7. CEILING RECESSED TYPE PACKAGED AIR CONDITIONER

(Split system, Air cooled Cooling only type)

FDTN208CEN-S, FDTN208CEP-S
FDTN208CEN, FDTN208CEP
FDTN258CEN-S, FDTN258CEP-S
FDTN258CEN, FDTN258CEP
FDTN308CEN, FDTN308CEP
FDTN308CES, FDTN408CES
FDTN508CES, FDTN508CEM

FDT208CEN-S, FDT258CEN-S
FDT308CEN, FDT308CES
FDT408CES, FDT508CES

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7.1 GENERAL INFORMATION

7.1.1 Specific features

(1) Less refrigerant charge amount due to use of double phase refrigerant flow system. The total refrigerant charge amount has been reduced by more than 50%.

(2) The indoor outdoor interconnection signal wiring has been done away with. The microcomputer chip is installed in the indoor unit. There is no need for the unit to communicate between the outdoor and indoor units so the unit is more resistant to electromagnetic noise thus the incidence of microcomputer malfunction has been reduced. The compressor in the outdoor unit has its own self protection function, that reacts according to abnormal high pressure and excessive high temperature.

(3) There are only four power lines between the outdoor and indoor unit. As no signal wire is used there is no need to separate the power line from the signal line. One cab tyre cable with 4 wires encased in one sheath is enough for conducting the wiring work between the outdoor unit and the indoor unit. This contributes to simpler wiring work in the field.

(4) All air supply ports have auto swing louvers. The indoor fan motor has two speeds of high and low.

(5) All models have control valves protruding from the outdoor unit for faster flare connection work in the field.

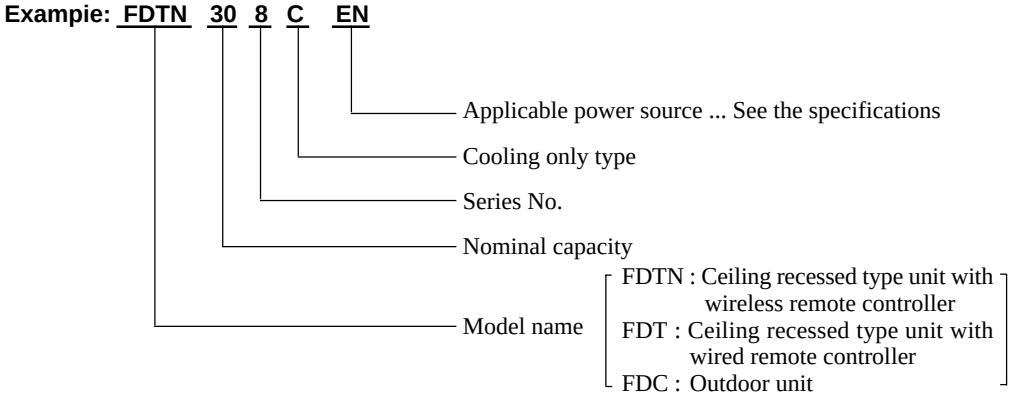
(6) Low sound level

Operating noise has been remarkably reduced due to adoption of the crescent turbo fan which cuts off wind-blowing noise and also console type of cabinet which is highly effective to protect vibration.

(7) 700mm high drain head

Adoption of drain pump with high drain head and high capacity (600cc/min) has made it possible to have maximum 700 mm(form below ceiling drain head.[In case 700mm drain head is required, set it up close to the unit. It is impossible to do piping on down slope.]

7.1.2 How to read the model name



7.2 SELECTION DATA

7.2.1 Specifications

(a) Wireless remote controller type

Model FDTN208CEN-S

Item		Model	FDTN208CEN-S	
			FDTN208C	FDC208CEN3
Nominal cooling capacity(1)		W	**5000**	
Power source			**1 Phase, 220/240V, 50Hz**	
Operation data(3)	Cooling input	kW	1.78/1.87	
	Running current (Cooling)	A	8.3/8.1	
	Power factor (Cooling)	%	97/96	
	Inrush current (L.R.A)	A	44	
	Noise level(4)	dB(A)	Hi:38 Lo:33	52
Exterior dimensions Height × Width × Depth		**mm**	**Unit 215 × 700 × 700 Panel 26 × 800 × 800**	**690 × 880 × 290**
Net weight		**kg**	**23 (Unit:18 Panel:5)**	**49**
Refrigerant equipment Compressor type & Q'ty			–	**RM5523GNE4 × 1**
Motor		kW	–	**1.6**
Starting method			–	Line starting
Heat exchanger			Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control			Capillary tube	Capillary tube
Refrigerant			**R22**	
Quantity		**kg**	**Holding charged**	**0.9 [Pre-charged up to the piping length of 0m]**
Refrigerant oil		ℓ	–	**0.7 (BARREL FREEZE 32 SAM)**
High pressure control			–	
Air handling equipment Fan type & Q'ty			Turbo fan × 1	Propeller fan × 1
Motor		W	30 × 1	55 × 1
Starting method			Line starting	Line starting
Air flow (Standard)		**CMM**	**Hi:14 Lo:10**	**56**
Fresh air intake			Available	–
Air filter, Q'ty			Long life filter × 1 (washable)	–
Shock & vibration absorber			Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater		W	–	20 (Crank case heater)
Operation control Operation switch			Wireless remote control switch	– (Indoor unit side)
Room temperature control			Thermostat by electronics	–
Safety equipment			Internal thermostat for fan motor. Frost protection thermostat.	Internal thermostat for fan motor. Thermostat for discharge temperature.
Installation data Refrigerant piping size		**mm (in)**	**Liquid line: ϕ6.35 (1/4″) Gas line: ϕ15.88 (5/8″)**	
Connecting method			**Flare piping**	
Drain hose			(Connectable with VP25)	–
Insulation for piping			Necessary (both Liquid & Gas lines)	
Accessories			Mounting kit. Wireless remote controller.	
Optional parts			Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDTN208CEP-S

Item		Model	FDTN208CEP-S	
			FDTN208C	FDC208CEP3
Nominal cooling capacity(1)		W	**5200**	
Power source			**1 Phase, 220V, 60Hz**	
Operation data(3)	Cooling input	kW	1.78	
	Running current (Cooling)	A	8.4	
	Power factor (Cooling)	%	96	
	Inrush current (L.R.A)	A	52	
	Noise level(4)	dB(A)	Hi:38 Lo:33	52
Exterior dimensions Height × Width × Depth		**mm**	**Unit 215 × 700 × 700 Panel 26 × 800 × 800**	**690 × 880 × 290**
Net weight		**kg**	**23 (Unit:18 Panel:5)**	**49**
Refrigerant equipment Compressor type & Q'ty			–	**RM5520GP4 × 1**
Motor		kW	–	**1.6**
Starting method			–	Line starting
Heat exchanger			Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control			Capillary tube	Capillary tube
Refrigerant			**R22**	
Quantity		**kg**	**Holding charged**	**0.9 [Pre-charged up to the piping length of 0m]**
Refrigerant oil		ℓ	–	**0.7 (BARREL FREEZE 32 SAM)**
High pressure control			–	
Air handling equipment Fan type & Q'ty			Turbo fan × 1	Propeller fan × 1
Motor		W	30 × 1	55 × 1
Starting method			Line starting	Line starting
Air flow (Standard)		**CMM**	**Hi:14 Lo:10**	**56**
Fresh air intake			Available	–
Air filter, Q'ty			Long life filter × 1 (washable)	–
Shock & vibration absorber			Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater		W	–	20 (Crank case heater)
Operation control Operation switch			Wireless remote control switch	– (Indoor unit side)
Room temperature control			Thermostat by electronics	–
Safety equipment			Internal thermostat for fan motor. Frost protection thermostat.	Internal thermostat for fan motor. Thermostat for discharge temperature.
Installation data Refrigerant piping size		**mm (in)**	**Liquid line: ϕ6.35 (1/4″) Gas line: ϕ15.88 (5/8″)**	
Connecting method			**Flare piping**	
Drain hose			(Connectable with VP25)	–
Insulation for piping			Necessary (both Liquid & Gas lines)	
Accessories			Mounting kit. Wireless remote controller.	
Optional parts			Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V.

(4) Indicates the value at mild mode.

Model FDTN258CEN-S

Item		Model	FDTN258CEN-S	
			FDTN258C	FDC258CEN3
Nominal cooling capacity(1)		W	**5700**	
Power source			**1 Phase, 220/240V, 50Hz**	
Operation data(3)	Cooling input	kW	2.05/2.16	
	Running current (Cooling)	A	9.4/9.4	
	Power factor (Cooling)	%	99/96	
	Inrush current (L.R.A)	A	51	
	Noise level(4)	dB(A)	Hi:39 Lo:35	52
Exterior dimensions Height × Width × Depth		**mm**	**Unit 260 × 840 × 840 Panel 30 × 950 × 950**	**845 × 880 × 340**
Net weight		**kg**	**30 (Unit:24 Panel:6)**	**55**
Refrigerant equipment Compressor type & Q'ty			–	**RM5526GNE4 × 1**
Motor		kW	–	**1.9**
Starting method			–	Line starting
Heat exchanger			Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control			Capillary tube	Capillary tube
Refrigerant			**R22**	
Quantity		**kg**	**Holding charged**	**1.05 [Pre-charged up to the piping length of 5m]**
Refrigerant oil		ℓ	–	**0.7 (BARREL FREEZE 32 SAM)**
High pressure control			–	
Air handling equipment Fan type & Q'ty			Turbo fan × 1	Propeller fan × 1
Motor		W	25 × 1	55 × 1
Starting method			Line starting	Line starting
Air flow (Standard)		**CMM**	**Hi:16 Lo:11**	**56**
Fresh air intake			Available	–
Air filter, Q'ty			Long life filter × 1 (washable)	–
Shock & vibration absorber			Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater		W	–	20 (Cank case heater)
Operation control Operation switch			Wireless remote control switch	– (Indoor unit side)
Room temperature control			Thermostat by electronics	–
Safety equipment(4)			Internal thermostat for fan motor. Frost protection thermostat.	Internal thermostat for fan motor. Thermostat for discharge temperature.
Installation data Refrigerant piping size		**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method			**Flare piping**	
Drain hose			(Connectable with VP25)	–
Insulation for piping			Necessary (both Liquid & Gas lines)	
Accessories			Mounting kit. Wireless remote controller.	
Optional parts			Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature		Outdoor air temperature		Standards
	DB	WB	DB	WB	
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDTN258CEP-S

Item		Model	FDTN258CEP-S	
			FDTN258C	FDC258CEP3
Nominal cooling capacity(1)		W	**6200**	
Power source			**1 Phase, 220V, 60Hz**	
Operation data(3)	Cooling input	kW	2.77	
	Running current (Cooling)	A	12.8	
	Power factor (Cooling)	%	98	
	Inrush current (L.R.A)	A	71	
	Noise level(4)	dB(A)	Hi:39 Lo:35	52
Exterior dimensions Height × Width × Depth		**mm**	**Unit 260 × 840 × 840 Panel 30 × 950 × 950**	**845 × 880 × 340**
Net weight		**kg**	**30 (Unit:24 Panel:6)**	**55**
Refrigerant equipment Compressor type & Q'ty			–	**RM5526GP4 × 1**
Motor		kW	–	**1.9**
Starting method			–	Line starting
Heat exchanger			Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control			Capillary tube	Capillary tube
Refrigerant			**R22**	
Quantity		**kg**	**Holding charged**	**1.13 [Pre-charged up to the piping length of 5m]**
Refrigerant oil		ℓ	–	**0.7 (BARREL FREEZE 32 SAM)**
High pressure control			–	
Air handling equipment Fan type & Q'ty			Turbo fan × 1	Propeller fan × 1
Motor		W	25 × 1	55 × 1
Starting method			Line starting	Line starting
Air flow (Standard)		**CMM**	**Hi:16 Lo:11**	**56**
Fresh air intake			Available	–
Air filter, Q'ty			Long life filter × 1 (washable)	–
Shock & vibration absorber			Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater		W	–	20 (Cank case heater)
Operation control Operation switch			Wireless remote control switch	– (Indoor unit side)
Room temperature control			Thermostat by electronics	–
Safety equipment			Internal thermostat for fan motor. Frost protection thermostat.	Internal thermostat for fan motor. Thermostat for discharge temperature.
Installation data Refrigerant piping size		**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method			**Flare piping**	
Drain hose			(Connectable with VP25)	–
Insulation for piping			Necessary (both Liquid & Gas lines)	
Accessories			Mounting kit. Wireless remote controller.	
Optional parts			Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature		Outdoor air temperature		Standards
	DB	WB	DB	WB	
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V.

(4) Indicates the value at mild mode.

Model FDTN208CEN

Item				Model	FDTN208CEN	
					FDTN208C	FDC206CEN3
Nominal cooling capacity(1)			ISO-T1	W	**5000**	
			ISO-T3		**4100**	
Power source					**1 Phase, 220/240V, 50Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	2.09/2.12	
		Running current (Cooling)		A	10.0/9.8	
		Power factor (Cooling)		%	95/90	
	ISO-T3	Cooling input		kW	2.35/2.37	
		Running current (Cooling)		A	11.1/10.9	
		Power factor (Cooling)		%	96/91	
	Inrush current (L.R.A)			A	47	
	Noise level(4)			dB(A)	Hi:38 Lo:33	59
Exterior dimensions Height × Width × Depth				**mm**	**Unit 215 × 700 × 700 Panel 26 × 800 × 800**	**615 × 850 × 290 + 30**
Net weight				**kg**	**23 (Unit:18 Panel:5)**	**55**
Refrigerant equipment Compressor type & Q'ty					–	**RC5520ENE1 × 1**
Motor				kW	–	**1.49**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**0.9 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30 × 1	55 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:14 Lo:10**	**42**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ6.35 (1/4″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDTN208CEP

Item				Model	FDTN208CEP	
					FDTN208C	FDC206CEP3
Nominal cooling capacity(1)			ISO-T1	W	**5200**	
			ISO-T3		**4500**	
Power source					**1 Phase, 220V, 60Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	2.08	
		Running current (Cooling)		A	9.7	
		Power factor (Cooling)		%	97	
	ISO-T3	Cooling input		kW	2.34	
		Running current (Cooling)		A	11.0	
		Power factor (Cooling)		%	97	
	Inrush current (L.R.A)			A	50	
	Noise level(4)			dB(A)	Hi:38 Lo:33	59
Exterior dimensions **Height × Width × Depth**				**mm**	**Unit 215 × 700 × 700** **Panel 26 × 800 × 800**	**615 × 850 × 290 + 30**
Net weight				**kg**	**23 (Unit:18 Panel:5)**	**55**
Refrigerant equipment **Compressor type & Q'ty**					–	**RC5520EPE1 × 1**
Motor				kW	–	**1.31**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.15 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30× 1	55 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:14 Lo:10**	**44**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data **Refrigerant piping size**				**mm** **(in)**	**Liquid line: ϕ6.35 (1/4″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature		Outdoor air temperature		Standards
	DB	WB	DB	WB	
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V.

(4) Indicates the value at mild mode.

