

Subtype THERMOR ALFEA EXCELLIA A.I. 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. 11 2024
Registration number	012-C700288
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. 11 2024**

Model name	THERMOR ALFEA EXCELLIA A.I. 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	1x230V 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	8.40 kW
EI input	2.51 kW	3.31 kW
COP	4.30	2.54

**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 %
P <sub>rated</sub>	11.00 kW	9.40 kW
SCOP	4.00	3.03
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	9.70 kW	8.30 kW
COP T <sub>j</sub> = -7°C	2.60	1.97
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1.000	1.000
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.90 kW	5.10 kW
COP T <sub>j</sub> = +2°C	3.78	2.95
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.990	0.990
P <sub>dh</sub> T <sub>j</sub> = +7°C	6.10 kW	5.80 kW

COP Tj = +7°C	5.47	3.97
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	7.30 kW	7.10 kW
COP Tj = 12°C	6.99	5.18
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	9.70 kW	8.30 kW
COP Tj = Tbiv	2.60	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	7.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	7 W	7 W
PTO	16 W	16 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	2.10 kW
Annual energy consumption Qhe	5675 kWh	6409 kWh

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

Model name	THERMOR ALFEA EXCELLIA DUO A.I. 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	1x230V 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	1:20 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	8.40 kW
El input	2.51 kW	3.31 kW
COP	4.30	2.54

**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	11.00 kW	9.40 kW

SCOP	4.00	3.03
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.70 kW	8.30 kW
COP Tj = -7°C	2.60	1.97
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	5.90 kW	5.10 kW
COP Tj = +2°C	3.78	2.95
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.10 kW	5.80 kW
COP Tj = +7°C	5.47	3.97
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	7.30 kW	7.10 kW
COP Tj = 12°C	6.99	5.18
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Pdh Tj = Tbiv	9.70 kW	8.30 kW
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.59
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WTOL	60 °C	60 °C
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	2.10 kW
Annual energy consumption Qhe	5675 kWh	6409 kWh