

Subtype Sherpa Tower S3 E 8 - 10

Certificate Holder	Olimpia Splendid S.p.A.
Address	Via Industriale, 1/3
ZIP	25060
City	Cellatica (BS)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	Sherpa Tower S3 E 8 - 10
Registration number	ICIM-PDC-000186
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.65 kg
Certification Date	23.01.2023
Testing basis	Heat Pump KEYMARK V11

Model SHERPA TOWER S3 E 8

Model name	SHERPA TOWER S3 E 8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.97
Heating up time	01:00 h:min
Standby power input	40.0 W
Reference hot water temperature	43.7 °C
Mixed water at 40°C	230 l

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	8.30 kW	7.50 kW
El input	1.60 kW	2.36 kW
COP	5.20	3.18

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.19 kW	1.66 kW
Cooling capacity	7.40	8.40
EER	3.38	5.05

EN 12102-1 | Average Climate

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

Sound power level outdoor	54 dB(A)	54 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	205 %	131 %
Prated	8.10 kW	6.60 kW
SCOP	5.22	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.18 kW	5.84 kW
COP Tj = -7°C	3.35	2.16
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.65 kW	3.76 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.90 kW	2.43 kW
COP Tj = +7°C	6.82	4.34
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.63 kW	1.39 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.18 kW	5.84 kW
COP Tj = Tbiv	3.35	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.44 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	1.69 kW
Annual energy consumption Qhe	3218 kWh	4054 kWh
EN 14825 Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.40 kW	8.40 kW
SEER	5.83	8.95
Pdc Tj = 35°C	7.38 kW	8.37 kW
EER Tj = 35°C	3.39	5.09
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	5.72 kW	6.47 kW

EER Tj = 30°C	4.71	7.02
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	3.62 kW	4.31 kW
EER Tj = 25°C	6.65	10.67
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	1.64 kW	1.80 kW
EER Tj = 20°C	8.55	13.61
Cdc Tj = 20 °C	0.900	0.900
Poff	14 W	14 W
PTO	10 W	10 W
PSB	14 W	14 W
PCK	0 W	0 W
Annual energy consumption Qce	761 kWh	563 kWh

Model SHERPA TOWER S3 E 10

Model name	SHERPA TOWER S3 E 10
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	123 %
COP	2.97
Heating up time	01:00 h:min
Standby power input	40.0 W
Reference hot water temperature	43.7 °C
Mixed water at 40°C	230 l

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	10.00 kW	9.50 kW
El input	2.00 kW	3.06 kW
COP	5.00	3.10

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.08 kW	2.48 kW
Cooling capacity	10.00	8.20
EER	4.80	3.30

EN 12102-1 | Average Climate

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

Sound power level outdoor	55 dB(A)	55 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	205 %	136 %
Prated	9.20 kW	7.70 kW
SCOP	5.20	3.47
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.10 kW	6.78 kW
COP Tj = -7°C	3.23	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.18 kW	4.28 kW
COP Tj = +2°C	5.01	3.42
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.32 kW	2.77 kW
COP Tj = +7°C	7.08	4.52
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.65 kW	1.58 kW
COP Tj = 12°C	8.58	5.68
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.10 kW	6.78 kW
COP Tj = Tbiv	3.23	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	2.28 kW
Annual energy consumption Qhe	3644 kWh	4567 kWh
EN 14825 Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.70 kW	10.00 kW
SEER	5.98	8.78
Pdc Tj = 35°C	8.73 kW	10.01 kW
EER Tj = 35°C	3.21	4.64
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	6.68 kW	7.71 kW

EER Tj = 30°C	4.47	6.45
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.26 kW	5.03 kW
EER Tj = 25°C	7.02	10.36
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	1.94 kW	2.32 kW
EER Tj = 20°C	9.54	14.98
Cdc Tj = 20 °C	0.900	0.900
Poff	14 W	14 W
PTO	10 W	10 W
PSB	14 W	14 W
PCK	0 W	0 W
Annual energy consumption Qce	873 kWh	683 kWh