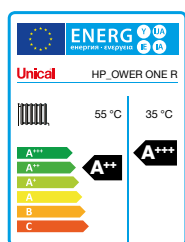


# HP.OWER ONE R

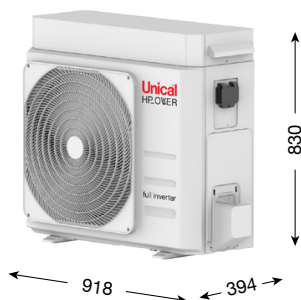
## ENBLOC FULL INVERTER HEAT PUMPS

Air-water, full inverter, high efficiency heat pump, available in 7 models

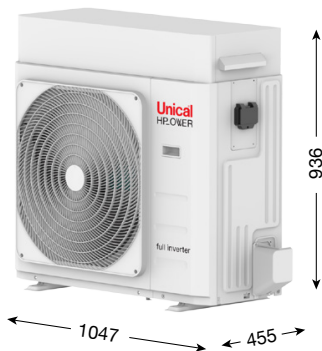
- **Efficiency Class A+++**  
C.O.P. up to 4.85 - E.E.R. up to 5.40
- Possibility to configure in **cascade up to 7 machines**
- Low absorption and noisiness, twin rotary, **DC INVERTER compressor**
- **DC INVERTER BRUSHLESS fan motors**
- **INVERTER circulators with high efficiency BRUSHLESS MOTOR**
- **Flow temperatures** up to 60°C
- **Operation up to -20°C**
- **PREASSEMBLED hydronic kit** composed of: safety valve at 6 bar, air vent, INVERTER circulator, circulation flow-switch
- High efficiency, stainless steel, **water/gas plate heat exchanger**, patented for R32
- **D.H.W. production** through a dedicated storage tank
- **Air-gas heat exchanger** made of copper pipes with aluminium fins and anti-corrosion treatment
- **Refrigerant R32**
- **Integrated digital regulator**
- **Touch screen remote control (optional)**
- **Management of integration source** through integral climatic controller
- **Standard supplied thermo-controller** with management of modulating flow temperature
- **Management through outer controller** with 0-10 V signal (optional)
- Management through **external ON-OFF programmer** (optional)
- **Automatic management** of electric heater for D.H.W. tank
- **Automatic defrosting function**
- **Compressor case pre-heating** for low temperatures
- **Auto-restart**
- **Self-diagnosis**



