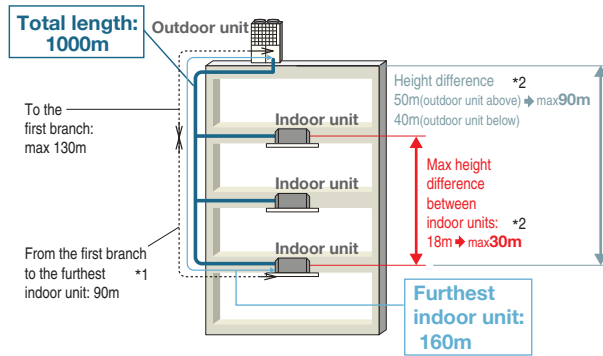


# KXZ 2 Heat pump systems

## 10, 12HP (28.0kW, 33.5kW)

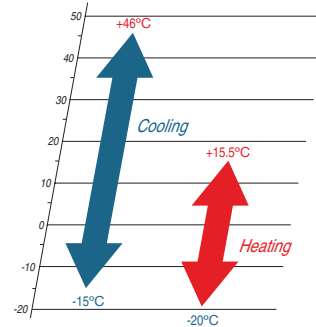
Model No.	Nominal Cooling Capacity	NEW
FDC280KXZA2	28.0kW	
FDC335KXZA2	33.5kW	

- The new KXZ2 series has a layered design and a refined new form.
- Connect up to 29 indoor units/up to 130% capacity.
- High efficiency with EER up to 3.86.
- New Heating solution - Continuous Heating Capacity Control (CHCC).



- \*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m. (MAX85m)
- \*2 It is necessary to change the setting corresponding to each height difference in installation. The range of use is also different.

