Manual No.'19・PAC-DB-315D

DRAFT

MITSUBISHI HEAVY INDUSTRIES

DATA BOOK

INVERTER PACKAGED AIR-CONDITIONERS

ZONE CONTROL

(Split system, air to air heat pump type)

HYPER INVERTER

DUCT CONNECTED-HIGH STATIC PRESSURE TYPE

FDU71VNXVH
100VNXVH
100VSXVH
125VNXVH
125VSXVH
140VNXVH
140VSXVH

DUCT CONNECTED-LOW/MIDDLE STATIC PRESSURE TYPE

FDUM40ZSXVH
50ZSXVH
60ZSXVH
71VNXVH
100VNXVH
100VSXVH
125VNXVH
125VSXVH
140VNXVH
140VSXVH

MICRO INVERTER

DUCT CONNECTED-HIGH STATIC PRESSURE TYPE

FDU100VNAVH
100VSAVH
125VNAVH
125VSAVH
140VNAVH
140VSAVH

DUCT CONNECTED-LOW/MIDDLE STATIC PRESSURE TYPE

FDUM100VNAVH
100VSAVH
125VNAVH
125VSAVH
140VNAVH
140VSAVH

STANDARD INVERTER

DUCT CONNECTED-HIGH STATIC PRESSURE TYPE

FDU71VNPVH
90VNPVH
90VNP1VH
100VNP1VH

DUCT CONNECTED-LOW/MIDDLE STATIC PRESSURE TYPE

FDUM71VNPVH
90VNPVH
90VNP1VH
100VNP1VH

MITSUBISHI HEAVY INDUSTRIES THERMAL SYSTEMS, LTD.

TABLE OF CONTENTS

· Note
(1) Indoor unit in this data book will have the service code "/A".

- FDU71VH/1 → FDU71VH/A
- FDU100VH/1 → FDU100VH/A
- FDU125VH/1 → FDU125VH/A
- FDU140VH/1 → FDU140VH/A
- FDUM40VH/1 → FDUM40VH/A
- FDUM50VH/1 → FDUM50VH/A
- FDUM60VH/1 → FDUM60VH/A
- FDUM71VH/1 → FDUM71VH/A
- FDUM100VH/1 → FDUM100VH/A
- FDUM125VH/1 → FDUM125VH/A
- FDUM140VH/1 → FDUM140VH/A

1. OUTLINE OF ZONE CONTROL

(1) System outline

Please refer to the following information to design your ducted air-conditioning system.

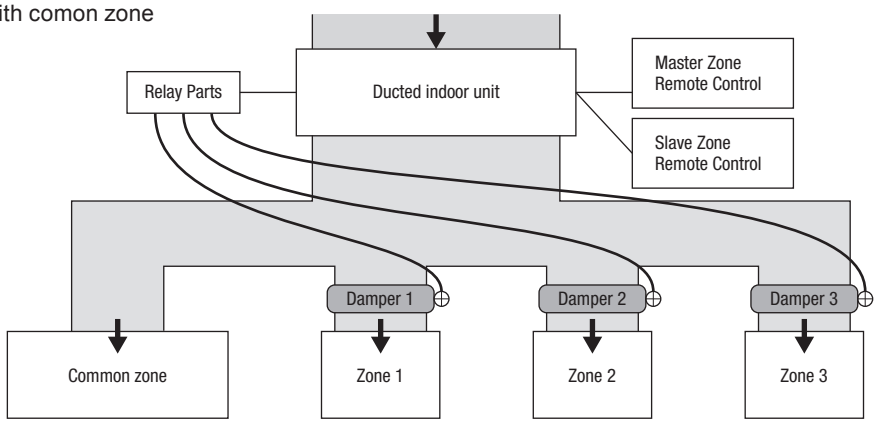
Attention

- This unit can control up to 4 zones, including common zones (A zone in which a damper is not installed).
  Do not exceed 4 zones.
- In zone control system, one or two remote controls (Master and slave) can not control multiple indoor units.
  Connect one or two remote controls with one indoor unit.

Advice

Common zone: A zone in which a damper is not installed.
Spill zone: A zone in which a damper open automatically.

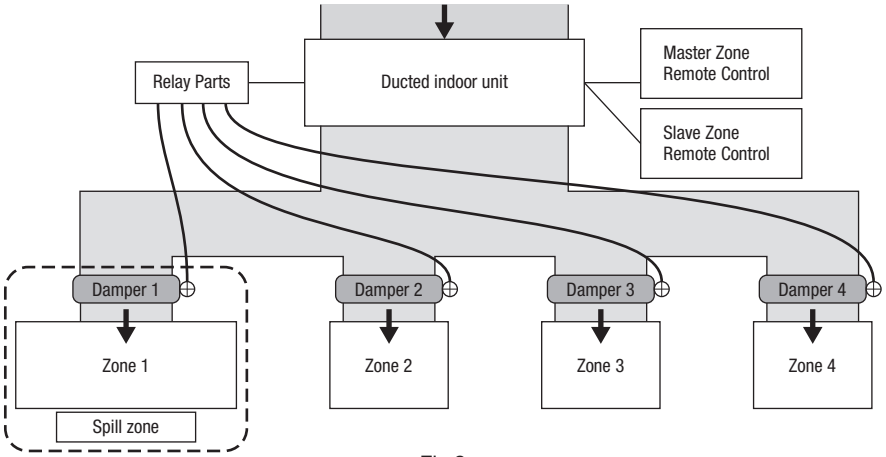
a) With comon zone



<Fig.1>

Fig.1 shows a system example, where common zone, 3 damper motors 2 remote controls are connected.

b) No comon zone
(Spill zone setting required)



<Fig.2>

Fig.2 shows a system example, where no common zone, 4 damper motors, 2 remote controls are connected.

Zone remote control	Maximum 2 remote controls can be connected.
Damper motor (Locally supplied)	Only drive open, drive close damper motor can be connected. (Spring motor damper can not be used.) If you use 24V AC motors, ensure the transformer is adequately sized for the zone motors connected and is suitable for the installation conditions.

Symbol	Legend
↓	Air flow
▭	Duct
▬	Damper
⊕	Damper motor
⬚	Spill zone

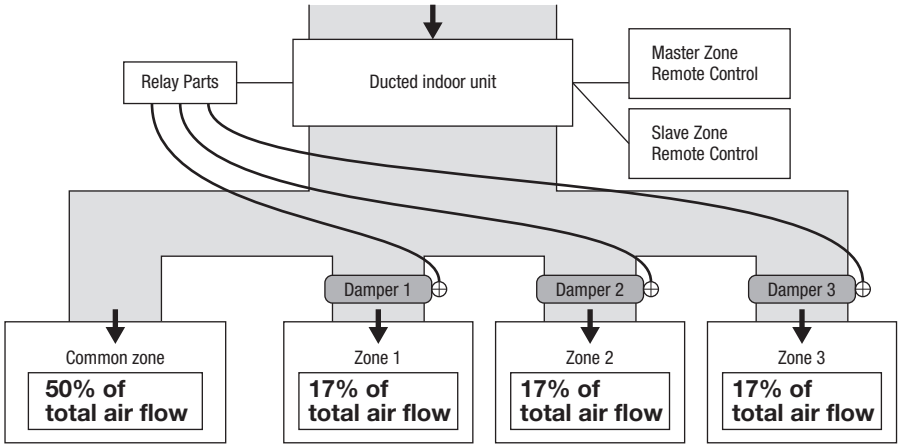
(2) Duct design

Attention

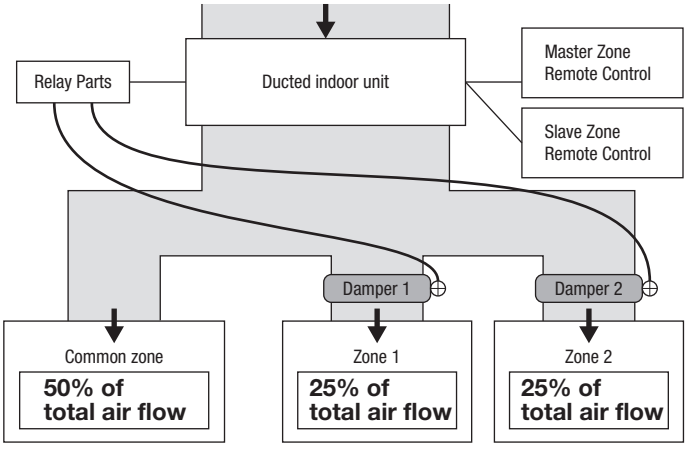
- Design the duct so that the common zone or spill zone equal 50% of total air flow.
- Ducts in zones other than common zone or spill zone should have equal static pressure (equal air flow).

- Be sure to also refer to the indoor unit installation manual.
- Common zone installation is recommended. However if you prefer no common zone system, you must set spill zones with the remote control.

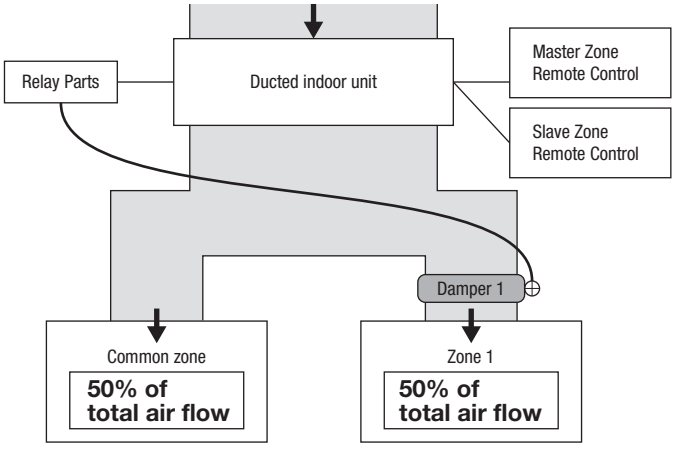
a) In the case of 4 zones



b) In the case of 3 zones



c) In the case of 2 zones



2. HYPER INVERTER PACKAGED AIR-CONDITIONERS

CONTENTS

■ How to read the model name

Example: FDUM 40 Z SXVH

- SXVH — Series code
- Z — Inverter type
- 40 — Product capacity
- FDUM — Model name

FDU : Duct connected-High static pressure type
FDUM : Duct connected-Low/Middle static pressure type
SRC : Outdoor unit

Example: FDUM 100 VNX VH

- VH — Series code
- VNX — Applicable power source...See the specification
- 100 — Product capacity
- FDUM — Model name

FDU : Duct connected-High static pressure type
FDUM : Duct connected-Low/Middle static pressure type
FDC : Outdoor unit

2.1 SPECIFICATIONS

(1) Duct connected-High static pressure type (FDU)

Item			Model	FDU71VNXVH	
				Indoor unit **FDU71VH**	Outdoor unit **FDC71VNX**
Power source				1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)		kW	7.1 [3.2(Min.)-8.0(Max.)]	
	Nominal heating capacity (range)		kW	8.0 [3.6(Min.)-9.0(Max.)]	
	Power consumption	Cooling	kW	2.05	
		Heating		2.01	
	Max power consumption			3.28	
	Running current	Cooling	A	9.1 / 9.5	
		Heating		9.1 / 9.5	
	Inrush current, max current			5 , 17	
	Power factor	Cooling	%	98	
		Heating		96	
	EER	Cooling		3.46	
	COP	Heating		3.98	
	Sound power level	Cooling	dB(A)	65	66
		Heating			
	Sound pressure level	Cooling		P-Hi : 38 Hi : 33 Me : 29 Lo : 25	51
		Heating			48
	Silent mode sound pressure level			—	—
Exterior dimensions (Height x Width x Depth)			mm	280 × 950 × 635	750×880(+88)×340
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	34	60
Compressor type & Q'ty				—	RMT5118MDE2 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.675 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 2.95 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×2	Propeller fan ×1
Fan motor (Starting method)			W	130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 24 Hi : 19 Me : 15 Lo : 10	60
		Heating			50
Available external static pressure			Pa	Standard : 35 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired : RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
		Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size x Core number			ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	35Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU100VNXVH	
					Indoor unit **FDU100VH**	Outdoor unit **FDC100VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)			kW	11.2 [4.0(Min.)-12.5(Max.)]	
	Power consumption		Cooling	kW	2.68	
			Heating		3.02	
	Max power consumption				4.83	
	Running current		Cooling	A	12.0 / 12.5	
			Heating		13.5 / 14.1	
	Inrush current, max current				5 , 25	
	Power factor		Cooling	%	97	
			Heating		97	
	EER		Cooling		3.73	
	COP		Heating		3.71	
	Sound power level		Cooling	dB(A)	65	70
			Heating			
	Sound pressure level		Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	48
			Heating			50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU100VSXVH	
					Indoor unit **FDU100VH**	Outdoor unit **FDC100VSX**
Power source					3 Phase 380-415V 50Hz / 380V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)			kW	11.2 [4.0(Min.)-16.0(Max.)]	
	Power consumption		Cooling	kW	2.68	
			Heating		3.02	
	Max power consumption				6.04	
	Running current		Cooling	A	4.0 / 4.2	
			Heating		4.5 / 4.7	
	Inrush current, max current				5 , 16	
	Power factor		Cooling	%	97	
			Heating		97 / 98	
	EER		Cooling		3.73	
	COP		Heating		3.71	
	Sound power level		Cooling	dB(A)	65	70
			Heating			
	Sound pressure level		Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	48
			Heating			50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE3(Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU125VNXVH	
					Indoor unit **FDU125VH**	Outdoor unit **FDC125VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)			kW	14.0 [4.0(Min.)-17.0(Max.)]	
	Power consumption		Cooling	kW	3.49	
			Heating		3.77	
	Max power consumption				6.03	
	Running current		Cooling	A	15.5 / 16.2	
			Heating		16.8 / 17.6	
	Inrush current, max current				5 , 29	
	Power factor		Cooling	%	98	
			Heating		98 / 97	
	EER		Cooling		3.58	
	COP		Heating		3.71	
	Sound power level		Cooling	dB(A)	67	70
			Heating			
	Sound pressure level		Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	48
			Heating			50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU125VSXVH	
					Indoor unit **FDU125VH**	Outdoor unit **FDC125VSX**
Power source					3 Phase 380-415V 50Hz / 380V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)			kW	14.0 [4.0(Min.)-18.0(Max.)]	
	Power consumption		Cooling	kW	3.49	
			Heating		3.77	
	Max power consumption				7.54	
	Running current		Cooling	A	5.2 / 5.5	
			Heating		5.6 / 5.9	
	Inrush current, max current				5 , 18	
	Power factor		Cooling	%	97 / 96	
			Heating		97	
	EER		Cooling		3.58	
	COP		Heating		3.71	
	Sound power level		Cooling	dB(A)	67	70
			Heating			
	Sound pressure level		Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	48
			Heating			50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE3 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU140VNXVH	
					Indoor unit **FDU140VH**	Outdoor unit **FDC140VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	14.0 [5.0(Min.)-16.0(Max.)]	
	Nominal heating capacity (range)			kW	16.0 [4.0(Min.)-18.0(Max.)]	
	Power consumption		Cooling	kW	4.28	
			Heating		4.42	
	Max power consumption				6.19	
	Running current		Cooling	A	19.2 / 20.1	
			Heating		19.8 / 20.7	
	Inrush current, max current				5 , 30	
	Power factor		Cooling	%	97	
			Heating		97	
	EER		Cooling		3.27	
	COP		Heating		3.62	
	Sound power level		Cooling	dB(A)	70	72
			Heating			
	Sound pressure level		Cooling		P-Hi : 47 Hi : 40 Me : 35 Lo : 30	49
			Heating			52
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU140VSXVH	
					Indoor unit **FDU140VH**	Outdoor unit **FDC140VSX**
Power source					3 Phase 380-415V 50Hz / 380V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	14.0 [5.0(Min.)-16.0(Max.)]	
	Nominal heating capacity (range)			kW	16.0 [4.0(Min.)-20.0(Max.)]	
	Power consumption		Cooling	kW	4.28	
			Heating		4.42	
	Max power consumption				7.74	
	Running current		Cooling	A	6.4 / 6.7	
			Heating		6.6 / 6.9	
	Inrush current, max current				5 , 19	
	Power factor		Cooling	%	97	
			Heating		97	
	EER		Cooling		3.27	
	COP		Heating		3.62	
	Sound power level		Cooling	dB(A)	70	72
			Heating			
	Sound pressure level		Cooling		P-Hi : 47 Hi : 40 Me : 35 Lo : 30	49
			Heating			52
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE3 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88(5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm ×3 cores + earth cable / Termainal block(Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

(2) Duct connected-Low/Middle static pressure type (FDUM)

Item				Model	FDUM40ZSXVH	
					Indoor unit **FDUM40VH**	Outdoor unit **SRC40ZSX-S**
Power source					1 Phase, 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	4.0 [1.1(Min.) - 4.7(Max.)]	
	Nominal heating capacity (range)			kW	4.5 [0.6(Min.) - 5.4(Max.)]	
	Power consumption		Cooling	kW	0.952	
			Heating		1.07	
	Max power consumption				2.60	
	Running current		Cooling	A	4.4 / 4.6	
			Heating		4.9 / 5.1	
	Inrush current, max current				5 , 12	
	Power factor		Cooling	%	94	
			Heating		95	
	EER		Cooling		4.20	
	COP		Heating		4.21	
	Sound power level		Cooling	dB(A)	60	63
			Heating			
	Sound pressure level		Cooling		P-Hi : 37 Hi : 32 Me : 29 Lo : 26	50
			Heating			49
	Silent mode sound pressure level				—	Cooling:42 / Heating:43
Exterior dimensions (Height x Width x Depth)				mm	280 × 750 × 635	640 × 800 (+71) × 290
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	29	45
Compressor type & Q'ty					—	RMT5113MCE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.45 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 1.5 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×1	Propeller fan ×1
Fan motor (Starting method)				W	100 < Direct line start >	34 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 13 Hi : 10 Me : 9 Lo : 8	36
			Heating			33
Available external static pressure				Pa	Standard : 35 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 6.35 (1/4") Pipe ϕ 6.35(1/4")x0.8 O/U ϕ 6.35 (1/4")	
			Gas line		I/U ϕ 12.7 (1/2") Pipe ϕ 12.7(1/2")x0.8 O/U ϕ 12.7 (1/2")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 x 5pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	4.8	
Interconnecting wires	Size x Core number				1.5mm^2 x 4 cores (Including earth cable) / Terminal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts					Filter set : UM-FL1EF , Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	35Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL1EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM50ZSXVH	
					Indoor unit **FDUM50VH**	Outdoor unit **SRC50ZSX-S**
Power source					1 Phase, 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	5.0 [1.1(Min.) - 5.6(Max.)]	
	Nominal heating capacity (range)			kW	5.4 [0.6(Min.) - 6.3(Max.)]	
	Power consumption		Cooling	kW	1.38	
			Heating		1.45	
	Max power consumption				2.90	
	Running current		Cooling	A	6.3 / 6.6	
			Heating		6.6 / 6.9	
	Inrush current, max current				5 , 15	
	Power factor		Cooling	%	95	
			Heating		96	
	EER		Cooling		3.62	
	COP		Heating		3.72	
	Sound power level		Cooling	dB(A)	60	63
			Heating			
	Sound pressure level		Cooling		P-Hi : 37 Hi : 32 Me : 29 Lo : 26	50
			Heating			49
	Silent mode sound pressure level				—	Cooling:42 / Heating:43
Exterior dimensions (Height x Width x Depth)				mm	280 × 750 × 635	640 × 800 (+71) × 290
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	29	45
Compressor type & Q'ty					—	RMT5113MCE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.45 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 1.5 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×1	Propeller fan ×1
Fan motor (Starting method)				W	100 < Direct line start >	34 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 13 Hi : 10 Me : 9 Lo : 8	40
			Heating			33
Available external static pressure				Pa	Standard : 35 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 6.35 (1/4") Pipe ϕ 6.35(1/4")x0.8 O/U ϕ 6.35 (1/4")	
			Gas line		I/U ϕ 12.7 (1/2") Pipe ϕ 12.7(1/2")x0.8 O/U ϕ 12.7 (1/2")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 x 5pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5	
Interconnecting wires	Size x Core number				1.5mm^2 x 4 cores (Including earth cable) / Terminal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, drain hose	Drain elbow, Drain hole grommet
Option parts					Filter set : UM-FL1EF , Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature		Outdoor air temperature		External static pressure of indoor unit	Standards
	DB	WB	DB	WB		
Cooling	27˚C	19˚C	35˚C	24˚C	35Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL1EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM60ZSXVH	
					Indoor unit **FDUM60VH**	Outdoor unit **SRC60ZSX-S**
Power source					1 Phase, 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	5.6 [1.1(Min.) - 6.3(Max.)]	
	Nominal heating capacity (range)			kW	6.7 [0.6(Min.) - 7.1(Max.)]	
	Power consumption		Cooling	kW	1.54	
			Heating		1.75	
	Max power consumption				2.90	
	Running current		Cooling	A	6.8 / 7.1	
			Heating		7.8 / 8.2	
	Inrush current, max current				5 , 15	
	Power factor		Cooling	%	98 / 99	
			Heating		98 / 97	
	EER		Cooling		3.64	
	COP		Heating		3.83	
	Sound power level		Cooling	dB(A)	60	65
			Heating			64
	Sound pressure level		Cooling		P-Hi : 36 Hi : 31 Me : 28 Lo : 25	52
			Heating			
	Silent mode sound pressure level				—	Cooling:42 / Heating:43
Exterior dimensions (Height x Width x Depth)				mm	280 × 950 × 635	640 × 800 (+71) × 290
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	34	45
Compressor type & Q'ty					—	RMT5113MCE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.45 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 1.5 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×2	Propeller fan ×1
Fan motor (Starting method)				W	130 < Direct line start >	34 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 20 Hi : 15 Me : 13 Lo : 10	41.5
			Heating			39
Available external static pressure				Pa	Standard : 35 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 6.35 (1/4") Pipe ϕ 6.35(1/4")x0.8 O/U ϕ 6.35 (1/4")	
			Gas line		I/U ϕ 12.7 (1/2") Pipe ϕ 12.7(1/2")x0.8 O/U ϕ 12.7 (1/2")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 x 5pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5	
Interconnecting wires	Size x Core number				1.5mm^2 x 4 cores (Including earth cable) / Terminal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, drain hose	Drain elbow, Drain hole grommet
Option parts					Filter set : UM-FL1EF , Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	35Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL1EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM71VNXVH	
					Indoor unit **FDUM71VH**	Outdoor unit **FDC71VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	7.1 [3.2(Min.)-8.0(Max.)]	
	Nominal heating capacity (range)			kW	8.0 [3.6(Min.)-9.0(Max.)]	
	Power consumption		Cooling	kW	2.03	
			Heating		1.99	
	Max power consumption				3.25	
	Running current		Cooling	A	9.0 / 9.4	
			Heating		9.0 / 9.4	
	Inrush current, max current				5 , 17	
	Power factor		Cooling	%	98	
			Heating		96	
	EER		Cooling		3.5	
	COP		Heating		4.02	
	Sound power level		Cooling	dB(A)	65	66
			Heating			
	Sound pressure level		Cooling		P-Hi : 38 Hi : 33 Me : 29 Lo : 25	51
			Heating			48
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 950 × 635	750×880(+88)×340
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	34	60
Compressor type & Q'ty					—	RMT5118MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.675 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 2.95 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×2	Propeller fan ×1
Fan motor (Starting method)				W	130 < Direct line start >	86 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 24 Hi : 19 Me : 15 Lo : 10	60
			Heating			50
Available external static pressure				Pa	Standard : 35 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52 (3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88 (5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.50	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm x 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	—
Option parts					Filter set : UM-FL2EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	35Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL2EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM100VNXVH	
					Indoor unit **FDUM100VH**	Outdoor unit **FDC100VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)			kW	11.2 [4.0(Min.)-12.5(Max.)]	
	Power consumption	Cooling		kW	2.68	
		Heating			3.02	
	Max power consumption				4.83	
	Running current	Cooling		A	12.0 / 12.5	
		Heating			13.5 / 14.1	
	Inrush current, max current				5 , 24	
	Power factor	Cooling		%	97	
		Heating			97	
	EER	Cooling			3.73	
	COP	Heating			3.71	
	Sound power level	Cooling		dB(A)	65	70
		Heating				
	Sound pressure level	Cooling			P-Hi : 44 Hi : 38 Me : 36 Lo : 30	48
		Heating				50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 x 2 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	100
		Heating				
Available external static pressure				Pa	Standard : 60 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line		mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52 (3/8")x0.8 O/U ϕ 9.52 (3/8")	
		Gas line			ϕ 15.88 (5/8") ϕ 15.88 (5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm x 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM100VSXVH	
					Indoor unit **FDUM100VH**	Outdoor unit **FDC100VSX**
Power source					3 Phase 380-415V 50Hz / 380V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)			kW	11.2 [4.0(Min.)-16.0(Max.)]	
	Power consumption	Cooling		kW	2.68	
		Heating			3.02	
	Max power consumption				6.04	
	Running current	Cooling		A	4.0 / 4.2	
		Heating			4.5 / 4.7	
	Inrush current, max current				5 , 15	
	Power factor	Cooling		%	97	
		Heating			97 / 98	
	EER	Cooling			3.73	
	COP	Heating			3.71	
	Sound power level	Cooling		dB(A)	65	70
		Heating				
	Sound pressure level	Cooling			P-Hi : 44 Hi : 38 Me : 36 Lo : 30	48
		Heating				50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE3 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 x 2 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	100
		Heating				
Available external static pressure				Pa	Standard : 60 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line		mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52 (3/8")x0.8 O/U ϕ 9.52 (3/8")	
		Gas line			ϕ 15.88 (5/8") ϕ 15.88 (5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm x 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM125VNXVH	
					Indoor unit **FDUM125VH**	Outdoor unit **FDC125VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)			kW	14.0 [4.0(Min.)-17.0(Max.)]	
	Power consumption		Cooling	kW	3.49	
			Heating		3.77	
	Max power consumption				6.03	
	Running current		Cooling	A	15.5 / 16.2	
			Heating		16.8 / 17.6	
	Inrush current, max current				5 , 26	
	Power factor		Cooling	%	98	
			Heating		98 / 97	
	EER		Cooling		3.58	
	COP		Heating		3.71	
	Sound power level		Cooling	dB(A)	67	70
			Heating			
	Sound pressure level		Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	48
			Heating			50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52 (3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88 (5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm x 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM125VSXVH	
					Indoor unit **FDUM125VH**	Outdoor unit **FDC125VSX**
Power source					3 Phase 380-415V 50Hz / 380V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)			kW	14.0 [4.0(Min.)-18.0(Max.)]	
	Power consumption		Cooling	kW	3.49	
			Heating		3.77	
	Max power consumption				7.54	
	Running current		Cooling	A	5.2 / 5.5	
			Heating		5.6 / 5.9	
	Inrush current, max current				5 , 15	
	Power factor		Cooling	%	97 / 96	
			Heating		97	
	EER		Cooling		3.58	
	COP		Heating		3.71	
	Sound power level		Cooling	dB(A)	67	70
			Heating			
	Sound pressure level		Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	48
			Heating			50
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE3 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	100
			Heating			
Available external static pressure				Pa	Standard : 60 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52 (3/8")x0.8 O/U ϕ 9.52 (3/8")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88 (5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm x 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM140VNXVH	
					Indoor unit **FDUM140VH**	Outdoor unit **FDC140VNX**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	14.0 [5.0(Min.)-16.0(Max.)]	
	Nominal heating capacity (range)			kW	16.0 [4.0(Min.)-18.0(Max.)]	
	Power consumption	Cooling		kW	4.28	
		Heating			4.42	
	Max power consumption				6.19	
	Running current	Cooling		A	19.2 / 20.1	
		Heating			19.8 / 20.7	
	Inrush current, max current				5 , 26	
	Power factor	Cooling		%	97	
		Heating			97	
	EER	Cooling			3.27	
	COP	Heating			3.62	
	Sound power level	Cooling		dB(A)	70	72
		Heating				
	Sound pressure level	Cooling			P-Hi : 47 Hi : 40 Me : 35 Lo : 30	49
		Heating				52
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 x 2 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	100
		Heating				
Available external static pressure				Pa	Standard : 60 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line		mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52 (3/8")x0.8 O/U ϕ 9.52 (3/8")	
		Gas line			ϕ 15.88 (5/8") ϕ 15.88 (5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm x 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these valsue are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM140VSXVH	
					Indoor unit **FDUM140VH**	Outdoor unit **FDC140VSX**
Power source					3 Phase 380-415V 50Hz / 380V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	14.0 [5.0(Min.)-16.0(Max.)]	
	Nominal heating capacity (range)			kW	16.0 [4.0(Min.)-20.0(Max.)]	
	Power consumption	Cooling		kW	4.28	
		Heating			4.42	
	Max power consumption				7.74	
	Running current	Cooling		A	6.4 / 6.7	
		Heating			6.6 / 6.9	
	Inrush current, max current				5 , 15	
	Power factor	Cooling		%	97	
		Heating			97	
	EER	Cooling			3.27	
	COP	Heating			3.62	
	Sound power level	Cooling		dB(A)	70	72
		Heating				
	Sound pressure level	Cooling			P-Hi : 47 Hi : 40 Me : 35 Lo : 30	49
		Heating				52
	Silent mode sound pressure level				—	—
Exterior dimensions (Height x Width x Depth)				mm	280 × 1368 × 740	1300×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	105
Compressor type & Q'ty					—	RMT5134MDE3 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 4.5 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×2
Fan motor (Starting method)				W	100 + 200 < Direct line start >	86 × 2 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	100
		Heating				
Available external static pressure				Pa	Standard : 60 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	20 (Crank case heater)
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line		mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")×0.8 O/U ϕ 9.52 (3/8")	
		Gas line			ϕ 15.88 (5/8") ϕ 15.88(5/8")×1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.100	
	Vertical height diff. between O/U and I/U			m	Max.30 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 × 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size x Core number				ϕ 1.6mm×3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IP24
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

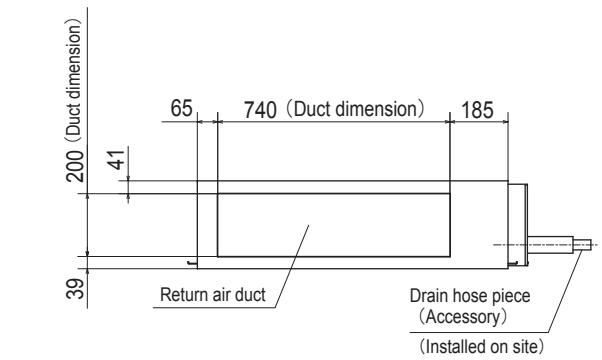
(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

2.2 EXTERIOR DIMENSIONS

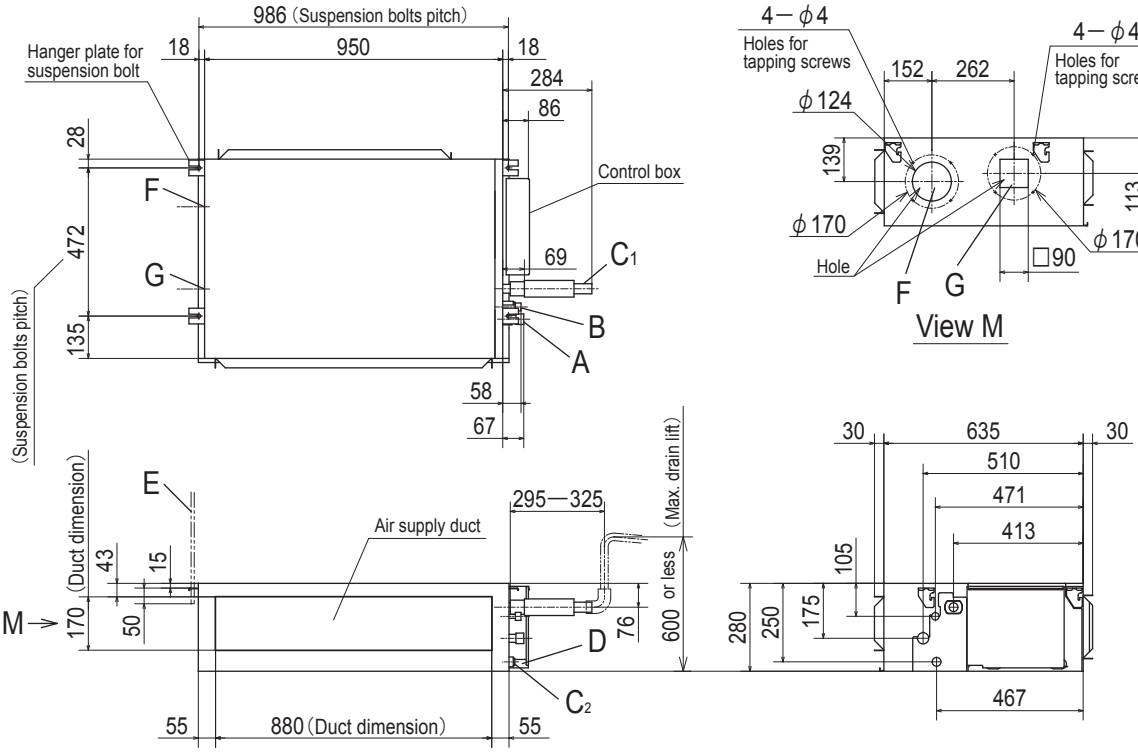
(1) Indoor units

(a) Duct connected-High static pressure type (FDU)

Model FDU71VH



Symbol	Content	
A	Gas piping	ϕ15.88 (5/8") (Flare)
B	Liquid piping	ϕ9.52 (3/8") (Flare)
C1	Drain piping	VP25 (O.D.32)
C2	Drain piping (Gravity drainage)	VP20
D	Hole for wiring	
E	Suspension bolts	(M10)
F	Outside air opening for ducting	(Knock out)
G	Air outlet opening for ducting	(Knock out)
H	Inspection opening	(450×450)

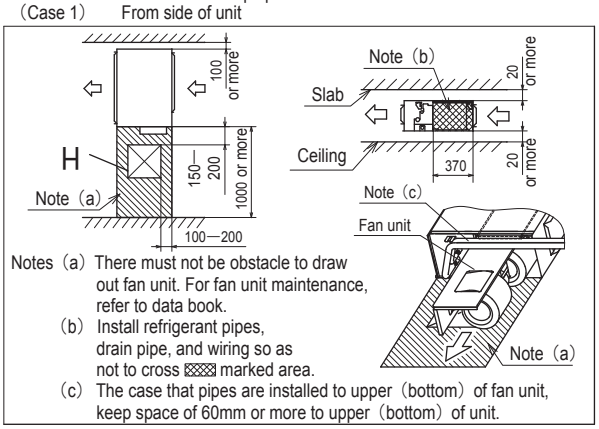


Unit:mm

Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit

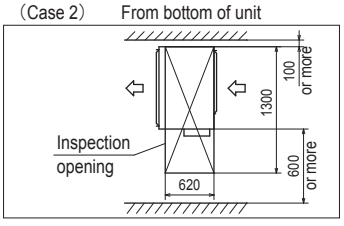


Notes (a) There must not be obstacle to draw out fan unit. For fan unit maintenance, refer to data book.

