

**Subtype Sphera EVO 2.0 Tower 190L 2.1, 3.1**

Certificate Holder	Clivet s.p.a.
Address	Via camp long 25 c.ap.
ZIP	I-32032
City	z.i. Villapaiera - Feltre (BL)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	Sphera EVO 2.0 Tower 190L 2.1, 3.1
Registration number	ICIM-PDC-000166
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.5 kg
Certification Date	10.06.2022
Testing basis	HP KEYMARK certification scheme rules rev. n. 9

**Model SQKN-YEE 1 TC A 190 + MiSAN-YEE 1 S 2.1**

Model name	SQKN-YEE 1 TC A 190 + MiSAN-YEE 1 S 2.1
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	120 %
COP	2.82
Heating up time	2:30 h:min
Standby power input	45.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	204 l

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.32 kW	4.08 kW
El input	0.80 kW	1.36 kW
COP	5.42	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	dB(A)	41 dB(A)
Sound power level outdoor	dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	202 %	130 %
Prated	5.36 kW	4.08 kW
SCOP	5.13	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.74 kW	3.61 kW
COP Tj = -7°C	3.15	2.02
Cdh Tj = -7 °C	0.900	0.900

Pdh Tj = +2°C	3.05 kW	2.16 kW
COP Tj = +2°C	4.96	3.21
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.99 kW	1.54 kW
COP Tj = +7°C	6.81	4.43
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.45 kW	1.29 kW
COP Tj = 12°C	8.94	6.20
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.74 kW	3.61 kW
COP Tj = Tbiv	3.15	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.21 kW	3.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.15 kW	0.17 kW
Annual energy consumption Qhe	2161 kWh	2542 kWh

**Model SQKN-YEE 1 TC A 190 + MiSAN-YEE 1 S 3.1**

Model name	SQKN-YEE 1 TC A 190 + MiSAN-YEE 1 S 3.1
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	120 %
COP	2.82
Heating up time	2:30 h:min
Standby power input	45.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	204 l

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.18 kW	5.94 kW
El input	1.19 kW	1.93 kW
COP	5.21	3.07

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	dB(A)	41 dB(A)
Sound power level outdoor	dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	203 %	139 %
Prated	6.23 kW	5.62 kW
SCOP	5.15	3.54
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.51 kW	4.97 kW
COP Tj = -7°C	3.13	2.12
Cdh Tj = -7 °C	0.900	0.900

Pdh Tj = +2°C	3.30 kW	3.02 kW
COP Tj = +2°C	4.91	3.41
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.24 kW	2.00 kW
COP Tj = +7°C	7.11	4.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.45 kW	1.30 kW
COP Tj = 12°C	8.94	6.32
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.51 kW	4.97 kW
COP Tj = Tbiv	3.13	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.80 kW	5.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.43 kW	0.35 kW
Annual energy consumption Qhe	2502 kWh	3283 kWh