Range of operation



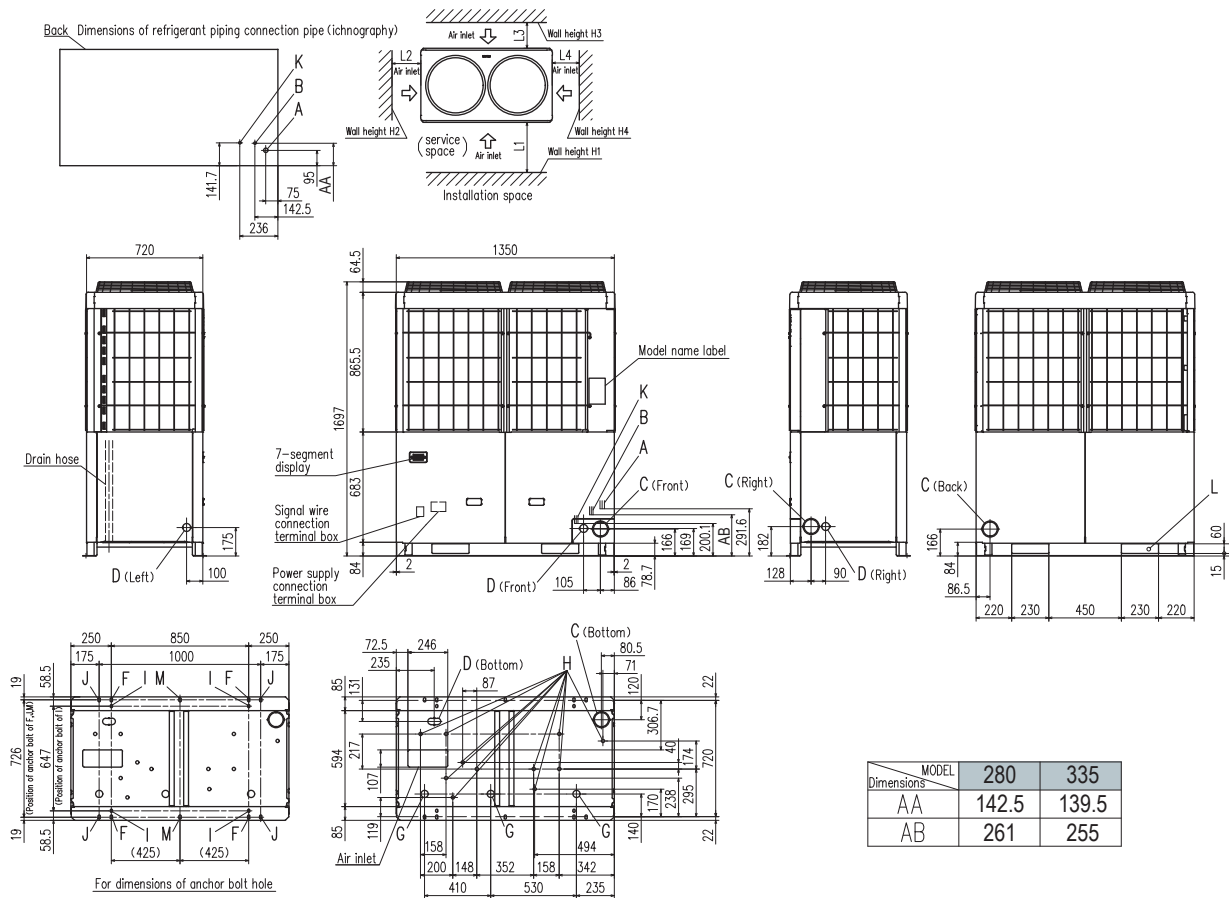
## Specifications

Item		Model	FDC280KXZA2	FDC335KXZA2
Nominal horse power			10HP	12HP
Power source			3 Phase 380-415V, 50Hz	
Starting current		A	5	
Max current		A	20.1	
Nominal capacity	Cooling	kW	28.0	33.5
	Heating	kW	31.5	37.5
Electrical characteristics	Power consumption	Cooling	7.25	8.98
		Heating	7.41	9.03
Exterior dimensions	HxWxD	mm	1697x1350x720	
Net weight		kg	284	
Sound pressure level	Cooling/Heating	dB(A)	56/57	63/62
Refrigerant	Type / GWP		R410A / 2088	
	Charge	kg/TCO2Eq	11.0 / 22.968	
Refrigerant piping size	Liquid line	mm(in)	ø9.52(3/8")	ø12.7(1/2")
	Gas line	mm(in)	ø22.22(7/8")	ø25.4(1") [ø22.22(7/8")]
Capacity connection		%	50~200	
Number of connectable indoor units			24	29

1. The data are measured under the following conditions(ISO-T1, H1). 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.  
 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 CO<sub>2</sub> 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.



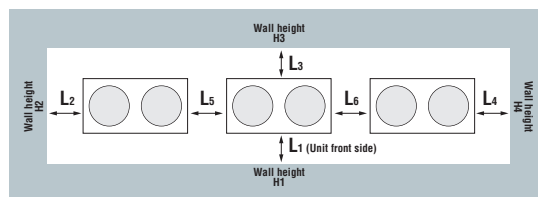
Dimensions	MODEL 280	335
AA	142.5	139.5
AB	261	255

Mark	Content	280	335
A	Refrigerant gas piping connection pipe	ø22.22(Brazing)	ø25.4(Brazing)
B	Refrigerant liquid piping connection pipe	ø9.52(Flare)	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 x 4 places	
G	Drain waste water hose hole	ø45 x 3 places	
H	Drain hole	ø20 x 11 places	
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 <sub>1</sub>	500	Open
L <sub>2</sub>	10(30)	10(30)
L <sub>3</sub>	100	100
L <sub>4</sub>	10(30)	Open
H <sub>1</sub>	1500	Open
H <sub>2</sub>	No limit	No limit
H <sub>3</sub>	1000	No limit
H <sub>4</sub>	No limit	Open

() :In case it is the promised installation location that the outdoor unit is used on conditions with the ambient temperature of 43°C or more.

## When more than one unit is installed



Installation example		
Dimensions	1	2
L <sub>1</sub>	500	Open
L <sub>2</sub>	10(30)	200
L <sub>3</sub>	100	300
L <sub>4</sub>	10(30)	Open
L <sub>5</sub>	10(30)	400
L <sub>6</sub>	10(30)	400
H <sub>1</sub>	1500	Open
H <sub>2</sub>	No limit	No limit
H <sub>3</sub>	1000	No limit
H <sub>4</sub>	No limit	Open

