

KXZ2 VRF-T SYSTEM

The best solution for
the air conditioning of
“sophisticated” buildings

High air conditioning performance for all
business environments.

Comfort and energy efficiency, system
flexibility, intuitive and customisable
controls, as well as even simpler
maintenance and management.



10~12HP
(28.0~33.5 kW)



14~20HP
(40.0~56.0 kW)

KXZ2



Heat pump - modular outdoor units

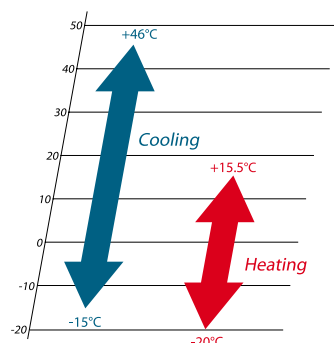
CONNECT UP TO 44 INDOOR UNITS/200% CAPACITY

FDC 280 KXZE2 28.0 kW

FDC 335 KXZE2 33.5 kW



OPERATING RANGE

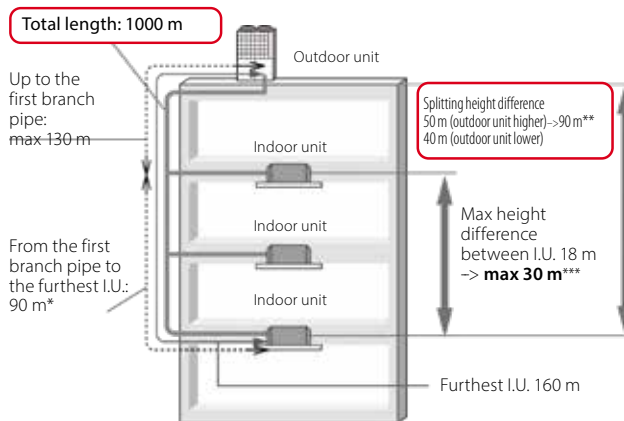


10~12HP (28.0~33.5 kW)

CHARACTERISTICS

- Maximum energy efficiency COP 4.25 and EER 3.86 [10 HP]
- 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
- Up to 85 Pa prevalence on fans

INSTALLATION DIAGRAM



* With difference of length between the farthest 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.
 *** It is necessary to change the corresponding setting of each difference in level during installation. Range of use also varies.

Models		FDC 280 KXZE2	FDC 335 KXZE2
Nominal Cool. capacity	kW	28.00	33.50
Cool. power consumption	kW	7.25	8.98
Seasonal energy efficiency index in Cool.	SEER ²	7.30	7.54
Rated energy efficiency coefficient in Cool.	EER ³	3.86	3.73
Nominal Heat. capacity	kW	31.50	37.50
Heat. power consumption	kW	7.41	9.03
Seasonal energy efficiency index in Heat.	SCOP ²	4.88	4.68
Rated energy efficiency coefficient in Heat.	COP ³	4.25	4.15
Power		Three-phase 380-415V 50Hz	
Rated current in Cool.	A	12.00	14.70
Rated current in Heat.	A	12.20	14.80
Sound level	dB(A)	56	63
External dimensions (HxLxD)	mm	1697 x 1350 x 720	
Exterior appearance (Munsell colour)		White plaster (4.2Y7.5/1.1) and dark silver (0.5Y4.3/0.1) equivalent	
Net weight	kg	288	
Refrigerant circuit/Compressor type and qty.		GTC5150NC47BF x 1	
Motor	kW	4.76 x 1	5.94 x 1
Starting method		Direct. in line	
Indoor System Units	Number of connectable I.U. Total connectable capacity*	1-37 140-560	1-44 168-670
Crankcase heater	W	33 x 1	
Refrigerant circuit/Heat exchanger		Pipes finned with Blue fin treatment and grooved internally	
Refrigerant control		Electronic expansion valve	
Refrigerant/GWP ⁴		R410A / 2088	
Quantity	kg	11	
Tons of CO ₂ equivalent		22.97	
Refrigerant oil	l	2.25 (M-MA32R)	
Defrost control		Micro -computerised	
Air treatment/Fan type and quantity		Axial fan x 2	
Motor	W	560 x 2	
Starting method		Direct	
Air flow (Standard)	m ³ /h	13500	17640
Available static pressure	Pa	Max 85	
Shock and vibration absorption		Rubber vibration absorber (for compressor)	
Safety devices		Compressor overheating protection/overcurrent/power transistor overheating protection/abnormal high pressure protection	
Diameter refrigerant pipes	mm (inch)	Liquid side: ø9.52 (3/8") Gas side: ø22.22 (7/8")	Liquid side: ø12.7 (1/2") Gas side: ø25.4 (1") - ø22.22 (7/8")
Joining method		Gas side: brazing / Liquid side: flare	
Condensate drain		Drain holes: ø20 x 10 pcs; ø45 x 3 pcs	
Piping insulation		Necessary (on both sides. liquid and gas)	
Accessories		-	

