

Subtype ALFEA M 10 and 12 TRI

Certificate Holder	Groupe Atlantic
Address	Rue des Fondateurs 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