(b) Install refrigerant pipes, drain pipe, and wiring so as not to cross ▨ marked area.

(c) The case that pipes are installed to upper (bottom) of fan unit, keep space of 60mm or more to upper (bottom) of unit.

(Case 2) From bottom of unit



Note (1) The model name label is attached on the lid of the control box.

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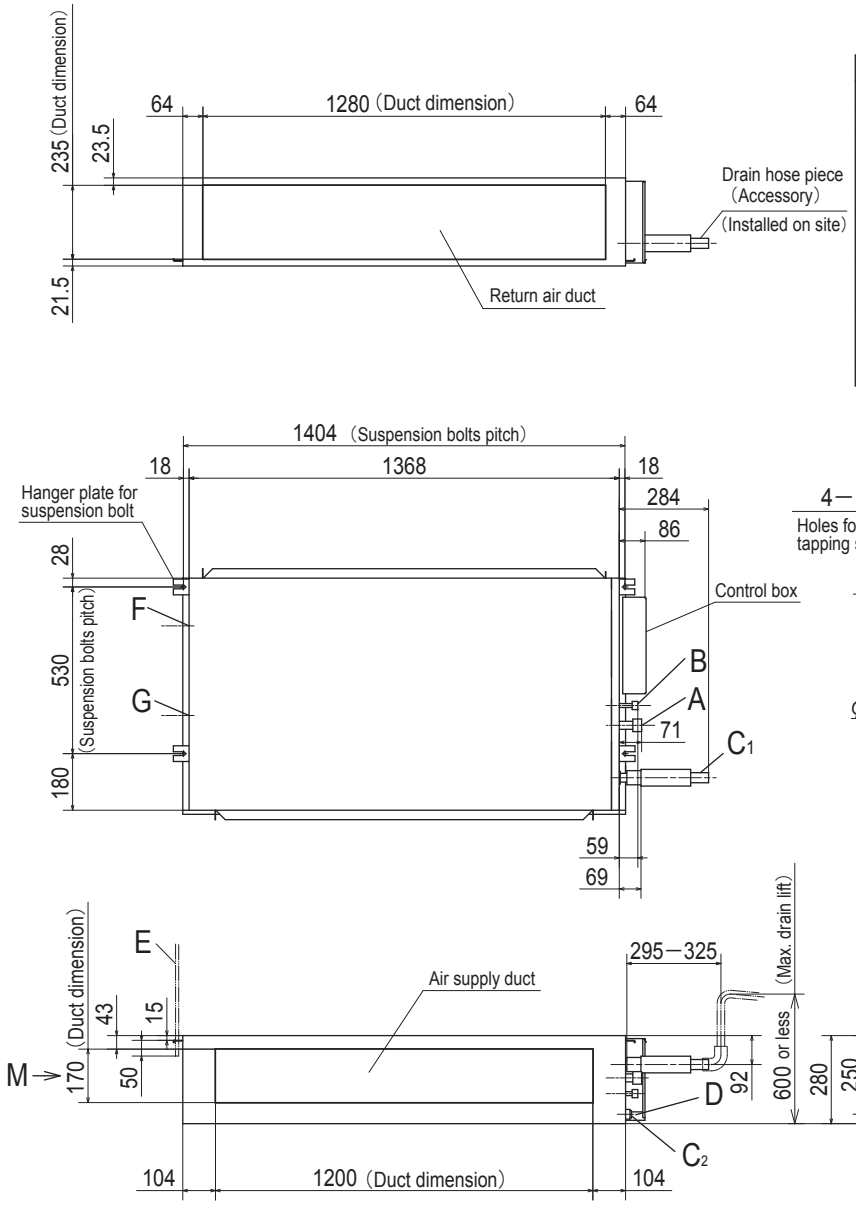
Models FDU100VH, 125VH, 140VH



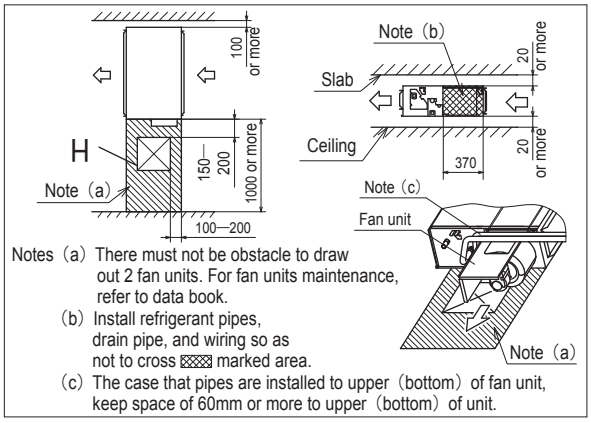
Symbol	Content	
A	Gas piping	φ15.88 (5/8") (Flare)
B	Liquid piping	φ9.52 (3/8") (Flare)
C_1	Drain piping	VP25 (O.D.32)
C_2	Drain piping (Gravity drainage)	VP20
D	Hole for wiring	
E	Suspension bolts	(M10)
F	Outside air opening for ducting	(Knock out)
G	Air outlet opening for ducting	(Knock out)
H	Inspection opening	(450×450)

Unit:mm

Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit

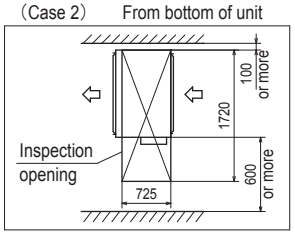


Notes (a) There must not be obstacle to draw out 2 fan units. For fan units maintenance, refer to data book.

(b) Install refrigerant pipes, drain pipe, and wiring so as not to cross ▨ marked area.

(c) The case that pipes are installed to upper (bottom) of fan unit, keep space of 60mm or more to upper (bottom) of unit.

(Case 2) From bottom of unit

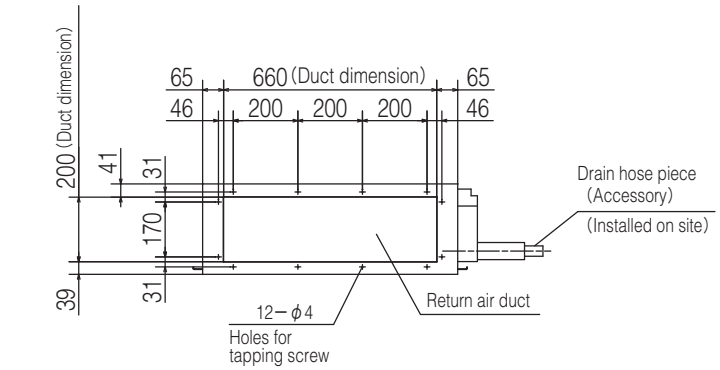


Note (1) The model name label is attached on the lid of the control box.

PJG000Z579

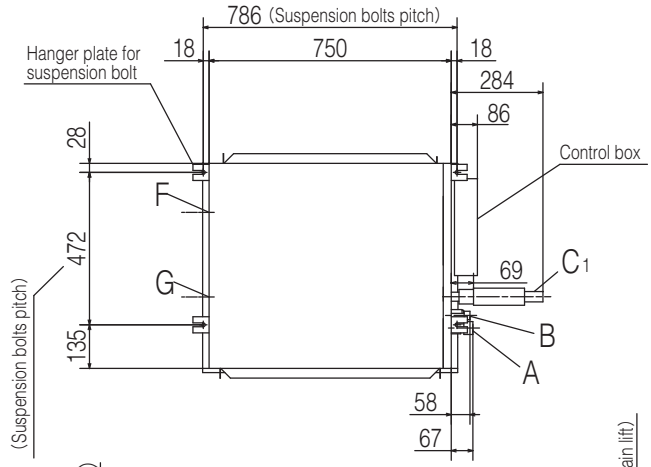
(b) Duct connected-Low / Middle static pressure type (FDUM)

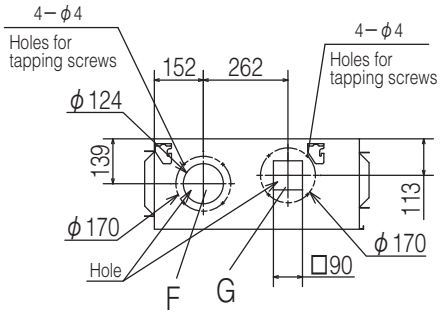
Models FDUM40VH, 50VH



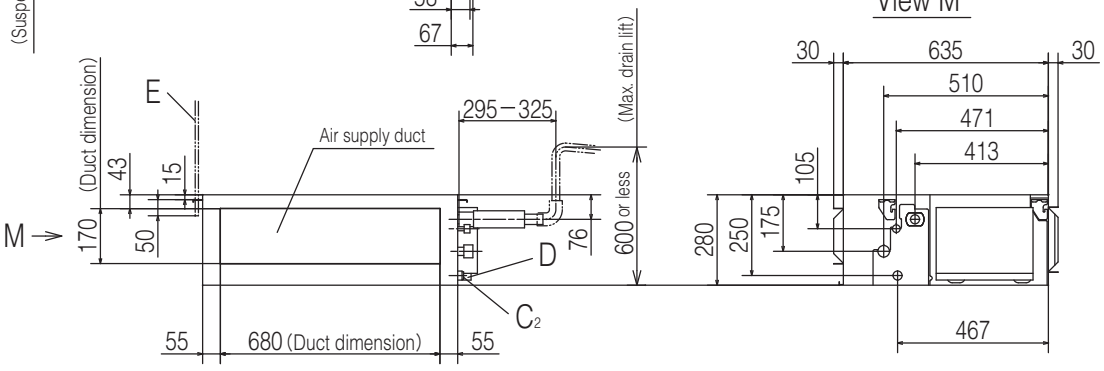
Symbol	Content	
A	Gas piping	φ12.7 (1/2") (Flare)
B	Liquid piping	φ6.35 (1/4") (Flare)
C1	Drain piping	VP25 (O.D.32)
C2	Drain piping (Gravity drainage)	VP20
D	Hole for wiring	
E	Suspension bolts	(M10)
F	Outside air opening for ducting	(φ150) (Knock out)
G	Air outlet opening for ducting	(φ125) (Knock out)
H	Inspection opening	(450×450)

Note (1) The model name label is attached on the lid of the control box.





View M

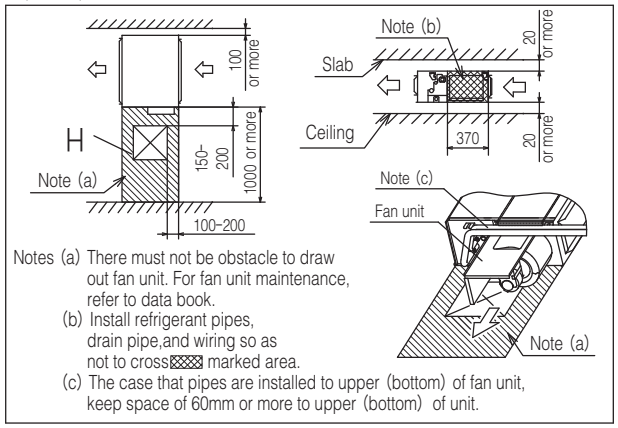


Unit:mm

Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit

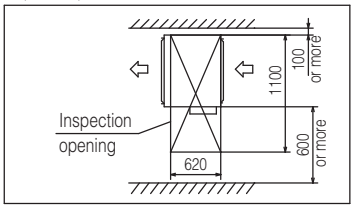


Notes (a) There must not be obstacle to draw out fan unit. For fan unit maintenance, refer to data book.

(b) Install refrigerant pipes, drain pipe,and wiring so as not to cross ▨ marked area.

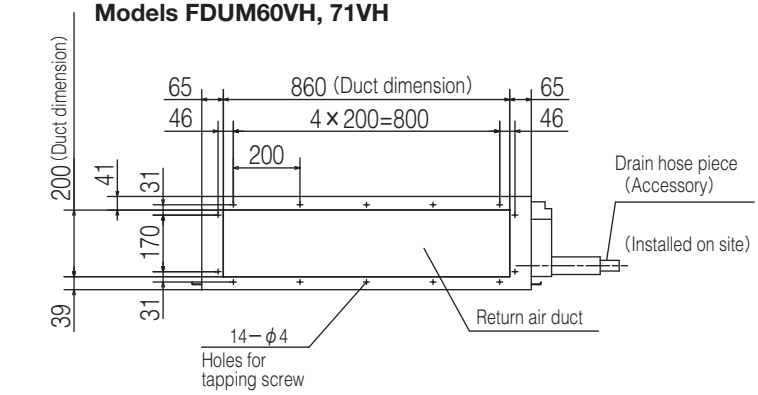
(c) The case that pipes are installed to upper (bottom) of fan unit, keep space of 60mm or more to upper (bottom) of unit.

(Case 2) From bottom of unit



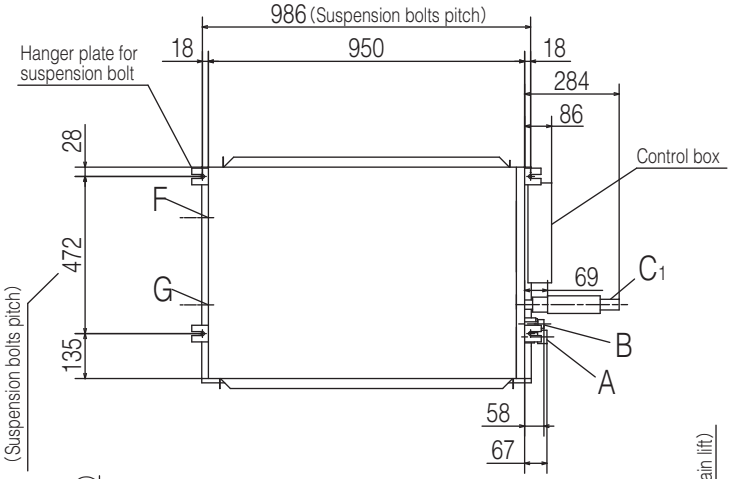
PJG000Z485

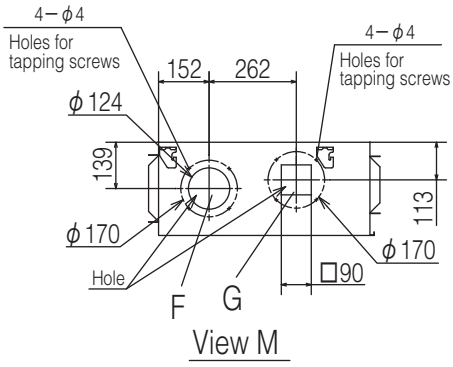
Models FDUM60VH, 71VH

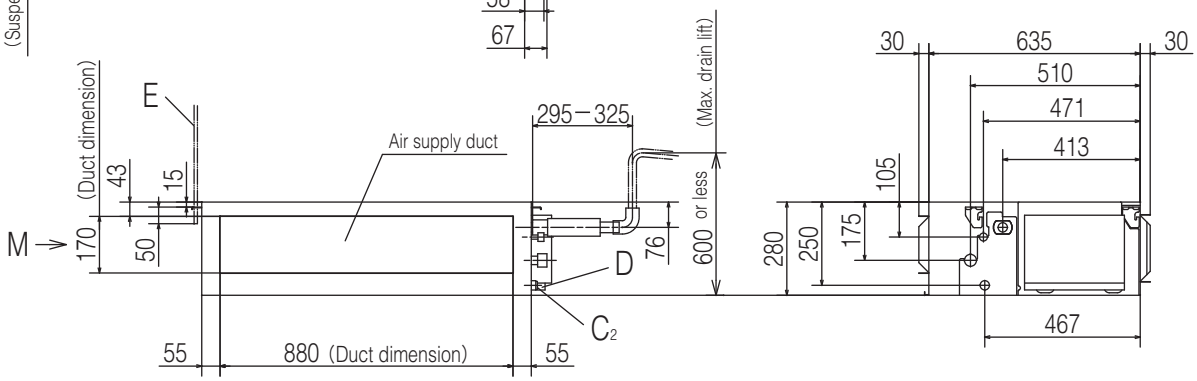


Symbol	Content		
	Model	60	71
A	Gas piping	φ12.7 (1/2") (Flare)	φ15.88 (5/8") (Flare)
B	Liquid piping	φ6.35 (1/4") (Flare)	φ9.52 (3/8") (Flare)
C1	Drain piping	VP25 (O.D.32)	
C2	Drain piping (Gravity drainage)	VP20	
D	Hole for wiring		
E	Suspension bolts	(M10)	
F	Outside air opening for ducting	(φ150) (Knock out)	
G	Air outlet opening for ducting	(φ125) (Knock out)	
H	Inspection opening	(450×450)	

Note (1) The model name label is attached on the lid of the control box.



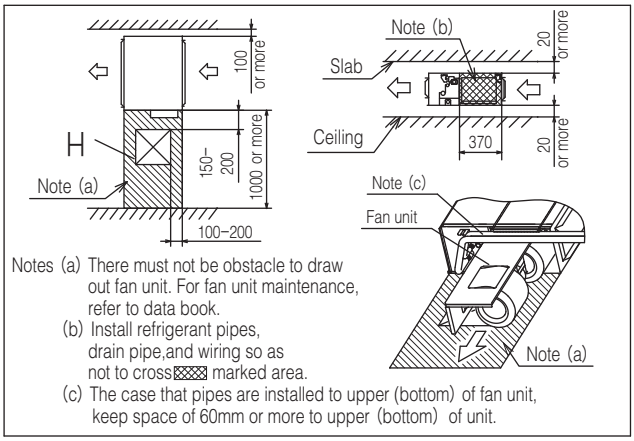




Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit

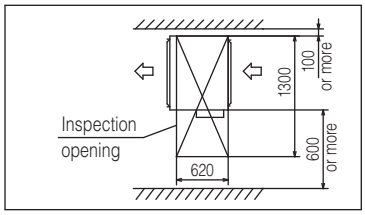


Notes (a) There must not be obstacle to draw out fan unit. For fan unit maintenance, refer to data book.

(b) Install refrigerant pipes, drain pipe,and wiring so as not to cross ▨ marked area.

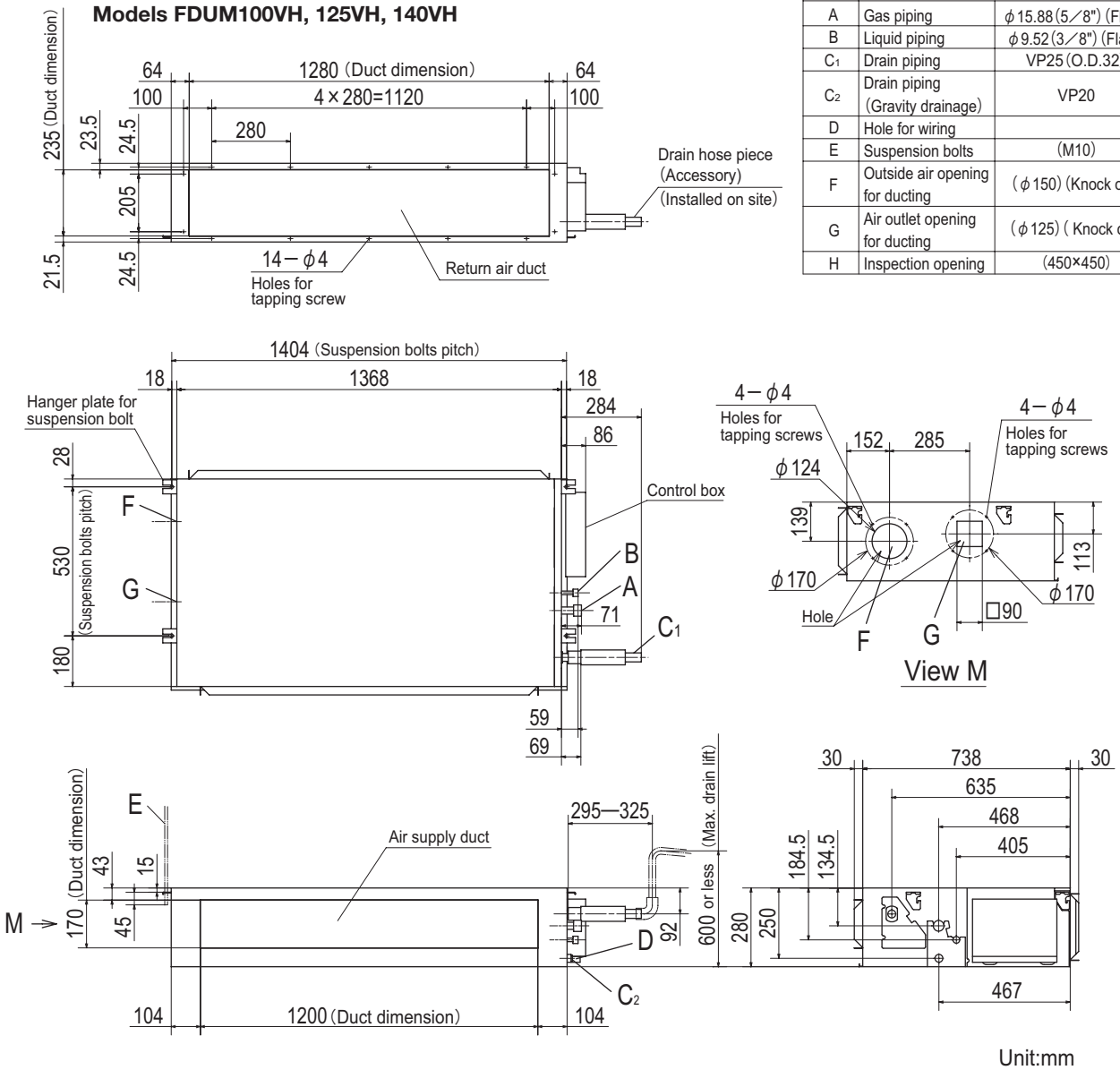
(c) The case that pipes are installed to upper (bottom) of fan unit, keep space of 60mm or more to upper (bottom) of unit.

(Case 2) From bottom of unit



PJG000Z486

Symbol	Content	
A	Gas piping	ϕ15.88 (5/8") (Flare)
B	Liquid piping	ϕ9.52 (3/8") (Flare)
C_1	Drain piping	VP25 (O.D.32)
C_2	Drain piping (Gravity drainage)	VP20
D	Hole for wiring	
E	Suspension bolts	(M10)
F	Outside air opening for ducting	(ϕ150) (Knock out)
G	Air outlet opening for ducting	(ϕ125) (Knock out)
H	Inspection opening	(450×450)

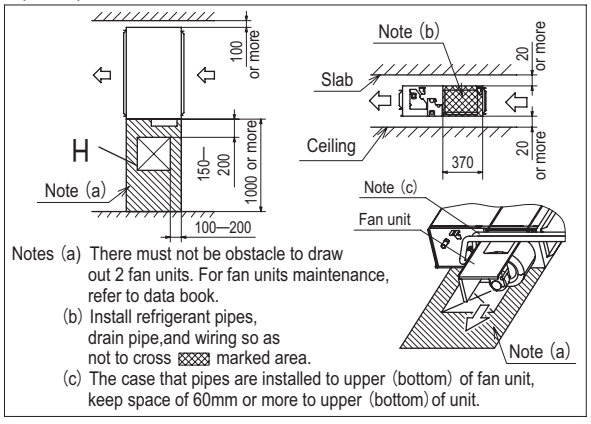


Unit:mm

Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit

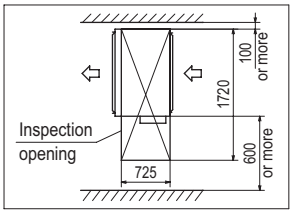


Notes (a) There must not be obstacle to draw out 2 fan units. For fan units maintenance, refer to data book.

(b) Install refrigerant pipes, drain pipe,and wiring so as not to cross ▨ marked area.

(c) The case that pipes are installed to upper (bottom) of fan unit, keep space of 60mm or more to upper (bottom) of unit.

(Case 2) From bottom of unit



Note (1) The model name label is attached on the lid of the control box.

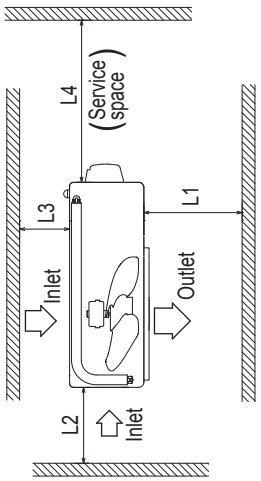
PJG000Z487

(2) Outdoor units

Models SRC40ZSX-S, 50ZSX-S, 60ZSX-S

Symbol	Content	
A	Service valve connection (Gas side)	φ12.7(1/2")(Flare)
B	Service valve connection (Liquid side)	φ6.35(1/4")(Flare)
C	Pipe/cable draw-out hole	
D	Drain discharge hole	φ20×5 places
E	Anchor bolt hole	M10-12×4 places

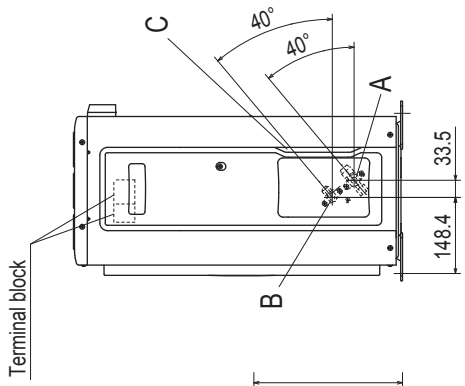
Notes
(1) The unit must not be surrounded by walls on the four sides.
(2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm.
(3) If the unit is installed in the location where there is a possibility of strong winds, place the unit such that the direction of air from the outlet gets perpendicular to the wind direction.
(4) Leave 200mm or more space above the unit.
(5) The wall height on the outlet side should be 1200mm or less.
(6) The model name label is attached on the front side of the unit.

