4–6 HP (12.1kW – 15.5kW)

Technical focus

- Compact & flexible design
- High efficiency with EER up to 4.08
- Easy maintenance & Quick installation
- Available in 1-phase (KXZEN1-W) and 3-Phase (KXZES1-W)
- Total piping length up to 100m and a maximum pipe run of 70m

FDC121–155

SPECIFICATIONS

Item			Model	FDC121KXZEN1-W	FDC140KXZEN1-W	FDC155KXZEN1-W	FDC121KXZES1-W	FDC140KXZES1-W	FDC155KXZES1-W
Nominal horse power				4HP	5HP	6HP	4HP	5HP	6HP
Power source				1 Phase 220-240V, 50Hz			3 Phase 380-415V, 50Hz		
Nominal capacity	Cooling	kW		12.1	14.0	15.5	12.1	14.0	15.5
	Heating			12.1	14.0	15.5	12.1	14.0	15.5
Max heating capacity		kW		12.5	16.0	16.3	12.5	16.0	16.3
Power consumption	Cooling	kW		2.97	4.00	5.20	2.97	4.00	5.20
*2 (Lot6/21)	Heating			2.88	3.52	4.06	2.88	3.52	4.06
EER				4.08	3.50	2.98	4.08	3.50	2.98
COP *2 (Lot6/21)				4.20	3.98	3.82	4.20	3.98	3.82
SEER				8.51	8.07	7.64	8.51	8.07	7.64
SCOP *1(Eurovent Certification condition)				4.40	4.43	4.41	4.40	4.43	4.41
SEER				9.67	8.82	8.17	9.67	8.82	8.17
SCOP *2 (Lot6/21)				4.67	4.62	4.58	4.67	4.62	4.58
Exterior dimensions (HxWxD)			mm	845x970x370					
Net weight			kg	85			87		
Sound power level	Cooling		dB(A)	68	69	70	68	69	70
*2 (Lot6/21)	Heating			71	73	73	71	73	73
Sound pressure level	Cooling		dB(A)	54	54	54	54	54	54
	Heating			56	58	58	56	58	58
Starting current			A	5					
Max current			A	23.0			13.5		
Refrigerant	Type / GWP			R32 / 675					
	Charge		kg	4.2					
	TCO_2Eq			2.835					
Refrigerant piping size	Liquid		mm	ø9.52(3/8")					
	Gas		(in)	ø15.88(5/8")					
Total piping length			m	100					
Outdoor operating temperature range	Cooling		°CDB	-15–43					
	Heating		°CWB	-20–15.5					
Capacity connection			%	80–150					
Number of connectable indoor units				8	10	10	8	10	10

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. SEER/SCOP are based on EN14825:2016 and Commission regulation (EU) No.2016/2281. Temperature conditions for calculating SCOP are based on "Average climate".
3. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
4. 'tonne(s) of CO_2 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.
5. Refrigerant contained in the products is a fluorinated greenhouse gas listed in Regulation (EU) No 517/2014.
6. Refrigerant piping size applicable to European installations are shown in parentheses.

*1 Seasonal efficiency of Eurovent certification condition SEER/SCOP certified value according to the max air flow limit of 275m^3/h/kW stated in the Eurovent certification rules.
*2 Lot 6/21 performances.

4–6 HP (12.1kW – 15.5kW)

R410A Blue Fin

Technical focus

- Compact & flexible design
- High efficiency with EER up to 3.82
- Easy maintenance & Quick installation
- Available in 1-phase (KXZEN1) and 3-Phase (KXZES1)
- Total piping length up to 100m and a maximum pipe run of 70m

