



**RESIDENTIAL
AIR SOURCED
HEAT PUMP CHILLER**

2022

**FOR PROFESSIONAL USE
2022 CATALOGUE**

eco°
eco° global industries
a Great Britain corporation



TOWARDS A GREENER & HEALTHIER WORLD

SMART & ECO-FRIENDLY TECHNOLOGICAL-DRIVEN SOLUTIONS FOR GREENER & HEALTHIER WORLD

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CORPORATE PROFILE

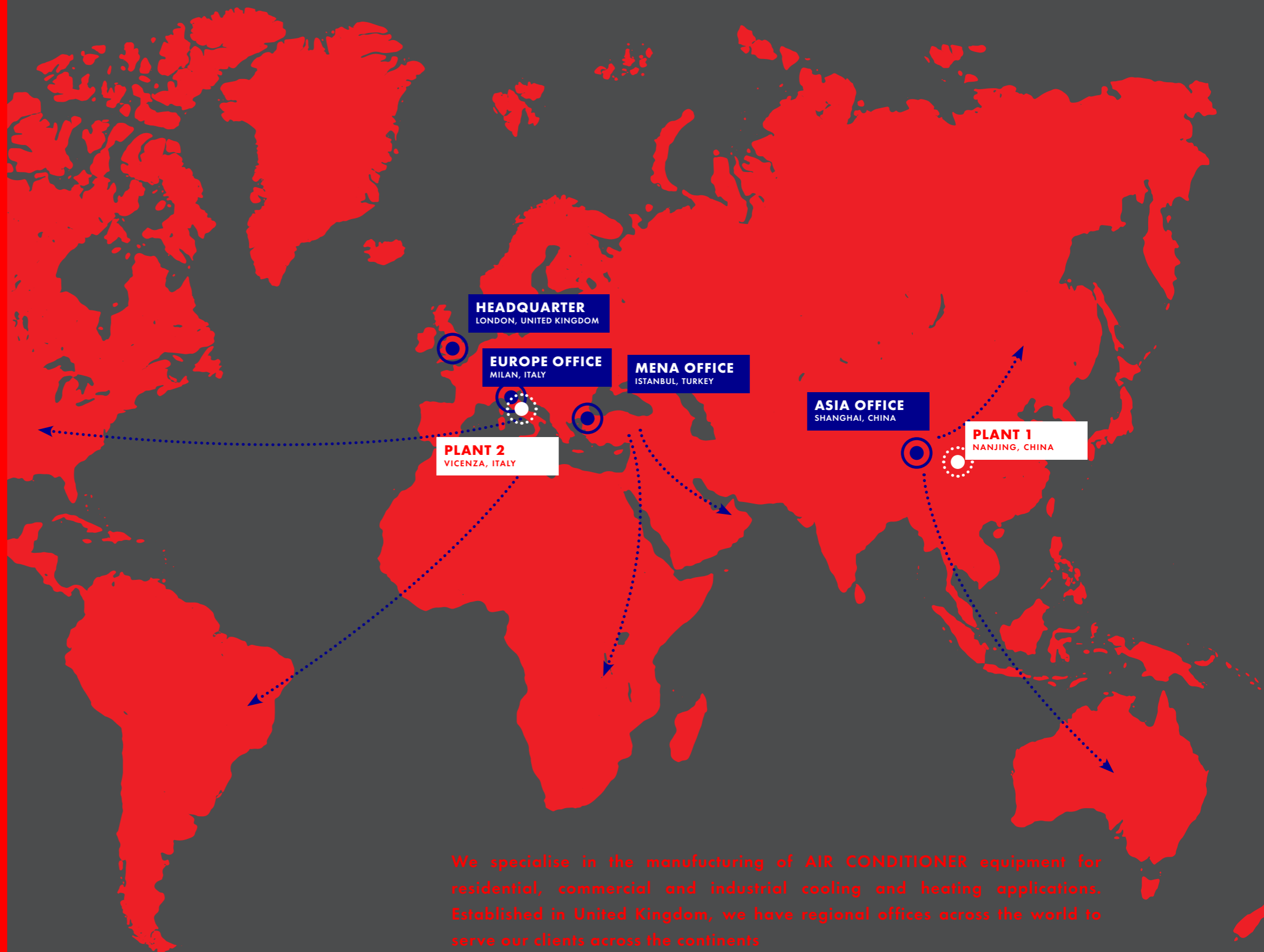
Our eco° global industries is an enterprise specialising in products and services across: Energy Sector, Heavy Industries, Technology Sector, Education Sector, Transportation Sector and Lifestyle Sector such as Appliances, Health & Food

eco° focuses on delivering eco-friendly and smart solutions and services to improve lives and safeguard our environment

eco° is committed towards our clients to always deliver design and engineering solutions with great consideration given to our environments. We focus greatly on solving design and engineering challenges with sustainable solutions