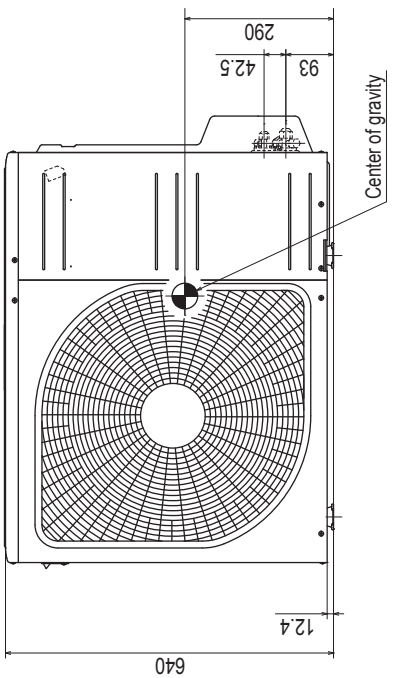


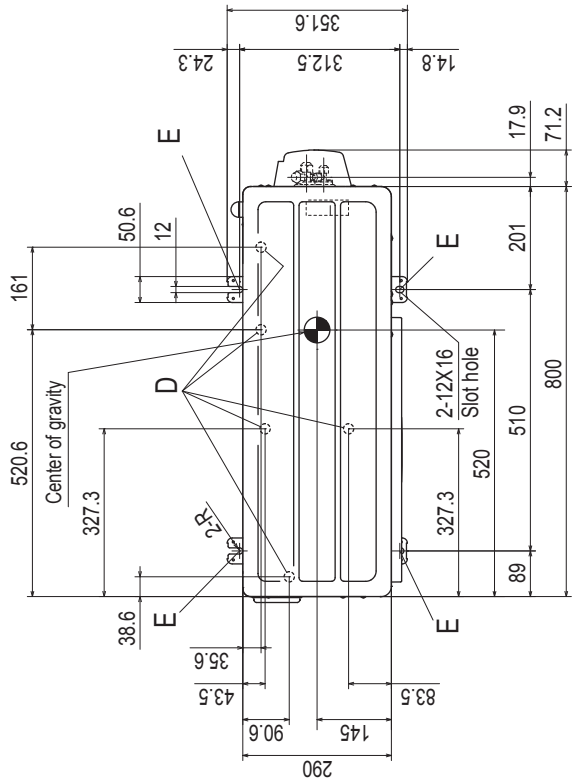
Minimum installation space

Examples installation / Size	I	II	III	IV
L1	Open	280	280	180
L2	100	75	Open	Open
L3	100	80	80	80
L4	250	Open	250	Open

Unit:mm



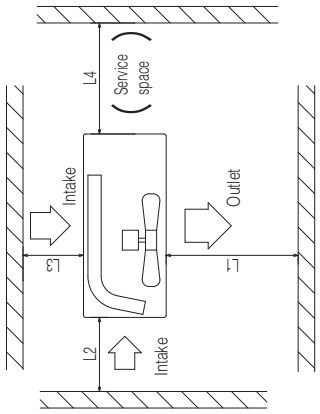




RCT000Z020

Model FDC71VNX

Notes
(1) It must not be surrounded by walls on the four sides.
(2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more the 15mm.
(3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
(4) Leave 1m or more space above the unit.
(5) A wall in front of the blower outlet must not exceed the units height.
(6) The model name label is attached on the lower right corner of the front panel.

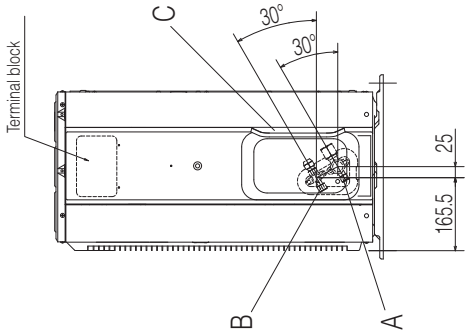


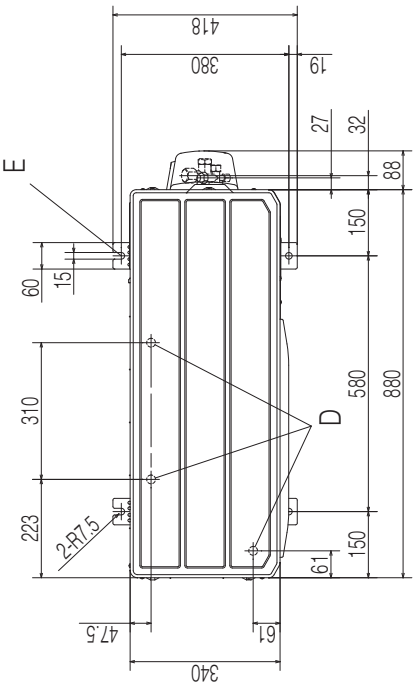
Minimum installation space

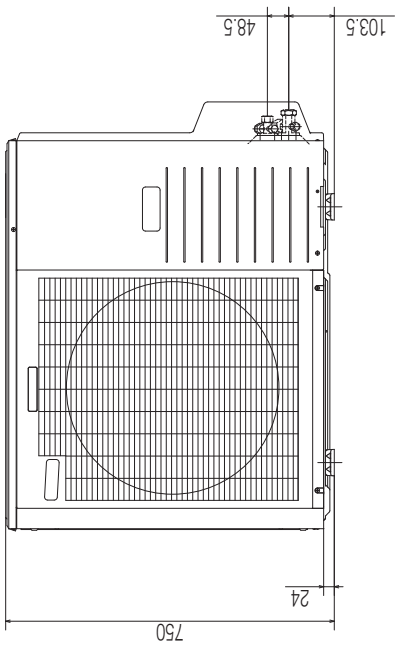
Examples of installation / Dimensions	I	II	III
L1	Open	Open	500
L2	300	250	Open
L3	100	150	100
L4	250	250	250

Unit:mm

Symbol	Content	
A	Service valve connection (gas side)	ϕ15.88 (5/8") (Flare)
B	Service valve connection (liquid side)	ϕ9.52 (3/8") (Flare)
C	Pipe/cable draw-out hole	
D	Drain discharge hole	ϕ20 × 3 places
E	Anchor bolt hole	M10 × 4 places

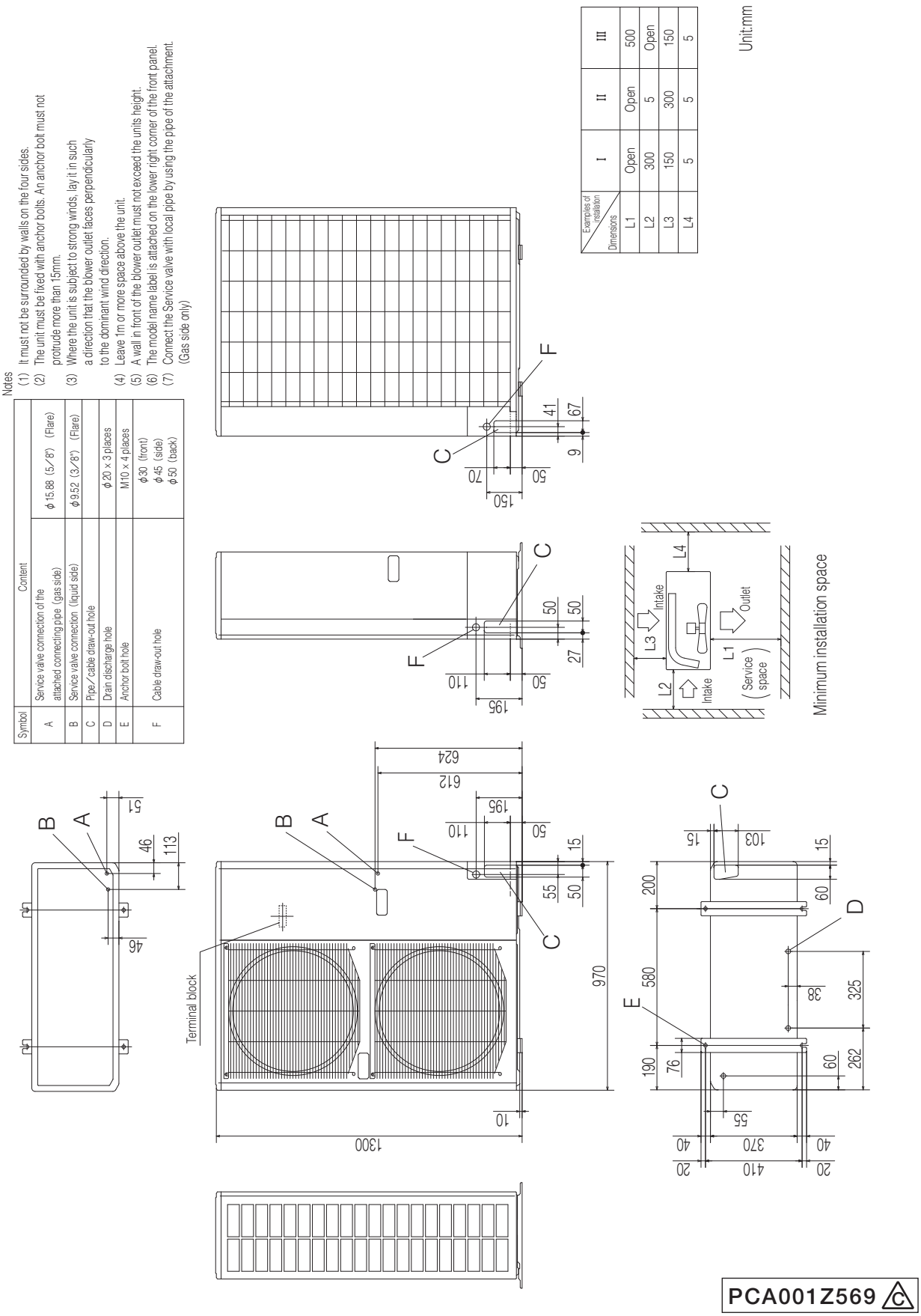






PCA001Z603 A

Models FDC100VNX, 125VNX, 140VNX
100VSX, 125VSX, 140VSX



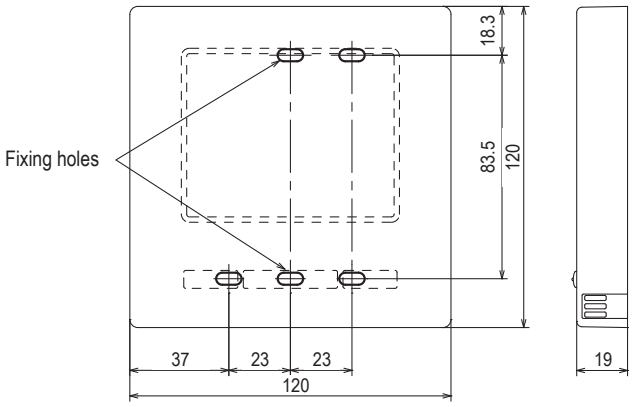
PCA001Z569

(3) Remote control

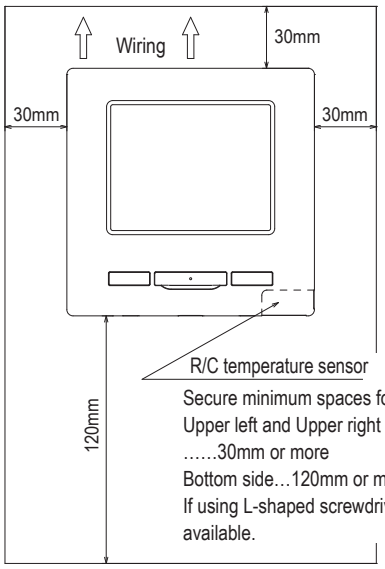
● **Wired remote control**

Model RC-EXZ3A

Dimensions (Viewed from front)



Installation space



Secure minimum spaces for disassembling the case.
Upper left and Upper right sides
……30mm or more
Bottom side…120mm or more
If using L-shaped screwdriver, 50mm or more is available.

● Do not install the remote control at following places.

1) It could cause break-down or deformation of remote control.
   - Where it is exposed to direct sunlight
   - Where the ambient temperature becomes 0 °C or below, or 40 °C or above
   - Where the surface is not flat
   - Where the strength of installation area is insufficient
2) Moisture may be attached to internal parts of the remote control, resulting in a display failure.
   - Place with high humidity where condensation occurs on the remote control
   - Where the remote control gets wet
3) Accurate room temperature may not be detected using the temperature sensor of the remote control.
   - Where the average room temperature cannot be detected
   - Place near the equipment to generate heat
   - Place affected by outside air in opening/closing the door
   - Place exposed to direct sunlight or wind from air-conditioner
   - Where the difference between wall and room temperature is large
4) When you are using the automatic grille up and down panel in the IU, you may not be able to confirm the up and down motion.
   - Where the IU cannot be visually confirmed

R/C cable:0.3mm^{2}x2 cores

When the cable length is longer than 100 m, the max size for wires used in the R/C case is 0.5 mm^2 . Connect them to wires of larger size near the outside of R/C. When wires are connected, take measures to prevent water, etc. from entering inside.

≦ 200 m	0.5 mm^2 x 2 cores
≦ 300m	0.75 mm^2 x 2 cores
≦ 400m	1.25 mm^2 x 2 cores
≦ 600m	2.0 mm^2 x 2 cores

● When installing the unit at a hospital, telecommunication facility, etc., take measures to suppress electric noises.

It could cause malfunction or break-down due to hazardous effects on the inverter, private power generator, high frequency medical equipment, radio communication equipment, etc.
The influences transmitted from the remote control to medical or communication equipment could disrupt medical activities, video broadcasting or cause noise interference.

Adapted RoHS directive

PJZ000Z338

2.3 ELECTRICAL WIRING

(1) Indoor units

(a) Duct connected-High static pressure type (FDU)

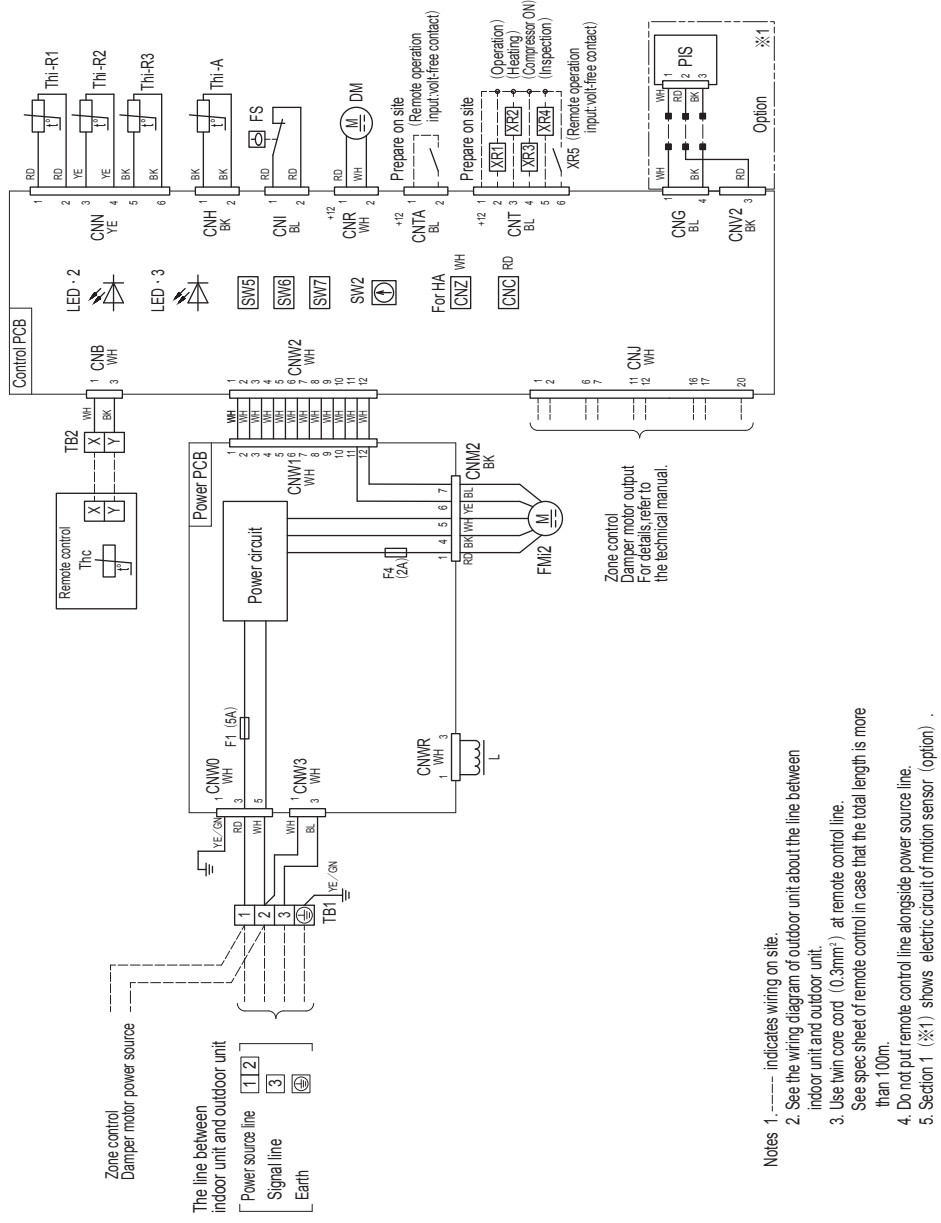
Model FDU71VH

Meaning of marks

Item	Description
CNB-Z	Connector
DM	Drain pump motor
F1,4	Fuse
FMI2	Fan motor
FS	Float switch
L	Reactor
LED・2	Indication lamp (Green-Normal operation)
LED・3	Indication lamp (Red-Inspection)
PIS	Motion sensor
SW2	Remote control communication address
SW5	Plural units Master／Slave setting
SW6	Model capacity setting
SW7- 1	Operation check,Drain pump motor test run
TB1	Terminal block (Power source) (□mark)
TB2	Terminal block (Signal line) (□mark)
Thc	Temperature sensor (Remote control)
Thi-A	Temperature sensor (Return air)
Thi-R 1,2,3	Temperature sensor (Heat exchanger)
■mark	Closed-end connector

Color Marks

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
YE	Yellow
YE／GN	Yellow／Green



Notes 1.------ indicates wiring on site.
2. See the wiring diagram of outdoor unit about the line between indoor unit and outdoor unit.
3. Use twin core cord (0.3mm²) at remote control line. See spec sheet of remote control in case that the total length is more than 100m.
4. Do not put remote control line alongside power source line.
5. Section 1 (※1) shows electric circuit of motion sensor (option).

PJG000Z652

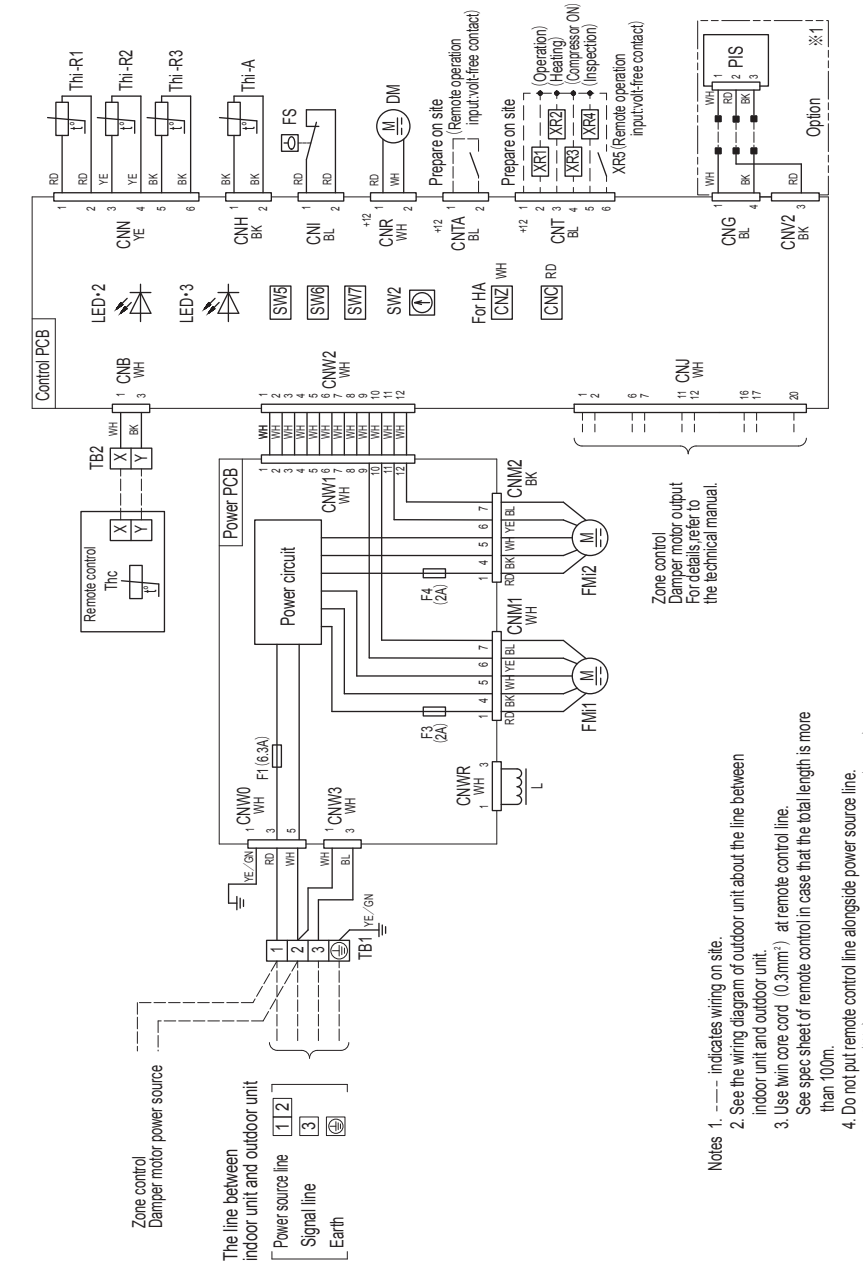
Models FDU100VH, 125VH, 140VH

Meaning of marks

Item	Description
CNB-Z	Connector
DM	Drain pump motor
F1,3,4	Fuse
FMi1,2	Fan motor
FS	Float switch
L	Reactor
LED･2	Indication lamp (Green-Normal operation)
LED･3	Indication lamp (Red-Inspection)
PIS	Motion sensor
SW2	Remote control communication address
SW5	Plural units Master／Slave setting
SW6	Model capacity setting
SW7-1	Operation check,Drain pump motor test run
TB1	Terminal block (Power source) (□mark)
TB2	Terminal block (Signal line) (□mark)
Thc	Temperature sensor (Remote control)
Thi-A	Temperature sensor (Return air)
Thi-R1,2,3	Temperature sensor (Heat exchanger)
■mark	Closed-end connector

Color Marks

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
YE	Yellow
YE／GN	Yellow／Green

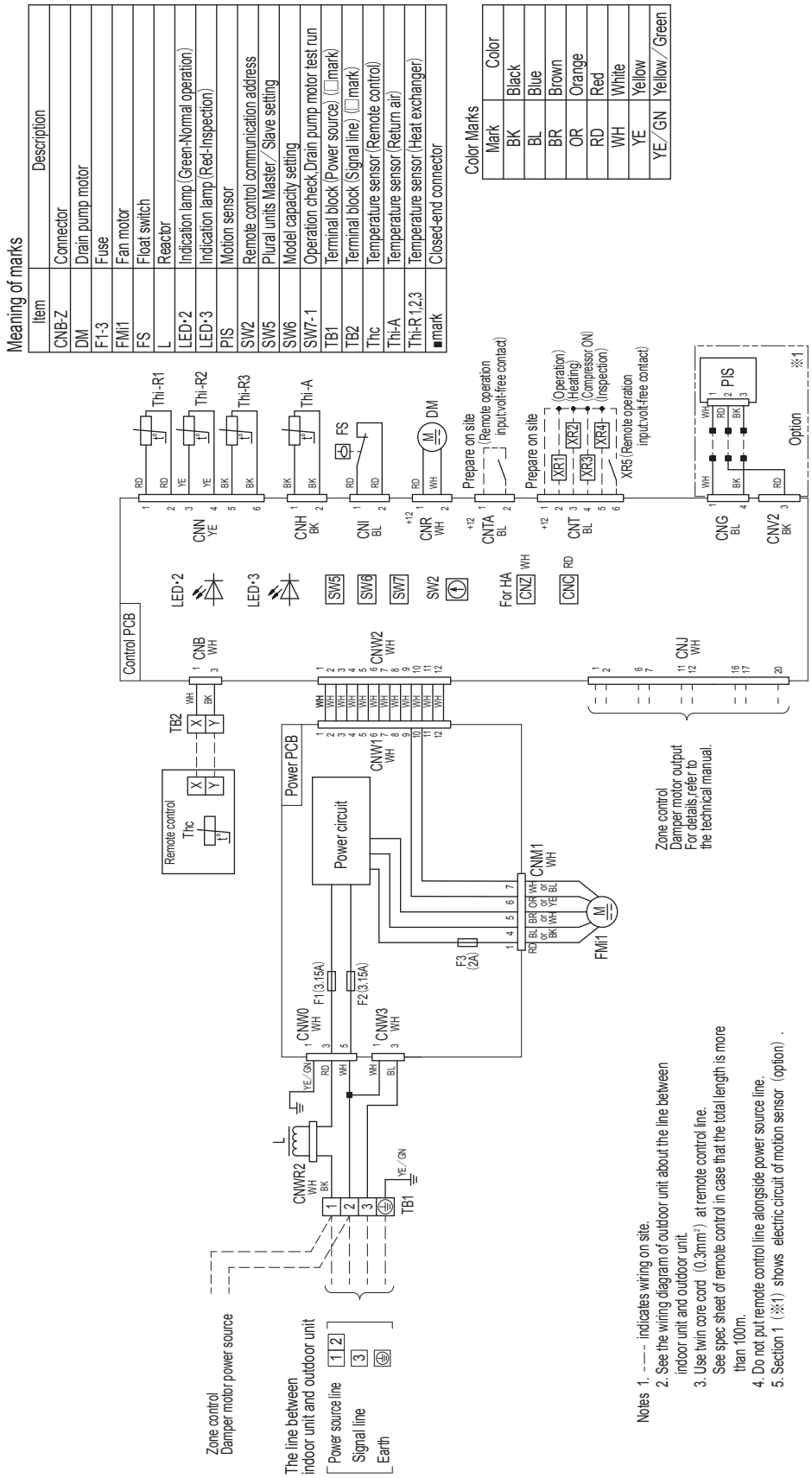


Notes 1. - — - indicates wiring on site.
2. See the wiring diagram of outdoor unit about the line between indoor unit and outdoor unit.
3. Use twin core cord (0.3mm²) at remote control line.
See spec sheet of remote control in case that the total length is more than 100m.
4. Do not put remote control line alongside power source line.
5. Section 1 (※1) shows electric circuit of motion sensor (option).

PJG000Z653

(b) Duct connected-Low/Middle static pressure type (FDUM)

Models FDUM40VH, 50VH



PJG000Z654

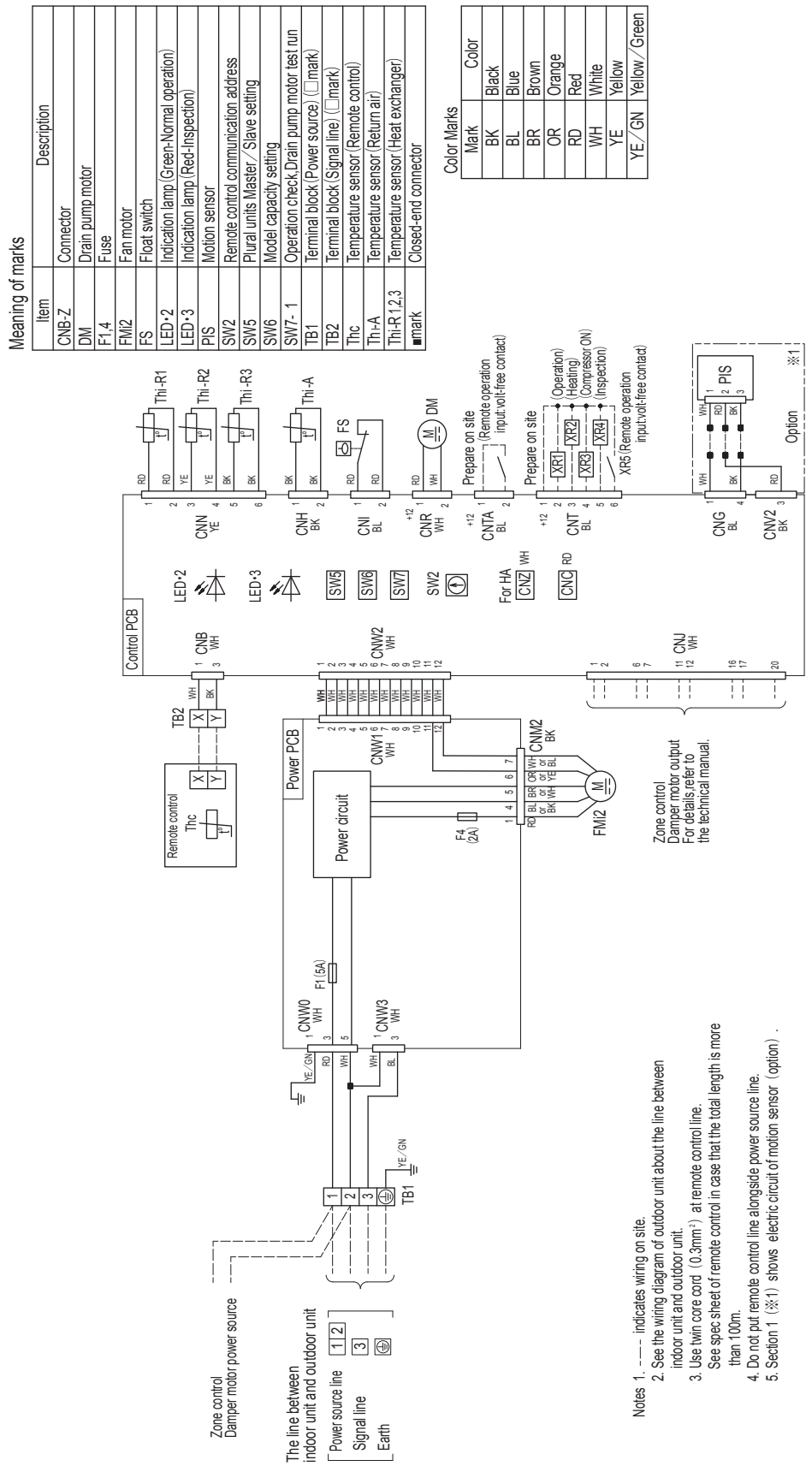
Models FDUM60VH, 71VH

Meaning of marks

Item	Description
CNB-Z	Connector
DM	Drain pump motor
F1,4	Fuse
FMi2	Fan motor
FS	Float switch
LED･2	Indication lamp (Green-Normal operation)
LED･3	Indication lamp (Red-Inspection)
PIS	Motion sensor
SW2	Remote control communication address
SW5	Plural units Master／Slave setting
SW6	Model capacity setting
SW7- 1	Operation check,Drain pump motor test run
TB1	Terminal block (Power source) (□mark)
TB2	Terminal block (Signal line) (□mark)
Thc	Temperature sensor (Remote control)
Thi-A	Temperature sensor (Return air)
Thi-R1,2,3	Temperature sensor (Heat exchanger)
■mark	Closed-end connector

Color Marks

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



Notes 1. ---- indicates wiring on site.
2. See the wiring diagram of outdoor unit about the line between indoor unit and outdoor unit.
3. Use twin core cord (0.3mm²) at remote control line. See spec sheet of remote control in case that the total length is more than 100m.
4. Do not put remote control line alongside power source line.
5. Section 1 (※1) shows electric circuit of motion sensor (option).

