

Subtype ALFEA M 10 and 12 TRI

| | |
|---------------------|--------------------------------------------------------------------|
| Certificate Holder | Groupe Atlantic |
| Address | Rue des Fondeurs BP 64 |
| ZIP | 59660 |
| City | Merville |
| Country | FR |
| Certification Body | RISE CERT |
| Subtype title | ALFEA M 10 and 12 TRI |
| Registration number | 012-C700380 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R290 |
| Mass of Refrigerant | 1.4 kg |
| Certification Date | 12.08.2025 |
| Testing basis | EN 14511:2022, EN 14825:2022, EN 16147:2017+A1:2022, EN 12102:2022 |
| Testing laboratory | CETIAT, FR |

Model ALFEA M 10 TRI

| | |
|-------------------------------------|-----------------------|
| Model name | ALFEA M 10 TRI |
| Application | Heating (medium temp) |
| Units | Indoor, 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 | 14.12 kW | 12.10 kW |
| El input | 2.92 kW | 3.89 kW |
| COP | 4.83 | 3.11 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 35 dB(A) | 35 dB(A) |
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 198 % | 143 % |
| Prated | 11.60 kW | 11.30 kW |
| SCOP | 5.02 | 3.65 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 10.30 kW | 10.00 kW |
| COP Tj = -7°C | 3.31 | 2.16 |
| Cdh Tj = -7 °C | 0.980 | 0.990 |
| Pdh Tj = +2°C | 6.20 kW | 6.10 kW |
| COP Tj = +2°C | 4.99 | 3.61 |
| Cdh Tj = +2 °C | 0.960 | 0.970 |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = +7°C | 6.50 kW | 6.10 kW |
| COP Tj = +7°C | 6.57 | 4.98 |
| Cdh Tj = +7 °C | 0.950 | 0.960 |
| Pdh Tj = 12°C | 7.40 kW | 7.20 kW |
| COP Tj = 12°C | 7.97 | 6.63 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| Pdh Tj = Tbiv | 10.30 kW | 10.00 kW |
| COP Tj = Tbiv | 3.31 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.20 kW | 9.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.93 | 1.86 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 75 °C | 75 °C |
| Poff | 10 W | 10 W |
| PTO | 50 W | 50 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 | 1.40 kW |
| Annual energy consumption Qhe | 4773 kWh | 6397 kWh |

Model ALFEA M DUO 10 TRI

| | |
|-------------------------------------|--------------------------|
| Model name | ALFEA M DUO 10 TRI |
| Application | Heating + DHW + low temp |
| Units | Indoor, 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 16147 | Average Climate**

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 130 % |
| COP | 3.25 |
| Heating up time | 01:05 h:min |
| Standby power input | 40.0 W |
| Reference hot water temperature | 55.0 °C |
| Mixed water at 40°C | 230 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 | 14.12 kW | 12.10 kW |
| El input | 2.92 kW | 3.89 kW |
| COP | 4.83 | 3.11 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 35 dB(A) | 35 dB(A) |
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_S | 198 % | 143 % |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Prated | 11.60 kW | 11.30 kW |
| SCOP | 5.02 | 3.65 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 10.30 kW | 10.00 kW |
| COP Tj = -7°C | 3.31 | 2.16 |
| Cdh Tj = -7 °C | 0.980 | 0.990 |
| Pdh Tj = +2°C | 6.20 kW | 6.10 kW |
| COP Tj = +2°C | 4.99 | 3.61 |
| Cdh Tj = +2 °C | 0.960 | 0.970 |
| Pdh Tj = +7°C | 6.50 kW | 6.10 kW |
| COP Tj = +7°C | 6.57 | 4.98 |
| Cdh Tj = +7 °C | 0.950 | 0.960 |
| Pdh Tj = 12°C | 7.40 kW | 7.20 kW |
| COP Tj = 12°C | 7.97 | 6.63 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| Pdh Tj = Tbiv | 10.30 kW | 10.00 kW |
| COP Tj = Tbiv | 3.31 | 2.16 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.20 kW | 9.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.93 | 1.86 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 75 °C | 75 °C |
| Poff | 10 W | 10 W |
| PTO | 50 W | 50 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 | 1.40 kW |
| Annual energy consumption Qhe | 4773 kWh | 6397 kWh |

Model ALFEA M 12 TRI

| | |
|-------------------------------------|-----------------------|
| Model name | ALFEA M 12 TRI |
| Application | Heating (medium temp) |
| Units | Indoor, 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 | 16.16 kW | 12.10 kW |
| El input | 3.54 kW | 3.89 kW |
| COP | 4.56 | 3.11 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 35 dB(A) | 35 dB(A) |
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 199 % | 146 % |
| Prated | 13.50 kW | 13.20 kW |
| SCOP | 5.04 | 3.72 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.90 kW | 11.70 kW |
| COP Tj = -7°C | 3.13 | 2.13 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 7.30 kW | 7.10 kW |
| COP Tj = +2°C | 5.05 | 3.71 |
| Cdh Tj = +2 °C | 0.970 | 0.970 |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = +7°C | 6.60 kW | 6.10 kW |
| COP Tj = +7°C | 6.66 | 5.07 |
| Cdh Tj = +7 °C | 0.950 | 0.960 |
| Pdh Tj = 12°C | 7.40 kW | 7.20 kW |
| COP Tj = 12°C | 7.98 | 6.65 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| Pdh Tj = Tbiv | 11.90 kW | 11.70 kW |
| COP Tj = Tbiv | 3.13 | 2.13 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.90 kW | 11.50 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.78 | 1.86 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 75 °C | 75 °C |
| Poff | 10 W | 10 W |
| PTO | 50 W | 50 W |
| PSB | 10 W | 10 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.60 kW | 1.70 kW |
| Annual energy consumption Qhe | 5537 kWh | 7328 kWh |

