### **FGREE** HEAT PUMPS

# Kea AI An AI Learning Heat Pump



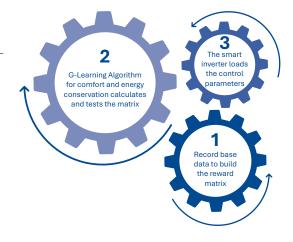
# G-AI Learning Technology

Welcome to the future of heating with Gree. Experience unparalleled comfort with Kea AI, the ultimate high-end heat pump system, designed for those who demand the best. Combining cutting edge technology, sleek design, and energy efficiency, Kea AI redefines what it means to be hot.

#### G-AI Learning Technology, a New Generation of Smart Inverter

Kea AI adopts the AI+ 2.0 intelligent inverter associated control scheme, and pioneers the G-learning intelligent algorithm. With Gree's independently developed AI technology, annual power consumption is reduced by 10% over a standard unit\*.





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### Kea Al Enhanced Heating Capacity

The Kea AI intelligent inverter is connected to the new high frequency compressors developed by Gree. Able to achieve a stable 160Hz operation, low temperature performance is improved by 10%. The Kea AI models offer excellent low temperature heating and will deliver outstanding heating performance at -7°C ambient (H3) and are capable of operating all the way down to -15°C.

G-Learning Algorithm for Comfort and Energy Conservation.

Heating Performance at Different Ambient Temperatures							
Model	GWH09AVCXD-K6DNA1A	GWH12AVDXD-K6DNA1A	GWH18AVEXF-K6DNA1A	GWH24AVEXH-K6DNA1C			
H1 (+7°C)	3.20kW	4.00kW	6.00kW	7.80kW			
H2 (+2°C)	3.85kW	4.00kW	6.40kW	8.20kW			
H3 (-7°C)	2.93kW	3.76kW	5.95kW	7.10kW			



#### Surfing Louver – All-Round Comfort

Enjoy a significant improvement in air swing performance; delivering balanced, comfortable airflow throughout the entire room. The new surfing louver expands the air supply range with wider swing angles and user defined airflow direction.

The air supply distance is up to 15.5m and the air supply volume is up by 10%. However there is no direct draught as the surfing louver can be adjusted to direct the airflow around occupants.

### Intelligent Control

The Kea AI heat pumps come standard with an elegant remote control. This upgraded remote control allows you to control the standard features as well as the enhanced features like the Wi-Fi Bluetooth Efficient Network, the humidity setting and the health function.

Other smart functions can be controlled by the remote controller, including the energy save function, the auto clean function along with timers, sleep and night mode functions.

There are also optional Smart Centralised Controls, wall controllers and the Kea AI is compatible with third party voice control systems.

Gree have also upgraded after sales service with their new Innovative Intelligent Maintenance module and multifunctional tester. This will allow for easier, faster and more accurate diagnosis of system errors.



# Hybrid Defrosting Technology (HDT)

Innovative defrosting algorithm with dual defrosting mode to maintain continuous heating all night long.

#### Defrosting Time Reduced to 2~3 Minutes

Depending on the outside temperature, two methods of defrosting are used. At temperatures from 5°C to -10°C, the algorithm monitors the occurrence of frost on the exchanger and activates the fast-defrosting mode if necessary. Below -10°C, the system automatically switches to the classic Gree intelligent defrosting mode to ensure the proper operation of the device even in extreme weather conditions.

#### 10 Hours of Continuous Heating

HDT allows for uninterrupted heating of the unit even during the defrosting mode, this unique algorithm for frost detection and its thickness on the heat exchanger, plus a newly designed expansion valve that ensures an increase in maximum flow of the working medium, allows for faster and more frequent removal of thin frost thickness – the average thawing time is reduced by 75%, this prevents any significant change in the room temperature – reducing the temperature drop during the defrost cycle from an average of 6~8°C to just 0.7~1.7°C.

Zero-chill Heating Repaid defrosting supported By Continuous heating technology

### Unique algorithm

Unique algorithm to sense the frost accumulated on the condenser and judge the thin frost status. Clever use of heat

A new type of EXV is developed to increase the maximum flow The heat of throttling refrigerant is used for defrosting. (In heating mode, some heat is used for heating while some is used for defrosting.) **B** Rapid removing of thin frost

Adjust system operating parameters to enter the thin frost rapid removing mode.



