

8-36HP (22.4kW – 100.0kW)


Production by order

Model No.	Nominal Cooling Capacity	Model No.	Nominal Cooling Capacity
FDC224KXZWE1	22.4kW	FDC730KXZWE1(FDC224×2+FDC280)	73.0kW
FDC280KXZWE1	28.0kW	FDC775KXZWE1(FDC224+FDC280×2)	77.5kW
FDC335KXZWE1	33.5kW	FDC850KXZWE1(FDC280×3)	85.0kW
FDC450KXZWE1(FDC224×2)	45.0kW	FDC900KXZWE1(FDC280×2+FDC335)	90.0kW
FDC500KXZWE1(FDC224+FDC280)	50.0kW	FDC950KXZWE1(FDC280+FDC335×2)	95.0kW
FDC560KXZWE1(FDC280×2)	56.0kW	FDC1000KXZWE1(FDC335×3)	100.0kW
FDC615KXZWE1(FDC280+FDC335)	61.5kW		
FDC670KXZWE1(FDC335×2)	67.0kW		

Features

1. High efficiency (EER/COP)

- Energy saving → Reduction of operation cost

2. Compact design

- Easy transportation and installation
- Carriable by elevator

3. BMS (Building Management System)

- Can use the same BMS as air cooled KX
- Available to large-scale and fine control

4. Serviceability & Maintenance

- Service and maintenance of main parts can be done from the front side only
- Useful service tools (Mente-PC, SL-Checker etc.)

Applicable to

1. High-rise Building

- 50m <FDC> , -100m <FDC>
- 100m or higher in height <FDCW>

2. Glass-exterior facade Building

- Possible to hide KXZW units and to keep fine sight


8, 10, 12HP

16, 18, 20, 22, 24HP

26, 28, 30, 32, 34, 36HP

Specifications

Item	Model	FDC224KXZWE1	FDC280KXZWE1	FDC335KXZWE1	FDC450KXZWE1	FDC500KXZWE1	FDC560KXZWE1	FDC615KXZWE1	FDC670KXZWE1
Combination (FDC)		-	-	-	224KXZWE1	224KXZWE1	280KXZWE1	280KXZWE1	335KXZWE1
Nominal horse power		8HP	10HP	12HP	16HP	18HP	20HP	22HP	24HP
Power source		3 Phase 380-415V, 50Hz							
Nominal capacity	Cooling	kW	22.4	28.0	33.5	45.0	50.0	56.0	61.5
	Heating	kW	25.0	31.5	37.5	50.0	56.0	63.0	75.0
Power consumption	Cooling	kW	4.23	5.75	8.13	8.49	9.83	11.5	13.7
	Heating	kW	4.24	5.10	6.30	8.47	9.27	10.2	12.6
EER	Cooling		5.3	4.9	4.1	5.3	5.1	4.9	4.5
COP	Heating		5.9	6.2	6.0	5.9	6.0	6.2	6.1
Exterior dimensions	HxWxD	mm	1100x780x550						-
Sound pressure level	dB(A)		48	50	52	51	52	53	54
Net weight	kg		185						185x2

Item	Model	FDC730KXZWE1	FDC775KXZWE1	FDC850KXZWE1	FDC900KXZWE1	FDC950KXZWE1	FDC1000KXZWE1
Combination (FDC)		224KXZWE1	224KXZWE1	280KXZWE1	280KXZWE1	280KXZWE1	335KXZWE1
		224KXZWE1	280KXZWE1	280KXZWE1	280KXZWE1	335KXZWE1	335KXZWE1
Nominal horse power		26HP	28HP	30HP	32HP	34HP	36HP
Power source		3 Phase 380-415V, 50Hz					
Nominal capacity	Cooling	kW	73.0	77.5	85.0	90.0	95.0
	Heating	kW	82.5	90.0	95.0	100	106
Power consumption	Cooling	kW	14.2	15.5	17.5	19.5	21.7
	Heating	kW	13.8	14.8	15.4	16.4	17.6
EER	Cooling		5.1	5.0	4.9	4.6	4.4
COP	Heating		6.0	6.1	6.2	6.1	6.0
Exterior dimensions	HxWxD	mm	-				
Sound pressure level	dB(A)		54	54	55	56	56
Net weight	kg		185x3				