HP\_OWER ONE 70RD1 - 90RD1



HP\_OWER ONE 120R - 120RT



HP\_OWER ONE 140R - 160RT - 180R



## Technical data

HP_OWER ONE		70RD1	90RD1	120R	120RT	140R	160RT	180R	
Season EFFICIENCY CLASS in heating mode (T <sub>out</sub> = 35/55°C)		<b>A+++ / A++</b>	<b>A+++ / A++</b>	<b>A+++ / A++</b>	<b>A+++ / A++</b>	<b>A+++ / A++</b>	<b>A+++ / A++</b>	<b>A+++ / A++</b>	
Cooling	Cooling capacity <sup>(1)</sup> min-nom-max	kW	4.82-6.18-6.80*	4.91-7.72-8.49*	6.41-11.60-12.76*	6.41-11.60-12.76*	9.17-14.00-14.70*	9.20-15.80-16.59*	9.09-17.10-17.96*
	Input power <sup>(1)</sup>	kW	1.28	1.76	2.79	2.79	2.59	3.15	3.59
	E.E.R. <sup>(1)</sup>	W/W	4.82	4.38	4.16	4.16	5.40	5.02	4.76
	Cooling capacity <sup>(2)</sup> min-nom-max	kW	3.20-5.02-5.52*	3.80-6.08-6.69*	4.55-8.51-9.36*	4.55-8.51-9.36*	6.87-11.48-12.05*	5.99-13.80-14.49*	6.86-15.04-15.79*
	Input power <sup>(2)</sup>	kW	1.60	1.99	2.79	2.79	3.53	4.38	4.88
Heating	E.E.R. <sup>(2)</sup> / S.E.E.R. <sup>(5)</sup>	W/W	3.14 / 4.42	3.05 / 4.51	3.05 / 4.43	3.05 / 4.43	3.25 / 4.77	3.15 / 4.94	3.08 / 5.05
	Heating capacity <sup>(3)</sup> min-nom-max	kW	3.95-6.08-6.99*	3.95-7.81-8.98*	5.33-11.30-13.57*	5.33-11.30-13.57*	7.54-14.10-15.23*	7.36-16.30-17.60*	7.30-17.90-19.33*
	Input power <sup>(3)</sup>	kW	1.35	1.78	2.61	2.61	2.91	3.49	4.07
	C.O.P. <sup>(3)</sup>	W/W	4.51	4.38	4.32	4.32	4.85	4.67	4.40
	Heating capacity <sup>(4)</sup> min-nom-max	kW	3.82-5.88-6.76*	3.80-7.58-8.72*	5.13-11.47-13.19*	5.13-11.47-13.19*	7.23-13.56-14.64*	7.06-15.77-17.03*	7.02-17.32-18.71*
Electric data	Input power <sup>(4)</sup>	kW	1.66	2.17	3.33	3.33	3.55	4.24	4.92
	C.O.P. <sup>(4)</sup> / S.C.O.P. <sup>(6)</sup>	W/W	3.54 / 4.46	3.50 / 4.46	3.44 / 4.47	3.44 / 4.47	3.82 / 4.48	3.72 / 4.50	3.52 / 4.46
	Power supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	400/3/50	230/1/50	400/3/50	400/3/50
Hydraulic circuit	Maximum input power (vers. K)	kW	3.4 (3.5)	4.1 (4.2)	5.1 (5.2)	5.1	6.6 (6.7)	7.0 (7.1)	8.3 (8.5)
	Maximum input current (vers. K)	A	15.5 (15.9)	18.7 (19.1)	22.1 (22.7)	7.3	28.6 (29.2)	10.1 (10.3)	12.0 (12.2)
	R32 Refrigerant quantity <sup>(7)</sup>	kg	0.97	0.97	2.5	2.5	3.2	3.5	3.5
	Water flow rate <sup>(2)</sup>	l/s	0.24	0.28	0.41	0.41	0.55	0.66	0.71
	Available head pressure <sup>(2)</sup>	kPa	78.8	76.0	43.4	43.4	75.0	62.3	55.6
Noise level	Minimum volume of water	l	40	40	60	60	60	70	70
	Sound power at full load L <sub>w</sub> <sup>(8)</sup>	dB(A)	64	64	65	65	68	68	68
	Sound power at partial load L <sub>p1</sub> <sup>(9)</sup>	dB(A)	62	62	62	62	66	66	66
	Sound pressure level at a dist. of 1m at full load L <sub>p1</sub> <sup>(10)</sup>	dB(A)	49.8	49.8	50.4	50.4	52.7	52.7	52.7
	Sound pressure level at a dist. of 10m at full load L <sub>p10</sub> <sup>(10)</sup>	dB(A)	32.8	32.8	33.7	33.7	36.6	36.6	36.6
	Sound pressure level at a dist. of 1m at partial load L <sub>p1</sub> <sup>(11)</sup>	dB(A)	47.8	47.8	47.4	47.4	50.7	50.7	50.7
Operating / Shipping weight	Sound pressure level at a dist. of 10m at partial load L <sub>p10</sub> <sup>(11)</sup>	dB(A)	30.8	30.8	30.7	30.7	34.6	34.6	34.6
	kg	66 / 77	66 / 77	96 / 110	96 / 110	121 / 134	141 / 154	141 / 154	

**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<sub>int</sub> = -7°C; in/out water temp 30/35°C.
- (7) Indicative data subject to changes. For the correct value, always refer to the technical label on the unit.
- (8) Sound power level: full load unit in heating mode according to (EU Regulation 813/2013 inlet-outlet water temperature 47-55 °C) EN 12102-1: 2013. Value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1 which describes the test with the intensity method, in compliance with the requirements of Eurovent and Heat Pump Keymark certification. The tolerance on the value of the total sound power level is 2 dB (A).

- (9) Sound power: unit at partial load in heating mode (outside air temperature 7 ° C, inlet-outlet water temperature 47-55 ° C, in accordance with EU Regulation 813/2013) to guarantee a thermal capacity in accordance with EN 14825, according to the provisions of Annex A of EN 12102-1: 2017. Value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1 which describes the test with the intensity method, in compliance with the requirements of Eurovent certification and Heat Pump Keymark. The tolerance on the value of the total sound power level is 2 dB (A)
- (10) Sound pressure: value calculated from the sound power level at full load using ISO 3744: 2010, considering the units in open field
- (11) Sound pressure: value calculated from the sound power level at part load using ISO 3744: 2010, considering the units in open field
- (\*) activating the "maximum Hz" function

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

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