

KXZX Hi-COP VRF-T SYSTEM

Unprecedented efficiency in heating and cooling

In any combination of outdoor units, KXZX heat pump systems provide increased energy efficiency.



8HP
(22.4 kW)



10~12HP
(28.0~33.5 kW)

Heat pump



KXZX Hi-COP

8-12HP (22.4-33.5 kW)

CONNECT UP TO 44 INDOOR UNITS/200% CAPACITY

- FDC 224 KXZE1 22.4 kW
- FDC 280 KXZE1 28.0 kW
- FDC 335 KXZE1 33.5 kW

CHARACTERISTICS

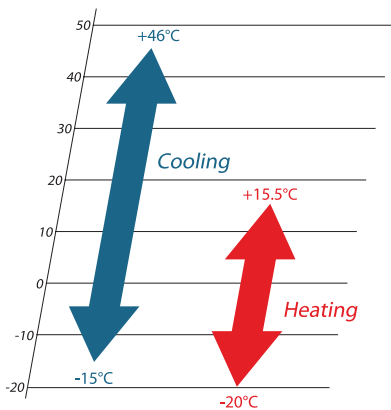
- Maximum energy efficiency COP 4.61 (10HP)
- Only DC Inverter compressors
- High split: up to 1000 m in total and with a maximum distance between the O.U. and the furthest I.U. of 160 m

Combinazioni 16-36HP (45.0-100.0 kW)

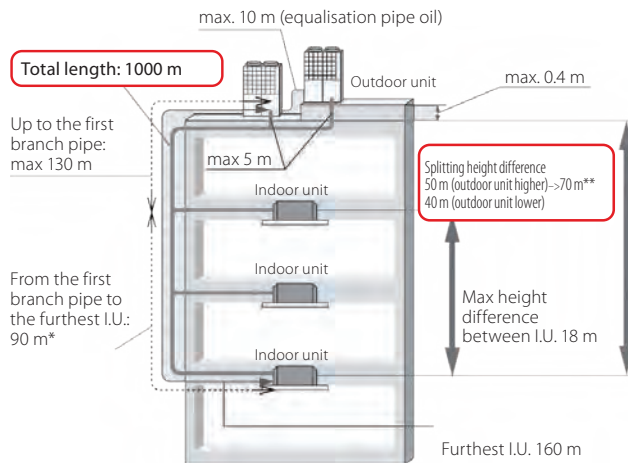
CONNECT UP TO 80 INDOOR UNITS/160% (FDC 450 KXZE1 200%) CAPACITY

- FDC 450 KXZE1 (FDC 224+FDC 224) 45,0 kW
- FDC 500 KXZE1 (FDC 224+FDC 280) 50,0 kW
- FDC 560 KXZE1 (FDC 280+FDC 280) 56,0 kW
- FDC 615 KXZE1 (FDC 280+FDC 335) 61,5 kW
- FDC 670 KXZE1 (FDC 335+FDC 335) 67,0 kW
- FDC 735 KXZE1 (FDC 224+FDC 224+FDC 280) 73,5 kW
- FDC 800 KXZE1 (FDC 224+FDC 280+FDC 280) 80,0 kW
- FDC 850 KXZE1 (FDC 280+FDC 280+FDC 280) 85,0 kW
- FDC 900 KXZE1 (FDC 280+FDC 280+FDC 335) 90,0 kW
- FDC 950 KXZE1 (FDC 280+FDC 335+FDC 335) 95,0 kW
- FDC 1000 KXZE1 (FDC 335+FDC 335+FDC 335) 100,0 kW

OPERATING RANGE



INSTALLATION DIAGRAM



* With difference of length between the furthest indoor unit and the nearest one from the first branch pipe < 40 m (MAX 85 m).
 ** Comply with installation conditions. For details, refer to the Technical Manual.

