

## Subtype Hydro 5

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 5
Registration number	011-1W0592
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1 kg
Certification Date	14.04.2023
Testing basis	HP KEYMARK certification scheme rules V11

## Model Hydro 5

Model name	Hydro 5
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 $\eta_{DHW}$	115 %
COP	2.86
Heating up time	2:20 h:min
Standby power input	58.0 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	5.00 kW	4.30 kW
El input	1.03 kW	1.52 kW
COP	4.85	2.83

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	175 %	125 %

Prated	6.00 kW	5.00 kW
SCOP	4.46	3.20
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.87 kW	4.42 kW
COP Tj = -7°C	2.99	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.96 kW	2.69 kW
COP Tj = +2°C	4.18	3.17
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.90 kW	1.73 kW
COP Tj = +7°C	6.11	4.03
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.88 kW	1.70 kW
COP Tj = 12°C	7.70	4.73
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	4.87 kW	4.42 kW
COP Tj = Tbiv	2.99	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.59 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2.00
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	1.41 kW	0.80 kW
Annual energy consumption Qhe	2548 kWh	3224 kWh