

Subtype Sherpa Aquadue Tower S3 E 12 - 14 - 16 - 12T - 14T - 16T

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 Aquadue Tower S3 E 12 - 14 - 16 - 12T - 14T - 16T
Registration number	ICIM-PDC-000190
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.84 kg
Certification Date	23.01.2023
Testing basis	Heat Pump KEYMARK V11

**Model SHERPA AQUADUE TOWER S3 E 12**

Model name	SHERPA AQUADUE TOWER S3 E 12
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
Phase-out Date	20.06.2027

**General data**

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

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency ηDHW	81 %
COP	1.88
Heating up time	01:07 h:min
Standby power input	76.0 W
Reference hot water temperature	43.1 °C
Mixed water at 40°C	156 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	12.10 kW	12.00 kW
El input	2.44 kW	3.87 kW
COP	4.95	3.10

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	4.22 kW	3.00 kW
Cooling capacity	11.60	12.00
EER	2.75	4.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	189 %	135 %
P <sub>rated</sub>	12.00 kW	11.60 kW
SCOP	4.81	3.45
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	10.61 kW	10.24 kW
COP T <sub>j</sub> = -7°C	2.88	2.01
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	6.69 kW	6.52 kW
COP T <sub>j</sub> = +2°C	4.65	3.44
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	4.44 kW	4.36 kW
COP T <sub>j</sub> = +7°C	6.62	4.59
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.74 kW	3.29 kW
COP T <sub>j</sub> = 12°C	8.47	6.05
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	10.61 kW	10.27 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.88	2.01
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	10.74 kW	9.10 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.77	1.79
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WT <sub>OL</sub>	65 °C	65 °C
P <sub>off</sub>	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	1.26 kW	2.50 kW
Annual energy consumption Q <sub>he</sub>	5156 kWh	6927 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	11.30 kW	11.80 kW
SEER	4.89	7.10
P <sub>dc T<sub>j</sub></sub> = 35°C	11.31 kW	11.77 kW
EER T <sub>j</sub> = 35°C	2.61	3.87

Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	8.76 kW	9.21 kW
EER Tj = 30°C	3.93	5.50
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	5.81 kW	5.74 kW
EER Tj = 25°C	5.73	8.66
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	2.63 kW	3.33 kW
EER Tj = 20°C	6.75	10.07
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	1387 kWh	997 kWh

**Model SHERPA AQUADUE TOWER SE E 14**

Model name	SHERPA AQUADUE TOWER SE E 14
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
Phase-out Date	20.06.2027

**General data**

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

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	1.88
Heating up time	01:07 h:min
Standby power input	76.0 W
Reference hot water temperature	43.1 °C
Mixed water at 40°C	156 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	14.50 kW	13.80 kW
El input	3.09 kW	4.60 kW
COP	4.70	3.00

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	4.98 kW	3.50 kW
Cooling capacity	12.70	13.00
EER	2.55	3.70

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	186 %	135 %
P <sub>rated</sub>	13.70 kW	12.10 kW
SCOP	4.72	3.47
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	12.14 kW	10.68 kW
COP T <sub>j</sub> = -7°C	2.79	2.01
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	7.94 kW	6.86 kW
COP T <sub>j</sub> = +2°C	4.52	3.43
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	5.20 kW	4.63 kW
COP T <sub>j</sub> = +7°C	6.68	4.66
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.75 kW	3.31 kW
COP T <sub>j</sub> = 12°C	8.52	6.13
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	12.14 kW	10.68 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.79	2.01
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	11.47 kW	9.19 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.59	1.76
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WT <sub>OL</sub>	65 °C	65 °C
P <sub>off</sub>	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	2.23 kW	2.91 kW
Annual energy consumption Q <sub>he</sub>	6012 kWh	7202 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	12.20 kW	13.30 kW
SEER	4.86	6.90
P <sub>dc T<sub>j</sub></sub> = 35°C	12.19 kW	13.30 kW
EER T <sub>j</sub> = 35°C	2.46	3.46

Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	9.41 kW	10.20 kW
EER Tj = 30°C	3.85	5.26
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	6.16 kW	6.57 kW
EER Tj = 25°C	5.80	8.45
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	2.63 kW	3.33 kW
EER Tj = 20°C	6.74	10.07
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	1505 kWh	1157 kWh