MANUFACTURING PLANTS

Our AIR SOURCED HEAT PUMP-CHILLER manufacturing plants are located in: China and Italy, serving our distributors and partners across the continents. With our innovative R&D network, our equipment features latest technology and capable of delivering cooling and heating to challenging climates around the world



We specialise in the manufacturing of AIR CONDITIONER equipment for residential, commercial and industrial cooling and heating applications. Established in United Kingdom, we have regional offices across the world to serve our clients across the continents

PRODUCTS LINEUP

TECHNOLOGY PROFILE

INVERTER TECHNOLOGY

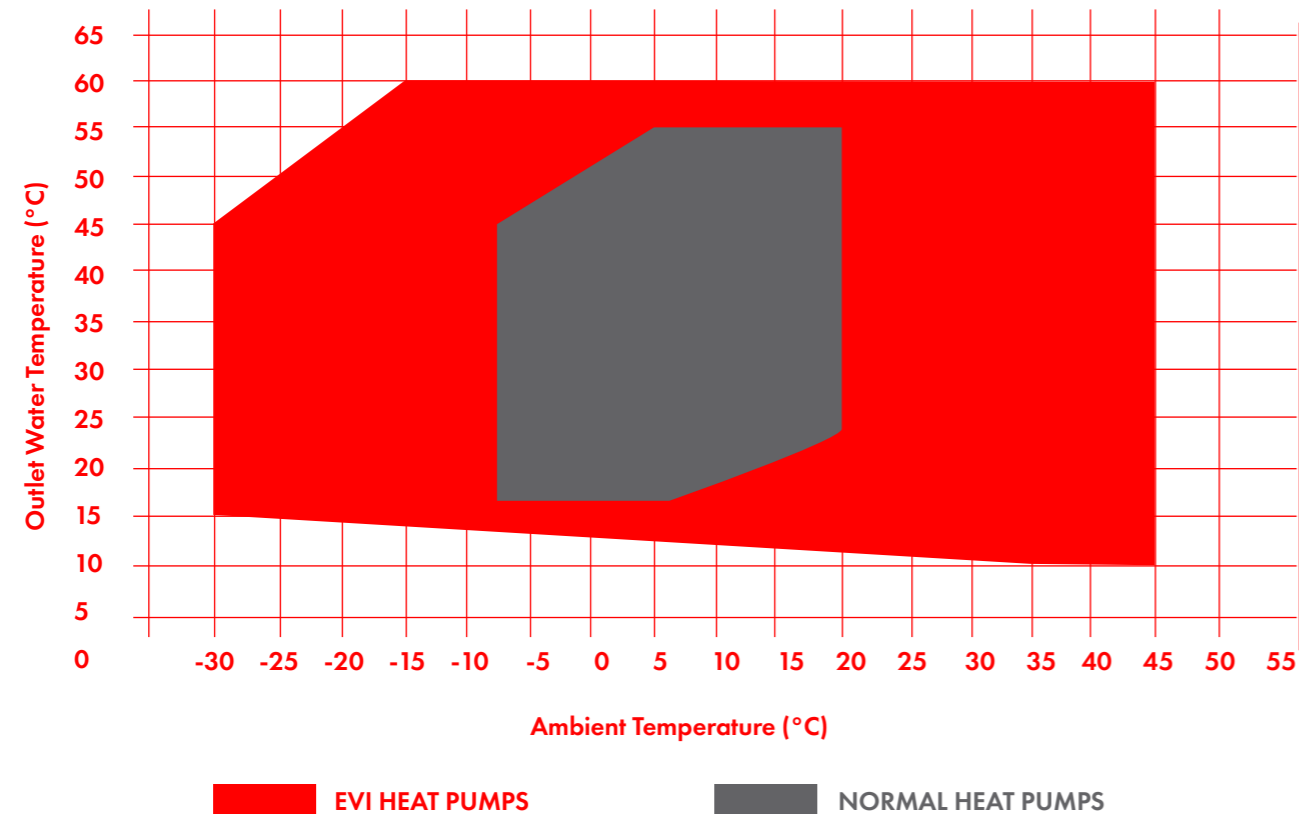
Our Full Inverter Heat Pump utilises variable speed compressor to automatically adjust the output required to achieve the lowest power consumption and maintain the best ambient condition. When the heating or cooling demand is high, the inverter compressor and the fan motor will start running at high speed, inversely the components will run at low speed when the demand reduces.

