

## Subtype THERMOR ALFEA EXCELLIA A.I. TRI 16 2024

Certificate Holder	Groupe Atlantic
Address	Rue des Fondateurs BP 64
ZIP	59660
City	Merville
Country	FR
Certification Body	RISE CERT
Subtype title	THERMOR ALFEA EXCELLIA A.I. TRI 16 2024
Registration number	012-C700292
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 16 2024

Model name	THERMOR ALFEA EXCELLIA A.I. TRI 16 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	15.20 kW	12.30 kW
El input	3.71 kW	4.96 kW
COP	4.10	2.48

## 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
$\eta_s$	155 %	125 %
Prated	14.00 kW	13.00 kW
SCOP	3.95	3.20
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.40 kW	11.50 kW
COP Tj = -7°C	2.51	1.87
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	7.50 kW	7.00 kW
COP Tj = +2°C	3.69	3.08
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.30 kW	5.60 kW

COP Tj = +7°C	5.62	4.50
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	7.40 kW	6.90 kW
COP Tj = 12°C	7.32	6.09
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.40 kW	11.50 kW
COP Tj = Tbiv	2.51	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.60 kW	10.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	10 W	10 W
PTO	24 W	24 W
PSB	14 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.40 kW	2.70 kW
Annual energy consumption Qhe	7317 kWh	8395 kWh

## Model THERMOR ALFEA EXCELLIA DUO A.I. TRI 16 2024

Model name	THERMOR ALFEA EXCELLIA DUO A.I. TRI 16 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	0:50 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	15.20 kW	12.30 kW
El input	3.71 kW	4.96 kW
COP	4.10	2.48

## 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
$\eta_s$	155 %	125 %
Prated	14.00 kW	13.00 kW

SCOP	3.95	3.20
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.40 kW	11.50 kW
COP Tj = -7°C	2.51	1.87
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	7.50 kW	7.00 kW
COP Tj = +2°C	3.69	3.08
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.30 kW	5.60 kW
COP Tj = +7°C	5.62	4.50
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	7.40 kW	6.90 kW
COP Tj = 12°C	7.32	6.09
Cdh Tj = +12 °C	0.980	0.980
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WTOL	60 °C	60 °C
Poff	10 W	10 W
PTO	24 W	24 W
PSB	14 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.40 kW	2.70 kW
Annual energy consumption Qhe	7317 kWh	8395 kWh