PJG000Z655

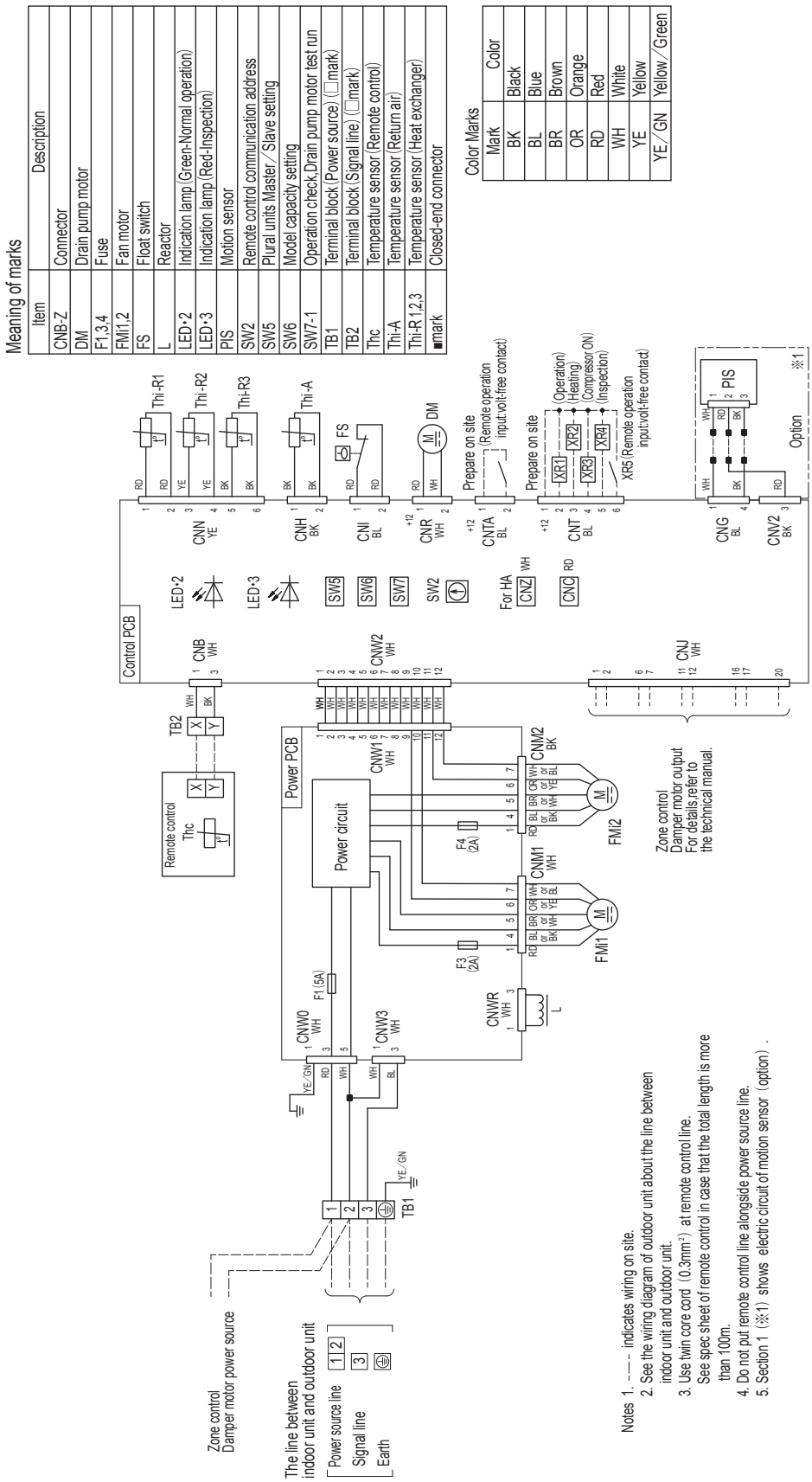
Models FDUM100VH, 125VH, 140VH

Meaning of marks

Item	Description
CNB-Z	Connector
DM	Drain pump motor
F1,3,4	Fuse
FM1,2	Fan motor
FS	Float switch
L	Reactor
LED･2	Indication lamp (Green-Normal operation)
LED･3	Indication lamp (Red-Inspection)
PIS	Motion sensor
SW2	Remote control communication address
SW5	Plural units Master／Slave setting
SW6	Model capacity setting
SW7-1	Operation check,Drain pump motor test run
TB1	Terminal block (Power source) (□mark)
TB2	Terminal block (Signal line) (□mark)
Thc	Temperature sensor (Remote control)
Thi-A	Temperature sensor (Return air)
Thi-R 1,2,3	Temperature sensor (Heat exchanger)
■mark	Closed-end connector

Color Marks

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

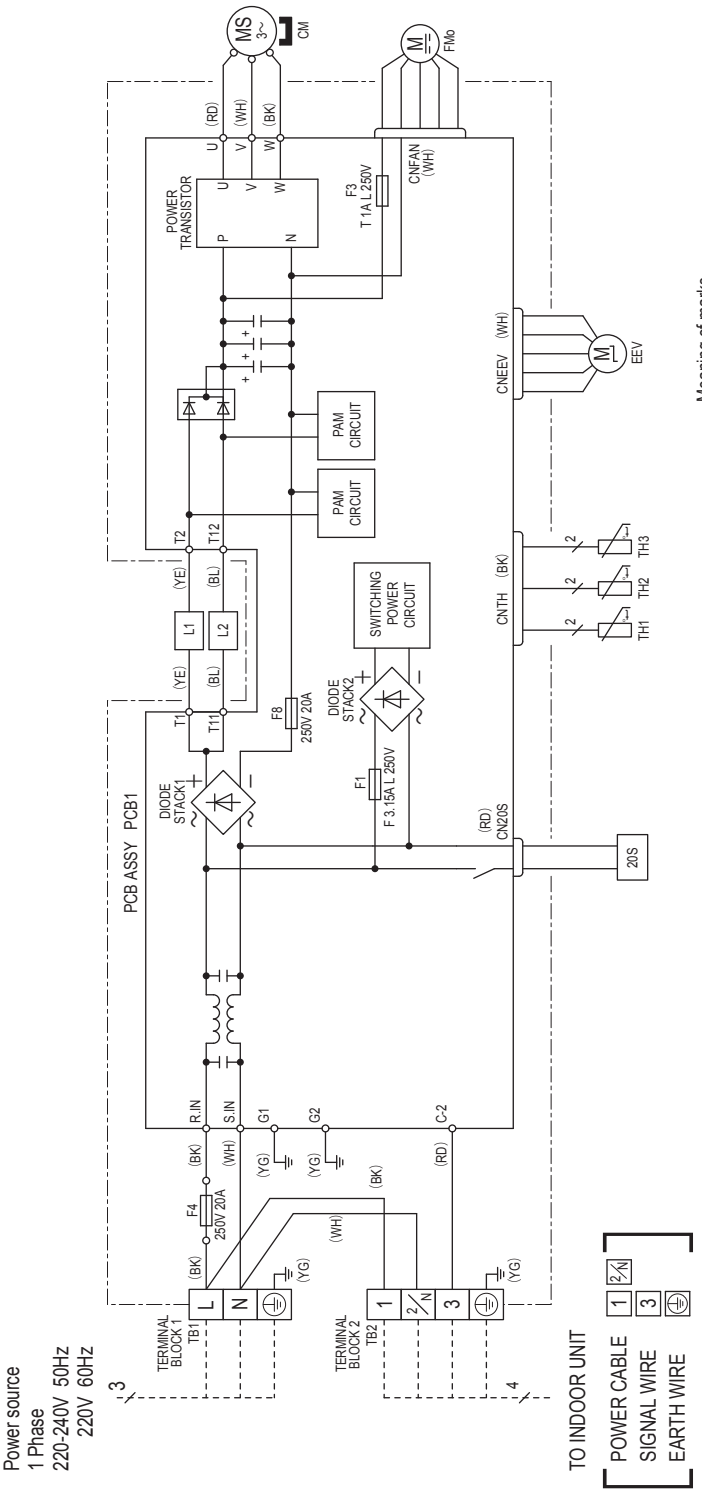


Notes 1. ---- indicates wiring on site.
2. See the wiring diagram of outdoor unit about the line between indoor unit and outdoor unit.
3. Use twin core cord (0.3mm²) at remote control line.
See spec sheet of remote control in case that the total length is more than 100m.
4. Do not put remote control line alongside power source line.
5. Section 1 (※1) shows electric circuit of motion sensor (option) .

PJG000Z656

(2) Outdoor units

Models SRC40ZSX-S, 50ZSX-S, 60ZSX-S



Meaning of marks

Item	Description
20S	Solenoid coil for 4-way valve
CN20S CNEEV CNFAN CNTH	Connector
CM	Compressor motor
EEV	Electric expansion valve (coil)
FMo	Fan motor
L1,2	Reactor
TH1	Heat exchanger temperature sensor
TH2	Outdoor air temperature sensor
TH3	Discharge pipe temperature sensor

Color marks

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
YE	Yellow
YG	Yellow／Green

Power cable, indoor-outdoor connecting wires

Model name	MAX running current (A)	Power cable wire size x number*	Power cable length (m)	Connecting cable wire size x number*
SRC40ZSX-S SRC50ZSX-S SRC60ZSX-S	15	2.0mm² x 3	13	1.5mm² x 4

* The wire numbers include earth wire (Yellow／Green).
◦ Switchgear or circuit breaker capacity should be chosen according to national or regional electricity regulations.
◦ The power cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the national or regional electricity regulations.

RWC000Z298

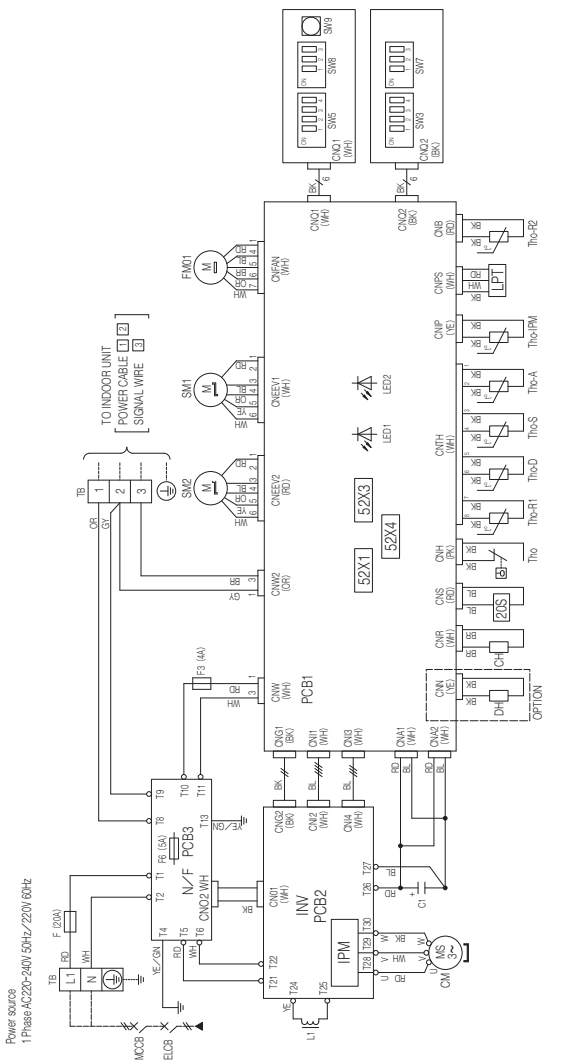
Model FDC71VNX

Meaning of marks

Item	Description
CM	Compressor motor
FM01	Fan motor
CH	Crankcase heater
DH	Drain pan heater
52X1	Auxiliary relay (for CH)
52X3	Auxiliary relay (for 20S)
52X4	Auxiliary relay (for DH)
20S	Solenoid valve for 4-way valve
SM1	Expansion valve for cooling
SM2	Expansion valve for heating
63H1	High pressure switch
Tho-A	Temperature sensor (Outdoor air.)
Tho-D	Temperature sensor (Discharge pipe)
Tho-R1,R2	Temperature sensor (Heat exchanger)
Tho-S	Temperature sensor (Suction pipe)
Tho-IPM	Temperature sensor (IPM)
LPT	Low pressure sensor
IPM	Intelligent power module
TB	Terminal block
FF3	Fuse
CnA-Z	Connector
SW9	Pump down switch
SW3,5	Local setting switch
LED1	Indication lamp (GREEN)
LED2	Indication lamp (RED)
L1	Reactor

Color marks

Mark	Color
BK	Black
BL	Blue
BR	Brown
OR	Orange
RD	Red
WH	White
YE	Yellow
YE/GN	Yellow/Green
GY	Gray
PK	Pink



Local setting switch SW3, SW5 (Set up at shipment OFF)

SW3-1	Defrost control change	The defrost operation interval becomes shorter by turning ON this switch. This switch should be turned ON in the area where outside temperature becomes below the freezing point.
SW3-2	Snow guard fan control	When this switch is turned ON, the outdoor unit fan will run for 10 seconds in every 10 minutes, when outdoor temperature falls to 3°C or lower and the compressor is not running. When the unit is used in a very snowy country, set this switch to ON.
SW5-3,4	Trial operation	Method of trial operation 1. Trial operation can be performed by using SW5-3. 2. Cooling trial operation will be performed when SW5-4 is OFF, and heating trial operation when SW5-4 is ON. 3. Be sure to turn OFF SW5-3 after the trial operation is finished.

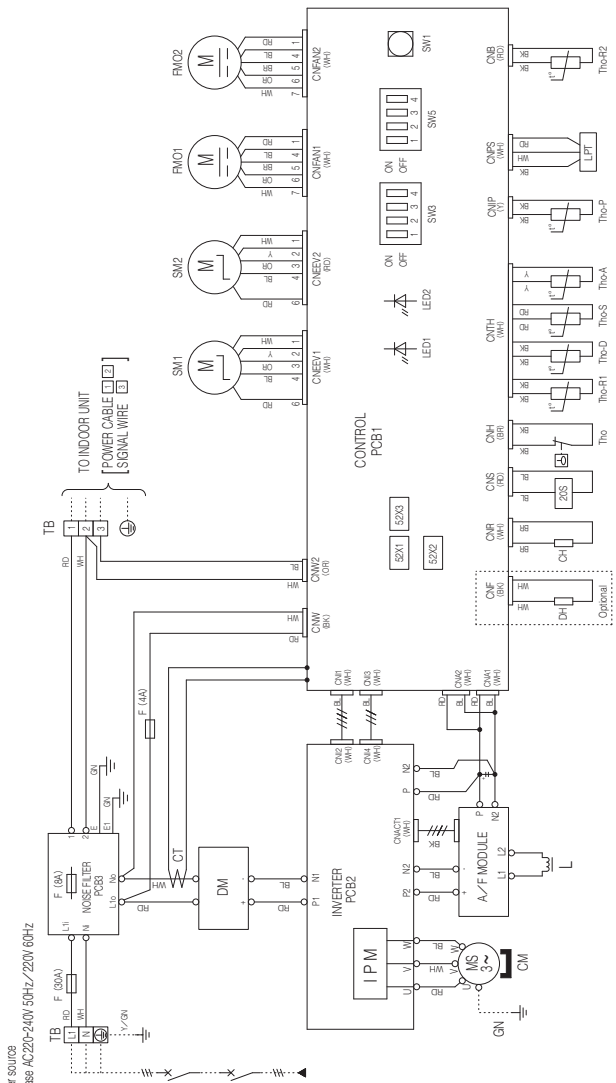
Power cable, indoor-outdoor connecting wires

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size
FDC71	17	3.5	21	ϕ1.6mm x 3	ϕ1.6mm

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.
- Refer to installation manual or technical manual about usage of local setting switch.
  Don't operate SW3-3,SW5-1,SW5-2,SW7,SW8

PCA001Z605

Models FDC100VNX, 125VNX, 140VNX



Color marks

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

Meaning of marks

Item	Description
CnA–Z	Connector
CH	Crankcase heater
DH	Drain pan heater
CM	Compressor motor
CT	Current sensor
DM	Diode module
F	Fuse
FMO1	Fan motor
IPM	Intelligent power module
L	Reactor
LED1	Indication lamp (GREEN)
LED2	Indication lamp (RED)
LPT	Low pressure sensor
SM1	Expansion valve for cooling
SM2	Expansion valve for heating
SW1	Pump down switch
SW3,5	Local setting switch
TB	Terminal block
Tho-A	Temperature sensor (Outdoor air)
Tho-D	Temperature sensor (Discharge pipe)
Tho-P	Temperature sensor (IPM)
Tho-R1,2	Temperature sensor (Heat exchanger pipe)
Tho-S	Temperature sensor (Suction pipe)
20S	Solenoid valve for 4-way valve
52X1	Auxiliary relay (for CH)
52X2	Auxiliary relay (for DH)
52X3	Auxiliary relay (for 20S)
63H1	High pressure switch

Local setting switch SW3 (Set up at shipment OFF)

SW3-1	Defrost control change	The defrost operation interval becomes shorter by turning ON this switch. This switch should be turned ON in the area where outside temperature becomes below the freezing point.
SW3-2	Snow guard fan control	When this switch is turned ON, the outdoor unit fan will run for 30 seconds in every 10 minutes, when outdoor temperature falls to 3°C or lower and the compressor is not running when the unit is used in a very snowy country, set this switch to ON.
SW3-3,4	Trial operation	Method of trial operation ①Trial operation can be performed by using SW3-3,4. ②Compressor will be in the operation when SW3-3 is ON. ③Cooling trial operation will be performed when SW3-4 is OFF, and heating trial operation when SW3-4 is ON. ④Be sure to turn OFF SW3-3 after the trial operation is finished.

Power cable, indoor-outdoor connecting wires

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm)
FDC100	24	5.5	25	ϕ1.6mm x 3	ϕ1.6
FDC125	26		23		
FDC140					

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z570 A

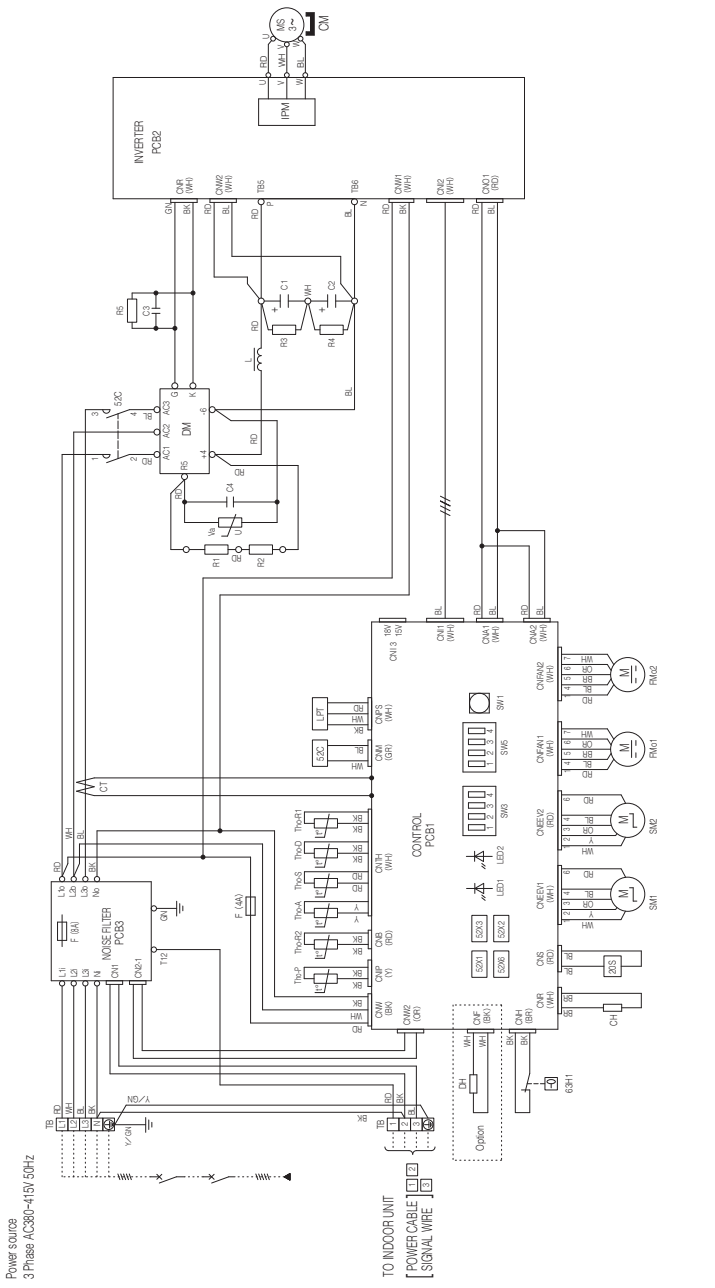
Models FDC100VSX, 125VSX, 140VSX

Meaning of marks

Item	Description
CH	Crankcase heater
CM	Compressor motor
CnA~Z	Connector
CT	Current sensor
DH	Drain pan heater
DM	Diode module
F	Fuse
FMo1,2	Fan motor
IPM	Intelligent power module
L	Reactor
LED1	Indication lamp (GREEN)
LED2	Indication lamp (RED)
LPT	Low pressure sensor
SM1	Expansion valve for cooling
SM2	Expansion valve for heating
SW1	Pump down switch
SW3,5	Local setting switch
TB	Terminal block
Tho-A	Temperature sensor (Outdoor air)
Tho-D	Temperature sensor (Discharger pipe)
Tho-R1,2	Temperature sensor (Heat exchanger pipe)
Tho-S	Temperature sensor (Suction pipe)
Tho-P	Temperature sensor (IPM)
20S	Solenoid valve for 4-way valve
52C	Relay
52X1	Auxiliary relay (for CH)
52X2	Auxiliary relay (for DH)
52X3	Auxiliary relay (for 20S)
52X6	Auxiliary relay (for 52C)
63H1	High pressure switch

Color marks

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



Local setting switch SW3 (Set up at shipment OFF)

SW3-1	Defrost control change	The defrost operation interval becomes shorter by turning ON this switch. This switch should be turned ON in the area where outside temperature becomes below the freezing point.
SW3-2	Snow guard fan control	When this switch is turned ON, the outdoor unit fan will run for 30 seconds in every 10 minutes, when outdoor temperature falls to 3°C or lower and the compressor is not running when the unit is used in a very snowy country, set this switch to ON.
SW3-3,4	Trial operation	Method of trial operation ① Trial operation can be performed by using SW3-3, 4. ② Compressor will be in the operation when SW3-3 is ON. ③ Cooling trial operation will be performed when SW3-4 is OFF, and heating trial operation when SW3-4 is ON. ④ Be sure to turn OFF SW3-3 after the trial operation is finished.

Power cable, indoor-outdoor connecting wires

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm)
FDC100 FDC125 FDC140	15	3.5	27	ϕ 1.6mm x 3	ϕ 1.6

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z571 A

2.4 TECHNICAL INFORMATION

(1) Duct connected-High static pressure type (FDU)

FDU71VNXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU71VH**
Outdoor unit model name	**FDC71VNX**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**7.1**	kW
heating / Average	Pdesignh	**7.0**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.24**	A
heating / Average	SCOP/A	**3.90**	A
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**5.9**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**1.08**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**7.10**	kW
Tj=30℃	Pdc	**5.23**	kW
Tj=25℃	Pdc	**3.37**	kW
Tj=20℃	Pdc	**3.20**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.46**	-
Tj=30℃	EERd	**4.72**	-
Tj=25℃	EERd	**7.94**	-
Tj=20℃	EERd	**10.38**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**6.20**	kW
Tj=2℃	Pdh	**3.85**	kW
Tj=7℃	Pdh	**2.45**	kW
Tj=12℃	Pdh	**2.56**	kW
Tj=bivalent temperature	Pdh	**6.20**	kW
Tj=operating limit	Pdh	**5.00**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.53**	-
Tj=2℃	COPd	**3.82**	-
Tj=7℃	COPd	**5.15**	-
Tj=12℃	COPd	**6.28**	-
Tj=bivalent temperature	COPd	**2.53**	-
Tj=operating limit	COPd	**2.06**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**15**	W
standby mode	Psb	**15**	W
thermostat-off mode	Pto(cooling)	**18**	W
	Pto(heating)	**35**	W
crankcase heater mode	Pck	**22**	W

Annual electricity consumption			
cooling	Qce	**475**	kWh/a
heating / Average	Qhe	**2516**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**66**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**1,440**	m^3/h
Rated air flow(outdoor)	-	**3,600**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

PJG000Z575Ⓐ

FDU100VNXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC100VNX**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**13.0**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**10.9**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.42**	kW
Tj=25℃	Pdc	**5.58**	kW
Tj=20℃	Pdc	**5.87**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**11.50**	kW
Tj=2℃	Pdh	**6.89**	kW
Tj=7℃	Pdh	**4.50**	kW
Tj=12℃	Pdh	**5.20**	kW
Tj=bivalent temperature	Pdh	**11.50**	kW
Tj=operating limit	Pdh	**8.96**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**20**	W
standby mode	Psb	**20**	W
thermostat-off mode	Pto(cooling)	**45**	W
	Pto(heating)	**65**	W
crankcase heater mode	Pck	**25**	W
Capacity control(indicate one of three options)			
fixed		**No**	
staged		**No**	
variable		**Yes**	

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.22**	A
heating / Average	SCOP/A	**4.10**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**2.09**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.73**	-
Tj=30℃	EERd	**4.84**	-
Tj=25℃	EERd	**7.43**	-
Tj=20℃	EERd	**10.46**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.54**	-
Tj=2℃	COPd	**4.07**	-
Tj=7℃	COPd	**5.52**	-
Tj=12℃	COPd	**6.50**	-
Tj=bivalent temperature	COPd	**2.54**	-
Tj=operating limit	COPd	**2.16**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**670**	kWh/a
heating / Average	Qhe	**4441**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a
Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**6,000**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDU100VSXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC100VSX**

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**13.0**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.19**	A
heating / Average	SCOP/A	**4.10**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**10.9**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**2.09**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.42**	kW
Tj=25℃	Pdc	**5.58**	kW
Tj=20℃	Pdc	**5.87**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.73**	-
Tj=30℃	EERd	**4.84**	-
Tj=25℃	EERd	**7.43**	-
Tj=20℃	EERd	**10.46**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**11.50**	kW
Tj=2℃	Pdh	**6.89**	kW
Tj=7℃	Pdh	**4.50**	kW
Tj=12℃	Pdh	**5.20**	kW
Tj=bivalent temperature	Pdh	**11.50**	kW
Tj=operating limit	Pdh	**8.96**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.54**	-
Tj=2℃	COPd	**4.07**	-
Tj=7℃	COPd	**5.52**	-
Tj=12℃	COPd	**6.50**	-
Tj=bivalent temperature	COPd	**2.54**	-
Tj=operating limit	COPd	**2.16**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**40**	W
standby mode	Psb	**20**	W
thermostat-off mode	Pto(cooling)	**65**	W
	Pto(heating)	**75**	W
crankcase heater mode	Pck	**25**	W

Annual electricity consumption			
cooling	Qce	**675**	kWh/a
heating / Average	Qhe	**4443**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**6,000**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative.
	Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDU125VNXVH

Model(s) : FDC125VNX ／ FDU125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**210.5**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**358.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**456.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**700.0**	%
Tj=+20℃	Pdc	**5.8**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,017.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.045**	kW	Crankcase heater mode	P_{CK}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.055**	kW	Standby mode	P_{SB}	**0.045**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**70.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

Information to identify the model(s) to which the information relates :				FDC125VNX ／ FDU125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**152.0**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**10.1**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**302.0**	%
T_j=+2℃	Pdh	**6.1**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**353.0**	%
T_j=+7℃	Pdh	**4.3**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**512.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**625.0**	%
T_{biv}=bivalent temperature	Pdh	**11.4**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**279.0**	%
T_{OL}=operation limit	Pdh	**9.0**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**238.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.045**	kW	Type of energy input Standby mode	P_{SB}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.045**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**70.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

FDU125VSXVH

Model(s) : FDC125VSX ／ FDU125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**216.5**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**358.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**465.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**714.0**	%
Tj=+20℃	Pdc	**5.8**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,038.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.040**	kW	Crankcase heater mode	P_{CK}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.055**	kW	Standby mode	P_{SB}	**0.040**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**70.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575Ⓐ

Information to identify the model(s) to which the information relates :				FDC125VSX ／ FDU125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**153.2**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**12.4**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**284.0**	%
T_j=+2℃	Pdh	**7.5**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**364.0**	%
T_j=+7℃	Pdh	**4.9**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**512.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**638.0**	%
T_{biv}=bivalent temperature	Pdh	**14.0**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**263.0**	%
T_{OL}=operation limit	Pdh	**10.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**238.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.040**	kW	Type of energy input Standby mode	P_{SB}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.095**	kW				
Crankcase heater mode	P_{CK}	**0.040**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**70.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

FDU140VNXVH

Model(s) : FDC140VNX ／ FDU140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**14.0**	kW	Seasonal space cooling energy efficiency ηs,c		**205.9**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**14.0**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**327.0**	%
Tj=+30℃	Pdc	**10.3**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**445.0**	%
Tj=+25℃	Pdc	**6.6**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**656.0**	%
Tj=+20℃	Pdc	**6.0**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,026.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.045**	kW	Crankcase heater mode	P_{CK}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.060**	kW	Standby mode	P_{SB}	**0.045**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor	L_{WA}	**72.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

Information to identify the model(s) to which the information relates :				FDC140VNX ／ FDU140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**16.0**	kW	Seasonal space heating energy efficiency ηs,h		**151.1**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**11.5**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**295.0**	%
T_j=+2℃	Pdh	**7.0**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**351.0**	%
T_j=+7℃	Pdh	**4.5**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**511.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**631.0**	%
T_{biv}=bivalent temperature	Pdh	**13.0**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**267.0**	%
T_{OL}=operation limit	Pdh	**10.3**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**235.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.045**	kW	Type of energy input Standby mode	P_{SB}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.105**	kW				
Crankcase heater mode	P_{CK}	**0.045**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**72.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

FDU140VSXVH

Model(s) : FDC140VSX ／ FDU140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**14.0**	kW	Seasonal space cooling energy efficiency ηs,c		**211.4**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**14.0**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**327.0**	%
Tj=+30℃	Pdc	**10.3**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**454.0**	%
Tj=+25℃	Pdc	**6.6**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**669.0**	%
Tj=+20℃	Pdc	**6.0**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,047.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.040**	kW	Crankcase heater mode	P_{CK}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.060**	kW	Standby mode	P_{SB}	**0.040**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor	L_{WA}	**72.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

Information to identify the model(s) to which the information relates :				FDC140VSX ／ FDU140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**16.0**	kW	Seasonal space heating energy efficiency ηs,h		**152.3**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**13.7**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**279.0**	%
T_j=+2℃	Pdh	**8.4**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**363.0**	%
T_j=+7℃	Pdh	**5.4**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**508.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**644.0**	%
T_{biv}=bivalent temperature	Pdh	**15.5**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**237.0**	%
T_{OL}=operation limit	Pdh	**11.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**212.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.040**	kW	Type of energy input Standby mode	P_{SB}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.040**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**72.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

(2) Duct connected-Low/Middle static pressure type (FDUM)

FDUM40ZSXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM40VH**
Outdoor unit model name	**SRC40ZSX-S**

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**4.0**	kW
heating / Average	Pdesignh	**3.5**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**2.9**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**4.00**	kW
Tj=30℃	Pdc	**2.95**	kW
Tj=25℃	Pdc	**1.90**	kW
Tj=20℃	Pdc	**1.51**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**3.05**	kW
Tj=2℃	Pdh	**1.79**	kW
Tj=7℃	Pdh	**1.21**	kW
Tj=12℃	Pdh	**0.98**	kW
Tj=bivalent temperature	Pdh	**3.05**	kW
Tj=operating limit	Pdh	**2.35**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**12**	w
standby mode	Psb	**12**	w
thermostat-off mode	Pto(cooling)	**15**	w
	Pto(heating)	**25**	w
crankcase heater mode	Pck	**0**	w
Capacity control(indicate one of three options)			
fixed		**No**	
staged		**No**	
variable		**Yes**	

