Subtype ELFOEnergy Storm EVO R-32 SH 18.2 , 20.2

Certificate Holder	Clivet s.p.a.
Address	Via camp lonc 25 c.ap.
ZIP	I-32032
City	z.i. Villapaiera - Feltre (BL)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	ELFOEnergy Storm EVO R-32 SH 18.2 , 20.2
Registration number	ICIM-PDC-000092-00
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	15 kg
Certification Date	23.12.2020
Testing basis	HP KEYMARK certification scheme rules rev. 8

Model ELFOEnergy Storm EVO WSAN-YES 18.2 R32		
Model name	ELFOEnergy Storm EVO WSAN-YES 18.2 R32	
Application	Heating (low temp)	
Units	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	3x400V 50Hz	
Off-peak product	n/a	
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	54.00 kW	
El input	25.60 kW	
COP	4.07	
EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	
EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	154 %	
Prated	41.00 kW	
SCOP	3.93	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	36.00 kW	
COP Tj = -7°C	2.76	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	22.90 kW	
COP Tj = +2°C	3.96	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	19.90 kW	

COP Tj = +7°C	4.83
Cdh Tj = +7 °C	0.89
Pdh Tj = 12°C	24.40 kW
COP Tj = 12°C	7.05
Cdh Tj = +12 °C	0.90
Pdh Tj = Tbiv	36.00 kW
COP Tj = Tbiv	2.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	32.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55
WTOL	55 °C
Poff	97 W
PTO	103 W
PSB	97 W
PCK	97 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	0 kWh

Model ELFOEnergy Storm EVO WSAN-YES 20.2 R32		
Model name	ELFOEnergy Storm EVO WSAN-YES 20.2 R32	
Application	Heating (low temp)	
Units	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	3x400V 50Hz	
Off-peak product	n/a	
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	61.00 kW	
El input	25.60 kW	
COP	4.00	
EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	
EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	153 %	
Prated	49.00 kW	
SCOP	3.91	
Tbiv	-7 °C	
TOL	-10 °C	
Pdh Tj = -7°C	44.50 kW	
COP Tj = -7°C	2.79	
Cdh Tj = -7 °C	0.90	
Pdh Tj = +2°C	29.60 kW	
COP Tj = +2°C	4.05	
Cdh Tj = +2 °C	0.90	
Pdh Tj = +7°C	20.60 kW	

COP Tj = +7°C	4.25
Cdh Tj = +7 °C	0.90
Pdh Tj = 12°C	26.60 kW
COP Tj = 12°C	7.02
Cdh Tj = +12 °C	0.90
Pdh Tj = Tbiv	44.50 kW
COP Tj = Tbiv	2.79
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	41.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56
WTOL	55 °C
Poff	97 W
PTO	103 W
PSB	97 W
PCK	97 W
Supplementary Heater: Type of energy input	Electricity
Supplementary Heater: PSUP	0.00 kW
Annual energy consumption Qhe	0 kWh