

## Subtype ThermaX Split 8/10KW

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 8/10KW
Registration number	011-1W0679
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.58 kg
Certification Date	20.09.2023
Testing basis	HP KEYMARK certification scheme rules V12

Model OU: HPS-V80W/R2 + IU: HM-100/DR2

Model name	OU: HPS-V80W/R2 + IU: HM-100/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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 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	7.80 kW	7.30 kW
SCOP	4.90	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.98 kW	6.66 kW
COP Tj = -7°C	3.04	2.30
Cdh Tj = -7 °C	0.992	0.994
Pdh Tj = +2°C	4.33 kW	3.94 kW
COP Tj = +2°C	4.71	3.51
Cdh Tj = +2 °C	0.980	0.984
Pdh Tj = +7°C	2.64 kW	2.45 kW
COP Tj = +7°C	6.63	4.71
Cdh Tj = +7 °C	0.955	0.965
Pdh Tj = 12°C	1.94 kW	1.81 kW
COP Tj = 12°C	8.51	6.27
Cdh Tj = +12 °C	0.921	0.938
Pdh Tj = Tbiv	6.98 kW	6.66 kW

COP $T_j = T_{biv}$	3.04	2.30
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.56 kW	6.16 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.91	2.02
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.992	0.994
WTOL	63 °C	63 °C
P <sub>off</sub>	12 W	12 W
PTO	18 W	18 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.20 kW	1.10 kW
Annual energy consumption Q <sub>he</sub>	3288 kWh	4158 kWh

Model OU: HPS-V100W/R2 + IU: HM-100/DR2

Model name	OU: HPS-V100W/R2 + IU: HM-100/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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

##### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	190 %	142 %
Prated	9.10 kW	8.20 kW
SCOP	4.83	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.11 kW	7.26 kW
COP Tj = -7°C	2.97	2.27
Cdh Tj = -7 °C	0.993	0.994
Pdh Tj = +2°C	4.82 kW	4.39 kW
COP Tj = +2°C	4.55	3.45
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.21 kW	2.87 kW
COP Tj = +7°C	6.77	4.89
Cdh Tj = +7 °C	0.962	0.969
Pdh Tj = 12°C	1.94 kW	1.81 kW
COP Tj = 12°C	8.63	6.33
Cdh Tj = +12 °C	0.920	0.937
Pdh Tj = Tbiv	8.11 kW	7.26 kW

COP $T_j = T_{biv}$	2.97	2.27
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.87 kW	6.82 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.73	2.04
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.994	0.995
WTOL	63 °C	63 °C
P <sub>off</sub>	12 W	12 W
PTO	18 W	18 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.20 kW	1.40 kW
Annual energy consumption Q <sub>he</sub>	3895 kWh	4676 kWh