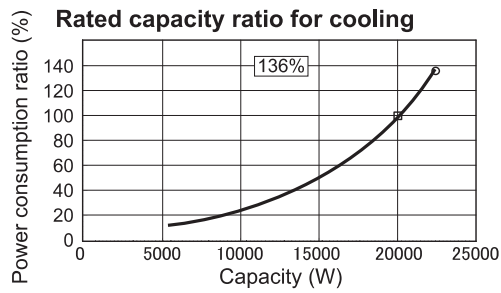
- The graphs "①" of the characteristics show the value under the following conditions.
 Equivalent tubing length : 7.5m
 Difference of elevation : 0m
 Wind speed : High
- "○" marking indicates the maximum capacity / maximum power consumption under the JIS condition.
 Maximum capacity indicates the maximum 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).

Outdoor unit heating capacity correction coefficient during of frosting / defrosting (RH approximately 85%)

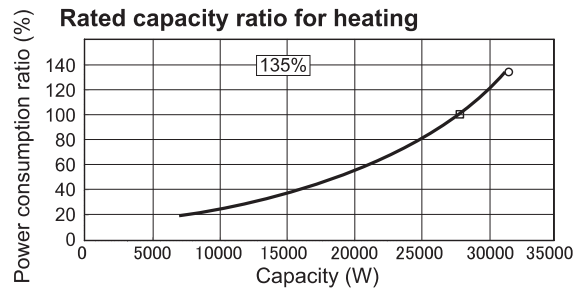
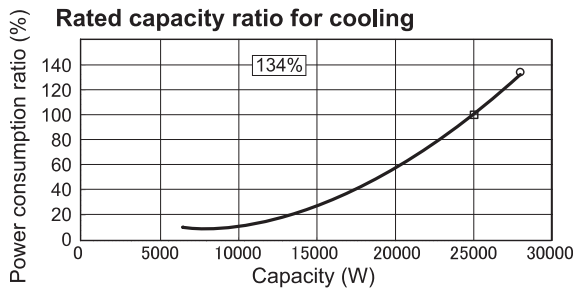
Outdoor intake air temperature °C WB	-20	-15	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7
Correction coefficient	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.86	0.83	0.83	0.82	0.82	0.83	0.83	0.85	0.89	0.91	0.95	1.0

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.

② U-200PE2E8A



② U-250PE2E8A

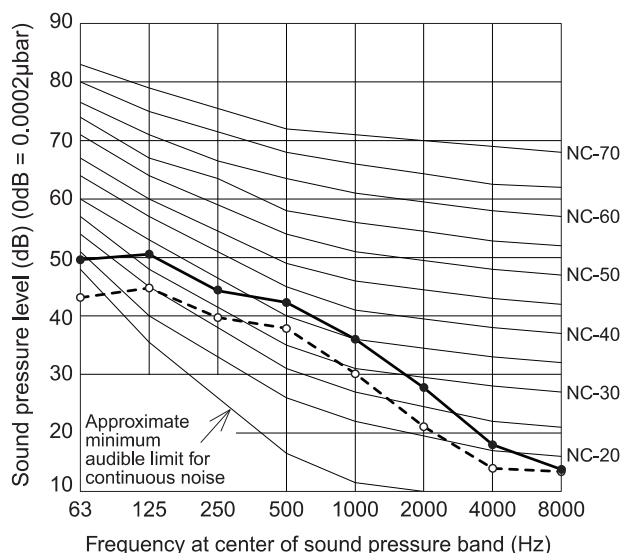
**NOTE 2**

- 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).

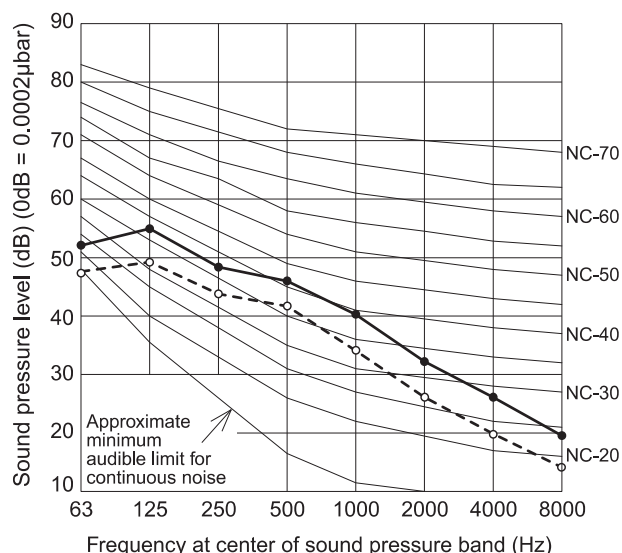
1-8. Noise Criterion Curves

High Static Pressure Ducted Type

MODEL	: S-200PE2E5
SOUND LEVEL	: HIGH 43 dB(A)
	: LOW 38 dB(A)
CONDITION	: Under the unit 1.5 m