FDC121–155

SPECIFICATIONS

Item		Model	FDC121KXZEN1	FDC140KXZEN1	FDC155KXZEN1	FDC121KXZES1	FDC140KXZES1	FDC155KXZES1
Nominal horse power			4HP	5HP	6HP	4HP	5HP	6HP
Power source			1 Phase 220-240V, 50Hz			3 Phase 380-415V, 50Hz		
Nominal capacity	Cooling	kW	12.1	14.0	15.5	12.1	14.0	15.5
	Heating	kW	12.1	14.0	15.5	12.1	14.0	15.5
Max heating capacity		kW	12.5	16.0	16.3	12.5	16.0	16.3
Power consumption *2 (Lot6/21)	Cooling	kW	3.16	3.96	5.20	3.16	3.96	5.20
	Heating	kW	3.09	3.66	4.28	3.09	3.66	4.28
EER *2 (Lot6/21)			3.82	3.54	2.98	3.82	3.54	2.98
COP *2 (Lot6/21)			3.91	3.83	3.62	3.91	3.83	3.62
SEER *1(Eurovent Certification condition)			7.37	7.06	6.68	7.37	7.06	6.68
SCOP *1(Eurovent Certification condition)			4.52	4.52	4.41	4.52	4.52	4.41
SEER *2 (Lot6/21)			8.15	7.73	7.21	8.15	7.73	7.21
SCOP *2 (Lot6/21)			4.63	4.59	4.55	4.63	4.59	4.55
Exterior dimensions (HxWxD)		mm	845x970x370					
Net weight		kg	85			87		
Sound power level *2 (Lot6/21)	Cooling	dB(A)	70	71	71	70	71	71
	Heating	dB(A)	72	72	74	72	72	74
Sound pressure level	Cooling	dB(A)	53	53	54	53	53	54
	Heating	dB(A)	56	57	57	56	57	57
Starting current		A	5					
Max current		A	28.0			13.5		
Refrigerant	Type / GWP		R410A / 2088					
	Charge	kg	5.0					
	TCO_2Eq		10.44					
Refrigerant piping size	Liquid	mm (in)	ø9.52(3/8")					
	Gas	mm (in)	ø15.88(5/8")					
Total piping length		m	100					
Outdoor operating temperature range	Cooling	°CDB	-15–43					
	Heating	°CWB	-20–15.5					
Capacity connection		%	80–150					
Number of connectable indoor units			8	10*3	10*3	8	10*3	10*3

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. SEER/SCOP are based on EN14825:2016 and Commission regulation (EU) No.2016/2281. Temperature conditions for calculating SCOP are based on "Average climate".
3. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
4. 'tonne(s) of CO_2 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.
5. Refrigerant contained in the products is a fluorinated greenhouse gas listed in Regulation (EU) No 517/2014.
6. Refrigerant piping size applicable to European installations are shown in parentheses.

*1 Seasonal efficiency of Eurovent certification condition SEER/SCOP certified value according to the max air flow limit of 275m^3/h/kW stated in the Eurovent certification rules.
*2 Lot 6/21 performances.
*3 When connecting 9 units or more, set the total capacity as follows : 5HP : 110% or less, 6HP : 100% or less. In the case of R410A.

8–12 HP (22.4kW – 33.5kW)

R410A Blue Fin

Technical focus

- Compact & flexible design
- High efficiency with EER up to 4.00
- Easy transportation & Quick installation
- Connect up to 24 indoor units / up to 150% capacity
- Total piping length up to 510m and a maximum pipe run of 160m