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.01**	A+
heating / Average	SCOP/A	**4.15**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0.61**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**4.17**	-
Tj=30℃	EERd	**5.57**	-
Tj=25℃	EERd	**7.45**	-
Tj=20℃	EERd	**10.27**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.88**	-
Tj=2℃	COPd	**4.34**	-
Tj=7℃	COPd	**4.90**	-
Tj=12℃	COPd	**5.17**	-
Tj=bivalent temperature	COPd	**2.88**	-
Tj=operating limit	COPd	**2.37**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**233**	kWh/a
heating / Average	Qhe	**1182**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a
Other items			
Sound power level(indoor)	Lwa	**60**	dB(A)
Sound power level(outdoor)	Lwa	**63**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**780**	m^3/h
Rated air flow(outdoor)	-	**2,160**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditionir 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

PJG000Z573A

FDUM50ZSXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM50VH**
Outdoor unit model name	**SRC50ZSX-S**

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**5.0**	kW
heating / Average	Pdesignh	**4.3**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**3.6**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**5.00**	kW
Tj=30℃	Pdc	**3.69**	kW
Tj=25℃	Pdc	**2.37**	kW
Tj=20℃	Pdc	**1.51**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**3.78**	kW
Tj=2℃	Pdh	**2.31**	kW
Tj=7℃	Pdh	**1.50**	kW
Tj=12℃	Pdh	**0.98**	kW
Tj=bivalent temperature	Pdh	**3.78**	kW
Tj=operating limit	Pdh	**2.82**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**12**	W
standby mode	Psb	**12**	W
thermostat-off mode	Pto(cooling)	**15**	W
	Pto(heating)	**25**	W
crankcase heater mode	Pck	**0**	W
Capacity control(indicate one of three options)			
fixed		**No**	
staged		**No**	
variable		**Yes**	

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.68**	A+
heating / Average	SCOP/A	**4.36**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0.74**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.62**	-
Tj=30℃	EERd	**4.86**	-
Tj=25℃	EERd	**6.93**	-
Tj=20℃	EERd	**9.50**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.86**	-
Tj=2℃	COPd	**4.34**	-
Tj=7℃	COPd	**5.51**	-
Tj=12℃	COPd	**6.76**	-
Tj=bivalent temperature	COPd	**2.86**	-
Tj=operating limit	COPd	**2.47**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**309**	kWh/a
heating / Average	Qhe	**1380**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a
Other items			
Sound power level(indoor)	Lwa	**60**	dB(A)
Sound power level(outdoor)	Lwa	**63**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**780**	m^3/h
Rated air flow(outdoor)	-	**2,400**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditionir 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM60ZSXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM60VH**
Outdoor unit model name	**SRC60ZSX-S**

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**5.6**	kW
heating / Average	Pdesignh	**5.4**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**4.6**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**5.60**	kW
Tj=30℃	Pdc	**4.13**	kW
Tj=25℃	Pdc	**2.65**	kW
Tj=20℃	Pdc	**1.48**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**4.80**	kW
Tj=2℃	Pdh	**2.85**	kW
Tj=7℃	Pdh	**1.77**	kW
Tj=12℃	Pdh	**0.97**	kW
Tj=bivalent temperature	Pdh	**4.80**	kW
Tj=operating limit	Pdh	**4.00**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**12**	W
standby mode	Psb	**12**	W
thermostat-off mode	Pto(cooling)	**25**	W
	Pto(heating)	**35**	W
crankcase heater mode	Pck	**0**	W
Capacity control(indicate one of three options)			
fixed		**No**	
staged		**No**	
variable		**Yes**	

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.42**	A++
heating / Average	SCOP/A	**4.37**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0.78**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.64**	-
Tj=30℃	EERd	**5.23**	-
Tj=25℃	EERd	**7.68**	-
Tj=20℃	EERd	**13.10**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.91**	-
Tj=2℃	COPd	**4.35**	-
Tj=7℃	COPd	**5.62**	-
Tj=12℃	COPd	**5.77**	-
Tj=bivalent temperature	COPd	**2.91**	-
Tj=operating limit	COPd	**2.50**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**306**	kWh/a
heating / Average	Qhe	**1731**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a
Other items			
Sound power level(indoor)	Lwa	**60**	dB(A)
Sound power level(outdoor)	Lwa	**65**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**1,200**	m^3/h
Rated air flow(outdoor)	-	**2,490**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditionir 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM100VNXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC100VNX**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**13.0**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.22**	A
heating / Average	SCOP/A	**4.10**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**10.9**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**2.09**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.42**	kW
Tj=25℃	Pdc	**5.58**	kW
Tj=20℃	Pdc	**5.87**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.73**	-
Tj=30℃	EERd	**4.84**	-
Tj=25℃	EERd	**7.43**	-
Tj=20℃	EERd	**10.46**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**11.50**	kW
Tj=2℃	Pdh	**6.89**	kW
Tj=7℃	Pdh	**4.50**	kW
Tj=12℃	Pdh	**5.20**	kW
Tj=bivalent temperature	Pdh	**11.50**	kW
Tj=operating limit	Pdh	**8.96**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.54**	-
Tj=2℃	COPd	**4.07**	-
Tj=7℃	COPd	**5.52**	-
Tj=12℃	COPd	**6.50**	-
Tj=bivalent temperature	COPd	**2.54**	-
Tj=operating limit	COPd	**2.16**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**20**	W
standby mode	Psb	**20**	W
thermostat-off mode	Pto(cooling)	**45**	W
	Pto(heating)	**65**	W
crankcase heater mode	Pck	**25**	W

Annual electricity consumption			
cooling	Qce	**670**	kWh/a
heating / Average	Qhe	**4441**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**6,000**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative.
	Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM100VSXVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC100VSX**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**13.0**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.19**	A
heating / Average	SCOP/A	**4.10**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**10.9**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**2.09**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.42**	kW
Tj=25℃	Pdc	**5.58**	kW
Tj=20℃	Pdc	**5.87**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.73**	-
Tj=30℃	EERd	**4.84**	-
Tj=25℃	EERd	**7.43**	-
Tj=20℃	EERd	**10.46**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**11.50**	kW
Tj=2℃	Pdh	**6.89**	kW
Tj=7℃	Pdh	**4.50**	kW
Tj=12℃	Pdh	**5.20**	kW
Tj=bivalent temperature	Pdh	**11.50**	kW
Tj=operating limit	Pdh	**8.96**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.54**	-
Tj=2℃	COPd	**4.07**	-
Tj=7℃	COPd	**5.52**	-
Tj=12℃	COPd	**6.50**	-
Tj=bivalent temperature	COPd	**2.54**	-
Tj=operating limit	COPd	**2.16**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-7**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**20**	W
standby mode	Psb	**20**	W
thermostat-off mode	Pto(cooling)	**65**	W
	Pto(heating)	**85**	W
crankcase heater mode	Pck	**25**	W

Annual electricity consumption			
cooling	Qce	**675**	kWh/a
heating / Average	Qhe	**4444**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**6,000**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM125VNXVH

Model(s) : FDC125VNX ／ FDUM125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**210.5**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**358.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**456.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**700.0**	%
Tj=+20℃	Pdc	**5.8**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,017.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.045**	kW	Crankcase heater mode	P_{CK}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.055**	kW	Standby mode	P_{SB}	**0.045**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**70.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	–	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

Information to identify the model(s) to which the information relates :				FDC125VNX ／ FDUM125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**152.0**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**10.1**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**302.0**	%
T_j=+2℃	Pdh	**6.1**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**353.0**	%
T_j=+7℃	Pdh	**4.3**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**512.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**625.0**	%
T_{biv}=bivalent temperature	Pdh	**11.4**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**279.0**	%
T_{OL}=operation limit	Pdh	**9.0**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**238.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.045**	kW	Type of energy input Standby mode	P_{SB}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.045**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**70.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573Ⓐ

FDUM125VSXVH

Model(s) : FDC125VSX ／ FDUM125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**216.5**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**358.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**465.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**714.0**	%
Tj=+20℃	Pdc	**5.8**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,038.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.040**	kW	Crankcase heater mode	P_{CK}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.055**	kW	Standby mode	P_{SB}	**0.040**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**70.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**–**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

Information to identify the model(s) to which the information relates :				FDC125VSX ／ FDUM125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**153.2**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**12.4**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**284.0**	%
T_j=+2℃	Pdh	**7.5**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**364.0**	%
T_j=+7℃	Pdh	**4.9**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**512.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**638.0**	%
T_{biv}=bivalent temperature	Pdh	**14.0**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**263.0**	%
T_{OL}=operation limit	Pdh	**10.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**238.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.040**	kW	Type of energy input Standby mode	P_{SB}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.095**	kW				
Crankcase heater mode	P_{CK}	**0.040**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**70.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573Ⓐ

FDUM140VNXVH

Model(s) : FDC140VNX ／ FDUM140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**14.0**	kW	Seasonal space cooling energy efficiency ηs,c		**205.9**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**14.0**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**327.0**	%
Tj=+30℃	Pdc	**10.3**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**445.0**	%
Tj=+25℃	Pdc	**6.6**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**656.0**	%
Tj=+20℃	Pdc	**6.0**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,026.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.045**	kW	Crankcase heater mode	P_{CK}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.060**	kW	Standby mode	P_{SB}	**0.045**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**72.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**–**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573Ⓐ

Information to identify the model(s) to which the information relates :				FDC140VNX ／ FDUM140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**16.0**	kW	Seasonal space heating energy efficiency ηs,h		**151.1**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**11.5**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**295.0**	%
T_j=+2℃	Pdh	**7.0**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**351.0**	%
T_j=+7℃	Pdh	**4.5**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**511.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**631.0**	%
T_{biv}=bivalent temperature	Pdh	**13.0**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**267.0**	%
T_{OL}=operation limit	Pdh	**10.3**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**235.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.045**	kW	Type of energy input Standby mode	P_{SB}	**0.045**	kW
Thermostat-off mode	P_{TO}	**0.105**	kW				
Crankcase heater mode	P_{CK}	**0.045**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**72.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573Ⓐ

FDUM140VSXVH

Model(s) : FDC140VSX ／ FDUM140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**14.0**	kW	Seasonal space cooling energy efficiency ηs,c		**211.4**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**14.0**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**327.0**	%
Tj=+30℃	Pdc	**10.3**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**454.0**	%
Tj=+25℃	Pdc	**6.6**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**669.0**	%
Tj=+20℃	Pdc	**6.0**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**1,047.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.040**	kW	Crankcase heater mode	P_{CK}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.060**	kW	Standby mode	P_{SB}	**0.040**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**6,000**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**72.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	–	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573Ⓐ

Information to identify the model(s) to which the information relates :				FDC140VSX ／ FDUM140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**16.0**	kW	Seasonal space heating energy efficiency ηs,h		**152.3**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**13.7**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**279.0**	%
T_j=+2℃	Pdh	**8.4**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**363.0**	%
T_j=+7℃	Pdh	**5.4**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**508.0**	%
T_j=+12℃	Pdh	**4.5**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**644.0**	%
T_{biv}=bivalent temperature	Pdh	**15.5**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**237.0**	%
T_{OL}=operation limit	Pdh	**11.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**212.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.040**	kW	Type of energy input Standby mode	P_{SB}	**0.040**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.040**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**6,000**	m^3/h
Sound power level, outdoor measured	L_{WA}	**72.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573Ⓐ

3. MICRO INVERTER PACKAGED AIR-CONDITIONERS

CONTENTS

Example: FDUM 100 VNA VH

- VH — Series code
- VNA — Applicable power source...See the specification
- 100 — Product capacity
- FDUM — Model name
  - FDU : Duct connected-High static pressure type
  - FDUM : Duct connected-Low/Middle static pressure type
  - FDC : Outdoor unit

3.1 SPECIFICATIONS

(1) Duct connected-High static pressure type (FDU)

Item			Model	FDU100VNAVH	
				Indoor unit **FDU100VH**	Outdoor unit **FDC100VNA**
Power source				1 Phase, 220-240V, 50Hz / 220V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)		kW	11.2 [4.0(Min.)-12.5(Max.)]	
	Power consumption	Cooling	kW	2.84	
		Heating		2.78	
	Max power consumption			6.40	
	Running current	Cooling	A	13.6 / 14.2	
		Heating		13.3 / 13.9	
	Inrush current, max current			5, 26	
	Power factor	Cooling	%	91	
		Heating		91	
	EER	Cooling		3.52	
	COP	Heating		4.03	
	Sound power level	Cooling	dB(A)	65	70
		Heating			
	Sound pressure level	Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	54
		Heating			56
	Silent mode sound pressure level			—	50/44 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	80
Compressor type & Q'ty				—	RMT5126MCE3 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item			Model	FDU100VSAVH	
				Indoor unit **FDU100VH**	Outdoor unit **FDC100VSA**
Power source				3 Phase, 380-415V, 50Hz / 380V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)		kW	11.2 [4.0(Min.)-12.5(Max.)]	
	Power consumption	Cooling	kW	2.84	
		Heating		2.78	
	Max power consumption			10.20	
	Running current	Cooling	A	4.4 / 4.6	
		Heating		4.3 / 4.5	
	Inrush current, max current			5, 17	
	Power factor	Cooling	%	93 / 94	
		Heating		93 / 94	
	EER	Cooling		3.52	
	COP	Heating		4.03	
	Sound power level	Cooling	dB(A)	65	70
		Heating			
	Sound pressure level	Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	54
		Heating			56
	Silent mode sound pressure level			—	50/44 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	54	82
Compressor type & Q'ty				—	RMT5126MCE4 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item			Model	FDU125VNAVH	
				Indoor unit **FDU125VH**	Outdoor unit **FDC125VNA**
Power source				1 Phase, 220-240V, 50Hz / 220V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)		kW	14.0 [4.0(Min.)-16.0(Max.)]	
	Power consumption	Cooling	kW	4.36	
		Heating		3.69	
	Max power consumption			6.40	
	Running current	Cooling	A	20.3 / 21.3	
		Heating		17.8 / 18.7	
	Inrush current, max current			5, 26	
	Power factor	Cooling	%	93	
		Heating		90	
	EER	Cooling		2.87	
	COP	Heating		3.79	
	Sound power level	Cooling	dB(A)	67	71
		Heating			
	Sound pressure level	Cooling		P-Hi : 45 Hi : 40 Me 34 Lo : 29	55
		Heating			57
	Silent mode sound pressure level			—	51/45 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	54	80
Compressor type & Q'ty				—	RMT5126MCE3 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ9.52 (3/8") Pipe ϕ9.52(3/8")×0.8 O/U ϕ9.52 (3/8")	
		Gas line		ϕ15.88 (5/8") ϕ15.88(5/8")×1.0 ϕ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5	
Interconnecting wires	Size × Core number			ϕ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature		Outdoor air temperature		External static pressure of indoor unit	Standards
	DB	WB	DB	WB		
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item			Model	FDU125VSAVH	
				Indoor unit **FDU125VH**	Outdoor unit **FDC125VSA**
Power source				3 Phase, 380-415V, 50Hz / 380V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)		kW	14.0 [4.0(Min.)-16.0(Max.)]	
	Power consumption	Cooling	kW	4.36	
		Heating		3.69	
	Max power consumption			10.20	
	Running current	Cooling	A	6.8 / 7.2	
		Heating		5.9 / 6.2	
	Inrush current, max current			5, 17	
	Power factor	Cooling	%	93 / 92	
		Heating		90	
	EER	Cooling		2.87	
	COP	Heating		3.79	
	Sound power level	Cooling	dB(A)	67	71
		Heating			
	Sound pressure level	Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	55
		Heating			57
	Silent mode sound pressure level			—	51/45 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	54	82
Compressor type & Q'ty				—	RMT5126MCE4 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable / Termainal block(Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item			Model	FDU140VNAVH	
				Indoor unit **FDU140VH**	Outdoor unit **FDC140VNA**
Power source				1 Phase, 220-240V, 50Hz / 220V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	13.6 [5.0(Min.)-14.5(Max.)]	
	Nominal heating capacity (range)		kW	15.5 [4.0(Min.)-16.5(Max.)]	
	Power consumption	Cooling	kW	4.93	
		Heating		4.21	
	Max power consumption			6.40	
	Running current	Cooling	A	22.8 / 23.8	
		Heating		20.3 / 21.3	
	Inrush current, max current			5, 27	
	Power factor	Cooling	%	94	
		Heating		90	
	EER	Cooling		2.76	
	COP	Heating		3.68	
	Sound power level	Cooling	dB(A)	70	73
		Heating			
	Sound pressure level	Cooling		P-Hi : 47 Hi : 40 Me : 35 Lo : 30	57
		Heating			59
	Silent mode sound pressure level			—	53/47 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	54	80
Compressor type & Q'ty				—	RMT5126MCE3 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item			Model	FDU140VSAVH	
				Indoor unit **FDU140VH**	Outdoor unit **FDC140VSA**
Power source				3 Phase, 380-415V, 50Hz / 380V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	13.6 [5.0(Min.)-14.5(Max.)]	
	Nominal heating capacity (range)		kW	15.5 [4.0(Min.)-16.5(Max.)]	
	Power consumption	Cooling	kW	4.93	
		Heating		4.21	
	Max power consumption			10.20	
	Running current	Cooling	A	7.8 / 8.2	
		Heating		6.8 / 7.1	
	Inrush current, max current			5, 18	
	Power factor	Cooling	%	91	
		Heating		89 / 90	
	EER	Cooling		2.76	
	COP	Heating		3.68	
	Sound power level	Cooling	dB(A)	70	73
		Heating			
	Sound pressure level	Cooling		P-Hi : 47 Hi : 40 Me : 35 Lo : 30	57
		Heating			59
	Silent mode sound pressure level			—	53/47 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	54	82
Compressor type & Q'ty				—	RMT5126MCE4 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

(2) Duct connected-Low/Middle static pressure type (FDUM)

Item			Model	FDUM100VNAVH	
				Indoor unit **FDUM100VH**	Outdoor unit **FDC100VNA**
Power source				1 Phase, 220-240V, 50Hz / 220V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)		kW	11.2 [4.0(Min.)-12.5(Max.)]	
	Power consumption	Cooling	kW	2.84	
		Heating		2.78	
	Max power consumption			6.40	
	Running current	Cooling	A	13.6 / 14.2	
		Heating		13.3 / 13.9	
	Inrush current, max current			5, 26	
	Power factor	Cooling	%	91	
		Heating		91	
	EER	Cooling		3.52	
	COP	Heating		4.03	
	Sound power level	Cooling	dB(A)	65	70
		Heating			
	Sound pressure level	Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	54
		Heating			56
	Silent mode sound pressure level			—	50/44 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	80
Compressor type & Q'ty				—	RMT5126MCE3 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable/ Termainal block（Screw fixing type）	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item			Model	FDUM100VSAVH	
				Indoor unit **FDUM100VH**	Outdoor unit **FDC100VSA**
Power source				3 Phase, 380-415V, 50Hz / 380V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	10.0 [4.0(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)		kW	11.2 [4.0(Min.)-12.5(Max.)]	
	Power consumption	Cooling	kW	2.84	
		Heating		2.78	
	Max power consumption			10.20	
	Running current	Cooling	A	4.4 / 4.6	
		Heating		4.3 / 4.5	
	Inrush current, max current			5, 17	
	Power factor	Cooling	%	93 / 94	
		Heating		93 / 94	
	EER	Cooling		3.52	
	COP	Heating		4.03	
	Sound power level	Cooling	dB(A)	65	70
		Heating			
	Sound pressure level	Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	54
		Heating			56
	Silent mode sound pressure level			—	50/44 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	82
Compressor type & Q'ty				—	RMT5126MCE4 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)			W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ9.52 (3/8") Pipe ϕ9.52(3/8")×0.8 O/U ϕ9.52 (3/8")	
		Gas line		ϕ15.88 (5/8") ϕ15.88(5/8")×1.0 ϕ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			ϕ1.6mm × 3 cores + earth cable/ Termainal block（Screw fixing type）	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item			Model	FDUM125VNAVH	
				Indoor unit **FDUM125VH**	Outdoor unit **FDC125VNA**
Power source				1 Phase, 220-240V, 50Hz / 220V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)		kW	14.0 [4.0(Min.)-16.0(Max.)]	
	Power consumption	Cooling	kW	4.36	
		Heating		3.69	
	Max power consumption			6.40	
	Running current	Cooling	A	20.3 / 21.3	
		Heating		17.8 / 18.7	
	Inrush current, max current			5, 26	
	Power factor	Cooling	%	93	
		Heating		90	
	EER	Cooling		2.87	
	COP	Heating		3.79	
	Sound power level	Cooling	dB(A)	67	71
		Heating			
	Sound pressure level	Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	55
		Heating			57
	Silent mode sound pressure level			—	51/45 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	80
Compressor type & Q'ty				—	RMT5126MCE3 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable/ Termainal block（Screw fixing type）	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item			Model	FDUM125VSAVH	
				Indoor unit **FDUM125VH**	Outdoor unit **FDC125VSA**
Power source				3 Phase, 380-415V, 50Hz / 380V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	12.5 [5.0(Min.)-14.0(Max.)]	
	Nominal heating capacity (range)		kW	14.0 [4.0(Min.)-16.0(Max.)]	
	Power consumption	Cooling	kW	4.36	
		Heating		3.69	
	Max power consumption			10.20	
	Running current	Cooling	A	6.8 / 7.2	
		Heating		5.9 / 6.2	
	Inrush current, max current			5, 17	
	Power factor	Cooling	%	93 / 92	
		Heating		90	
	EER	Cooling		2.87	
	COP	Heating		3.79	
	Sound power level	Cooling	dB(A)	67	71
		Heating			
	Sound pressure level	Cooling		P-Hi : 45 Hi : 40 Me : 34 Lo : 29	55
		Heating			57
	Silent mode sound pressure level			—	51/45 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368× 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	82
Compressor type & Q'ty				—	RMT5126MCE4 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 39 Hi : 32 Me : 26 Lo : 20	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U φ9.52 (3/8") Pipe φ9.52(3/8")×0.8 O/U φ9.52 (3/8")	
		Gas line		φ15.88 (5/8") φ15.88(5/8")×1.0 φ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size φ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			φ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature		Outdoor air temperature		External static pressure of indoor unit	Standards
	DB	WB	DB	WB		
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item			Model	FDUM140VNAVH	
				Indoor unit **FDUM140VH**	Outdoor unit **FDC140VNA**
Power source				1 Phase, 220-240V, 50Hz / 220V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	13.6 [5.0(Min.)-14.5(Max.)]	
	Nominal heating capacity (range)		kW	15.5 [4.0(Min.)-16.5(Max.)]	
	Power consumption	Cooling	kW	4.93	
		Heating		4.21	
	Max power consumption			6.40	
	Running current	Cooling	A	22.8 / 23.8	
		Heating		20.3 / 21.3	
	Inrush current, max current			5, 27	
	Power factor	Cooling	%	94	
		Heating		90	
	EER	Cooling		2.76	
	COP	Heating		3.68	
	Sound power level	Cooling	dB(A)	70	73
		Heating			
	Sound pressure level	Cooling		P-Hi : 47 Hi : 40 Me : 35 Lo : 30	57
		Heating			59
	Silent mode sound pressure level			—	53/47 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	80
Compressor type & Q'ty				—	RMT5126MCE3 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Stating method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ9.52 (3/8") Pipe ϕ9.52(3/8")×0.8 O/U ϕ9.52 (3/8")	
		Gas line		ϕ15.88 (5/8") ϕ15.88(5/8")×1.0 ϕ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			ϕ1.6mm × 3 cores + earth cable / Termainal block (Screw fixing type)	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item			Model	FDUM140VSAVH	
				Indoor unit **FDUM140VH**	Outdoor unit **FDC140VSA**
Power source				3 Phase, 380-415V, 50Hz / 380V, 60Hz	
Operation data	Nominal cooling capacity (range)		kW	13.6 [5.0(Min.)-14.5(Max.)]	
	Nominal heating capacity (range)		kW	15.5 [4.0(Min.)-16.5(Max.)]	
	Power consumption	Cooling	kW	4.93	
		Heating		4.21	
	Max power consumption			10.20	
	Running current	Cooling	A	7.8 / 8.2	
		Heating		6.8 / 7.1	
	Inrush current, max current			5, 18	
	Power factor	Cooling	%	91	
		Heating		89 / 90	
	EER	Cooling		2.76	
	COP	Heating		3.68	
	Sound power level	Cooling	dB(A)	70	73
		Heating			
	Sound pressure level	Cooling		P-Hi : 47 Hi : 40 Me : 35 Lo : 30	57
		Heating			59
	Silent mode sound pressure level			—	53/47 (Normal/Silent)
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	845 × 970 × 370
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent （RAL 7004） near equivalent
Net weight			kg	54	82
Compressor type & Q'ty				—	RMT5126MCE4 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.9 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 3.8 in outdoor unit (Incl. the amount for the piping of 30m)	
Heat exchanger				Louver fin & inner grooved tubing	Straight fin & inner grooved tubing
Refrigerant control				Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)			W	100 + 200 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 48 Hi : 35 Me : 28 Lo : 22	75
		Heating			73
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for compressor)
Electric heater			W	—	20 (Crank case heater)
Operation control	Remote control			Wired :RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Overload protection for fan motor Frost protection thermostat Internal thermostat for fan motor Abnormal discharge temperature protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ9.52 (3/8") Pipe ϕ9.52(3/8")×0.8 O/U ϕ9.52 (3/8")	
		Gas line		ϕ15.88 (5/8") ϕ15.88(5/8")×1.0 ϕ15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.50	
	Vertical height diff. between O/U and I/U		m	Max.50 (Outdoor unit is higher)	Max.15 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ20 × 3 pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			ϕ1.6mm × 3 cores + earth cable / Termainal block（Screw fixing type）	
IP number				IPX0	IP24
Standard accessories				Mounting kit, Drain hose	—
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27˚C	19˚C	35˚C	24˚C	60Pa	ISO5151-T1
Heating	20˚C	—	7˚C	6˚C		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 400V 50Hz or 380V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

3.2 EXTERIOR DIMENSIONS

(1) Indoor units ..... See page 22.

(2) Outdoor units

Models FDC100VNA, 125VNA, 140VNA
100VSA, 125VSA, 140VSA

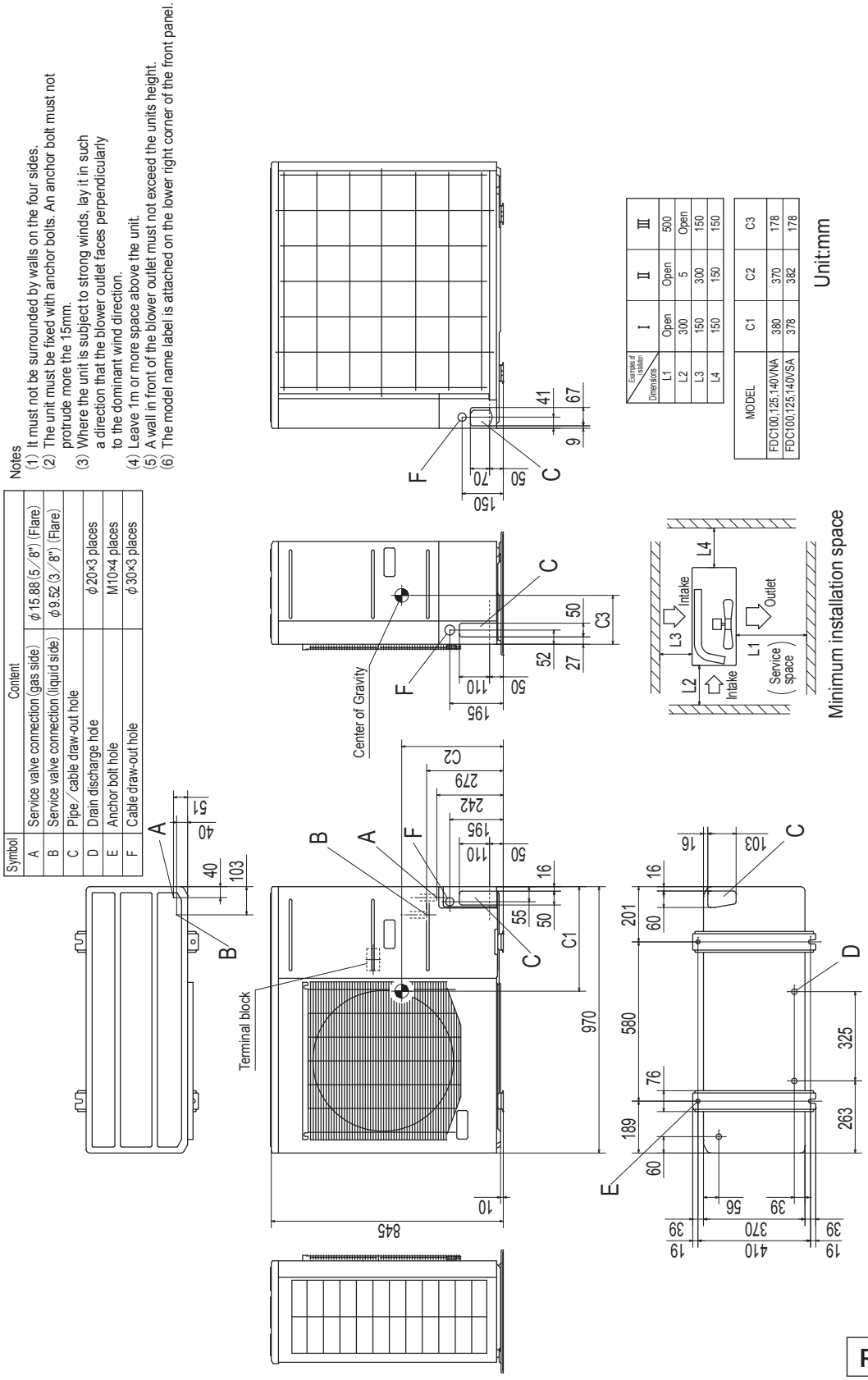
Notes
(1) It must not be surrounded by walls on the four sides.
(2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more the 15mm.
(3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
(4) Leave 1m or more space above the unit.
(5) A wall in front of the blower outlet must not exceed the units height.
(6) The model name label is attached on the lower right corner of the front panel.

Symbol	Content	
A	Service valve connection (gas side)	φ15.88 (5/8") (Flare)
B	Service valve connection (liquid side)	φ9.52 (3/8") (Flare)
C	Pipe/cable draw-out hole	φ20×3 places
D	Drain discharge hole	
E	Anchor bolt hole	M10×4 places
F	Cable draw-out hole	φ30×3 places

Examples of installation / Dimensions	I	II	III
L1	Open	Open	500
L2	300	5	Open
L3	150	300	150
L4	150	150	150

MODEL	C1	C2	C3
FDC100,125,140VNA	380	370	178
FDC100,125,140VSA	378	382	178

Unit:mm



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(3) Remote control ..... See page 30.

