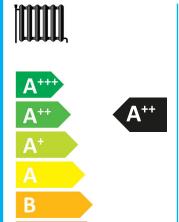
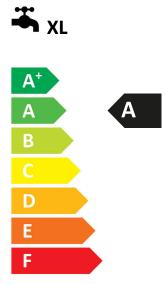


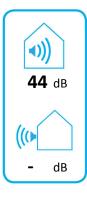
10066342

alpha innotec

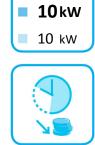
WZS 102H3M











9 kW



## **ENERGY**

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WZS 102H3M









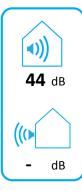


















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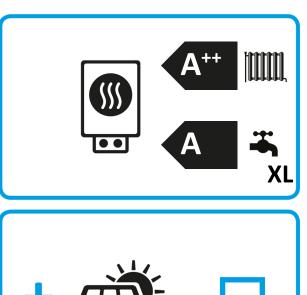


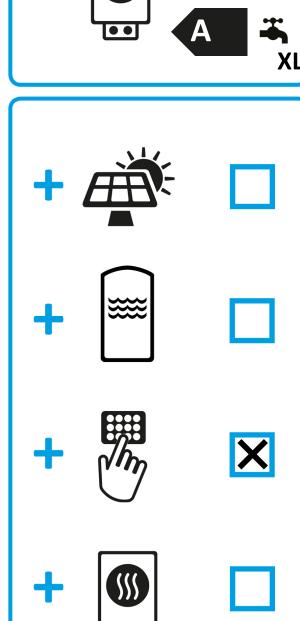
## ENERG IJA ΙE енергия · ενεργεια

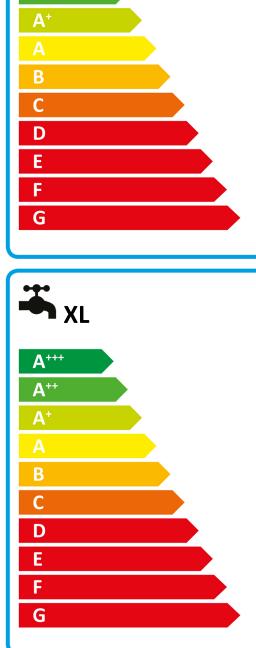
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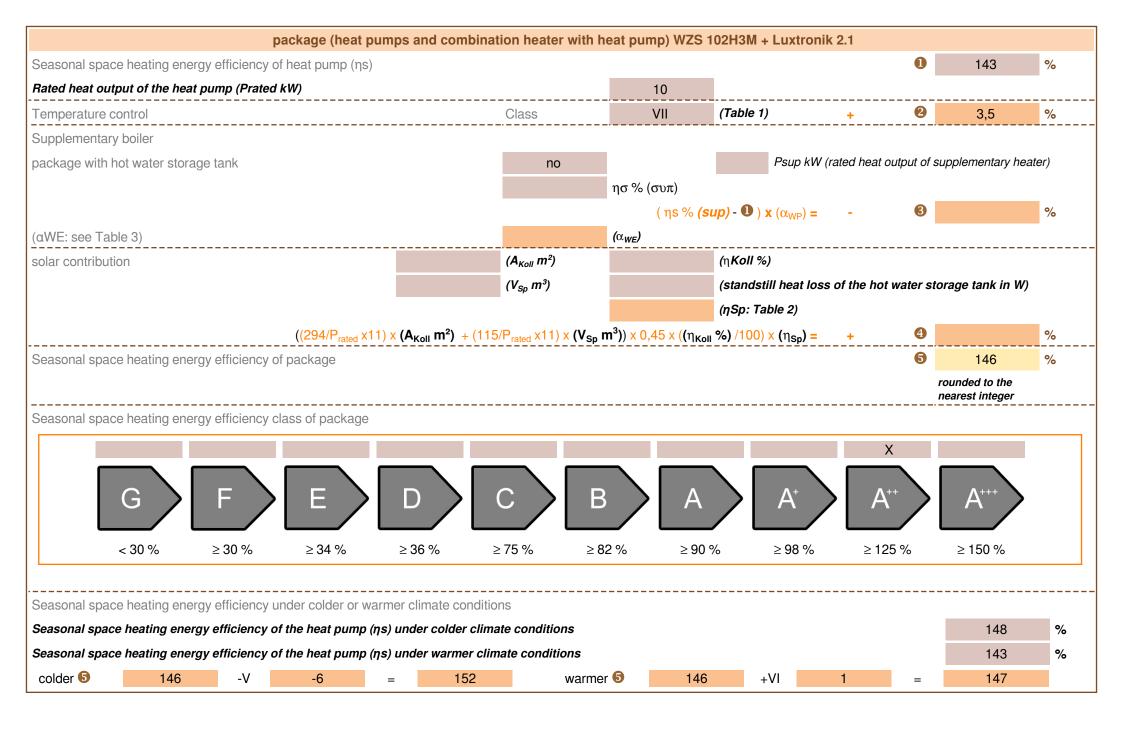
alpha innotec

