

INFORMATION SHEET

Manufacturer: Argoclima S.p.A. – via Alfeno Varo, 35 – 25020 Alfianello (BS) – ITALY					
Model				ANGHP12S / ANGHP12T SERB. ACS 300 LT B-1S	
Space heating temperature application		°C		35°C	55°C
Water heating declared load profile		-		XL	
Seasonal space heating energy efficiency class		-		A+++	A+++
Water heating energy efficiency class		-		A+	
Rated heat output	Average climate	P_{rated}	kW	11	9
Space heating annual energy consumption	Average climate	Q_{HE}	kWh	4540	4870
Water heating annual electricity consumption	Average climate	AEC	kWh	1345	
Seasonal space heating energy efficiency	Average climate	η_s	%	188	150
Water heating energy efficiency	Average climate	η_{wh}	%	125	
Indoor sound power level		L_{WA}	dB(A)	-	
Rated heat output	Colder climate	P_{rated}	kW	10	9
	Warmer climate		kW	11	9
Space heating annual energy consumption	Colder climate	Q_{HE}	kWh	5574	6636
	Warmer climate	Q_{HE}	kWh	2065	2290
Water heating annual electricity consumption	Colder climate	AEC	kWh	1644	
	Warmer climate	AEC	kWh	1142	
Seasonal space heating energy efficiency	Colder climate	η_s	%	169	134
	Warmer climate	η_s	%	269	195
Water heating energy efficiency	Colder climate	η_{wh}	%	102	
	Warmer climate	η_{wh}	%	147	
Outdoor sound power level		L_{WA}	dB(A)	53	

TECHNICAL PARAMETERS				
Model	ANGHP12S / ANGHP12T SERB. ACS 300 LT B-1S			
Type of heat pump	☒ Air-to-water heat pump ☐ Water-to-water heat pump ☐ Brine-to-water heat pump			
Low-temperature heat pump	☐ Yes ☒ No			
Equipped with a supplementary heater	☐ Yes ☒ No			
Heat pump combination heater	☒ Yes ☐ No			
Climate condition	☒ Average ☐ Colder ☐ Warmer			
Temperature application	☐ Low (35°C) ☒ Medium (55°C)			
Applied standards	EN 14825 / EN 14511 / EN 12102 / EN 16147			
Rated heat output	P _{rated}	9	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				
[A] T _j = -7°C	P _{dh}	7,8	kW	
[B] T _j = +2°C	P _{dh}	4,8	kW	
[C] T _j = +7°C	P _{dh}	3,1	kW	
[D] T _j = +12°C	P _{dh}	2,6	kW	
[E] T _j = operation limit temperature	P _{dh}	7,4	kW	
[F] T _j = bivalent temperature	P _{dh}	7,8	kW	
[G] T _j = -15°C (if TOL < -20°C)	P _{dh}	-	kW	
Bivalent temperature	T _{biv}	-7	°C	
Cycling interval capacity for heating	P _{cych}	-	kW	
Degradation co-efficient	C _{dh}	0,9	-	
Power consumption in modes other than active mode				
Off mode	P _{OFF}	0,006	kW	
Thermostat-off mode	P _{SB}	0,006	kW	
Standby mode	P _{TO}	0,006	kW	
Crankcase heater mode	P _{CK}	0,000	kW	
Other items				
Capacity control	Variable			
Sound power level, indoor / outdoor	L _{WA}	- / 53	dB	
Annual energy consumption	Q _{HE}	4870	kWh	
Water heating				
Declared load profile	XL			
Daily electricity consumption	Q _{elec}	6,112	kWh	
Annual electricity consumption	AEC	1345	kWh	
Contact details	Argoclima S.p.A. – via Alfeno Varo, 35 – 25020 Alfianello (BS) – ITALY			

Seasonal space heating energy efficiency	η _s	150	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
[A] T _j = -7°C	COP _d	2,24	-
[B] T _j = +2°C	COP _d	3,72	-
[C] T _j = +7°C	COP _d	5,05	-
[D] T _j = +12°C	COP _d	7,81	-
[E] T _j = operation limit temperature	COP _d	1,94	-
[F] T _j = bivalent temperature	COP _d	2,24	-
[G] T _j = -15°C (if TOL < -20°C)	COP _d	-	-
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cyc}	-	-
Heating water operating limit temperature	WTOL	75	°C
Supplementary heater			
Rated heat output	P _{sup}	1,6	kW
Type of energy input	Electric		
Rated air flow rate, outdoors	-	5600	m ³ /h
Water heating energy efficiency	η _{WH}	125	%

TECHNICAL PARAMETERS				
Model	ANGHP12S / ANGHP12T SERB. ACS 300 LT B-1S			
Type of heat pump	☒ Air-to-water heat pump ☐ Water-to-water heat pump ☐ Brine-to-water heat pump			
Low-temperature heat pump	☐ Yes ☒ No			
Equipped with a supplementary heater	☐ Yes ☒ No			
Heat pump combination heater	☒ Yes ☐ No			
Climate condition	☒ Average ☐ Colder ☐ Warmer			
Temperature application	☒ Low (35°C) ☐ Medium (55°C)			
Applied standards	EN 14825 / EN 14511 / EN 12102 / EN 16147			
Rated heat output	P _{rated}	11	kW	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				
[A] T _j = -7°C	P _{dh}	8,7	kW	
[B] T _j = +2°C	P _{dh}	5,6	kW	
[C] T _j = +7°C	P _{dh}	3,6	kW	
[D] T _j = +12°C	P _{dh}	2,6	kW	
[E] T _j = operation limit temperature	P _{dh}	8,2	kW	
[F] T _j = bivalent temperature	P _{dh}	8,7	kW	
[G] T _j = -15°C (if TOL < -20°C)	P _{dh}	-	kW	
Bivalent temperature	T _{biv}	-7	°C	
Cycling interval capacity for heating	P _{cych}	-	kW	
Degradation co-efficient	C _{dh}	0,9	-	
Power consumption in modes other than active mode				
Off mode	P _{OFF}	0,006	kW	
Thermostat-off mode	P _{SB}	0,006	kW	
Standby mode	P _{TO}	0,006	kW	
Crankcase heater mode	P _{CK}	0,000	kW	
Other items				
Capacity control	Variable			
Sound power level, indoor / outdoor	L _{WA}	- / 52	dB	
Annual energy consumption	Q _{HE}	4540	kWh	
Water heating				
Declared load profile	XL			
Daily electricity consumption	Q _{elec}	6,112	kWh	
Annual electricity consumption	AEC	1345	kWh	
Contact details	Argoclima S.p.A. – via Alfeno Varo, 35 – 25020 Alfianello (BS) – ITALY			

Seasonal space heating energy efficiency	η _s	188	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
[A] T _j = -7°C	COP _d	2,84	-
[B] T _j = +2°C	COP _d	4,48	-
[C] T _j = +7°C	COP _d	6,83	-
[D] T _j = +12°C	COP _d	9,97	-
[E] T _j = operation limit temperature	COP _d	2,60	-
[F] T _j = bivalent temperature	COP _d	2,84	-
[G] T _j = -15°C (if TOL < -20°C)	COP _d	-	-
Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cyc}	-	-
Heating water operating limit temperature	WTOL	75	°C
Supplementary heater			
Rated heat output	P _{sup}	2,3	kW
Type of energy input	Electric		
Rated air flow rate, outdoors	-	5600	m ³ /h
Water heating energy efficiency	η _{WH}	125	%