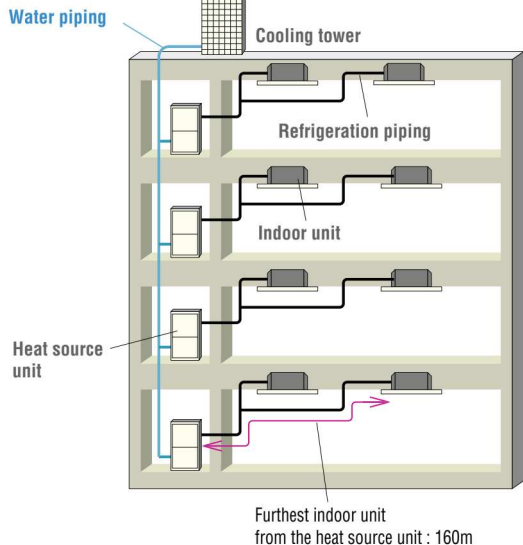
The data are measured at the following condition:

Cooling: Indoor temp. of 27 °C DB, 19 °C WB, and heat source unit inlet water temp. of 30 °C, water flow rate 96 L/min

Heating: Indoor temp. of 20 °C DB, 15 °C WB, and heat source unit inlet water temp. of 20 °C, water flow rate 96 L/min