* When connecting the indoor units in the following series: FDK, FDL, FDFU or FDFW, the power of the connectable indoor units cannot exceed 130%.

² EU Regulation No.2281/2016 -- Value measured according to harmonised standard EN14825. ³ Value measured according to harmonised standard EN14511. ⁴ 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.

KXZ2



Heat pump - modular outdoor units

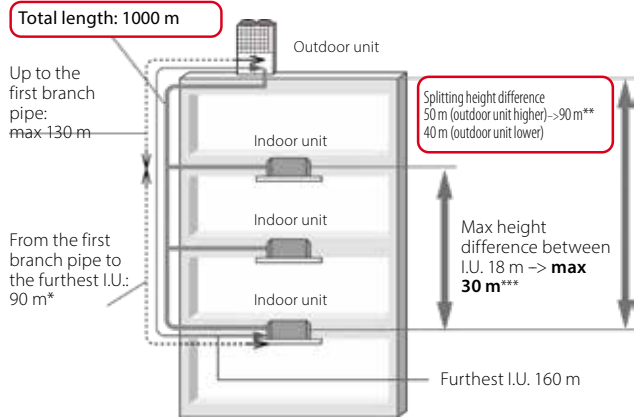
CONNECT UP TO 59 INDOOR UNITS/160% (FDC 400~450 KXZE2 200%) CAPACITY

FDC 400 KXZE2	40.0 kW	FDC 500 KXZE2	50.0 kW
FDC 450 KXZE2	45.0 kW	FDC 560 KXZE2	56.0 kW
FDC 475 KXZE2	47.5 kW		

CHARACTERISTICS

- Maximum energy efficiency COP 4.40 and EER 3.64 [14 HP]
- 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
- Up to 85 Pa prevalence on fans

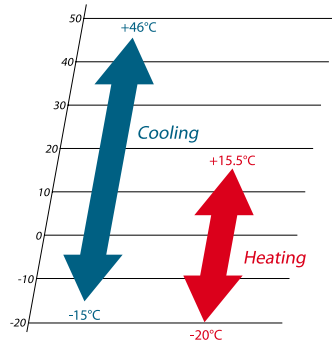
INSTALLATION DIAGRAM



* With difference of length between the farthest 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.
 *** È necessario cambiare l'impostazione corrispondente di ciascun dislivello durante l'installazione. Anche il range di utilizzo varia.



OPERATING RANGE



14~20HP (40.0~56.0 kW)