FDC 224 KXZE1



FDC 280-335 KXZE1



CHARACTERISTICS Hi-COP

- High efficiency
- Low consumption
- High energy savings

Models			FDC224KXZE1	FDC280KXZE1	FDC335KXZE1
Rated power			HP	8	10
Nominal capacity (T=35°C)	Cooling	kW	22.40	28.00	33.50
Power consumption (T=35°C)		kW	4.98	6.95	8.68
Seasonal energy efficiency index		SEER ¹	7.58	7.27	7.41
Rated energy efficiency coefficient		EER ²	4.50	4.03	3.86
Nominal capacity (T=7°C)	Heating	kW	25.00	31.50	37.50
Power consumption (T=7°C)		kW	5.56	6.83	8.39
Seasonal energy efficiency index		SCOP ¹	4.86	4.91	4.86
Rated energy efficiency coefficient		COP ²	4.50	4.61	4.47
Electrical data					
Power		Ph-V-Hz	3Ph-380~415V-50Hz		
Rated current	Cooling	A	8.70	11.70	14.70
Rated current	Heating	A	9.60	11.70	14.30
Refrigerant circuit/features					
Refrigerant (GWP) ³			R410A (2088)		
Quantity refrigerant pre-load ⁴	kg		11	11.5	11.5
Tons of CO2 equivalent			22.968	24.012	24.012
Diameter refrigerant pipes	Liquid	inch	ø3/8" (9.52)	ø3/8" (9.52)	ø1/2" (12.7)
	Gas	(mm)	ø3/4" (19.05)	ø7/8" (22.22)	ø1" (25.4)
	Oil balancing				
Product Specifications					
Dimensions	LxHxD	mm	1690x1350x720	2048x1350x720	2048x1350x720
Net weight	kg		280	325	325
Sound pressure level	Max	dB(A)	57	56	62
Treated air volume	Standard	m ³ /h	13200	13200	16800
Fan static pressure	Max	Pa	50	50	50
Max. connectable I.U.⁵	Min ~ Max	no	1 ~ 29	1 ~ 37	1 ~ 44
	Capacity	%	80 ~ 200	80 ~ 200	80 ~ 200

1. EU Regulation No. 206/2012 - N2281/2016 - Value measured according to the harmonised standard EN 14825. 2. Value measured according to the harmonised standard EN 14511. 3. Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 2088 times higher than 1 kg of CO₂ over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary. 4. For the calculation of the additional refrigerant charge refer to the labels placed inside and outside the unit. 5. When connecting indoor units of type FDK, FDFL, FDFU or FDFW the upper limit is always 130%.

COMBINATIONS

Models			FDC450KXZE1	FDC500KXZE1	FDC560KXZE1	FDC615KXZE1	FDC670KXZE1
Combinations			FDC224KXZE1	FDC224KXZE1	FDC280KXZE1	FDC280KXZE1	FDC335KXZE1
			FDC224KXZE1	FDC280KXZE1	FDC280KXZE1	FDC335KXZE1	FDC335KXZE1
Rated power			HP	16	18	20	22
Nominal capacity (T=35°C)	Cooling	kW	45.00	50.00	56.00	61.50	67.00
Power consumption (T=35°C)		kW	10.00	11.80	13.90	15.60	17.40
Rated energy efficiency coefficient		EER ¹	4.50	4.24	4.03	3.94	3.85
Nominal capacity (T=7°C)		Heating	kW	50.00	56.00	63.00	69.00
Power consumption (T=7°C)	kW		11.10	12.30	13.70	15.20	16.80
Rated energy efficiency coefficient	COP ¹		4.50	4.55	4.60	4.54	4.46
Electrical data							
Power		Ph-V-Hz	3Ph-380~415V-50Hz				
Rated current	Cooling	A	17.50	20.00	23.50	26.40	29.30
Rated current	Heating	A	19.20	21.20	23.30	26.00	28.60
Refrigerant circuit/features							
Refrigerant (GWP) ²			R410A (2088)				
Quantity refrigerant pre-load ³	kg		22	22.5	23	23	23
Tons of CO2 equivalent			45.936	46.980	48.024	48.024	48.024
Diameter refrigerant pipes ⁴	Liquid	inch	ø1/2" (12.7)	ø1/2" (12.7)	ø1/2" (12.7)	ø1/2" (12.7)	ø1/2" (12.7)
	Gas	(mm)	ø1-1/8" (28.58)	ø1-1/8" (28.58)	ø1-1/8" (28.58)	ø1-1/8" (28.58)	ø1-1/8" (28.58)
	Oil balancing		ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)
Product Specifications							
Dimensions	LxHxD	mm	1690x2700x720	2048x2700x720	2048x2700x720	2048x2700x720	2048x2700x720
Net weight	kg		560	605	650	650	650
Max. connectable I.U.⁵	Min ~ Max	no	2 ~ 60	2 ~ 53	2 ~ 59	2 ~ 65	2 ~ 71
	Capacity	%	80 ~ 200	80 ~ 160	80 ~ 160	80 ~ 160	80 ~ 160