WZS 102H3M + Luxtronik 2.1









	aluba innatas					
manufacturer:		alpha innotec WZS 102H3M				
model:	WZS 102H3M					
Information concerning energy officiency class and rated	hoot output					
Information concerning energy efficiency class and rated heat output:						
load profile water heating	I/L	XL				
	average / low	average / medium	Τ			
energy efficiency class space heater:	A+++	A++	-			
energy efficiency class waterheating		A	-			
rated heat output:	11	10	kW			
annual final energy consumption space heater	3934	5241	kWh			
annual electricity consumption waterheating	1551		kWh			
energy efficiency space heater:	214	143	%			
energy efficiency waterheating	108	•	%			
sound power level indoors		44	dB			
sound power level indoors		44	dB			
sound power level indoors special precautions concerning assembly, installation or	maintenance	44	dB			
		<b>'</b>				
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by q		ompliance with local regulations				
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information	ualified specialist personnel in c	ompliance with local regulations medium	3.			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadritional information rated heat output colder climate	ualified specialist personnel in color	ompliance with local regulations medium 9	kW			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate	ualified specialist personnel in colors  low  11  11	ompliance with local regulations medium 9 10	kW kW			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate annual energy consumption space heater colder climate	low 11 11 4478	medium 9 10 5980	kW kW kWh			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate annual energy consumption space heater colder climate annual energy consumption space heater warmer climate	low 11 11 4478 2619	ompliance with local regulations medium 9 10	kW kW kWh			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate annual energy consumption space heater colder climate annual energy consumption space heater warmer climate annual energy consumption space heater warmer climate ann. Electricity consumption waterheating colder climate	low 11 11 4478 2619 1551	medium 9 10 5980	kW kW kWh kWh			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate annual energy consumption space heater colder climate annual energy consumption space heater warmer climate annual energy consumption waterheating colder climate ann. Electricity consumption waterheating warmer climate	low 11 11 4478 2619 1551	medium 9 10 5980 3497	kW kW kWh kWh			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate annual energy consumption space heater colder climate annual energy consumption space heater warmer climate annual energy consumption waterheating colder climate ann. Electricity consumption waterheating warmer climate energy effiency space heater colder climate	low 11 11 4478 2619 1551 1551 223	medium 9 10 5980 3497	kW kW kWh kWh kWh			
special precautions concerning assembly, installation or a All instructional work in this manual may only be carried out by quadditional information rated heat output colder climate rated heat output warmer climate annual energy consumption space heater colder climate annual energy consumption space heater warmer climate annual energy consumption waterheating colder climate ann. Electricity consumption waterheating warmer climate energy effiency space heater colder climate energy effiency space heater colder climate	low 11 11 4478 2619 1551 1551 223 215	medium 9 10 5980 3497	kW kW kWh kWh kWh kWh			
special precautions concerning assembly, installation or	low 11 11 4478 2619 1551 1551 223	medium 9 10 5980 3497	kW kW kWh kWh kWh			

technical data of the temperature controller						
manufacturer:	alpha innotec					
model:	Luxtronik 2.1					
controller class		VII	-			
contribution of the controller to the energ	y efficiency space heater	3,5	%			