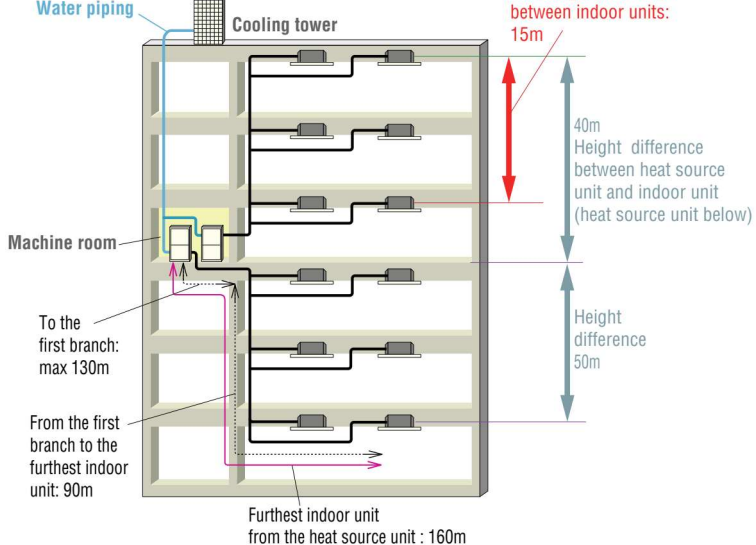
- New building projects -

Total piping length : 510m



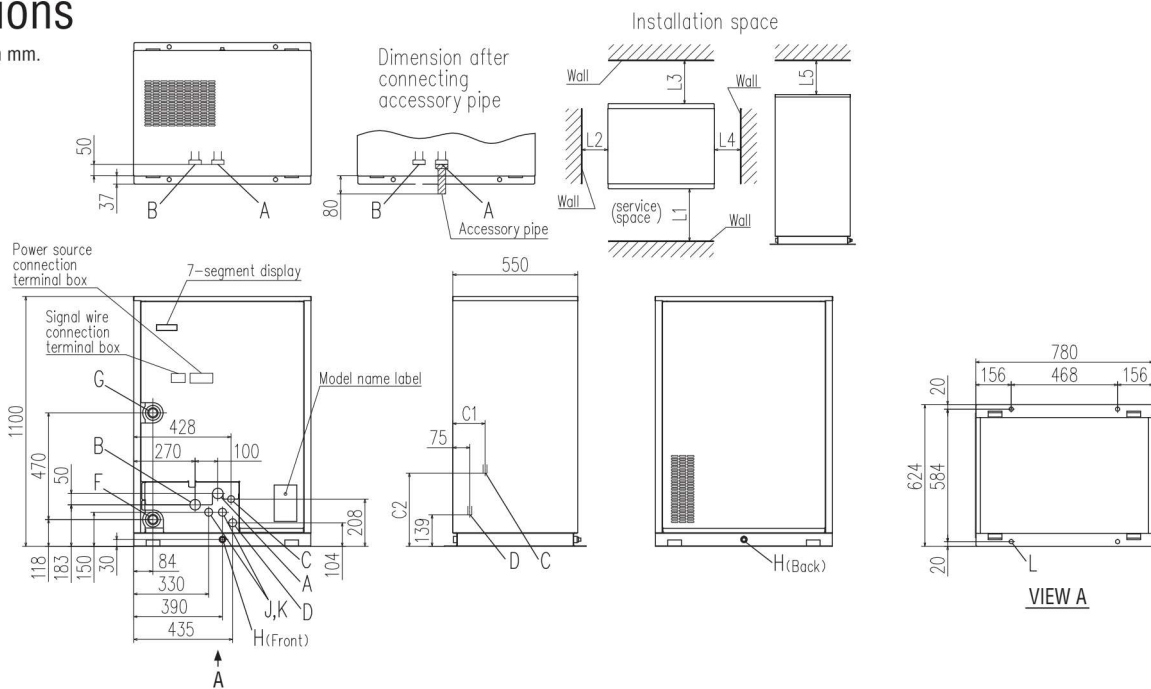
- Renovation projects -

Total piping length : 510m



Dimensions

All measurements in mm.



Mark	Content	
A	High/low gas line	Refer to piping size
B	—	Not to use.
C	Liquid line	Refer to piping size
D	Oil equalization line	
F	Water inlet	R1 1/4
G	Water outlet	R1 1/4
H	Drain outlet	Rp 1/2,2places
J	Power source intake	ø35
K	Signal wiring intake	ø35
L	Anchor bolt hole	ø18,4places

Dimension	FDC-KXZWE1	
	224,280	335
C1	142	139
C2	322	316

Dimension \ Installation example	1
L1	600 or more
L2	20 or more
L3	500 or more
L4	20 or more
L5	300 or more

Piping size

	FDC224KXZE1	FDC280KXZE1	FDC335KXZE1	Connection method
High/low gas line	ø19.05	ø22.22	ø25.4	Flange
Liquid line	ø9.52	ø9.52	ø12.7	Flare
Oil equalization line	ø9.52	ø9.52	ø9.52	

14-48HP (40.0kW – 136.0kW)



Production by order

Model No.	Nominal Cooling Capacity
FDCH335CKXE6G-K ※	33.5 kW(380V)
FDCH400CKXE6G	40.0 kW(380V)
FDCH450CKXE6G	45.0 kW(380V)
FDCH504CKXE6G	50.4 kW(380V)
FDCH560CKXE6G	56.0 kW(380V)
FDCH560CKXE6G-K ※	56.0 kW(380V)
FDCH615CKXE6G	61.5 kW(380V)
FDCH680CKXE6G	68.0 kW(380V)

※ FDCH335CKXE6G-K & FDCH560CKXE6G-K are only used for combining with other models.

- Maximum allowable height difference between the outdoor and the indoor unit located at the lowest height position has been increased from 50m to 100m.
(When the outdoor unit is located at higher position than the indoor unit)
- Non-CE Marking models.

Model No.	Nominal Cooling Capacity
FDCH735CKXE6G (FDCH335-K+FDCH400)	73.5 kW(380V)
FDCH800CKXE6G (FDCH400x2)	80.0 kW(380V)
FDCH850CKXE6G (FDCH400+FDCH450)	85.0 kW(380V)
FDCH900CKXE6G (FDCH450x2)	90.0 kW(380V)
FDCH960CKXE6G (FDCH450+FDCH504)	96.0 kW(380V)
FDCH1010CKXE6G (FDCH504x2)	101.0 kW(380V)
FDCH1065CKXE6G (FDCH504+FDCH560)	106.5 kW(380V)
FDCH1130CKXE6G (FDCH560x2)	113.0 kW(380V)
FDCH1180CKXE6G (FDCH560-K+FDCH615)	118.0 kW(380V)
FDCH1235CKXE6G (FDCH615x2)	123.5 kW(380V)
FDCH1300CKXE6G (FDCH615+FDCH680)	130.0 kW(380V)
FDCH1360CKXE6G (FDCH680x2)	136.0 kW(380V)