- + Achieve High COP
- + Short Heating Time
- + Save Energy and Reduces Electricity Bill

EVI TECHNOLOGY

Our EVI technology offers stable performance at low (-30°C) ambient conditions, facilitating for wide range of climates around the world, capable of delivering heating and hot water supply all year around.

- + Wider Ambient Temperature Range for Stable Running
- + 25% Stronger Heating Capacity and 10% Higher COP than Standard Heat Pumps
- + High Water Temperature Outlet
- + Low Noise
- + Low Vibration



PRODUCTS LINEUP

TECHNOLOGY PROFILE

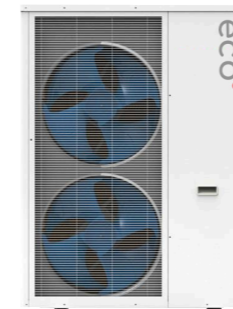


ECO PLUS SERIES

R32
REFRIGERANT

INVERTER AIR-TO-WATER HEAT PUMPS

-25°C Inverter EVI, A+++ Energy Level Rating
Heating Capacity: 2.3kW to 25.0kW
Cooling Capacity: 2.0kW to 15.8kW

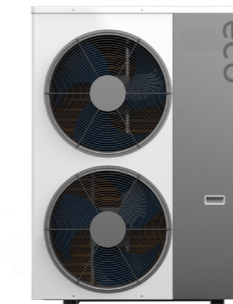


ECO STANDARD SERIES

R410a
REFRIGERANT

INVERTER AIR-TO-WATER HEAT PUMPS

-30°C Inverter EVI, A++ Energy Level Rating
Heating Capacity: 1.9kW to 25.1kW
Cooling Capacity: 1.6kW to 20.0kW



ECO PRO SERIES

R410a
REFRIGERANT

INVERTER AIR-TO-WATER HEAT PUMPS

-30°C Inverter EVI, A++ Energy Level Rating
Heating Capacity: 4.2kW to 41.0kW
Cooling Capacity: 3.6kW to 33.1kW



ECO PREMIUM SERIES

R410a
R32
REFRIGERANT

INVERTER AIR-TO-WATER HEAT PUMPS

-25°C Inverter EVI, A++ Energy Level Rating
Heating Capacity: 2.3kW to 25.0kW
Cooling Capacity: 2.0kW to 15.8kW

R32

AIR TO WATER HEAT PUMP

High Performance Residential
Air Conditioning Solution

eco PLUS

Heating Capacity: 2.3kW to 25.0kW

Cooling Capacity: 2.0kW to 15.8kW

-25 °C INVERTER EVI TECHNOLOGY

Capable of delivering 60°C hot water supply at stable operation condition of -25°C, our EVI INVERTER technology utilises R32 refrigerant to offer eco-friendly and high performance for a wide range of weather climates



DTU (OPTIONAL)

Our ecoPLUS series is engineered with remote data transferring interface to allow for web-based data monitoring

A+++ ENERGY LEVEL

With EVI DC INVERTER technology, our heat pumps can operate with frequency from 30Hz to 90Hz to accommodate for real-time performance adjustment. We can achieve energy level of A+++ according to ErP directive