Model ALFEA M DUO 12 TRI

| | |
|-------------------------------------|--------------------------|
| Model name | ALFEA M DUO 12 TRI |
| Application | Heating + DHW + low temp |
| Units | Indoor, 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 16147 | Average Climate**

| | |
|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 130 % |
| COP | 3.25 |
| Heating up time | 01:05 h:min |
| Standby power input | 40.0 W |
| Reference hot water temperature | 55.0 °C |
| Mixed water at 40°C | 230 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 | 16.16 kW | 12.10 kW |
| El input | 3.54 kW | 3.89 kW |
| COP | 4.56 | 3.11 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 35 dB(A) | 35 dB(A) |
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_S | 199 % | 146 % |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Prated | 13.50 kW | 13.20 kW |
| SCOP | 5.04 | 3.72 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.90 kW | 11.70 kW |
| COP Tj = -7°C | 3.13 | 2.13 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 7.30 kW | 7.10 kW |
| COP Tj = +2°C | 5.05 | 3.71 |
| Cdh Tj = +2 °C | 0.970 | 0.970 |
| Pdh Tj = +7°C | 6.60 kW | 6.10 kW |
| COP Tj = +7°C | 6.66 | 5.07 |
| Cdh Tj = +7 °C | 0.950 | 0.960 |
| Pdh Tj = 12°C | 7.40 kW | 7.20 kW |
| COP Tj = 12°C | 7.98 | 6.65 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| Pdh Tj = Tbiv | 11.90 kW | 11.70 kW |
| COP Tj = Tbiv | 3.13 | 2.13 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.90 kW | 11.50 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.78 | 1.86 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 75 °C | 75 °C |
| Poff | 10 W | 10 W |
| PTO | 50 W | 50 W |
| PSB | 10 W | 10 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.60 kW | 1.70 kW |
| Annual energy consumption Qhe | 5537 kWh | 7328 kWh |

Model ALFEA M COMPACT 10 TRI

| | |
|-------------------------------------|------------------------|
| Model name | ALFEA M COMPACT 10 TRI |
| Application | Heating (medium 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 | 14.19 kW | 12.24 kW |
| El input | 2.83 kW | 3.86 kW |
| COP | 5.01 | 3.17 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 205 % | 148 % |
| Prated | 12.10 kW | 11.90 kW |
| SCOP | 5.19 | 3.77 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 10.70 kW | 10.50 kW |
| COP Tj = -7°C | 3.39 | 2.21 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 6.50 kW | 6.40 kW |
| COP Tj = +2°C | 5.13 | 3.70 |
| Cdh Tj = +2 °C | 0.970 | 0.980 |
| Pdh Tj = +7°C | 6.60 kW | 6.20 kW |

| | | |
|-----------------------------------------------------|-------------|-------------|
| COP Tj = +7°C | 6.77 | 5.15 |
| Cdh Tj = +7 °C | 0.970 | 0.970 |
| Pdh Tj = 12°C | 7.40 kW | 7.20 kW |
| COP Tj = 12°C | 8.27 | 6.82 |
| Cdh Tj = +12 °C | 0.960 | 0.970 |
| Pdh Tj = Tbiv | 10.70 kW | 10.50 kW |
| COP Tj = Tbiv | 3.39 | 2.21 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.30 kW | 9.80 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.00 | 1.91 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 75 °C | 75 °C |
| Poff | 10 W | 10 W |
| PTO | 32 W | 32 W |
| PSB | 10 W | 10 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.80 kW | 2.10 kW |
| Annual energy consumption Qhe | 4818 kWh | 6529 kWh |

Model ALFEA M COMPACT 12 TRI

| | |
|-------------------------------------|------------------------|
| Model name | ALFEA M COMPACT 12 TRI |
| Application | Heating (medium 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 | 16.23 kW | 12.22 kW |
| El input | 3.42 kW | 3.87 kW |
| COP | 4.74 | 3.16 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 205 % | 150 % |
| Prated | 13.80 kW | 13.80 kW |
| SCOP | 5.20 | 3.83 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 12.20 kW | 12.20 kW |
| COP Tj = -7°C | 3.20 | 2.17 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 7.40 kW | 7.40 kW |
| COP Tj = +2°C | 5.19 | 3.82 |
| Cdh Tj = +2 °C | 0.980 | 0.980 |
| Pdh Tj = +7°C | 6.60 kW | 6.20 kW |

| | | |
|-----------------------------------------------------|-------------|-------------|
| COP Tj = +7°C | 6.88 | 5.20 |
| Cdh Tj = +7 °C | 0.970 | 0.970 |
| Pdh Tj = 12°C | 7.40 kW | 7.20 kW |
| COP Tj = 12°C | 8.27 | 6.83 |
| Cdh Tj = +12 °C | 0.960 | 0.970 |
| Pdh Tj = Tbiv | 12.20 kW | 12.20 kW |
| COP Tj = Tbiv | 3.20 | 2.17 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.00 kW | 11.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.98 | 1.89 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 75 °C | 75 °C |
| Poff | 10 W | 10 W |
| PTO | 32 W | 32 W |
| PSB | 10 W | 10 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.80 kW | 2.10 kW |
| Annual energy consumption Qhe | 5478 kWh | 7435 kWh |