FDCH335CKXE6G-K
FDCH400CKXE6G
FDCH450CKXE6G



FDCH504-680CKXE6G



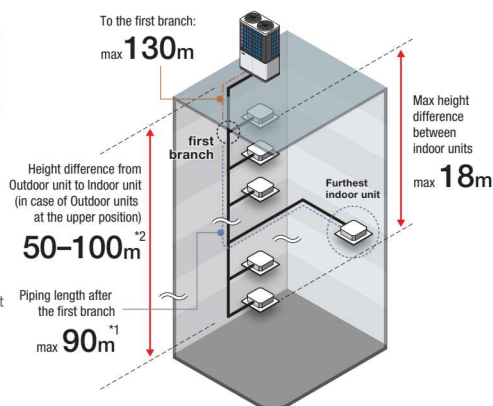
Total length :
1,000m

Furthest indoor unit:

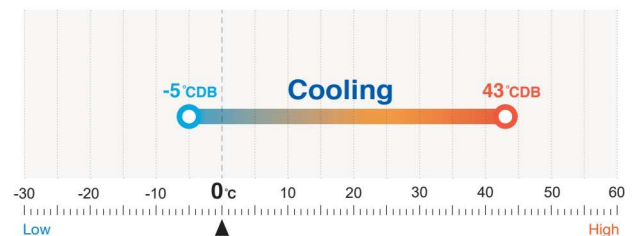
Actual length: **160m**
Equivalent length: **185m**

*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m.

*2 In case of less than 50m, the High Head models can not be applied.
In case Indoor unit is higher than outdoor unit, the High Head models can not be applied.



Range of operation



Specifications

Item			Model	FDCH400CKXE6G	FDCH450CKXE6G	FDCH504CKXE6G	FDCH560CKXE6G	FDCH615CKXE6G	FDCH680CKXE6G
Nominal horse power				14HP	16HP	18HP	20HP	22HP	24HP
Power source				3 Phase 380V, 60Hz					
Starting current			A	8					
Max current			A	47					
Nominal capacity	Cooling		kW	40.0	45.0	50.4	56.0	61.5	68.0
Electrical characteristics	Power consumption	Cooling	kW	11.27	12.97	14.73	16.79	20.37	24.98
Exterior dimensions	HxWxD		mm	1690x1350x720			2048x1350x720		
Net weight			kg	326			358		377
Sound pressure level	Cooling		dB(A)	59.5	62.5	61.5	63.0	64.5	65.0
Refrigerant	Type/GWP			R410A/2088					
	Charge		kg/TCO ₂ Eq	11.5/24.012					
Refrigerant piping size	Liquid line		mm(in)	ø12.7(1/2")			ø15.88(5/8")		
	Gas line		mm(in)	ø25.4(1") [ø28.58(1.1/8")]			ø28.58(1.1/8")		
Capacity connection			%	50-200			50-160		
Number of connectable indoor units				36	40	36	40	44	49

Item		Model	FDCH735CKXE6G	FDCH800CKXE6G	FDCH850CKXE6G	FDCH900CKXE6G	
Combination (FDCH)			335CKXE6G-K	400CKXE6G	400CKXE6G	450CKXE6G	
			400CKXE6G	400CKXE6G	450CKXE6G	450CKXE6G	
Nominal horse power			26HP	28HP	30HP	32HP	
Power source			3 Phase 380V, 60Hz				
Starting current		A	16				
Max current		A	94				
Nominal capacity	Cooling	kW	73.5	80.0	85.0	90.0	
Electrical characteristics	Power consumption	Cooling	kW	20.21	22.54	24.24	25.94
Net weight		kg	326x2				
Refrigerant charge		R410A	kg	11.5x2			
Refrigerant piping size	Liquid line	mm(in)	ø19.05(3/4")				
	Gas line		ø31.8(1·1/4") [ø34.92(1·3/8")]				
Capacity connection		%	50-160				
Number of connectable indoor units			53	58	61	65	