3.3 ELECTRICAL WIRING

(1) Indoor units ..... **See page 31.**

(2) Outdoor units

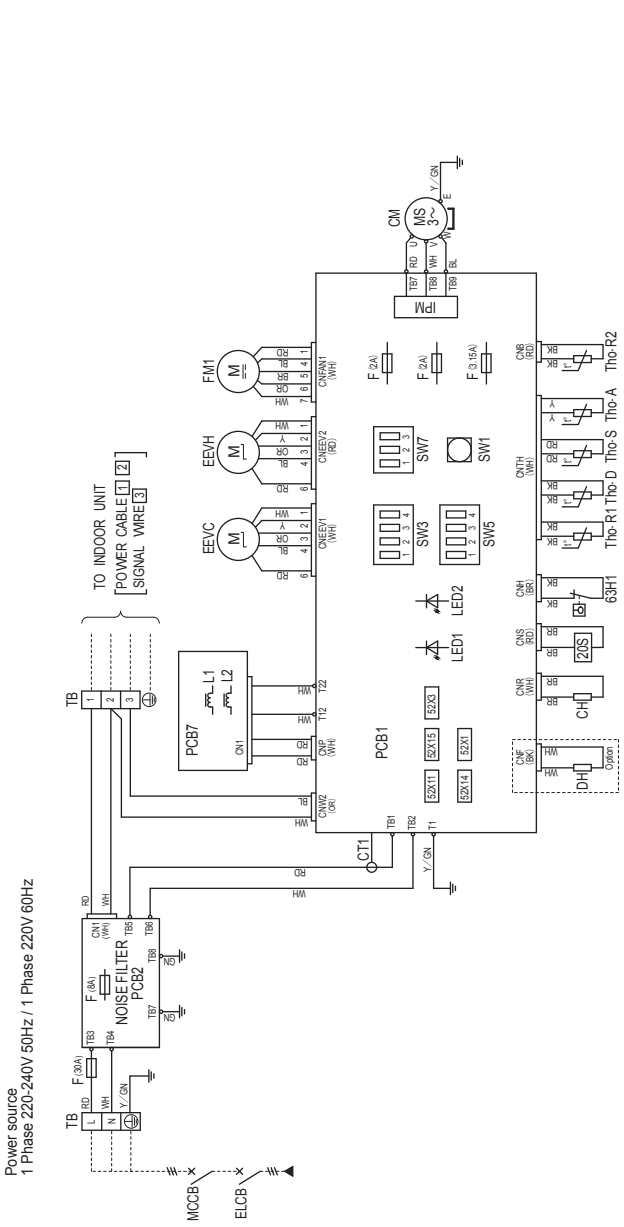
Models FDC100VNA, 125VNA, 140VNA

Meaning of marks

ITEM	DESCRIPTION
CH	Crankcase heater
CM	Compressor motor
CN	Connector
CT1	Current sensor
DH	Drain pan heater
EEVC	Expansion valve for cooling
EEVH	Expansion valve for heating
F	Fuse
FM1	Fan motor
IPM	Intelligent power module
LED1	Indication lamp (GREEN)
LED2	Indication lamp (RED)
L1,2	Reactor
SW1	Switch
SW3,5,7	Local setting switch
TB	Terminal block
THo-A	Temperature sensor (Outdoor air)
THo-D	Temperature sensor (Discharge pipe)
THo-R1,R2	Temperature sensor (Heat exchanger)
THo-S	Temperature sensor (Suction pipe)
20S	Solenoid valve for 4-way valve
52X1	Auxiliary relay
52X3	Auxiliary relay
52X11	Auxiliary relay (for 20S)
52X14	Auxiliary relay (for CH)
52X15	Auxiliary relay (for DH)
63H1	High pressure switch

Color marks

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



Local setting switch SW3,5,7 (Set up at shipment OFF)

SW3-1	Defrost control change	The defrosting operation interval becomes shorter by turning ON this switch. This switch should be turned ON in the area where outside temperature becomes below the freezing point.
SW3-2	Snow guard fan control	When this switch is turned ON, the outdoor unit fan will run for 10 seconds in every 10 minutes, when outdoor temperature falls to 3°C or lower and the compressor is not running when the unit is used in a very snowy country, set this switch to ON.
SW3-3,4	Trial operation	Method of trial operation ①Trial operation can be performed by using SW3-3,4. ②Compressor will be in the operation when SW3-3 is ON. ③Cooling trial operation will be performed when SW3-4 is OFF, and heating trial operation when SW3-4 is ON. ④Be sure to turn OFF SW3-3 after the trial operation is finished.
SW5-2	High height difference operation control	Set this switch to ON when outdoor unit is installed at a position higher than indoor unit by 30m or more.
SW7-2	Defrost control change	Set this switch to ON when managing unit operation by remote control connected external equipment.
SW7-3	Lower noise silent mode	Upper limit of compressor speed and fan speed becomes lower in silent mode.

Power cable, indoor-outdoor connecting wires

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm)
100	24	5.5	22	Ø1.6mm x 3	Ø1.6
125					
140					

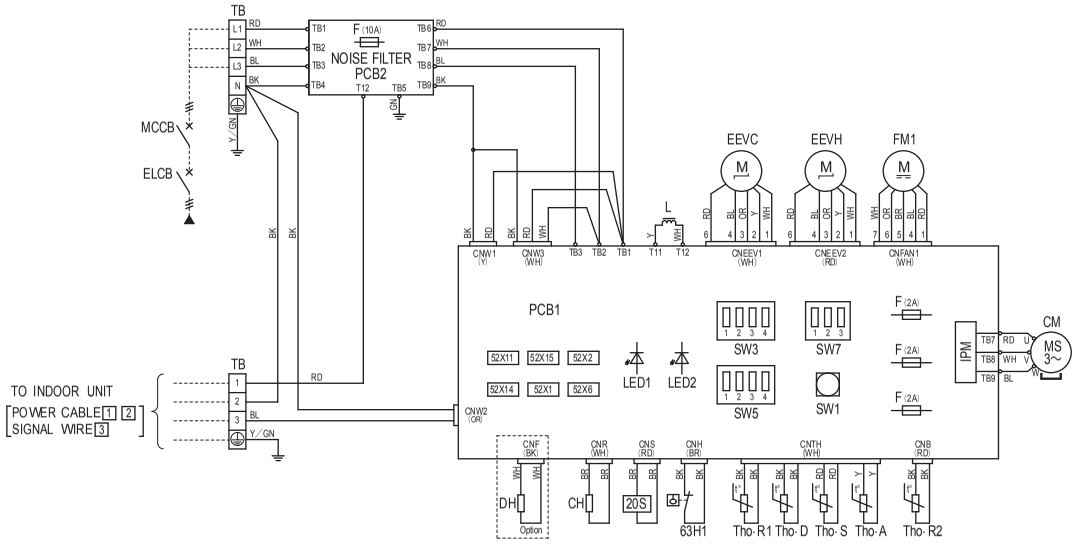
※At the connection with the duct type indoor unit.

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm)
100	26	5.5	20	Ø1.6mm x 3	Ø1.6
125					
140	27				

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of Circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z817

Power source
3 Phase 380~415V 50Hz



Power cable, indoor-outdoor connecting wires

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm)
100	15	3.5	46	Ø1.6mm x 3	Ø1.6
125					
140					

※At the connection with the duct type indoor unit.

Model	MAX over current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm)
100	17	3.5	40	Ø1.6mm x 3	Ø1.6
125					
140	18		38		

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of Circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

Local setting switch SW3,5,7 (Set up at shipment OFF)

SW3-1	Defrost control change	The defrosting operation interval becomes shorter by turning ON this switch. This switch should be turned ON in the area where outside temperature becomes below the freezing point.
SW3-2	Snow guard fan control	When this switch is turned ON, the outdoor unit fan will run for 10 seconds in every 10 minutes, when outdoor temperature falls to 3°C or lower and the compressor is not running when the unit is used in a very snowy country, set this switch to ON.
SW3-3,4	Trial operation	Method of trial operation ①Trial operation can be performed by using SW3-3,4. ②Compressor will be in the operation when SW3-3 is ON. ③Cooling trial operation will be performed when SW3-4 is OFF, and heating trial operation when SW3-4 is ON ④Be sure to turn OFF SW3-3 after the trial operation is finished.
SW5-2	High height difference operation control	Set this switch to ON when outdoor unit is installed at a position higher than indoor unit by 30m or more.
SW7-2	Defrost control change	Set this switch to ON when managing unit operation by remote control connected external equipment.
SW7-3	Lower noise silent mode	Upper limit of compressor speed and fan speed becomes lower in silent mode.

Meaning of marks

ITEM	DESCRIPTION
CH	Crankcase heater
CM	Compressor motor
CN	Connector
DH	Drain pan heater
EEVC	Expansion valve for cooling
EEVH	Expansion valve for heating
F	Fuse
FM1	Fan motor
IPM	Intelligent power module
L	Reactor
LED1	Indication lamp (GREEN)
LED2	Indication lamp (RED)
SW1	Switch
SW3,5,7	Local setting switch
TB	Terminal block
THo-A	Temperature sensor (Outdoor air)
THo-D	Temperature sensor (Discharge pipe)
THo-R1,R2	Temperature sensor (Heat exchanger)
THo-S	Temperature sensor (Suction pipe)
20S	Solenoid valve for 4-way valve
52X1	Auxilliary relay
52X2	Auxilliary relay
52X6	Auxiliary relay (for FM1)
52X11	Auxilliary relay (for 20S)
52X14	Auxilliary relay (for CH)
52X15	Auxilliary relay (for DH)
63H1	High pressure switch

Color marks

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

3.4 TECHNICAL INFORMATION

(1) Duct connected-High static pressure type (FDU)

FDU100VNAVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC100VNA**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**8.5**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.11**	A++
heating / Average	SCOP/A	**4.19**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.5**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.37**	kW
Tj=25℃	Pdc	**4.74**	kW
Tj=20℃	Pdc	**3.54**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.52**	-
Tj=30℃	EERd	**4.83**	-
Tj=25℃	EERd	**7.73**	-
Tj=20℃	EERd	**11.60**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.52**	kW
Tj=2℃	Pdh	**4.58**	kW
Tj=7℃	Pdh	**2.94**	kW
Tj=12℃	Pdh	**2.83**	kW
Tj=bivalent temperature	Pdh	**8.50**	kW
Tj=operating limit	Pdh	**6.77**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**3.21**	-
Tj=2℃	COPd	**3.91**	-
Tj=7℃	COPd	**5.42**	-
Tj=12℃	COPd	**6.23**	-
Tj=bivalent temperature	COPd	**2.70**	-
Tj=operating limit	COPd	**2.40**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**8**	W
standby mode	Psb	**8**	W
thermostat-off mode	Pto(cooling)	**65**	W
	Pto(heating)	**70**	W
crankcase heater mode	Pck	**8**	W

Annual electricity consumption			
cooling	Qce	**573**	kWh/a
heating / Average	Qhe	**2844**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**4,500**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

PJG000Z575Ⓐ

FDU100VSAVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC100VSA**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**8.5**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.11**	A++
heating / Average	SCOP/A	**4.19**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.5**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.37**	kW
Tj=25℃	Pdc	**4.74**	kW
Tj=20℃	Pdc	**3.54**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.52**	-
Tj=30℃	EERd	**4.83**	-
Tj=25℃	EERd	**7.73**	-
Tj=20℃	EERd	**11.60**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.52**	kW
Tj=2℃	Pdh	**4.58**	kW
Tj=7℃	Pdh	**2.94**	kW
Tj=12℃	Pdh	**2.83**	kW
Tj=bivalent temperature	Pdh	**8.50**	kW
Tj=operating limit	Pdh	**6.77**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**3.21**	-
Tj=2℃	COPd	**3.91**	-
Tj=7℃	COPd	**5.42**	-
Tj=12℃	COPd	**6.23**	-
Tj=bivalent temperature	COPd	**2.70**	-
Tj=operating limit	COPd	**2.40**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**8**	W
standby mode	Psb	**8**	W
thermostat-off mode	Pto(cooling)	**65**	W
	Pto(heating)	**70**	W
crankcase heater mode	Pck	**8**	W

Annual electricity consumption			
cooling	Qce	**573**	kWh/a
heating / Average	Qhe	**2844**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**4,500**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative.
	Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDU125VNAVH

Model(s) : FDC125VNA ／ FDU125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**207.3**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**287.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**409.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**650.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**865.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.010**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.075**	kW	Standby mode	P_{SB}	**0.010**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**71.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

Information to identify the model(s) to which the information relates :				FDC125VNA ／ FDU125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**162.1**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**8.7**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**311.0**	%
T_j=+2℃	Pdh	**5.3**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**391.0**	%
T_j=+7℃	Pdh	**3.4**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**530.0**	%
T_j=+12℃	Pdh	**2.9**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**600.0**	%
T_{biv}=bivalent temperature	Pdh	**9.8**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**260.0**	%
T_{OL}=operation limit	Pdh	**7.8**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**231.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.010**	kW	Type of energy input Standby mode	P_{SB}	**0.010**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW				
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**71.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

FDU125VSAVH

Model(s) : FDC125VSA ／ FDU125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**207.3**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**287.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**409.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**650.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**865.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.010**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.075**	kW	Standby mode	P_{SB}	**0.010**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**71.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

Information to identify the model(s) to which the information relates :				FDC125VSA ／ FDU125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**162.1**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**8.7**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**311.0**	%
T_j=+2℃	Pdh	**5.3**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**391.0**	%
T_j=+7℃	Pdh	**3.4**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**530.0**	%
T_j=+12℃	Pdh	**2.9**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**600.0**	%
T_{biv}=bivalent temperature	Pdh	**9.8**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**260.0**	%
T_{OL}=operation limit	Pdh	**7.8**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**231.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.010**	kW	Type of energy input Standby mode	P_{SB}	**0.010**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW				
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**71.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575Ⓐ

FDU140VNAVH

Model(s) : FDC140VNA ／ FDU140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**13.6**	kW	Seasonal space cooling energy efficiency ηs,c		**200.0**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**13.6**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**276.0**	%
Tj=+30℃	Pdc	**10.0**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**383.0**	%
Tj=+25℃	Pdc	**6.4**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**588.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**970.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.008**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW	Standby mode	P_{SB}	**0.008**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**73.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

Information to identify the model(s) to which the information relates :				FDC140VNA ／ FDU140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**15.5**	kW	Seasonal space heating energy efficiency ηs,h		**157.4**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**9.3**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**300.0**	%
T_j=+2℃	Pdh	**5.7**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**380.0**	%
T_j=+7℃	Pdh	**3.7**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**518.0**	%
T_j=+12℃	Pdh	**2.8**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**567.0**	%
T_{biv}=bivalent temperature	Pdh	**10.5**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**256.0**	%
T_{OL}=operation limit	Pdh	**7.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**229.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.008**	kW	Type of energy input Standby mode	P_{SB}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**73.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575Ⓐ

FDU140VSAVH

Model(s) : FDC140VSA ／ FDU140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**13.6**	kW	Seasonal space cooling energy efficiency ηs,c		**200.0**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**13.6**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**276.0**	%
Tj=+30℃	Pdc	**10.0**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**383.0**	%
Tj=+25℃	Pdc	**6.4**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**588.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**970.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.008**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW	Standby mode	P_{SB}	**0.008**	kW
Other items				For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Capacity control		**variable**					
Sound power level, outdoor	L_{WA}	**73.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	**-**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575Ⓐ

Information to identify the model(s) to which the information relates :				FDC140VSA ／ FDU140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**15.5**	kW	Seasonal space heating energy efficiency ηs,h		**157.4**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**9.3**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**300.0**	%
T_j=+2℃	Pdh	**5.7**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**380.0**	%
T_j=+7℃	Pdh	**3.7**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**518.0**	%
T_j=+12℃	Pdh	**2.8**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**567.0**	%
T_{biv}=bivalent temperature	Pdh	**10.5**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**256.0**	%
T_{OL}=operation limit	Pdh	**7.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**229.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	**—**	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	**—**	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		**—**	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	**—**	kW
Off mode	P_{OFF}	**0.008**	kW	Type of energy input Standby mode	P_{SB}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**73.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water fiow-rate, outdoor side heat exchanger		**—**	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	**—**	mg/kWh fuel input GCV				
GWP of the refrigerant		**2088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z575 A

(2) Duct connected-Low/Middle static pressure type (FDUM)

FDUM100VNAVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC100VNA**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**8.5**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.11**	A++
heating / Average	SCOP/A	**4.19**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.5**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.37**	kW
Tj=25℃	Pdc	**4.74**	kW
Tj=20℃	Pdc	**3.54**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.52**	-
Tj=30℃	EERd	**4.83**	-
Tj=25℃	EERd	**7.73**	-
Tj=20℃	EERd	**11.60**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.52**	kW
Tj=2℃	Pdh	**4.58**	kW
Tj=7℃	Pdh	**2.94**	kW
Tj=12℃	Pdh	**2.83**	kW
Tj=bivalent temperature	Pdh	**8.50**	kW
Tj=operating limit	Pdh	**6.77**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**3.21**	-
Tj=2℃	COPd	**3.91**	-
Tj=7℃	COPd	**5.42**	-
Tj=12℃	COPd	**6.23**	-
Tj=bivalent temperature	COPd	**2.70**	-
Tj=operating limit	COPd	**2.40**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**8**	W
standby mode	Psb	**8**	W
thermostat-off mode	Pto(cooling)	**65**	W
	Pto(heating)	**70**	W
crankcase heater mode	Pck	**8**	W

Annual electricity consumption			
cooling	Qce	**573**	kWh/a
heating / Average	Qhe	**2844**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**4,500**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

PJG000Z573 A

FDUM100VSAVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC100VSA**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**8.5**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.11**	A++
heating / Average	SCOP/A	**4.19**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.5**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.37**	kW
Tj=25℃	Pdc	**4.74**	kW
Tj=20℃	Pdc	**3.54**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.52**	-
Tj=30℃	EERd	**4.83**	-
Tj=25℃	EERd	**7.73**	-
Tj=20℃	EERd	**11.60**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.52**	kW
Tj=2℃	Pdh	**4.58**	kW
Tj=7℃	Pdh	**2.94**	kW
Tj=12℃	Pdh	**2.83**	kW
Tj=bivalent temperature	Pdh	**8.50**	kW
Tj=operating limit	Pdh	**6.77**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**3.21**	-
Tj=2℃	COPd	**3.91**	-
Tj=7℃	COPd	**5.42**	-
Tj=12℃	COPd	**6.23**	-
Tj=bivalent temperature	COPd	**2.70**	-
Tj=operating limit	COPd	**2.40**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-20**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**8**	W
standby mode	Psb	**8**	W
thermostat-off mode	Pto(cooling)	**65**	W
	Pto(heating)	**70**	W
crankcase heater mode	Pck	**8**	W

Annual electricity consumption			
cooling	Qce	**573**	kWh/a
heating / Average	Qhe	**2844**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**4,500**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative.
	Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM125VNAVH

Model(s) :	FDC125VNA ／ FDUM125VH						
Outdoor side heat exchanger of air conditioner :	air						
Indoor side heat exchanger of air conditioner :	air						
Type :	vapour compression						
if applicable :	electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**207.3**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**287.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**409.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**650.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**865.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.010**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.075**	kW	Standby mode	P_{SB}	**0.010**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Sound power level, outdoor	L_{WA}	**71.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

Information to identify the model(s) to which the information relates :				FDC125VNA ／ FDUM125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**162.1**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**8.7**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**311.0**	%
T_j=+2℃	Pdh	**5.3**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**391.0**	%
T_j=+7℃	Pdh	**3.4**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**530.0**	%
T_j=+12℃	Pdh	**2.9**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**600.0**	%
T_{biv}=bivalent temperature	Pdh	**9.8**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**260.0**	%
T_{OL}=operation limit	Pdh	**7.8**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**231.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	—	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	—	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		—	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	—	kW
Off mode	P_{OFF}	**0.010**	kW	Type of energy input Standby mode	P_{SB}	**0.010**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW				
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**71.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		—	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

FDUM125VSAVH

Model(s) : FDC125VSA ／ FDUM125VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**12.5**	kW	Seasonal space cooling energy efficiency ηs,c		**207.3**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**12.5**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**287.0**	%
Tj=+30℃	Pdc	**9.2**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**409.0**	%
Tj=+25℃	Pdc	**5.9**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**650.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**865.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.010**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.075**	kW	Standby mode	P_{SB}	**0.010**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Sound power level, outdoor	L_{WA}	**71.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

Information to identify the model(s) to which the information relates :				FDC125VSA ／ FDUM125VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**14.0**	kW	Seasonal space heating energy efficiency ηs,h		**162.1**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**8.7**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**311.0**	%
T_j=+2℃	Pdh	**5.3**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**391.0**	%
T_j=+7℃	Pdh	**3.4**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**530.0**	%
T_j=+12℃	Pdh	**2.9**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**600.0**	%
T_{biv}=bivalent temperature	Pdh	**9.8**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**260.0**	%
T_{OL}=operation limit	Pdh	**7.8**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**231.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	—	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	—	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		—	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	—	kW
Off mode	P_{OFF}	**0.010**	kW				
Thermostat-off mode	P_{TO}	**0.090**	kW	Type of energy input Standby mode	P_{SB}	**0.010**	kW
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**71.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		—	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

FDUM140VNAVH

Model(s) : FDC140VNA ／ FDUM140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**13.6**	kW	Seasonal space cooling energy efficiency ηs,c		**200.0**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**13.6**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**276.0**	%
Tj=+30℃	Pdc	**10.0**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**383.0**	%
Tj=+25℃	Pdc	**6.4**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**588.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**970.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.008**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW	Standby mode	P_{SB}	**0.008**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Sound power level, outdoor	L_{WA}	**73.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

Information to identify the model(s) to which the information relates :				FDC140VNA ／ FDUM140VH			
Outdoor side heat exchanger of heat pump :				air			
Indoor side heat exchanger of heat pump :				air			
Indication if the heater is equipped with a supplementary heater :				No			
if applicable :				electric motor			
Parameters shall be declared for the average heating season , parameters for the warmer and colder heating seasons are optional.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	**15.5**	kW	Seasonal space heating energy efficiency ηs,h		**157.4**	%
Declared heating capacity for part load at indoor temperature 20℃ and outdoor temperature Tj				Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
T_j=-7℃	Pdh	**9.3**	kW	T_j=-7℃	COPd or GUEh,bin / AEFh,bin	**300.0**	%
T_j=+2℃	Pdh	**5.7**	kW	T_j=+2℃	COPd or GUEh,bin / AEFh,bin	**380.0**	%
T_j=+7℃	Pdh	**3.7**	kW	T_j=+7℃	COPd or GUEh,bin / AEFh,bin	**518.0**	%
T_j=+12℃	Pdh	**2.8**	kW	T_j=+12℃	COPd or GUEh,bin / AEFh,bin	**567.0**	%
T_{biv}=bivalent temperature	Pdh	**10.5**	kW	T_{biv}=bivalent temperature	COPd or GUEh,bin / AEFh,bin	**256.0**	%
T_{OL}=operation limit	Pdh	**7.9**	kW	T_{OL}=operation limit	COPd or GUEh,bin / AEFh,bin	**229.0**	%
For air-to-water heat pumps : T_j=-15℃ (if T_{OL}＜-20℃)	Pdh	—	kW	For air-to-water heat pumps:T_j=-15℃ (if T_{OL}＜-20℃)	COPd or GUEh,bin / AEFh,bin	—	%
Bivalent temperature	T_{biv}	**-10.0**	℃	For water-to-air heat pumps:Operation limit T_{ol} temperature		—	℃
Degradation coefficient heat pumps**	C_{dh}	**0.25**	-				
Power consumpiton in modes other than 'active mode'				Supplementary heater back-up heating capacity	elbu	—	kW
Off mode	P_{OFF}	**0.008**	kW	Type of energy input Standby mode	P_{SB}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.100**	kW				
Crankcase heater mode	P_{CK}	**0.008**	kW				
Other items							
Capacity control		**variable**		For air-to-air heat pumps: air flow-rate,outdoor measured		**4,380**	m^3/h
Sound power level, outdoor measured	L_{WA}	**73.0**	dB	For water-/brine-to-air heat pumps : Rated brine or water flow-rate, outdoor side heat exchanger		—	m^3/h
Emissions of nitrogen oxides(if applicable)	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdh is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

FDUM140VSAVH

Model(s) : FDC140VSA ／ FDUM140VH							
Outdoor side heat exchanger of air conditioner : air							
Indoor side heat exchanger of air conditioner : air							
Type : vapour compression							
if applicable : electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**13.6**	kW	Seasonal space cooling energy efficiency ηs,c		**200.0**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**13.6**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**276.0**	%
Tj=+30℃	Pdc	**10.0**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**383.0**	%
Tj=+25℃	Pdc	**6.4**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**588.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**970.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.008**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW	Standby mode	P_{SB}	**0.008**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Sound power level, outdoor	L_{WA}	**73.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

Model(s) :	FDC140VSA ／ FDUM140VH						
Outdoor side heat exchanger of air conditioner :	air						
Indoor side heat exchanger of air conditioner :	air						
Type :	vapour compression						
if applicable :	electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	**13.6**	kW	Seasonal space cooling energy efficiency ηs,c		**200.0**	%
Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27℃/19℃(dry/wet bulb)				Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures Tj			
Tj=+35℃	Pdc	**13.6**	kW	Tj=+35℃	EERd or GUEc,bin / AEFc,bin	**276.0**	%
Tj=+30℃	Pdc	**10.0**	kW	Tj=+30℃	EERd or GUEc,bin / AEFc,bin	**383.0**	%
Tj=+25℃	Pdc	**6.4**	kW	Tj=+25℃	EERd or GUEc,bin / AEFc,bin	**588.0**	%
Tj=+20℃	Pdc	**3.5**	kW	Tj=+20℃	EERd or GUEc,bin / AEFc,bin	**970.0**	%
Degradation coefficient for air conditioners**	Cdc	**0.25**	-				
Power consumpiton in other than 'active mode'							
Off mode	P_{OFF}	**0.008**	kW	Crankcase heater mode	P_{CK}	**0.008**	kW
Thermostat-off mode	P_{TO}	**0.090**	kW	Standby mode	P_{SB}	**0.008**	kW
Other items							
Capacity control		**variable**		For air-to-air air conditioner: air flow-rate,outdoor measured		**4,500**	m^3/h
Sound power level, outdoor	L_{WA}	**73.0**	dB				
If engine driven: Emissions of nitrogen oxides	NOx ***	—	mg/kWh fuel input GCV				
GWP of the refrigerant		**2,088**	kg CO_{2eq} (100years)				
Contact details	Mitsubishi heavy industries thermal systems,LTD						

** If Cdc is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

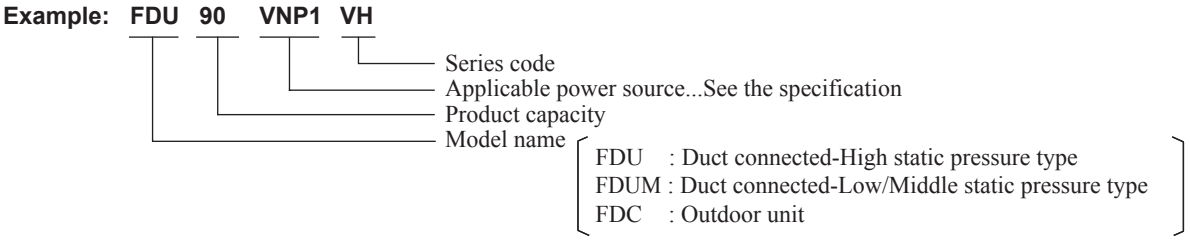
*** from 26 September 2018

Where information relates to multi-spilt air conditioners,the test result and performance data be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

PJG000Z573 A

4. STANDARD INVERTER PACKAGED AIR-CONDITIONERS

CONTENTS



4.1 SPECIFICATIONS

(1) Duct connected-High static pressure type (FDU)

Item			Model	FDU71VNPVH	
				Indoor unit **FDU71VH**	Outdoor unit **FDC71VNP**
Power source				1 phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)		kW	7.1 [1.4(Min.)-7.1(Max.)]	
	Nominal heating capacity (range)		kW	7.1 [1.0(Min.)-7.1(Max.)]	
	Power consumption	Cooling	kW	2.60	
		Heating		1.89	
	Max power consumption			3.27	
	Running current	Cooling	A	11.5 / 12.0	
		Heating		8.5/ 8.9	
	Inrush current, max current			5, 14.5	
	Power factor	Cooling	%	98 / 98	
		Heating		97 / 97	
	EER	Cooling		2.73	
	COP	Heating		3.76	
	Sound power level	Cooling	dB(A)	65	67
		Heating			
	Sound pressure level	Cooling		P-Hi : 38 Hi : 33 Me : 29 Lo : 25	54
		Heating			
	Silent mode sound pressure level			—	49
Exterior dimensions (Height × Width × Depth)			mm	280 × 950 × 635	640×800(+71)×290
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	34	45
Compressor type & Q'ty				—	RMT5113MDE2 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.45 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 1.6 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger				Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control				Capillary tubes + Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×2	Propeller fan ×1
Fan motor (Starting method)			W	130 < Direct line start >	34 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 24 Hi : 19 Me : 15 Lo : 10	36
		Heating			
Available external static pressure			Pa	Standard : 35 Max : 200	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater			W	—	—
Operation control	Remote control			Wired : RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 6.35(1/4")×0.8 O/U ϕ 6.35 (1/4")	
		Gas line		I/U ϕ 15.88 (5/8") Pipe ϕ 12.7(1/2")×0.8 O/U ϕ 12.7 (1/2")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.30	
	Vertical height diff. between O/U and I/U		m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 × 5 pcs
Drain pump, max lift height			mm	Built-in Drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			1.5mm^2×4 cores(Including earth cable)/ Termainal block(Screw fixing type)	
IP number				IPX0	IPX4
Standard accessories				Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts				Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	35Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU90VNPVH	
					Indoor unit **FDU100VH**	Outdoor unit **FDC90VNP**
Power source					1 phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	9.0 [1.9(Min.)- 9.0(Max.)]	
	Nominal heating capacity (range)			kW	9.0 [1.5(Min.)- 9.0(Max.)]	
	Power consumption		Cooling	kW	2.65	
			Heating		2.25	
	Max power consumption				4.19	
	Running current		Cooling	A	11.8 / 12.3	
			Heating		10.1 / 10.6	
	Inrush current, max current				5, 18	
	Power factor		Cooling	%	97 / 97	
			Heating		96 / 96	
	EER		Cooling		3.40	
	COP		Heating		4.00	
	Sound power level		Cooling	dB(A)	65	69
			Heating			
	Sound pressure level		Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	57
			Heating			55
	Silent mode sound pressure level				—	Cooling:52 / Heating:50
Exterior dimensions (Height × Width × Depth)				mm	280 × 1368 × 740	750 × 880(+88) × 340
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight				kg	54	57
Compressor type & Q'ty					—	RMT5118MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.675 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 2.1 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	63
			Heating			49.5
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve (for fan motor)	Rubber sleeve (for fan motor & compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 6.35(1/4")x0.8 O/U ϕ 6.35 (1/4")	
			Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 x 3pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size × Core number				1.5mm^2×4 cores(Including earth cable)/ Termainal block(Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU90VNP1VH	
					Indoor unit **FDU100VH**	Outdoor unit **FDC90VNP1**
Power source					1 phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	9.0 [1.9(Min.)-9.0(Max.)]	
	Nominal heating capacity (range)			kW	9.0 [1.5(Min.)-9.0(Max.)]	
	Power consumption		Cooling	kW	2.69	
			Heating		2.25	
	Max power consumption				4.19	
	Running current		Cooling	A	12.0 / 12.5	
			Heating		10.1 / 10.6	
	Inrush current, max current				5, 18.0	
	Power factor		Cooling	%	97 / 97	
			Heating		97 / 97	
	EER		Cooling		3.35	
	COP		Heating		4.00	
	Sound power level		Cooling	dB(A)	65	69
			Heating			
	Sound pressure level		Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	57
			Heating			55
	Silent mode sound pressure level				—	Cooling:52 / Heating:50
Exterior dimensions (Height × Width × Depth)				mm	280 × 1368 × 740	750 × 880(+88) × 340
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1)near equivalent (RAL 7004) near equivalent
Net weight				kg	54	57
Compressor type & Q'ty					—	RMT5118MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.675 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 2.1 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow			Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	63
			Heating			49.5
Available external static pressure				Pa	Standard : 60 Max : 200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve (for fan motor & compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 6.35(1/4")×0.8 O/U ϕ 6.35 (1/4")	
			Gas line		I/U ϕ 15.88 (5/8") Pipe ϕ 15.88(5/8")×1.0 O/U ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 × 3 pcs
Drain pump, max lift height				mm	Built-in Drain pump,600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size × Core number				1.5mm^2×4 cores (Including earth cable)/ Termainal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

Item				Model	FDU100VNP1VH	
					Indoor unit **FDU100VH**	Outdoor unit **FDC100VNP**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	10.0 [2.8(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)			kW	11.2 [2.5(Min.)-12.5(Max.)]	
	Power consumption	Cooling		kW	3.00	
		Heating			2.93	
	Max power consumption				4.60	
	Running current	Cooling		A	13.2 / 13.8	
		Heating			12.9 / 13.5	
	Inrush current, max current				5, 22.0	
	Power factor	Cooling		%	99	
		Heating			99	
	EER	Cooling			3.33	
	COP	Heating			3.82	
	Sound power level	Cooling		dB(A)	65	70
		Heating				
	Sound pressure level	Cooling			P-Hi : 44 Hi : 38 Me : 36 Lo : 30	57
		Heating				61
	Silent mode sound pressure level				—	Cooling:50 / Heating:49
Exterior dimensions (Height × Width × Depth)				mm	280 × 1368 × 740	845×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1)near equivalent (RAL 7004) near equivalent
Net weight				kg	54	70
Compressor type & Q'ty					—	RMT5126MCE1 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.90 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 2.55 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	75
		Heating				79
Available external static pressure				Pa	Standard：60 Max：200	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve (for fan motor & compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line		mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")×0.8 O/U ϕ 9.52 (3/8")	
		Gas line			I/U ϕ 15.88 (5/8") Pipe ϕ 15.88(5/8")×1.0 O/U ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25,O.D.32)	Hole size ϕ 20 × 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size × Core number				ϕ 1.6mm×3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, Drain hose	Edging
Option parts					Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) The factory E.S.P. setting is set within the range of 80 - 150 Pa.If SW8-4 is turned to "ON", E.S.P. setting range can be changed to 10 - 200 Pa.

