

Subtype Alf  a Excellia HP A.I. Tri 17

Certificate Holder	Groupe Atlantic
Address	Rue des Fondeurs BP 64
ZIP	59660
City	Merville
Country	FR
Certification Body	RISE CERT
Subtype title	Alf��a Excellia HP A.I. Tri 17
Registration number	012-SC0307-18
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.8 kg
Certification Date	09.12.2022
Testing basis	EN 14511:2013, EN 16147:2017, EN 14825:2016, EN 12102:2013
Testing laboratory	RISE Research Institutes of Sweden

**Model Alf  a Excellia HP A.I. Tri 17**

Model name	Alf��a Excellia HP A.I. Tri 17
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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	17.11 kW	15.53 kW
El input	4.08 kW	5.52 kW
COP	4.19	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	161 %	130 %
Prated	18.00 kW	16.50 kW
SCOP	4.11	3.33
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.00 kW	15.00 kW
COP Tj = -7°C	2.82	2.10
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	9.70 kW	9.00 kW
COP Tj = +2°C	4.13	3.32
Cdh Tj = +2 °C	0.960	0.980
Pdh Tj = +7°C	6.80 kW	6.30 kW
COP Tj = +7°C	5.01	4.23

Cdh Tj = +7 °C	0.930	0.970
Pdh Tj = 12°C	8.00 kW	7.70 kW
COP Tj = 12°C	6.64	5.95
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	16.00 kW	15.00 kW
COP Tj = Tbiv	2.82	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.90 kW	12.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	1.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	97 W	49 W
PSB	19 W	19 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.10 kW	4.10 kW
Annual energy consumption Qhe	9059 kWh	10232 kWh

**Model Alf  a Excellia HP Duo A.I. Tri 17**

Model name	Alf��a Excellia HP Duo A.I. Tri 17
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	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	109 %
COP	2.56
Heating up time	00:54 h:min
Standby power input	48.0 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

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	17.11 kW	15.53 kW
EI input	4.08 kW	5.52 kW
COP	4.19	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	161 %	130 %
Prated	18.00 kW	16.50 kW
SCOP	4.11	3.33

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.00 kW	15.00 kW
COP Tj = -7°C	2.82	2.10
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	9.70 kW	9.00 kW
COP Tj = +2°C	4.13	3.32
Cdh Tj = +2 °C	0.960	0.980
Pdh Tj = +7°C	6.80 kW	6.30 kW
COP Tj = +7°C	5.01	4.23
Cdh Tj = +7 °C	0.930	0.970
Pdh Tj = 12°C	8.00 kW	7.70 kW
COP Tj = 12°C	6.64	5.95
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	16.00 kW	15.00 kW
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Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	97 W	49 W
PSB	19 W	19 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.10 kW	4.10 kW
Annual energy consumption Qhe	9059 kWh	10232 kWh