

## Subtype SYNEA DUO 4

Certificate Holder	Groupe Atlantic
Address	Rue des Fondeurs BP 64
ZIP	59660
City	Merville
Country	FR
Certification Body	RISE CERT
Subtype title	SYNEA DUO 4
Registration number	012-C700225
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 4

Model name	SYNEA DUO 4
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 $\eta_{DHW}$	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	4.60 kW	4.50 kW
El input	0.95 kW	1.66 kW
COP	4.83	2.72

### 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
$\eta_s$	182 %	128 %
Prated	5.40 kW	4.80 kW

SCOP	4.61	3.29
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.80 kW	4.30 kW
COP Tj = -7°C	3.00	2.03
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.90 kW	2.60 kW
COP Tj = +2°C	4.45	3.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	1.90 kW	2.20 kW
COP Tj = +7°C	6.21	4.55
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.40 kW	2.30 kW
COP Tj = 12°C	7.99	6.29
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	4.80 kW	4.30 kW
COP Tj = Tbiv	3.00	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.30 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	1.72
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	1.10 kW	0.90 kW
Annual energy consumption Qhe	2418 kWh	3018 kWh