

Subtype ThermaX Split 12/14/16KW

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 Split 12/14/16KW
Registration number	011-1W0680
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.05 kg
Certification Date	20.09.2023
Testing basis	HP KEYMARK certification scheme rules V12

**Model OU: HPS-V120W/R2 + IU: HM-160/DR2**

Model name	OU: HPS-V120W/R2 + IU: HM-160/DR2
Application	Heating (medium 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 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	12.20 kW	12.00 kW
El input	2.54 kW	4.07 kW
COP	4.80	2.95

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	198 %	141 %
Prated	12.20 kW	12.50 kW
SCOP	5.02	3.59
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.84 kW	11.33 kW
COP Tj = -7°C	3.10	2.23
Cdh Tj = -7 °C	0.995	0.997
Pdh Tj = +2°C	6.60 kW	6.90 kW
COP Tj = +2°C	4.68	3.42
Cdh Tj = +2 °C	0.989	0.992

Pdh Tj = +7°C	4.11 kW	4.33 kW
COP Tj = +7°C	7.09	4.75
Cdh Tj = +7 °C	0.972	0.982
Pdh Tj = 12°C	3.71 kW	3.37 kW
COP Tj = 12°C	9.93	7.03
Cdh Tj = +12 °C	0.957	0.967
Pdh Tj = Tbiv	10.84 kW	11.33 kW
COP Tj = Tbiv	3.10	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.64 kW	10.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.99	1.97
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
WTOL	63 °C	63 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.60 kW	2.20 kW
Annual energy consumption Qhe	5021 kWh	7185 kWh

**Model OU: HPS-V140W/R2 + IU: HM-160/DR2**

Model name	OU: HPS-V140W/R2 + IU: HM-160/DR2
Application	Heating (medium 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 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	14.20 kW	14.00 kW
El input	3.09 kW	4.83 kW
COP	4.60	2.90

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	193 %	142 %
Prated	14.00 kW	14.10 kW
SCOP	4.91	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.44 kW	12.66 kW
COP Tj = -7°C	2.99	2.19
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	7.41 kW	7.60 kW
COP Tj = +2°C	4.60	3.44
Cdh Tj = +2 °C	0.990	0.993

Pdh Tj = +7°C	5.21 kW	4.88 kW
COP Tj = +7°C	6.81	4.88
Cdh Tj = +7 °C	0.979	0.984
Pdh Tj = 12°C	3.71 kW	3.37 kW
COP Tj = 12°C	9.93	7.03
Cdh Tj = +12 °C	0.957	0.967
Pdh Tj = Tbiv	12.44 kW	12.66 kW
COP Tj = Tbiv	2.99	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.56 kW	11.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	63 °C	63 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.40 kW	2.60 kW
Annual energy consumption Qhe	5894 kWh	8056 kWh

## Model OU: HPS-V160W/R2 + IU: HM-160/DR2

Model name	OU: HPS-V160W/R2 + IU: HM-160/DR2
Application	Heating (medium 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 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	16.00 kW	16.40 kW
El input	3.64 kW	5.75 kW
COP	4.40	2.85

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	191 %	140 %
Prated	15.20 kW	14.70 kW
SCOP	4.86	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.45 kW	13.29 kW
COP Tj = -7°C	2.92	2.16
Cdh Tj = -7 °C	0.997	0.997
Pdh Tj = +2°C	8.13 kW	8.13 kW
COP Tj = +2°C	4.57	3.38
Cdh Tj = +2 °C	0.991	0.993

Pdh Tj = +7°C	5.45 kW	5.12 kW
COP Tj = +7°C	6.81	4.90
Cdh Tj = +7 °C	0.980	0.985
Pdh Tj = 12°C	3.71 kW	3.37 kW
COP Tj = 12°C	9.93	7.03
Cdh Tj = +12 °C	0.957	0.967
Pdh Tj = Tbiv	13.45 kW	13.29 kW
COP Tj = Tbiv	2.92	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.58 kW	12.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	63 °C	63 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.60 kW	2.70 kW
Annual energy consumption Qhe	6463 kWh	8489 kWh