FDC224–335

SPECIFICATIONS

Item		Model	FDC224KXZME1	FDC280KXZME1	FDC335KXZME1A
Nominal horse power			8HP	10HP	12HP
Power source			3 Phase 380-415V, 50Hz		
Nominal capacity	Cooling	kW	22.4	28.0	33.5
	Heating		22.4	28.0	33.5
Max heating capacity		kW	25.0	31.5	37.5
Power consumption	Cooling	kW	5.59	7.90	10.68
	Heating		4.97	6.53	8.44
EER			4.00	3.54	3.13
COP			4.50	4.28	3.96
SEER			6.55	6.03	5.84
SCOP			4.55	4.54	4.04
Exterior dimensions (HxWxD)		mm	1675x1080x480		
Net weight		kg	221		224
Sound power level	Cooling	dB(A)	73	75	75
	Heating		75	76	77
Sound pressure level	Cooling	dB(A)	58	60	60
	Heating		59	60	62
Starting current		A	5		
Max current		A	20.0		23.0
Refrigerant	Type / GWP		R410A / 2088		
	Charge	kg	11.5		
	TCO_2Eq		24.012		
Refrigerant piping size	Liquid	mm (in)	ø9.52(3/8")		ø12.7(1/2")
	Gas		ø19.05(3/4")	ø22.22(7/8")	ø25.4(1") [ø22.22(7/8")]
Total piping length		m	510		
Outdoor operating temperature range	Cooling*1	°CDB	-15–46		
	Heating	°CWB	-20–15.5		
Capacity connection		%	50–150		
Number of connectable indoor units			22	24	24

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. SEER/SCOP are based on EN14825:2016 and Commission regulation (EU) No.2016/2281. Temperature conditions for calculating SCOP are based on "Average climate".
3. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
4. 'tonne(s) of CO_2 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.
5. Refrigerant contained in the products is a fluorinated greenhouse gas listed in Regulation (EU) No 517/2014.
6. Refrigerant piping size applicable to European installations are shown in parentheses.

*1 With limitation to height difference between indoor and outdoor units and installation space.

KXZ Lite Heat pump systems

8, 10 HP (22.4kW · 28.0kW)

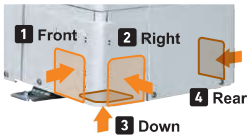
R410A Blue Fin

Technical focus

- Compact & flexible design
- High efficiency with EER up to 4.00
- KXZ Lite extends a cooling range operation up to 50°C.
- Connect up to 8 indoor units / up to 120% capacity
- Total piping length up to 150m and a maximum pipe run of 120m
- External static pressure is available up to 35 Pa
- Improved installation items

FDC224 · 280

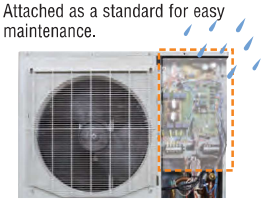
Improved freedom of piping layout



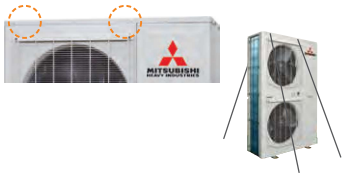
Hole size became 120% bigger.

A transparent rain cover

Attached as a standard for easy maintenance.



Wire insertion holes for fall prevention



Fixing screws to service panel

Decreased number of screws from 5 to 2, installation & service speed is improved.

■ SPECIFICATIONS

Item		Model	FDC224KXZPE1	FDC280KXZPE1
Nominal horse power			8HP	10HP
Power source			3 Phase 380-415V, 50Hz	
Nominal capacity	Cooling	kW	22.4	28.0
	Heating		22.4	28.0
Power consumption	Cooling	kW	5.6	7.87
	Heating		4.8	6.47
EER			4.00	3.56
COP			4.67	4.33
SEER			6.65	6.68
SCOP			4.34	4.50
Exterior dimensions (HxWxD)		mm	1505x970x370	
Net weight		kg	165	
Sound power level	Cooling	dB(A)	72	74
	Heating		73	76
Sound pressure level	Cooling	dB(A)	59	60
	Heating		60	63
Starting current		A	5	
Max current		A	21.0	22.0
Refrigerant	Type / GWP		R410A / 2088	
	Charge	kg	8.9	
	TCO_2Eq		18.583	
Refrigerant piping size	Liquid	mm (in)	ø9.52(3/8")	
	Gas		ø19.05(3/4")	ø22.22(7/8")
Total piping length		m	150	
Outdoor operating temperature range	Cooling	°CDB	-15~50	
	Heating	°CWB	-20~15.5	
Capacity connection		%	50~120	
Number of connectable indoor units			8	

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. SEER/SCOP are based on EN14825:2016 and Commission regulation (EU) No.2016/2281. Temperature conditions for calculating SCOP are based on "Average climate".
3. Sound pressure level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.
4. 'tonne(s) of CO_2 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.
5. Refrigerant contained in the products is a fluorinated greenhouse gas listed in Regulation (EU) No 517/2014.
6. Refrigerant piping size applicable to European installations are shown in parentheses.