Item			Model	FDCH960CKXE6G	FDCH1010CKXE6G	FDCH1065CKXE6G	FDCH1130CKXE6G
Combination (FDCH)				450CKXE6G	504CKXE6G	504CKXE6G	560CKXE6G
				504CKXE6G	504CKXE6G	560CKXE6G	560CKXE6G
Nominal horse power				34HP	36HP	38HP	40HP
Power source				3 Phase 380V, 60Hz			
Starting current			A	16			
Max current			A	94			
Nominal capacity	Cooling		kW	96.0	101.0	106.5	113.0
Electrical characteristics	Power consumption	Cooling	kW	27.70	29.46	31.52	33.58
Net weight			kg	326+358	358x2		
Refrigerant charge		R410A	kg	11.5x2			
Refrigerant piping size	Liquid line		mm(in)	ø19.05(3/4")			ø22.22(7/8")
	Gas line			ø31.8(1·1/4") [ø34.92(1·3/8")]			ø38.1(1·1/2")
Capacity connection			%	50-160	50-130		
Number of connectable indoor units				69	59	62	66

Item			Model	FDCH1180CKXE6G	FDCH1235CKXE6G	FDCH1300CKXE6G	FDCH1360CKXE6G
Combination (FDCH)				560CKXE6G-K	615CKXE6G	615CKXE6G	680CKXE6G
				615CKXE6G	615CKXE6G	680CKXE6G	680CKXE6G
Nominal horse power				42HP	44HP	46HP	48HP
Power source				3 Phase 380V, 60Hz			
Starting current			A	16			
Max current			A	94			
Nominal capacity	Cooling		kW	118.0	123.5	130.0	136.0
Electrical characteristics	Power consumption	Cooling	kW	37.16	40.74	45.35	49.96
Net weight			kg	377x2			
Refrigerant charge		R410A	kg	11.5x2			
Refrigerant piping size	Liquid line		mm(in)	ø22.22(7/8")			
	Gas line						
Capacity connection			%	50-130			
Number of connectable indoor units				69	72	76	80

1. The data are measured under the following conditions(ISO-T1). Cooling: Indoor temp. of 27°CDB, 19°CWB, and outdoor temp. of 35°CDB.

2. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.

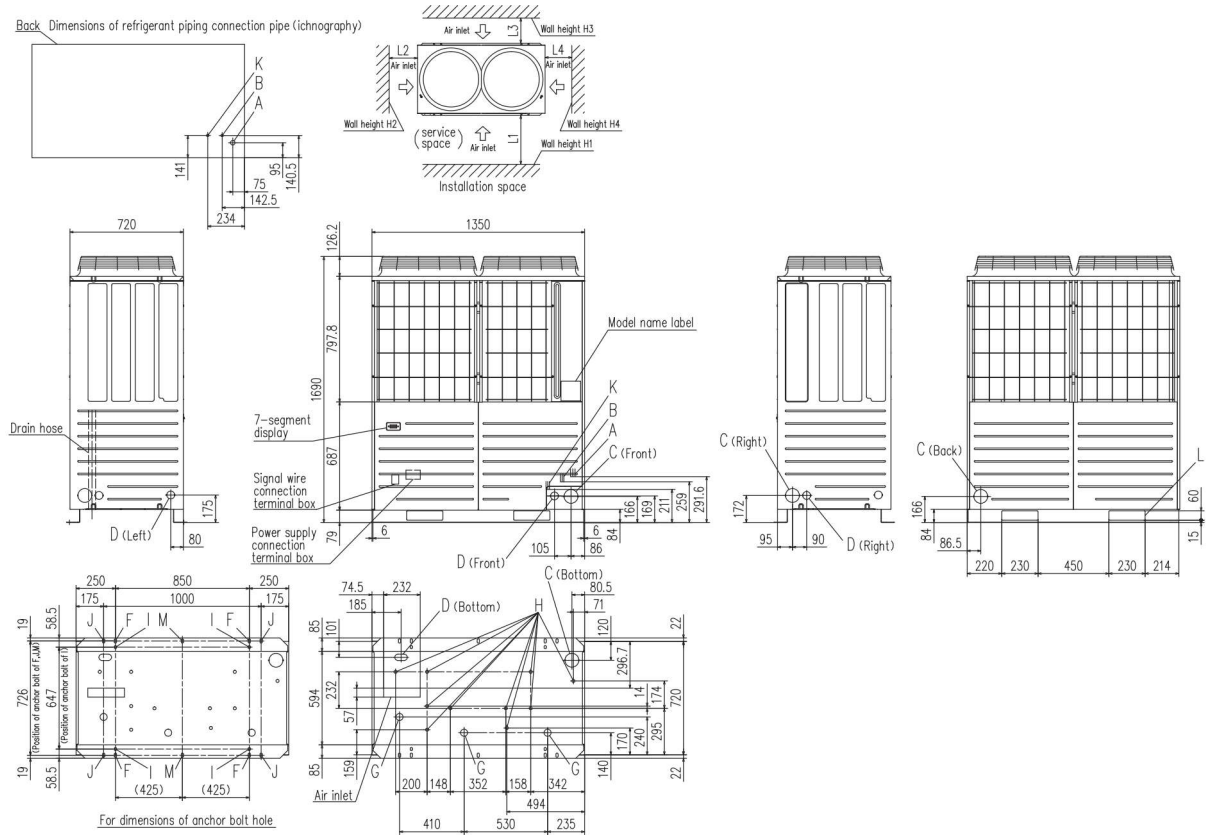
3. 'tonne(s) of CO₂ equivalent' means a quantity of greenhouse gases- expressed as the product of the weight of the greenhouse gases in metric tonnes and of their global warming potential.

