

# ECO COOLER

## HVAC SYSTEMS

2025  
Eco Hybrid Package

ECO HYBRID PACKAGE







Special Public Places Commercial,  
Office, Hospital, Restaruant, Coffee  
Shop & Etc.







# OPTIMAL COOLING

*Minimal Energy*







## PREMIUM HVAC SOLUTIONS FOR EFFICIENT COOLING AND HEATING

**ECO Hybrid Package (EHP)**, Our innovative **HVAC** systems are engineered to deliver outstanding performance in environments where power availability is limited and energy savings are crucial. Featuring **R410A**, a high-efficiency refrigerant, these systems ensure reliable cooling and heating in one compact package. Whether you opt for a rooftop packaged unit, a chiller, or a condensing unit, you can count on low energy consumption, robust performance, and straightforward operation. Designed to cover spaces up to 270 m<sup>2</sup> even on a single-phase power supply, our solutions are ideal for a wide range of residential and commercial applications.

### Key Benefits

#### 1- Optimized Power Usage

- **Microchannel Technology:** Advanced coil design enhances heat transfer while reducing refrigerant requirements, helping lower utility costs.
- **Evaporative Pre-Cooling:** Pre-cools entering air into the condenser, decreasing required power in hot climates and further cutting energy consumption.
- **High-Efficiency R410A Refrigerant:** Contributes to superior cooling and heating output with minimal power draw.

#### 2- Comprehensive Climate Control

- **Heat Pump Mode:** Offers both cooling and heating capabilities, eliminating the need for external systems.
- **Versatile Applications:** Ideal for various environments, capable of effectively conditioning spaces up to 270 m<sup>2</sup> on single-phase power supply and 750 m<sup>2</sup> on three-phase power supply.



# Premium HVAC Solutions for Efficient Cooling and Heating

## 3- CE-Certified Quality and Reliability

- Stringent European Standards: Ensures dependable performance, reduced downtime, and proven durability.
- Built to Last: High-quality components and robust construction minimize the need for frequent maintenance.

## 4- User-Friendly Design

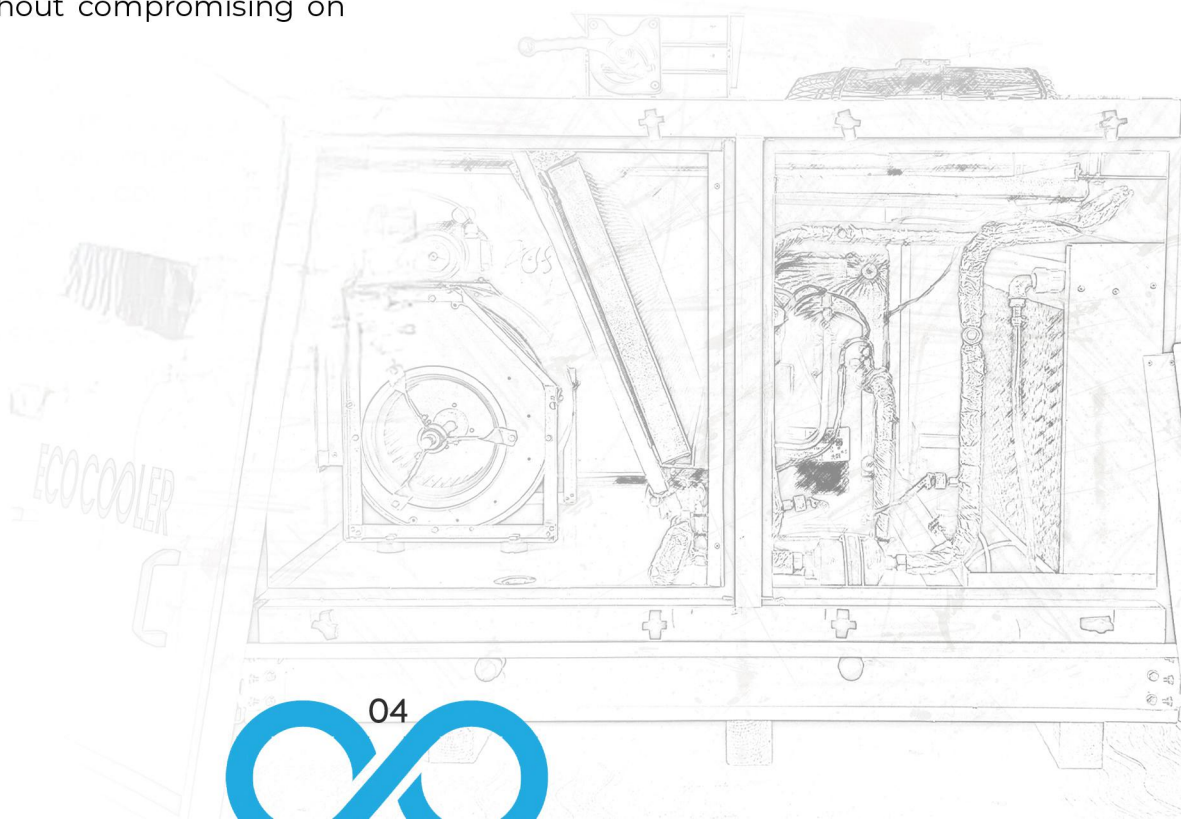
- Corrosion-Resistant Coils: Aluminum microchannel coils withstand harsh conditions, extending service life.
- Easy Installation and Maintenance: Thoughtful layout allows for quick setup, inspection, and servicing, even for non-specialists.