Models		FDC 400 KXZE2	FDC 450 KXZE2	FDC 475 KXZE2	FDC 500 KXZE2	FDC 560 KXZE2
Nominal Cool. capacity	kW	40.00	45.00	47.50	50.00	56.00
Cool. power consumption	kW	10.98	13.98	13.97	14.01	17.50
Seasonal energy efficiency index in Cool.	SEER ²	7.12	7.01	6.84	7.29	6.73
Rated energy efficiency coefficient in Cool.	EER ³	3.64	3.22	3.40	3.57	3.20
Nominal Heat. capacity	kW	45.00	50.00	53.00	56.00	63.00
Heat. power consumption	kW	10.23	12.50	12.99	13.56	16.15
Seasonal energy efficiency index in Heat.	SCOP ²	4.87	4.36	4.45	4.58	4.30
Rated energy efficiency coefficient in Heat.	COP ³	4.40	4.00	4.08	4.13	3.90
Power		Three-phase 380~415V 50Hz				
Rated current in Cool.	A	17.60	22.40	22.60	22.60	26.90
Rated current in Heat.	A	16.70	20.40	21.00	21.90	26.10
Sound level	dB(A)	60	61	61	61	63
External dimensions (HxLxD)	mm	2052 x 1350 x 720				
Exterior appearance (Munsell colour)		Bianco stucco (4.2Y7.5/1.1) e Argento scuro (0.5Y4.3/0.1) equivalente				
Net weight	kg	332		378		
Refrigerant circuit/Compressor type and qty.		GUC5185ND47B x 1		GTC5150NC47BF x 2		
Motor	kW	7.32 x 1	9.32 x 1	4.64 x 2	4.91 x 2	5.36 x 2
Starting method		Direct. in line				
Indoor System Units	Number of connectable I.U.	1-53	1-60	1-50	1-53	1-59
	Total connectable capacity*	200-800	225-900	238-760	250-800	280-896
Crankcase heater	W	40 x 1		33 x 2		
Refrigerant circuit/Heat exchanger		Pipes finned with Blue fin treatment and grooved internally				
Refrigerant control		Electronic expansion valve				
Refrigerant/GWP ⁴		R410A / 2088				
Quantity	kg	11.5				
Tons of CO2 equivalent		24.01				
Refrigerant oil	l	2.9 (M-MA32R)		4.2 (M-MA32R)		
Defrost control		Micro-computerised				
Air treatment/Fan type and quantity		Axial fan x 2				
Motor	W	560 x 2				
Starting method		Direct				
Air flow (Standard)	m ³ /h	18240		18000		
Available static pressure	Pa	Max 85				
Shock and vibration absorption		Rubber vibration absorber (for compressor)				
Safety devices		Compressor overheating protection/overcurrent/power transistor overheating protection/abnormal high pressure protection				
Diameter refrigerant pipes	mm (inch)	Liquid side: ø12.7 (1/2")				
		Gas side: ø25.4 (1") - ø28.58 (1-1/8")	Gas side: ø28.58 (1-1/8")			
Joining method		Gas side: brazing / Liquid side: flare				
Condensate drain		Drain holes: ø20 x 10 pcs; ø45 x 3 pcs				
Piping insulation		Necessary (on both sides. liquid and gas)				
Accessories		-				

* When connecting the indoor units in the following series: FDK, FDL, FDFU or FDFW, the power of the connectable indoor units cannot exceed 130%.
 2. EU Regulation No.2281/2016 -- Value measured according to harmonised standard EN14825. 3. Value measured according to harmonised standard EN14511. 4. 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.

KXZ2



Heat pump - modular outdoor units

CONNECT UP TO 71 INDOOR UNITS/160% CAPACITY

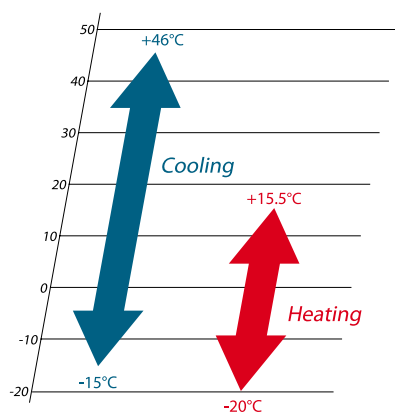
FDC 615 KXZE2 (FDC 280+FDC 335) 61.5 kW

FDC 670 KXZE2 (FDC 335+FDC 335) 67.0 kW

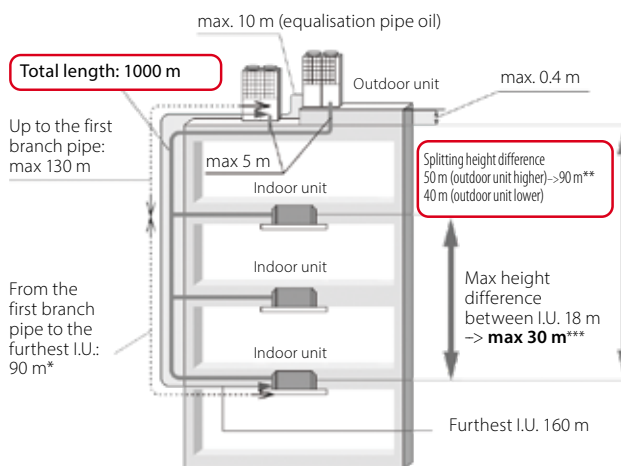
CHARACTERISTICS

- Maximum energy efficiency COP 4.20 and EER 3.79 [22 HP]
- 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
- Up to 85 Pa prevalence on fans

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.