4. [] : Pipe sizes applicable to European installations are shown in parentheses.

Dimensions

All measurements in mm.

FDCH335CKXE6G-K, 400CKXE6G, 450CKXE6G

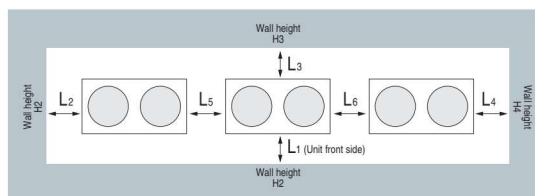


Mark	Content	335-K	400	450
A	Refrigerant gas piping connection pipe	ø25.4(Brazing)		ø28.58(Brazing)
B	Refrigerant liquid piping connection pipe		ø12.7(Flare)	
C	Refrigerant piping exit hole		ø88(or ø100)	
D	Power supply entry hole	ø50 (Right · Left · Front), Long hole 40 x 80 (Bottom)		
F	Anchor bolt hole		M10, 4 pcs	
G	Drain waste water hose hole		ø45, 3 pcs	
H	Drain hole		ø20, 10 pcs	
K	Refrigerant oil equalization piping connection pipe		ø9.52(Flare)	
L	Carrying in or hole for hanging		230 x 60	

Notes:

- (1) The unit must be fixed with anchor bolts.
- (2) Leave a 2m or larger space above the unit.
- (3) The unit name plate is attached on the lower right corner of the front panel.
- (4) The ports for refrigerant pipe and power cable penetrations are covered with half-blanks. Please cut off a half-blank with nippers in using these ports.
- (5) Use a ø88 port for refrigerant pipe connection.
- (6) Anchor holes marked "L J" (four holes for M10) are for a renewal installation.
- (7) The oil-equalising pipe K should be used when outdoor units are used in combination. (For 14,16Hp only)