During defrosting, the indoor unit keeps running to ensure normal heating.

# Clean Breathing

#### **Cleaner Air, Smarter Comfort with Kea AI**

The new Kea AI has several levels of health protection. Starting with a fully closed air outlet that is designed to stop dust ingress and give a sleeker look when off. An anti-bacterial and mould proof honeycomb filter and an ION generator to help disinfect the air.

There is also an indoor coil self cleaning function, with a 56°C disinfection heating cycle.

To keep the room fresh there is an optional mini energy recovery ventilator (ERV), fresh air in, stale air out.

Plus the outdoor unit has a five step self cleaning function, making service a breeze.

### **Elegant Appearance**

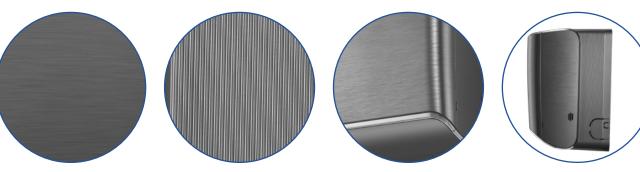
The new Gree Kea AI combines cutting edge technology with elegant, functional, and sleek design, for those who want the best.

The vertical texture on the side layer creates the impression of a much thinner unit.

The simple square shape with rounded corners gives a sleek look.

The partial silver plating embellishes the drawing texture and creates a sense of space.

The injection moulded etching and spraying process is adopted to simulate a brushed metal texture. Available in either white or black, the indoor is perfect for any home decor.



### Available in 2 Colours





# Energy Saving and Eco Friendly

#### Intelligent Power Control with G-AI 2.0 Technology

The Kea AI adopts Gree's G-AI 2.0 Learning Technology using Gree's new intelligent algorithm. This new algorithm allows for Power Gear Control. This allows the owner to restrict the amount of power being used whilst maintaining coolness and comfort.

#### Ultra High Speed Inverter Compressor for Enhanced Efficiency

The Kea AI also adopts Gree's new Ultra High Speed Inverter Compressor Technology. This ground breaking technology allows the compressor to run from 10 to 160Hz. (1Hz = 1 rps) This is achieved using Gree's real time drive control, allowing for greater efficiency and stability at high frequency.

#### Intelligent Dual Control (DCT) for Optimal Comfort and Health

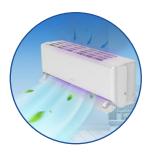
Gree's Intelligent Dual Control Technology (DCT) for both temperature and humidity aims to provide not only a comfortable environment, but a healthy environment as well. The aim is to avoid extremes in dryness causing dry skin and chest discomfort and high humidity providing a breeding ground for mould and bacteria.

#### Advanced Noise Reduction for Indoor and Outdoor Units

Gree researchers have developed smart innovative ways to reduce the noise levels of both the indoor and outdoor units, other than just slowing the fan speed. Newly developed designs have helped to reduce abnormal noises and achieve producing a quiet 19dB(A) sound level on the indoor. And to reduce the noise of the outdoor, especially the high frequency compressor, Gree have adopted Harmonic sampling to shape and smooth the waveform, thus reducing noise levels. After shaping, the outdoor noise level has been reduced by 3~4dB.











#### Gree Mini ERV (Optional)

The Kea AI heat pumps can be fitted with a colour matched mini ERV, which can be installed on either side and has independent activation. The replaceable HEPA filters can be fitted from either side plus there is a washable dust filter providing protection.

The mini ERV comes complete with a rain and rodent proof protective cover for the outdoor air vents.

There are three ways to control the mini ERV, with the standard remote controller, an optional wired controller or by the Gree Wi-Fi app. The airflow is channels through a dual-way "figure eight" track and can

deliver up to 30m3 /hr (8.31 l/sec)