# KXZ2 Heat pump systems

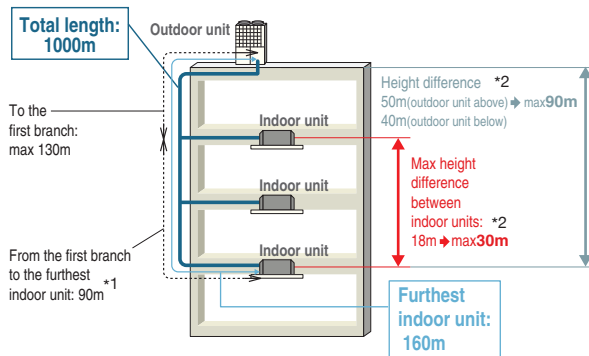
## 14 ~ 20HP (40.0kW~56.0kW) NEW

Model No.	Nominal Cooling Capacity
FDC400KXZA2	40.0kW
FDC450KXZA2	45.0kW
FDC475KXZA2	47.5kW
FDC500KXZA2	50.0kW
FDC560KXZA2	56.0kW

- The new KXZ2 series has a layered design and a refined new form.
- Connect up to 48 indoor units/up to 130% capacity.
- High efficiency with EER up to 3.64.
- New Heating solution - Continuous Heating Capacity Control (CHCC).

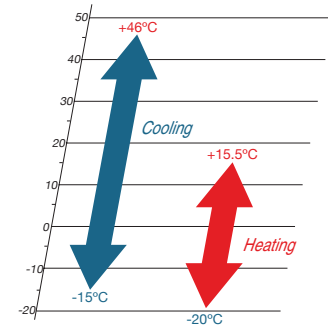


Uniform footprint of all models allows continuous side-by-side installation



- \*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m. (MAX85m)
- \*2 It is necessary to change the setting corresponding to each height difference in installation. The range of use is also different.