## 5- Optional Solar Integration

- Sustainable Energy Solution: Tap into renewable solar power to further reduce electricity consumption.
- Environmentally Responsible: Lower your carbon footprint without compromising on performance.

## Tailored for Energy-Limited Settings

Where electricity is scarce or expensive, our HVAC systems offer consistent, high-quality climate control without straining your power resources. Choose from our range of rooftop packaged units, chillers, or condensing units, and enjoy a comfortable indoor environment year-round — backed by modern technology, high efficiency, single-phase compatibility, and an optional solar power add-on.







**8A**

**1 Phase**

## EVAPORATIVE PRE-COOLING PACKAGE

**ECO COOLER** evaporative pre-cooling package is an energy-efficient solution designed for comprehensive climate control across various applications.

It features Microchannel Technology, an evaporative pre-cooling system, and high-efficiency **R410A** refrigerant to optimize power usage and lower energy costs.

With heat pump functionality, it offers both cooling and heating, eliminating the need for separate systems. The unit seamlessly integrates with ducting systems for efficient air distribution, effectively conditioning spaces up to 270 m<sup>2</sup> (single-phase) and 750 m<sup>2</sup> (three-phase).

Ideal for residential and commercial use, it provides a reliable, cost-effective, and sustainable climate control solution.





# Technical Data:

## Evaporative Pre-Cooling Package

Model	ERU 3	ERU 4	ERU 5	ERU 7.5	ERU 20
Cooling capacity* (kW)	7.2	10.7	13	25	70
Heating capacity** (kW)	6	9	11	23	64
Total power input (Cooling mode) (kW)	2.2	2.9	3.1	6.1	17.9
Total power input (Heating mode) (kW)	1.9	2.7	3.2	6.2	17.2
Total EER (Cooling mode)	3.3	3.8	4.3	4.0	3.9
Total EER (Heating mode)	3.2	3.5	3.5	3.6	3.7
Covered floor area (sq.meter)	50~75	80~120	150~200	250~300	450~750
Compressor					
Type	Scroll				
Quantity	1	1	1	2	2
Refrigerant	R410A				
Power input (Cooling mode) (kW)	1.44	1.9	2.1	4.2	12
Power input (Heating mode) (kW)	1.2	1.7	2.2	4.3	11.3
Amperage (Cooling mode) (A)	6.3	8.4	9.2	18.5	23.0
Amperage (Heating mode) (A)	5.1	7.7	9.7	18.7	22.4
Indoor heat exchanger					
Type	Microchannel				
Face area (sq.meter)			0.5	1	2
Indoor fan					
Type	Forward curved				
Size (mm)	250	300	300	380	450
Quantity	1	1	1	1	1
Air flow rate (CMH)	1500	3000	3000	5500	17000
Control type	Three-speed	Three-speed	Three-speed	Single-speed	Single-speed
Motor power (kW)	0.45	0.53	0.53	1.15	4.00
Amperage (A)	2.10	2.45	2.45	5.60	7.40
Outdoor heat exchanger					
Type	Microchannel				
Face area (m2)	0.5	0.5	0.5	1	2
Precooling method	Cellulose pad				
Outdoor fan					
Type	Axial				
Size (mm)	450	500	500	630	800
Quantity	1	1	1	1	1
Air flow rate (CMH)	4000	4500	4500	10000	18000
Control type	Pressure-based On/Off				
Motor power (kW)	0.29	0.42	0.42	0.74	1.9
Amperage (A)	1.3	1.7	1.7	2.9	4.1
Electrical info					
Power supply phase/voltage/ frequency	1P/220V/50Hz	1P/220V/50Hz	1P/220V/50Hz	1P/220V/50Hz	3P/400V/50Hz
Total amperage (Cooling mode) (A)	8~10	11~13	13~16	26~32	35~40
Total amperage (Heating mode) (A)	9~11	12~15	14~17	28~34	34~38
Installation info					
Length x Width x Height (cm)	156 x 117 x 110	156 x 117 x 110	156 x 117 x 110	245 x 125 x 146	245 x 220 x 146
Operating weight (kg)	300	305	315	500	805

