

Summary of	Alféa Hybrid Duo Fioul/Oil A.I. mono phase	Reg. No.	012-SC0258-19	
Certificate Holder	Certificate Holder			
Name	Groupe Atlantic			
Address	44 boulevard des Etats-Unis	44 boulevard des Etats-Unis Zip 85000		
City	La Roche Sur Yon	Country	France	
Certification Body	RISE CERT			
Name of testing laboratory	RISE			
Subtype title	Alféa Hybrid Duo Fioul/Oil A.I. mono phase			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410a			
Mass Of Refrigerant	2.5 kg			
Certification Date	27.06.2019			

## Model: Alféa Hybrid Duo Fioul/Oil A.I. 11 - 23kW

General Data	
Power supply	1x230V 50Hz

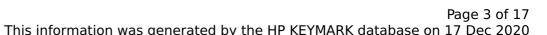
## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.80 kW	7.59 kW
El input	2.54 kW	3.07 kW
СОР	4.25	2.47
Indoor water flow rate	1.90 m³/h	0.90 m³/h

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

## **Average Climate**

#### EN 14825





	Low temperature	Medium temperature
$\eta_{s}$	151 %	112 %
Prated	11.00 kW	9.00 kW
SCOP	3.85	2.87
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.00 kW	8.20 kW
COP Tj = -7°C	2.60	1.90
Pdh Tj = +2°C	6.10 kW	5.00 kW
COP Tj = +2°C	3.70	2.80
Pdh Tj = +7°C	6.20 kW	5.90 kW
$COP Tj = +7^{\circ}C$	5.30	3.80
Pdh Tj = 12°C	7.40 kW	7.00 kW
COP Tj = 12°C	6.90	4.80
Pdh Tj = Tbiv	10.00 kW	8.20 kW
COP Tj = Tbiv	2.60	1.90
Pdh Tj = TOL	10.00 kW	8.00 kW
COP Tj = TOL	2.20	1.70
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	8 W	8 W

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





РТО	45 W	22 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.30 kW	1.30 kW
Annual energy consumption Qhe	6062 kWh	6623 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

Domestic Hot Water (DHW)





EN 16147		
Standby power input	40.0 W	
Reference hot water temperature	54.0 °C	
Declared load profile	L	
Efficiency ηDHW	88 %	
СОР	2.25	
Heating up time	00:55 h:min	
Mixed water at 40°C	250	

## Model: Alféa Hybrid Duo Fioul/Oil A.I. 11 - 29kW

General Data	
Power supply	1x230V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.80 kW	7.59 kW
El input	2.54 kW	3.07 kW
СОР	4.25	2.47
Indoor water flow rate	1.90 m³/h	0.90 m³/h

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit		
	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

### **Average Climate**

#### EN 14825





	Low temperature	Medium temperature
$\eta_{s}$	151 %	112 %
Prated	11.00 kW	9.00 kW
SCOP	3.85	2.87
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.00 kW	8.20 kW
COP Tj = -7°C	2.60	1.90
Pdh Tj = +2°C	6.10 kW	5.00 kW
COP Tj = +2°C	3.70	2.80
Pdh Tj = +7°C	6.20 kW	5.90 kW
COP Tj = +7°C	5.30	3.80
Pdh Tj = 12°C	7.40 kW	7.00 kW
COP Tj = 12°C	6.90	4.80
Pdh Tj = Tbiv	10.00 kW	8.20 kW
COP Tj = Tbiv	2.60	1.90
Pdh Tj = TOL	10.00 kW	8.00 kW
COP Tj = TOL	2.20	1.70
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	8 W	8 W





PTO	45 W	22 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.30 kW	1.30 kW
Annual energy consumption Qhe	6062 kWh	6623 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	69 dB(A)	69 dB(A)

Domestic Hot Water (DHW)





EN 16147		
Standby power input	40.0 W	
Reference hot water temperature	54.0 °C	
Declared load profile	L	
Efficiency ηDHW	88 %	
СОР	2.25	
Heating up time	00:55 h:min	
Mixed water at 40°C	250	



