Subtype AHP70 21-23

Certificate Holder	GUILLOT INDUSTRIES SAS - Groupe ATLANTIC
Address	1, Route de Fleurville
ZIP	01190
City	Ponte De Vaux
Country	FR
Certification Body	ICIM S.p.A.
Subtype title	AHP70 21-23
Registration number	ICIM-PDC-000252
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.7 kg
Certification Date	13.04.2024
Testing basis	V12

Model APTAE AHP70-21 (brand ATLANTIC); ECOMOD 290 HT AHP70-21 (brand IDEAL); TYNEHAM 290 HT AHP70-21 (brand HAMWORTHY); IZEA AHP70-21 (brand ACV); APTAE AHP70-21 (brand YGNIS)

Model name	APTAE AHP70-21 (brand ATLANTIC); ECOMOD 290 HT AHP70-21 (brand IDEAL); TYNEHAM 290 HT AHP70-21 (brand HAMWORTHY); IZEA AHP70-21 (brand ACV); APTAE AHP70-21 (brand YGNIS)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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	21.00 kW	19.60 kW
El input	4.31 kW	6.13 kW
COP	4.87	3.20

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	5.26 kW	
Cooling capacity	17.40	
EER	3.31	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	187 %	145 %
Prated	20.00 kW	19.00 kW

SCOP	4.75	3.70
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.40 kW	16.60 kW
COP Tj = -7°C	2.92	2.12
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	10.60 kW	10.20 kW
COP Tj = +2°C	4.41	3.60
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	9.50 kW	9.20 kW
COP Tj = +7°C	6.90	5.15
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	11.10 kW	10.80 kW
COP Tj = 12°C	8.48	6.47
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	17.40 kW	16.60 kW
COP Tj = Tbiv	2.92	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.80 kW	15.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	69 °C	69 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.20 kW	3.90 kW
Annual energy consumption Qhe	8561 kWh	10466 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	17.40 kW	
SEER		
Pdc Tj = 35°C	17.40 kW	
EER Tj = 35°C	3.31	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	kW	
EER Tj = 30°C		
Cdc Tj = 30 °C		
Pdc Tj = 25°C	kW	
EER Tj = 25°C		
Cdc Tj = 25 °C		
Pdc Tj = 20°C	kW	

EER Tj = 20°C	
Cdc Tj = 20 °C	
Poff	W
PTO	W
PSB	W
PCK	W
Annual energy consumption Qce	kWh

Model APTAE AHP70-23 (brand ATLANTIC); ECOMOD 290 HT AHP70-23 (brand IDEAL); TYNEHAM 290 HT AHP70-23 (brand HAMWORTHY); IZEA AHP70-23 (brand ACV); APTAE AHP70-23 (brand YGNIS)

Model name	APTAE AHP70-23 (brand ATLANTIC); ECOMOD 290 HT AHP70-23 (brand IDEAL); TYNEHAM 290 HT AHP70-23 (brand HAMWORTHY); IZEA AHP70-23 (brand ACV); APTAE AHP70-23 (brand YGNIS)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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	22.80 kW	21.60 kW
El input	4.78 kW	6.79 kW
COP	4.77	3.18

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	5.89 kW	
Cooling capacity	18.90	
EER	3.21	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	186 %	147 %
Prated	21.00 kW	21.00 kW

SCOP	4.72	3.74
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	18.60 kW	18.20 kW
COP Tj = -7°C	2.81	2.09
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	11.30 kW	11.10 kW
COP Tj = +2°C	4.47	3.67
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	9.50 kW	9.20 kW
COP Tj = +7°C	6.81	5.18
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	11.10 kW	10.80 kW
COP Tj = 12°C	8.45	6.62
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	18.60 kW	18.20 kW
COP Tj = Tbiv	2.81	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.00 kW	16.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	69 °C	69 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.00 kW	4.70 kW
Annual energy consumption Qhe	9199 kWh	11363 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	17.40 kW	
SEER		
Pdc Tj = 35°C	17.40 kW	
EER Tj = 35°C	3.31	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	kW	
EER Tj = 30°C		
Cdc Tj = 30 °C		
Pdc Tj = 25°C	kW	
EER Tj = 25°C		
Cdc Tj = 25 °C		
Pdc Tj = 20°C	kW	

EER Tj = 20°C	
Cdc Tj = 20 °C	
Poff	W
PTO	W
PSB	W
PCK	W
Annual energy consumption Qce	kWh