



## Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

Model		AGHP163PH					
Type of heat pump	<input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump						
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Equipped with a supplementary heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Colder <input type="checkbox"/> Warmer						
Temperature application	<input type="checkbox"/> Medium (55°C) <input checked="" type="checkbox"/> Low (35°C)						
Applied standards	EN14825 / EN16147						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	13	kW	Seasonal space heating energy efficiency	$\eta_s$	166	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	Pdh	11,40	kW	Tj = - 7°C	COPd	2,65	-
Degradation coefficient	Cdh	0,99	-	Tj = + 2°C	COPd	3,98	-
Tj = + 2°C	Pdh	7,00	kW	Tj = + 7°C	COPd	5,82	-
Degradation coefficient	Cdh	0,98	-	Tj = + 12°C	COPd	8,21	-
Tj = + 7°C	Pdh	7,70	kW	Tj = bivalent temperature	COPd	2,65	-
Degradation coefficient	Cdh	0,98	-	Tj = operation limit temperature	COPd	2,43	-
Tj = + 12°C	Pdh	9,60	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	kW
Degradation coefficient	Cdh	0,97	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	11,40	kW	Cycling interval efficiency	COPcyc	-	-
Tj = operation limit temperature	Pdh	10,80	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Cycling interval capacity for heating	Pcyc	-	kW				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0,000	kW	Rated heat output	P <sub>sup</sub>	3,0	kW
Thermostat-off mode	P <sub>SB</sub>	0,025	kW	Type of energy input	Electric		
Standby mode	P <sub>TO</sub>	0,025	kW				
Crankcase heater mode	P <sub>CK</sub>	0,010	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoor	-	4500	m <sup>3</sup> /h
Sound power level, indoor / outdoor	L <sub>WA</sub>	- / 72	dB	Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	6276	kWh				
For heat pump combination heater							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	90,9	%
Daily electricity consumption	Q <sub>elec</sub>	8835	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	1843	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	<b>ARGOCLIMA S.p.A. Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy</b>						



## Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

Model		AGHP163PH			
Type of heat pump	<input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump				
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Equipped with a supplementary heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Climate	<input type="checkbox"/> Average <input checked="" type="checkbox"/> Colder <input type="checkbox"/> Warmer				
Temperature application	<input type="checkbox"/> Medium (55°C) <input checked="" type="checkbox"/> Low (35°C)				
Applied standards	EN14825 / EN16147				

  

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_s$	136	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	Pdh	8,00	kW	Tj = - 7°C	COPd	2,83	-
Degradation coefficient	Cdh	0,98	-	Tj = + 2°C	COPd	3,98	-
Tj = + 2°C	Pdh	6,30	kW	Tj = + 7°C	COPd	5,94	-
Degradation coefficient	Cdh	0,98	-	Tj = + 12°C	COPd	8,26	-
Tj = + 7°C	Pdh	7,80	kW	Tj = bivalent temperature	COPd	2,22	-
Degradation coefficient	Cdh	0,97	-	Tj = operation limit temperature	COPd	2,01	-
Tj = + 12°C	Pdh	9,80	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2,22	kW
Degradation coefficient	Cdh	0,97	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	8,70	kW	Cycling interval efficiency	COPcyc	-	-
Tj = operation limit temperature	Pdh	9,20	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8,70	kW				
Bivalent temperature	Tbiv	-15	°C				
Cycling interval capacity for heating	Pcyc	-	kW				

  

Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	P <sub>sup</sub>	0,0	kW
Thermostat-off mode	P <sub>SB</sub>	0,018	kW	Type of energy input	Electric		
Standby mode	P <sub>TO</sub>	0,018	kW				
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				

  

Other items							
Capacity control	variable			Rated air flow rate, outdoor	-	4500	m <sup>3</sup> /h
Sound power level, indoor / outdoor	L <sub>WA</sub>	- / 72	dB	Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	7553	kWh				

  

For heat pump combination heater							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	68,6	%
Daily electricity consumption	Q <sub>elec</sub>	11306	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	2441	kWh	Annual fuel consumption	AFC	-	GJ

  

Contact details	<b>ARGOCLIMA S.p.A. Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy</b>
-----------------	--



## Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

<b>Model</b>		<b>AGHP163PH</b>	
Type of heat pump	<input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump		
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Equipped with a supplementary heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Climate	<input type="checkbox"/> Average <input type="checkbox"/> Colder <input checked="" type="checkbox"/> Warmer		
Temperature application	<input type="checkbox"/> Medium (55°C) <input checked="" type="checkbox"/> Low (35°C)		
Applied standards	EN14825 / EN16147		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	13	kW	Seasonal space heating energy efficiency	$\eta_s$	228	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	Pdh	-	kW	Tj = - 7°C	COPd	-	-
Degradation coefficient	Cdh	-	-	Tj = + 2°C	COPd	3,04	-
Tj = + 2°C	Pdh	13,20	kW	Tj = + 7°C	COPd	5,10	-
Degradation coefficient	Cdh	0,99	-	Tj = + 12°C	COPd	7,39	-
Tj = + 7°C	Pdh	8,40	kW	Tj = bivalent temperature	COPd	3,04	-
Degradation coefficient	Cdh	0,98	-	Tj = operation limit temperature	COPd	3,04	-
Tj = + 12°C	Pdh	9,60	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	kW
Degradation coefficient	Cdh	0,97	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	13,20	kW	Cycling interval efficiency	COPcyc	-	-
Tj = operation limit temperature	Pdh	13,20	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	2	°C				
Cycling interval capacity for heating	Pcyc	-	kW				

Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	P <sub>sup</sub>	0,0	kW
Thermostat-off mode	P <sub>SB</sub>	0,018	kW	Type of energy input	Electric		
Standby mode	P <sub>TO</sub>	0,018	kW				
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoor	-	4500	m <sup>3</sup> /h
Sound power level, indoor / outdoor	L <sub>WA</sub>	- / 72	dB	Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	3070	kWh				

For heat pump combination heater							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	95,2	%
Daily electricity consumption	Q <sub>elec</sub>	8459	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	1760	kWh	Annual fuel consumption	AFC	-	GJ

<b>Contact details</b>	<b>ARGOCLIMA S.p.A. Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy</b>
------------------------	--



## Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

Model		AGHP163PH	
Type of heat pump	<input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump		
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Equipped with a supplementary heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Colder <input type="checkbox"/> Warmer		
Temperature application	<input checked="" type="checkbox"/> Medium (55°C) <input type="checkbox"/> Low (35°C)		
Applied standards	EN14825 / EN16147		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	13	kW	Seasonal space heating energy efficiency	$\eta_s$	128	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	Pdh	11,20	kW	Tj = - 7°C	COPd	1,96	-
Degradation coefficient	Cdh	0,99	-	Tj = + 2°C	COPd	3,22	-
Tj = + 2°C	Pdh	6,80	kW	Tj = + 7°C	COPd	4,25	-
Degradation coefficient	Cdh	0,99	-	Tj = + 12°C	COPd	6,49	-
Tj = + 7°C	Pdh	7,30	kW	Tj = bivalent temperature	COPd	1,96	-
Degradation coefficient	Cdh	0,99	-	Tj = operation limit temperature	COPd	1,78	-
Tj = + 12°C	Pdh	9,50	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	kW
Degradation coefficient	Cdh	0,98	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	11,20	kW	Cycling interval efficiency	COPcyc	-	-
Tj = operation limit temperature	Pdh	10,10	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW				
Bivalent temperature	Tbiv	-7	°C				
Cycling interval capacity for heating	Pcyc	-	kW				

Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	P <sub>sup</sub>	3,0	kW
Thermostat-off mode	P <sub>SB</sub>	0,018	kW	Type of energy input	Electric		
Standby mode	P <sub>TO</sub>	0,018	kW				
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoor	-	4500	m <sup>3</sup> /h
Sound power level, indoor / outdoor	L <sub>WA</sub>	- /72	dB	Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	7945	kWh				

For heat pump combination heater							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	90,9	%
Daily electricity consumption	Q <sub>elec</sub>	8835	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	1843	kWh	Annual fuel consumption	AFC	-	GJ

Contact details	ARGOCLIMA S.p.A.Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy
-----------------	--



## Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

Model		AGHP163PH	
Type of heat pump	<input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump		
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Equipped with a supplementary heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Climate	<input type="checkbox"/> Average <input checked="" type="checkbox"/> Colder <input type="checkbox"/> Warmer		
Temperature application	<input checked="" type="checkbox"/> Medium (55°C) <input type="checkbox"/> Low (35°C)		
Applied standards	EN14825 / EN16147		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_s$	100	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	Pdh	7,80	kW	Tj = - 7°C	COPd	1,91	-
Degradation coefficient	Cdh	0,99	-	Tj = + 2°C	COPd	2,98	-
Tj = + 2°C	Pdh	6,00	kW	Tj = + 7°C	COPd	4,66	-
Degradation coefficient	Cdh	0,99	-	Tj = + 12°C	COPd	6,92	-
Tj = + 7°C	Pdh	7,40	kW	Tj = bivalent temperature	COPd	1,86	-
Degradation coefficient	Cdh	0,99	-	Tj = operation limit temperature	COPd	1,50	-
Tj = + 12°C	Pdh	9,70	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1,86	kW
Degradation coefficient	Cdh	0,99	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	8,90	kW	Cycling interval efficiency	COPcyc	-	-
Tj = operation limit temperature	Pdh	8,10	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8,90	kW				
Bivalent temperature	Tbiv	-15	°C				
Cycling interval capacity for heating	Pcyc	-	kW				

Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	P <sub>sup</sub>	3,0	kW
Thermostat-off mode	P <sub>SB</sub>	0,018	kW	Type of energy input	Electric		
Standby mode	P <sub>TO</sub>	0,018	kW				
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoor	-	4500	m <sup>3</sup> /h
Sound power level, indoor / outdoor	L <sub>WA</sub>	- / 72	dB	Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	10532	kWh				

For heat pump combination heater							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	68,6	%
Daily electricity consumption	Q <sub>elec</sub>	11306	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	2441	kWh	Annual fuel consumption	AFC	-	GJ

Contact details	ARGOCLIMA S.p.A.Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy
-----------------	--



## Technical parameters for heat pump space heaters and heat pump combination heaters

As by ANNEX II, point 5 - REQUIREMENTS FOR PRODUCT INFORMATION, Table 2 - COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and by ANNEX V - Table 8 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

Model		AGHP163PH	
Type of heat pump	<input checked="" type="checkbox"/> Air-to-water heat pump <input type="checkbox"/> Water-to-water heat pump <input type="checkbox"/> Brine-to-water heat pump		
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Equipped with a supplementary heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Heat pump combination heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Climate	<input type="checkbox"/> Average <input type="checkbox"/> Colder <input checked="" type="checkbox"/> Warmer		
Temperature application	<input checked="" type="checkbox"/> Medium (55°C) <input type="checkbox"/> Low (35°C)		
Applied standards	EN14825 / EN16147		
Item	Symbol	Value	Unit
Rated heat output	Prated	9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	Pdh	-	kW
Degradation coefficient	Cdh	-	-
Tj = + 2°C	Pdh	8,80	kW
Degradation coefficient	Cdh	1,00	-
Tj = + 7°C	Pdh	6,50	kW
Degradation coefficient	Cdh	0,99	-
Tj = + 12°C	Pdh	9,50	kW
Degradation coefficient	Cdh	0,98	-
Tj = bivalent temperature	Pdh	8,80	kW
Tj = operation limit temperature	Pdh	8,80	kW
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW
Bivalent temperature	Tbiv	2	°C
Cycling interval capacity for heating	Pcyc	-	kW
Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	$\eta_s$	150	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7°C	COPd	-	-
Tj = + 2°C	COPd	2,17	-
Tj = + 7°C	COPd	2,96	-
Tj = + 12°C	COPd	5,49	-
Tj = bivalent temperature	COPd	2,17	-
Tj = operation limit temperature	COPd	2,17	-
Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	kW
Operation limit temperature	TOL	-25	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0,018	kW
Thermostat-off mode	P <sub>SB</sub>	0,018	kW
Standby mode	P <sub>TO</sub>	0,018	kW
Crankcase heater mode	P <sub>CK</sub>	0,000	kW
Supplementary heater			
Rated heat output	P <sub>sup</sub>	0,0	kW
Type of energy input	Electric		
Other items			
Capacity control	variable		
Sound power level, indoor / outdoor	L <sub>WA</sub>	- / 72	dB
Annual energy consumption	Q <sub>HE</sub>	3073	kWh
Rated air flow rate, outdoor	-	4500	m <sup>3</sup> /h
Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
For heat pump combination heater			
Declared load profile	XL		
Daily electricity consumption	Q <sub>elec</sub>	8459	kWh
Annual electricity consumption	AEC	1760	kWh
Water heating energy efficiency	$\eta_{wh}$	95,2	%
Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual fuel consumption	AFC	-	GJ
Contact details	ARGOCLIMA S.p.A.Via Alfeno Varo, 35, 25020, Alfianello (BS), Italy		



## Information requirements (comfort chillers)

As by Table 11 of COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

**MODEL : AGHP163PH**

Outdoor side heat exchanger of airconditioner : air

Indoor side heat exchanger of airconditioner : water

Type: compressor driven vapour compression

Driver of compressor: electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	13	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	179	%

**Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27°/19 °C (dry/wet bulb)**

**Declared energy efficiency ratio for part load at given outdoor temperatures Tj**

Tj = 35°C	Pdc	12,80	kW	Tj = 35°C	EERd	2,59	-
Tj = 30°C	Pdc	9,40	kW	Tj = 30°C	EERd	3,84	-
Tj = 25°C	Pdc	6,10	kW	Tj = 25°C	EERd	5,17	-
Tj = 20°C	Pdc	5,00	kW	Tj = 20°C	EERd	6,69	-

Degradation coefficient for air conditioners(\*)

Cdc

0,9

-

### Power consumption in modes other than 'active mode'

Off mode	P <sub>OFF</sub>	0,018	kW	Crankcase heater mode	P <sub>CK</sub>	-	kW
Thermostat-off mode	P <sub>TO</sub>	0,018	kW	«stand-by» mode	P <sub>SB</sub>	0,018	kW

### Other items

Capacity control	Variable			For air-to-air air conditioner: air flow rate, outdoor measured	L <sub>WA</sub>	4500	m <sup>3</sup> /h
Sound power level, indoor/outdoor	L <sub>WA</sub>	72	dB(A)				
If engine driven: Emissions of nitrogen oxides	NOX(**)	-	mg/kWh input GCV				
GWP of the refrigerant	GWP	675	kg CO2 eq (100 years)				

Contact details:

**Argoclima Spa - Via Alfeno Varo, 35 - 25020 Alfianello (BS) - Italy**

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25.

(\*\*\*) From 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.



## PRODUCT FICHE

As by ANNEX IV - POINT 1 of COMMISSION REGULATION (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

### MEDIUM TEMPERATURE HEAT PUMP - Low & Medium temperature application

MODEL : AGHP163PH

SEASONAL SPACE HEATING ENERGY EFFICIENCY CLASS		A++	
		55°C	
Rated heat output (average climate conditions)	Prated	13	kW
DECLARED LOAD PROFILE		XL	
SEASONAL WATER HEATING ENERGY EFFICIENCY CLASS		A	
		55°C	
Annual energy consumption (average climate conditions)	Q <sub>HE</sub>	7945	kWh
Annual electricity consumption for water heating (average climate conditions)	AEC	1843	kWh
		55°C	
Seasonal space heating energy efficiency (average climate conditions)	η <sub>s</sub>	128	%
Water heating energy efficiency (average climate conditions)	η <sub>wh</sub>	90.9	%
		55°C	
Rated heat output (colder climate conditions)	P <sub>nominale</sub>	11	kW
Rated heat output (warmer climate conditions)	P <sub>nominale</sub>	9	kW
		55°C	
Annual electricity consumption for space heating (colder climate conditions)	Q <sub>HE</sub>	10532	kWh
Annual electricity consumption for space heating (warmer climate conditions)	Q <sub>HE</sub>	3073	kWh
Annual electricity consumption for water heating (colder climate conditions)	AEC	2441	kWh
Annual electricity consumption for water heating (warmer climate conditions)	AEC	1760	kWh
		55°C	
Seasonal space heating energy efficiency (colder climate conditions)	η <sub>s</sub>	100	%
Seasonal space heating energy efficiency (warmer climate conditions)	η <sub>s</sub>	150	%
Water heating energy efficiency (colder climate conditions)	η <sub>wh</sub>	68.6	%
Water heating energy efficiency (warmer climate conditions)	η <sub>wh</sub>	95.2	%
		Esterno	
Sound power level	L <sub>WA</sub>	72	dB
Contact information	Argoclima Spa - Via Alfeno Varo 35 - 25020 Alfianello (BS) ITALY		

#### Specific precautions for assembly, installation and maintenance of the combined heat pump:

- (1) Before proceeding with the installation, check that the power supply used corresponds to that indicated on the data plate and check the safety of the current;
- (2) Before use, check and confirm that the electrical connections and water pipes are made correctly, to avoid water leaks, electric shocks or fires;
- (3) Do not operate the machine with wet hands and do not allow children to play with the unit;
- (4) The On / Off key is used to switch the unit on or off by the end user, to switch off the unit completely disconnect the power cord;
- (5) Do not expose the unit to corrosive environment with water or humidity;
- (6) Do not use the unit without water in the tank. The air delivery and return must not be obstructed with objects;
- (7) The water in the unit and piping should be drained when not using the unit to prevent freeze breakage of the tank, water pipes and water pump;
- (8) Never press the button with sharp objects to avoid damaging the hand control.  
Never use other connections instead of the special communication lines of the unit to protect the control elements.  
Never clean the hand control with benzine or thinner to avoid discoloration of the surface or elements being damaged.  
Clean the unit with a damp cloth. Gently clean the display screen and connecting parts to prevent them from being damaged;
- (9) The power cable must be separated from the communication lines.