

## Subtype E-TEC 33 Hybrid

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	E-TEC 33 Hybrid
Registration number	011-1W0572
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	0.56 kg
Testing basis	HP KEYMARK certification scheme rules rev. 10

## Model E-TEC EHP / E-TEC 33 HB

Model name	E-TEC EHP / E-TEC 33 HB
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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 14511-4 | Heating

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

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	128 %
Prated	5.20 kW	5.60 kW
SCOP	4.15	3.28
Tbiv	2 °C	2 °C
TOL	-5 °C	-3 °C
Pdh Tj = -7°C	0.01 kW	0.01 kW
COP Tj = -7°C	1.00	1.00
Pdh Tj = +2°C	2.80 kW	3.00 kW
COP Tj = +2°C	4.31	3.19
Pdh Tj = +7°C	3.40 kW	3.20 kW
COP Tj = +7°C	5.78	4.52
Pdh Tj = 12°C	3.90 kW	3.90 kW
COP Tj = 12°C	8.02	6.42
Pdh Tj = Tbiv	2.80 kW	3.00 kW
COP Tj = Tbiv	4.31	3.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.00 kW	2.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	2.49

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	33 °C	48 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.20 kW	5.60 kW
Annual energy consumption Qhe	2588 kWh	3511 kWh