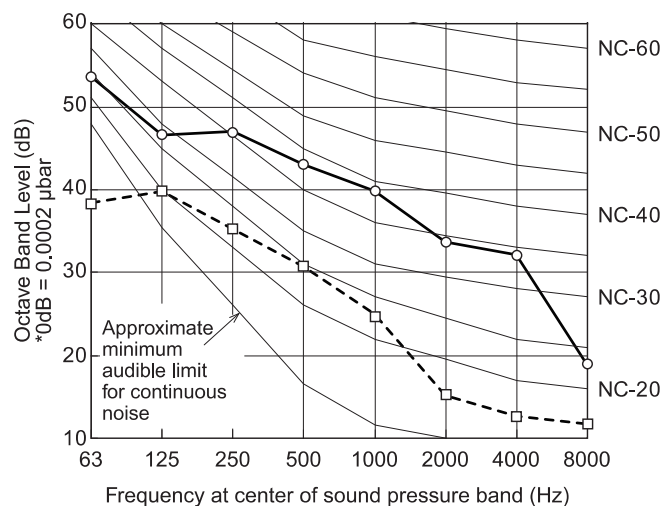


MODEL	: S-250PE2E5
SOUND LEVEL	: HIGH 47 dB(A)
	: LOW 42 dB(A)
CONDITION	: Under the unit 1.5 m

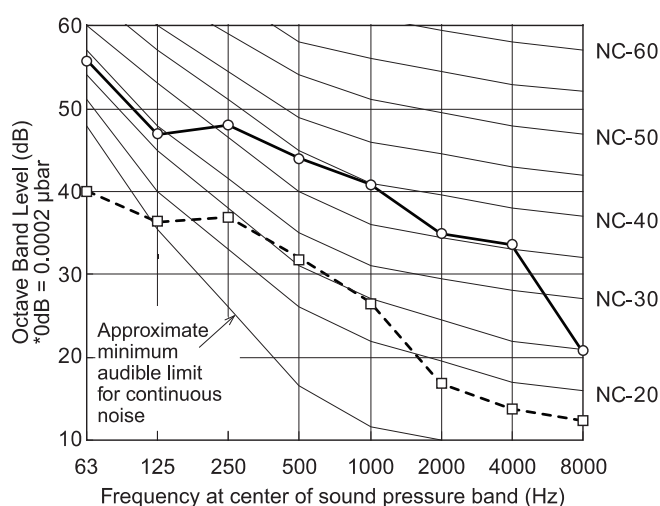


4-Way Cassette Type

MODEL	: S-100PU2E5A
SOUND LEVEL	: High 45 dB(A)
	: Low 32 dB(A)
CONDITION	: Under the unit 1.5m
SOURCE	: 220-240V, 1 phase, 50Hz



MODEL	: S-125PU2E5A
SOUND LEVEL	: High 46 dB(A)
	: Low 33 dB(A)
CONDITION	: Under the unit 1.5m
SOURCE	: 220-240V, 1 phase, 50Hz



REMARKS:

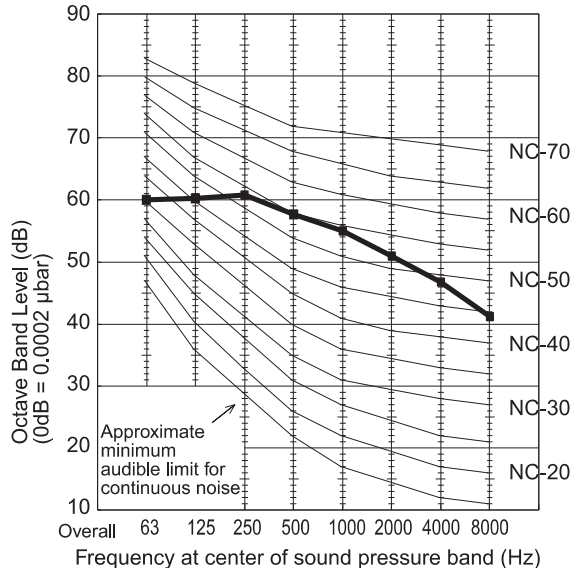
- Value obtained in the actual place where the unit is installed may be slightly higher than the values shown in this graph because of the conditions of operation, the structure of the building, the background noise and other factors.
- The test results were obtained from an anechoic room.