*** È necessario cambiare l'impostazione corrispondente di ciascun dislivello durante l'installazione. Anche il range di utilizzo varia.



COMBINATIONS

Models		FDC 615 KXZE2	FDC 670 KXZE2
Combinations		FDC 280 KXZE2	FDC 335 KXZE2
		FDC 335 KXZE2	FDC 335 KXZE2
Power		Three-phase 380-415V 50Hz	
Nominal Cool. capacity	kW	61.50	67.00
Cool. power consumption	kW	16.24	17.96
Rated energy efficiency coefficient in Cool.	EER ³	3.79	3.73
Nominal Heat. capacity	kW	69.00	75.00
Heat. power consumption	kW	16.44	18.06
Rated energy efficiency coefficient in Heat.	COP ³	4.20	4.15
Rated current in Cool.	A	26.70	29.40
Rated current in Heat.	A	27.00	29.60
Indoor System Units	Number of connectable I.U.	2-65	2-71
	Total connectable capacity*	308-984	335-1072
Net weight	kg	576	
Diameter refrigerant pipes	mm (inch)	Liquid side: ø12.7 (1/2")	
		Gas side: ø28.58 (1-1/8")	
Oil equalisation	mm (inch)	ø9.52 (3/8")	

* When connecting the indoor units in the following series: FDK, FDFL, FDFU or FDFW, the power of the connectable indoor units cannot exceed 130%.

3. Value measured according to harmonised standard EN14511.

Heat pump - modular outdoor units

CONNECT UP TO 80 INDOOR UNITS/160% CAPACITY (FDC 1000~1120 KXZE2 130%)

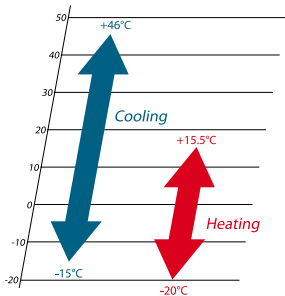
FDC 735 KXZE2 (FDC 335+FDC 400) 73.5 kW
 FDC 800 KXZE2 (FDC 400+FDC 400) 80.0 kW
 FDC 850 KXZE2 (FDC 400+FDC 450) 85.0 kW
 FDC 900 KXZE2 (FDC 450+FDC 450) 90.0 kW

FDC 950 KXZE2 (FDC 475+FDC 475) 95.0 kW
 FDC 1000 KXZE2 (FDC 500+FDC 500) 100.0 kW
 FDC 1060 KXZE2 (FDC 500+FDC 560) 106.0 kW
 FDC 1120 KXZE2 (FDC 560+FDC 560) 112.0 kW

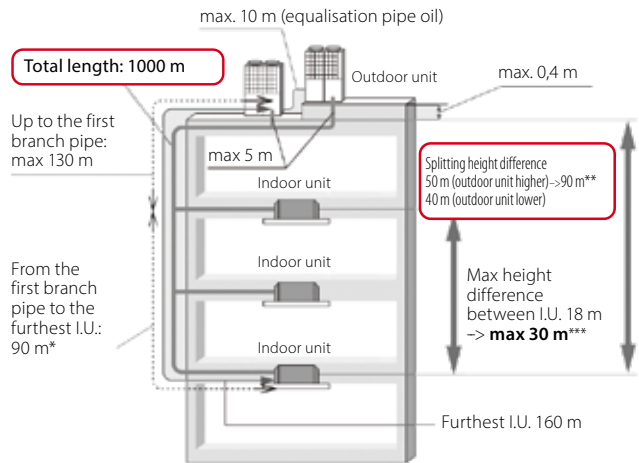
CHARACTERISTICS

- Maximum energy efficiency COP 4.40 (28HP); EER 3.68 [26 HP]
- 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
- Up to 85 Pa prevalence on fans

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.
 *** È necessario cambiare l'impostazione corrispondente di ciascun dislivello durante l'installazione. Anche il range di utilizzo varia.

