

**HEAT PUMP KXZ**



# MICRO COMPACT

CONNECT UP TO 10 INDOOR UNITS/150% CAPACITY

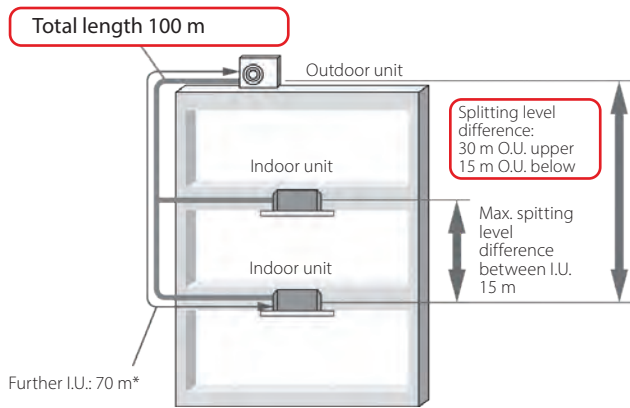
- FDC 121 KXZEN1/ZES1 12.1 kW 1-Phase/3-Phase
- FDC 140 KXZEN1/ZES1 14.0 kW 1-Phase/3-Phase
- FDC 155 KXZEN1/ZES1 15.5 kW 1-Phase/3-Phase

## FEATURES

- Maximum energy efficiency COP 3.92 (4HP)
- Rotary DC Inverter compressor on all units
- DC Inverter fan motors
- 4 sound levels in Silent mode
- New PCB cooling system: a refrigerant pipe branch passes to the base of the PCB to prevent overheating

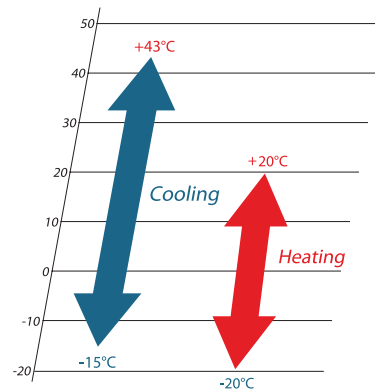
- **Can connect 1.5 kW indoor units**
- New system for managing indoor unit priorities
- "Pump down" safety function: to identify any gas leaks inside the room (third-party sensor) and start up the refrigerant recall procedure by the outdoor unit, present inside the system

## INSTALLATION DIAGRAM



\* The total length of piping, liquid side  $\varnothing 9.52$  mm (3/8") should be 50 m or less.

## OPERATING RANGE



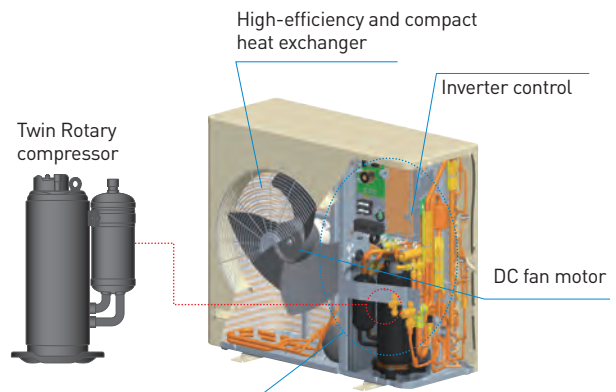
## INCREASED NB.. OF CONNECTABLE I.U.



