

# ECOPOWER R290



Czynnik R290

**CH**  
**Cooper & Hunter**  
COMFORT INNOVATIONS

**NEW  
2021**



## RELIABILITY AND PERFORMANCE

The new C&H ECOPOWER R290 devices are the "Premium" versions of the EVIPOWER series. They were created using the latest technologies used in EVI heat pumps. They meet stringent requirements for productivity, stability and noise emission. The ECOPOWER R290 series uses freon R290 (GWP=3) as a refrigerant, which is 30% more efficient than the previously used refrigerant and also has EVI DC INVERTER compressors. The combination of R290 together with EVI technology allows the heat pump to achieve a temperature at the outlet of up to + 70 degrees.

15 kW

Standard  
BMS

All DC  
Inverter

Control up  
to 5  
circuits\*

Wi-Fi\*

A+++

\*option only possible with Smart Pro 360 optional driver

**ECOPOWER R290**



R290

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COMFORT INNOVATIONS

# COMFORT OF USE AND QUIET OPERATION

**SUPER SILENT**  
**Only 44 dB(A)**





# ECOPOWER R290

GWP=3

PURPOSE(+350C) = 5.15

60°C AT -25°C

SUPER SILENT ONLY 44  
dB(A)



## MAIN FEATURES OF THE DEVICE

R290 is a high purity propane (C3H8) used in refrigeration. R290 has better thermodynamic properties and at the same time has a smaller impact on the depletion of the ozone layer compared to traditional refrigeration products.

The housing is made of high quality ABS plastic and is highly resistant to corrosion, which ensures a long vitality.

The ability to change the operating frequency of the EVI compressor in the range from 30 – 90 Hz, which allows for optimal adjustment of the heat pump power to each building.

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R290



## MAIN FEATURES OF THE DEVICE



Thanks to EVI DC Inverter technology, the device can produce hot water up to 70°C. Tests carried out in the laboratory have shown that the EVI heat pump, based on ERP standards, maintains the energy class A+++.

Intelligent defrosting uses these defrosting technology with pressure change to determine the exact defrost time and initial pressure according to the actual ambient temperature.

The ability to set the water temperature at the outlet from 20 to 70 degrees. This allows the heat pump to be integrated both with efficient low-temperature systems: fan coils and underfloor heating, as well as with high-temperature systems: classic radiators in existing installations.

A high-performance plate heat exchanger was used, which improves the efficiency of the entire device.

Control of up to 3 heating circuits with circulating pumps (expandable to 5)\*.

Possibility of remote control of the device from bms (RS485 as standard).

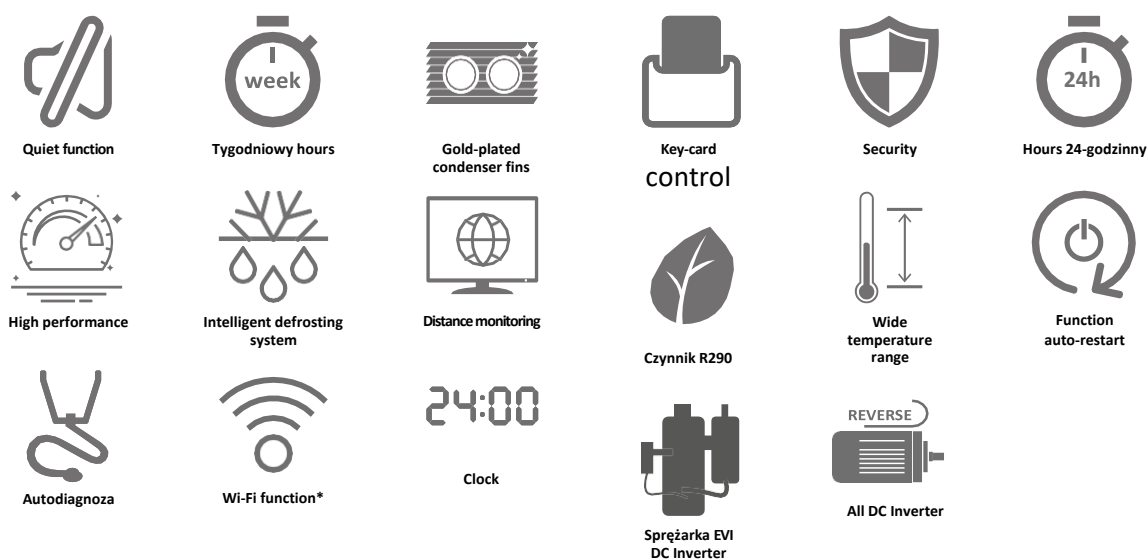
Colorful, touch, original control panel with menu in Polish\*.

