

Subtype Hydro 8

Certificate Holder	Alpha Therm Ltd.
Address	Nepicar House, London Road
ZIP	TN15 7RS
City	Kent
Country	GB
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Hydro 8
Registration number	011-1W0593
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.15 kg
Certification Date	14.04.2023
Testing basis	HP KEYMARK certification scheme rules rev. 11

Model Hydro 8

Model name	Hydro 8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	115 %
COP	2.85
Heating up time	2:00 h:min
Standby power input	60.0 W
Reference hot water temperature	52.1 °C
Mixed water at 40°C	206 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	8.00 kW	7.10 kW
El input	1.77 kW	2.53 kW
COP	4.52	2.81

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	175 %	126 %

Prated	8.00 kW	8.00 kW
SCOP	4.44	3.23
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	2.63	1.90
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.31 kW	4.31 kW
COP Tj = +2°C	4.24	3.11
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.10 kW	2.80 kW
COP Tj = +7°C	6.39	4.55
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.60 kW	2.40 kW
COP Tj = 12°C	8.22	5.77
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.10 kW	7.10 kW
COP Tj = Tbiv	2.63	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.48	1.66
WTOL	65 °C	65 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.00 kW	1.20 kW
Annual energy consumption Qhe	3719 kWh	5113 kWh