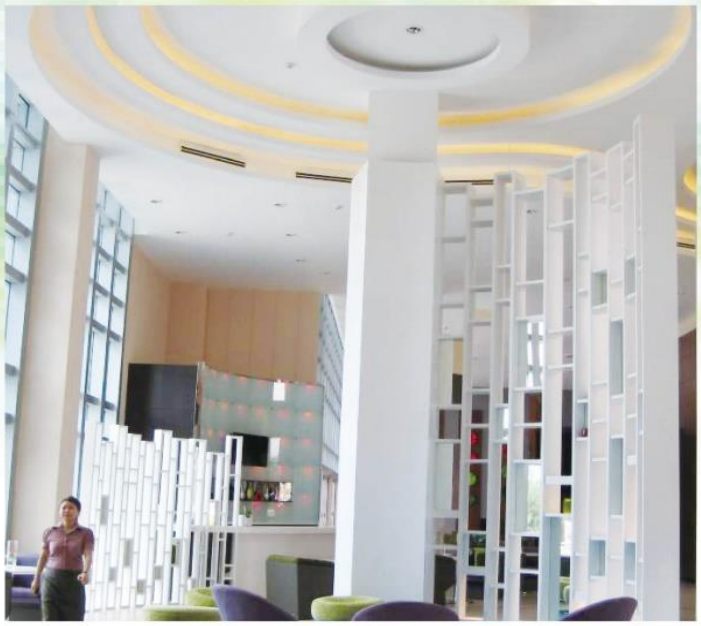
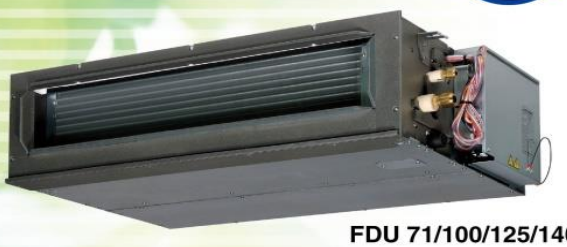
DUCT CONNECTED -High Static pressure-

FDU

R410A





FDU 71/100/125/140

FDU 200/250
Tropical Usage Mode

Energy Saving | Hi Power | Silent Operation | Automatic Operation | Weekly/Sleep/Peak-Cut Timer | Self-Diagnostics

*Not all functions are available with all remote control options.

Remote control (option)

Wired			Wireless	
RC-EX3A	RC-E5	RCH-E3	RCN-KIT4-E2	

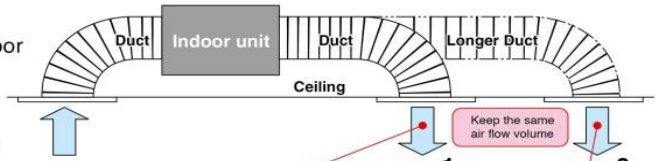




Point 1 Automatic external static pressure (E.S.P.) control

You can set External Static Pressure (E.S.P.) by method of manual setting on remote control. Indoor unit will control fan-speed to keep rated air flow volume at each fan speed setting. You can set required E.S.P. by wired remote control that calculated with the set air flow rate and pressure loss of the duct connected.

RC-E5
E.S.P. button
External Static Pressure (E.S.P.) can be set by E.S.P. button.



Setting No.	No.8	No.9	No.10	No.11	No.12	No.13	No.14	No.15
E.S.P.	80Pa	90Pa	100Pa	110Pa	120Pa	130Pa	140Pa	150Pa

*Range of 80~150 Pa is set at ex-factory default.
Range of 10~200 Pa is available by setting SW8-4 switch on at site.

Expansion of external static pressure range

Previous
10~130Pa

Current
10~200Pa

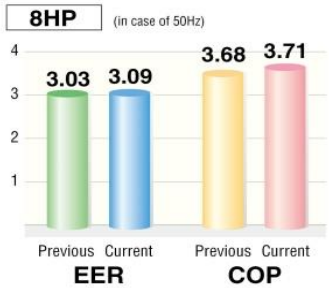
Point 2 More quiet noise

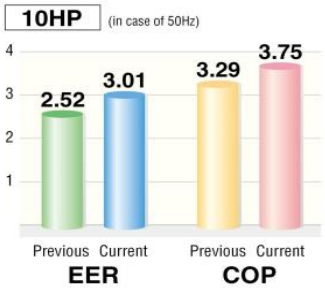
Thanks to use of DC fan motor, fan steps increase from two to four and quiet operation is achieved.(FDU200/250)

	Previous		Current	Lo mode
FDU71	37	➡	25	12dB(A) less!!
FDU100	38	➡	30	8dB(A) less!!
FDU200	51	➡	45	6dB(A) less!!