26HP (73.5)



28~40HP (80~112.0 kW)

COMBINATIONS

Models	FDC 735 KXZE2	FDC 800 KXZE2	FDC 850 KXZE2	FDC 900 KXZE2	FDC 950 KXZE2	FDC 1000 KXZE2	FDC 1060 KXZE2	FDC 1120 KXZE2	
Combinations	FDC 335 KXZE2 FDC 400 KXZE2	FDC 400 KXZE2 FDC 400 KXZE2	FDC 400 KXZE2 FDC 450 KXZE2	FDC 450 KXZE2 FDC 450 KXZE2	FDC 475 KXZE2 FDC 475 KXZE2	FDC 500 KXZE2 FDC 500 KXZE2	FDC 500 KXZE2 FDC 560 KXZE2	FDC 560 KXZE2 FDC 560 KXZE2	
Power	Three-phase 380-415V 50Hz								
Nominal Cool. capacity	kW	73.50	80.00	85.00	90.00	95.00	100.00	106.00	
Cool. power consumption	kW	19.96	21.96	24.96	27.95	27.94	28.02	31.51	
Rated energy efficiency coefficient in Cool.	EER ³	3.68	3.64	3.41	3.22	3.40	3.57	3.36	
Nominal Heat. capacity	kW	82.50	90.00	95.00	100.00	106.00	112.00	119.00	
Heat. power consumption	kW	19.26	20.45	22.73	25.00	25.98	27.12	29.71	
Rated energy efficiency coefficient in Heat.	COP ³	4.28	4.40	4.18	4.00	4.08	4.13	4.01	
Rated current in Cool.	A	32.30	35.20	40.00	44.80	45.20	45.20	49.50	
Rated current in Heat.	A	31.50	33.40	37.10	40.80	42.00	43.80	48.00	
Indoor System Units	Number of connectable I.U.	2-78		2-80					
	Total connectable capacity*	368-1176	400-1280	425-1360	450-1440	475-1520	500-1300	530-1378	
Net weight	kg	620	664			756			
Diameter refrigerant pipes	mm (inch)	Liquid side: ø15.88 (5/8")				Liquid side: ø19.05(3/4")			
		Gas side: ø31.75 (1-1/4") - ø34.92 (1-3/8")				Gas side: ø38.1 (1-1/2") - ø34.92 (1-3/8")			
Oil equalisation	mm (inch)	ø9.52 (3/8")							

* When connecting the indoor units in the following series: FDK, FDFL, FDFU or FDFW, the power of the connectable indoor units cannot exceed 130%.
 3. Value measured according to harmonised standard EN14511.

KXZ2



Heat pump - modular outdoor units

CONNECT UP TO 80 INDOOR UNITS/130% CAPACITY

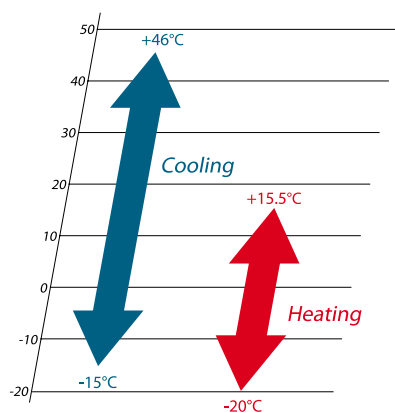
FDC 1200 KXZE2 (FDC 400+FDC 400+FDC 400)	120.0 kW
FDC 1250 KXZE2 (FDC 400+FDC 400+FDC 450)	125.0 kW
FDC 1300 KXZE2 (FDC 400+FDC 450+FDC 450)	130.0 kW
FDC 1350 KXZE2 (FDC 450+FDC 450+FDC 450)	135.0 kW
FDC 1425 KXZE2 (FDC 475+FDC 475+FDC 475)	142.5 kW

