Subtype SYNEA DUO 6

Certificate Holder	Groupe Atlantic
Address	Rue des Fondeurs BP 64
ZIP	59660
City	Merville
Country	FR
Certification Body	RISE CERT
Subtype title	SYNEA DUO 6
Registration number	012-C700226
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	0.97 kg
Certification Date	20.11.2023
Testing basis	EN 14511:2022, EN 16147:2017, EN 14825:2022, EN 12102:2022.
Testing laboratory	ACTA INDUSTRIE - Laboratoire Acoustique et Climatique

Model SYNEA DUO 6	
Model name	SYNEA DUO 6
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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 ηDHW	132 %
COP	3.30
Heating up time	1:30 h:min
Standby power input	30.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	216 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	5.60 kW	5.60 kW
El input	1.16 kW	2.02 kW
COP	4.81	2.77

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	189 %	132 %
Prated	6.10 kW	5.40 kW

SCOP	4.80	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.40 kW	4.80 kW
COP Tj = -7°C	2.97	2.08
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.30 kW	2.90 kW
COP Tj = +2°C	4.64	3.22
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.10 kW	1.90 kW
COP Tj = +7°C	6.67	4.62
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.40 kW	2.30 kW
COP Tj = 12°C	8.34	6.57
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	5.40 kW	4.80 kW
COP Tj = Tbiv	2.97	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	4 W	4 W
PTO	12 W	13 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.40 kW	1.20 kW
Annual energy consumption Qhe	2628 kWh	3307 kWh