Point 3 High efficiency

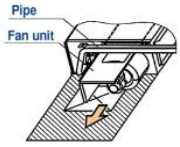
Energy efficiency is improved by use of DC fan motor & high efficient heat exchanger.





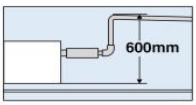
Point 4 Improvement of the serviceability

Fan unit (impeller and motor) can be pulled out from the right side of the unit. Maintenance can be available from the right side or the bottom side.



Point 5 Enhanced installation workability

600mm Drain Pump is mounted in FDU71/100/125/140.
The indoor unit is completely hidden in the ceiling, so this is suitable for spaces with classy interior decoration.



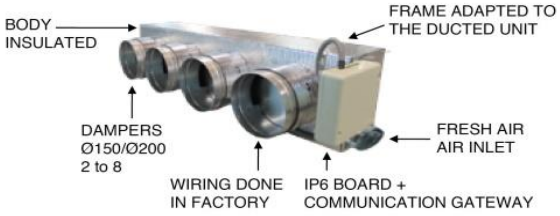
Point 6 Transparent inspection window

Dirt condition of the bottom of a drain pan can be checked through this transparent inspection window without removing drain pan.

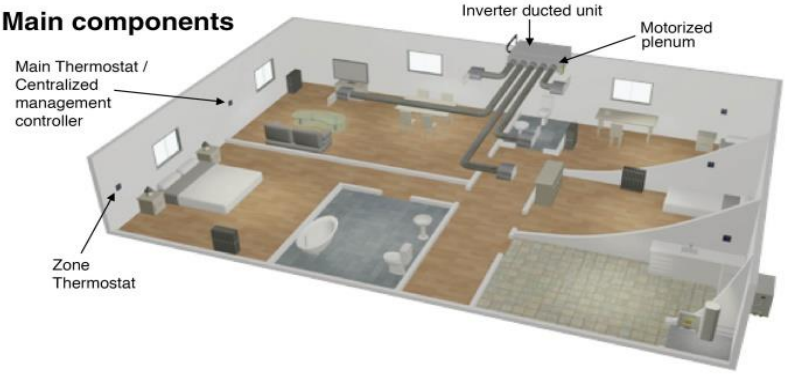
Round duct adapter (Available for FDU71~140VF)

AIRZONE Company: AIRZONE
URL:http://www.airzone.es

All-in-one solution: the whole zoning system in a plug&play device perfectly adapted to the indoor DX unit



Main components



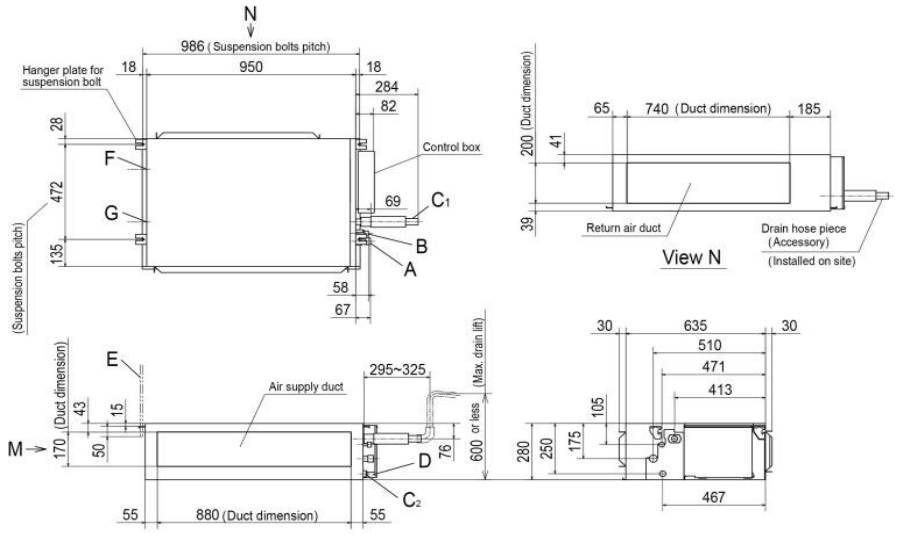
OUTDOOR UNIT

	Hyper Inverter		Micro Inverter		
FDC	71VNX	100~140VN(S)X	100~140VN(S)A	200VSA	250VSA
model					
Chargeless	30m		30m		
Height x Width x Depth (mm)	750 x 880(+88) x 340	1,300 x 970 x 370	845 x 970 x 370	1,300 x 970 x 370	1,505 x 970 x 370

