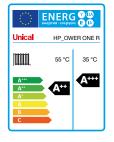
Unical

HPOWER ONE R

ENBLOC FULL INVERTER HEAT PUMPS

- Air-water, full inverter, high efficiency heat pump, available in 6 models
- Efficiency Class A+++ C.O.P. up to 4.85 E.E.R. up to 5.40
- 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
- Air-gas heat exchanger made of copper pipes with aluminium fins and anti-corrosion treatment.

- D.H.W. production through a dedicated storage tank
- 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













Unical

HP OWER ONE 70R-90R







HP OWER ONE 140R-160RT-180R





Technical data

HP_C	OWER ONE		70R	90R	120R	140R	160RT	180R
Season EFFICIENCY CLASS in heating mode (T _{out} = 35/55°C)			A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Cooling	Cooling capacity (1) min-nom-max	kW	4.82 - 6.18 - 6.80*	4.91 - 7.72 - 8.49*	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 (1)	kW	1.28	1.76	2.79	2.59	3.15	3.59
	E.E.R. (1)	W/W	4.82	4.38	4.16	5.40	5.02	4.76
	Cooling capacity (2) min-nom-max	kW	3.20 - 5.02 - 5.52*	3.80 - 6.08 - 6.69*	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 (2)	kW	1.60	1.99	2.79	3.53	4.38	4.88
	E.E.R. (2) / S.E.E.R. (5)	W/W	3.14 / 4.12	3.05 / 4.25	3.05 / 4.25	3.25 / 4.62	3.15 / 4.80	3.08 / 4.91
Heating	Heating capacity (3) min-nom-max	kW	3.95 - 6.08 - 6.99*	3.95 - 7.81 - 8.98*	5.33 - 11.80 - 13.57*	7.54 - 14.10 - 15.23*	7.36 - 16.30 - 17.60*	7.30 - 17.90 - 19.33
	Input power (3)	kW	1.35	1.78	2.73	2.91	3.49	4.07
	C.O.P. (3)	W/W	4.51	4.38	4.32	4.85	4.67	4.40
	Heating capacity (4) min-nom-max	kW	3.82 - 5.88 - 6.76*	3.80 - 7.58 - 8.72*	5.13 - 11.47 - 13.19*	7.23 - 13.56 - 14.64*	7.06 - 15.77 - 17.03*	7.02 - 17.32 - 18.71
	Input power (4)	kW	1.66	2.17	3.33	3.55	4.24	4.92
	C.O.P. (4) / S.C.O.P. (6)	W/W	3.54 / 4.46	3.50 / 4.46	3.44 / 4.47	3.82 / 4.48	3.72 / 4.50	3.52 / 4.46
Electric	Power supply		230V/1/50Hz	230V/1/50Hz	230V/1/50Hz	230V/1/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50H
	Maximum input power (vers. K)	kW	3.5 (3.6)	3.9 (4.0)	5.1 (5.2)	6.6 (6.7)	7.0 (7.1)	8.3 (8.5)
	Maximum input current (vers. K)	Α	15.1 (15.6)	17.0 (17.6)	22.1 (22.7)	28.6 (29.2)	10.1 (10.3)	12.0 (12.2)
R32 Refrigerant quantity (7)		kg	1.5	1.5	2.5	3.2	3.5	3.5
Hydraulic circuit	Water flow rate (2)	l/s	0.24	0.28	0.41	0.55	0.66	0.71
	Available head pressure (2)	kPa	78.8	76.0	63.4	75.0	62.3	55.6
	Minimum volume of water	1	40	40	60	60	70	70
Noise level	Sound power L _w ⁽⁸⁾	dB(A)	64	64	65	68	68	68
	Sound press. level at a dist. of 1m L	⁽⁹⁾ dB(A)	49.8	49.8	50.4	52.7	52.7	52.7
	Sound press.level at a dist. of 10m L	₀₁₀ ⁽⁹⁾ dB(A)	32.8	32.8	33.7	36.6	36.6	36.6
Operating weight kg		72	72	96	121	141	141	

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 22/10°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; $T_{\rm bw}=-7^{\circ}{\rm C}$; 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 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 level: value calculated from the sound power level using ISO 3744:2010, considering the units in the 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