KXZ series

KXZ Water cooled series

8–36HP (22.4kW – 100.0kW)

R410A

Technical focus

- Ideal for high rise buildings, using water as heat source

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.)

FDC224–335

FDC450–670

FDC730–1000

■ SPECIFICATIONS

Item			Model	FDC224KXZWE1	FDC280KXZWE1	FDC335KXZWE1	FDC450KXZWE1	FDC500KXZWE1	FDC560KXZWE1
Combination (FDC)				–	–	–	224KXZWE1	224KXZWE1	280KXZWE1
				–	–	–	224KXZWE1	280KXZWE1	280KXZWE1
				–	–	–	–	–	–
Nominal horse power				8HP	10HP	12HP	16HP	18HP	20HP
Power source				3 Phase 380-415V, 50Hz					
Nominal capacity	Cooling	kW		22.4	28.0	33.5	45.0	50.0	56.0
	Heating			25.0	31.5	37.5	50.0	56.0	63.0
Power consumption	Cooling	kW		4.23	5.75	8.13	8.49	9.83	11.5
	Heating			4.24	5.10	6.30	8.47	9.27	10.2
EER				5.30	4.87	4.12	5.30	5.09	4.87
COP				5.90	6.18	5.95	5.90	6.04	6.18
Exterior dimensions (HxWxD)		mm		1100x780x550			–		
Net weight		kg		185			185x2		
Sound pressure level	Cooling	dB(A)		48	50	52	51	52	53
	Heating								
Refrigerant	Type / GWP			R410A / 2088					
	Charge	kg		9.9			9.9+9.9		
	TCO_2Eq			20.671			–		
Refrigerant piping size	Liquid	mm (in)		ø9.52(3/8")		ø12.7(1/2")			
	Gas			ø19.05(3/4")	ø22.22(7/8")	ø25.4(1") [ø22.22(7/8")]	ø28.58(1·1/8")		
	Oil equalization			–	–	–	ø9.52(3/8")		
Water piping size	Water inlet			R1 1/4					
	Water outlet			R1 1/4					
	Drain outlet			Rp 1/2(internal thread)					
Total piping length		m		510					
Capacity connection		%		50–150					
Number of connectable indoor units				22	28	33	44	50	56

1.The data are measured at the following condition:
Cooling: Indoor temp. of 27 °CDB,19 °CWB, and heat source unit inlet water temp. of 30 °C, water flow rate 96 L/min
Heating: Indoor temp. of 20 °CDB,15 °CWB, and heat source unit inlet water temp. of 20 °C, water flow rate 96 L/min
2.Refrigerant piping size applicable to European installations are shown in parentheses.