	Standard Inverter		
FDC	71VNP	90VNP1	100VNP
model			
Chargeless	15m		
Height x Width x Depth (mm)	640 x 800(+71) x 290	750 x 880(+88) x 340	845 x 970 x 370

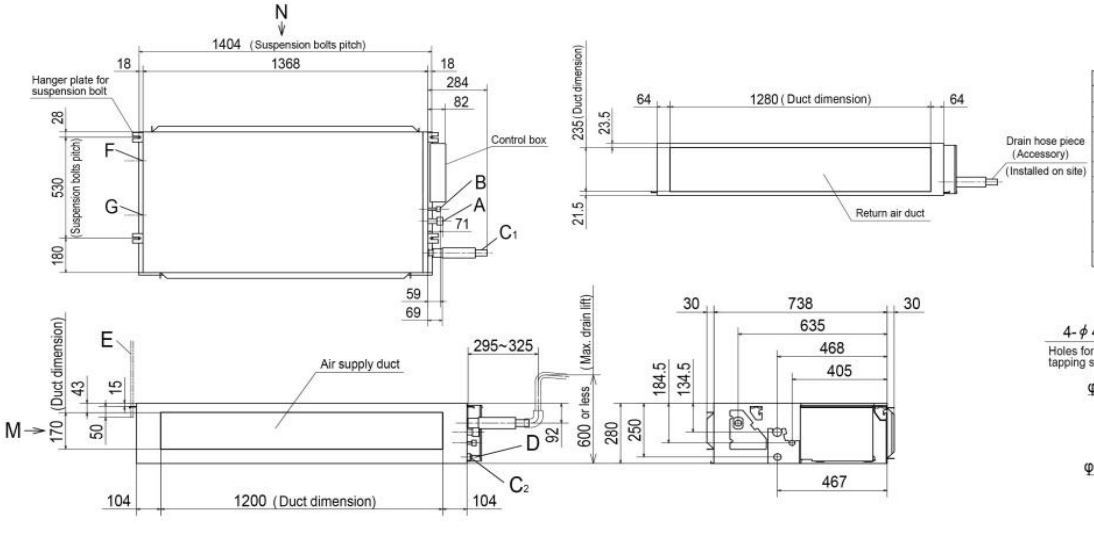
DIMENSIONS (Unit:mm)

Model FDU71VF1



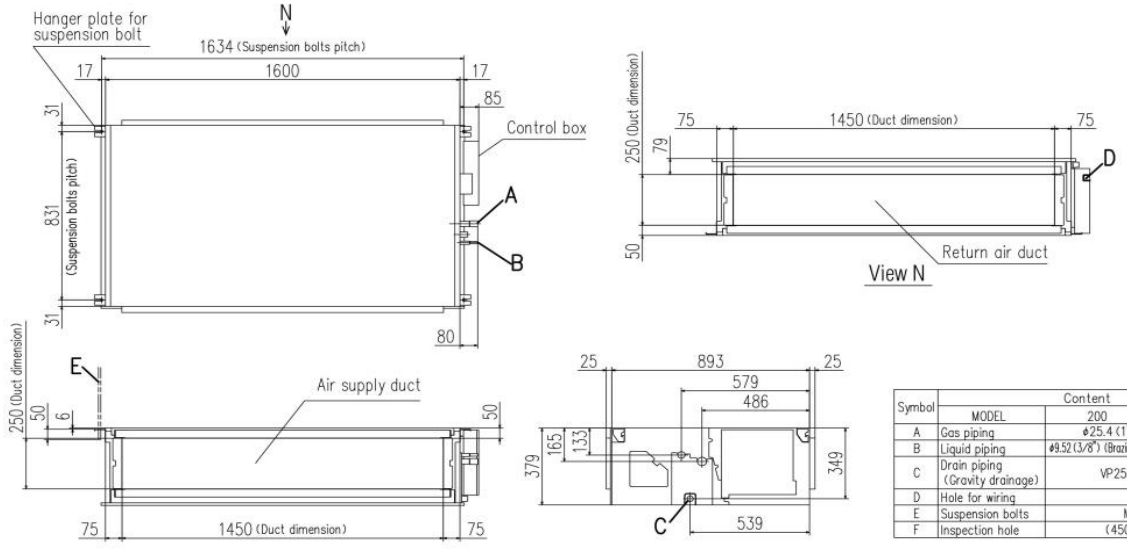
Symbol	Content	
A	Gas piping	φ 15.88 (5/8") (Flare)
B	Liquid piping	φ 9.52 (3/8") (Flare)
C1	Drain piping	VP25 (I.D.25,O.D.32)
C2	Drain piping (Gravity drainage)	VP20 (I.D.20,O.D.26)
D	Hole for wiring	
E	Suspension bolts	(M10)
F	Outside air opening for ducting	(Knock out)
G	Air outlet opening for ducting	(Knock out)
H	Inspection hole	(450X450)

