

Subtype THERMOR ALFEA EXCELLIA A.I. TRI 11 2024

|                     |  |
|---------------------|--|
| Certificate Holder  | Groupe Atlantic  |
| Address             | Rue des Fondeurs BP 64                                     |
| ZIP                 | 59660  |
| City                | Merville   |
| Country             | FR   |
| Certification Body  | RISE CERT  |
| Subtype title       | THERMOR ALFEA EXCELLIA A.I. TRI 11 2024                    |
| Registration number | 012-C700290  |
| Heat Pump Type      | Outdoor Air/Water  |
| Refrigerant         | R410A  |
| Mass of Refrigerant | 2.5 kg   |
| Certification Date  | 16.04.2024   |
| Testing basis       | EN 14511:2022, EN 14825:2022, EN 16147:2017, EN 12102:2022 |

**Model THERMOR ALFEA EXCELLIA A.I. TRI 11 2024**

|                                     |   |
|-------------------------------------|---|
| Model name                          | THERMOR ALFEA EXCELLIA A.I. TRI 11 2024 |
| Application                         | Heating (medium 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     | 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 | 10.80 kW        | 9.30 kW            |
| EI input    | 2.51 kW         | 3.52 kW            |
| COP         | 4.30            | 2.64               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 40 dB(A)        | 40 dB(A)           |
| Sound power level outdoor | 67 dB(A)        | 67 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 157 %           | 118 %              |
| Prated         | 11.30 kW        | 9.30 kW            |
| SCOP           | 4.00            | 3.02               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 10.00 kW        | 8.20 kW            |
| COP Tj = -7°C  | 2.74            | 1.93               |
| Cdh Tj = -7 °C | 0.990           | 0.990              |
| Pdh Tj = +2°C  | 6.10 kW         | 5.00 kW            |
| COP Tj = +2°C  | 3.79            | 2.92               |
| Cdh Tj = +2 °C | 0.990           | 0.990              |
| Pdh Tj = +7°C  | 6.40 kW         | 5.80 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 5.38        | 4.14        |
| Cdh Tj = +7 °C                                      | 0.980       | 0.980       |
| Pdh Tj = 12°C                                       | 7.50 kW     | 7.30 kW     |
| COP Tj = 12°C                                       | 6.81        | 5.32        |
| Cdh Tj = +12 °C                                     | 0.980       | 0.980       |
| Pdh Tj = Tbiv                                       | 10.00 kW    | 8.20 kW     |
| COP Tj = Tbiv                                       | 2.74        | 1.93        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.30 kW    | 7.60 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.46        | 1.60        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990       | 1.000       |
| WTOL  | 60 °C       | 60 °C       |
| Poff  | 10 W        | 10 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 14 W        | 14 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.00 kW     | 1.70 kW     |
| Annual energy consumption Qhe                       | 5834 kWh    | 6353 kWh    |

**Model THERMOR ALFEA EXCELLIA DUO A.I. TRI 11 2024**

|                                     |   |
|-------------------------------------|---|
| Model name                          | THERMOR ALFEA EXCELLIA DUO A.I. TRI 11 2024 |
| 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     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 100 %      |
| COP                             | 2.50       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 40.0 W     |
| Reference hot water temperature | 54.2 °C    |
| Mixed water at 40°C             | 250 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 | 10.80 kW        | 9.30 kW            |
| El input    | 2.51 kW         | 3.52 kW            |
| COP         | 4.30            | 2.64               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 40 dB(A)        | 40 dB(A)           |
| Sound power level outdoor | 67 dB(A)        | 67 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_s$ | 157 %           | 118 %              |
| Prated   | 11.30 kW        | 9.30 kW            |

|   |             |             |
|---|-------------|-------------|
| SCOP  | 4.00        | 3.02        |
| Tbiv  | -7 °C       | -7 °C       |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 10.00 kW    | 8.20 kW     |
| COP Tj = -7°C                                       | 2.74        | 1.93        |
| Cdh Tj = -7 °C                                      | 0.990       | 0.990       |
| Pdh Tj = +2°C                                       | 6.10 kW     | 5.00 kW     |
| COP Tj = +2°C                                       | 3.79        | 2.92        |
| Cdh Tj = +2 °C                                      | 0.990       | 0.990       |
| Pdh Tj = +7°C                                       | 6.40 kW     | 5.80 kW     |
| COP Tj = +7°C                                       | 5.38        | 4.14        |
| Cdh Tj = +7 °C                                      | 0.980       | 0.980       |
| Pdh Tj = 12°C                                       | 7.50 kW     | 7.30 kW     |
| COP Tj = 12°C                                       | 6.81        | 5.32        |
| Cdh Tj = +12 °C                                     | 0.980       | 0.980       |
| Pdh Tj = Tbiv                                       | 10.00 kW    | 8.20 kW     |
| COP Tj = Tbiv                                       | 2.74        | 1.93        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.30 kW    | 7.60 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.46        | 1.60        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990       | 1.000       |
| WTOL  | 60 °C       | 60 °C       |
| Poff  | 10 W        | 10 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 14 W        | 14 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.00 kW     | 1.70 kW     |
| Annual energy consumption Qhe                       | 5834 kWh    | 6353 kWh    |