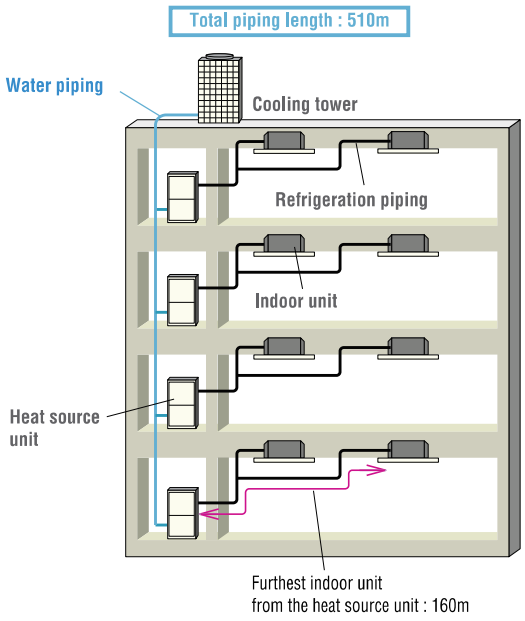
1. High-rise Building

- 100m or higher in height

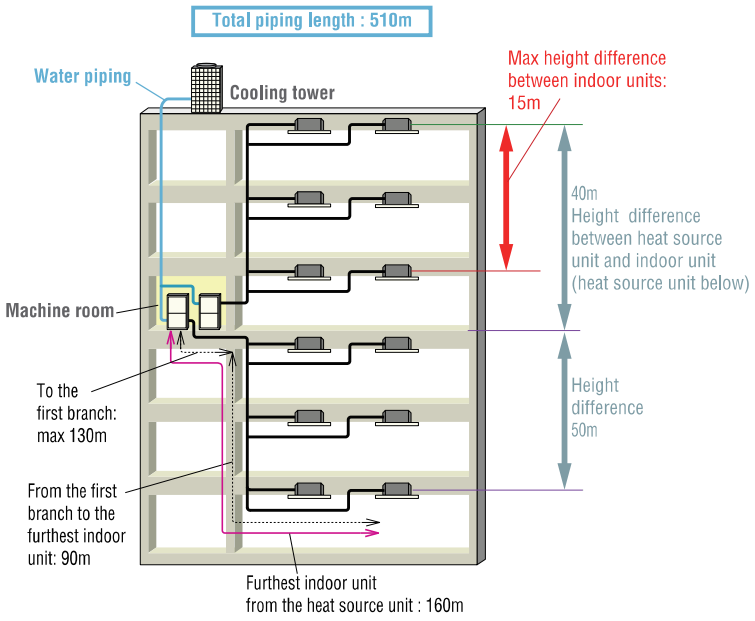
2. Glass-exterior facade Building

- Possible to hide KXZW units and to keep fine sight

Heat source units on every floor
- New building projects -



Heat source units in the machine room
- Renovation projects -



FDC615KXZWE1	FDC670KXZWE1	FDC730KXZWE1	FDC775KXZWE1	FDC850KXZWE1	FDC900KXZWE1	FDC950KXZWE1	FDC1000KXZWE1
280KXZWE1	335KXZWE1	224KXZWE1	224KXZWE1	280KXZWE1	280KXZWE1	280KXZWE1	335KXZWE1
335KXZWE1	335KXZWE1	224KXZWE1	280KXZWE1	280KXZWE1	280KXZWE1	335KXZWE1	335KXZWE1
–	–	280KXZWE1	280KXZWE1	280KXZWE1	335KXZWE1	335KXZWE1	335KXZWE1
22HP	24HP	26HP	28HP	30HP	32HP	34HP	36HP
3 Phase 380-415V, 50Hz							
61.5	67.0	73.0	77.5	85.0	90.0	95.0	100.0
69.0	75.0	82.5	90.0	95.0	100.0	106.0	112.0
13.7	16.3	14.2	15.5	17.5	19.5	21.7	24.3
11.4	12.6	13.8	14.8	15.4	16.4	17.6	18.8
4.49	4.11	5.14	5.00	4.86	4.62	4.38	4.12
6.05	5.95	5.98	6.08	6.17	6.10	6.02	5.96
–		–			–		
370		555					
54	55	54		55	56		57
R410A / 2088							
9.9+9.9		9.9x3					
–		–			–		
ø12.7(1/2")		ø15.88(5/8")					
ø28.58(1·1/8")		ø31.75(1·1/4") [ø34.92(1·3/8")]					ø38.1(1·1/2") [ø34.92(1·3/8")]
ø9.52(3/8")							
R1 1/4							
R1 1/4							
Rp 1/2(internal thread)							
510							
50–150							
61	67	72	78	80			