(2) Duct connected-Low / Middle static pressure type (FDUM)

Item				Model	FDUM71VNPVH	
					Indoor unit **FDUM71VH**	Outdoor unit **FDC71VNP**
Power source					1 phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	7.1 [1.4(Min.)-7.1(Max.)]	
	Nominal heating capacity (range)			kW	7.1 [1.0(Min.)-7.1(Max.)]	
	Power consumption	Cooling		kW	2.60	
		Heating			1.89	
	Max power consumption				3.27	
	Running current	Cooling		A	11.5 / 12.0	
		Heating			8.5 / 8.9	
	Inrush current, max current				5, 14.5	
	Power factor	Cooling		%	98 / 98	
		Heating			97 / 97	
	EER	Cooling			2.73	
	COP	Heating			3.76	
	Sound power level	Cooling		dB(A)	65	67
		Heating				
	Sound pressure level	Cooling			P-Hi : 38 Hi : 33 Me : 29 Lo : 25	54
		Heating				
	Silent mode sound pressure level				—	49
Exterior dimensions (Height × Width × Depth)				mm	280 × 950 × 635	640×800(+71)×290
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1)near equivalent (RAL 7004) near equivalent
Net weight				kg	34	45
Compressor type & Q'ty					—	RMT5113MDE2 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.45 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 1.6 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×2	Propeller fan ×1
Fan motor (Starting method)				W	130 < Direct line start >	34 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 24 Hi : 19 Me : 15 Lo : 10	36
		Heating				
Available external static pressure				Pa	Standard : 35 Max : 100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve(for compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)		Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 6.35(1/4")×0.8 O/U ϕ 6.35 (1/4")	
			Gas line		I/U ϕ 15.88 (5/8") Pipe ϕ 12.7(1/2")×0.8 O/U ϕ 12.7 (1/2")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 x 5 pcs
Drain pump, max lift height				mm	Built-in Drain pump,600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size × Core number				1.5mm^2×4 cores (including earth cable)/ Termainal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts					Filter set : UM-FL2EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	35Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of optional air filter "UM-FL2EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

PJG000Z573 A

Item			Model	FDUM90VNPVH	
				Indoor unit **FDUM100VH**	Outdoor unit **FDC90VNP**
Power source				1 phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)		kW	9.0 [1.9(Min.)- 9.0(Max.)]	
	Nominal heating capacity (range)		kW	9.0 [1.5(Min.)- 9.0(Max.)]	
	Power consumption	Cooling	kW	2.65	
		Heating		2.25	
	Max power consumption			4.19	
	Running current	Cooling	A	11.8 / 12.3	
		Heating		10.1 / 10.6	
	Inrush current, max current			5, 18	
	Power factor	Cooling	%	97 / 97	
		Heating		96 / 96	
	EER	Cooling		3.40	
	COP	Heating		4.00	
	Sound power level	Cooling	dB(A)	65	69
		Heating			
	Sound pressure level	Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	57
		Heating			55
	Silent mode sound pressure level			—	Cooling:52 / Heating:50
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	750 × 880(+88) × 340
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1) near equivalent (RAL 7004) near equivalent
Net weight			kg	54	57
Compressor type & Q'ty				—	RMT5118MDE2 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.675 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 2.1 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger				Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control				Capillary tubes + Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)			W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	63
		Heating			49.5
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve (for fan motor)	Rubber sleeve (for fan motor & compressor)
Electric heater			W	—	—
Operation control	Remote control			Wired : RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 6.35(1/4")x0.8 O/U ϕ 6.35 (1/4")	
		Gas line		ϕ 15.88 (5/8") ϕ 15.88(5/8")x1.0 ϕ 15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.30	
	Vertical height diff. between O/U and I/U		m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25 (I.D.25, O.D.32)	Hole size ϕ 20 x 3pcs
Drain pump, max lift height			mm	Built-in drain pump , 600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			1.5mm^2×4 cores (Including earth cable)/ Termainal block (Screw fixing type)	
IP number				IPX0	IPX4
Standard accessories				Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts				Filter set : UM-FL2EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL2EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

PJG000Z573 A

Item			Model	FDUM90VNP1VH	
				Indoor unit **FDUM100VH**	Outdoor unit **FDC90VNP1**
Power source				1 phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)		kW	9.0 [1.9(Min.)-9.0(Max.)]	
	Nominal heating capacity (range)		kW	9.0 [1.5(Min.)-9.0(Max.)]	
	Power consumption	Cooling	kW	2.69	
		Heating		2.25	
	Max power consumption			4.19	
	Running current	Cooling	A	12.0 / 12.5	
		Heating		10.1 / 10.6	
	Inrush current, max current			5, 18.0	
	Power factor	Cooling	%	97 / 97	
		Heating		97 / 97	
	EER	Cooling		3.35	
	COP	Heating		4.00	
	Sound power level	Cooling	dB(A)	65	69
		Heating			
	Sound pressure level	Cooling		P-Hi : 44 Hi : 38 Me : 36 Lo : 30	57
		Heating			55
	Silent mode sound pressure level			—	Cooling:52 / Heating:50
Exterior dimensions (Height × Width × Depth)			mm	280 × 1368 × 740	750 × 880(+88) × 340
Exterior appearance (Munsell color) (RAL color)				—	Stucco white (4.2Y7.5/1.1)near equivalent (RAL 7004) near equivalent
Net weight			kg	54	57
Compressor type & Q'ty				—	RMT5118MDE2 (Twin rotary type)×1
Compressor motor (Starting method)			kW	—	Direct line start
Refrigerant oil (Amount, type)			ℓ	—	0.675 (M-MA68)
Refrigerant (Type, amount, pre-charge length)			kg	R410A 2.1 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger				Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control				Capillary tubes + Electronic expansion valve	
Fan type & Q'ty				Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)			W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling	m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	63
		Heating			49.5
Available external static pressure			Pa	Standard : 60 Max : 100	0
Outside air intake				Possible	—
Air filter, Quality / Quantity				Procure locally	—
Shock & vibration absorber				Rubber sleeve(for fan motor)	Rubber sleeve (for fan motor & compressor)
Electric heater			W	—	—
Operation control	Remote control			Wired : RC-EXZ3A	
	Room temperature control			Thermostat by electronics	
	Operation display			—	
Safety equipments				Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line	mm	I/U ϕ 9.52 (3/8") Pipe ϕ 6.35(1/4")×0.8 O/U ϕ 6.35 (1/4")	
		Gas line		I/U ϕ 15.88 (5/8") Pipe ϕ 15.88(5/8")×1.0 O/U ϕ 15.88 (5/8")	
	Connecting method			Flare piping	Flare piping
	Attached length of piping		m	—	—
	Insulation for piping			Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length		m	Max.30	
	Vertical height diff. between O/U and I/U		m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose			Hose connectable VP25(I.D.25, O.D.32)	Hole size ϕ 20 x 3 pcs
Drain pump, max lift height			mm	Built-in Drain pump,600	—
Recommended breaker size			A	—	
L.R.A. (Locked rotor ampere)			A	5.0	
Interconnecting wires	Size × Core number			1.5mm^2×4 cores (Including earth cable)/ Termainal block (Screw fixing type)	
IP number				IPX0	IPX4
Standard accessories				Mounting kit, Drain hose	Drain elbow, Drain hole grommet
Option parts				Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

Item				Model	FDUM100VNP1VH	
					Indoor unit **FDUM100VH**	Outdoor unit **FDC100VNP**
Power source					1 Phase 220-240V 50Hz / 220V 60Hz	
Operation data	Nominal cooling capacity (range)			kW	10.0 [2.8(Min.)-11.2(Max.)]	
	Nominal heating capacity (range)			kW	11.2 [2.5(Min.)-12.5(Max.)]	
	Power consumption	Cooling		kW	3.00	
		Heating			2.93	
	Max power consumption				4.60	
	Running current	Cooling		A	13.2 / 13.8	
		Heating			12.9 / 13.5	
	Inrush current, max current				5, 22.0	
	Power factor	Cooling		%	99	
		Heating			99	
	EER	Cooling			3.33	
	COP	Heating			3.82	
	Sound power level	Cooling		dB(A)	65	70
		Heating				
	Sound pressure level	Cooling			P-Hi : 44 Hi : 38 Me : 36 Lo : 30	57
		Heating				61
	Silent mode sound pressure level				—	Cooling:50 / Heating:49
Exterior dimensions (Height × Width × Depth)				mm	280 × 1368 × 740	845×970×370
Exterior appearance (Munsell color) (RAL color)					—	Stucco white (4.2Y7.5/1.1)near equivalent (RAL 7004) near equivalent
Net weight				kg	54	70
Compressor type & Q'ty					—	RMT5126MCE1 (Twin rotary type)×1
Compressor motor (Starting method)				kW	—	Direct line start
Refrigerant oil (Amount, type)				ℓ	—	0.90 (M-MA68)
Refrigerant (Type, amount, pre-charge length)				kg	R410A 2.55 in outdoor unit (Incl. the amount for the piping of 15m)	
Heat exchanger					Louver fin & inner grooved tubing	M shape fin & inner grooved tubing
Refrigerant control					Capillary tubes + Electronic expansion valve	
Fan type & Q'ty					Centrifugal fan ×3	Propeller fan ×1
Fan motor (Starting method)				W	100 + 130 < Direct line start >	86 < Direct line start >
Air flow		Cooling		m^3/min	P-Hi : 36 Hi : 28 Me : 25 Lo : 19	75
		Heating				79
Available external static pressure				Pa	Standard：60 Max：100	0
Outside air intake					Possible	—
Air filter, Quality / Quantity					Procure locally	—
Shock & vibration absorber					Rubber sleeve(for fan motor)	Rubber sleeve (for fan motor & compressor)
Electric heater				W	—	—
Operation control	Remote control				Wired : RC-EXZ3A	
	Room temperature control				Thermostat by electronics	
	Operation display				—	
Safety equipments					Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Indoor fan motor error protection, Heating overload protection(High pressure control), Cooling overload protection	
Installation data	Refrigerant piping size (O.D.)	Liquid line		mm	I/U ϕ 9.52 (3/8") Pipe ϕ 9.52(3/8")×0.8 O/U ϕ 9.52 (3/8")	
		Gas line			I/U ϕ 15.88 (5/8") Pipe ϕ 15.88(5/8")×1.0 O/U ϕ 15.88 (5/8")	
	Connecting method				Flare piping	Flare piping
	Attached length of piping			m	—	—
	Insulation for piping				Necessary (both Liquid & Gas lines)	
	Refrigerant line (one way) length			m	Max.30	
	Vertical height diff. between O/U and I/U			m	Max.20 (Outdoor unit is higher)	Max.20 (Outdoor unit is lower)
	Drain hose				Hose connectable VP25 (I.D.25,O.D.32)	Hole size ϕ 20 × 3 pcs
Drain pump, max lift height				mm	Built-in drain pump , 600	—
Recommended breaker size				A	—	
L.R.A. (Locked rotor ampere)				A	5.0	
Interconnecting wires	Size × Core number				ϕ 1.6mm×3 cores + earth cable / Termainal block (Screw fixing type)	
IP number					IPX0	IPX4
Standard accessories					Mounting kit, Drain hose	—
Option parts					Filter set : UM-FL3EF, Motion sensor : LB-KIT	

Notes (1) The data are measured at the following conditions. The pipe length is 7.5m.

Item / Operation	Indoor air temperature DB	Indoor air temperature WB	Outdoor air temperature DB	Outdoor air temperature WB	External static pressure of indoor unit	Standards
Cooling	27℃	19℃	35℃	24℃	60Pa	ISO5151-T1
Heating	20℃	—	7℃	6℃		ISO5151-H1

(2) This air-conditioner is manufactured and tested in conformity with the ISO.
(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
(4) Select the breaker size according to the own national standard.
(5) The operation data indicate when the air-conditioner is operated at 230V 50Hz or 220V 60Hz.
(6) Static pressure of option air filter "UM-FL3EF" is 5Pa initially.
(7) The external static pressure setting can be changed to 10-100Pa.

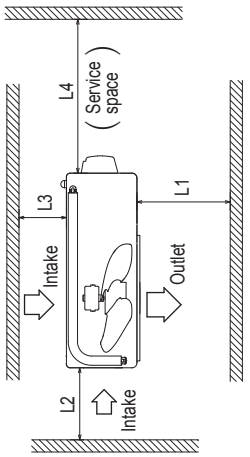
4.2 EXTERIOR DIMENSIONS

(1) Indoor units ..... **See page 22.**

(2) Outdoor units

Model FDC71VNP

Notes
(1) It must not be surrounded by walls on the four sides.
(2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm.
(3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
(4) Leave 1m or more space above the unit.
(5) A wall in front of the blower outlet must not exceed the units height.
(6) The model name label is attached on the lower right corner of the front panel.

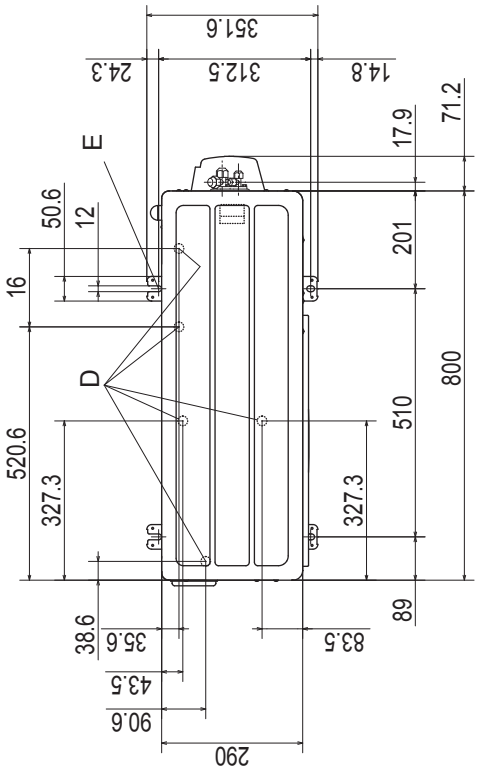


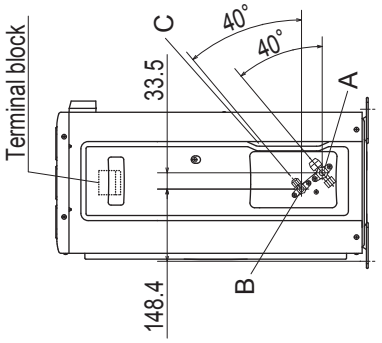
Minimum installation space

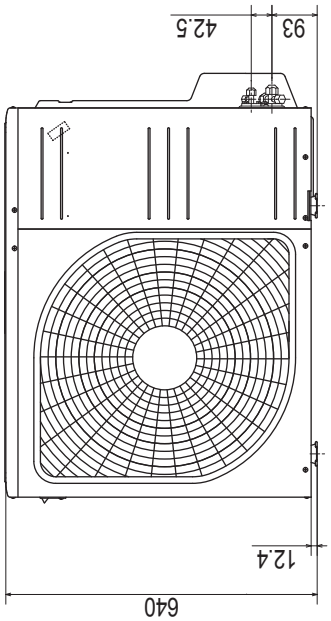
Examples of installation / Dimensions	I	II	III	IV
L1	Open	280	280	180
L2	100	75	Open	Open
L3	100	80	80	80
L4	250	Open	250	Open

Unit:mm

Symbol	Content	
A	Service valve connection (gas side)	ϕ 12.7 (1/2") (Flare)
B	Service valve connection (liquid side)	ϕ 6.35 (1/4") (Flare)
C	Pipe/cable draw-out hole	ϕ 20 × 5 places
D	Drain discharge hole	
E	Anchor bolt hole	M10 × 4 places

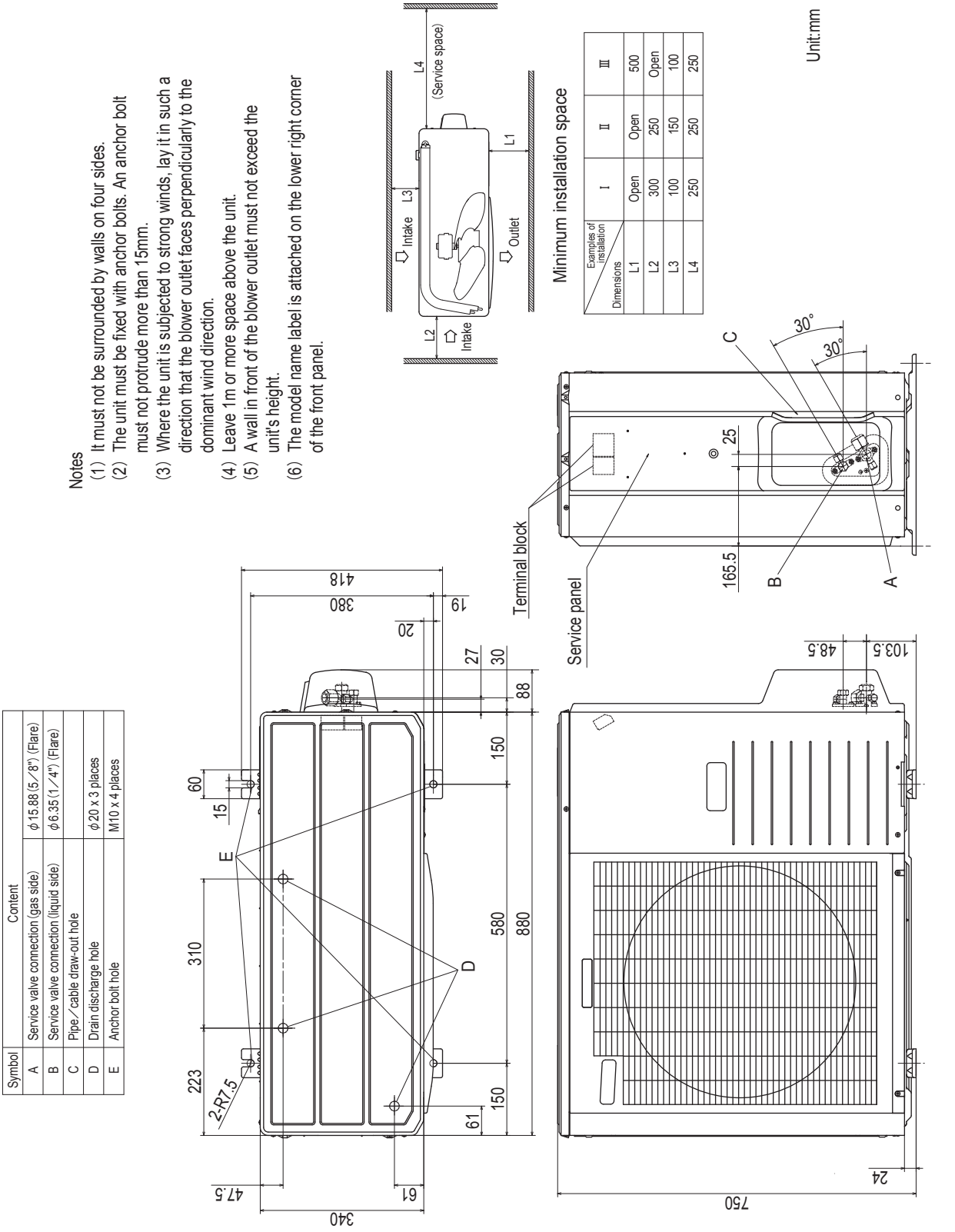






PCA001Z713

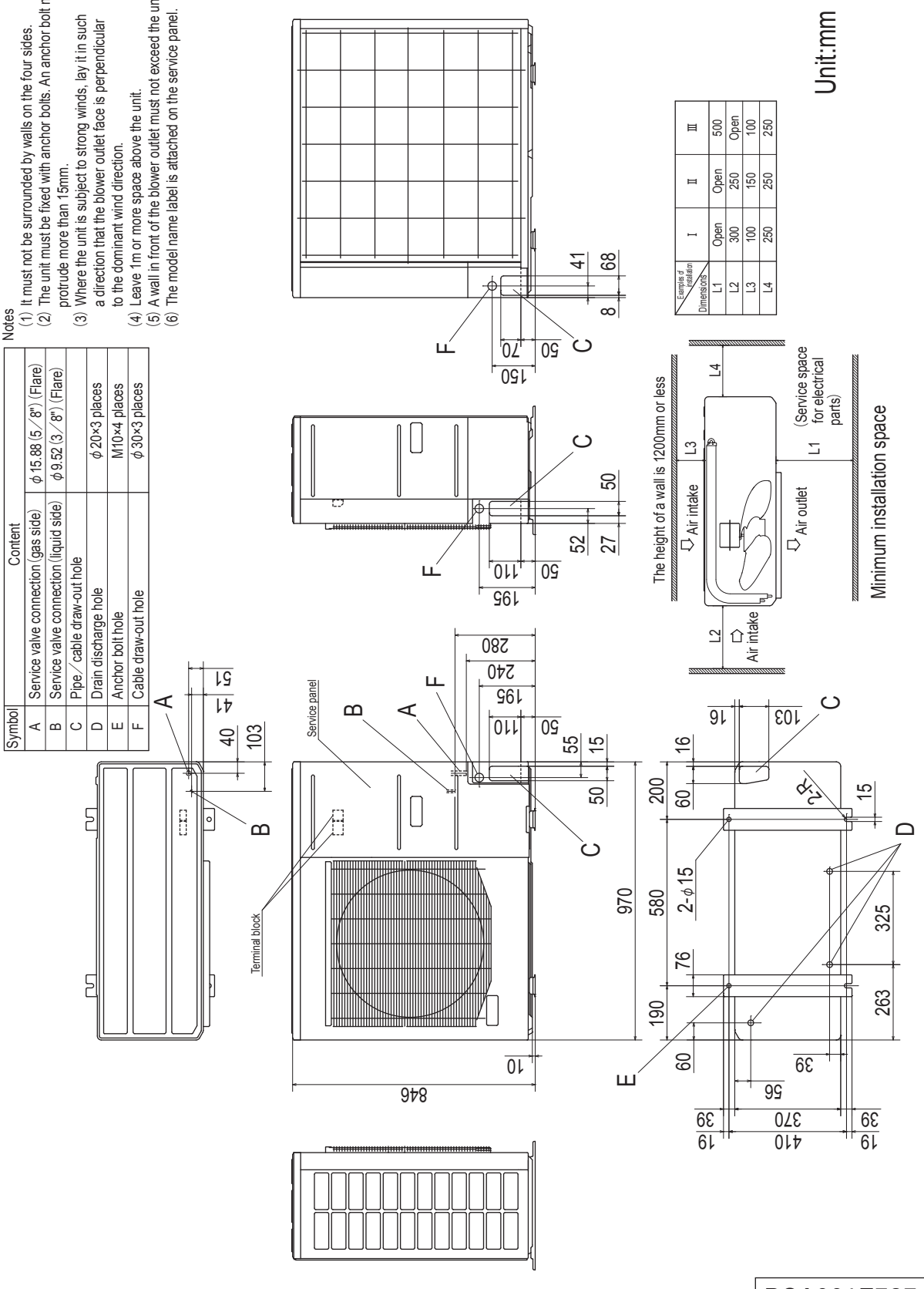
Models FDC90VNP, 90VNP1



Symbol	Content	
A	Service valve connection (gas side)	ϕ15.88 (5/8") (Flare)
B	Service valve connection (liquid side)	ϕ6.35 (1/4") (Flare)
C	Pipe / cable draw-out hole	
D	Drain discharge hole	ϕ20 x 3 places
E	Anchor bolt hole	M10 x 4 places

PCA001Z714A

Model FDC100VNP



PCA001Z787 A

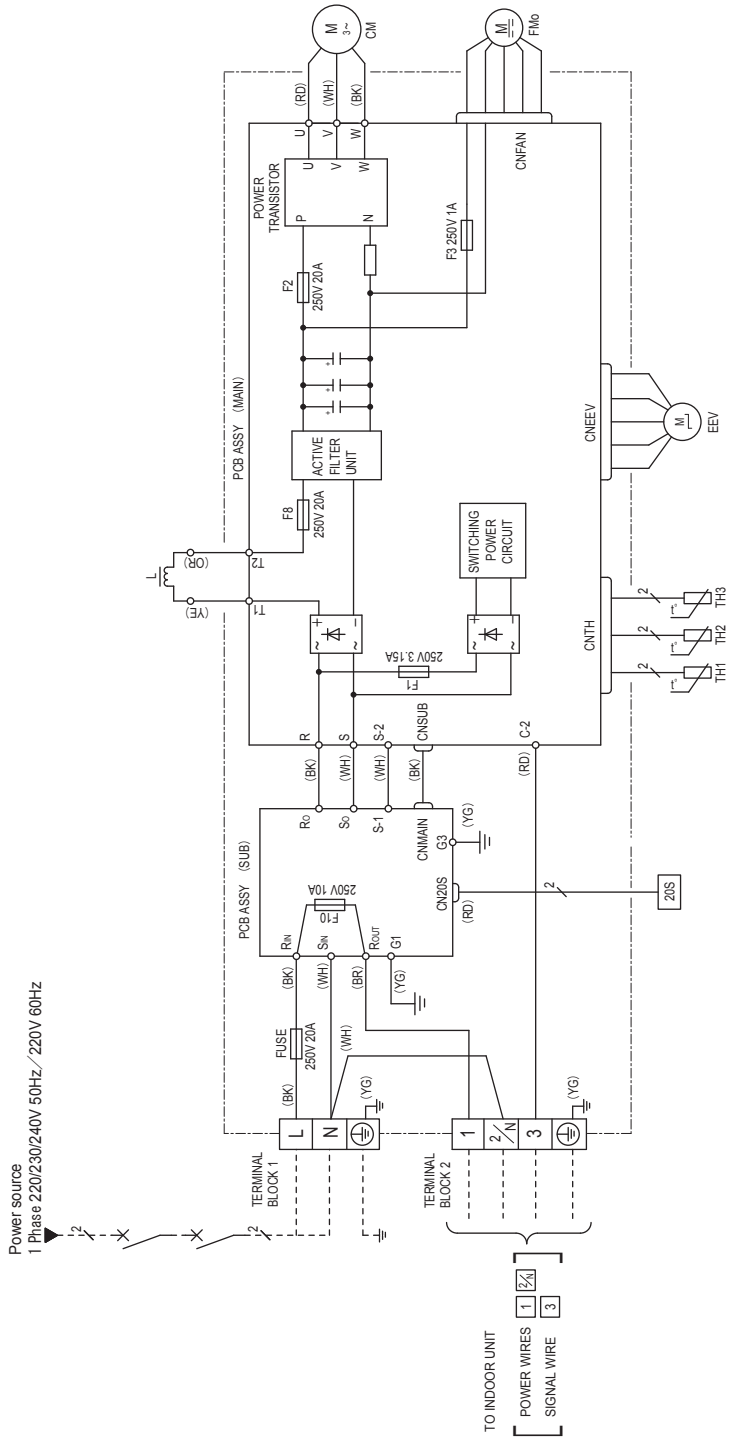
(3) Remote control ..... See page 30.