Range of operation



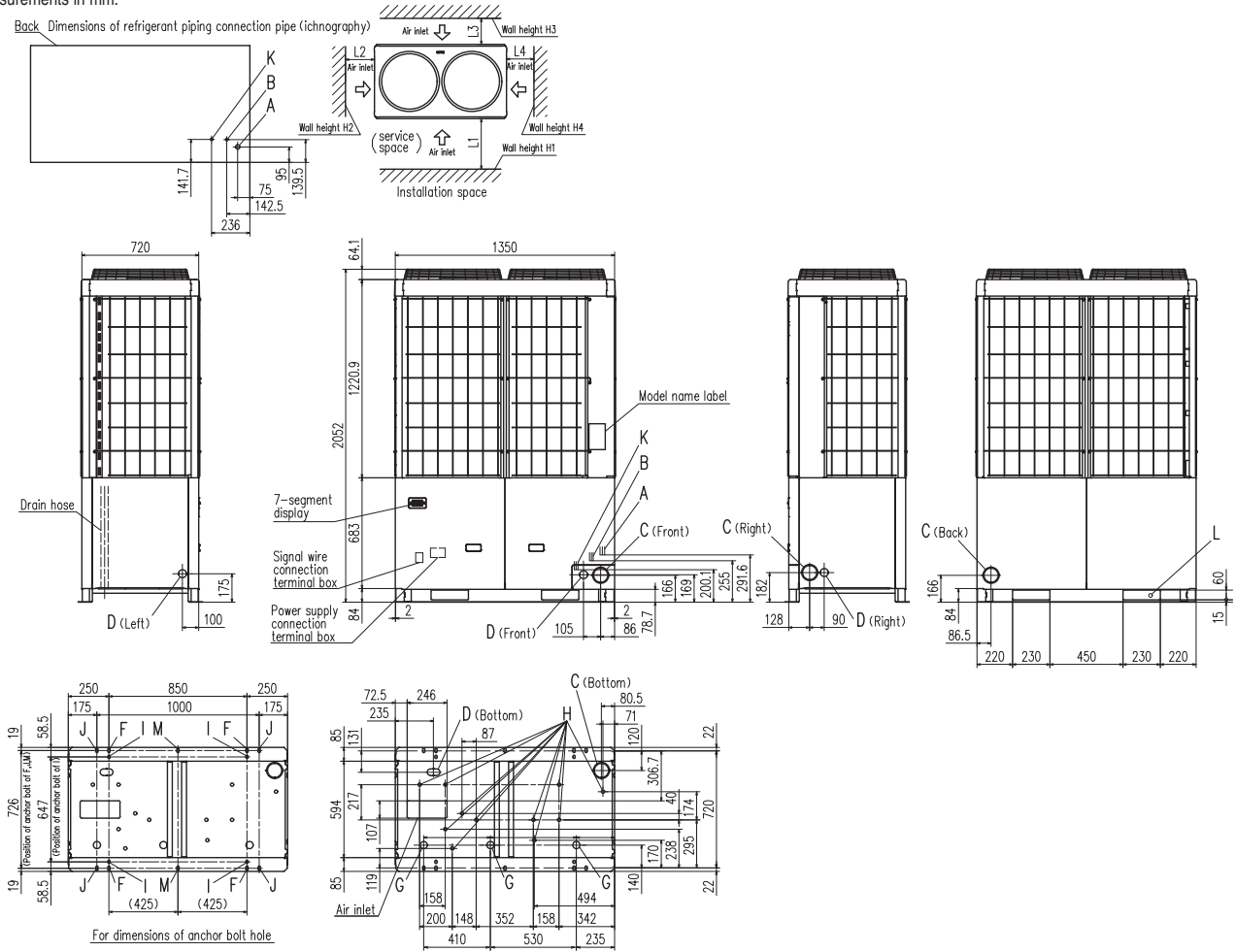
## Specifications

Item		Model	FDC400KXZA2	FDC450KXZA2	FDC475KXZA2	FDC500KXZA2	FDC560KXZA2	
Nominal horse power			14HP	16HP	17HP	18HP	20HP	
Power source			3 Phase 380-415V, 50Hz					
Starting current		A	5			8		
Max current		A	32.0			40.2		
Nominal capacity	Cooling	kW	40.0	45.0	47.5	50.0	56.0	
	Heating		45.0	50.0	53.0	56.0	63.0	
Electrical characteristics	Power consumption	kW	Cooling	10.98	13.98	13.97	14.01	17.50
			Heating	10.23	12.50	12.99	13.56	16.15
Exterior dimensions		HxWxD	mm 2052x1350x720					
Net weight		kg	328			374		
Sound pressure level		Cooling/Heating	dB(A)	60/62	61/62	61/61	61/62	63/64
Refrigerant	Type / GWP		R410A / 2088					
	Charge	kg/TCO2Eq	11.5 / 24.012					
Refrigerant piping size	Liquid line	mm(in)	ø12.7(1/2")					
	Gas line		ø25.4(1") [ø28.58(1 1/8")]	ø28.58(1 1/8")				
Capacity connection		%	50~130					
Number of connectable indoor units			34	39	41	43	48	

1. The data are measured under the following conditions(ISO-T1, H1). 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.  
 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 CO<sub>2</sub> 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.

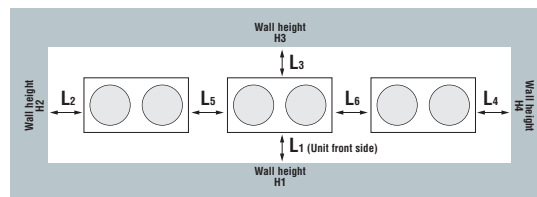


Mark	Content	400	450, 475, 500, 560
A	Refrigerant gas piping connection pipe	ø25.4(Brazing)	ø28.58(Brazing)
B	Refrigerant liquid piping connection pipe		ø12.7(Flare)
C	Refrigerant piping exit hole		ø88(or ø100)
D	Power supply entry hole	ø50 (right · left · front), long hole 40 x 80 (bottom)	
F	Anchor bolt hole	M10 x 4 places	
G	Drain waste water hose hole	ø45 x 3 places	
H	Drain hole	ø20 x 11 places	
K	Refrigerant oil equalization piping connection pipe	ø9.52(Flare)	
L	Carrying in or hole for hanging	230 x 60	

Dimensions	Installation example	
	1	2
L <sub>1</sub>	500	Open
L <sub>2</sub>	10(30)	10(30)
L <sub>3</sub>	100	100
L <sub>4</sub>	10(30)	Open
H <sub>1</sub>	1500	Open
H <sub>2</sub>	No limit	No limit
H <sub>3</sub>	1000	No limit
H <sub>4</sub>	No limit	Open

( ) : In case it is the promised installation location that the outdoor unit is used on conditions with the ambient temperature of 43°C or more.