	KXE6	NEW KXZ
4HP	6 units	→ 8 units
5HP	8 units	→ 10 units <sup>1</sup>
6HP	8 units	→ 10 units <sup>2</sup>

- 1: max capacity <=100% with 9 or 10 connected units
- 2: max capacity <=100% with 9 or 10 connected units

## HIGH EFFICIENCY OF OUTDOOR UNITS 4~6HP



Optimal refrigerant control system, advanced liquid return control, high-speed control system with Superlink, and optimised refrigerant distribution

# MICRO COMPACT

4-6HP (12.1~15.5 kW)



### REFRIGERANT CONNECTIONS

HP		4	5	6
Liquid side	Furthest I.U. =<70 m	ø 9.52 (3/8")		
Gas side		ø 15.88 (5/8")		

### BRANCH PIPES



DIS-22-1B  
DIS-180-1B

### MANIFOLDS



HEAD4-22-1B  
HEAD6-180-1B

Outdoor unit model			FDC 121 KXZEN1	FDC 140 KXZEN1	FDC 155 KXZEN1	FDC 121 KXZES1	FDC 140 KXZES1	FDC 155 KXZES1
Power class	HP		4	5	6	4	5	6
<b>Nominal data</b>								
Rated capacity	Cooling	kW	12.10	14.00	15.50	12.10	14.00	15.50
Rated power input		kW	3.16	3.96	5.20	3.16	3.96	5.20
Rated energy efficiency coefficient		EER <sup>1</sup>	3.83	3.54	2.98	3.83	3.54	2.98
Rated capacity	Heating	kW	12.10	14.00	15.50	12.10	14.00	15.50
Rated power input		kW	3.09	3.66	4.28	3.09	3.66	4.28
Rated energy performance coefficient		COP <sup>1</sup>	3.92	3.83	3.62	3.92	3.83	3.62
<b>Seasonal data</b>								
Seasonal energy efficiency index	Cooling	SEER <sup>2</sup>	8.15	7.73	7.21	8.15	7.73	7.21
Seasonal performance coefficient	Heating	SCOP <sup>2</sup>	4.63	4.59	4.55	4.63	4.59	4.55
Seasonal energy efficiency (ηs)		%	182.20	180.60	179.00	182.20	180.60	179.00
<b>Electrical data</b>								
Power supply	Ph-V-Hz		1Ph-220~240V-50Hz			3Ph-380~415V-50Hz		
Rated current	Cooling	A	15.30	19.60	25.70	5.20	6.50	8.60
	Heating	A	15.20	18.30	21.40	5.10	6.10	7.10
Maximum current	A	28.00	28.00	28.00	13.50	13.50	13.50	
<b>Refrigerant circuit data</b>								
Refrigerant <sup>3</sup>	type (GWP)		R410A (2088)					
Qty of refrigerant pre-charge (tons of CO <sub>2</sub> equivalent)	kg		5 (10.44)	5 (10.44)	5 (10.44)	5 (10.44)	5 (10.44)	5 (10.44)
Piping diameter	Liquid	inch	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)	3/8" (9.52)
	Gas	(mm)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)	5/8" (15.88)
<b>Product specifications</b>								
Dimensions	HxLxD	mm	845x970x370	845x970x370	845x970x370	845x970x370	845x970x370	845x970x370
Net weight		kg	85	85	85	87	87	87
Sound power level	Max	dB(A)	72	72	74	72	72	74
Sound pressure level	Max	dB(A)	56	57	57	56	57	57
Volume of air treated	Standard	m <sup>3</sup> /h	4500	4500	4500	4500	4500	4500
Fan static pressure	Max	Pa	-	-	-	-	-	-
Operating range (outdoor temperature)	Cooling	°C	-15~43	-15~43	-15~43	-15~43	-15~43	-15~43
	Heating	°C	-20~20	-20~20	-20~20	-20~20	-20~20	-20~20
Connectable indoor units	Min ~ Max	nb.	1 ~ 8	1 ~ 10 <sup>4</sup>	1 ~ 10 <sup>4</sup>	1 ~ 8	1 ~ 10 <sup>4</sup>	1 ~ 10 <sup>4</sup>
	Capacity	%	80 ~ 150	80 ~ 150	80 ~ 150	80 ~ 150	80 ~ 150	80 ~ 150

1. Value measured according to the harmonised standard EN14511. 2. EU Regulations No. 206/2012 - No. 2281/2016 - Value measured according to the harmonised standard EN14825. 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 CO<sub>2</sub>, 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. With limitations on maximum connectivity.