**EVI INVERTER
TECHNOLOGY**

**DTU READY
(OPTIONAL)**

**TOUCH
DISPLAY**

**A+++
ENERGY LEVEL**

**INTELLIGENT
DEFROSTING**

**-25 °C
OPERATION**

TECHNICAL DATA

Model		6a	10a	10t	17a	17t	24t
Performance Condition: Outdoor Air 7°C / 6°C, Inlet / Outlet Water 30°C / 35°C							
Heating Capacity	kW	2.3 - 8.3	4.7 - 12.5	4.7 - 12.5	7.0 - 20.5	7.0 - 20.5	10.0 - 25.0
Heating Power Input	kW	0.6 - 1.8	1.1 - 3.4	1.1 - 3.4	1.5 - 6.0	1.5 - 6.0	2.8 - 5.7
Performance Condition: Outdoor Air 35°C / 24°C, Inlet / Outlet Water 12°C / 7°C							
Cooling Capacity	kW	2.0 - 6.1	3.2 - 11.3	3.2 - 11.3	5.5 - 15.5	5.5 - 15.5	6.4 - 15.8
Cooling Power Input	kW	0.7 - 2.2	1.3 - 4.6	1.3 - 4.6	1.5 - 6.0	1.5 - 6.0	3.4 - 6.8
Performance Condition: Outdoor Air 20°C / 15°C, Water Circulates from 15°C to 55°C							
Hot Water Capacity	kW	3.0 - 9.8	5.8 - 16.2	5.8 - 16.2	9.4 - 24.3	9.4 - 24.3	14.3 - 28.1
Hot Water Power Input	kW	0.6 - 2.4	1.2 - 4.2	1.2 - 4.2	2.1 - 6.4	2.1 - 6.4	3.4 - 7.0
Rated Voltage / Frequency	/	208 / 240V 30 - 90Hz		380 - 460V / 3N 30 - 90Hz	208 / 240V 30 - 90Hz	380 - 460V / 3N 30 - 90Hz	
Max Power Input	kW	2.9	4.6	4.6	7.2	7.2	12.8
Max Current Input	A	13.0	21.5	7.6	33.2	12.0	20.5
Refrigerant / Proper Input	kg	R32 / 1.3kg	R32 / 1.7kg	R32 / 1.6kg	R32 / 2.0kg	R32 / 2.0kg	R32 / 3.4kg
CO ₂ Equivalent	Ton	0.88	1.15	1.08	1.35	1.35	2.30
Sound Pressure Noise (from 1m)	dB(A)	37 - 54	42 - 55	42 - 55	44 - 58	44 - 58	53 - 59
Operating Ambient Temperature	°C	-25 to 43					
Fan Motor Type	/	DC					
Unit Dimension (L/W/H)	mm	1002 x 490 x 805	953 x 460 x 915		997 x 437 x 1315		1178 x 450 x 1605
Shipping Dimension (L/W/H)	mm	106 x 500 x 825	1040 x 490 x 920		1070 x 435 x 1340		1210 x 490 x 1650

* we reserve the right to change specification as the products develop, please always refer to the name plate for the exact specification

R410a

AIR TO WATER HEAT PUMP

High Performance Residential
Air Conditioning Solution

eco STANDARD

Heating Capacity: 1.9kW to 25.1kW

Cooling Capacity: 1.6kW to 20.0kW

0.1 °C CONTROL PRECISION

Excels in precision control, our ecoSTANDARD series allows for 0.1 °C temperature adjustment. Our unit can automatically adjust the operating frequency of the compressor to match with the heating and cooling demand.



INTELLIGENT DEFROSTING

Our ecoSTANDARD utilises the pressure sliding defrosting technology to define the optimal condition to start intelligent defrosting, which in turns reduce the energy consumption and prevent defrosting errors.

WATER TEMP CURVE

Water Temperature Curve diagram can be generated from the controller to provide easy monitoring of the changes in water flow.