**Model SHERPA AQUADUE TOWER S3 E 16**

Model name	SHERPA AQUADUE TOWER S3 E 16
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
Phase-out Date	20.06.2027

**General data**

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

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	1.88
Heating up time	01:07 h:min
Standby power input	76.0 W
Reference hot water temperature	43.1 °C
Mixed water at 40°C	156 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	16.00 kW	16.00 kW
El input	3.56 kW	5.52 kW
COP	4.50	2.90

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	5.71 kW	3.74 kW
Cooling capacity	14.00	13.50
EER	2.45	3.61

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	133 %
P <sub>rated</sub>	15.20 kW	13.00 kW
SCOP	4.62	3.41
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	13.45 kW	11.52 kW
COP T <sub>j</sub> = -7°C	2.72	1.99
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	8.56 kW	7.18 kW
COP T <sub>j</sub> = +2°C	4.41	3.34
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	5.70 kW	4.67 kW
COP T <sub>j</sub> = +7°C	6.56	4.61
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.78 kW	3.32 kW
COP T <sub>j</sub> = 12°C	8.51	6.07
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	13.45 kW	11.52 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.72	1.99
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	12.52 kW	10.33 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.48	1.80
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WT <sub>OL</sub>	65 °C	65 °C
P <sub>off</sub>	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	2.68 kW	2.67 kW
Annual energy consumption Q <sub>he</sub>	6804 kWh	7895 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	14.30 kW	15.40 kW
SEER	4.69	6.75
P <sub>dc T<sub>j</sub></sub> = 35°C	14.31 kW	15.40 kW
EER T <sub>j</sub> = 35°C	2.47	3.50

Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	10.68 kW	11.42 kW
EER Tj = 30°C	3.63	5.14
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	6.76 kW	7.27 kW
EER Tj = 25°C	5.27	7.83
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.41 kW	3.40 kW
EER Tj = 20°C	7.29	10.35
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	1830 kWh	1369 kWh

**Model SHERPA AQUADUE TOWER S3 E 12T**

Model name	SHERPA AQUADUE TOWER S3 E 12T
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
Phase-out Date	20.06.2027

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency ηDHW	81 %
COP	1.88
Heating up time	01:07 h:min
Standby power input	76.0 W
Reference hot water temperature	43.1 °C
Mixed water at 40°C	156 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	12.10 kW	12.00 kW
El input	2.44 kW	3.87 kW
COP	4.95	3.10

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	4.22 kW	3.00 kW
Cooling capacity	11.60	12.00
EER	2.75	4.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	189 %	135 %
P <sub>rated</sub>	12.00 kW	11.60 kW
SCOP	4.81	3.45
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	10.61 kW	10.24 kW
COP T <sub>j</sub> = -7°C	2.88	2.01
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	6.69 kW	6.52 kW
COP T <sub>j</sub> = +2°C	4.65	3.44
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	4.44 kW	4.36 kW
COP T <sub>j</sub> = +7°C	6.62	4.59
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.74 kW	3.29 kW
COP T <sub>j</sub> = 12°C	8.47	6.05
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	10.61 kW	10.27 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.88	2.01
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	10.74 kW	9.10 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.77	1.79
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WT <sub>OL</sub>	65 °C	65 °C
P <sub>off</sub>	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.26 kW	2.50 kW
Annual energy consumption Q <sub>he</sub>	5153 kWh	6928 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	11.30 kW	11.80 kW
SEER	4.86	7.04
P <sub>dc T<sub>j</sub></sub> = 35°C	11.31 kW	11.77 kW
EER T <sub>j</sub> = 35°C	2.61	3.87

Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	8.76 kW	9.21 kW
EER Tj = 30°C	3.93	5.50
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	5.81 kW	5.74 kW
EER Tj = 25°C	5.73	8.66
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	2.63 kW	3.33 kW
EER Tj = 20°C	6.75	10.07
Cdc Tj = 20 °C	0.900	0.900
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Annual energy consumption Qce	1395 kWh	1006 kWh

