## CEN heat pump KEYMARK

### Subtype SYNEA DUO 10

| | |
|---|---|
| Certificate Holder | Groupe Atlantic |
| Address | Rue des Fondeurs BP 64 |
| ZIP | 59660 |
| City | Merville |
| Country | FR |
| Certification Body | RISE CERT |
| Subtype title | SYNEA DUO 10 |
| Registration number | 012-C700405 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R32 |
| Mass of Refrigerant | 1.63 kg |
| Certification Date | 25.08.2025 |
| Testing basis | EN 14511:2022, EN 14825:2022, EN 16147:2017+A1:2022, EN 12102:2022 |
| Testing laboratory | ACTA INDUSTRIE - Laboratoire Acoustique et Climatique |

This information was generated by the HP KEYMARK database on 25.09.2025

## CEN heat pump KEYMARK

### Model SYNEA DUO 10

| | |
|---|---|
| Model name | SYNEA DUO 10 |
| 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 | 01:20 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 | 9.80 kW | 9.50 kW |
| El input | 2.16 kW | 3.33 kW |
| COP | 4.53 | 2.85 |

### EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---|---|---|
| Sound power level indoor | 40 dB(A) | 40 dB(A) |
| Sound power level outdoor | 62 dB(A) | 62 dB(A) |

### EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|---|---|
| ηs | 186 % | 139 % |
| Prated | 8.70 kW | 8.60 kW |

This information was generated by the HP KEYMARK database on 25.09.2025

| | | |
|---|---|---|
| SCOP | 4.73 | 3.54 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.70 kW | 7.60 kW |
| COP Tj = -7°C | 3.08 | 2.14 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 4.70 kW | 4.60 kW |
| COP Tj = +2°C | 4.60 | 3.46 |
| Cdh Tj = +2 °C | 0.980 | 0.980 |
| Pdh Tj = +7°C | 3.80 kW | 3.60 kW |
| COP Tj = +7°C | 6.41 | 4.74 |
| Cdh Tj = +7 °C | 0.970 | 0.970 |
| Pdh Tj = 12°C | 4.30 kW | 4.20 kW |
| COP Tj = 12°C | 7.11 | 6.40 |
| Cdh Tj = +12 °C | 0.970 | 0.970 |
| Pdh Tj = Tbiv | 7.70 kW | 7.60 kW |
| COP Tj = Tbiv | 3.08 | 2.14 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.30 kW | 7.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.77 | 1.88 |
| 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 | 20 W | 21 W |
| PSB | 8 W | 8 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.40 kW | 0.90 kW |
| Annual energy consumption Qhe | 3796 kWh | 5014 kWh |

This information was generated by the HP KEYMARK database on 25.09.2025