FDTN-C

Model FDTN258CEN

Item				Model	FDTN258CEN	
					FDTN258C	FDC256CEN3
Nominal cooling capacity(1)			ISO-T1	W	**5900**	
			ISO-T3		**4900**	
Power source					**1 Phase, 220/240V, 50Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	2.59/2.63	
		Running current (Cooling)		A	12.6/13.2	
		Power factor (Cooling)		%	93/83	
	ISO-T3	Cooling input		kW	2.77/2.81	
		Running current (Cooling)		A	13.4/14.0	
		Power factor (Cooling)		%	94/84	
	Inrush current (L.R.A)			A	64	
	Noise level(4)			dB(A)	Hi:39 Lo:35	59
Exterior dimensions **Height × Width × Depth**				**mm**	**Unit 260 × 840 × 840** **Panel 30 × 950 × 950**	**615 × 850 × 290 + 30**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**56**
Refrigerant equipment **Compressor type & Q'ty**					–	**RC5527ENE1 × 1**
Motor				kW	–	**1.87**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.35 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	25× 1	55 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:16 Lo:11**	**42**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data **Refrigerant piping size**				**mm** **(in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDTN258CEP

Item				Model	FDTN258CEP	
					FDTN258C	FDC256CEP3
Nominal cooling capacity(1)			ISO-T1	W	6200	
			ISO-T3		5200	
Power source					1 Phase, 220V, 60Hz	
Operation data(3)	ISO-T1	Cooling input		kW	2.68	
		Running current (Cooling)		A	12.4	
		Power factor (Cooling)		%	98	
	ISO-T3	Cooling input		kW	3.06	
		Running current (Cooling)		A	14.4	
		Power factor (Cooling)		%	97	
	Inrush current (L.R.A)			A	66	
	Noise level(4)			dB(A)	Hi:39 Lo:35	59
Exterior dimensions Height × Width × Depth				**mm**	**Unit 260 × 840 × 840 Panel 30 × 950 × 950**	**615 × 850 × 290 + 30**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**56**
Refrigerant equipment Compressor type & Q'ty					–	**RC5528EPE1 × 1**
Motor				kW	–	**1.68**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					R22	
Quantity				**kg**	**Holding charged**	**1.35 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	25 × 1	55 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:16 Lo:11**	**44**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V.

(4) Indicates the value at mild mode.

FDTN-C

Model FDTN308CEN

Item				Model	FDTN308CEN	
					FDTN308C	FDC306CEN3
Nominal cooling capacity(1)			ISO-T1	W	**7100**	
			ISO-T3		**5700**	
Power source					**1 Phase, 220/240V, 50Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	3.07/3.11	
		Running current (Cooling)		A	15.6/16.3	
		Power factor (Cooling)		%	89/79	
	ISO-T3	Cooling input		kW	3.26/3.30	
		Running current (Cooling)		A	16.6/17.3	
		Power factor (Cooling)		%	89/79	
	Inrush current (L.R.A)			A	89	
	Noise level(4)			dB(A)	Hi:41 Lo:35	56
Exterior dimensions **Height × Width × Depth**				**mm**	**Unit 260 × 840 × 840** **Panel 30 × 950 × 950**	**844 × 950 × 340**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**67**
Refrigerant equipment **Compressor type & Q'ty**					–	**RC5532ENE1 × 1**
Motor				kW	–	**2.24**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.3 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30× 1	60 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:17 Lo:12**	**54**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data **Refrigerant piping size**				**mm** **(in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature		Outdoor air temperature		Standards
	DB	WB	DB	WB	
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDTN308CEP

Item				Model	FDTN308CEP	
					FDTN308C	FDC306CEP3
Nominal cooling capacity(1)			ISO-T1	W	**7100**	
			ISO-T3		**5700**	
Power source					**1 Phase, 220V, 60Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	3.03	
		Running current (Cooling)		A	14.1	
		Power factor (Cooling)		%	98	
	ISO-T3	Cooling input		kW	3.26	
		Running current (Cooling)		A	15.2	
		Power factor (Cooling)		%	97	
	Inrush current (L.R.A)			A	78	
	Noise level(4)			dB(A)	Hi:41 Lo:35	59
Exterior dimensions Height × Width × Depth				**mm**	**Unit 260 × 840 × 840 Panel 30 × 950 × 950**	**844 × 950 × 340**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**67**
Refrigerant equipment Compressor type & Q'ty					–	**RC5533EPE1 × 1**
Motor				kW	–	**1.87**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.3 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30 × 1	60 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:17 Lo:12**	**56**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V.

(4) Indicates the value at mild mode.

Model FDTN308CES

Item				Model	FDTN308CES	
					FDTN308C	FDC306CES3
Nominal cooling capacity(1)			ISO-T1	W	**7100/7700**	
			ISO-T3		**5700/6000**	
Power source					**3 Phase, 380-415V 50Hz or 380V 50Hz/415V 50Hz, 380V 60Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	2.83/2.84/3.35	
		Running current (Cooling)		A	5.3/5.3/6.0	
		Power factor (Cooling)		%	81/75/85	
	ISO-T3	Cooling input		kW	3.02/3.03/3.58	
		Running current (Cooling)		A	5.7/5.7/6.5	
		Power factor (Cooling)		%	80/74/84	
	Inrush current (L.R.A)			A	43	
	Noise level(4)			dB(A)	Hi:41 Lo:35	59
Exterior dimensions Height × Width × Depth				**mm**	**Unit 260 × 840 × 840 Panel 30 × 950 × 950**	**844 × 950 × 340**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**67**
Refrigerant equipment Compressor type & Q'ty					–	**RC5538ESE1 × 1**
Motor				kW	–	**2.24**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.3 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30 × 1	60 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:17 Lo:12**	**54/56**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	- (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 380/415V 50Hz and 380V 60Hz respectively.

(4) Indicates the value at mild mode.

Model FDTN408CES

Item				Model	FDTN408CES	
					FDTN408C	FDC406CES3
Nominal cooling capacity(1)			ISO-T1	W	**10200/11300**	
			ISO-T3		**8900/9900**	
Power source					**3 Phase, 380-415V 50Hz or 380V 50Hz/415V 50Hz, 380V 60Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	3.78/3.78/4.65	
		Running current (Cooling)		A	7.5/7.5/8.8	
		Power factor (Cooling)		%	77/70/80	
	ISO-T3	Cooling input		kW	4.12/4.12/5.15	
		Running current (Cooling)		A	8.1/8.1/9.5	
		Power factor (Cooling)		%	77/71/82	
	Inrush current (L.R.A)			A	45	
	Noise level(4)			dB(A)	Hi:48 Lo:40	57
Exterior dimensions Height × Width × Depth				**mm**	**Unit 320 × 840 × 840 Panel 30 × 950 × 950**	**1250 × 950 × 340**
Net weight				**kg**	**34 (Unit:28 Panel:6)**	**80**
Refrigerant equipment Compressor type & Q'ty					–	**RC5547ESE1 × 1**
Motor				kW	–	**2.61**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.55 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 2
Motor				W	80 × 1	60 × 2
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:26 Lo:19**	**100/110**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ19.05 (3/4″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 380/ 415V 50Hz and 380V 60Hz respectively.

(4) Indicates the value at mild mode.

Model FDTN508CES

Item			Model	FDTN508CES	
				FDTN508C	FDC506CES3
Nominal cooling capacity(1)		ISO-T1	W	**12500/14000**	
		ISO-T3		**10600/11900**	
Power source				**3 Phase, 380-415V 50Hz or 380V 50Hz/415V 50Hz, 380V 60Hz**	
Operation data(3)	ISO-T1	Cooling input	kW	4.87/4.87/5.83	
		Running current (Cooling)	A	10.0/10.0/11.0	
		Power factor (Cooling)	%	74/68/81	
	ISO-T3	Cooling input	kW	5.42/5.42/6.43	
		Running current (Cooling)	A	11.3/11.3/12.0	
		Power factor (Cooling)	%	73/67/81	
	Inrush current (L.R.A)		A	68	
	Noise level(4)		dB(A)	Hi:49 Lo:43	59
Exterior dimensions Height × Width × Depth			**mm**	**Unit 320 × 840 × 840 Panel 30 × 950 × 950**	**1250 × 950 × 340**
Net weight			**kg**	**36 (Unit:30 Panel:6)**	**85**
Refrigerant equipment Compressor type & Q'ty				–	**RC5563ESE2 × 1**
Motor			kW	–	**3.73**
Starting method				–	Line starting
Heat exchanger				Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control				Capillary tube	Capillary tube
Refrigerant				**R22**	
Quantity			**kg**	**Holding charged**	**1.85 [Pre-charged up to the piping length of 5m]**
Refrigerant oil			ℓ	–	**2.07 (SUNISO 3GS)**
High pressure control				High pressure regulator valve	
Air handling equipment Fan type & Q'ty				Turbo fan × 1	Propeller fan × 2
Motor			W	130 × 1	60 × 2
Starting method				Line starting	Line starting
Air flow (Standard)			**CMM**	**Hi:28 Lo:20**	**100/110**
Fresh air intake				Available	–
Air filter, Q'ty				Long life filter × 1 (washable)	–
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater			W	–	40 (Crank case heater)
Operation control Operation switch				Wireless remote control switch	– (Indoor unit side)
Room temperature control				Thermostat by electronics	–
Safety equipment				Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size			**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ19.05 (3/4″)**	
Connecting method				**Flare piping**	
Drain hose				(Connectable with VP25)	–
Insulation for piping				Necessary (both Liquid & Gas lines)	
Accessories				Mounting kit. Wireless remote controller.	
Optional parts				Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 380/415V 50Hz and 380V 60Hz respectively.

(4) Indicates the value at mild mode.

Model FDTN508CEM

Item				Model	FDTN508CEM	
					FDTN508C	FDC506CEM3
Nominal cooling capacity(1)			ISO-T1	W	**12500/14000**	
			ISO-T3		**11900**	
Power source					**3 Phase, 230V 50Hz, 220V 60Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	4.62/5.56	
		Running current (Cooling)		A	15.0/16.4	
		Power factor (Cooling)		%	77/89	
	ISO-T3	Cooling input		kW	6.08	
		Running current (Cooling)		A	17.7	
		Power factor (Cooling)		%	90	
	Inrush current (L.R.A)			A	108	
	Noise level(4)			dB(A)	Hi:49 Lo:43	59
Exterior dimensions Height × Width × Depth				**mm**	**Unit 320 × 840 × 840 Panel 30 × 950 × 950**	**1250 × 950 × 340**
Net weight				**kg**	**36 (Unit:30 Panel:6)**	**85**
Refrigerant equipment Compressor type & Q'ty					–	**RC5559EME2 × 1**
Motor				kW	–	**3.36**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.8 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**2.07 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 2
Motor				W	130 × 1	60 × 2
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:28 Lo:20**	**100/110**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	40 (Crank case heater)
Operation control Operation switch					Wireless remote control switch	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ19.05 (3/4″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit. Wireless remote controller.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 230V,50Hz and 220V,60Hz respectively.

(4) Indicates the value at mild mode.

(b) Wired remote controller type
Model FDT208CEN-S

Item		Model	FDT208CEN-S	
			FDT208	FDC208CEN3
Nominal cooling capacity(1)		W	**5000**	
Power source			**1 Phase, 220/240V, 50Hz**	
Operation data(3)	Cooling input	kW	1.78/1.87	
	Running current (Cooling)	A	8.3/8.1	
	Power factor (Cooling)	%	97/96	
	Inrush current (L.R.A)	A	44	
	Noise level(4)	dB(A)	Hi:38 Lo:33	52
Exterior dimensions Height × Width × Depth		**mm**	**Unit 215 × 700 × 700 Panel 26 × 800 × 800**	**690 × 880 × 290**
Net weight		**kg**	**23 (Unit:18 Panel:5)**	**49**
Refrigerant equipment Compressor type & Q'ty			–	**RM5523GNE4 × 1**
Motor		kW	–	**1.6**
Starting method			–	Line starting
Heat exchanger			Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control			Capillary tube	Capillary tube
Refrigerant			**R22**	
Quantity		**kg**	**Holding charged**	**0.9 [Pre-charged up to the piping length of 0m]**
Refrigerant oil		ℓ	–	**0.7 (BARREL FREEZE 32 SAM)**
High pressure control			–	
Air handling equipment Fan type & Q'ty			Turbo fan × 1	Propeller fan × 1
Motor		W	30 × 1	55 × 1
Starting method			Line starting	Line starting
Air flow (Standard)		**CMM**	**Hi:14 Lo:10**	**56**
Fresh air intake			Available	–
Air filter, Q'ty			Long life filter × 1 (washable)	–
Shock & vibration absorber			Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater		W	–	20 (Crank case heater)
Operation control Operation switch			Wired remote control switch (Optional:RCD-C-S-E)	– (Indoor unit side)
Room temperature control			Thermostat by electronics	–
Safety equipment			Internal thermostat for fan motor. Frost protection thermostat.	Internal thermostat for fan motor. Thermostat for discharge temperature.
Installation data Refrigerant piping size		**mm (in)**	**Liquid line: ϕ6.35 (1/4″) Gas line: ϕ15.88 (5/8″)**	
Connecting method			**Flare piping**	
Drain hose			(Connectable with VP25)	–
Insulation for piping			Necessary (both Liquid & Gas lines)	
Accessories			Mounting kit.	
Optional parts			Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDT258CEN-S

Item		Model	FDT258CEN-S	
			FDT258	FDC258CEN3
Nominal cooling capacity(1)		W	**5700**	
Power source			**1 Phase, 220/240V, 50Hz**	
Operation data(3)	Cooling input	kW	2.05/2.16	
	Running current (Cooling)	A	9.4/9.4	
	Power factor (Cooling)	%	99/96	
	Inrush current (L.R.A)	A	51	
	Noise level(4)	dB(A)	Hi:39 Lo:35	52
Exterior dimensions Height × Width × Depth		**mm**	**Unit 260 × 840 × 840 Panel 30 × 950 × 950**	**845 × 880 × 340**
Net weight		**kg**	**30 (Unit:24 Panel:6)**	**55**
Refrigerant equipment Compressor type & Q'ty			–	**RM5526GNE4 × 1**
Motor		kW	–	**1.9**
Starting method			–	Line starting
Heat exchanger			Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control			Capillary tube	Capillary tube
Refrigerant			**R22**	
Quantity		**kg**	**Holding charged**	**1.05 [Pre-charged up to the piping length of 5m]**
Refrigerant oil		ℓ	–	**0.7 (BARREL FREEZE 32 SAM)**
High pressure control			–	
Air handling equipment Fan type & Q'ty			Turbo fan × 1	Propeller fan × 1
Motor		W	25 × 1	55 × 1
Starting method			Line starting	Line starting
Air flow (Standard)		**CMM**	**Hi:16 Lo:11**	**56**
Fresh air intake			Available	–
Air filter, Q'ty			Long life filter × 1 (washable)	–
Shock & vibration absorber			Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater		W	–	20 (Cank case heater)
Operation control Operation switch			Wired remote control switch (Optional:RCD-C-S-E)	– (Indoor unit side)
Room temperature control			Thermostat by electronics	–
Safety equipment(4)			Internal thermostat for fan motor. Frost protection thermostat.	Internal thermostat for fan motor. Thermostat for discharge temperature.
Installation data Refrigerant piping size		**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method			**Flare piping**	
Drain hose			(Connectable with VP25)	–
Insulation for piping			Necessary (both Liquid & Gas lines)	
Accessories			Mounting kit.	
Optional parts			Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDT308CEN

Item				Model	FDT308CEN	
					FDT308	FDC306CEN3
Nominal cooling capacity(1)			ISO-T1	W	**7100**	
			ISO-T3		**5700**	
Power source					**1 Phase, 220/240V, 50Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	3.07/3.11	
		Running current (Cooling)		A	15.6/16.3	
		Power factor (Cooling)		%	89/79	
	ISO-T3	Cooling input		kW	3.26/3.30	
		Running current (Cooling)		A	16.6/17.3	
		Power factor (Cooling)		%	89/79	
	Inrush current (L.R.A)			A	89	
	Noise level(4)			dB(A)	Hi:41 Lo:35	56
Exterior dimensions **Height × Width × Depth**				**mm**	**Unit 260 × 840 × 840** **Panel 30 × 950 × 950**	**844 × 950 × 340**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**67**
Refrigerant equipment **Compressor type & Q'ty**					–	**RC5532ENE1 × 1**
Motor				kW	–	**2.24**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.3 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30× 1	60 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:17 Lo:12**	**54**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wired remote control switch (Optional:RCD-C-S-E)	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data **Refrigerant piping size**				**mm** **(in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 220V and 240V respectively.

(4) Indicates the value at mild mode.