FDC 1450 KXZE2 (FDC 475+FDC 475+FDC 500)	145.0 kW
FDC 1500 KXZE2 (FDC 500+FDC 500+FDC 500)	150.0 kW
FDC 1560 KXZE2 (FDC 500+FDC 500+FDC 560)	156.0 kW
FDC 1620 KXZE2 (FDC 500+FDC 560+FDC 560)	162.0 kW
FDC 1680 KXZE2 (FDC 560+FDC 560+FDC 560)	168.0 kW

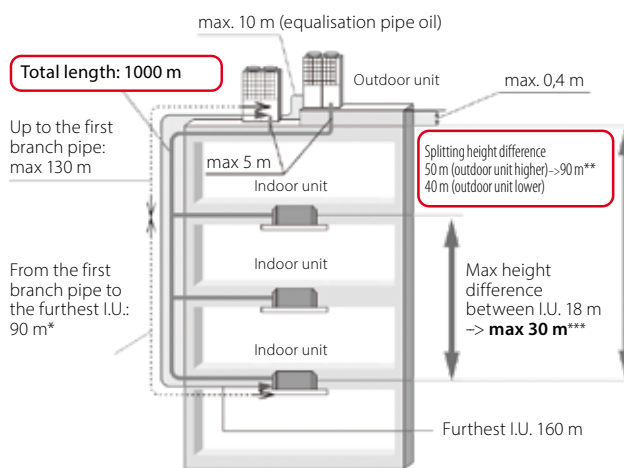
CHARACTERISTICS

- Maximum energy efficiency COP 4.40 and EER 3.64 [42 HP]
- 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
- Up to 85 Pa prevalence on fans

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.
 *** È necessario cambiare l'impostazione corrispondente di ciascun dislivello durante l'installazione. Anche il range di utilizzo varia.

42~60HP
(120.0~168.0 kW)



COMBINATIONS

Models		FDC 1200 KXZE2	FDC 1250 KXZE2	FDC 1300 KXZE2	FDC 1350 KXZE2	FDC 1425 KXZE2	FDC 1450 KXZE2	FDC 1500 KXZE2	FDC 1560 KXZE2	FDC 1620 KXZE2	FDC 1680 KXZE2	
Combinations		FDC 400 KXZE2	FDC 400 KXZE2	FDC 450 KXZE2	FDC 450 KXZE2	FDC 475 KXZE2	FDC 475 KXZE2	FDC 500 KXZE2	FDC 500 KXZE2	FDC 500 KXZE2	FDC 560 KXZE2	
Power		Three-phase 380-415V 50Hz										
Nominal Cool. capacity	kW	120.00	125.00	130.00	135.00	142.50	145.00	150.00	156.00	162.00	168.00	
Cool. power consumption	kW	32.94	35.94	38.93	41.93	41.91	41.95	42.03	45.52	49.01	52.50	
Rated energy efficiency coefficient in Cool.	EER ³	3.64	3.48	3.34	3.22	3.40	3.46	3.57	3.43	3.31	3.20	
Nominal Heat. capacity	kW	135.00	140.00	145.00	150.00	159.00	162.00	168.00	175.00	182.00	189.00	
Heat. power consumption	kW	30.68	32.95	35.23	37.50	38.97	39.54	40.68	43.27	45.87	48.46	
Rated energy efficiency coefficient in Heat.	COP ³	4.40	4.25	4.12	4.00	4.08	4.10	4.13	4.04	3.97	3.90	
Rated current in Cool.	A	52.80	57.60	62.40	67.20	67.80	67.80	67.80	72.10	76.40	80.70	
Rated current in Heat.	A	50.10	53.80	57.50	61.20	63.00	63.90	65.70	69.90	74.10	78.30	
Indoor System Units	Number of connectable I.U.	3-80										
	Total connectable capacity*	600-1560	625-1625	650-1690	675-1755	713-1852	725-1885	750-1950	780-2028	810-2106	840-2184	
Net weight	kg	996					1134					
Diameter refrigerant pipes	mm (inch)	Liquid side: ø19.05 (3/4") Gas side: ø38.1 (1-1/2") - ø34.92 (1-3/8")										
Oil equalisation	mm (inch)	ø9.52 (3/8")										

* When connecting the indoor units in the following series: FDK, FDFL, FDFU or FDFW, the power of the connectable indoor units cannot exceed 130%.
 3. Value measured according to harmonised standard EN14511.