TECHNICAL DATA

Model		6	8	15	25
Performance Condition: Outdoor Air 7 °C / 6 °C, Inlet / Outlet Water 30 °C / 35 °C					
Heating Capacity	kW	1.9 - 6.4	2.5 - 10.8	5.0 - 17.3	7.0 - 25.1
Heating Power Input	kW	0.6 - 2.0	0.8 - 2.8	1.2 - 4.6	7.0 - 20.0
Performance Condition: Outdoor Air 35 °C / 24 °C, Inlet / Outlet Water 12 °C / 7 °C					
Cooling Capacity	kW	1.6 - 5.4	2.0 - 10.0	5.0 - 14.5	7.0 - 20.0
Cooling Power Input	kW	0.6 - 1.9	1.0 - 3.4	1.6 - 5.6	2.5 - 9.0
Performance Condition: Outdoor Air 20 °C / 15 °C, Water Circulates from 15 °C to 55 °C					
Hot Water Capacity	kW	3.0 - 9.8	5.8 - 16.2	5.8 - 16.2	9.4 - 24.3
Hot Water Power Input	kW	0.6 - 2.4	1.2 - 4.2	1.2 - 4.2	2.1 - 6.4
Rated Voltage / Frequency	/	208 - 240V / 30 - 90Hz		380 - 460V / 3N 30 - 90Hz	
Max Power Input	kW	2.9	4.6	4.6	7.2
Max Current Input	A	8.7	18.0 + 13.7	27.0	14.0
Refrigerant / Proper Input	kg	R410a 1.7kg	R410a 2.4kg	R410a 3.2kg	R410a 4.4kg
CO ₂ Equivalent	Ton	3.55	5.00	6.68	9.19
Sound Pressure Noise (from 1m)	dB(A)	54	54	58	62
Compressor	/	Mitsubishi Electric			
Operating Ambient Temperature	°C	-15 to 43	-20 to 52		
Fan Motor Type	/	DC			
Unit Dimension (L/W/H)	mm	1052 x 490 x 790	980 x 465 x 910	990 x 437 x 1315	1135 x 450 x 1588
Shipping Dimension (L/W/H)	mm	1070 x 510 x 945	1050 x 500 x 1060	1080 x 445 x 1480	1290 x 530 x 1760

* we reserve the right to change specification as the products develop, please always refer to the name plate for the exact specification

**EVI INVERTER
TECHNOLOGY**

**30% ENERGY
SAVING**

**TOUCH
DISPLAY**

**A++
ENERGY LEVEL**

**INTELLIGENT
DEFROSTING**

**0.1 °C
TEMP CONTROL**

R410a

AIR TO WATER HEAT PUMP High Performance Residential Air Conditioning Solution

eco PRO

Heating Capacity: 4.2kW to 41.0kW
Cooling Capacity: 3.6kW to 33.1kW

-30°C INVERTER EVI

Our ecoPRO series focus on delivering stable hot water production (at 60°C) even under low ambient condition like -30°C. Our Inverter EVI excels in performance stability as well as high energy saving.



DTU (OPTIONAL)

Our ecoPLUS series is engineered with remote data transferring interface to allow for web-based data monitoring

SUITABLE FOR LIGHT COMMERCIAL

With heating capacity ranges from 4.2kW to 41.0kW and cooling capacity ranges from 3.6kW to 33.1kW, our ecoPRO series is suitable for light commercial applications such as hotels, schools, resort centres, gyms and any other small-medium sized buildings

TECHNICAL DATA

Model		10	14	18	26	30	38
Performance Condition: Outdoor Air 7°C / 6°C, Inlet / Outlet Water 30°C / 35°C							
Heating Capacity	kW	4.2 - 12.0	5.6 - 16.8	7.2 - 20.0	9.8 - 27.3	11.5 - 31.5	15.0 - 41.0
Heating Power Input	kW	12.0 - 4.0	1.6 - 5.6	2.1 - 6.8	3.5 - 10.6	3.4 - 10.5	5.0 - 13.8
Performance Condition: Outdoor Air 35°C / 24°C, Inlet / Outlet Water 12°C / 7°C							
Cooling Capacity	kW	3.6 - 9.6	5.0 - 13.4	6.3 - 16.5	8.3 - 23.1	10.2 - 28.2	11.9 - 33.1
Cooling Power Input	kW	1.2 - 4.0	1.6 - 5.6	2.1 - 6.8	3.5 - 10.6	4.4 - 13.6	5.0 - 13.8
Performance Condition: Outdoor Air 20°C / 15°C, Water Circulates from 15°C to 55°C							
Hot Water Capacity	kW	5.3 - 13.5	5.8 - 15.1	7.5 - 21.1	10.0 - 27.5	11.8 - 32.0	15.5 - 41.5
Hot Water Power Input	kW	1.5 - 4.3	1.6 - 5.0	2.1 - 7.1	3.7 - 10.8	4.5 - 13.8	5.2 - 14.0
Rated Voltage / Frequency	/	208 - 240V / 30 - 90Hz					
Max Power Input	kW	4.6	4.8	7.0	10.6	13.6	16.0
Max Current Input	A	21.0	21.8	32.0	17.0	25.5	31.2
Refrigerant / Proper Input	kg	R410a 2.2kg	R410a 2.5kg	R410a 2.8kg	R410a 4.5kg	R410a 5.0kg	R410a 6.6kg
CO ₂ Equivalent	Ton	4.59	5.22	5.85	9.40	10.44	13.78
Sound Pressure Noise (from 1m)	dB(A)	38 - 52	40 - 53	42 - 54	44 - 57	44 - 58	45 - 60
Compressor	/	GMCC	Landa	GMCC	Panasonic	Panasonic	Highly
Operating Ambient Temperature	°C	-30 to 52					
Fan Motor Type	/	DC					
Unit Dimension (L/W/H)	mm	955 x 470 x 910	1000 x 440 x 1325		1170 x 450 x 1600		1700 x 800 x 1685
Shipping Dimension (L/W/H)	mm	1040 x 490 x 1050	1070 x 440 x 1470		1240 x 450 x 1730		1830 x 910 x 2000