Model FDT308CES

Item				Model	FDT308CES	
					FDT308	FDC306CES3
Nominal cooling capacity(1)			ISO-T1	W	**7100/7700**	
			ISO-T3		**5700/6000**	
Power source					**3 Phase, 380-415V 50Hz or 380V 50Hz/415V 50Hz, 380V 60Hz**	
Operation data(3)	ISO-T1	Cooling input		kW	2.83/2.84/3.35	
		Running current (Cooling)		A	5.3/5.3/6.0	
		Power factor (Cooling)		%	81/75/85	
	ISO-T3	Cooling input		kW	3.02/3.03/3.58	
		Running current (Cooling)		A	5.7/5.7/6.5	
		Power factor (Cooling)		%	80/74/84	
	Inrush current (L.R.A)			A	43	
	Noise level(4)			dB(A)	Hi:41 Lo:35	59
Exterior dimensions **Height × Width × Depth**				**mm**	**Unit 260 × 840 × 840** **Panel 30 × 950 × 950**	**844 × 950 × 340**
Net weight				**kg**	**30 (Unit:24 Panel:6)**	**67**
Refrigerant equipment **Compressor type & Q'ty**					–	**RC5538ESE1 × 1**
Motor				kW	–	**2.24**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.3 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 1
Motor				W	30 × 1	60 × 1
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:17 Lo:12**	**54/56**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wired remote control switch (Optional:RCD-C-S-E)	- (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data **Refrigerant piping size**				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ15.88 (5/8″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 380/415V 50Hz and 380V 60Hz respectively.

(4) Indicates the value at mild mode.

Model FDT408CES

Item				Model	FDT408CES	
					FDT408	FDC406CES3
Nominal cooling capacity(1)			ISO-T1	W	**10200/11300**	
			ISO-T3		**8900/9900**	
Power source					**3 Phase, 380-415V 50Hz or 380V 50Hz/415V 50Hz, 380V 60Hz**	
Operation data(3)	**ISO-T1**	Cooling input		kW	3.78/3.78/4.65	
		Running current (Cooling)		A	7.5/7.5/8.8	
		Power factor (Cooling)		%	77/70/80	
	ISO-T3	Cooling input		kW	4.12/4.12/5.15	
		Running current (Cooling)		A	8.1/8.1/9.5	
		Power factor (Cooling)		%	77/71/82	
	Inrush current (L.R.A)			A	45	
	Noise level(4)			dB(A)	Hi:48 Lo:40	57
Exterior dimensions Height × Width × Depth				**mm**	**Unit 320 × 840 × 840 Panel 30 × 950 × 950**	**1250 × 950 × 340**
Net weight				**kg**	**34 (Unit:28 Panel:6)**	**80**
Refrigerant equipment Compressor type & Q'ty					–	**RC5547ESE1 × 1**
Motor				kW	–	**2.61**
Starting method					–	Line starting
Heat exchanger					Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control					Capillary tube	Capillary tube
Refrigerant					**R22**	
Quantity				**kg**	**Holding charged**	**1.55 [Pre-charged up to the piping length of 5m]**
Refrigerant oil				ℓ	–	**1.63 (SUNISO 3GS)**
High pressure control					High pressure regulator valve	
Air handling equipment Fan type & Q'ty					Turbo fan × 1	Propeller fan × 2
Motor				W	80 × 1	60 × 2
Starting method					Line starting	Line starting
Air flow (Standard)				**CMM**	**Hi:26 Lo:19**	**100/110**
Fresh air intake					Available	–
Air filter, Q'ty					Long life filter × 1 (washable)	–
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater				W	–	–
Operation control Operation switch					Wired remote control switch (Optional:RCD-C-S-E)	– (Indoor unit side)
Room temperature control					Thermostat by electronics	–
Safety equipment					Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size				**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ19.05 (3/4″)**	
Connecting method					**Flare piping**	
Drain hose					(Connectable with VP25)	–
Insulation for piping					Necessary (both Liquid & Gas lines)	
Accessories					Mounting kit.	
Optional parts					Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 380/ 415V 50Hz and 380V 60Hz respectively.

(4) Indicates the value at mild mode.

Model FDT508CES

Item			Model	FDT508CES	
				FDT508	FDC506CES3
Nominal cooling capacity(1)		ISO-T1	W	**12500/14000**	
		ISO-T3		**10600/11900**	
Power source				**3 Phase, 380-415V 50Hz or 380V 50Hz/415V 50Hz, 380V 60Hz**	
Operation data(3)	ISO-T1	Cooling input	kW	4.87/4.87/5.83	
		Running current (Cooling)	A	10.0/10.0/11.0	
		Power factor (Cooling)	%	74/68/81	
	ISO-T3	Cooling input	kW	5.42/5.42/6.43	
		Running current (Cooling)	A	11.3/11.3/12.0	
		Power factor (Cooling)	%	73/67/81	
	Inrush current (L.R.A)		A	68	
	Noise level(4)		dB(A)	Hi:49 Lo:43	59
Exterior dimensions Height × Width × Depth			**mm**	**Unit 320 × 840 × 840 Panel 30 × 950 × 950**	**1250 × 950 × 340**
Net weight			**kg**	**36 (Unit:30 Panel:6)**	**85**
Refrigerant equipment Compressor type & Q'ty				–	**RC5563ESE2 × 1**
Motor			kW	–	**3.73**
Starting method				–	Line starting
Heat exchanger				Louver fins & inner grooved tubing	Slitted fines & bare tubing
Refrigerant control				Capillary tube	Capillary tube
Refrigerant				**R22**	
Quantity			**kg**	**Holding charged**	**1.85 [Pre-charged up to the piping length of 5m]**
Refrigerant oil			ℓ	–	**2.07 (SUNISO 3GS)**
High pressure control				High pressure regulator valve	
Air handling equipment Fan type & Q'ty				Turbo fan × 1	Propeller fan × 2
Motor			W	130 × 1	60 × 2
Starting method				Line starting	Line starting
Air flow (Standard)			**CMM**	**Hi:28 Lo:20**	**100/110**
Fresh air intake				Available	–
Air filter, Q'ty				Long life filter × 1 (washable)	–
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber mount (for compressor)
Electric heater			W	–	40 (Crank case heater)
Operation control Operation switch				Wired remote control switch (Optional:RCD-C-S-E)	– (Indoor unit side)
Room temperature control				Thermostat by electronics	–
Safety equipment				Internal thermostat for fan motor. Frost protection thermostat.	Internal protector for compressor. Internal thermostat for fan motor. Internal Pressure relief valve for compressor.
Installation data Refrigerant piping size			**mm (in)**	**Liquid line: ϕ9.52 (3/8″) Gas line: ϕ19.05 (3/4″)**	
Connecting method				**Flare piping**	
Drain hose				(Connectable with VP25)	–
Insulation for piping				Necessary (both Liquid & Gas lines)	
Accessories				Mounting kit.	
Optional parts				Decorative Panel	

Notes (1) The data are measured at the following conditions.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	ISO-T1, JIS B8616
	29˚C	19˚C	46˚C	24˚C	ISO-T3, SASO

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.
JIS B8616 "UNITARY AIR CONDITIONERS"

(3) The operation data indicate when the air conditioner is operated at 380/415V 50Hz and 380V 60Hz respectively.

(4) Indicates the value at mild mode.

7.2.2 Range of usage & limitations

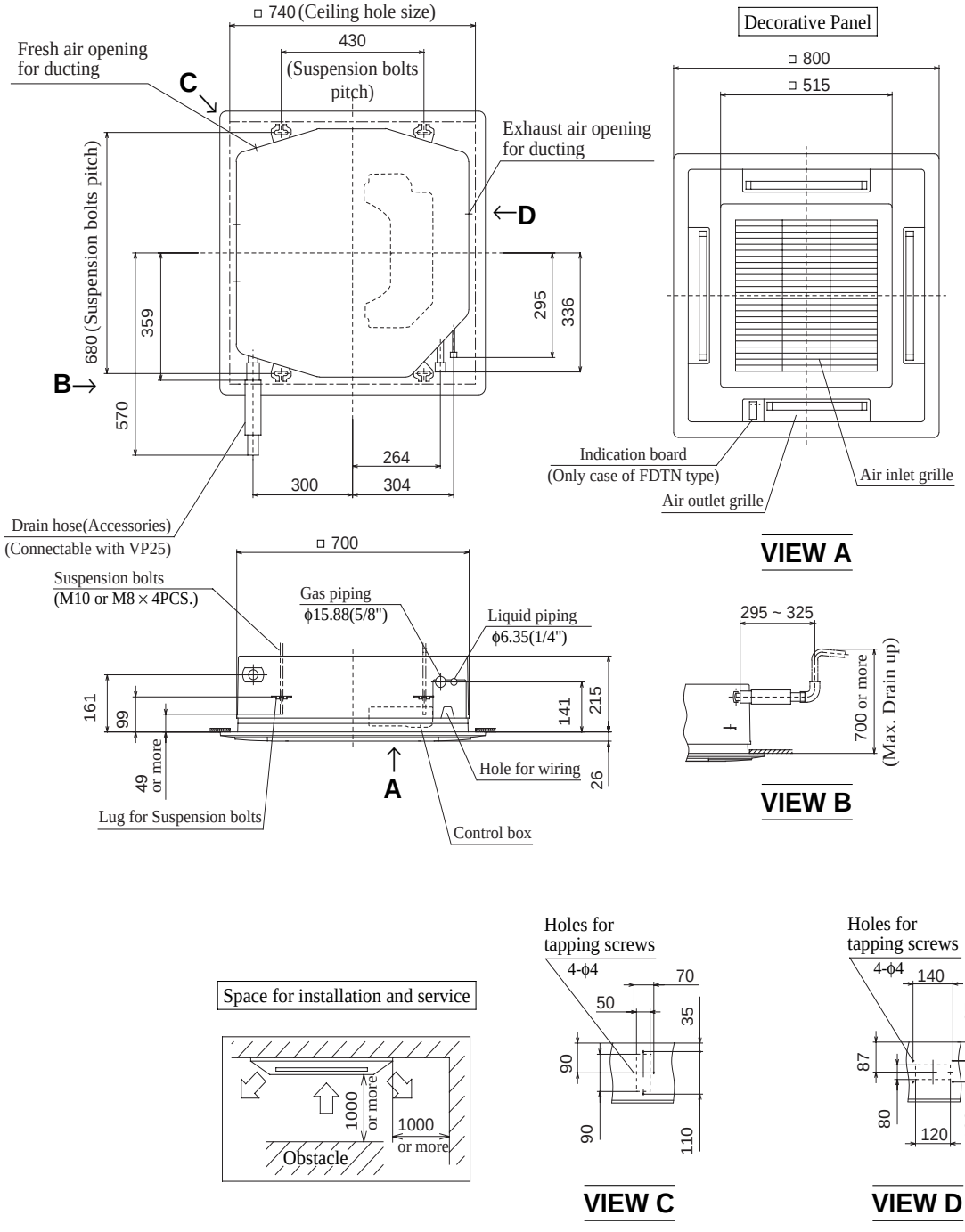
Item \ Models	FDT(N)208, 258 (FDC208, 258 type)	FDT(N)208~508 (FDC206~506 type)
Indoor return air temperature (Upper, lower limits)	Refer to the selection chart	
Outdoor air temperature (Upper, lower limits)		
Indoor unit atmosphere (behind ceiling) temperature and humidity	Dew point temperature 28˚C or less, relative humidity 80% or less	
Refrigerant line (one way) length	**Max. 30m**	
Vertical height difference between outdoor unit and indoor unit	**Max. 20m (Outdoor unit is higher)** **Max. 15m (Outdoor unit is lower)**	**Max. 15m**
Power source voltage	Rating ± 10%	
Voltage at starting	Min. 85% of rating	
Frequency of ON-OFF cycle	**Max. 10 times/h**	
ON and OFF interval	**Min. 3 minutes**	

