

# **KX 1:1 SYSTEMS**

- SINGLE FAN CONDENSER FOR 9.0KW 15.5KW MODELS
- ROBUST AND DURABLE DESIGN WITH BLUE FIN COATED COILS.
- FLEXIBLE 9.52MM / 15.88MM REFRIGERANT PIPING (9.0KW -15.2KW)
- HIGH STATIC, LOW PROFILE (280MM) FANCOIL UNITS WITH BUILT IN DRAIN PUMPS (9.0KW - 15.2KW)
- ADJUSTABLE ESP 10-200 PA FOR FDU FANCOIL UNITS
- QUIETER OPERATION ON BOTH INDOOR AND OUTDOOR UNITS
- COMPATIBLE WITH AIRZONE ZONING SOLUTION
- OPTIONAL WI-FI CONTROL\*

\*Requires Wi-Fi adaptor (sold separately)





### SYSTEMS

9.0kW High Static Ducted (R32   Single Phase)	
Model	Total Ex. GST (\$AUD)
FDU90KXE6F-W	
FDC90KXZEN1-W	POA
RC-EXZ3A Controller	

14kW High Static Ducted (R32   Single Phase)	
Model	Total Ex. GST (\$AUD)
FDU140KXE6F-W	
FDC140KXZEN1-W	POA
RC-EXZ3A Controller	

11.2kW High Static Ducted (R32   Three Phase)	
Model	Total Ex. GST (\$AUD)
FDU112KXE6F-W	
FDC112KXZES1-W	POA
RC-EXZ3A Controller	

15.2kW High Static Ducted	(R32   Three Phase)
Model	Total Ex. GST (\$AUD)
FDU160KXE6F-W	
FDCA155KXZES1-W	POA
RC-EXZ3A Controller	

28.0kW High Static Ducted (R410A   Three Phase)	
Model	Total Ex. GST (\$AUD)
FDC280KXZPE1	
FDU280KXZE1	POA
RC-EXZ3A Controller	

14.0kW Ceiling Cassette (R32   Single Phase)	
Model	Total Ex. GST (\$AUD)
FDC140KXZEN1-W	
FDT140KXZE1-W	DOA
RC-EXZ3A Controller	PUA
T-PSAE-5BW-E Fascia Panel	

14.0kW Ceiling Cassette (R32   Three Phase)	
Model	Total Ex. GST (\$AUD)
FDC140KXZES1-W	
FDT140KXZE1-W	DOA
RC-EXZ3A Controller	PUA
T-PSAE-5BW-E Fascia Panel	

11.2kW High Static Ducted (R32   Single Phase)	
Model	Total Ex. GST (\$AUD)
FDU112KXE6F-W	
FDC112KXZEN1-W	POA
RC-EXZ3A Controller	

15.2kW High Static Ducted (Single Phase)	
Model	Total Ex. GST (\$AUD)
FDU160KXE6F-W	
FDCA155KXZEN1-W	POA
RC-EXZ3A Controller	

14kW High Static Ducted (Three Phase)	
Model	Total Ex. GST (\$AUD)
FDU140KXE6F-W	
FDC140KXZES1-W	POA
RC-EXZ3A Controller	

22.4kW High Static Ducted (R410A   Three Phase)	
Model	Total Ex. GST (\$AUD)
FDC224KXZPE1	
FDU224KXZE1	POA
RC-EXZ3A Controller	

9.0kW Ceiling Cassette (R32   Single Phase)	
Model	Total Ex. GST (\$AUD)
FDC90KXZEN1-W	
FDT90KXZE1-W	
RC-EXZ3A Controller	PUA
T-PSAE-5BW-E Fascia Panel	

15.5kW Ceiling Cassette (R32   Single Phase)					
Model	Total Ex. GST (\$AUD)				
FDCA155KXZEN1-W					
FDT160KXZE1-W	DOA				
RC-EXZ3A Controller	PUA				
T-PSAE-5BW-E Fascia Panel					

15.5kW Ceiling Cassette (R32   Three Phase)					
Model	Total Ex. GST (\$AUD)				
FDCA155KXZES1-W					
FDT160KXZE1-W					
RC-EXZ3A Controller	POA				
T-PSAE-5BW-E Fascia Panel					



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Mitsubishi Heavy Industries Air-Conditioners Australia, Pty. Ltd.

### **INSTALLATION GUIDE**

#### Refer to the below list of KX installation points for correct installation process.

If you are unsure of any of these points, please contact MHIAA technical support on 1300 138 007 before you commence installation. The complete manufacturer's installation instructions/requirements are included in each indoor unit or outdoor unit carton for reference.