Models			FDC735KXZE1	FDC800KXZE1	FDC850KXZE1	FDC900KXZE1	FDC950KXZE1	FDC1000KXZE1
Combinations			FDC224KXZE1	FDC224KXZE1	FDC280KXZE1	FDC280KXZE1	FDC280KXZE1	FDC335KXZE1
			FDC224KXZE1	FDC280KXZE1	FDC280KXZE1	FDC280KXZE1	FDC335KXZE1	FDC335KXZE1
Rated power			HP	26	28	30	32	34
Nominal capacity (T=35°C)	Cooling	kW	73.50	80.00	85.00	90.00	95.00	100.00
Power consumption (T=35°C)		kW	17.10	19.30	21.10	22.70	24.30	25.90
Rated energy efficiency coefficient		EER ¹	4.30	4.15	4.03	3.96	3.91	3.86
Nominal capacity (T=7°C)		Heating	kW	82.50	90.00	95.00	100.00	106.00
Power consumption (T=7°C)	kW		18.20	19.70	20.60	21.90	23.50	25.10
Rated energy efficiency coefficient	COP ¹		4.53	4.57	4.61	4.57	4.51	4.46
Electrical data								
Power		Ph-V-Hz	3Ph-380~415V-50Hz					
Rated current	Cooling	A	29.40	32.90	35.60	38.40	41.00	43.70
Rated current	Heating	A	31.40	33.50	35.20	37.40	40.10	42.80
Refrigerant circuit/features								
Refrigerant (GWP) ²			R410A (2088)					
Quantity refrigerant pre-load ³	kg		33.5	34	34.5	34.5	34.5	34.5
Tons of CO2 equivalent			69.948	70.992	72.036	72.036	72.036	72.036
Diameter refrigerant pipes ⁴	Liquid	inch	ø5/8" (15.88)	ø5/8" (15.88)	ø5/8" (15.88)	ø5/8" (15.88)	ø5/8" (15.88)	ø5/8" (15.88)
	Gas	(mm)	ø1-1/4" (31.75)	ø1-1/4" (31.75)	ø1-1/4" (31.75)	ø1-1/4" (31.75)	ø1-1/4" (31.75)	ø1-1/4" (31.75)
	Oil balancing		ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)	ø3/8" (9.52)
Product Specifications								
Dimensions	LxHxD	mm	2048x4050x720	2048x4050x720	2048x4050x720	2048x4050x720	2048x4050x720	2048x4050x720
Net weight	kg		885	930	975	975	975	975
Max. connectable I.U.⁵	Min ~ Max	no	3 ~ 78	3 ~ 80	3 ~ 80	3 ~ 80	3 ~ 80	3 ~ 80
	Capacity	%	80 ~ 160	80 ~ 160	80 ~ 160	80 ~ 160	80 ~ 160	80 ~ 160

1. Value measured according to the harmonised standard EN 14511. 2. Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 2088. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 2088 times higher than 1 kg of CO₂ over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary. 3. For the calculation of the additional refrigerant charge, refer to the labels positioned inside and outside the unit. 4. The diameters indicated refer to the section up to the first junction, with an equivalent length of less than 90 m. 5. When connecting indoor units of type FDK, FDFL, FDFU or FDFW the upper limit is always 130%.