Models FDU100VF2,125VF,140VF



Symbol	Content	
A	Gas piping	φ 15.88 (5/8")(Flare)
B	Liquid piping	φ 9.52 (3/8")(Flare)
C1	Drain piping	VP25 (I.D.25,O.D.32)
C2	Drain piping (Gravity drainage)	VP20 (I.D.20,O.D.26)
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 hole	(450X450)

Models FDU200VG, 250VG



Symbol	Content		
	MODEL	200	250
A	Gas piping	φ25.4 (1") (Brazing)	
B	Liquid piping	φ9.52 (3/8") (Brazing)	φ12.7 (1/2") (Brazing)
C	Drain piping (Gravity drainage)	VP25 (O.D.32)	
D	Hole for wiring		
E	Suspension bolts	M10	
F	Inspection hole	(450X450)	

SPECIFICATIONS

				Hyper Inverter			
Set model name				FDU71VNXVF1	FDU100VNXVF2	FDU125VNXVF	FDU140VNXVF
Indoor unit				FDU71VF1	FDU100VF2	FDU125VF	FDU140VF
Outdoor unit				FDC71VNX	FDC100VNX	FDC125VNX	FDC140VNX
Power source				1 Phase 220-240V, 50Hz / 220V, 60Hz			
Nominal cooling capacity (Min~Max)			kW	7.1 (3.2 ~ 8.0)	10.0 (4.0 ~ 11.2)	12.5 (5.0 ~ 14.0)	14.0 (5.0 ~ 16.0)
Nominal heating capacity (Min~Max)			kW	8.0 (3.6 ~ 9.0)	11.2 (4.0 ~ 12.5)	14.0 (4.0 ~ 17.0)	16.0 (4.0 ~ 18.0)
Power consumption		Cooling/Heating	kW	2.05 / 2.01	2.68 / 3.02	3.49 / 3.77	4.28 / 4.42
EER/COP		Cooling/Heating		3.46 / 3.98	3.73 / 3.71	3.58 / 3.71	3.27 / 3.62
Inrush current			A	5	5	5	5
Max. current				17	25	29	30
Sound power level*1	Indoor	Cooling/Heating	dB(A)	65 / 65	65 / 65	67 / 67	70 / 70
	Outdoor	Cooling/Heating		66 / 66	70 / 70	70 / 70	72 / 72
Sound pressure level*1	Indoor	Cooling (P-Hi/Hi/Me/Lo)		38 / 33 / 29 / 25	44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30
		Heating (P-Hi/Hi/Me/Lo)		38 / 33 / 29 / 25	44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30
	Outdoor	Cooling/Heating		51 / 48	48 / 50	48 / 50	49 / 52
Air flow	Indoor	Cooling (P-Hi/Hi/Me/Lo)	m^3/min	24 / 19 / 15 / 10	36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22
		Heating (P-Hi/Hi/Me/Lo)		24 / 19 / 15 / 10	36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22
	Outdoor	Cooling/Heating		60 / 50	100 / 100	100 / 100	100 / 100
External static pressure*2			Pa	Standard:35 Max:200	Standard:60 Max:200		
Exterior dimensions	Indoor	HeightxWidthxDepth	mm	280 x 950 x 635	280 x 1,370 x 740		
	Outdoor			750 x 880(+88) x 340	1,300 x 970 x 370		
Net weight	Indoor		kg	34	54		
	Outdoor			60	105		
Ref.piping size	Liquid/Gas		ømm	9.52(3/8") / 15.88(5/8")			
Refrigerant line (one way) length			m	Max.50	Max.100		
Vertical height differences		Outdoor is higher/lower	m	Max.30 / Max.15			
Outdoor operating temperature range		Cooling	°C	-15~43*3			
		Heating		-20~20			
Air filter				Procure locally			
Remote control (option)				wired:RC-EX3A, RC-E5, RCH-E3 wireless:RCN-KIT4-E2			