NOTE

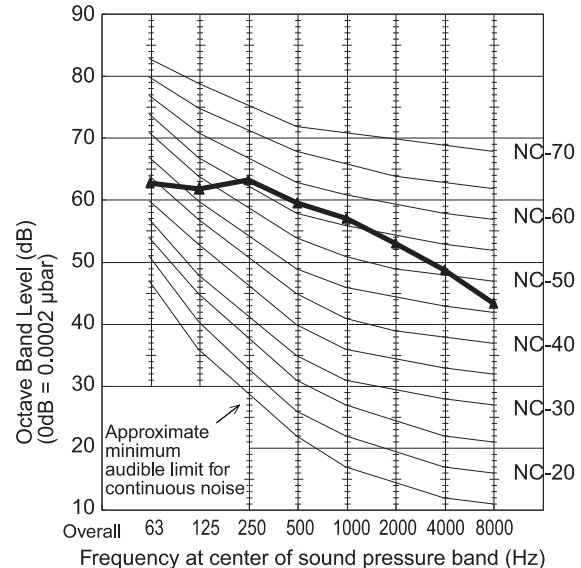
To evaluate "Noise level" the maximum number of the measured OCTAVE BAND SOUND PRESSURE LEVEL is used. Read the number on each BAND CENTER FREQUENCIES (horizontal axis) ranging from 63 Hz to 8000 Hz and select the maximum value (vertical axis) among them.

COOLING

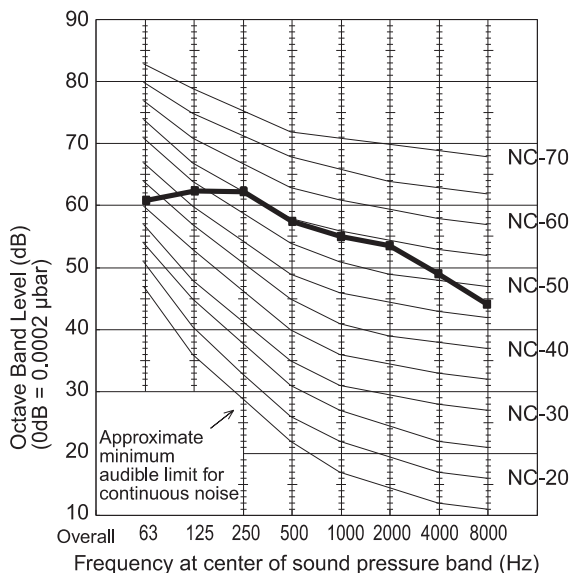
MODEL : U-200PE2E8A
 SOUND LEVEL : 60 dB(A)
 CONDITION : 1 m in front at height of 1.5 m

**HEATING**

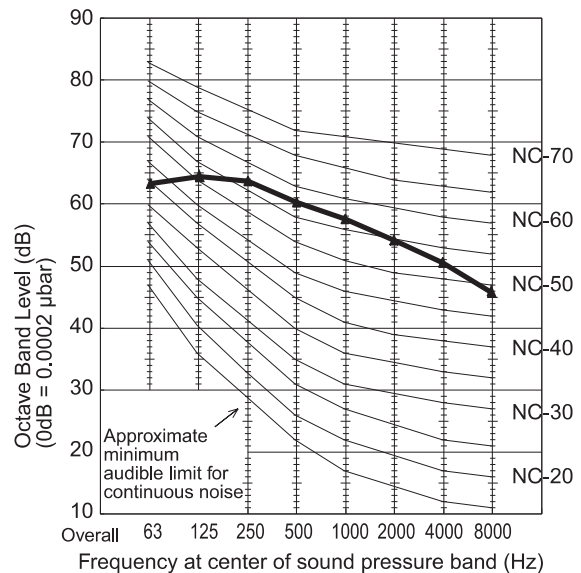
MODEL : U-200PE2E8A
 SOUND LEVEL : 62 dB(A)
 CONDITION : 1 m in front at height of 1.5 m

**COOLING**

MODEL : U-250PE2E8A
 SOUND LEVEL : 61 dB(A)
 CONDITION : 1 m in front at height of 1.5 m

**HEATING**

MODEL : U-250PE2E8A
 SOUND LEVEL : 63 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.

1-11. 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

Indoor unit

Type	(B) Power supply	Time delay fuse or circuit capacity
	2.5 mm ²	
E2	Max. 30 m	10-16 A
U2	Max. 130 m	10-16 A

Control wiring

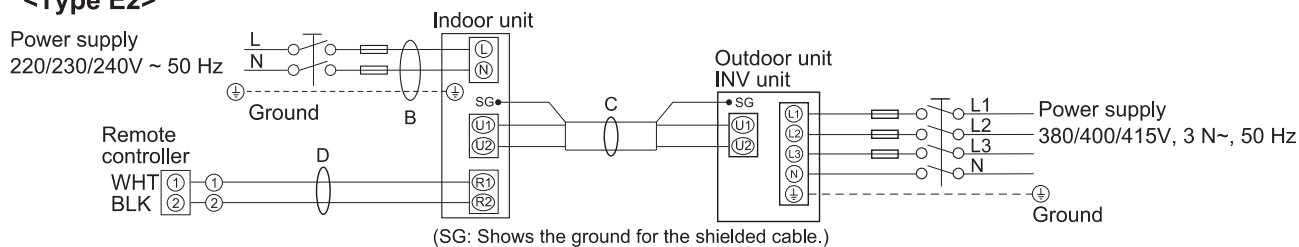
(C) Inter-unit control wiring (between outdoor and indoor units)	(D) Remote control wiring	(E) Control wiring for group control
0.75 mm ² (AWG #18) Use shielded wiring*	0.75 mm ² (AWG #18)	0.75 mm ² (AWG #18)
Max. 1,000 m	Max. 500 m	Max. 200 m (Total)