7.2.3 Exterior dimensions

(1) Indoor unit

Models FDTN208C
FDT208

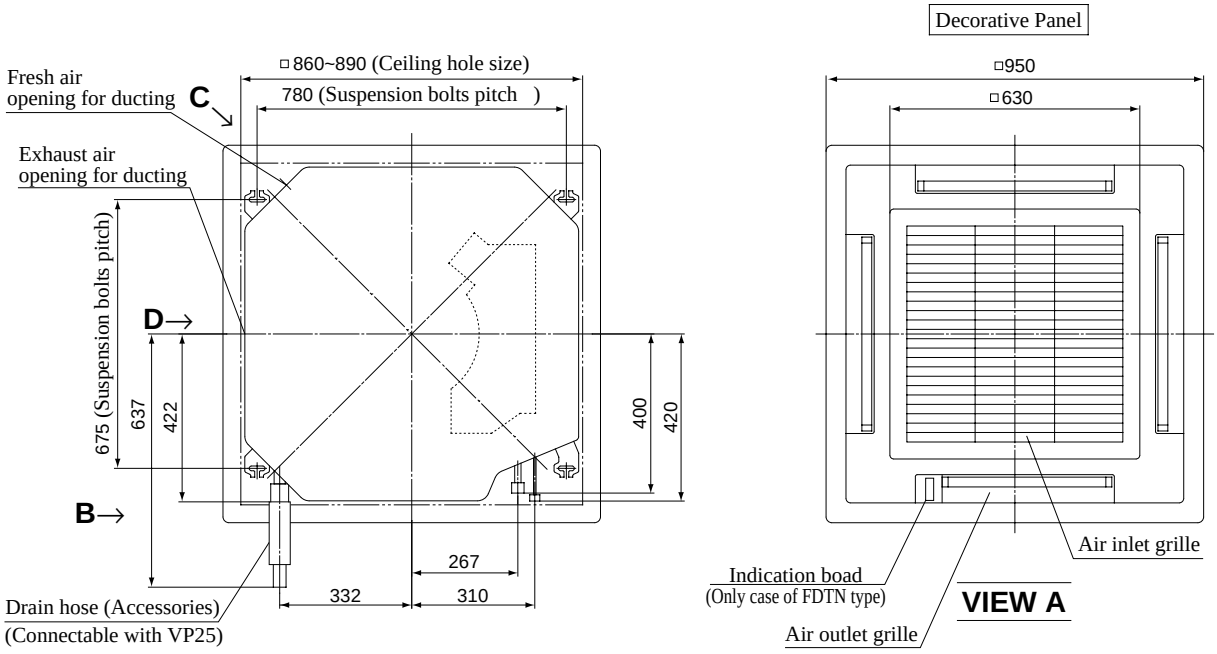
Unit : mm

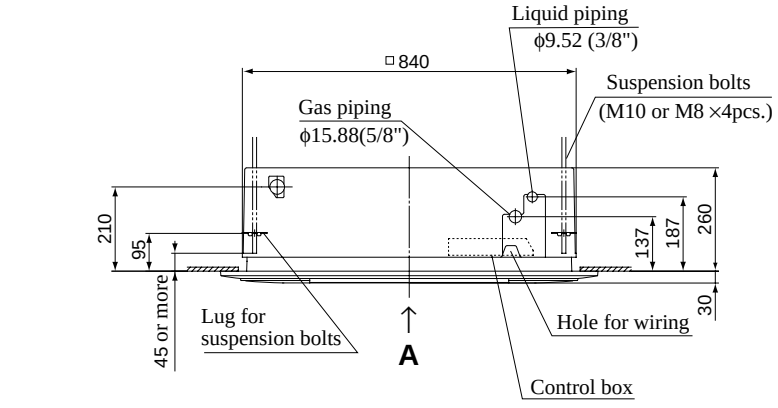


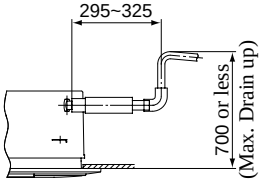
FDTN-C

Models FDTN258C, 308C
FDT258, 308

Unit : mm

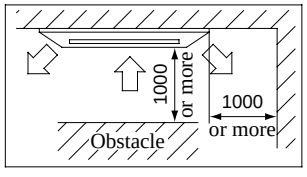


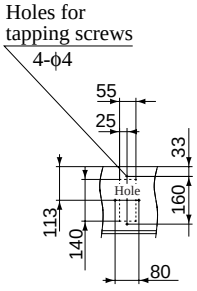




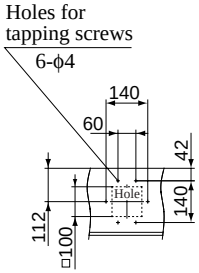
VIEW B

Space for installation and service





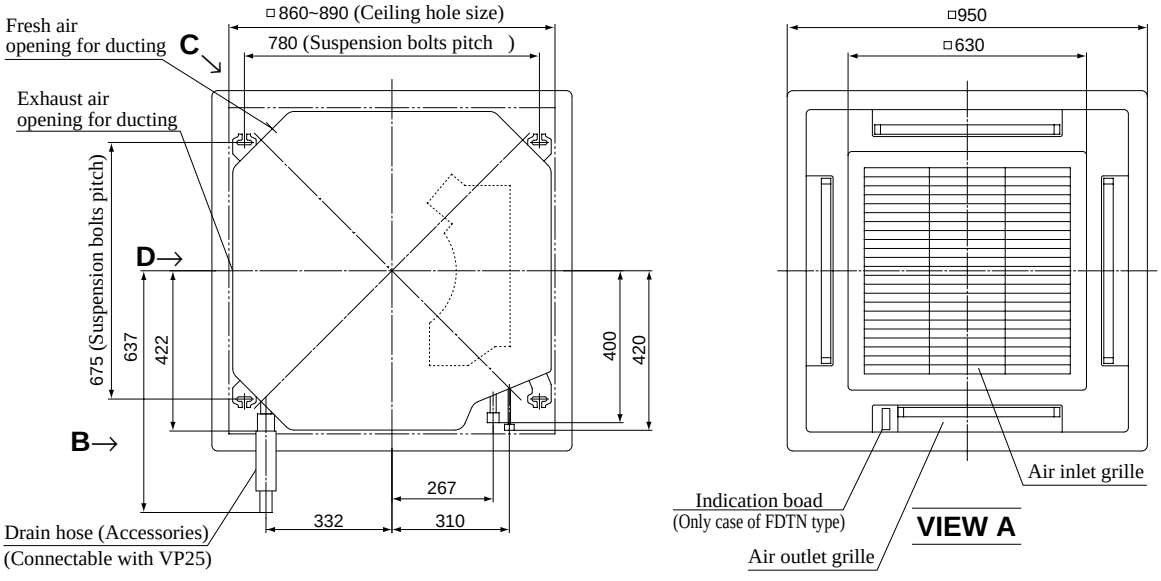
VIEW C

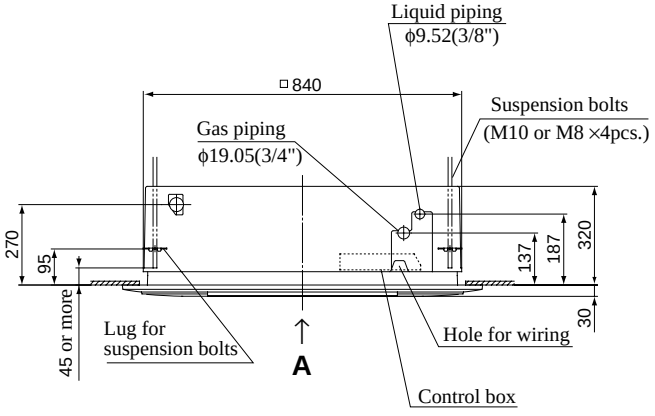


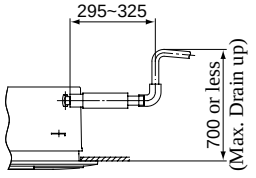
VIEW D

Models FDTN408C, 508C
FDT408, 508

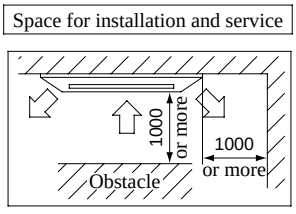
Unit : mm

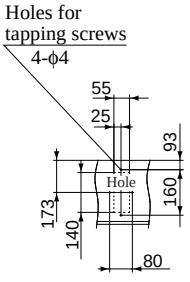




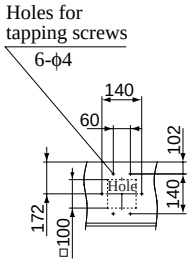


VIEW B





VIEW C

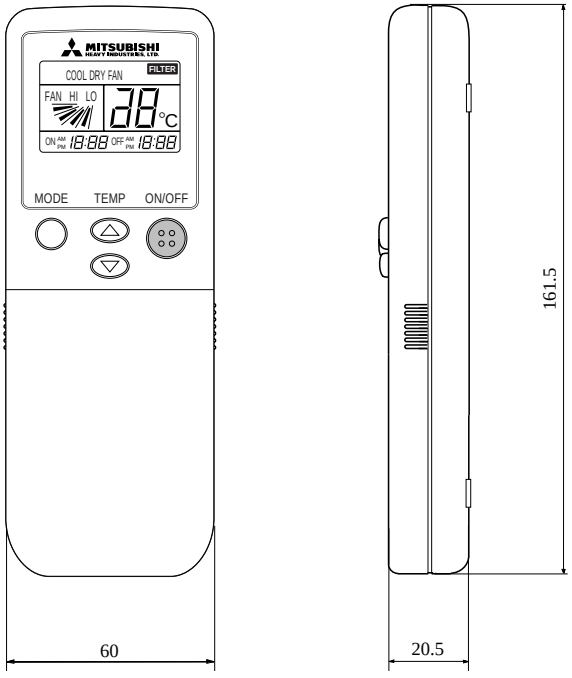


VIEW D

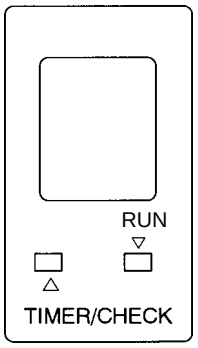
(2) Remote controller

(a) Wireless remote controller

Unit: mm

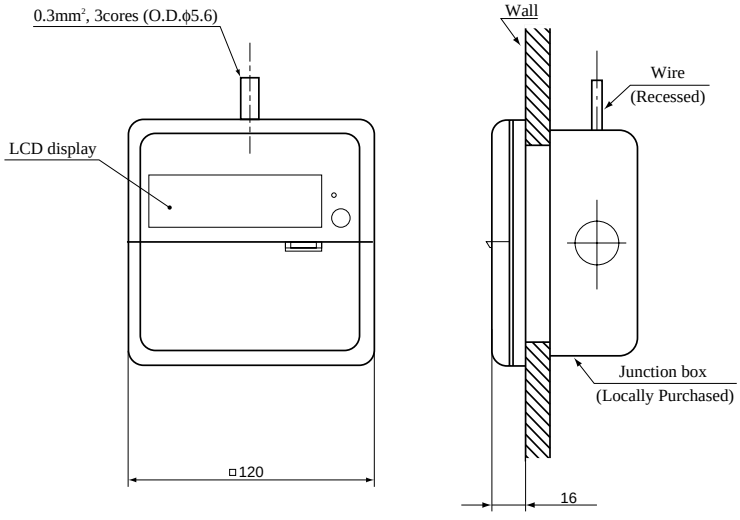


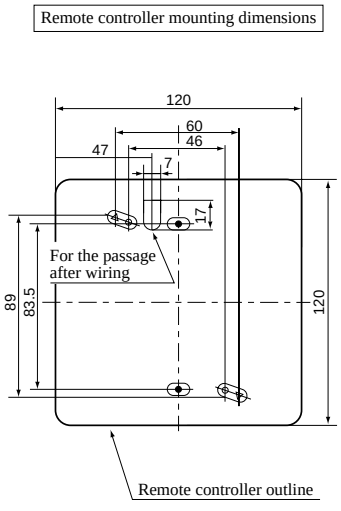
Indication board of indoor unit



Unit: mm

(b) Wired remote controller(Optional parts)





♦ Usable JIS box, JIS C 8336
- Switch box for 1 piece (without cover)
  (use of the ● mark hole as illustrated on the left)
- Switch box for 2 pieces
  (use of the ○ mark hole as illustrated on the left)
  (without cover)
  (use of the △ mark hole as illustrated on the left)
  (when installing the cover)

Note (1) Allowable length of remote controller cable: 600 m

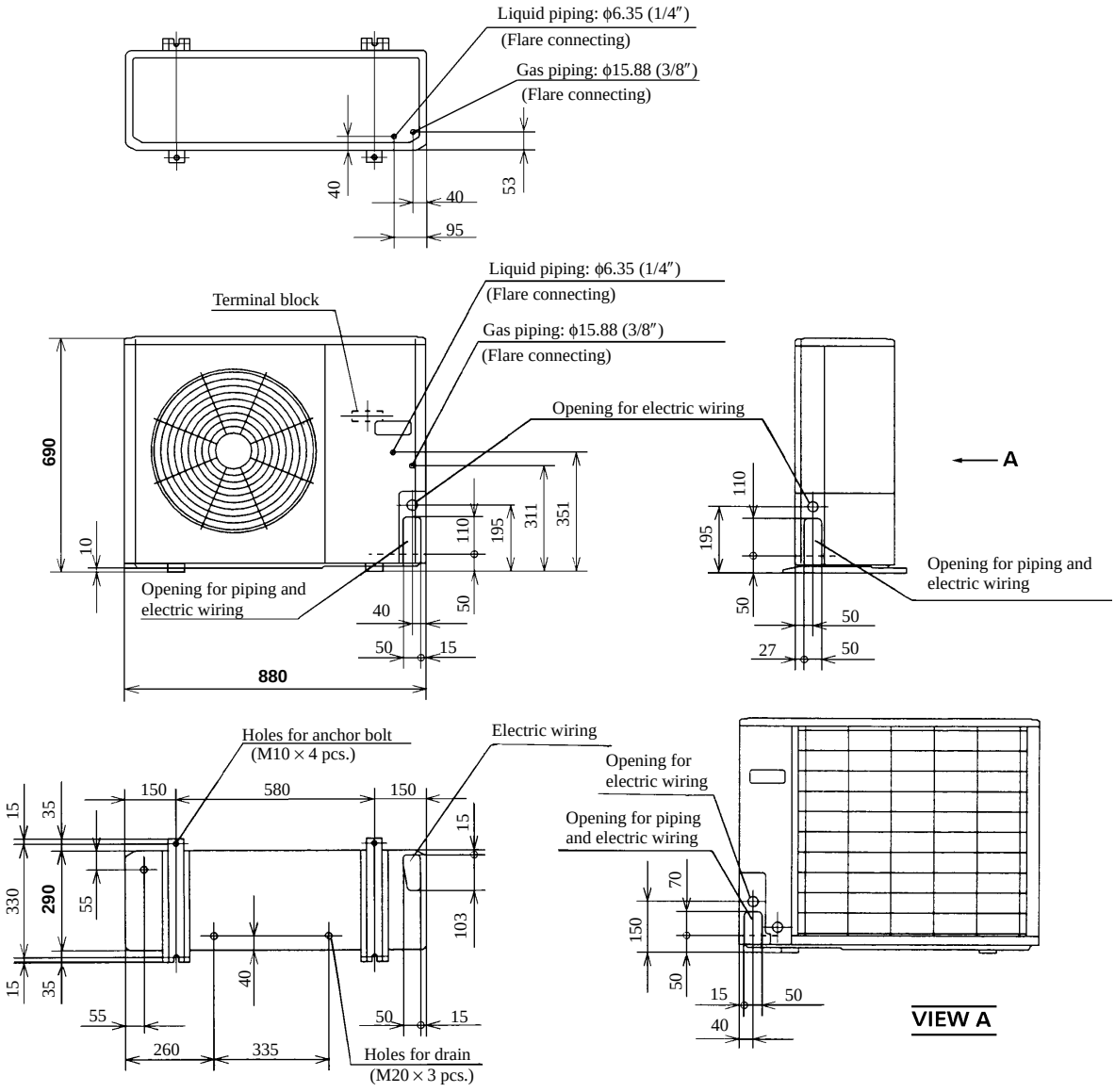
Allowable rang of wire thickness and length

Standard Within	0.3 mm²	× Within 100 m
	0.5 mm²	× Within 200 m
	0.75 mm²	× Within 300 m
	1.25 mm²	× Within 400 m
	2 mm²	× Within 600 m

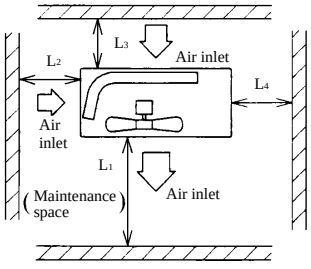
(3) Outdoor unit

Models FDC208CEN3, 208CEP3

Unit: mm



Required space for maintenance and air flow



Minimum allowable space to the obstacles

Unit:mm

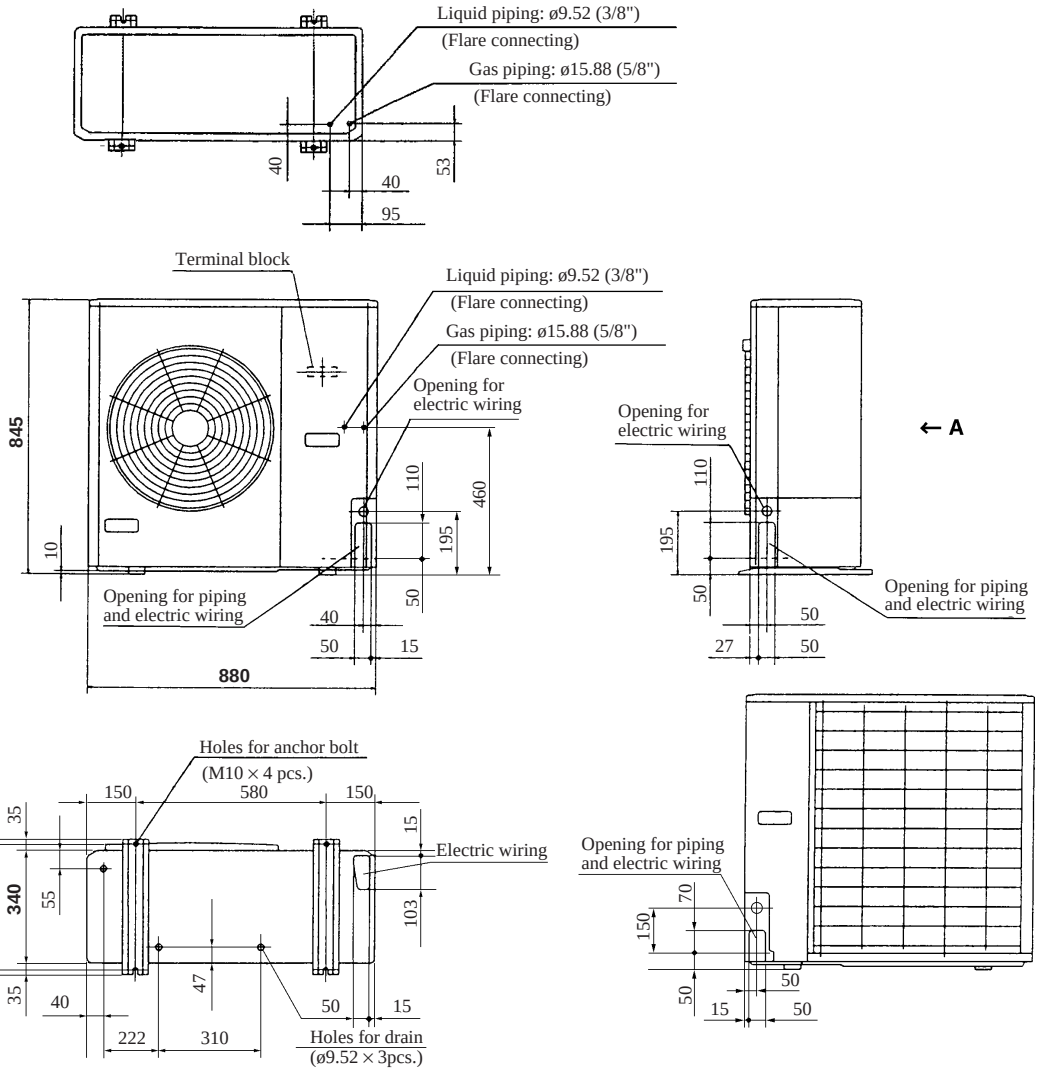
Mark \ Installation type	Ⅰ	Ⅱ	Ⅲ
L_1	Open	Open	500
L_2	300	5	Open
L_3	100	150	100
L_4	5	5	5

Notes

(1) Avoid the location where four sides are entirely surrounded by walls.
(2) Fix the unit by anchor bolts without fail. Restrict the protrusion length of anchor bolt to 15 mm and under.
(3) When strong wind blows against the unit, direct the discharge port at a right angle to the wind direction.
(4) Secure the space of 1 m and over at the top of unit.
(5) Make the height of obstruction wall in front of discharge port lower than the height of unit.

