This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	ELFOEnergy SHEEN EVO 10.1, 12.1, 14.1	Reg. No.	ICIM-PDC-000060-00
Certificate Holder			
Name	Clivet s.p.a.		
Address	Via camp lonc 25 c.ap.	Zip	I-32032
City	z.i. Villapaiera - Feltre (BL)	Country	Italy
Certification Body	ICIM S.p.A.		
Name of testing laboratory	ReLab Politecnico Milano		
Subtype title	ELFOEnergy SHEEN EVO 10.1, 12.1, 14.1		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	7.9 kg		
Certification Date	20.01.2020		
Testing basis	HP KEYMARK certification scheme rules rev. no. 7		

Model: ELFOEnergy SHEEN EVO 10.1

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	25.30 kW	4.80 kW
El input	6.07 kW	1.90 kW
COP	4.17	2.53
Indoor water flow rate	4.35 m³/h	0.52 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	75 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	169 %	129 %
Prated	21.00 kW	7.00 kW
SCOP	4.30	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	18.30 kW	5.90 kW
COP Tj = -7°C	2.95	2.00
Cdh	0.90	
Pdh Tj = +2°C	11.20 kW	3.70 kW
COP Tj = +2°C	4.10	3.18
Cdh	0.90	
Pdh Tj = +7°C	7.20 kW	2.50 kW
COP Tj = +7°C	5.60	4.52
Cdh	0.90	
Pdh Tj = 12°C	7.10 kW	1.10 kW

COP Tj = 12°C	6.82	5.09
Cdh	0.90	
Pdh Tj = Tbiv	20.70 kW	5.90 kW
COP Tj = Tbiv	2.73	2.00
Pdh Tj = TOL	20.70 kW	6.60 kW
COP Tj = TOL	2.73	1.80
Cdh	0.90	0.90
WTOL	54 °C	49 °C
Poff	19 W	16 W
PTO	200 W	16 W
PSB	19 W	16 W
PCK	0 W	34 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	9946 kWh	4202 kWh

Model: ELFOEnergy SHEEN EVO 12.1

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	28.20 kW	6.20 kW
El input	6.64 kW	2.38 kW
COP	4.25	2.61
Indoor water flow rate	4.85 m³/h	0.68 m³/h

Average Climate

EN 14825

	Low temperature	**Medium temperature**
η_s	167 %	129 %
Prated	22.00 kW	7.00 kW
SCOP	4.25	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.10 kW	5.90 kW
COP Tj = -7°C	2.92	2.00
Cdh	0.90	
Pdh Tj = +2°C	11.60 kW	3.70 kW
COP Tj = +2°C	4.00	3.18
Cdh	0.90	
Pdh Tj = +7°C	7.50 kW	2.50 kW
COP Tj = +7°C	5.65	4.52
Cdh	0.90	
Pdh Tj = 12°C	7.10 kW	1.10 kW
COP Tj = 12°C	6.82	5.09
Cdh	0.90	
Pdh Tj = Tbiv	21.60 kW	5.90 kW
COP Tj = Tbiv	2.70	2.00
Pdh Tj = TOL	21.60 kW	6.60 kW

COP Tj = TOL	2.70	1.80
Cdh	0.90	0.90
WTOL	54 °C	49 °C
Poff	19 W	16 W
PTO	200 W	16 W
PSB	19 W	16 W
PCK	0 W	34 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	10500 kWh	4202 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	76 dB(A)	64 dB(A)

Model: ELFOEnergy SHEEN EVO 14.1

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	32.00 kW	9.40 kW
El input	7.69 kW	3.30 kW
COP	4.16	2.85
Indoor water flow rate	5.50 m³/h	1.01 m³/h

Average Climate

EN 14825

	Low temperature	**Medium temperature**
η_s	167 %	127 %
Prated	24.00 kW	9.00 kW
SCOP	4.24	3.26
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	20.90 kW	7.70 kW
COP Tj = -7°C	2.86	1.98
Cdh	0.90	
Pdh Tj = +2°C	12.70 kW	4.90 kW
COP Tj = +2°C	3.98	3.02
Cdh	0.90	
Pdh Tj = +7°C	8.20 kW	3.20 kW
COP Tj = +7°C	5.75	4.67
Cdh	0.90	
Pdh Tj = 12°C	7.10 kW	1.40 kW
COP Tj = 12°C	6.82	6.16
Cdh	0.90	
Pdh Tj = Tbiv	23.60 kW	7.70 kW
COP Tj = Tbiv	2.57	1.98
Pdh Tj = TOL	23.60 kW	7.00 kW

COP Tj = TOL	2.57	1.78
Cdh	0.90	0.90
WTOL	54 °C	49 °C
Poff	19 W	16 W
PTO	200 W	16 W
PSB	19 W	16 W
PCK	0 W	34 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	11514 kWh	5558 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	76 dB(A)	67 dB(A)