

## Subtype HPS.Z 6kW/230 V

Certificate Holder	Kospel SP. z o.o.
Address	ul. Olchowa 1
ZIP	75-136
City	Koszalin
Country	PL
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	HPS.Z 6kW/230 V
Registration number	011-1W0437
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	0.95 kg
Certification Date	15.12.2021
Testing basis	HP KEYMARK certification scheme rules rev. 9

## Model HPSO-6/230 + HPSI-6

Model name	HPSO-6/230 + HPSI-6
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	Yes

## 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	62 dB(A)	62 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	175 %	125 %
Prated	5.10 kW	4.10 kW
SCOP	4.45	3.20
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.53 kW	3.31 kW
COP Tj = -7°C	2.85	1.89
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.04 kW	2.65 kW
COP Tj = +2°C	4.30	3.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.11 kW	2.74 kW
COP Tj = +7°C	5.93	4.76
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.60 kW	3.27 kW
COP Tj = 12°C	8.40	6.35
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	4.53 kW	3.59 kW

COP $T_j = T_{biv}$	2.85	1.89
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	4.08 kW	2.86 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.49
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.99	0.99
WTOL	55 °C	55 °C
P <sub>off</sub>	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.04 kW	1.20 kW
Annual energy consumption Q <sub>he</sub>	10549 kWh	8383 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	135 %	90 %
Prated	4.80 kW	3.30 kW
SCOP	3.46	2.32
$T_{biv}$	-15 °C	-15 °C
TOL	-20 °C	-20 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	3.10 kW	2.10 kW
COP $T_j = -7^{\circ}\text{C}$	2.89	1.81
$C_{dh} T_j = -7^{\circ}\text{C}$	0.99	0.99
$P_{dh} T_j = +2^{\circ}\text{C}$	2.40 kW	2.09 kW
COP $T_j = +2^{\circ}\text{C}$	4.40	2.72
$C_{dh} T_j = +2^{\circ}\text{C}$	0.99	0.99
$P_{dh} T_j = +7^{\circ}\text{C}$	3.14 kW	2.88 kW
COP $T_j = +7^{\circ}\text{C}$	6.20	4.76
$C_{dh} T_j = +7^{\circ}\text{C}$	0.99	0.99
$P_{dh} T_j = 12^{\circ}\text{C}$	3.43 kW	3.34 kW
COP $T_j = 12^{\circ}\text{C}$	8.00	6.85
$C_{dh} T_j = +12^{\circ}\text{C}$	0.99	0.99
$P_{dh} T_j = T_{biv}$	3.90 kW	2.67 kW
COP $T_j = T_{biv}$	2.11	1.51
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	3.30 kW	1.06 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	1.21	0.32

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.78 kW	3.27 kW
Annual energy consumption Qhe	11493 kWh	7870 kWh

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	225 %	156 %
Prated	5.70 kW	4.10 kW
SCOP	5.70	3.97
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	5.01 kW	4.08 kW
COP Tj = +2°C	4.30	1.98
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.28 kW	2.95 kW
COP Tj = +7°C	4.86	3.25
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.43 kW	3.31 kW
COP Tj = 12°C	7.69	5.59
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.01 kW	4.08 kW
COP Tj = Tbiv	2.97	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.01 kW	4.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.97	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	55 °C	55 °C
Poff	15 W	15 W
PTO	0 W	0 W
PSB	0 W	0 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	6687 kWh	5450 kWh