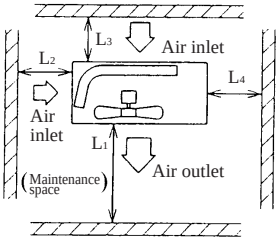
Models FDC258CEN3, 258CEP3

Unit: mm



VIEW A

Required space for maintenance and air flow



Minimum allowable space to the obstacles

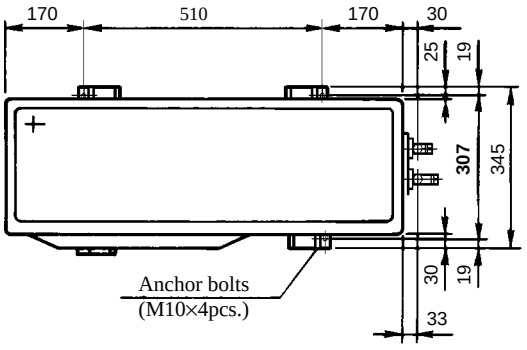
Unit:mm

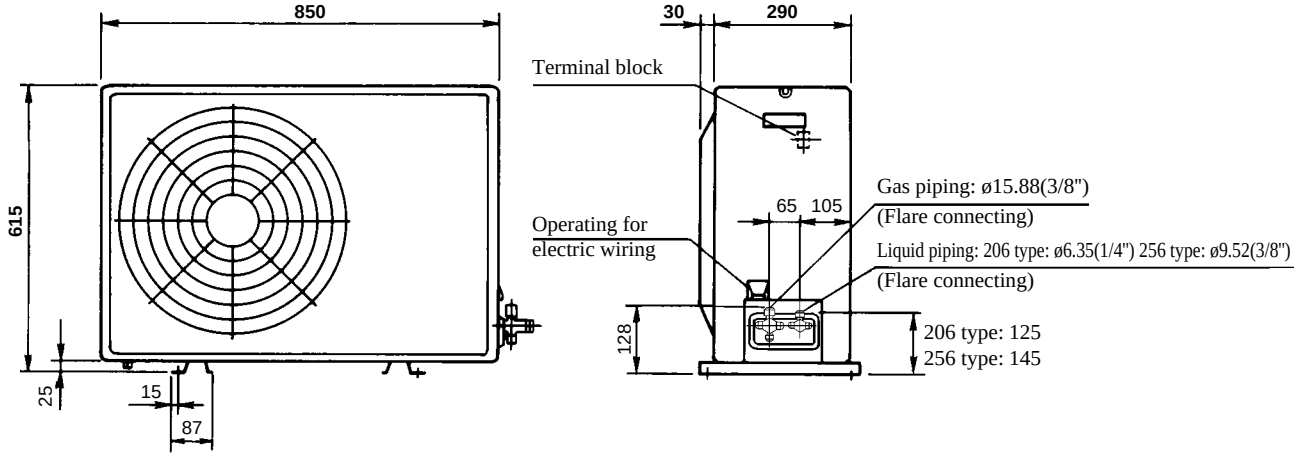
Mark \ Installation type	Ⅰ	Ⅱ	Ⅲ
L_1	Open	Open	500
L_2	300	5	Open
L_3	100	150	100
L_4	5	5	5

Notes
(1) Avoid the location where four sides are entirely surrounded by walls.
(2) Fix the unit by anchor bolts without fail. Restrict the protrusion length of anchor bolt to 15 mm and under.
(3) When strong wind blows against the unit, direct the discharge port at a right angle to the wind direction.
(4) Secure the space of 1 m and over at the top of unit.
(5) Make the height of obstruction wall in front of discharge port lower than the height of unit.

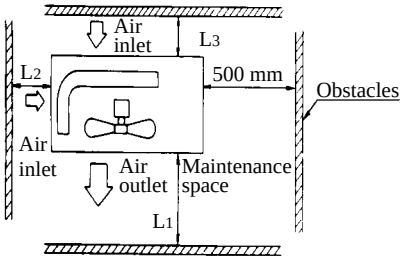
Models FDC206CEN3, 206CEP3, 256CEN3, 256CEP3

Unit: mm





Required space for maintenance and air flow



Minimum allowable space to the obstacles

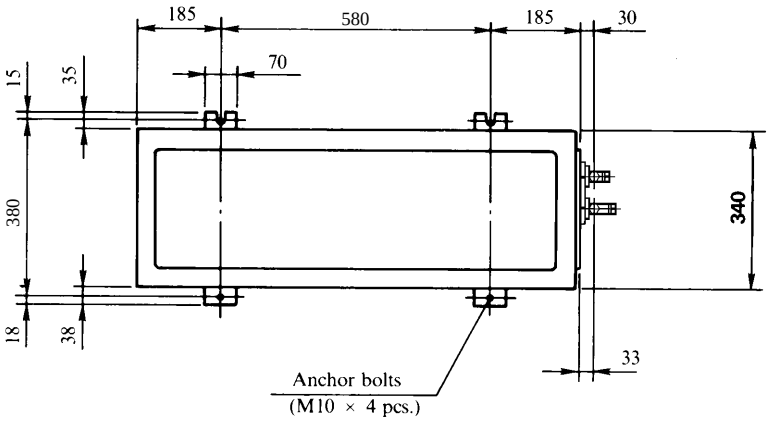
Unit:mm

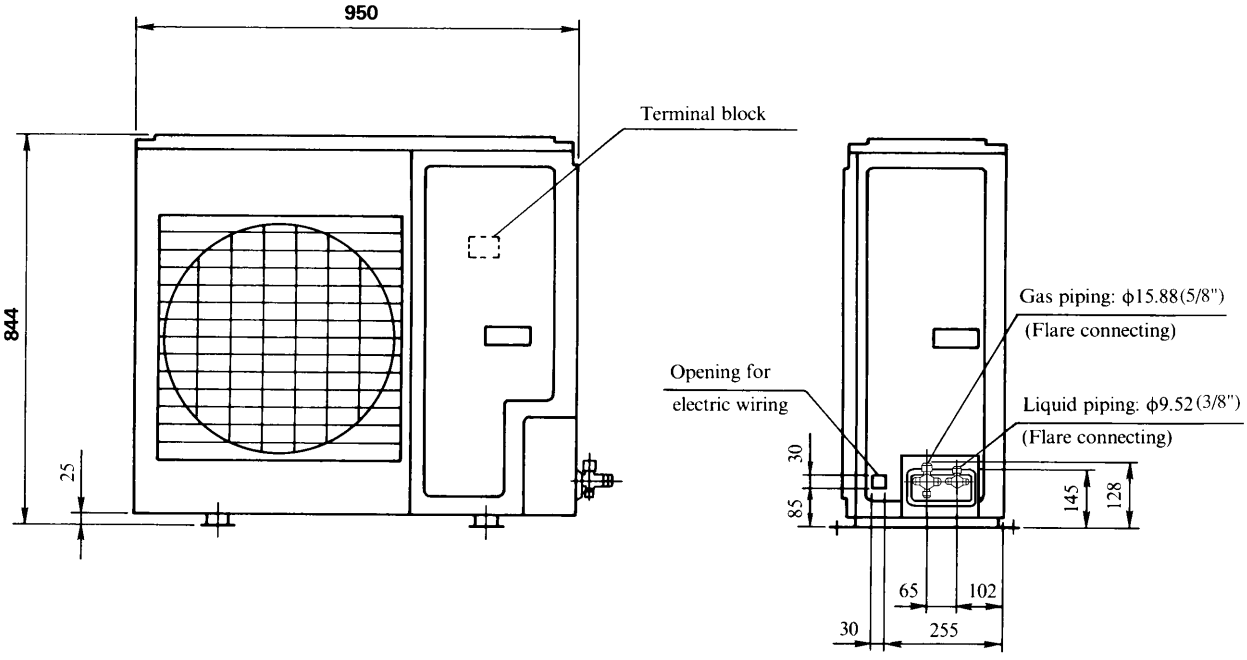
Mark \ Installation type	Ⅰ	Ⅱ
L_1	Open	100
L_2	100	Open
L_3	100	500

Notes
(1) Fix the unit with anchor bolts.
(2) Strong wind must not be directed to the air outlet.
(3) Free space over the unit must be larger than 1 m.
(4) The unit should not be surrounded by obstructions in all direction. At least one direction around the unit must be free.

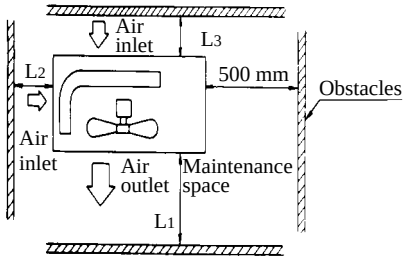
Models FDC306CEN3, 306CEP3, 306CES3

Unit: mm





Required space for maintenance and air flow



Minimum allowable space to the obstacles

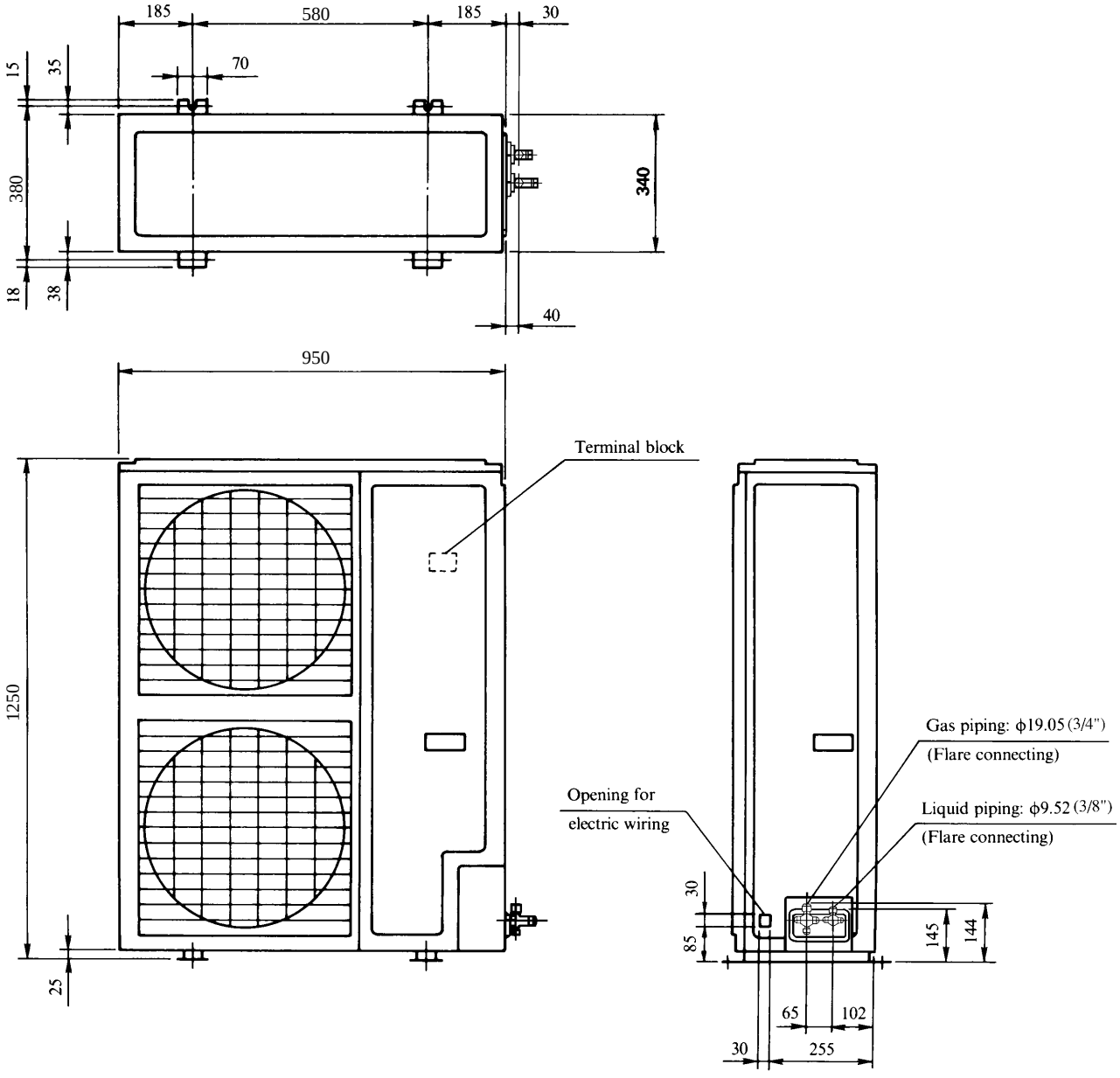
Unit:mm

Mark \ Installation type	Ⅰ	Ⅱ	Ⅲ
L_1	Open	Open	500
L_2	300	0	Open
L_3	100	150	100

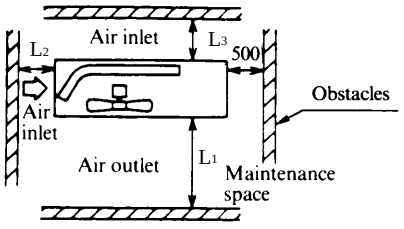
Notes
(1) Fix the unit with anchor bolts.
(2) Strong wind must not be directed to the air outlet.
(3) Free space over the unit must be larger than 1 m.
(4) The unit should not be surrounded by obstructions in all direction. At least one direction around the unit must be free.

Models FDC406CES3, 506CES3, 506CEM3

Unit: mm



Required space for maintenance and air flow



Minimum allowable space to the obstacles

Unit:mm

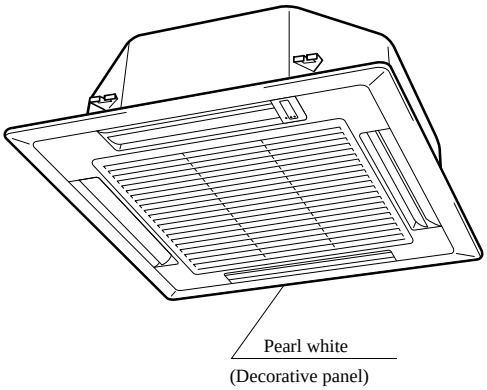
Mark \ Installation type	Ⅰ	Ⅱ	Ⅲ
L_1	Open	Open	500
L_2	300	0	Open
L_3	150	300	150

Notes
(1) Fix the unit with anchor bolts.
(2) Strong wind must not be directed to the air outlet.
(3) Free space over the unit must be larger than 1 m.
(4) The unit should not be surrounded by obstructions in all direction. At least one direction around the unit must be free.