- R32 Refrigerant used. Please follow the Safety precautions in handling air-conditioners with flammable refrigerant in the installation manual.
- When a flammable refrigerant is used in a refrigerating system, safety checks and a proper risk assessment should be performed to minimise any risk of ignition. Depending on the total refrigerant charge of the system, indoor unit(s) must complies with minimum installation floor area requirement. The following standards are used to calculate the minimum installation floor area for MHI refrigerating systems. AS/NZS 60335-2-40 :2019 is applied for flammability assessment. AS/NZS ISO 817:2016 is applied for toxicity assessment.
- The installed refrigeration piping length is to be within the manufacturer's maximum allowable piping length and limitations.
- The interconnect "A-B" communication cable size is to be 0.75mm<sup>2</sup>, screened two core stranded cable. When installing the interconnect communication cable, the screen is to be earthed at the outdoor unit.
- Dry nitrogen is to be utilised for any brazed piping connections.
- The piping circuit is to be nitrogen pressure tested to 4100kPa before any connections are made to the outdoor unit. Do not exceed 1500 kPa in nitrogen pressure where any connections are made to the outdoor unit service valves.
- The pipework vacuum reading is to be below 300 Microns and holding before refrigerant is removed or added, or service valves are opened.
- No oil traps are required to be installed in the refrigeration piping circuit.
- The outdoor unit is to have a dedicated power supply/earth leakage breaker/circuit breaker
- The indoor unit is to have a dedicated power supply/earth leakage breaker/circuit breaker
- The indoor unit is to be accessible for servicing.
- It is recommended that the indoor and outdoor unit Control PCB are manually addressed as per the installation instructions.
- The designated power is to be supplied and turned on to the "OUTDOOR UNIT ONLY", for a minimum of six hours prior to operating equipment. The indoor unit designated power supply circuit breaker is to be left off until the "ODP" timer has completed.
- If any equipment is installed in an environment susceptible to vermin ingress, suitable methods to be arranged to prevent a system failure. Vermin ingress is not covered under any terms of the manufacturer's defects warranty or MHIAA express warranty provisions.



## **ELECTRICAL DATA**

#### FDE and FDK system pricing available on request

System Type	Outdoor	Indoor	Phase	Voltage	Outdoor Cool / Heat			Indoor	
					Run Amps	Max Amps	Input kW	Run Amps	Input kW
Ducted	FDC90KXZEN1-W	FDU90KXE6F-W	1	240v	8.30/8.10	23	1.98/1.93	1.70	0.25
	FDC112KXZEN1-W	FDU112KXE6F-W	1	240v	10.7/10.6	23	2.55/2.53	2.00	0.32
	FDC140KXZEN1-W	FDU140KXE6F-W	1	240v	16.8/14.8	23	4.00/3.52	2.20	0.36
	FDCA155KXZEN1-W	FDU160KXE6F-W	1	240v	20.5/17.1	23	4.87/4.06	2.50	0.43
	FDC112KXZES1-W	FDU112KXE6F-W	3	415v	3.8/3.8	13.5	2.55/2.53	2.00	0.32
	FDC140KXZES1-W	FDU140KXE6F-W	3	415v	6.0/5.4	13.5	4.00/3.52	2.20	0.36
	FDCA155KXZES1-W	FDU160KXE6F-W	3	415v	7.4/6.2	13.5	4.87/4.06	2.50	0.43
	FDC224KXZPE1	FDU224KXZE1	3	415v	8.50/7.3	21	5.6/4.8	6.5	1.2
	FDC280KXZPE1	FDU280KXZE1	3	415v	11.8/9.7	22	7.87/6.47	6.5	1.2
Ceiling Cassette	FDC90KXZEN1-W	FDT90KXZE1-W	1	240V	8.30/8.10	23	1.98/1.93	0.95	0.13
	FDC140KXZEN1-W	FDT140KXZE1-W	1	240V	16.8/14.8	23	4.00/3.52	1.02	0.14
	FDCA155KXZEN1-W	FDT160KXZE1-W	1	240v	20.5/17.1	23	4.87/4.06	1.02	0.14
	FDC140KXZES1-W	FDT140KXZE1-W	3	415v	6.0/5.4	13.5	4.00/3.52	1.02	0.14
	FDCA155KXZES1-W	FDT160KXZE1-W	3	415v	7.9/6.2	13.5	4.87/4.06	1.02	0.14

1.) The data was measured at the following conditions. 2.) This packaged air-conditioner is manufactured and test in conformity with the ISO-T1 "UNITARY AIR-CONDITIONERS" 3.) Indoor Unit other than KX cannot be connected.

Item	Indoor Air T	Indoor Air Temp Outdoor Air Temp		Standarde	
Operation	DB	WB	DB	WB	Otandardis
Cooling*1	27°C	19°C	35°C	24°C	AC / NZC 2002 0
Heating*2	20°C	-	7°C	6°C	A3 / NZ3 3023.2

#### REFRIGERANT

Masial		Defrigerent	Max	Max Height Diff		*Definerent Cherge Adjustment		
IVIOGEI	Pipe Sizes	Refrigerant	Length	OU Above	OU Below	Reingerant Charge Adjustment		
FDC90KXZEN1-W		n R32 m	50m	30m	15m	<b>1m-4m Pipe Length:</b> Follow Formula Below: Remove Refrigerant (kg) = 4.2 (kg) Factory charged volume - Refrigerant (necessary) charge volume for piping (kg)		
FDC112KXZEN/S1-W	 (10,50mm					5m-20m Pipe Length: No adjustment required		
FDC140KXZEN/S1-W	Ø15.88mm					<b>20m-50m Pipe Length:</b> Follow Formula Below: Additional Refrigerant (kg) = Refrigerant (necessary) charg volume for piping (kg) - 4.2 (kg) Factory charged volume.		
FDCA155KXZEN/S1-W						<b>Refrigerant (necessary) charge volume for piping (kg)</b> = Standard refrigerant charge 3.2kg + Ø9.52 Total length of liquid pipes (m) x 0.050 (kg/m)		
FDC224KXZPE1	Ø9.52mm Ø19.05mm	R410A	90m	30m	30m	1-29M add 0.054 KG/M At 30M add 2.6KG only		
FDC280KXZPE1	Ø9.52mm Ø22.22mm	R410A	90m	30m	30m	30-90M add 2.6 KG plus 0.054 KG/M for every metre over 30M		

\*Depending on the total refrigerant charge of the system, indoor unit(s) must comply with the minimum installation floor area requirement. See point 2 above,



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