

Model	SIP 100H
Air-to-water heat pump: (yes/no)	no
Brine-to-water heat pump: (yes/no)	yes
Water-to-water heat pump: (yes/no)	no
Low-temperature heat pump: (yes/no)	no
Equipped with supplementary heater: (yes/no)	no
combination heater with: (yes/no)	no
application: (low/medium)	medium
climate: (colder/average/warmer)	average

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	107	kW	Seasonal space heating energy efficiency	η_S	118,0	%
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	106,0	kW	Tj = -7°C	COPd	3,16	-
Tj = +2°C	Pdh	103,5	kW	Tj = +2°C	COPd	3,50	-
Tj = +7°C	Pdh	102,0	kW	Tj = +7°C	COPd	3,76	-
Tj = +12°C	Pdh	100,4	kW	Tj = +12°C	COPd	4,07	-
Tj = bivalent temperature	Pdh	106,7	kW	Tj = bivalent temperature	COPd	3,08	-
Tj = operation limit temperature	Pdh	106,7	kW	Tj = operation limit temperature	COPd	3,08	-
For air-to-water heat pumps: Tj = +15°C (if TOL < -20°C)	Pdh	106,7	kW	For air-to-water heat pumps: Tj = +15°C (if TOL < -20°C)	COPd	3,08	-
Bivalent temperature	Tbiv	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych		kW	Cycling interval efficiency	COPcyc		-
Degradation co-efficient (**)	Cdh	1,0	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0,010	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	PTO	0,010	kW	Type of energy input	electrical		
Standby mode	PSB	0,010	kW				
Crankcase heater mode	PCK	0	kW				
Capacity control	fixed						
sound power level, indoors/outdoors	LWA	83/-	dB	For air-to-water heat pumps: Rated air flow rate, outdoors	-		m³/h
Emissions of nitrogen oxides	NOX	0	mg/kWh	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	18000	m³/h
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	0	kWh
Contact details	ait deutschland GmbH Industriestr. 3 95359 Kasendorf Germany						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

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Air-to-water heat pump: (yes/no)	no
Brine-to-water heat pump: (yes/no)	yes
Water-to-water heat pump: (yes/no)	no
Low-temperature heat pump: (yes/no)	no
Equipped with supplementary heater: (yes/no)	no
combination heater with: (yes/no)	no
application: (low/medium)	low
climate: (colder/average/warmer)	average

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	100	kW	Seasonal space heating energy efficiency	η_S	149,0	%
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	99,9	kW	Tj = -7°C	COPd	4,20	-
Tj = +2°C	Pdh	99,1	kW	Tj = +2°C	COPd	4,40	-
Tj = +7°C	Pdh	98,4	kW	Tj = +7°C	COPd	4,59	-
Tj = +12°C	Pdh	97,7	kW	Tj = +12°C	COPd	4,81	-
Tj = bivalent temperature	Pdh	100,0	kW	Tj = bivalent temperature	COPd	4,17	-
Tj = operation limit temperature	Pdh	100,0	kW	Tj = operation limit temperature	COPd	4,17	-
For air-to-water heat pumps: Tj = +15°C (if TOL < -20°C)	Pdh	100,0	kW	For air-to-water heat pumps: Tj = +15°C (if TOL < -20°C)	COPd	4,17	-
	Tbiv	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych		kW	Cycling interval efficiency	COPcyc		-
Degradation co-efficient (**)	Cdh	1,0	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0,010	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	PTO	0,010	kW	Type of energy input	electrical		
Standby mode	PSB	0,010	kW				
Crankcase heater mode	PCK	0	kW				
Other items				For air-to-water heat pumps: Rated air flow rate, outdoors			
Capacity control	fixed						m³/h
sound power level, indoors/outdoors	LWA	83/-	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger		18000	m³/h
Emissions of nitrogen oxides	NOX	0	mg/kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-				η_{wh}	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	0	kWh
Contact details				ait deutschland GmbH Industriestr. 3 95359 Kasendorf Germany			
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							