\* Cooling capacity rating is based on: ambient dry/wet bulb temperature of 46 C/22 °C - Return dry/wet bulb temperature of 27 C/19 °C

\*\* Heating capacity rating is based on: ambient dry/wet bulb temperature of 7 C/6 °C - Return dry/wet bulb temperature of 20 C/14 °C

ECO COOLER reserves the right to modify technical information at any time without prior notice.





**8A**

**1 Phase**

## CHILLER-HEAT PUMP

**ECO COOLER** Chiller heat pump is a multi-functional system that provides both cooling and heating, ensuring consistent comfort and substantial energy savings.

It incorporates advanced microchannel technology, an evaporative pre-cooling system, and high-efficiency **R410A** refrigerant to reduce energy consumption.

The system offers reliable climate control with a heat pump mode, supplying chilled water at 7 °C for cooling and hot water at 45 °C for heating, perfect for fan coil units.

Suitable for residential, commercial, and industrial spaces up to 650 m<sup>2</sup>, it integrates smoothly with piping systems for optimal air distribution.

Environmentally friendly and energy-efficient, it provides top-tier performance even in extreme climates, ensuring a low-maintenance, cost-effective solution.





# Technical Data:

## Evaporative Pre-Cooling Package

Model	EACH 3	EACH 4	EACH 5	EACH 7.5	EACH 20
Cooling capacity* (kW)	5	8	11	22	60
Heating capacity** (kW)	4	7	10	20	58
Total power input (Cooling mode) (kW)	2.0	2.3	2.6	4.9	13.9
Total power input (Heating mode) (kW)	2.4	3.2	3.7	7.3	18.4
Total EER (Cooling mode)	2.7	3.4	4.2	4.5	4.3
Total EER (Heating mode)	1.9	2.0	2.8	2.7	3.1
Covered floor area (sq.meter)	120	120	120	240	400~650
Compressor					
Type	Scroll				
Quantity	1	1	1	2	2
Refrigerant	R410A				
Power input (Cooling mode) (kW)	1.68	1.9	2.17	4.2	12
Power input (Heating mode) (kW)	2.1	2.8	3.3	6.6	16.5
Amperage (Cooling mode) (A)	7.4	8.4	9.5	19.0	23.0
Amperage (Heating mode) (A)	9.1	12.3	13.8	27.0	29.2
Heat exchanger					
Type	Brazed plate heat exchanger				
Quantity	1	1	1	1	1
Water flow rate (CMH)	0.81	1.21	1.69	3.39	9.23
Outdoor heat exchanger					
Type	Microchannel				
Face area (m2)	0.5	0.5	0.5	1	2
Precooling method	Cellulose pad				
Outdoor fan					
Type	Axial				
Size (mm)	450	500	500	630	800
Quantity	1	1	1	1	1
Air flow rate (CMH)	4000	4500	4500	10000	18000
Control type	Pressure-based On/Off				
Motor power (kW)	0.29	0.42	0.42	0.74	1.9
Amperage (A)	1.3	1.7	1.7	2.9	4.1
Electrical info					
Power supply phase/voltage/ frequency	1P/220V/50Hz	1P/220V/50Hz	1P/220V/50Hz	1P/220V/50Hz	3P/400V/50Hz
Total amperage (Cooling mode) (A)	7~9	8~12	11~14	22~28	27~30
Total amperage (Heating mode) (A)	8~10	10~14	16~18	32~36	33~36
Installation info					
Length x Width x Height (cm)	78 x 117 x 110	78 x 117 x 110	78 x 117 x 110	112 x 117 x 120	225 x 117 x 130
Operating weight (kg)	203	216	227	369	659

\* Cooling capacity rating is based on: ambient dry/wet bulb temperature of 46 C/22 °C - Return dry/wet bulb temperature of 27 C/19 °C

\*\* Heating capacity rating is based on: ambient dry/wet bulb temperature of 7 C/6 °C - Return dry/wet bulb temperature of 20 C/14 °C

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**8A**

**1 Phase**

## DUCT SPLIT

**ECO COOLER** duct split is a dual-purpose system designed for both cooling and heating, providing year-round comfort and energy efficiency.