NOTE

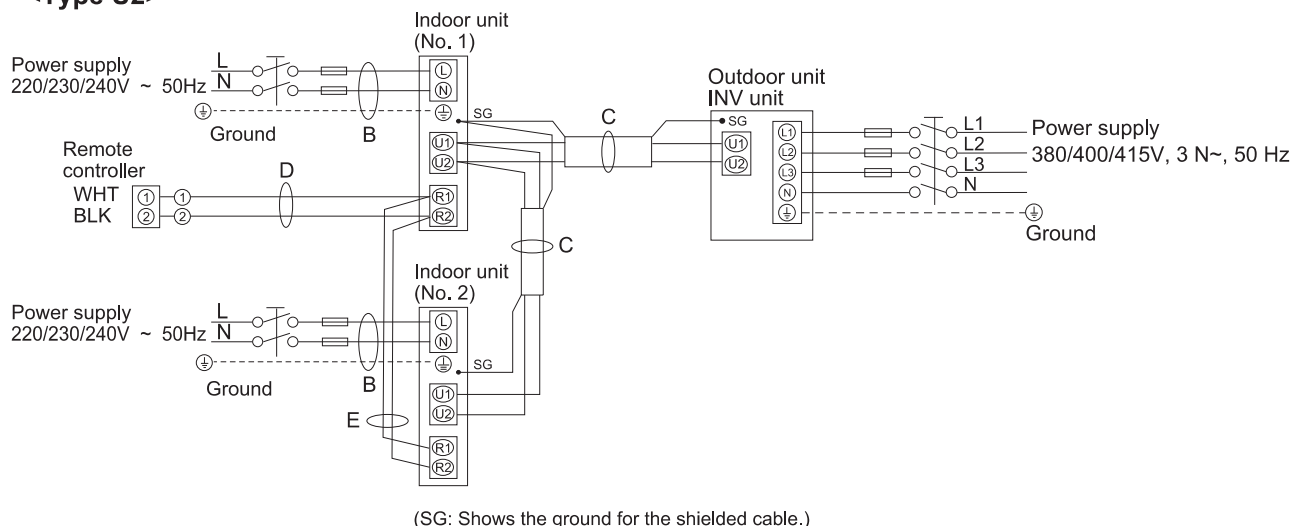
* With ring-type wire terminal.

■ Wiring System Diagrams

<Type E2>



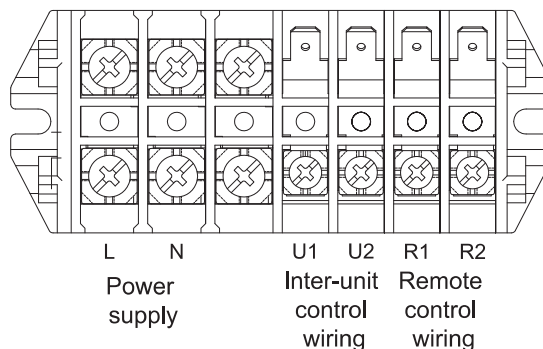
<Type U2>



NOTE

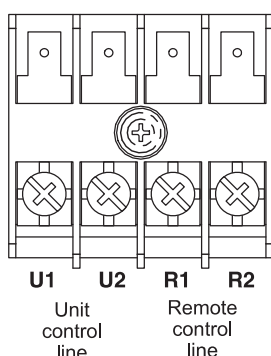
- (1) Refer to "Recommended Wire Length and Wire Diameter for Power Supply System" for the explanation of "B", "C", "D" and "E" in the above diagram.
- (2) The basic connection diagram of the indoor unit shows the terminal boards, so the terminal boards in your equipment may differ from the diagram.
- (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).

7P terminal board

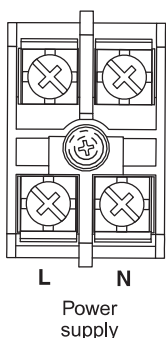


Type E2

4P terminal board



2P terminal board



Type U2



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)