#### Features



Indoor Unit Model Outdoor Unit Model		GWH09AVCXD -K6DNA1A/I GWH09AVCXD -K6DNA1A/O	GWH12AVDXD -K6DNA1A/I GWH12AVDXD -K6DNA1A/O	GWH18AVEXF -K6DNA1A/I GWH18AVEXF -K6DNA1A/O	GWH24AVEXH -K6DNA1C/I GWH24AVEXH -K6DNA1C/O
RE Part Number		-K6DNATA/O AC7252*-I/O	-K6DNATA/O AC7253*-I/O	-K6DNATA/O AC7255*-I/O	-K6DNATC/O AC7257*-I/O
GEMS Reg Number		AC7232 -1/0 AAC8506	AC7233 4//0 AAC8399	AAC8424	AC7257 -170 AAC8579
OLHO Neg Numbe	<u> </u>		rformance	7400424	AA00070
Cooling (Min-Max)	kW	2.70 (0.66-3.40)	3.52 (0.55-4.70)	5.00 (1.70-6.00)	7.10 (1.55-9.70)
Heating (Min-Max)	kW	3.20 (0.70-4.80)	4.00 (0.80-4.60)	6.00 (1.50-7.20)	7.80(2.10-10.60)
Cooling Power Input	kW	0.57	0.80	1.25	1.84
Heating Power Input	kW	0.71	0.86	1.40	2.00
AEER	W/W	4.7	4.4	3.94	3.80
ACOP	W/W	4.5	4.56	4.23	3.85
Heating Capcity H2	kW	3.85	4.00	6.4	8.20
Power Input Heating H2	kW	1.35	1.32	2.46	3.55
Hot (Cooling / Heating)	Star Rating	5.5/4.0	5.5/4.0	4.5/3.5	4.5/3.5
Average (Cooling / Heating)	Star Rating	5.0/3.0	5/3.5	4.0/3.0	4.0/2.5
Cold (Cooling / Heating)	Star Rating	5.0/2.5	5.5/2.5	4.0/2.5	4.5/2.0
Dehumidifying Volume	L/Hr	0.8	1.6	1.8	3.5
Air Flow Volume (Max)	L/Sec	189	264	375	389
Sound Pressure (min/max) Ind	dB(A)	19~42	22~44	26~46	29~51
Sound Power (min/max) Ind	dB(A)	34~57	37~59	41~63	43~66
Sound Pressure / Power Out	dB(A)	53/61	54/64	60/69	62
		E	Electrical	<u> </u>	1
Power Supply Outdoor	V/Hz/Ph	220~240/50/1	220~240/50/1	220~240/50/1	220~240/50/1
Circuit Breaker	A	16	16	25	25
Max Current	A	6.2	8.0	15.0	18.0
Max Input	W	1550	1600	3300	4400
Recommended Power Cable	-	2 Core plus Earth (3 Cores) 2.5mm			
Control Wiring	-		3 Core plus earth	(4 Cores) 1.5mm	
		Dimensi	ons and Weights		
Indoor Dimensions (HxWxD)	mm	292x907x200	347x970x257	347x1110x257	347x1110x257
Indoor Net Weight	kg	10.5	15.0	17.5	18.0
Outdoor Dimensions (HxWxD)	mm	555x802x350	555x802x350	660x958x402	746x1000x427
Outdoor Net Weight	kg	30.0	30.0	41.5	52.5
		Ir	stallation		
Operating Temp Range Cool	°C	-15 ~ 56	-15 ~ 56	-15 ~ 56	-15 ~ 56
Operating Temp Range Heat	°C	-15 ~ 24	-15 ~ 24	-15 ~ 24	-15 ~ 24
Refrigerant Type	-	R32	R32	R32	R32
Refrigerant Charge	kg	0.77	0.85	1.2	1.6
Max Pipe Length (pre-charged)	m	15 (10)	20 (10)	25 (10)	25 (10)
Max Height	m	10	10	10	10
Additional Refrigerant	g/m	16	16	16	40
Pipe Connection	Inch	1/4" ~ 3/8"	1/4" ~ 3/8"	1/4" ~ 1/2"	1/4" ~ 5/8"

Note: Above parameters are for reference only. Actual parameters may vary.

MEPS

Features and Options						
Indoor Fascia Colour*	*White or *Black	Dry Contact On/off Control	Standard			
Coil Protection	Gold Fin Anti-Corrosion Coating	Cold Plasma Air Purify	Standard			
Remote Controller	YBE1FB9 (White)	Wi-Fi Function	Blue Tooth Wi-Fi			
Weekly Wired Controller	Optional (XK76)	G-AI Function	Standard			
Fresh Air Adaptor	Optional (Mini ERV)	Demand Response AS4755	Standard			



For Installation and Sales:













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For Parts and Warranty:

0800 BUY GREE

0800 289 4733

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**GREENZKEAAI-0625** 

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