## When more than one unit is installed



Dimensions	Installation example	
	1	2
L <sub>1</sub>	500	Open
L <sub>2</sub>	10(30)	200
L <sub>3</sub>	100	300
L <sub>4</sub>	10(30)	Open
L <sub>5</sub>	10(30)	400
L <sub>6</sub>	10(30)	400
H <sub>1</sub>	1500	Open
H <sub>2</sub>	No limit	No limit
H <sub>3</sub>	1000	No limit
H <sub>4</sub>	No limit	Open



# KXZ<sup>2</sup> Heat pump systems

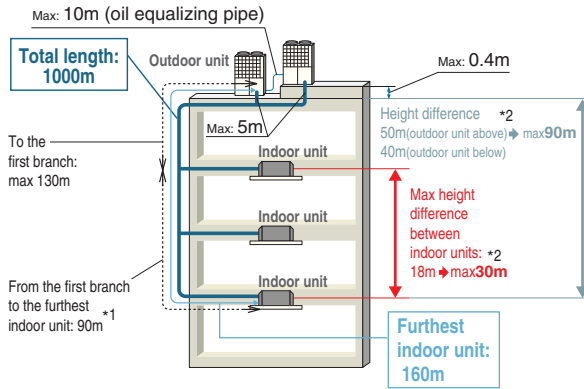
## 22, 24HP (61.5kW, 67.0kW)



Model No.	Nominal Cooling Capacity
FDC615KXZA2	61.5kW
FDC670KXZA2	67.0kW

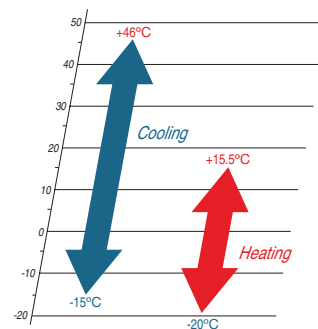
**NEW**

- The new KXZ series has a layered design and a refined new form.
- Connect up to 58 indoor units/up to 130% capacity.
- High efficiency with EER up to 3.78.
- New Heating solution - Continuous Heating Capacity Control (CHCC).



- \*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m. (MAX85m)  
 \*2 It is necessary to change the setting corresponding to each height difference in installation. The range of use is also different.

Range of operation



## Specifications

Exterior dimension : Please refer to page 45.

Item		Model	FDC615KXZA2	FDC670KXZA2
Combination (FDC)			280KXZA2	335KXZA2
			335KXZA2	335KXZA2
Nominal horse power			22HP	24HP
Power source			3 Phase 380-415V, 50Hz	
Starting current		A	10	
Max current		A	40.2	
Nominal capacity	Cooling	kW	61.5	67.0
	Heating	kW	69.0	75.0
Electrical characteristics	Power consumption	Cooling	16.24	17.96
		Heating	16.44	18.06
Exterior dimensions		HxWxD	mm 1697x2700x720	
Net weight		kg	567	
Refrigerant charge		R410A	kg 11.0x2	
Refrigerant piping size	Liquid line	mm(in)	ø12.7(1/2")	
	Gas line	mm(in)	ø28.58(1 1/8")	
Capacity connection		%	50~130	
Number of connectable indoor units			53	58

1. The data are measured under the following conditions(ISO-T1,H1). 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.  
 2.Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.

# KXZ2 Heat pump systems

## 26 ~ 40HP (73.5kW~112.0kW)



Model No.	Nominal Cooling Capacity
FDC735KXZA2	73.5kW
FDC800KXZA2	80.0kW
FDC850KXZA2	85.0kW
FDC900KXZA2	90.0kW
FDC950KXZA2	95.0kW
FDC1000KXZA2	100.0kW
FDC1060KXZA2	106.0kW
FDC1120KXZA2	112.0kW



FDC735

- The new KXZ2 series has a layered design and a refined new form.
- Connect up to 80 indoor units/up to 130% capacity.
- High efficiency with EER up to 3.68.
- New Heating solution - Continuous Heating Capacity Control (CHCC).
- Industry leading total piping length up to 1000m and a maximum height difference between indoor units has been increased to maximum of 30m.
- Wide range of operation.



FDC800~1120

## Specifications

Exterior dimension : Please refer to page 45, 47.