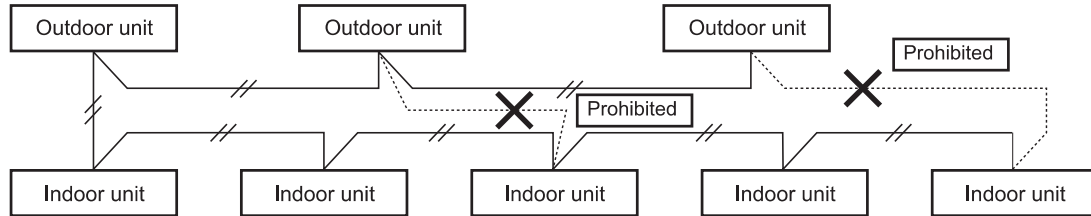


Fig. 1-1

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

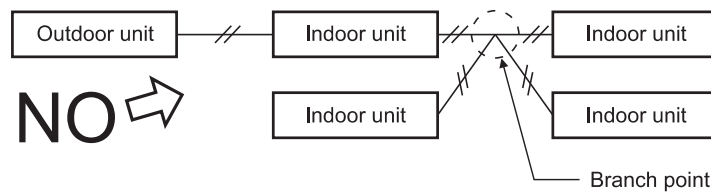


Fig. 1-2

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

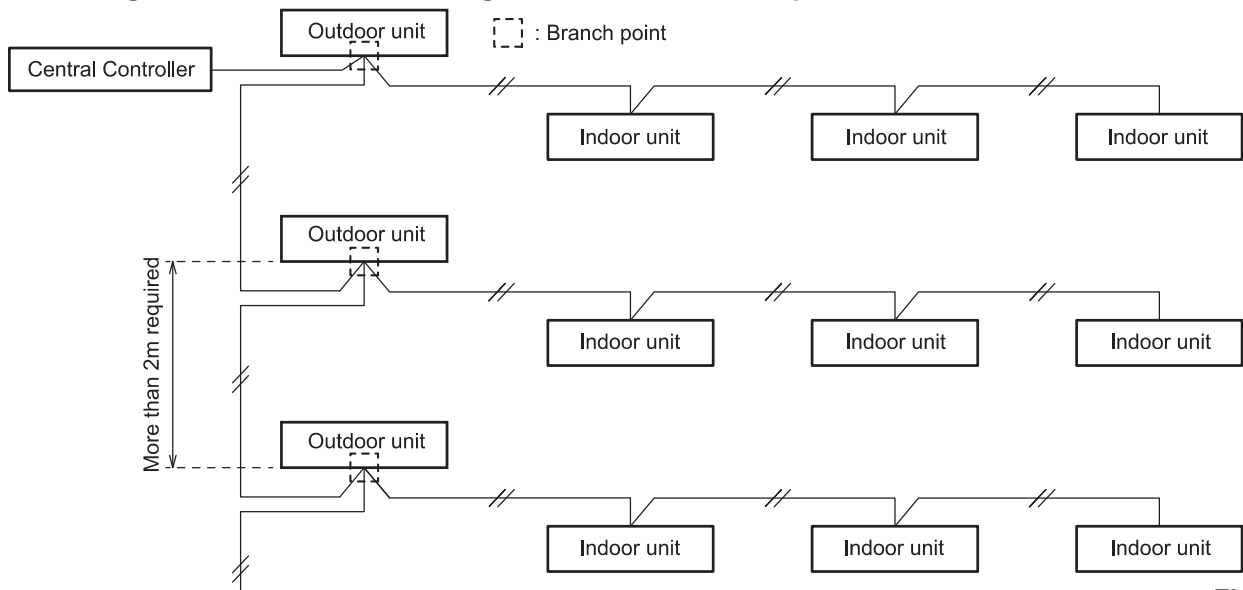


Fig. 1-3

- (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”.

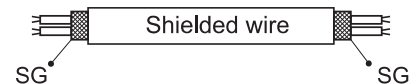


Fig. 1-4

- (6) • Connecting cable between indoor unit and outdoor unit shall be approved polychloroprene sheathed 5 or 3 *1.5 mm² 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.

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. 1-5)
- (2) Using a Phillips head screwdriver, remove the terminal screw(s) on the terminal board.
- (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. 1-6)

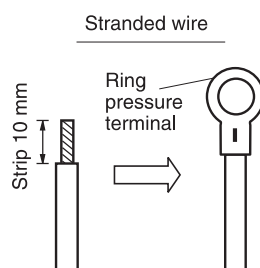


Fig. 1-5

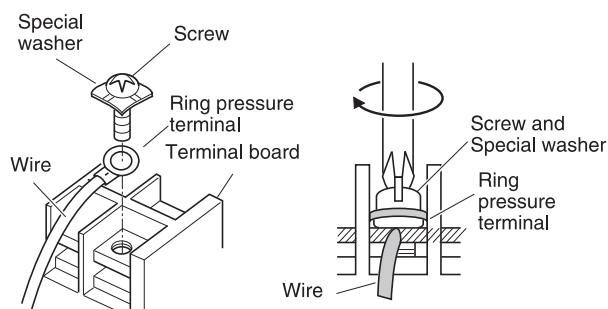


Fig. 1-6

■ Examples of shield wires

- (1) Remove cable coat not to scratch braided shield. (Fig. 1-7)
- (2) Unbraid the braided shield carefully and twist the unbraid shield wires tightly together. Insulate the shield wires by covering them with an insulation tube or wrapping insulation tape around them. (Fig. 1-8)
- (3) Remove coat of signal wire. (Fig. 1-9)
- (4) Attach ring pressure terminals to the signal wires and the shield wires insulated in Step (2). (Fig. 1-10)