				Hyper Inverter		
Set model name				FDU100VSXVF2	FDU125VSXVF	FDU140VSXVF
Indoor unit				FDU100VF2	FDU125VF	FDU140VF
Outdoor unit				FDC100VSX	FDC125VSX	FDC140VSX
Power source				3 Phase 380-415V, 50Hz / 380V, 60Hz		
Nominal cooling capacity (Min~Max)			kW	10.0 (4.0 ~ 11.2)	12.5 (5.0 ~ 14.0)	14.0 (5.0 ~ 16.0)
Nominal heating capacity (Min~Max)			kW	11.2 (4.0 ~ 16.0)	14.0 (4.0 ~ 18.0)	16.0 (4.0 ~ 20.0)
Power consumption		Cooling/Heating	kW	2.68 / 3.02	3.49 / 3.77	4.28 / 4.42
EER/COP		Cooling/Heating		3.73 / 3.71	3.58 / 3.71	3.27 / 3.62
Inrush current			A	5	5	5
Max. current				16	18	19
Sound power level*1	Indoor	Cooling/Heating	dB(A)	65 / 65	67 / 67	70 / 70
	Outdoor	Cooling/Heating		70 / 70	70 / 70	72 / 72
Sound pressure level*1	Indoor	Cooling (P-Hi/Hi/Me/Lo)		44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30
		Heating (P-Hi/Hi/Me/Lo)		44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30
	Outdoor	Cooling/Heating		48 / 50	48 / 50	49 / 52
Air flow	Indoor	Cooling (P-Hi/Hi/Me/Lo)	m^3/min	36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22
		Heating (P-Hi/Hi/Me/Lo)		36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22
	Outdoor	Cooling/Heating		100 / 100	100 / 100	100 / 100
External static pressure*2			Pa	Standard:60 Max:200		
Exterior dimensions	Indoor	HeightxWidthxDepth	mm	280 x 1,370 x 740		
	Outdoor			1,300 x 970 x 370		
Net weight	Indoor		kg	54		
	Outdoor			105		
Ref.piping size	Liquid/Gas		ømm	9.52(3/8") / 15.88(5/8")		
Refrigerant line (one way) length			m	Max.100		
Vertical height differences		Outdoor is higher/lower	m	Max.30 / Max.15		
Outdoor operating temperature range		Cooling	°C	-15~43*3		
		Heating		-20~20		
Air filter				Procure locally		
Remote control (option)				wired:RC-EX3A, RC-E5, RCH-E3 wireless:RCN-KIT4-E2		

NOTES:

The data are measured under the following conditions(ISO-T1).
Cooling:Indoor temp. of 27˚CDB, 19˚CWB, and outdoor temp. of 35˚CDB. Heating:Indoor temp. of 20˚CDB, and outdoor temp. of 7˚CDB, 6˚CWB.

*1 : Indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.

*2 : External static pressure is changeable to be set by the remote control. MAX external static pressure is "High static pressure" setting. The values of sound pressure level become 5dB(A) higher at external static pressure of 200Pa.

*3 : If a cooling operation is conducted when the outdoor air temperature is –5˚C or lower, the outdoor unit should be installed at a place where it is not influenced by natural wind. If wind blows, the low pressure will drop and compressor frequency will increase, this will cause the capacity to drop and may cause the unit to break down.