**Model SHERPA AQUADUE TOWER SE E 14T**

Model name	SHERPA AQUADUE TOWER SE E 14T
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
Phase-out Date	20.06.2027

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	81 %
COP	1.88
Heating up time	01:07 h:min
Standby power input	76.0 W
Reference hot water temperature	43.1 °C
Mixed water at 40°C	156 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	14.50 kW	13.80 kW
El input	3.09 kW	4.59 kW
COP	4.70	3.00

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	4.98 kW	3.50 kW
Cooling capacity	12.70	13.00
EER	2.55	3.70

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	185 %	135 %
P <sub>rated</sub>	13.70 kW	12.10 kW
SCOP	4.72	3.47
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	12.14 kW	10.68 kW
COP T <sub>j</sub> = -7°C	2.79	2.01
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	7.94 kW	6.86 kW
COP T <sub>j</sub> = +2°C	4.52	3.43
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	5.20 kW	4.63 kW
COP T <sub>j</sub> = +7°C	6.68	4.66
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.75 kW	3.31 kW
COP T <sub>j</sub> = 12°C	8.52	6.13
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	12.14 kW	10.68 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.79	2.01
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	11.47 kW	9.19 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.59	1.76
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WT <sub>OL</sub>	65 °C	65 °C
P <sub>off</sub>	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.23 kW	2.91 kW
Annual energy consumption Q <sub>he</sub>	6013 kWh	7203 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	12.20 kW	13.30 kW
SEER	4.83	6.85
P <sub>dc T<sub>j</sub></sub> = 35°C	12.19 kW	13.30 kW
EER T <sub>j</sub> = 35°C	2.46	3.47

Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	9.41 kW	10.20 kW
EER Tj = 30°C	3.85	5.26
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	6.16 kW	6.57 kW
EER Tj = 25°C	5.80	8.45
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	2.63 kW	3.33 kW
EER Tj = 20°C	6.74	10.07
Cdc Tj = 20 °C	0.900	0.900
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Annual energy consumption Qce	1515 kWh	1165 kWh

**Model SHERPA AQUADUE TOWER 16T**

Model name	SHERPA AQUADUE TOWER 16T
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
Phase-out Date	20.06.2027

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency ηDHW	81 %
COP	1.88
Heating up time	01:07 h:min
Standby power input	76.0 W
Reference hot water temperature	43.1 °C
Mixed water at 40°C	156 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	16.00 kW	16.00 kW
El input	3.56 kW	5.52 kW
COP	4.50	2.90

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	5.71 kW	3.74 kW
Cooling capacity	13.99	13.50
EER	2.45	3.61

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	181 %	133 %
P <sub>rated</sub>	15.20 kW	13.00 kW
SCOP	4.62	3.41
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	13.45 kW	11.52 kW
COP T <sub>j</sub> = -7°C	2.72	1.99
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	8.56 kW	7.18 kW
COP T <sub>j</sub> = +2°C	4.41	3.34
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	5.70 kW	4.67 kW
COP T <sub>j</sub> = +7°C	6.56	4.61
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.78 kW	3.32 kW
COP T <sub>j</sub> = 12°C	8.51	6.07
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	13.45 kW	11.52 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.72	1.99
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	12.52 kW	10.33 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.48	1.80
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WT <sub>OL</sub>	65 °C	65 °C
P <sub>off</sub>	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.68 kW	2.67 kW
Annual energy consumption Q <sub>he</sub>	6805 kWh	7896 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	14.30 kW	15.40 kW
SEER	4.67	6.71
P <sub>dc T<sub>j</sub></sub> = 35°C	14.31 kW	15.40 kW
EER T <sub>j</sub> = 35°C	2.47	3.50

Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	10.68 kW	11.42 kW
EER Tj = 30°C	3.63	5.14
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	6.76 kW	7.27 kW
EER Tj = 25°C	5.27	7.83
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.41 kW	3.40 kW
EER Tj = 20°C	7.29	10.35
Cdc Tj = 20 °C	0.900	0.900
Poff	20 W	20 W
PTO	10 W	10 W
PSB	20 W	20 W
PCK	0 W	0 W
Annual energy consumption Qce	1838 kWh	1377 kWh