7.2.4 Exterior appearance

(1) Indoor unit

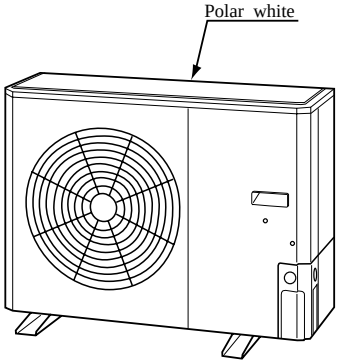
Models All models



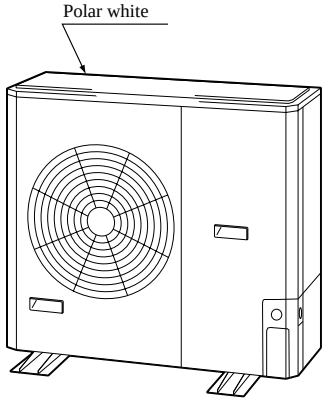
Type \ Item		Panel model	Remarks
For wireless remote controller	FDTN208C	TN-PSC-22W-E	Without swing
	FDTN258C~508C	TN-PSC-32W-E	
For wired remote controller	FDT208	T-PSA-22W-E	
	FDT258~508	T-PSA-32W-E	

(2) Outdoor unit

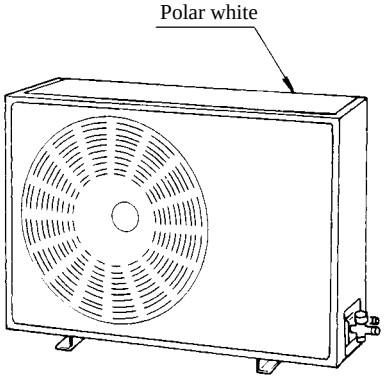
Models FDC208CEN3, 208CEP3



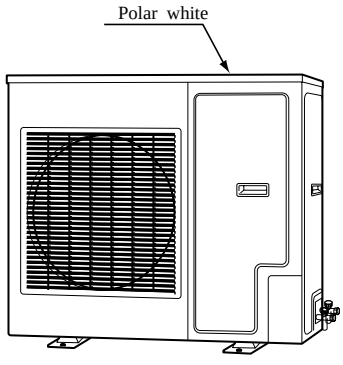
Models FDC258CEN3, 258CEP3



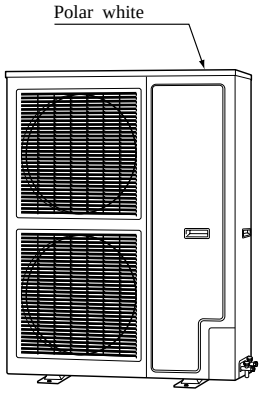
Models FDC206CEN3, 206CEP3
256CEN3, 256CEP3



Models FDC306CEN3,306CEP3
306CES3

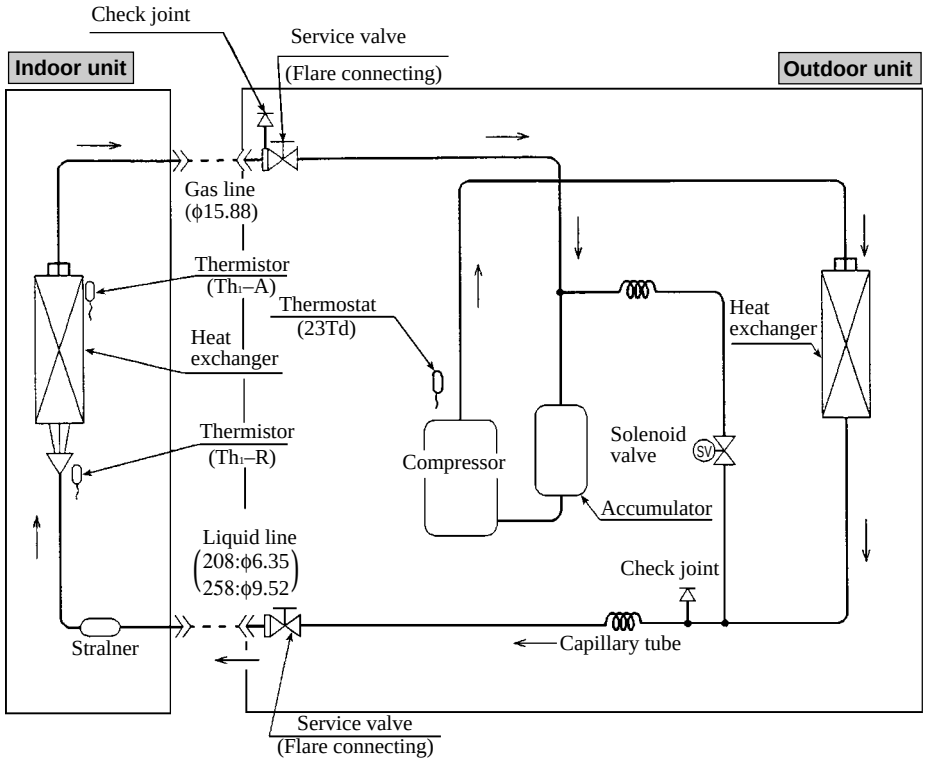


Models FDC406CES3, 506CES3
506CEM3

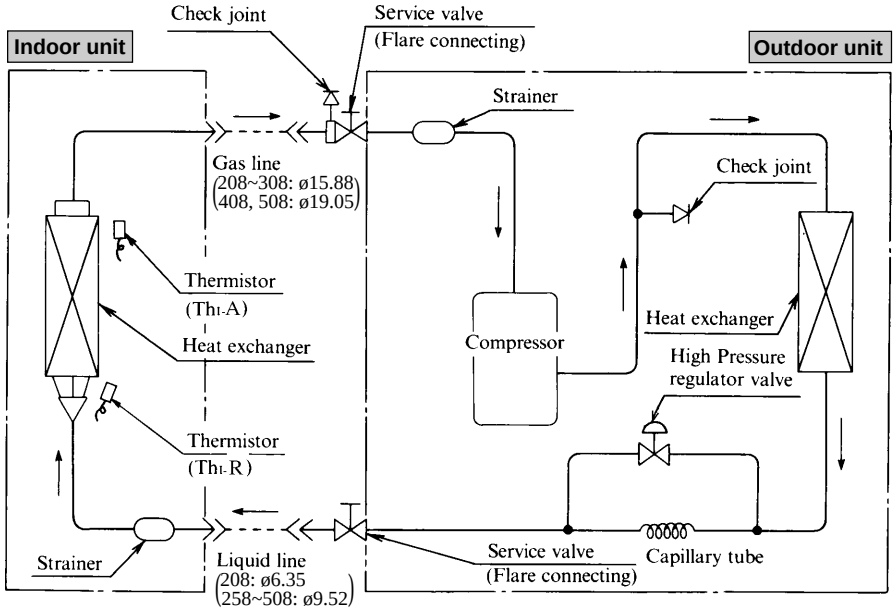


7.2.5 Piping system

Models FDTN208CEN-S, 208CEP-S, 258CEN-S, 258CEP-S
FDT208CEN-S, 258CEN-S



Models FDTN208CEN, 208CEP, 258CEN, 258CEP, 308CEN, 308CEP, 308CES, 408CES, 508CES, 508CEM
FDT308CEN, 308CES, 408CES, 508CES



Preset point of protective devices

Part name	Mark	Equipped unit	All models
Thermistor (for frost prevention)	**Thi-R**	Indoor unit	OFF 2.5°C ON 10°C

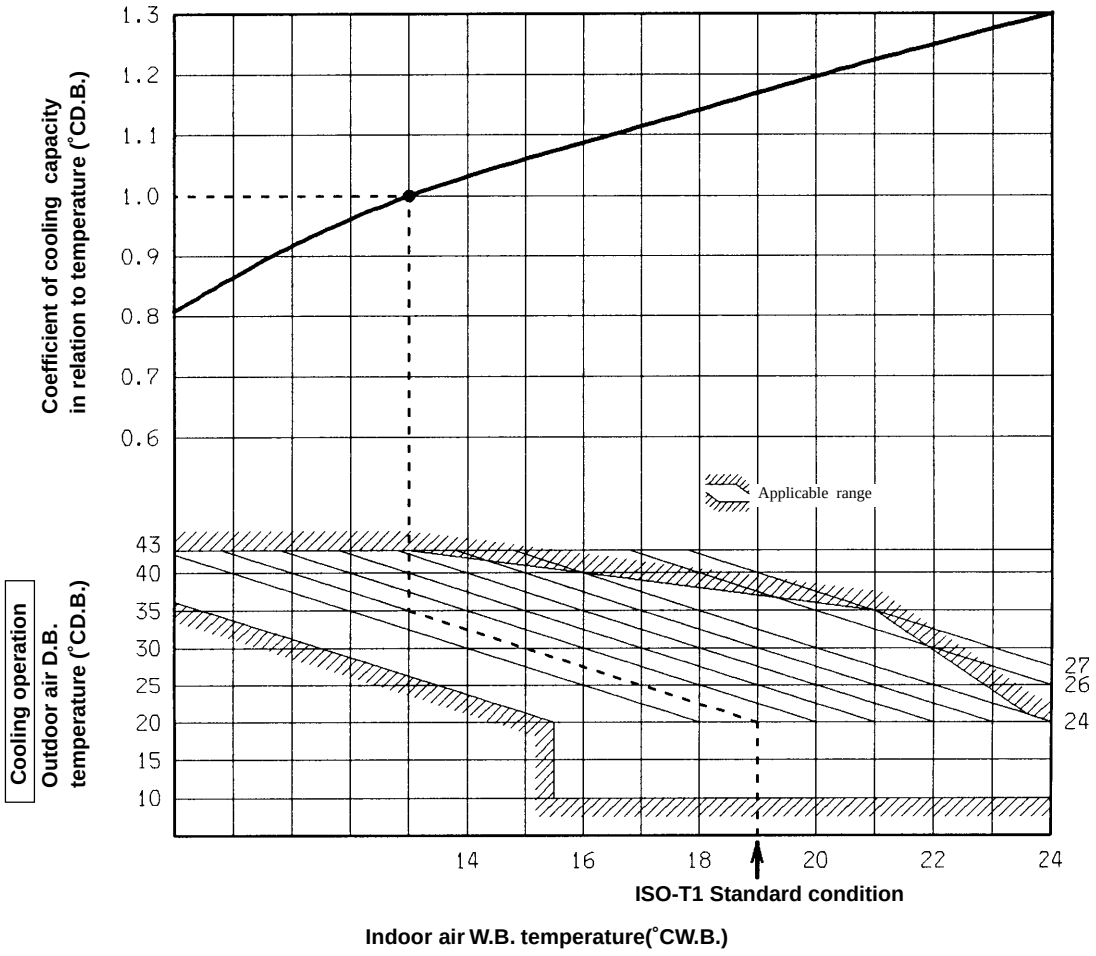
7.2.6 Selection chart

Correct the cooling capacity in accordance with the conditions as follows. The net cooling capacity can be obtained in the following way.

Net capacity = Capacity shown on specification × Correction factors as follows.

(1) Coefficient of cooling capacity in relation to temperatures

(a) Only case of ISO-T1 models



(b) Only case of ISO-T3 and SASO models

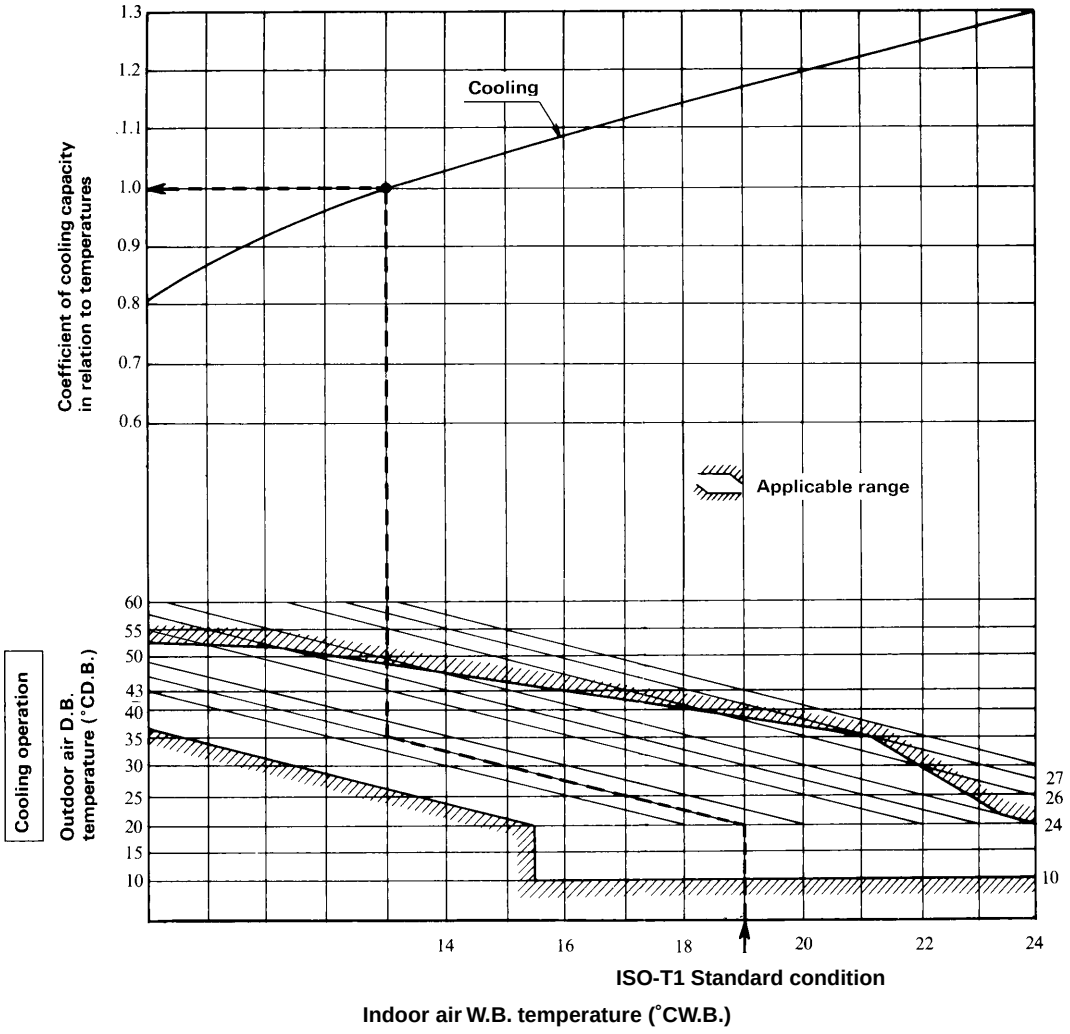


Table of bypass factor

Item \ Model		208 type	258 type	308 type	408 type	508 type
Air flow	Hi	0.112	0.050	0.065	0.076	0.025
	Lo	0.073	0.030	0.030	0.050	0.013

(2) Correction of cooling capacity in relation to air flow rate control (fan speed)

Coefficient: 1.00 at High, 0.95 at Low

(3) Correction of cooling capacity in relation to one way length of refrigerant piping

It is necessary to correct the cooling capacity in relation to the one way equivalent piping length between the indoor and outdoor units.

(50/60Hz)

Equivalent piping length(1) m		5	10	15	20	25	30	35
Cooling	208 type	1.0	0.995	0.995/0.99	0.99/0.985	0.985/0.98	0.985/0.975	0.98/0.97
	258 type	1.0	0.995	0.99	0.985	0.98	0.975	0.97
	308 type	1.0	0.99	0.98/0.975	0.97/0.965	0.96/0.95	0.95/0.94	0.94/0.925
	408 type	1.0	0.995/0.99	0.985/0.98	0.98/0.97	0.97/0.96	0.965/0.95	0.955/0.94
	508 type	1.0	0.99/0.985	0.975/0.97	0.965/0.955	0.95/0.94	0.94/0.925	0.925/0.91

Note (1) Equivalent piping length can be obtained by calculating as follows.
208, 258, 308 series [ϕ15.88(5/8″)]: Equivalent piping length = Real piping length + (0.10 × Number or bends in piping)
408, 508, series [ϕ19.05(3/4″)]: Equivalent piping length = Real piping length + (0.15 × Number of bends in piping)
[Equivalent piping length < Limitation length of piping + 5m]

(4) When the outdoor unit is located at a lower height than the indoor unit in cooling operation, the following values should be subtracted from the values in the above table.

Height difference between the indoor unit and outdoor unit in the vertical height difference	5m	10m	15m
Adjustment coefficient	0.01	0.02	0.03

Piping length limitations

Item \ Modei	FDT(N)208, 258(FDC208,258 type)	FDT(N)208~508(FDC206~506 type)
Max.one way piping length	30m	
Max.vertical height difference	20m(Outdoor unit is higher) 15m(Outdoor unit is lower)	15m

Note (1) Values in the table indicate the one way piping length between the indoor and outdoor units.