Fig. 1-7

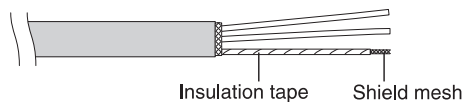


Fig. 1-8

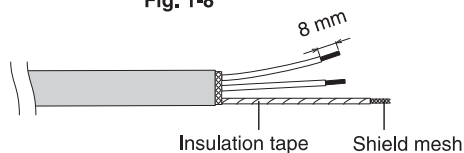


Fig. 1-9

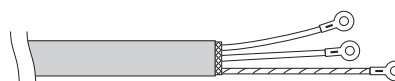


Fig. 1-10

1-20. Capacity Table

High Static Pressure Ducted Type

1. Cooling Capacity Performance Data

TC: Cooling Capacity

SHC: Sensible Heat Capacity

IPT: Cooling Power Consumption

unit : kW

				Outdoor air intake temp(°C D.B.)														
Model	Power Source	Ambient Return Air		20°C			30°C			35°C			40°C			46°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
S-200PE2E5 U-200PE2E8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	23	16	24.5	17.0	6.90	22.2	15.8	8.43	20.6	15.0	8.26	18.6	14.0	7.84	17.2	13.4	7.25
			19	26.3	13.0	7.06	24.0	12.0	8.60	22.4	11.3	8.43	20.4	10.5	8.01	19.0	9.9	7.42
			22	28.0	9.1	7.23	25.8	8.3	8.77	24.2	7.6	8.60	22.2	6.9	8.18	20.8	6.4	7.59
		25	16	24.5	19.2	6.90	22.2	18.0	8.43	20.6	17.2	8.26	18.6	16.2	7.84	17.2	15.6	7.25
			19	26.3	15.3	7.06	24.0	14.2	8.60	22.4	13.5	8.43	20.4	12.6	8.01	19.0	12.1	7.42
			22	28.0	11.2	7.23	25.8	10.4	8.77	24.2	9.8	8.60	22.2	9.0	8.18	20.8	8.5	7.59
		27	16	24.5	21.4	6.90	22.2	20.2	8.43	20.6	19.4	8.26	18.6	18.4	7.84	17.2	17.2	7.25
			19	26.3	17.4	7.06	24.0	16.4	8.60	22.4	15.7	8.43	20.4	14.8	8.01	19.0	14.2	7.42
			22	28.0	13.4	7.23	25.8	12.6	8.77	24.2	11.9	8.60	22.2	11.2	8.18	20.8	10.6	7.59
		29	16	24.5	23.6	6.90	22.2	22.3	8.43	20.6	20.7	8.26	18.6	18.6	7.84	17.2	17.2	7.25
			19	26.3	19.6	7.06	24.0	18.6	8.60	22.4	17.8	8.43	20.4	16.9	8.01	19.0	16.4	7.42
			22	28.0	15.6	7.23	25.8	14.7	8.77	24.2	14.1	8.60	22.2	13.3	8.18	20.8	12.7	7.59
		32	16	24.5	24.5	6.90	22.2	22.1	8.43	20.6	20.6	8.26	18.6	18.6	7.84	17.2	17.2	7.25
			19	26.3	22.8	7.06	24.0	21.8	8.60	22.4	21.1	8.43	20.4	20.2	8.01	19.0	19.0	7.42
			22	28.0	18.8	7.23	25.8	17.9	8.77	24.2	17.3	8.60	22.2	16.5	8.18	20.8	16.0	7.59
S-250PE2E5 U-250PE2R8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	23	16	30.6	21.4	9.39	27.7	20.0	11.5	25.8	19.1	11.3	23.2	17.8	10.7	21.6	17.0	9.87
			19	32.8	16.6	9.62	30.0	15.3	11.7	28.0	14.5	11.5	25.5	13.4	10.9	23.8	12.6	10.1
			22	35.1	11.8	9.85	32.2	10.6	11.9	30.2	9.8	11.7	27.7	8.9	11.1	26.0	8.2	10.3
		25	16	30.6	24.1	9.39	27.7	22.8	11.5	25.8	21.8	11.3	23.2	20.5	10.7	21.6	19.8	9.87
			19	32.8	19.3	9.62	30.0	18.0	11.7	28.0	17.2	11.5	25.5	16.2	10.9	23.8	15.4	10.1
			22	35.1	14.4	9.85	32.2	13.3	11.9	30.2	12.5	11.7	27.7	11.6	11.1	26.0	11.0	10.3
		27	16	30.6	27.0	9.39	27.7	25.5	11.5	25.8	24.6	11.3	23.2	23.2	10.7	21.6	21.7	9.87
			19	32.8	22.0	9.62	30.0	20.7	11.7	28.0	19.9	11.5	25.5	18.8	10.9	23.8	18.1	10.1
			22	35.1	17.2	9.85	32.2	16.1	11.9	30.2	15.2	11.7	27.7	14.3	11.1	26.0	13.6	10.3
		29	16	30.6	29.7	9.39	27.7	27.7	11.5	25.8	25.7	11.3	23.2	23.2	10.7	21.6	21.5	9.87
			19	32.8	24.8	9.62	30.0	23.5	11.7	28.0	22.7	11.5	25.5	21.6	10.9	23.8	20.9	10.1
			22	35.1	19.8	9.85	32.2	18.7	11.9	30.2	17.9	11.7	27.7	17.0	11.1	26.0	16.4	10.3
		32	16	30.6	30.5	9.39	27.7	27.7	11.5	25.8	25.8	11.3	23.2	23.2	10.7	21.6	21.6	9.87
			19	32.8	28.9	9.62	30.0	27.6	11.7	28.0	26.7	11.5	25.5	25.5	10.9	23.8	23.8	10.1
			22	35.1	23.9	9.85	32.2	22.8	11.9	30.2	21.9	11.7	27.7	21.0	11.1	26.0	20.4	10.3

