

HP.OVER P500

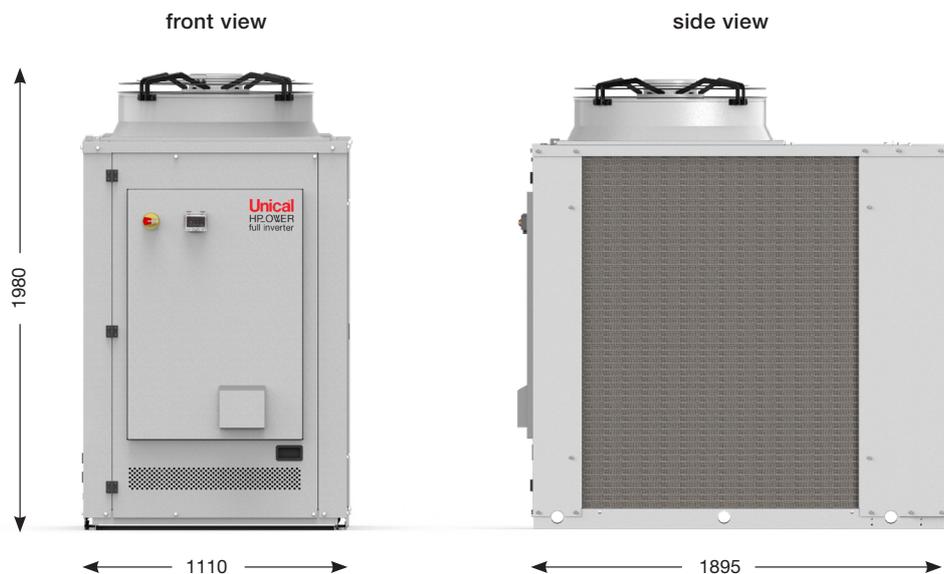
FULL INVERTER HIGH-CAPACITY HEAT PUMPS - R290

High efficiency **“Full inverter”** heat pump, designed for heating, cooling and DHW production.

- **Energy class A ++**
C.O.P. 4.21 - E.E.R. 4.34
- Modularity up to **350 kW** (possibility of cascading up to 7 machines)
- Flow temperatures up to **78°C**
- Low consumption **DC SCROLL INVERTER compressors**, with low noise emissions and continuous progressive modulation
- Asymmetrical stainless-steel **water-gas exchanger**, patented for R290 refrigerant
- **Air-gas heat exchanger** with copper tubes and aluminum fins for an enhanced exchange surface
- **Integrated hydronic kit** with high-efficiency inverter water pump and deaerator
- **Integrated digital controller** for monitoring, control, setting of heat pump parameters and complete system configuration
- **Management** of DHW storage tank (such as Enerboil) or combined storage tank for DHW and buffer tank system (such as Multipower)
- **Standard supplied antifreeze kit** for protection of the plate exchanger (heating cables) and inverter water pump

- “Super Low Noise” kit (SLN), with **air diffuser** for smoother air discharge and reduced fan speed and a **thermal-acoustic insulation** of the compressor to reduce noise emissions and heat losses
- Integrated climatic logic for auxiliary heat source management
- Management options:
 - ModBUS protocol
 - 0-10 Volt external control unit
 - ON / OFF chronothermostat
- **Autorestart and Self-diagnosis**
- **Colour Touch screen Remote control (optional)**, for system configuration and module cascade management
- **HP connect wireless Gateway (optional)**:
 - User App
 - Service App
 - Remote management
- **HP Multifunction Expansion Module (optional)**





Technical data

HP_OWER		P500
Season EFFICIENCY CLASS in heating mode ($T_{out} = 35/55^{\circ}\text{C}$)		A++ A++
Cooling	Cooling capacity ⁽¹⁾	kW 37
	Power input ⁽¹⁾	kW 8.53
	E.E.R. ⁽¹⁾	W/W 4.34
	Cooling capacity ⁽²⁾	kW 34.1
	Power input ⁽²⁾	kW 11
	E.E.R. ⁽²⁾ / S.E.E.R. ⁽⁶⁾	W/W 3.10 / 4.81
Heating	Heating capacity ⁽³⁾	kW 50.1
	Power input ⁽³⁾	kW 11.9
	C.O.P. ⁽³⁾	W/W 4.21
	Heating capacity ⁽⁴⁾	kW 47.9
	Power input ⁽⁴⁾	kW 16.50
	C.O.P. ⁽⁴⁾ / S.C.O.P. ⁽⁶⁾	W/W 2.90 / 4.20
Electric data	Power supply	V/Ph/Hz 400/3/50
	Maximum power input	kW 27
	Maximum current absorbed	A 44
Hydraulic circuit	Water flow rate ⁽²⁾	l/s 1.63
	Available head pressure ^{(2) / (4)}	kPa 124 / 144
	Minimum water volume ⁽⁷⁾	l 415
Emiss. sonore	Sound power L_w ⁽⁸⁾	dB(A) 75
	Sound power L_w ⁽⁹⁾	dB(A) 81
	Sound press. level at a dist. of 1m / 10 ⁽¹⁰⁾	dB(A) 65 / 51
Dimens. e pesi	Dimensions (L x H x D)	mm 1110 x 1980 x 1895
	Shipping weight / Operating weight	kg 550 / 557
R290 Refrigerant quantity		kg 3.5
Ambient operating temperature range		$^{\circ}\text{C}$ -20 / +46

Performance referring to the following conditions:

- (1) Cooling: outdoor air temperature 35°C; in/out water temperature 23/18 °C
- (2) Cooling: outdoor air temperature 35°C; in/out water temperature 12/ 7°C.
- (3) Heating: outdoor air temperature 7°C DB 6°C WB; in/out water temp 30/35°C.
- (4) Heating: outdoor air temperature 7°C DB 6°C WB; in/out water temp 40/45°C.
- (5) Cooling: in/out water temperature 7/12°C.
- (6) Heating: average climatic conditions; $T_{bi} = -7^{\circ}\text{C}$; in/out water temp 30/35°C.
- (7) The volume indicated refers to the total needed; the designer must satisfy it by considering the quantity already present inside the unit, according to the hydronic kit chosen (please check this value in the data sheet).

- (8) Sound power level: full load unit in heating mode according to EU Regulation 813/2013 for medium and low temperature applications. Value determined on the basis of measurements carried out in accordance with EN 12102-1: 2017, used in conjunction with UNI EN ISO 9614-2 which describes the test with the Intensimetric method. The tolerance on the value of the total sound power level is 2 dB (A).

- (9) Sound pressure: mode (1) value calculated from the sound power level using UNI EN ISO 9614-1, considering the units in the open field.
- (10) Sound pressure level: value calculated from the sound power level using ISO 3744:2010, considering the units in the open field.

N.B. Performance data declared in points (1), (2), (3) and (4) is intended to refer to instantaneous power according to UNI EN 14511. The value declared in point (5) and (6) is determined according to UNI EN 14825.