Item		Model	FDC735KXZA2	FDC800KXZA2	FDC850KXZA2	FDC900KXZA2	FDC950KXZA2	FDC1000KXZA2	FDC1060KXZA2	FDC1120KXZA2	
Combination (FDC)			335KXZA2	400KXZA2	400KXZA2	450KXZA2	475KXZA2	500KXZA2	500KXZA2	560KXZA2	
			400KXZA2	400KXZA2	450KXZA2	450KXZA2	475KXZA2	500KXZA2	560KXZA2	560KXZA2	
Nominal horse power			26HP	28HP	30HP	32HP	34HP	36HP	38HP	40HP	
Power source			3 Phase 380-415V, 50Hz								
Starting current		A	10				16				
Max current		A	52.1	64.0			80.4				
Nominal capacity		Cooling	kW								
		Heating	73.5	80.0	85.0	90.0	95.0	100.0	106.0	112.0	
Electrical characteristics		Power consumption	Cooling	19.96	21.96	24.96	27.95	27.94	28.02	31.51	35.00
			Heating	19.26	20.45	22.73	25.00	25.98	27.12	29.71	32.31
Exterior dimensions		HxWxD	mm								
Net weight		kg	611	655			747				
Refrigerant charge		R410A	kg		11.0+11.5	11.5x2					
Refrigerant piping size		Liquid line	mm(in)						ø15.88(5/8")		ø19.05(3/4")
		Gas line	ø31.75(1 1/4") [ø34.92(1 3/8")]					ø38.1(1 1/2") [ø34.92(1 3/8")]			
Capacity connection		%	50~130								
Number of connectable indoor units			63	69	73	78	80				

1.The data are measured under the following conditions(ISO-T1,H1). 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.  
 2.Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.  
 3.[ ] : Pipe sizes applicable to European installations are shown in parentheses.

# KXZ2 Heat pump systems

## 42 ~ 48HP (120.kW~135.0kW)



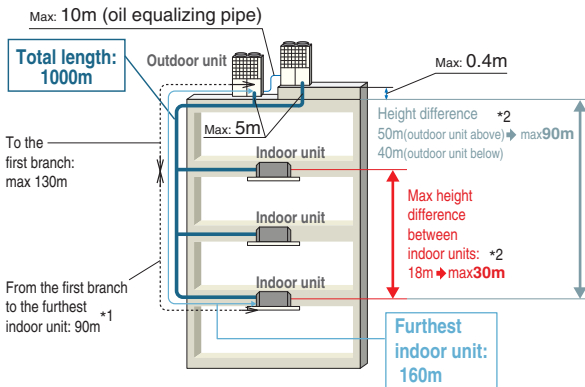
Model No.	Nominal Cooling Capacity
FDC1200KXZA2	120.0kW
FDC1250KXZA2	125.0kW
FDC1300KXZA2	130.0kW
FDC1350KXZA2	135.0kW

NEW

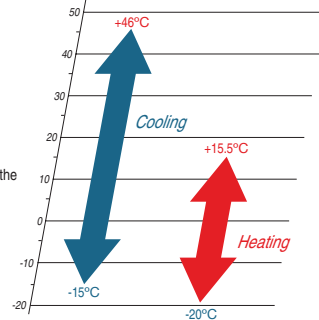
- The new KXZ2 series has a layered design and a refined new form.
- Connect up to 80 indoor units/up to 130% capacity.
- High efficiency with EER up to 3.64.
- New Heating solution - Continuous Heating Capacity Control (CHCC).



FDC1200~1350



Range of operation



- \*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m. (MAX85m)
- \*2 It is necessary to change the setting corresponding to each height difference in installation. The range of use is also different..

## Specifications

Exterior dimension : Please refer to page 47.

Item		Model	FDC1200KXZA2	FDC1250KXZA2	FDC1300KXZA2	FDC1350KXZA2
Combination (FDC)			400KXZA2	400KXZA2	400KXZA2	450KXZA2
			400KXZA2	400KXZA2	450KXZA2	450KXZA2
			400KXZA2	450KXZA2	450KXZA2	450KXZA2
Nominal horse power			42HP	44HP	46HP	48HP
Power source			3 Phase 380-415V, 50Hz			
Starting current		A	15			
Max current		A	96.0			
Nominal capacity	Cooling	kW	120.0	125.0	130.0	135.0
	Heating	kW	135.0	140.0	145.0	150.0
Electrical characteristics	Power consumption	Cooling	32.94	35.94	38.93	41.93
		Heating	30.68	32.95	35.23	37.50
Exterior dimensions		HxWxD	mm 2052x4050x720			
Net weight		kg	982			
Refrigerant charge		R410A	kg 11.5x3			
Refrigerant piping size	Liquid line	mm(in)	ø19.05(3/4")			
	Gas line	mm(in)	ø38.1(1 1/2") [ø34.92(1 3/8")]			
Capacity connection		%	50~130			
Number of connectable indoor units			80			

1. The data are measured under the following conditions(ISO-T1,H1). 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.  
 2. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.  
 3. [ ] : Pipe sizes applicable to European installations are shown in parentheses.