How to obtain the cooling capacity

Example : The net cooling capacity of the model FDTN308CEN with the air flow "High", the piping length of 15m, the outdoor unit located 5m lower than the indoor unit, indoor wet-bulb temperature at 19.0 ˚C and outdoor dry-bulb temperature 35 ˚C is

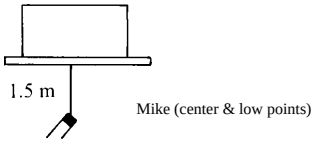
Net cooling capacity = 7100 × 1.00 × (0.98 - 0.01) × 1.0 = **6887 w**

- 7100 — FDTN308CEN
- 1.00 — Air flow "High"
- (0.98 - 0.01) — Length 15m. Height difference 5 m
- 1.0 — Factor by air temperatures

7.2.7 Noise level

Notes (1) The data are based on the following conditions.
Ambient air temperature:
Indoor unit 27˚C DB, 19˚C WB.
Outdoor unit 35˚C DB.

Indoor unit
Measured based on JIS B 8616
Mike position as below



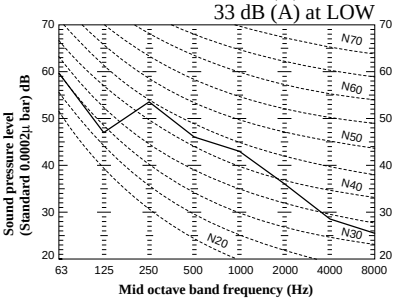
Outdoor unit
Measured based on JIS B 8616
Mike position: at highest noise level in position as below
Distance from front side 1 m
Height 1 m

(2) The data in the chart are measured in an unechonic room.

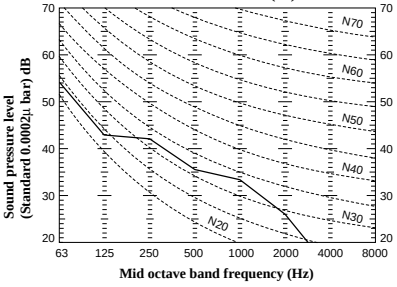
(3) The noise levels measured in the field are usually higher than the data because of reflection.

(1) Indoor unit

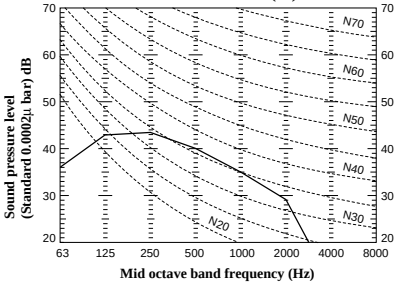
Models FDTN208C FDT208
Noise level 38 dB (A) at HIGH
33 dB (A) at LOW



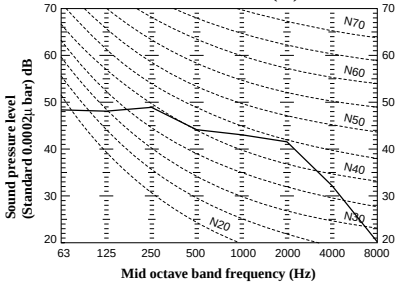
Models FDTN258C FDT258
Noise level 39 dB (A) at HIGH
35 dB (A) at LOW



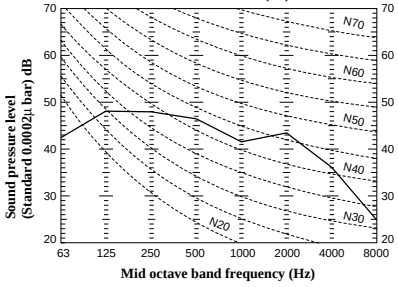
Models FDTN308C FDT308
Noise level 41 dB (A) at HIGH
35 dB (A) at LOW



Models FDTN408C FDT408
Noise level 48 dB (A) at HIGH
40 dB (A) at LOW

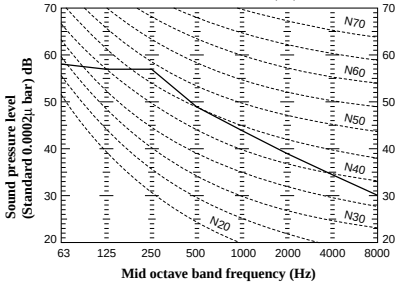


Models FDTN508C FDT508
Noise level 49 dB (A) at HIGH
43 dB (A) at LOW

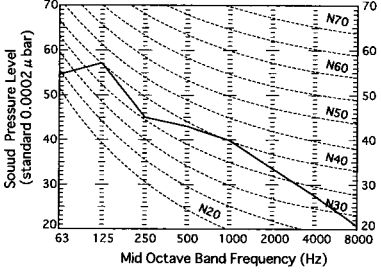


(2) Outdoor unit

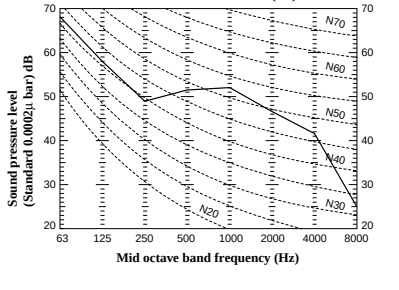
Model FDC208CEN3
Noise level 52 dB (A)



Model FDC208CEP3
Noise level 52 dB (A)

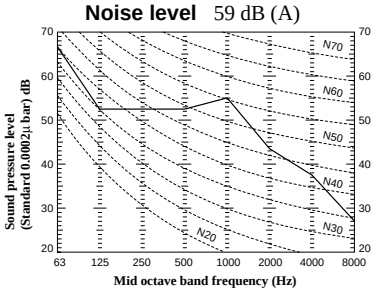


Model FDC206CEN3
Noise level 59 dB (A)



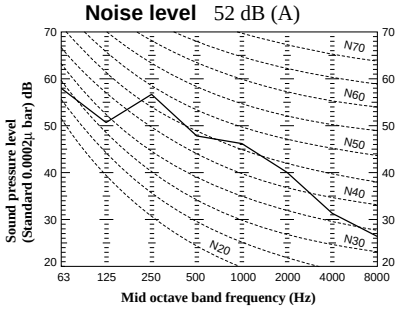
Model FDC206CEP3

Noise level 59 dB (A)



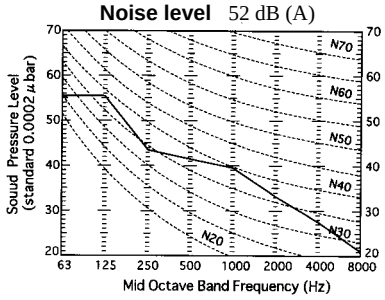
Model FDC258CEN3

Noise level 52 dB (A)



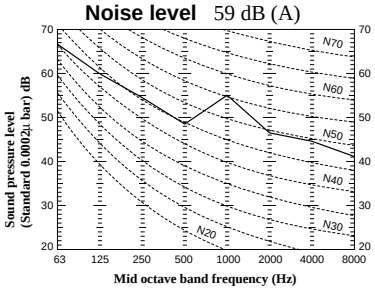
Model FDC258CEP3

Noise level 52 dB (A)



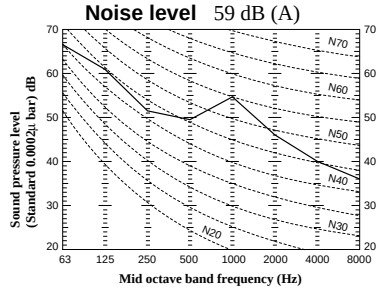
Model FDC256CEN3

Noise level 59 dB (A)



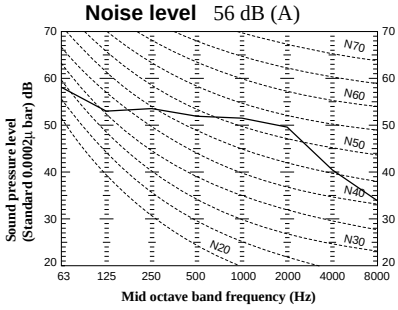
Model FDC256CEP3

Noise level 59 dB (A)



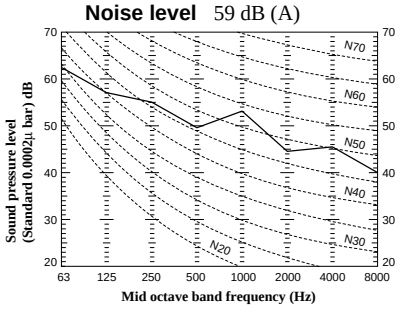
Model FDC306CEN3

Noise level 56 dB (A)



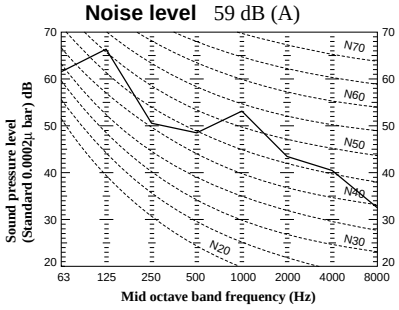
Model FDC306CEP3

Noise level 59 dB (A)



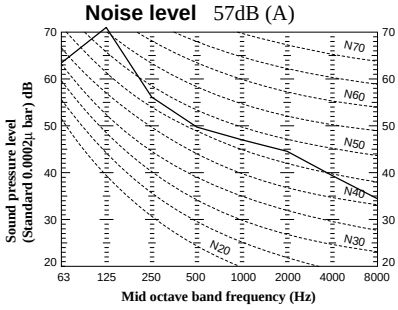
Model FDC306CES3

Noise level 59 dB (A)



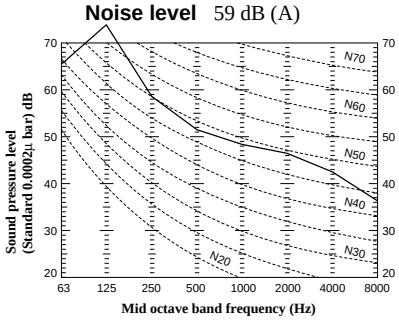
Model FDC406CES3

Noise level 57dB (A)



Models FDC506CES3, 506CEM3

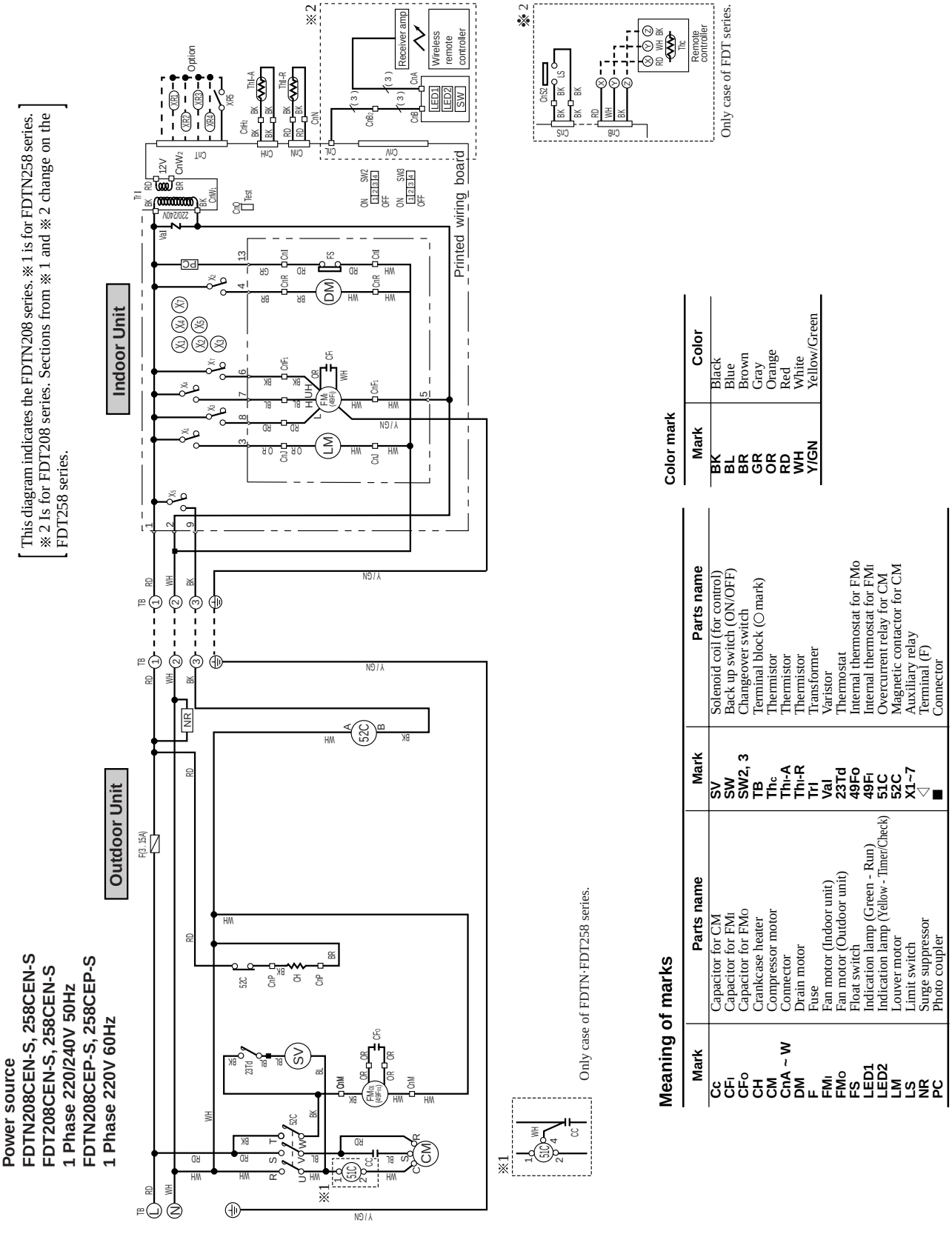
Noise level 59 dB (A)



7.3 ELECTRICAL DATA

7.3.1 Electrical wiring

Models FDTN208CEN-S, 208CEP-S, 258CEN-S, 258CEP-S
FDT208CEN-S, 258CEN-S



Color mark

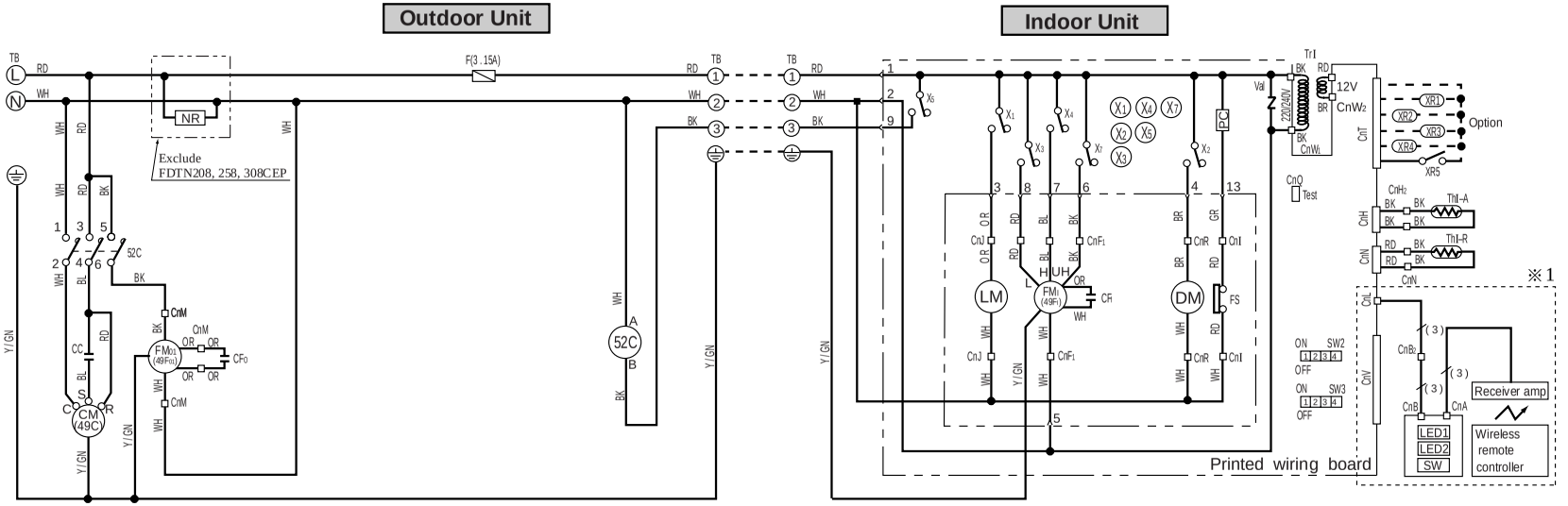
Mark	Color
BK	Black
BL	Blue
BR	Brown
GR	Gray
OR	Orange
RD	Red
WH	White
Y/GN	Yellow/Green

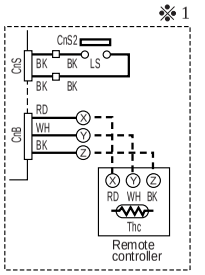
Meaning of marks

Mark	Parts name	Mark	Parts name
Cc	Capacitor for CM	**SV**	Solenoid coil (for control)
CFi	Capacitor for FMi	**SW**	Back up switch (ON/OFF)
CFo	Capacitor for FMo	**SW2, 3**	Changeover switch
CH	Crankcase heater	**TB**	Terminal block (○ mark)
CM	Compressor motor	**Thc**	Thermistor
CnA ~ W	Connector	**Thi-A**	Thermistor
DM	Drain motor	**Thi-R**	Thermistor
F	Fuse	**Trl**	Transformer
FMi	Fan motor (Indoor unit)	**Val**	Varistor
FMo	Fan motor (Outdoor unit)	**23Td**	Thermostat
FS	Float switch	**49Fo**	Internal thermostat for FMo
LED1	Indication lamp (Green - Run)	**49Fi**	Internal thermostat for FMi
LED2	Indication lamp (Yellow - Timer/Check)	**51C**	Overcurrent relay for CM
LM	Louver motor	**52C**	Magnetic contactor for CM
LS	Limit switch	**X1~7**	Auxiliary relay
NR	Surge suppressor	**▽**	Terminal (F)
PC	Photo coupler	**■**	Connector

Power source
FDTN208CEN, 258CEN, 308CEN
FDT308CEN
1 Phase 220/240V 50Hz
FDTN208CEP, 258CEP, 308CEP
1 Phase 220V 60Hz

[This diagram indicates the FDTN series. Section from ※ 1 changes on the FDT series.]