4.3 ELECTRICAL WIRING

(1) **Indoor units** ..... **See page 31.**

(2) **Outdoor units**

Model FDC71VNP



Color marks

Mark	Color
BK	Black
BR	Brown
OR	Orange
RD	Red
WH	White
YE	Yellow
YG	Yellow/Green

Meaning of marks

Item	Description
CM	Compressor motor
CN20S CNTH CNEEV CNFAN	Connector
EEV	Electric expansion valve (coil)
FMo	Fan motor
L	Reactor
TH1	Heat exchanger temperature sensor
TH2	Outdoor air temperature sensor
TH3	Discharge pipe temperature sensor
20S	Solenoid coil for 4-way valve

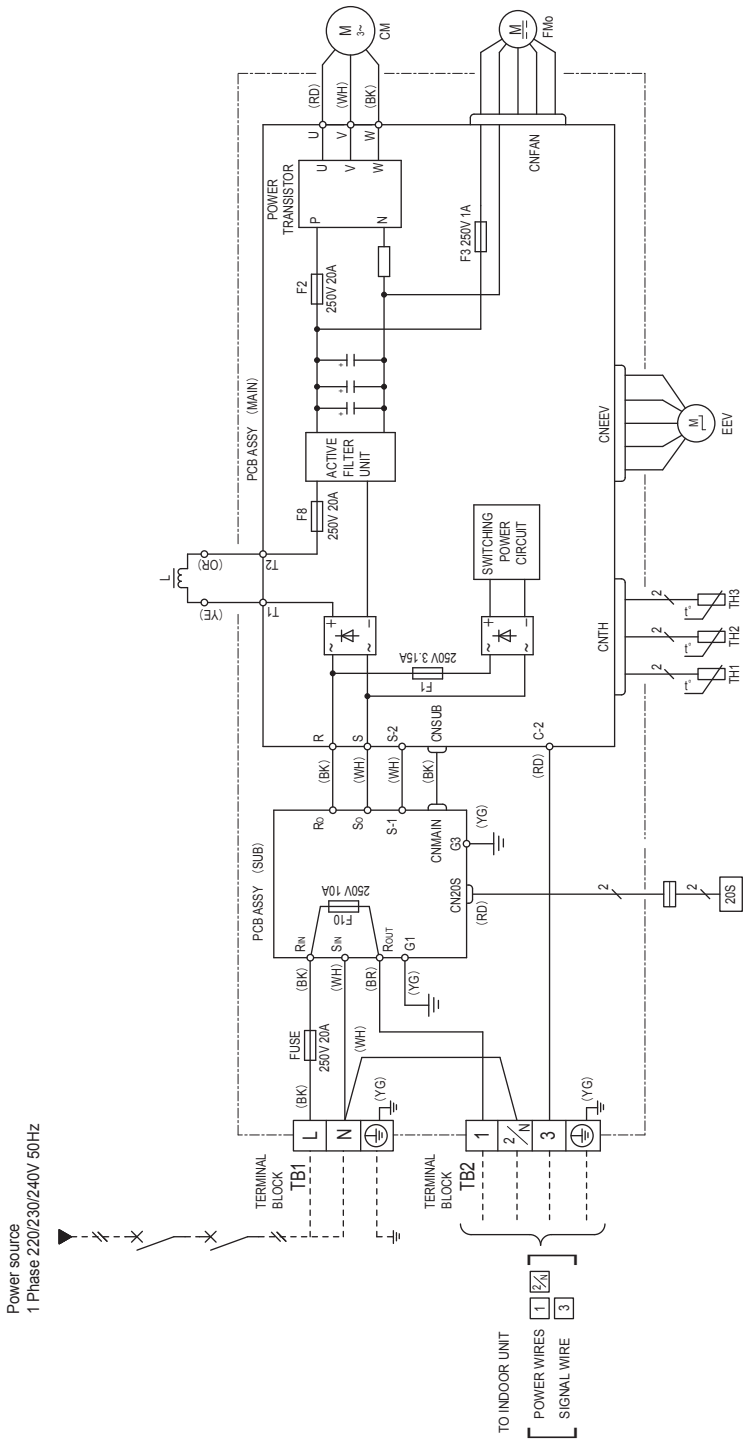
Power cable, indoor-outdoor connecting wires

Model	MAX running current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm^2)
FDC71	14.5	2.0	15	1.5mm^2 x 4	1.5

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z715

Model FDC90VNP



Color marks

Mark	Color
BK	Black
BR	Brown
OR	Orange
RD	Red
WH	White
YE	Yellow
YG	Yellow/Green

Meaning of marks

Item	Description
CM	Compressor motor
CN20S CNTH CNEEV CNFAN	Connector
EEV	Electric expansion valve (coil)
FMo	Fan motor
L	Reactor
TH1	Heat exchanger temperature sensor
TH2	Outdoor air temperature sensor
TH3	Discharge pipe temperature sensor
20S	Solenoid coil for 4-way valve

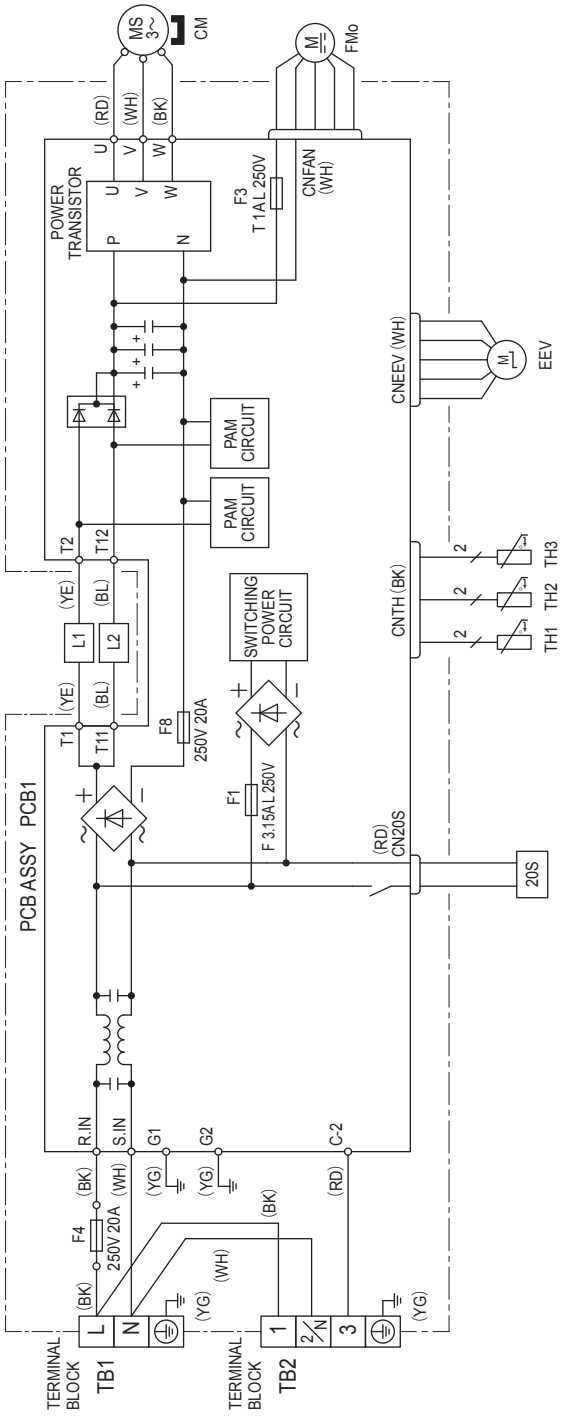
Power cable, indoor-outdoor connecting wires

Model	MAX running current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number	Earth wire size (mm^2)
FDC90	18	2.5	15	1.5mm^2 x 4	1.5

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z716

Model FDC90VNP1



Meaning of marks

20S	4-way valve (coil)
CM	Compressor motor
EEV	Electric expansion valve (coil)
FMo	Fan motor
L1,2	Reactor
TH1	Heat exchanger temperature sensor
TH2	Outdoor air temperature sensor
TH3	Discharge pipe temperature sensor

Color marks

Mark	Color	Mark	Color
BK	Black	YE	Yellow
BL	Blue	YG	Yellow/ Green
RD	Red		
WH	White		

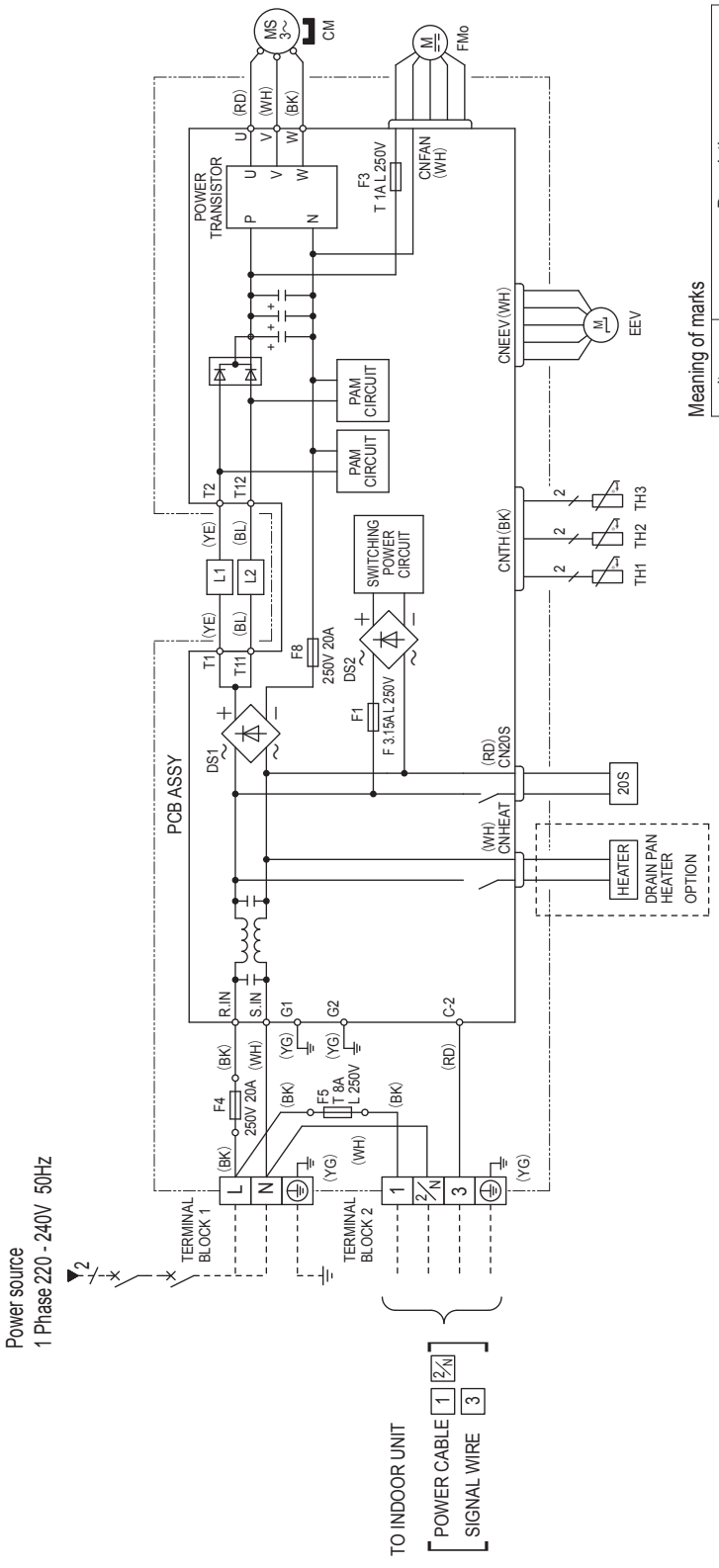
Power cable, indoor-outdoor connecting wires

Model	MAX running current (A)	Power cable size (mm^2)	Power cable length (m)	indoor-outdoor wire size x number	Earth wire size (mm^2)
71	14.5	2.0	15	$1.5mm^2$ x 4	1.5

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of Circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z838 A

Model FDC100VNP



Meaning of marks

Item	Description
20S	Solenoid coil for 4-way valve
CN20S CNEEV CNFAN CNHEAT CNTH	Connector
CM	Compressor motor
DS1,2	Diode stack
EEV	Electric expansion valve (coil)
FMo	Fan motor
L1,2	Reactor
TH1	Heat exchanger temperature sensor
TH2	Outdoor air temperature sensor
TH3	Discharge pipe temperature sensor
J2	Jumper (※)

Note(1) ※ By cutting J2, the operation of cooling start in heating mode is disablement.

Color marks

Mark	Color
BK	Black
BL	Blue
RD	Red
WH	White
YE	Yellow
YG	Yellow ⁄ Green

Power cable, indoor-outdoor connecting wires

MODEL NAME	MAX running current (A)	Power cable size (mm^2)	Power cable length (m)	Indoor-outdoor wire size x number (mm)	Earth wire size (mm)
FDC100VNP	21	5.5	25	ϕ1.6 × 3	ϕ1.6

- The specifications shown in the above table are for units without heaters. For units with heaters, refer to the installation instructions or the construction instructions of the indoor unit.
- Switchgear of circuit breaker capacity which is calculated from MAX. over current should be chosen along the regulations in each country.
- The cable specifications are based on the assumption that a metal or plastic conduit is used with no more than three cables contained in a conduit and a voltage drop is 2%. For an installation falling outside of these conditions, please follow the internal cabling regulations. Adapt it to the regulation in effect in each country.

PCA001Z788

4.4 TECHNICAL INFORMATION

(1) Duct connected-High static pressure type (FDU)

FDU71VNPVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU71VH**
Outdoor unit model name	**FDC71VNP**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**7.1**	kW
heating / Average	Pdesignh	**5.7**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**5.7**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**7.10**	kW
Tj=30℃	Pdc	**5.20**	kW
Tj=25℃	Pdc	**3.40**	kW
Tj=20℃	Pdc	**1.50**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**5.00**	kW
Tj=2℃	Pdh	**3.00**	kW
Tj=7℃	Pdh	**2.00**	kW
Tj=12℃	Pdh	**1.40**	kW
Tj=bivalent temperature	Pdh	**5.70**	kW
Tj=operating limit	Pdh	**5.10**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**10**	W
standby mode	Psb	**10**	W
thermostat-off mode	Pto(cooling)	**25**	W
	Pto(heating)	**35**	W
crankcase heater mode	Pck	**0**	W

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.73**	A+
heating / Average	SCOP/A	**4.00**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**2.70**	-
Tj=30℃	EERd	**4.30**	-
Tj=25℃	EERd	**7.40**	-
Tj=20℃	EERd	**9.80**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.50**	-
Tj=2℃	COPd	**3.90**	-
Tj=7℃	COPd	**5.40**	-
Tj=12℃	COPd	**6.00**	-
Tj=bivalent temperature	COPd	**2.40**	-
Tj=operating limit	COPd	**2.10**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**434**	kWh/a
heating / Average	Qhe	**1997**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**67**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**1,440**	m^3/h
Rated air flow(outdoor)	-	**2,160**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

PJG000Z575 A

FDU90VNPVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC90VNP**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**9.0**	kW
heating / Average	Pdesignh	**8.1**	kW
heating / Warmer	Pdesignh	**—**	kW
heating / Colder	Pdesignh	**—**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.86**	A++
heating / Average	SCOP/A	**4.20**	A+
heating / Warmer	SCOP/W	**—**	—
heating / Colder	SCOP/C	**—**	—

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.10**	kW
heating / Warmer (2℃)	Pdh	**—**	kW
heating / Colder (-22℃)	Pdh	**—**	kW

Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**—**	kW
heating / Colder (-22℃)	elbu	**—**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**9.00**	kW
Tj=30℃	Pdc	**6.60**	kW
Tj=25℃	Pdc	**4.30**	kW
Tj=20℃	Pdc	**2.20**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.40**	-
Tj=30℃	EERd	**5.30**	-
Tj=25℃	EERd	**8.20**	-
Tj=20℃	EERd	**14.00**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.10**	kW
Tj=2℃	Pdh	**4.30**	kW
Tj=7℃	Pdh	**2.70**	kW
Tj=12℃	Pdh	**1.80**	kW
Tj=bivalent temperature	Pdh	**8.10**	kW
Tj=operating limit	Pdh	**7.10**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.80**	-
Tj=2℃	COPd	**4.10**	-
Tj=7℃	COPd	**5.50**	-
Tj=12℃	COPd	**5.90**	-
Tj=bivalent temperature	COPd	**2.40**	-
Tj=operating limit	COPd	**2.30**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**—**	kW
Tj=7℃	Pdh	**—**	kW
Tj=12℃	Pdh	**—**	kW
Tj=bivalent temperature	Pdh	**—**	kW
Tj=operating limit	Pdh	**—**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**—**	-
Tj=7℃	COPd	**—**	-
Tj=12℃	COPd	**—**	-
Tj=bivalent temperature	COPd	**—**	-
Tj=operating limit	COPd	**—**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**—**	kW
Tj=2℃	Pdh	**—**	kW
Tj=7℃	Pdh	**—**	kW
Tj=12℃	Pdh	**—**	kW
Tj=bivalent temperature	Pdh	**—**	kW
Tj=operating limit	Pdh	**—**	kW
Tj=-15℃	Pdh	**—**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**—**	-
Tj=2℃	COPd	**—**	-
Tj=7℃	COPd	**—**	-
Tj=12℃	COPd	**—**	-
Tj=bivalent temperature	COPd	**—**	-
Tj=operating limit	COPd	**—**	-
Tj=-15℃	COPd	**—**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**—**	℃
heating / Colder	Tbiv	**—**	℃

Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**—**	℃
heating / Colder	Tol	**—**	℃

Cycling interval capacity			
for cooling	Pcycc	**—**	kW
for heating	Pcych	**—**	kW

Cycling interval efficiency			
for cooling	EERcyc	**—**	-
for heating	COPcyc	**—**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**10**	W
standby mode	Psb	**10**	W
thermostat-off mode	Pto	**55**	W
crankcase heater mode	Pck	**0**	W

Annual electricity consumption			
cooling	Qce	**459**	kWh/a
heating / Average	Qhe	**2,703**	kWh/a
heating / Warmer	Qhe	**—**	kWh/a
heating / colder	Qhe	**—**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**69**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**3,780**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDU90VNP1VH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC90VNP1**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**9.0**	kW
heating / Average	Pdesignh	**8.1**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.1**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**9.00**	kW
Tj=30℃	Pdc	**6.60**	kW
Tj=25℃	Pdc	**4.30**	kW
Tj=20℃	Pdc	**2.20**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.10**	kW
Tj=2℃	Pdh	**4.30**	kW
Tj=7℃	Pdh	**2.70**	kW
Tj=12℃	Pdh	**1.80**	kW
Tj=bivalent temperature	Pdh	**8.10**	kW
Tj=operating limit	Pdh	**7.10**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**8**	W
standby mode	Psb	**8**	W
thermostat-off mode	Pto(cooling)	**50**	W
	Pto(heating)	**60**	W
crankcase heater mode	Pck	**0**	W

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.56**	A++
heating / Average	SCOP/A	**3.98**	A
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.35**	-
Tj=30℃	EERd	**5.05**	-
Tj=25℃	EERd	**7.97**	-
Tj=20℃	EERd	**11.75**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.69**	-
Tj=2℃	COPd	**3.93**	-
Tj=7℃	COPd	**5.12**	-
Tj=12℃	COPd	**5.25**	-
Tj=bivalent temperature	COPd	**2.50**	-
Tj=operating limit	COPd	**2.36**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**480**	kWh/a
heating / Average	Qhe	**2850**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**69**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**3,780**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDU100VNP1VH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDU100VH**
Outdoor unit model name	**FDC100VNP**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**8.1**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.1**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.37**	kW
Tj=25℃	Pdc	**4.74**	kW
Tj=20℃	Pdc	**3.50**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.17**	kW
Tj=2℃	Pdh	**4.36**	kW
Tj=7℃	Pdh	**2.83**	kW
Tj=12℃	Pdh	**2.90**	kW
Tj=bivalent temperature	Pdh	**8.10**	kW
Tj=operating limit	Pdh	**7.15**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**10**	W
standby mode	Psb	**10**	W
thermostat-off mode	Pto(cooling)	**50**	W
	Pto(heating)	**60**	W
crankcase heater mode	Pck	**0**	W

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.36**	A++
heating / Average	SCOP/A	**4.13**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.33**	-
Tj=30℃	EERd	**4.75**	-
Tj=25℃	EERd	**8.03**	-
Tj=20℃	EERd	**11.67**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.79**	-
Tj=2℃	COPd	**4.04**	-
Tj=7℃	COPd	**5.34**	-
Tj=12℃	COPd	**6.17**	-
Tj=bivalent temperature	COPd	**2.52**	-
Tj=operating limit	COPd	**2.38**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**551**	kWh/a
heating / Average	Qhe	**2748**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**4,500**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

(2) Duct connected-Low / Middle static pressure type (FDUM)

FDUM71VNPVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM71VH**
Outdoor unit model name	**FDC71VNP**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**7.1**	kW
heating / Average	Pdesignh	**5.7**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**5.7**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**7.10**	kW
Tj=30℃	Pdc	**5.20**	kW
Tj=25℃	Pdc	**3.40**	kW
Tj=20℃	Pdc	**1.50**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**5.00**	kW
Tj=2℃	Pdh	**3.00**	kW
Tj=7℃	Pdh	**2.00**	kW
Tj=12℃	Pdh	**1.40**	kW
Tj=bivalent temperature	Pdh	**5.70**	kW
Tj=operating limit	Pdh	**5.10**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**10**	W
standby mode	Psb	**10**	W
thermostat-off mode	Pto(cooling)	**25**	W
	Pto(heating)	**35**	W
crankcase heater mode	Pck	**0**	W

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**5.73**	A+
heating / Average	SCOP/A	**4.00**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**2.70**	-
Tj=30℃	EERd	**4.30**	-
Tj=25℃	EERd	**7.40**	-
Tj=20℃	EERd	**9.80**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.50**	-
Tj=2℃	COPd	**3.90**	-
Tj=7℃	COPd	**5.40**	-
Tj=12℃	COPd	**6.00**	-
Tj=bivalent temperature	COPd	**2.40**	-
Tj=operating limit	COPd	**2.10**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**434**	kWh/a
heating / Average	Qhe	**1997**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**67**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**1,440**	m^3/h
Rated air flow(outdoor)	-	**2,160**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

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FDUM90VNPVH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC90VNP**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**9.0**	kW
heating / Average	Pdesignh	**8.1**	kW
heating / Warmer	Pdesignh	**—**	kW
heating / Colder	Pdesignh	**—**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.86**	A++
heating / Average	SCOP/A	**4.20**	A+
heating / Warmer	SCOP/W	**—**	—
heating / Colder	SCOP/C	**—**	—

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.10**	kW
heating / Warmer (2℃)	Pdh	**—**	kW
heating / Colder (-22℃)	Pdh	**—**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**—**	kW
heating / Colder (-22℃)	elbu	**—**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**9.00**	kW
Tj=30℃	Pdc	**6.60**	kW
Tj=25℃	Pdc	**4.30**	kW
Tj=20℃	Pdc	**2.20**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.40**	-
Tj=30℃	EERd	**5.30**	-
Tj=25℃	EERd	**8.20**	-
Tj=20℃	EERd	**14.00**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.10**	kW
Tj=2℃	Pdh	**4.30**	kW
Tj=7℃	Pdh	**2.70**	kW
Tj=12℃	Pdh	**1.80**	kW
Tj=bivalent temperature	Pdh	**8.10**	kW
Tj=operating limit	Pdh	**7.10**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.80**	-
Tj=2℃	COPd	**4.10**	-
Tj=7℃	COPd	**5.50**	-
Tj=12℃	COPd	**5.90**	-
Tj=bivalent temperature	COPd	**2.40**	-
Tj=operating limit	COPd	**2.30**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**—**	kW
Tj=7℃	Pdh	**—**	kW
Tj=12℃	Pdh	**—**	kW
Tj=bivalent temperature	Pdh	**—**	kW
Tj=operating limit	Pdh	**—**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**—**	-
Tj=7℃	COPd	**—**	-
Tj=12℃	COPd	**—**	-
Tj=bivalent temperature	COPd	**—**	-
Tj=operating limit	COPd	**—**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**—**	kW
Tj=2℃	Pdh	**—**	kW
Tj=7℃	Pdh	**—**	kW
Tj=12℃	Pdh	**—**	kW
Tj=bivalent temperature	Pdh	**—**	kW
Tj=operating limit	Pdh	**—**	kW
Tj=-15℃	Pdh	**—**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**—**	-
Tj=2℃	COPd	**—**	-
Tj=7℃	COPd	**—**	-
Tj=12℃	COPd	**—**	-
Tj=bivalent temperature	COPd	**—**	-
Tj=operating limit	COPd	**—**	-
Tj=-15℃	COPd	**—**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**—**	℃
heating / Colder	Tbiv	**—**	℃

Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**—**	℃
heating / Colder	Tol	**—**	℃

Cycling interval capacity			
for cooling	Pcycc	**—**	kW
for heating	Pcych	**—**	kW

Cycling interval efficiency			
for cooling	EERcyc	**—**	-
for heating	COPcyc	**—**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**10**	W
standby mode	Psb	**10**	W
thermostat-off mode	Pto	**55**	W
crankcase heater mode	Pck	**0**	W

Annual electricity consumption			
cooling	Qce	**459**	kWh/a
heating / Average	Qhe	**2,703**	kWh/a
heating / Warmer	Qhe	**—**	kWh/a
heating / colder	Qhe	**—**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**69**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**3,780**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM90VNP1VH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC90VNP1**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**9.0**	kW
heating / Average	Pdesignh	**8.1**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW
Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.1**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW
Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**9.00**	kW
Tj=30℃	Pdc	**6.60**	kW
Tj=25℃	Pdc	**4.30**	kW
Tj=20℃	Pdc	**2.20**	kW
Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.10**	kW
Tj=2℃	Pdh	**4.30**	kW
Tj=7℃	Pdh	**2.70**	kW
Tj=12℃	Pdh	**1.80**	kW
Tj=bivalent temperature	Pdh	**8.10**	kW
Tj=operating limit	Pdh	**7.10**	kW
Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW
Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃
Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW
Degradation coefficient			
cooling	Cdc	**0.25**	-
Electric power input in power modes other than 'active mode'			
off mode	Poff	**8**	W
standby mode	Psb	**8**	W
thermostat-off mode	Pto(cooling)	**50**	W
	Pto(heating)	**60**	W
crankcase heater mode	Pck	**0**	W

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.56**	A++
heating / Average	SCOP/A	**3.98**	A
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-
			unit
Back up heating capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW
Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.35**	-
Tj=30℃	EERd	**5.05**	-
Tj=25℃	EERd	**7.97**	-
Tj=20℃	EERd	**11.75**	-
Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.69**	-
Tj=2℃	COPd	**3.93**	-
Tj=7℃	COPd	**5.12**	-
Tj=12℃	COPd	**5.25**	-
Tj=bivalent temperature	COPd	**2.50**	-
Tj=operating limit	COPd	**2.36**	-
Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-
Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃
Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-
Degradation coefficient			
heating	Cdh	**0.25**	-
Annual electricity consumption			
cooling	Qce	**480**	kWh/a
heating / Average	Qhe	**2850**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**69**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**3,780**	m^3/h

Contact details for obtaining more information	Name and address of the manufacturer or of its authorised representative. Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd. 5 The Square, Stockley Park, Uxbridge, Middlesex, UB11 1ET, United Kingdom

FDUM100VNP1VH

Information to identify the model(s) to which the information relates to:	
Indoor unit model name	**FDUM100VH**
Outdoor unit model name	**FDC100VNP**

If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.

Function(indicate if present)	
cooling	**Yes**
heating	**Yes**

Average(mandatory)	**Yes**
Warmer(if designated)	**No**
Colder(if designated)	**No**

Item	symbol	value	unit
Design load			
cooling	Pdesignc	**10.0**	kW
heating / Average	Pdesignh	**8.1**	kW
heating / Warmer	Pdesignh	**-**	kW
heating / Colder	Pdesignh	**-**	kW

Item	symbol	value	class
Seasonal efficiency and energy efficiency class			
cooling	SEER	**6.36**	A++
heating / Average	SCOP/A	**4.13**	A+
heating / Warmer	SCOP/W	**-**	-
heating / Colder	SCOP/C	**-**	-

Declared capacity at outdoor temperature Tdesignh			
heating / Average (-10℃)	Pdh	**8.1**	kW
heating / Warmer (2℃)	Pdh	**-**	kW
heating / Colder (-22℃)	Pdh	**-**	kW

Back up heating capacity at outdoor temperature Tdesignh			unit
heating / Average (-10℃)	elbu	**0**	kW
heating / Warmer (2℃)	elbu	**-**	kW
heating / Colder (-22℃)	elbu	**-**	kW

Declared capacity for cooling, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	Pdc	**10.00**	kW
Tj=30℃	Pdc	**7.37**	kW
Tj=25℃	Pdc	**4.74**	kW
Tj=20℃	Pdc	**3.50**	kW

Declared energy efficiency ratio, at indoor temperature 27(19)℃ and outdoor temperature Tj			
Tj=35℃	EERd	**3.33**	-
Tj=30℃	EERd	**4.75**	-
Tj=25℃	EERd	**8.03**	-
Tj=20℃	EERd	**11.67**	-

Declared capacity for heating / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**7.17**	kW
Tj=2℃	Pdh	**4.36**	kW
Tj=7℃	Pdh	**2.83**	kW
Tj=12℃	Pdh	**2.90**	kW
Tj=bivalent temperature	Pdh	**8.10**	kW
Tj=operating limit	Pdh	**7.15**	kW

Declared coefficient of performance / Average season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**2.79**	-
Tj=2℃	COPd	**4.04**	-
Tj=7℃	COPd	**5.34**	-
Tj=12℃	COPd	**6.17**	-
Tj=bivalent temperature	COPd	**2.52**	-
Tj=operating limit	COPd	**2.38**	-

Declared capacity for heating / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW

Declared coefficient of performance / Warmer season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-

Declared capacity for heating / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	Pdh	**-**	kW
Tj=2℃	Pdh	**-**	kW
Tj=7℃	Pdh	**-**	kW
Tj=12℃	Pdh	**-**	kW
Tj=bivalent temperature	Pdh	**-**	kW
Tj=operating limit	Pdh	**-**	kW
Tj=-15℃	Pdh	**-**	kW

Declared coefficient of performance / Colder season, at indoor temperature 20℃ and outdoor temperature Tj			
Tj=-7℃	COPd	**-**	-
Tj=2℃	COPd	**-**	-
Tj=7℃	COPd	**-**	-
Tj=12℃	COPd	**-**	-
Tj=bivalent temperature	COPd	**-**	-
Tj=operating limit	COPd	**-**	-
Tj=-15℃	COPd	**-**	-

Bivalent temperature			
heating / Average	Tbiv	**-10**	℃
heating / Warmer	Tbiv	**-**	℃
heating / Colder	Tbiv	**-**	℃

Operating limit temperature			
heating / Average	Tol	**-15**	℃
heating / Warmer	Tol	**-**	℃
heating / Colder	Tol	**-**	℃

Cycling interval capacity			
for cooling	Pcycc	**-**	kW
for heating	Pcych	**-**	kW

Cycling interval efficiency			
for cooling	EERcyc	**-**	-
for heating	COPcyc	**-**	-

Degradation coefficient			
cooling	Cdc	**0.25**	-

Degradation coefficient			
heating	Cdh	**0.25**	-

Electric power input in power modes other than 'active mode'			
off mode	Poff	**10**	W
standby mode	Psb	**10**	W
thermostat-off mode	Pto(cooling)	**50**	W
	Pto(heating)	**60**	W
crankcase heater mode	Pck	**0**	W

Annual electricity consumption			
cooling	Qce	**551**	kWh/a
heating / Average	Qhe	**2748**	kWh/a
heating / Warmer	Qhe	**-**	kWh/a
heating / colder	Qhe	**-**	kWh/a

Capacity control(indicate one of three options)	
fixed	**No**
staged	**No**
variable	**Yes**

Other items			
Sound power level(indoor)	Lwa	**65**	dB(A)
Sound power level(outdoor)	Lwa	**70**	dB(A)
Global warming potential	GWP	**1,975**	$kgCO_2eq.$
Rated air flow(indoor)	-	**2,160**	m^3/h
Rated air flow(outdoor)	-	**4,500**	m^3/h

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