SPECIFICATIONS

				Micro Inverter					
Set model name				FDU100VNAVF2	FDU125VNAVF	FDU140VNAVF	FDU100VSAVF2	FDU125VSAVF	FDU140VSAVF
Indoor unit				FDU100VF2	FDU125VF	FDU140VF	FDU100VF2	FDU125VF	FDU140VF
Outdoor unit				FDC100VNA	FDC125VNA	FDC140VNA	FDC100VSA	FDC125VSA	FDC140VSA
Power source				1 Phase 220-240V, 50Hz / 220V, 60Hz			3 Phase 380-415V, 50Hz / 380V, 60Hz		
Nominal cooling capacity (Min~Max)			kW	10.0 (4.0 ~ 11.2)	12.5 (5.0 ~ 14.0)	13.6 (5.0 ~ 14.5)	10.0 (4.0 ~ 11.2)	12.5 (5.0 ~ 14.0)	13.6 (5.0 ~ 14.5)
Nominal heating capacity (Min~Max)			kW	11.2 (4.0 ~ 12.5)	14.0 (4.0 ~ 16.0)	15.5 (4.0 ~ 16.5)	11.2 (4.0 ~ 12.5)	14.0 (4.0 ~ 16.0)	15.5 (4.0 ~ 16.5)
Power consumption		Cooling/Heating	kW	2.84 / 2.78	4.36 / 3.69	4.93 / 4.21	2.84 / 2.78	4.36 / 3.69	4.93 / 4.21
EER/COP		Cooling/Heating		3.52 / 4.03	2.87 / 3.79	2.76 / 3.68	3.52 / 4.03	2.87 / 3.79	2.76 / 3.68
Inrush current			A	5	5	5	5	5	5
Max. current				26	26	27	17	17	18
Sound power level*1	Indoor	Cooling/Heating	dB(A)	65 / 65	67 / 67	70 / 70	65 / 65	67 / 67	70 / 70
	Outdoor	Cooling/Heating		70 / 70	71 / 71	73 / 73	70 / 70	71 / 71	73 / 73
Sound pressure level*1	Indoor	Cooling (P-Hi/Hi/Me/Lo)		44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30	44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30
		Heating (P-Hi/Hi/Me/Lo)		44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30	44 / 38 / 36 / 30	45 / 40 / 34 / 29	47 / 40 / 35 / 30
	Outdoor	Cooling/Heating		54 / 56	55 / 57	57 / 59	54 / 56	55 / 57	57 / 59
Air flow	Indoor	Cooling (P-Hi/Hi/Me/Lo)	m^3/min	36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22	36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22
		Heating (P-Hi/Hi/Me/Lo)		36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22	36 / 28 / 25 / 19	39 / 32 / 26 / 20	48 / 35 / 28 / 22
	Outdoor	Cooling/Heating		75 / 73	75 / 73	75 / 73	75 / 73	75 / 73	75 / 73
External static pressure*2			Pa	Standard:60 Max:200					
Exterior dimensions	Indoor	HeightxWidthxDepth	mm	280 x 1,370 x 740					
	Outdoor			845 x 970 x 370					
Net weight	Indoor		kg	54					
	Outdoor			80			82		
Ref.piping size	Liquid/Gas		ømm	9.52(3/8") / 15.88(5/8")					
Refrigerant line (one way) length			m	Max.50					
Vertical height differences		Outdoor is higher/lower	m	Max.50 / Max.15					
Outdoor operating temperature range		Cooling	°C	-15~50*3					
		Heating		-20~20					
Air filter				Procure locally					
Remote control (option)				wired:RC-EX3A, RC-E5, RCH-E3 wireless:RCN-KIT4-E2					

