

Subtype ALFEA M 6 and 8 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 6 and 8 TRI
Registration number	012-C700378
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.95 kg
Certification Date	01.04.2025
Testing basis	EN 14511:2022, EN 14825:2022, EN 16147:2017+A1:2022, EN 12102:2022
Testing laboratory	CETIAT, FR

**Model ALFEA M 6 TRI**

Model name	ALFEA M 6 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	8.08 kW	9.57 kW
El input	1.60 kW	3.10 kW
COP	5.05	3.09

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	195 %	142 %
Prated	7.10 kW	6.80 kW
SCOP	4.96	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	6.00 kW
COP Tj = -7°C	3.35	2.32
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	4.88	3.49
Cdh Tj = +2 °C	0.960	0.970

Pdh Tj = +7°C	3.70 kW	3.40 kW
COP Tj = +7°C	6.46	4.83
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	4.20 kW	4.10 kW
COP Tj = 12°C	8.23	6.60
Cdh Tj = +12 °C	0.930	0.950
Pdh Tj = Tbiv	6.30 kW	6.00 kW
COP Tj = Tbiv	3.35	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.02	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	34 W	34 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	2960 kWh	3889 kWh

**Model ALFEA M DUO 6 TRI**

Model name	ALFEA M DUO 6 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 $\eta_{DHW}$	130 %
COP	3.25
Heating up time	1:15 h:min
Standby power input	38.0 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	8.08 kW	9.57 kW
El input	1.60 kW	3.10 kW
COP	5.05	3.09

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	195 %	142 %

Prated	7.10 kW	6.80 kW
SCOP	4.96	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	6.00 kW
COP Tj = -7°C	3.35	2.32
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.70 kW
COP Tj = +2°C	4.88	3.49
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	3.70 kW	3.40 kW
COP Tj = +7°C	6.46	4.83
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	4.20 kW	4.10 kW
COP Tj = 12°C	8.23	6.60
Cdh Tj = +12 °C	0.930	0.950
Pdh Tj = Tbiv	6.30 kW	6.00 kW
COP Tj = Tbiv	3.35	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.02	2.01
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	34 W	34 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.90 kW	0.90 kW
Annual energy consumption Qhe	2960 kWh	3889 kWh

**Model ALFEA M 8 TRI**

Model name	ALFEA M 8 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	11.13 kW	9.57 kW
El input	2.40 kW	3.10 kW
COP	4.64	3.09

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	201 %	147 %
Prated	9.30 kW	9.00 kW
SCOP	5.10	3.74
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.20 kW	8.00 kW
COP Tj = -7°C	3.24	2.36
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	5.00 kW	4.90 kW
COP Tj = +2°C	5.04	3.63
Cdh Tj = +2 °C	0.970	0.970

Pdh Tj = +7°C	3.70 kW	3.40 kW
COP Tj = +7°C	6.68	4.92
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	4.30 kW	4.00 kW
COP Tj = 12°C	8.60	6.63
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.20 kW	8.00 kW
COP Tj = Tbiv	3.24	2.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.10 kW	7.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.03
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	34 W	34 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.20 kW	1.10 kW
Annual energy consumption Qhe	3764 kWh	4969 kWh

**Model ALFEA M DUO 8 TRI**

Model name	ALFEA M DUO 8 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 $\eta_{DHW}$	130 %
COP	3.25
Heating up time	1:15 h:min
Standby power input	38.0 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	11.13 kW	9.57 kW
El input	2.40 kW	3.10 kW
COP	4.64	3.09

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	201 %	147 %

Prated	9.30 kW	9.00 kW
SCOP	5.10	3.74
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.20 kW	8.00 kW
COP Tj = -7°C	3.24	2.36
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	5.00 kW	4.90 kW
COP Tj = +2°C	5.04	3.63
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.70 kW	3.40 kW
COP Tj = +7°C	6.68	4.92
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	4.30 kW	4.00 kW
COP Tj = 12°C	8.60	6.63
Cdh Tj = +12 °C	0.930	0.940
Pdh Tj = Tbiv	8.20 kW	8.00 kW
COP Tj = Tbiv	3.24	2.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.10 kW	7.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.03
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	34 W	34 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.20 kW	1.10 kW
Annual energy consumption Qhe	3764 kWh	4969 kWh

**Model ALFEA M COMPACT 6 TRI**

Model name	ALFEA M COMPACT 6 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	8.16 kW	9.72 kW
El input	1.57 kW	3.08 kW
COP	5.20	3.16

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	205 %	150 %
Prated	7.50 kW	7.20 kW
SCOP	5.20	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.60 kW	6.40 kW
COP Tj = -7°C	3.44	2.40
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	5.07	3.65
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	3.70 kW	3.40 kW

COP Tj = +7°C	6.76	5.05
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	4.20 kW	4.10 kW
COP Tj = 12°C	8.62	6.90
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	6.60 kW	6.40 kW
COP Tj = Tbiv	3.44	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.30 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.10	2.93
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	19 W	19 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.20 kW	1.10 kW
Annual energy consumption Qhe	2983 kWh	3899 kWh

**Model ALFEA M COMPACT 8 TRI**

Model name	ALFEA M COMPACT 8 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	11.19 kW	9.72 kW
El input	2.34 kW	3.08 kW
COP	4.78	3.16

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	209 %	150 %
Prated	9.70 kW	9.50 kW
SCOP	5.31	3.81
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.60 kW	8.40 kW
COP Tj = -7°C	3.32	2.37
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	5.20 kW	5.10 kW
COP Tj = +2°C	5.21	3.68
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	3.70 kW	3.40 kW

COP Tj = +7°C	6.96	5.05
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	4.30 kW	4.10 kW
COP Tj = 12°C	9.01	6.81
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	8.60 kW	8.40 kW
COP Tj = Tbiv	3.32	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.20 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	19 W	19 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	1.50 kW
Annual energy consumption Qhe	3777 kWh	5148 kWh