Cascade up to 5 pumps as standard\*.

\* option possible only with the smart pro 360 optional controller

## SPECIFICATION

The new generation of C&H ECOPOWER R290 heat pumps is designed for the future. Thanks to EVI DC Inverter technology in combination with R290, the device can produce hot water up to 70°C. Tests carried out in the laboratory have shown that the EVI heat pump, based on ERP standards, maintains the energy class A+++. Thanks to the highest energy class A+++, the device is very energy-efficient, thanks to which it can significantly reduce energy bills for the user.



## ACCESSORIES AS STANDARD

EVIPOWER PREMIUM Controller	DHW sensor x1 pcs.	Condensate drain connection	Anti-vibration rubber x4 pcs.	Display mounting element	Communication cable for display

## OPTIONAL ACCESSORIES

Panel sterujący Smart Pro 360	Regulator Smart Pro 360	ecoNET Wi-Fi module	CT6-P Outdoor temperature sensor	CT-10 Direct and adjustable circulation sensor x3 pcs.

\* Up to 3 heating circuits can be controlled as standard. It is possible to expand with an additional module that

will allow you to control up to 5 heating circuits.

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## HEAT PUMPS



R290

Model		CH-HP22UIMPZM
Heating mode - Temp. ambient temperature (DB/WB): 7/6°C, Temp. water (inlet/outlet): 30/35°C		
Heating capacity	Kw	8.00 ~ 22.00
Current consumption in heating mode	Kw	1.60 ~ 6.90
Cooling mode - Temp. Ambient temperature (DB/WB): 35/24°C, Temp. water (inlet/outlet): 12/7°C		
Cooling capacity	Kw	4.20 ~ 15.00
Current consumption in cooling mode	Kw	1.80 ~ 7.30
DHW heating mode - temp. Ambient temperature (DB/WB): 20/15°C, Temp. water (inlet/outlet): 15/55°C		
Heating capacity	Kw	10.00 ~ 27.00
Current consumption in heating mode	Kw	1.90 ~ 7.10
ErP Level (35°C)	/	A+++
ErP Level (55°C)	/	A+++
SCOP (35°C)	/	5.13
SCOP (55°C)	/	3.84
Freon	/	R290
GWP		3
Amount of refrigerant	kg	1.3
Power	In ~Hz/phase	380 ~ 415V / 3N ~ / 50Hz
Electric heater	/	option
Compressor type	/	Inverter
Control type	/	Reverse
Circulation pump	/	Grundfos
Water connection	inch	1
Water flow	m <sup>3</sup> /h	2.9
Circulating pump pressure	m	12.5
Sound pressure (1 m)	dB(A)	47
Sound power (according to EN12102)	dB(A)	62
Scales	medical history	160
Net dimensions (W x D x H)	mm	1250x540x1330
Gross dimensions (W x D x H)	mm	1380x570x1480
Pressure loss on the exchanger	kPa	45
Max. outlet temperature at -25°C outside	°C	65
Operating temperature range	°C	-25-43
Max. supply temperature	°C	75

\* Noise level based on JB/T4330-1999 from a distance of 1m

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## HEAT PUMPS

1 - PHASE

OUTDOOR UNIT - DIMENSIONS