# KXZ2 Heat pump systems

## 50 ~ 60HP (142.5kW~168.0kW)



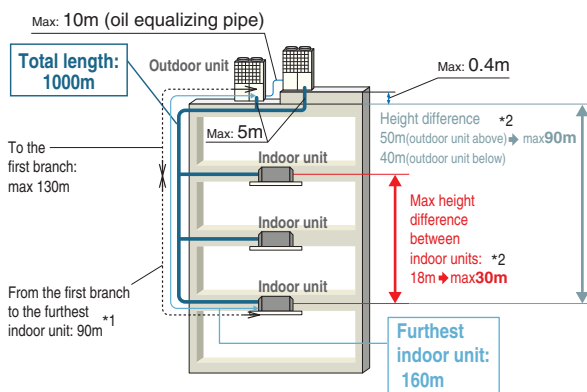
Model No.	Nominal Cooling Capacity
FDC1425KXZA2	142.5kW
FDC1450KXZA2	145.0kW
FDC1500KXZA2	150.0kW
FDC1560KXZA2	156.0kW
FDC1620KXZA2	162.0kW
FDC1680KXZA2	168.0kW

**NEW**

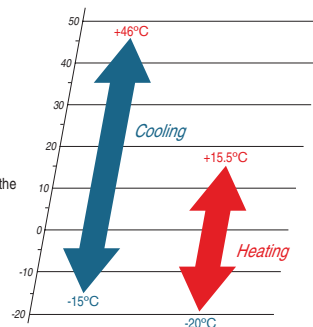
- The new KXZ2 series has a layered design and a refined new form.
- Connect up to 80 indoor units/up to 130% capacity.
- High efficiency with EER up to 3.57.
- New Heating solution - Continuous Heating Capacity Control (CHCC).



FDC1425~1680



Range of operation



- \*1 The difference between the longest and the shortest indoor unit piping from the first branch must be within 40m. (MAX85m)
- \*2 It is necessary to change the setting corresponding to each height difference in installation. The range of use is also different.

## Specifications

Exterior dimension : Please refer to page 47.

Item		Model	FDC1425KXZA2	FDC1450KXZA2	FDC1500KXZA2	FDC1560KXZA2	FDC1620KXZA2	FDC1680KXZA2
Combination (FDC)			475KXZA2	475KXZA2	500KXZA2	500KXZA2	500KXZA2	560KXZA2
			475KXZA2	475KXZA2	500KXZA2	500KXZA2	560KXZA2	560KXZA2
			475KXZA2	500KXZA2	500KXZA2	560KXZA2	560KXZA2	560KXZA2
Nominal horse power			50HP	52HP	54HP	56HP	58HP	60HP
Power source			3 Phase 380-415V, 50Hz					
Starting current		A	24					
Max current		A	120.6					
Nominal capacity	Cooling	kW	142.5	145.0	150.0	156.0	162.0	168.0
	Heating	kW	159.0	162.0	168.0	175.0	182.0	189.0
Electrical characteristics	Power consumption	Cooling	41.91	41.95	42.03	45.52	49.01	52.50
		Heating	38.97	39.54	40.68	43.27	45.87	48.46
Exterior dimensions		HxWxD	2052x4050x720					
Net weight		kg	1120					
Refrigerant charge		R410A	11.5x3					
Refrigerant piping size	Liquid line	mm(in)	ø19.05(3/4")					
	Gas line		ø38.1(1 1/2") [ø34.92(1 3/8")]					
Capacity connection		%	50~130					
Number of connectable indoor units			80					

1. The data are measured under the following conditions(ISO-T1,H1). 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.  
 2. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.  
 3. [] : Pipe sizes applicable to European installations are shown in parentheses.