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**EVI INVERTER
TECHNOLOGY**

**-30°C STABLE
PERFORMANCE**

**TOUCH
DISPLAY**

**A++
ENERGY LEVEL**

**HIGH COP
BENCHMARK**

**DTU READY
(OPTIONAL)**

R32 R410a

AIR TO WATER HEAT PUMP High Performance Residential Air Conditioning Solution

eco PREMIUM

Heating Capacity: 2.3kW to 25.0kW
Cooling Capacity: 2.0kW to 15.8kW

INVERTER AIR COOLED HEAT PUMP

Suitable for outdoor installation, our eco PREMIUM series features highly efficient BLDC twin rotary inverter compressor, allowing for massive energy reduction and durable performance between -10° to 46°C



BLDC TWIN ROTARY INVERTER

Our ecoPLUS series is engineered with remote data transferring interface to allow for web-based data monitoring

INVERTER EC FAN

Our eco PREMIUM series is equipped with 6poles BLDC brushless motor with internal protection and fan speed control integrated. All components are engineered to increase efficiency, reduce sound level and maximise performance

TECHNICAL DATA

Model		10	14
Performance Condition: Outdoor Air 7°C / 6°C, Inlet / Outlet Water 30°C / 35°C			
Heating Capacity	kW	3.96 - 11.58	7.37 - 16.74
COP	/	3.72 - 3.53	4.06 - 3.85
Performance Condition: Outdoor Air 7°C / 6°C, Inlet / Outlet Water 40°C / 45°C			
Heating Capacity	kW	12.00	17.67
COP	/	4.31	4.85
Performance Condition: Outdoor Air 35°C, Inlet / Outlet Water 12°C / 7°C			
Cooling Capacity	kW	3.81 - 10.33	7.35 - 15.11
EER	/	4.22 - 3.23	4.38 - 3.61
Performance Condition: Outdoor Air 20°C / 15°C, Water Circulates from 15°C to 55°C			
Rated Voltage / Frequency	/	230V - 50Hz Single Phase	400V - 50Hz 3 Phase
Nominal Absorbed Power (Max Admissible Conditions)	kW	0.91 - 3.20	1.72 - 4.18
Maximum Absorbed Current (Under Nominal Conditions)	A	6.53 - 9.16	8.06 - 10.00
Refrigerant	/	R410a (Standard) R32 (Optional)	
Sound Pressure Noise (from 1m)	dB(A)	32	37
Compressor	/	BLDC Twin Rotary	
Operating Ambient Temperature	°C	-10 to 46	
Fan Motor Type	/	6poles EC INVERTER Fan	
Unit Dimension (L/W/H)	mm	1500 x 450 x 980	

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INVERTER
TECHNOLOGY

-10°C
PERFORMANCE

MADE IN
EUROPE

A++
ENERGY LEVEL

HIGH SCOP
BENCHMARK

INVERTER
EC FAN



eco°

eco° global industries
a Great Britain corporation

eco° global industries corporation specialises in SMART &
ECOFRIENDLY air conditioning solutions for residential and
commercial and industrial applications

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