It features microchannel technology for enhanced heat transfer, an evaporative pre-cooling system to improve performance in hot climates, and a high-efficiency **R410A** refrigerant for minimal environmental impact.

Compatible with duct split systems, it distributes cold or warm air efficiently across spaces up to 650 m<sup>2</sup>, and integrates seamlessly with piping systems.

Suitable for residential, commercial, and industrial applications, it ensures optimal performance, reduced operational costs, and environmental sustainability — making it a low-maintenance, energy-saving solution.



# Technical Data:

## Condensing Unit-Heat Pump

Model	ECU 3	ECU 4	ECU 5	ECU 7.5	ECU 20
Cooling capacity* (kW)	7.2	10.7	13	26	70
Heating capacity** (kW)	6	9	10	20	64
Total power input (Cooling mode) (kW)	1.7	2.3	2.6	4.9	13.5
Total power input (Heating mode) (kW)	1.5	2.2	3.7	7.3	13.7
Total EER (Cooling mode)	4.1	4.6	4.9	5.3	5.2
Total EER (Heating mode)	4.3	4.3	2.8	2.7	4.7
Covered floor area (sq.meter)	120	120	120	240	400~650
Compressor					
Type	Scroll				
Quantity	1	1	1	2	2
Refrigerant	R410A	R410A	R410A		
Power input (Cooling mode) (kW)	1.44	1.9	2.14	4.2	11.6
Power input (Heating mode) (kW)	1.2	1.7	3.3	6.6	11.8
Amperage (Cooling mode) (A)	6.3	8.4	9.4	19.0	22.5
Amperage (Heating mode) (A)	5.1	7.7	13.8	27.0	23.0
Outdoor heat exchanger					
Type	Microchannel				
Face area (m2)	0.5	0.5	0.5	1	2
Precooling method	Cellulose pad				
Outdoor fan					
Type	Axial				
Size (mm)	450	500	500	630	800
Quantity	1	1	1	1	1
Air flow rate (CMH)	4000	4500	4500	10000	18000
Control type	Pressure-based On/Off				
Motor power (kW)	0.29	0.42	0.42	0.74	1.9
Amperage (A)	1.3	1.7	1.7	2.9	4.1
Electrical info					
Power supply phase/voltage/ frequency	1P/220V/50Hz	1P/220V/50Hz	1P/220V/50Hz	1P/220V/50Hz	3P/400V/50Hz
Total amperage (Cooling mode) (A)	7~8	8~10	11~14	22~28	27~30
Total amperage (Heating mode) (A)	5~6	7~9	16~18	32~36	33~36
Installation info					
Length x Width x Height (cm)	78 x 117 x 110	78 x 117 x 110	78 x 117 x 110	112 x 117 x 120	225 x 117 x 130
Operating weight (kg)	193	206	207	344	626

\* Cooling capacity rating is based on: ambient dry/wet bulb temperature of 46 C/22 °C - Return dry/wet bulb temperature of 27 C/19 °C

\*\* Heating capacity rating is based on: ambient dry/wet bulb temperature of 7 C/6 °C - Return dry/wet bulb temperature of 20 C/14 °C

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**MINIMUM ENERGY**  
*Maximum Performance*





## SOLAR SYSTEMS



**COOLING SAVINGS**  
**%30 - %50**



**HEATING SAVINGS**  
**%20 - %30**

We offer an optional feature called the Solar System that can be integrated with **ECO Hybrid Package units**. By adding this solar-powered system, the efficiency of the units increases by up to 50% during winter and 30% in summer, significantly reducing energy consumption and saving costs.

This system utilizes specialized solar panels that operate with refrigerants to enhance the performance of compressors and condensers.

In addition to improving energy efficiency, it minimizes the emission of harmful gases, ensuring a more sustainable operation. The Solar System not only optimizes the functionality of the **HVAC** units but also protects the ecosystem by reducing environmental impact.

Other advantages include lower long-term operational costs, reduced dependency on conventional energy sources, and contribution to global efforts in combating climate change. This innovation makes our units more eco-friendly while maintaining superior performance year-round.







Thank You

**FOR CHOOSING US TO CREATE CLEAN AIR AND COMFORTABLE LIVING SPACES.**  
We remain committed to delivering the best for your health and well-being.

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