

Subtype Alf  a Hybrid Duo Fioul/Oil A.I. 8

Certificate Holder	Groupe Atlantic
Address	Rue des Fondeurs BP 64
ZIP	59660
City	Merville
Country	FR
Certification Body	RISE CERT
Subtype title	Alf��a Hybrid Duo Fioul/Oil A.I. 8
Registration number	012-SC0257-19
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	1.4 kg
Certification Date	27.06.2019
Testing laboratory	RISE Research Institutes of Sweden

**Model Alf  a Hybrid Duo Fioul/Oil A.I. 8**

Model name	Alf��a Hybrid Duo Fioul/Oil A.I. 8
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	No

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

Declared load profile	L
Efficiency $\eta_{DHW}$	120 %
COP	3.00
Heating up time	01:45 h:min
Standby power input	32.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	249 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	7.50 kW	5.00 kW
El input	1.84 kW	1.94 kW
COP	4.08	2.58

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	156 %	118 %
Prated	6.50 kW	6.10 kW
SCOP	3.97	3.02

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.80 kW	5.30 kW
COP Tj = -7°C	2.40	1.80
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.50 kW	3.10 kW
COP Tj = +2°C	3.80	2.90
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.30 kW	2.00 kW
COP Tj = +7°C	5.70	4.10
Cdh Tj = +7 °C		
Pdh Tj = 12°C	2.40 kW	2.20 kW
COP Tj = 12°C	8.20	5.80
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	5.80 kW	5.30 kW
COP Tj = Tbiv	2.40	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.60 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.00	1.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	6 W	6 W
PTO	30 W	16 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Oil	Oil
Supplementary Heater: PSUP	0.90 kW	1.20 kW
Annual energy consumption Qhe	3375 kWh	3886 kWh