2. Heating Capacity Performance Data

TC: Cooling Capacity

IPT: Cooling Power Consumption

unit : kW

			Outdoor air intake temp(°C D.B.)															
Model	Power Source	Ambient Return Air	-15°C		-10°C		-7°C		0°C		2°C		4°C		7°C		10°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-200PE2E5 U-200PE2E8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	16	18.3	5.05	20.5	5.67	21.9	6.05	23.7	7.49	24.2	7.57	25.0	7.60	26.3	7.66	26.5	7.68
		20	17.0	5.46	19.3	6.08	20.6	6.45	22.5	7.90	23.0	7.97	23.8	8.01	25.0	8.06	25.2	8.08
		24	15.8	5.86	18.0	6.48	19.4	6.85	21.2	8.30	21.7	8.38	22.5	8.41	23.8	8.46	24.0	8.48
S-250PE2E5 U-250PE2E8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	16	23.0	6.39	25.9	7.18	27.5	7.65	29.9	9.48	30.5	9.58	31.6	9.62	33.1	9.69	33.3	9.72
		20	21.5	6.90	24.3	7.69	26.0	8.16	28.3	9.99	29.0	10.1	30.0	10.1	31.5	10.2	31.8	10.2
		24	19.9	7.41	22.7	8.20	24.4	8.67	26.7	10.5	27.4	10.6	28.4	10.6	29.9	10.7	30.2	10.7

4-Way Cassette Type

1. Cooling Capacity Performance Data

TC: Cooling Capacity
 SHC: Sensible Heat Capacity
 IPT: Cooling Power Consumption
 unit : kW