Model OU: HPS-V120W/SR2 + IU: HM-160/DSR2

Model name	OU: HPS-V120W/SR2 + IU: HM-160/DSR2
Application	Heating (medium 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	3x400V 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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.20 kW	12.00 kW
El input	2.54 kW	4.07 kW
COP	4.80	2.95

#### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	195 %	141 %
Prated	12.20 kW	12.50 kW
SCOP	4.96	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.04 kW	11.16 kW
COP Tj = -7°C	3.12	2.23
Cdh Tj = -7 °C	0.994	0.996
Pdh Tj = +2°C	6.49 kW	6.66 kW
COP Tj = +2°C	4.62	3.40
Cdh Tj = +2 °C	0.986	0.990

Pdh Tj = +7°C	4.43 kW	4.46 kW
COP Tj = +7°C	6.97	4.95
Cdh Tj = +7 °C	0.969	0.978
Pdh Tj = 12°C	3.69 kW	3.42 kW
COP Tj = 12°C	9.48	6.84
Cdh Tj = +12 °C	0.949	0.960
Pdh Tj = Tbiv	11.04 kW	11.16 kW
COP Tj = Tbiv	3.12	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.02 kW	10.12 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.994	0.996
WTOL	63 °C	63 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	3 W	3 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.20 kW	2.40 kW
Annual energy consumption Qhe	5083 kWh	7158 kWh

**Model OU: HPS-V140W/SR2 + IU: HM-160/DSR2**

Model name	OU: HPS-V140W/SR2 + IU: HM-160/DSR2
Application	Heating (medium 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	3x400V 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 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	14.20 kW	14.00 kW
El input	3.09 kW	4.83 kW
COP	4.60	2.90

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	194 %	141 %
Prated	14.00 kW	14.10 kW
SCOP	4.91	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.40 kW	12.50 kW
COP Tj = -7°C	3.07	2.17
Cdh Tj = -7 °C	0.995	0.997
Pdh Tj = +2°C	7.36 kW	7.43 kW
COP Tj = +2°C	4.55	3.44
Cdh Tj = +2 °C	0.988	0.991

Pdh Tj = +7°C	4.97 kW	4.88 kW
COP Tj = +7°C	7.02	4.93
Cdh Tj = +7 °C	0.972	0.980
Pdh Tj = 12°C	3.69 kW	3.42 kW
COP Tj = 12°C	9.48	6.84
Cdh Tj = +12 °C	0.949	0.960
Pdh Tj = Tbiv	12.40 kW	12.50 kW
COP Tj = Tbiv	3.07	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.38 kW	10.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.996
WTOL	63 °C	63 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	3 W	3 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.60 kW	3.20 kW
Annual energy consumption Qhe	5887 kWh	8074 kWh

Model OU: HPS-V160W/SR2 + IU: HM-160/DSR2

Model name	OU: HPS-V160W/SR2 + IU: HM-160/DSR2
Application	Heating (medium 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	3x400V 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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	16.00 kW	16.40 kW
El input	3.64 kW	5.75 kW
COP	4.40	2.85

#### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	192 %	141 %
Prated	15.20 kW	14.70 kW
SCOP	4.86	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.45 kW	13.09 kW
COP Tj = -7°C	2.96	2.17
Cdh Tj = -7 °C	0.996	0.997
Pdh Tj = +2°C	7.89 kW	8.20 kW
COP Tj = +2°C	4.53	3.41
Cdh Tj = +2 °C	0.989	0.992

Pdh Tj = +7°C	5.45 kW	5.38 kW
COP Tj = +7°C	6.99	4.98
Cdh Tj = +7 °C	0.974	0.981
Pdh Tj = 12°C	3.69 kW	3.42 kW
COP Tj = 12°C	9.48	6.84
Cdh Tj = +12 °C	0.949	0.960
Pdh Tj = Tbiv	13.45 kW	13.09 kW
COP Tj = Tbiv	2.96	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.07 kW	11.61 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.996	0.997
WTOL	63 °C	63 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	3 W	3 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.10 kW	3.10 kW
Annual energy consumption Qhe	6459 kWh	8436 kWh