Only case of FDT series.

Meaning of marks

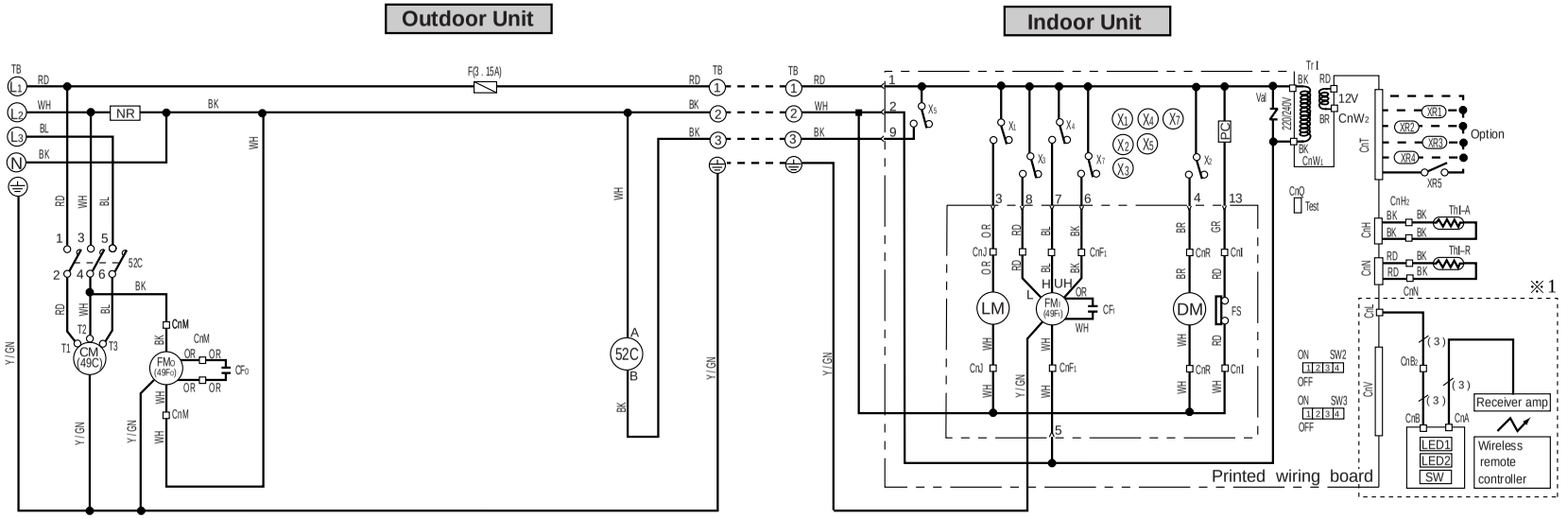
Mark	Parts name	Mark	Parts name
Cc	Capacitor for CM	**SW**	Back up switch (ON/OFF)
CFI	Capacitor for FMI	**SW2, 3**	Changeover switch
CFo	Capacitor for FMO	**TB**	Terminal block (○ mark)
CM	Compressor motor	**Thc**	Thermistor
CnA ~ W	Connector	**ThI-A**	Thermistor
DM	Drain motor	**ThI-R**	Thermistor
F	Fuse	**Trl**	Transformer
FMI	Fan motor (Indoor unit)	**Val**	Varistor
FMo	Fan motor (Outdoor unit)	**49C**	Internal thermostat for CM
FS	Float switch	**49Fo**	Internal thermostat for FMo
LED1	Indication lamp (Green - Run)	**49FI**	Internal thermostat for FMI
LED2	Indication lamp (Yellow - Timer/Check)	**52C**	Magnetic contactor for CM
LM	Louver motor	**X1~7**	Auxiliary relay
LS	Limit switch	◁	Terminal (F)
NR	Surge suppressor	■	Connector
PC	Photo coupler		

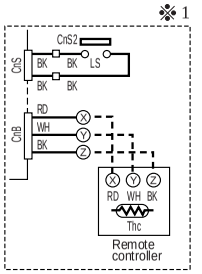
Color mark

Mark	Color
BK	Black
BL	Blue
BR	Brown
GR	Gray
OR	Orange
RD	Red
WH	White
Y/GN	Yellow/Green

Power Source
3 Phase 380/415V 50Hz-380V 60Hz

[This diagram indicates the FDTN series. Section from ※ 1 changes on the FDT series.]





Only case of FDT series.

Meaning of marks

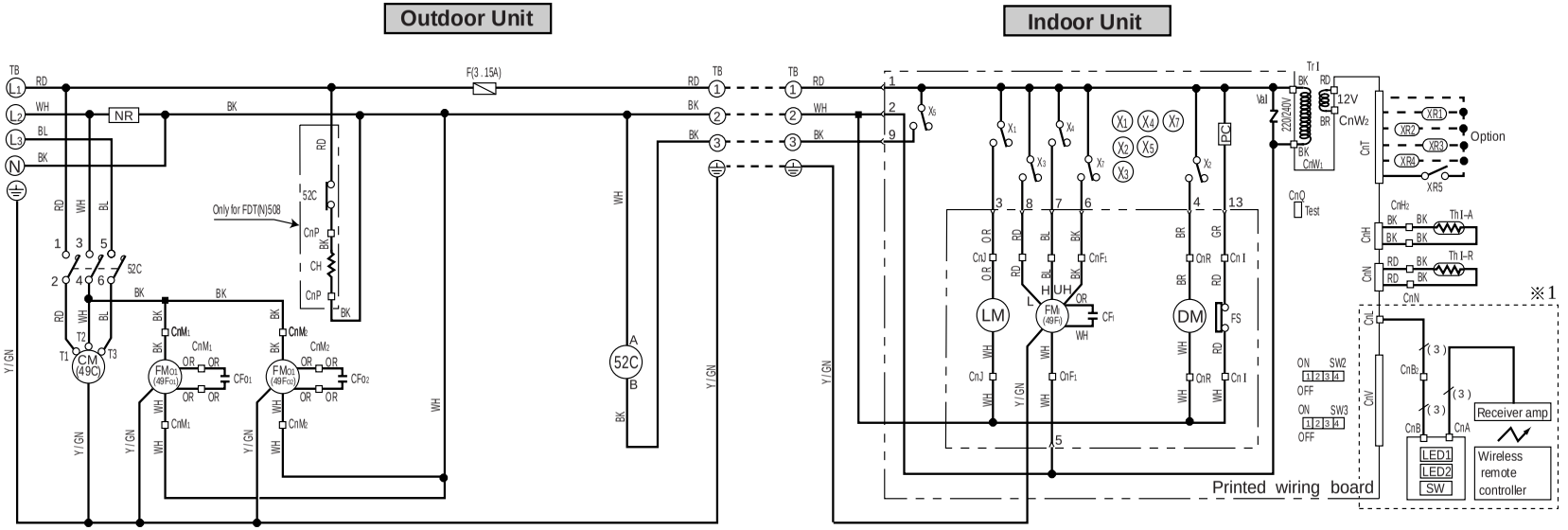
Mark	Parts name	Mark	Parts name
CFI	Capacitor for FMI	**PC**	Photo coupler
CFO	Capacitor for FMO	**TB**	Terminal block (○mark)
CM	Compressor motor	**SW2, 3**	Changeover switch
CnA ~ W	Connector	**Thc**	Thermistor
DM	Drain motor	**THI-A**	Thermistor
F	Fuse	**THI-R**	Thermistor
FMI	Fan motor (Indoor unit)	**TrI**	Transformer
FMO	Fan motor (Outdoor unit)	**Val**	Varistor
FS	Float switch	**49C**	Internal thermostat for CM
LED1	Indication lamp (Green - Run)	**49FO**	Internal thermostat for FMO
LED2	Indication lamp (Yellow - Timer/Check)	**49FI**	Internal thermostat for FMI
LM	Louver motor	**52C**	Magnetic contactor for CM
LS	Limit switch	**X1~7**	Auxiliary relay
NR	Surge suppressor	◁	Terminal (F)
SW	Back up switch (ON/OFF)	■	Connector

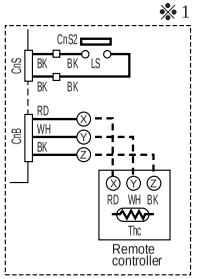
Color mark

Mark	Color
BK	Black
BL	Blue
BR	Brown
GR	Gray
OR	Orange
RD	Red
WH	White
Y/GN	Yellow/Green

Power Source
3 Phase 380/415V 50Hz-380V 60Hz

[This diagram indicates the FDTN series. Section from ※ 1 changes on the FDT series.]





Only case of FDT series.

Meaning of marks

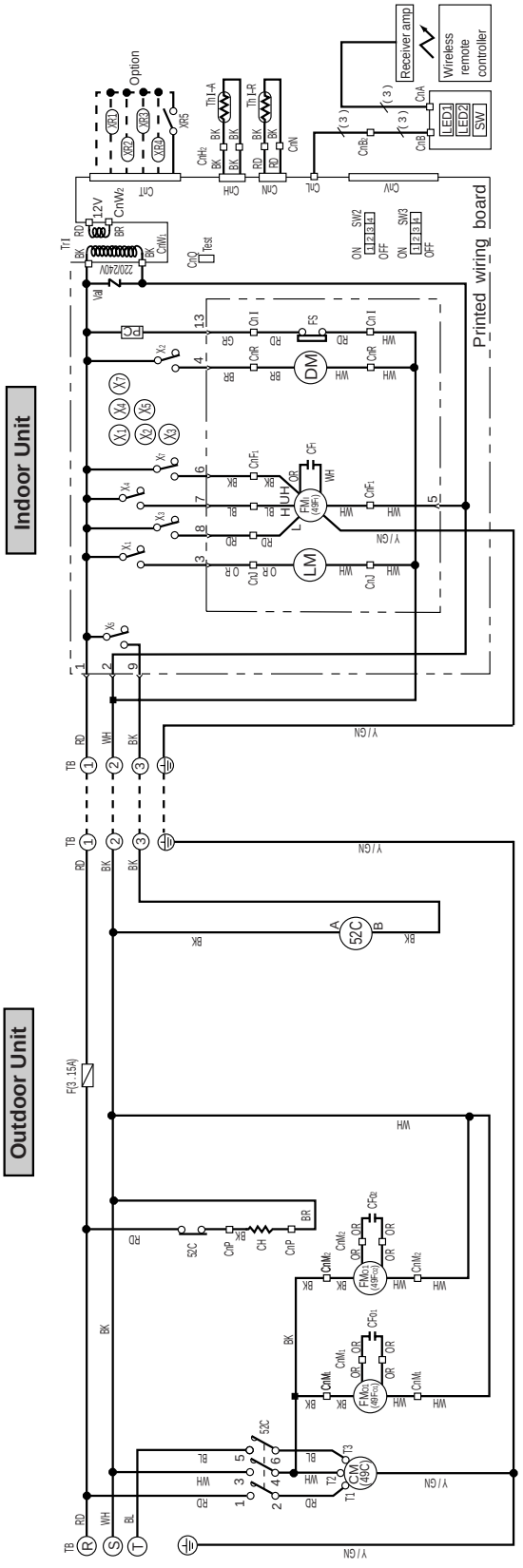
Mark	Parts name	Mark	Parts name
CFI	Capacitor for FMI	**PC**	Photo coupler
CFO1,2	Capacitor for FMO	**TB**	Terminal block (○ mark)
CH	Crankcase heater	**SW2, 3**	Changeover switch
CM	Compressor motor	**Thc**	Thermistor
CnA ~ W	Connector	**ThI-A**	Thermistor
DM	Drain motor	**ThI-R**	Thermistor
F	Fuse	**TrI**	Transformer
FMI	Fan motor (Indoor unit)	**Val**	Varistor
FMO1,2	Fan motor (Outdoor unit)	**49C**	Internal thermostat for CM
FS	Float switch	**49FO1,2**	Internal thermostat for FMO
LED1	Indication lamp (Green - Run)	**49FI**	Internal thermostat for FMI
LED2	Indication lamp (Yellow - Timer/Check)	**52C**	Magnetic contactor for CM
LM	Louver motor	**X1~7**	Auxiliary relay
LS	Limit switch	◁	Terminal (F)
NR	Surge suppressor	■	Connector
SW	Back up switch (ON/OFF)		

Color mark

Mark	Color
BK	Black
BL	Blue
BR	Brown
GR	Gray
OR	Orange
RD	Red
WH	White
Y/GN	Yellow/Green

Model FDTN508CEM

Power source
3 Phase 230V 50Hz/220V 60Hz



Meaning of marks

Mark	Parts name	Mark	Parts name
CFI	Capacitor for FMI	**PC**	Photo coupler
CFO1,2	Capacitor for FMO	**TB**	Terminal block (○mark)
CH	Crankcase heater	**SW2, 3**	Changeover switch
CM	Compressor motor	**Th-A**	Thermistor
CnA ~ W	Connector	**Th-R**	Thermistor
DM	Drain motor	**TrI**	Transformer
F	Fuse	**Val**	Varistor
FMI	Fan motor (Indoor unit)	**49FI**	Internal thermostat for FMI
FMO1,2	Fan motor (Outdoor unit)	**49C**	Internal thermostat for CM
FS	Float switch	**49FO1,2**	Internal thermostat for FMO
LED1	Indication lamp (Green - Run)	**52C**	Magnetic contactor for CM
LED2	Indication lamp (Yellow - Timer/Check)	**X1~7**	Auxiliary relay
LM	Louver motor	**▽**	Terminal (F)
SW	Back up switch (ON/OFF)	**■**	Connector

Color mark

Mark	Color
BK	Black
BL	Blue
BR	Brown
GR	Gray
OR	Orange
RD	Red
WH	White
Y/GN	Yellow/Green

7.4 OUTLINE OF OPERATION CONTROL BY MICROCOMPUTER

Except for function relating to heating, same at the unit for FDT(N) heat pump type. See page 241.

7.5 APPLICATION DATA

The application data for the cooling only models are similar to those for the heat pump models. (See page 256.)

7.6 MAINTENANCE DATA

Same at the cooling /heating equipment FDT(N) heat pump type. Refer to page 271.