				Micro Inverter		Standard Inverter		
Set model name				FDU200VSAVG	FDU250VSAVG	FDU71VNPVF1	FDU90VNP1VF2	FDU100VNP1VF2
Indoor unit				FDU200VG	FDU250VG	FDU71VF1	FDU100VF2	FDU100VF2
Outdoor unit				FDC200VSA	FDC250VSA	FDC71VNP	FDC90VNP1	FDC100VNP
Power source				3 Phase 380-415V, 50Hz / 380V, 60Hz		1 Phase 220-240V, 50Hz / 220V, 60Hz		
Nominal cooling capacity (Min~Max)			kW	19.0 (5.2 ~ 22.4)	24.0 (6.9 ~ 28.0)	7.1 (1.4 ~ 7.1)	9.0 (1.9 ~ 9.0)	10.0 (2.8 ~ 11.2)
Nominal heating capacity (Min~Max)			kW	22.4 (3.3 ~ 25.0)	27.0 (5.5 ~ 31.5)	7.1 (1.0 ~ 7.1)	9.0 (1.5 ~ 9.0)	11.2 (2.5 ~ 12.5)
Power consumption		Cooling/Heating	kW	6.15 / 6.03	7.98 / 7.20	2.60 / 1.89	2.69 / 2.25	3.00 / 2.93
EER/COP		Cooling/Heating		3.09 / 3.71	3.01 / 3.75	2.73. / 3.76	3.35 / 4.00	3.33 / 3.82
Inrush current			A	5	5	5	5	5
Max. current				25	27	14.5	18.0	22.0
Sound power level*1	Indoor	Cooling/Heating	dB(A)	75 / 75	75 / 75	65 / 65	65 / 65	65 / 65
	Outdoor	Cooling/Heating		72 / 74	73 / 75	67 / 67	69 / 69	70 / 70
Sound pressure level*1	Indoor	Cooling (P-Hi/Hi/Me/Lo)		52 / 50 / 47 / 45	52 / 50 / 47 / 45	38 / 33 / 29 / 25	44 / 38 / 36 / 30	44 / 38 / 36 / 30
		Heating (P-Hi/Hi/Me/Lo)		52 / 50 / 47 / 45	52 / 50 / 47 / 45	38 / 33 / 29 / 25	44 / 38 / 36 / 30	44 / 38 / 36 / 30
	Outdoor	Cooling/Heating		57 / 59	59 / 62	54 / 54	57 / 55	57 / 61
Air flow	Indoor	Cooling (P-Hi/Hi/Me/Lo)	m^3/min	80 / 72 / 64 / 56	80 / 72 / 64 / 56	24 / 19 / 15 / 10	36 / 28 / 25 / 19	36 / 28 / 25 / 19
		Heating (P-Hi/Hi/Me/Lo)		80 / 72 / 64 / 56	80 / 72 / 64 / 56	24 / 19 / 15 / 10	36 / 28 / 25 / 19	36 / 28 / 25 / 19
	Outdoor	Cooling/Heating		135 / 135	143 / 151	36 / 36	63 / 49.5	75 / 79
External static pressure*2			Pa	Standard:72 Max:200		Standard:35 Max:200	Standard:60 Max:200	
Exterior dimensions	Indoor	HeightxWidthxDepth	mm	379 x 1,600 x 893		280 x 950 x 635	280 x 1,370 x 740	
	Outdoor			1,300 x 970 x 370	1,505 x 970 x 370	640 x 800(+71) x 290	750 x 880(+88) x 340	845 x 970 x 370
Net weight	Indoor		kg	89		34	54	
	Outdoor			115	143	45	57	70
Ref.piping size	Liquid/Gas		ømm	9.52(3/8") / 22.22(7/8")	12.7(1/2") / 25.4(1")	6.35(1/4") / 12.7(1/2")	6.35(1/4") / 15.88(5/8")	9.52(3/8") / 15.88(5/8")
Refrigerant line (one way) length			m	Max.70		Max.30		
Vertical height differences		Outdoor is higher/lower	m	Max.30 / Max.15		Max.20 / Max.20		
Outdoor operating temperature range		Cooling	°C	-15~50*3		-15~46*3		
		Heating		-15~20		-15~20		
Air filter				Procure locally		Procure locally		
Remote control (option)				wired:RC-EX3A, RC-E5, RCH-E3 wireless:RCN-KIT4-E2		wired:RC-EX3A, RC-E5, RCH-E3 wireless:RCN-KIT4-E2		

NOTES:

The data are measured under the following conditions(ISO-T1).
Cooling:Indoor temp. of 27˚CDB, 19˚CWB, and outdoor temp. of 35˚CDB. Heating:Indoor temp. of 20˚CDB, and outdoor temp. of 7˚CDB, 6˚CWB.

*1 : Indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.

*2 : External static pressure is changeable to be set by the remote control. MAX external static pressure is "High static pressure" setting. The values of sound pressure level become 5dB(A) higher at external static pressure of 200Pa.

*3 : If a cooling operation is conducted when the outdoor air temperature is –5˚C or lower, the outdoor unit should be installed at a place where it is not influenced by natural wind. If wind blows, the low pressure will drop and compressor frequency will increase, this will cause the capacity to drop and may cause the unit to break down.