Model	Power Source	Ambient Return Air		Outdoor air intake temp(°C D.B.)														
				20°C			30°C			35°C			40°C			46°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
S-100PU2E5A×2 U-200PE2E8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	23	16	24.5	19.1	6.71	22.2	18.1	8.20	20.6	17.4	8.04	18.6	16.5	7.63	17.2	15.8	7.05
			19	26.3	14.3	6.87	24.0	13.4	8.36	22.4	12.8	8.20	20.4	12.0	7.79	19.0	11.5	7.22
			22	28.0	9.6	7.04	25.8	8.8	8.53	24.2	8.3	8.36	22.2	7.6	7.95	20.8	7.1	7.38
		25	16	24.5	21.9	6.71	22.2	20.8	8.20	20.6	20.1	8.04	18.6	18.6	7.63	17.2	17.2	7.05
			19	26.3	17.1	6.87	24.0	16.2	8.36	22.4	15.6	8.20	20.4	14.8	7.79	19.0	14.3	7.22
			22	28.0	12.4	7.04	25.8	11.6	8.53	24.2	11.0	8.36	22.2	10.3	7.95	20.8	9.9	7.38
		27	16	24.5	24.4	6.71	22.2	22.1	8.20	20.6	20.5	8.04	18.6	18.6	7.63	17.2	17.2	7.05
			19	26.3	19.9	6.87	24.0	19.0	8.36	22.4	18.3	8.20	20.4	17.5	7.79	19.0	17.0	7.22
			22	28.0	15.1	7.04	25.8	14.3	8.53	24.2	13.7	8.36	22.2	13.0	7.95	20.8	12.6	7.38
		29	16	24.5	24.4	6.71	22.2	22.2	8.20	20.6	20.6	8.04	18.6	18.6	7.63	17.2	17.2	7.05
			19	26.3	22.7	6.87	24.0	21.8	8.36	22.4	21.1	8.20	20.4	20.4	7.79	19.0	19.0	7.22
			22	28.0	17.9	7.04	25.8	17.1	8.53	24.2	16.5	8.36	22.2	15.8	7.95	20.8	15.3	7.38
		32	16	24.5	24.5	6.71	22.2	22.1	8.20	20.6	20.5	8.04	18.6	18.6	7.63	17.2	17.2	7.05
			19	26.3	26.3	6.87	24.0	24.0	8.36	22.4	22.4	8.20	20.4	20.4	7.79	19.0	19.0	7.22
			22	28.0	21.9	7.04	25.8	21.1	8.53	24.2	20.6	8.36	22.2	19.9	7.95	20.8	19.4	7.38
S-125PU2E5A×2 U-250PE2R8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	23	16	30.6	22.3	9.33	27.7	20.9	11.4	25.8	20.0	11.2	23.2	18.8	10.6	21.6	18.1	9.81
			19	32.8	17.3	9.56	30.0	16.1	11.6	28.0	15.2	11.4	25.5	14.2	10.8	23.8	13.5	10.0
			22	35.1	12.3	9.79	32.2	11.2	11.9	30.2	10.5	11.6	27.7	9.5	11.1	26.0	8.9	10.3
		25	16	30.6	25.2	9.33	27.7	23.8	11.4	25.8	22.9	11.2	23.2	21.6	10.6	21.6	21.0	9.81
			19	32.8	20.2	9.56	30.0	18.9	11.6	28.0	18.1	11.4	25.5	17.1	10.8	23.8	16.3	10.0
			22	35.1	15.2	9.79	32.2	14.1	11.9	30.2	13.3	11.6	27.7	12.3	11.1	26.0	11.7	10.3
		27	16	30.6	28.1	9.33	27.7	26.7	11.4	25.8	25.8	11.2	23.2	23.2	10.6	21.6	21.6	9.81
			19	32.8	23.1	9.56	30.0	21.8	11.6	28.0	20.9	11.4	25.5	19.9	10.8	23.8	19.2	10.0
			22	35.1	18.0	9.79	32.2	16.9	11.9	30.2	16.1	11.6	27.7	15.1	11.1	26.0	14.6	10.3
		29	16	30.6	30.7	9.33	27.7	27.6	11.4	25.8	25.7	11.2	23.2	23.1	10.6	21.6	21.6	9.81
			19	32.8	26.0	9.56	30.0	24.6	11.6	28.0	23.8	11.4	25.5	22.8	10.8	23.8	22.0	10.0
			22	35.1	20.8	9.79	32.2	19.7	11.9	30.2	19.0	11.6	27.7	18.0	11.1	26.0	17.3	10.3
		32	16	30.6	30.5	9.33	27.7	27.7	11.4	25.8	25.8	11.2	23.2	23.2	10.6	21.6	21.6	9.81
			19	32.8	30.3	9.56	30.0	29.0	11.6	28.0	28.1	11.4	25.5	25.6	10.8	23.8	23.7	10.0
			22	35.1	25.1	9.79	32.2	24.0	11.9	30.2	23.2	11.6	27.7	22.2	11.1	26.0	21.6	10.3

2. Heating Capacity Performance Data

TC: Cooling Capacity
 IPT: Cooling Power Consumption
 unit : kW

			Outdoor air intake temp(°C D.B.)															
Model	Power Source	Ambient Return Air	-15°C		-10°C		-7°C		0°C		2°C		4°C		7°C		10°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-100PU2E5A×2 U-200PE2E8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	16	18.3	4.39	20.5	4.93	21.9	5.25	23.7	6.51	24.2	6.57	25.0	6.60	26.3	6.65	26.5	6.67
		20	17.0	4.74	19.3	5.28	20.6	5.60	22.5	6.86	23.0	6.92	23.8	6.95	25.0	7.00	25.2	7.02
		24	15.8	5.09	18.0	5.63	19.4	5.95	21.2	7.21	21.7	7.27	22.5	7.30	23.8	7.35	24.0	7.37
S-125PU2E5A×2 U-250PE2E8A	220V/230V/240V 50Hz 1phase (380V/400V/415V 50Hz 3 phase)	16	23.0	6.08	25.9	6.83	27.5	7.28	29.9	9.02	30.5	9.11	31.6	9.15	33.1	9.22	33.3	9.24
		20	21.5	6.57	24.3	7.31	26.0	7.76	28.3	9.50	29.0	9.59	30.0	9.64	31.5	9.70	31.8	9.72
		24	19.9	7.05	22.7	7.80	24.4	8.25	26.7	10.0	27.4	10.1	28.4	10.1	29.9	10.2	30.2	10.2

3. ELECTRICAL DATA

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3-2. Indoor Units (Electric Wiring Diagram)	3-3
High Static Pressure Ducted Type	3-3
4-Way Cassette Type	3-4

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ELECTRIC WIRING DIAGRAM



3-2. Indoor Units

■ High Static Pressure Ducted Type S-200PE2E5, S-250PE2E5
Electric Wiring Diagram