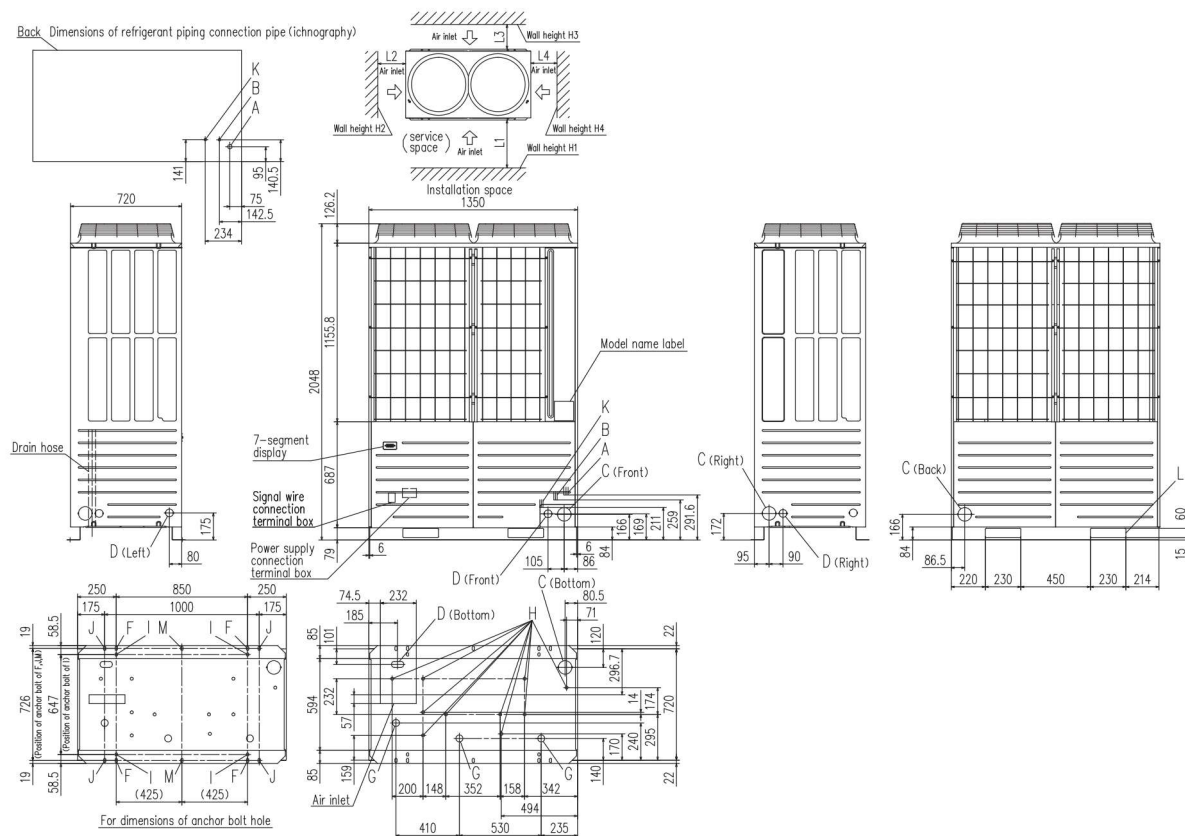
When more than one unit is installed



Installation example		
Dimensions	1	2
L ₁	500	Open
L ₂	10	10
L ₃	100	100
L ₄	10	Open
H ₁	1500	Open
H ₂	No limit	No limit
H ₃	1000	No limit
H ₄	No limit	Open

Installation example		
Dimensions	1	2
L ₁	500	Open
L ₂	10	200
L ₃	100	300
L ₄	10	Open
L ₅	0	400
L ₆	0	400
H ₁	1500	No limit
H ₂	No limit	No limit
H ₃	1000	No limit
H ₄	No limit	No limit

FDCH504CKXE6G, 560CKXE6G, 560CKXE6G-K, 615CKXE6G, 680CKXE6G



Mark	Content	
A	Refrigerant gas piping connection pipe	ø28.58(Brazing)
B	Refrigerant liquid piping connection pipe	ø12.7(Flare)
C	Refrigerant piping exit hole	ø88(or ø100)
D	Power supply entry hole	ø50 (Right · Left · Front), Long hole 40 x 80 (Bottom)
F	Anchor bolt hole	M10, 4 pcs
G	Drain waste water hose hole	ø45, 3 pcs
H	Drain hole	ø20, 10 pcs
K	Refrigerant oil equalization piping connection pipe	ø9.52(Flare)
L	Carrying in or hole for hanging	230 x 60

Installation example		
Dimensions	1	2
L ₁	500	Open
L ₂	10	10
L ₃	100	100
L ₄	10	Open
H ₁	1500	Open
H ₂	No limit	No limit
H ₃	1000	No limit
H ₄	No limit	Open

Notes:

- (1) The unit must be fixed with anchor bolts.
- (2) Leave a 2m or larger space above the unit.
- (3) The unit name plate is attached on the lower right corner of the front panel.
- (4) The ports for refrigerant pipe and power cable penetrations are covered with half-blanks. Please cut off a half-blank with nippers in using these ports.
- (5) Use a ø88 port for refrigerant pipe connection.
- (6) Anchor holes marked "L J" (four holes for M10) are for a renewal installation.
- (7) The oil-equalising pipe K should be used when outdoor units are used in combination.