

## Subtype ThermaX Mono 4/6KW

Certificate Holder	GD Shenling Thermal Tech Co., Ltd
Address	No.29 Shunye East Rd.
ZIP	528325
City	Foshan
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	ThermaX Mono 4/6KW
Registration number	011-1W0635
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.15 kg
Certification Date	05.06.2023
Testing basis	HP KEYMARK certification scheme rules V11

## Model HPM-V40W/R2

Model name	HPM-V40W/R2
Application	Heating (medium temp)
Units	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 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	209 %	142 %
Prated	5.00 kW	4.40 kW
SCOP	5.30	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.46 kW	3.93 kW
COP Tj = -7°C	3.27	2.23
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.64 kW	2.31 kW
COP Tj = +2°C	5.11	3.52
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	1.78 kW	1.52 kW
COP Tj = +7°C	7.17	4.80
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.24 kW	1.15 kW
COP Tj = 12°C	9.43	6.73
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	4.46 kW	3.93 kW
COP Tj = Tbiv	3.27	2.23

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.32 kW	3.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.01	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	63 °C	63 °C
Poff	12 W	12 W
PTO	13 W	13 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.70 kW	1.20 kW
Annual energy consumption Qhe	1948 kWh	2510 kWh

## Model HPM-V60W/R2

Model name	HPM-V60W/R2
Application	Heating (medium temp)
Units	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 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 12102-1 | Average Climate

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

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	200 %	145 %
Prated	6.00 kW	5.60 kW
SCOP	5.08	3.71
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.36 kW	5.03 kW
COP Tj = -7°C	3.23	2.30
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.36 kW	3.19 kW
COP Tj = +2°C	4.70	3.48
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.06 kW	2.00 kW
COP Tj = +7°C	7.13	5.13
Cdh Tj = +7 °C	0.950	0.970
Pdh Tj = 12°C	1.23 kW	1.15 kW
COP Tj = 12°C	9.37	6.86
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	5.36 kW	5.03 kW
COP Tj = Tbiv	3.23	2.30

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.27 kW	4.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.02	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	63 °C	63 °C
Poff	12 W	12 W
PTO	13 W	13 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.70 kW	0.80 kW
Annual energy consumption Qhe	2442 kWh	3120 kWh