# Model: Alféa Hybrid Duo Fioul/Oil A.I. 14 - 23 kW

General Data	
Power supply 1x230V 50Hz	

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	9.48 kW
El input	3.23 kW	3.95 kW
СОР	4.18	2.40
Indoor water flow rate	2.30 m³/h	1.05 m³/h

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	



 $$\operatorname{\textit{Page}}\ 11$ of 17$$  This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	148 %	113 %
Prated	13.00 kW	11.00 kW
SCOP	3.77	2.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.10 kW	10.00 kW
COP Tj = -7°C	2.50	1.90
Pdh Tj = +2°C	6.70 kW	6.10 kW
COP Tj = +2°C	3.60	2.80
Pdh Tj = +7°C	6.20 kW	5.90 kW
COP Tj = +7°C	5.40	3.90
Pdh Tj = 12°C	7.30 kW	7.10 kW
COP Tj = 12°C	6.90	5.10
Pdh Tj = Tbiv	11.10 kW	10.00 kW

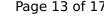
EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com



# $$\operatorname{\textit{Page}}\ 12$ of 17$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = Tbiv	2.50	1.90
Pdh Tj = TOL	10.80 kW	9.30 kW
COP Tj = TOL	2.40	1.70
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	8 W	8 W
РТО	72 W	25 W
PSB	12 W	12 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.70 kW	2.10 kW
Annual energy consumption Qhe	6824 kWh	8041 kWh

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\ 13$$  of 17 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147	
Declared load profile	L
Efficiency ηDHW	88 %
СОР	2.25
Heating up time	00:55 h:min
Mixed water at 40°C	250 l
Standby power input	40.0 W
Reference hot water temperature	54.0 °C

# Model: Alféa Hybrid Duo Fioul/Oil A.I. 14 - 29 kW

General Data	
Power supply 1x230V 50Hz	

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.50 kW	9.48 kW
El input	3.23 kW	3.95 kW
СОР	4.18	2.40
Indoor water flow rate	2.30 m³/h	1.05 m³/h

EN 14511-4			
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed		
Shutting off the heat transfer medium flow	passed		
Complete power supply failure	passed		
Defrost test	passed		

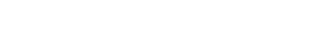


 $$\operatorname{\textit{Page}}\ 15$$  of 17 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1				
	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			
	Low temperature	Medium temperature	
$\eta_{s}$	148 %	113 %	
Prated	13.00 kW	11.00 kW	
SCOP	3.77	2.90	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	11.10 kW	10.00 kW	
COP Tj = -7°C	2.50	1.90	
Pdh Tj = +2°C	6.70 kW	6.10 kW	
COP Tj = +2°C	3.60	2.80	
Pdh Tj = +7°C	6.20 kW	5.90 kW	
COP Tj = +7°C	5.40	3.90	
Pdh Tj = 12°C	7.30 kW	7.10 kW	
COP Tj = 12°C	6.90	5.10	
Pdh Tj = Tbiv	11.10 kW	10.00 kW	

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com

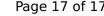


 $$\operatorname{Page}\ 16$$  of 17 This information was generated by the HP KEYMARK database on 17 Dec 2020

COP Tj = Tbiv	2.50	1.90
Pdh Tj = TOL	10.80 kW	9.30 kW
COP Tj = TOL	2.40	1.70
Cdh	0.90	0.90
WTOL	60 °C	60 °C
Poff	8 W	8 W
РТО	72 W	25 W
PSB	12 W	12 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.70 kW	2.10 kW
Annual energy consumption Qhe	6824 kWh	8041 kWh

Domestic Hot Water (DHW)

CEN heat pump KEYMARK





 $$\operatorname{\textit{Page}}\ 17$$  of 17 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 16147			
Declared load profile	L		
Efficiency ηDHW	88 %		
СОР	2.25		
Heating up time	00:55 h:min		
Mixed water at 40°C	250 l		
Standby power input	40.0 W		
Reference hot water temperature	54.0 °C		