Air-to-water heat pump: (yes/no)  Brine-to-water heat pump: (yes/no)  Water-to-water heat pump: (yes/no)  Low-temperature heat pump: (yes/no)  Equipped with supplementary heater: (yes/no)  combination heater with: (yes/no)  application: (low/medium)  climate: (colder/average/warmer)  Item  Symbol Value  Hated heat output  Prated  10  kW  Seasonal space heating energy efficiency  Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj  Tj = -7°C  Pdh  8,5  kW  Tj = -7°C  COPd  3,05  Tj = +2°C  COPd  3,76	Unit %
Water-to-water heat pump: (yes/no)       no         Low-temperature heat pump: (yes/no)       no         Equipped with supplementary heater: (yes/no)       yes         combination heater with: (yes/no)       yes         application: (low/medium)       medium         climate: (colder/average/warmer)       average         Item       Symbol       Value       Unit       Item       Symbol       Value         Rated heat output       Prated       10       kW       Seasonal space heating energy efficiency       ηS       142,7         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       8,5       kW       Tj = -7°C       COPd       3,05         Tj = +2°C       Pdh       8,9       kW       Tj = +2°C       COPd       3,76	%
Low-temperature heat pump: (yes/no)       no         Equipped with supplementary heater: (yes/no)       yes         combination heater with: (yes/no)       yes         application: (low/medium)       medium         climate: (colder/average/warmer)       average         Item       Symbol       Value         Rated heat output       Prated       10       kW       Seasonal space heating energy efficiency       ηS       142,7         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       8,5       kW       Tj = -7°C       COPd       3,05         Tj = +2°C       Pdh       8,9       kW       Tj = +2°C       COPd       3,76	%
Equipped with supplementary heater: (yes/no)	%
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	%
application: (low/medium) medium  climate: (colder/average/warmer) average  Item Symbol Value Unit Item Symbol Value  Rated heat output Prated 10 kW Seasonal space heating energy efficiency  Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature Tj $Tj = -7  ^{\circ} C$ Pdh 8,5 kW $Tj = -7  ^{\circ} C$ COPd 3,05 $Tj = +2  ^{\circ} C$ Pdh 8,9 kW $Tj = +2  ^{\circ} C$ COPd 3,76	%
climate: (colder/average/warmer)averageItemSymbolValueUnitItemSymbolValueRated heat outputPrated10kWSeasonal space heating energy efficiency $\eta S$ 142,7Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature TjDeclared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj $Tj = -7^{\circ}C$ Pdh8,5kW $Tj = -7^{\circ}C$ COPd3,05 $Tj = +2^{\circ}C$ Pdh8,9kW $Tj = +2^{\circ}C$ COPd3,76	%
	%
Rated heat outputPrated10kWSeasonal space heating energy efficiency $\eta S$ 142,7Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature TjDeclared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj $Tj = -7^{\circ}C$ Pdh8,5kW $Tj = -7^{\circ}C$ COPd3,05 $Tj = +2^{\circ}C$ Pdh8,9kW $Tj = +2^{\circ}C$ COPd3,76	%
	loor
$Tj = +2 ^{\circ}C$ Pdh 8,9 kW $Tj = +2 ^{\circ}C$ COPd 3,76	
	-
	-
$Tj = +7^{\circ}C$ Pdh 9,1 kW $Tj = +7^{\circ}C$ COPd 4,35	-
Tj = +12°C Pdh 9,4 kW Tj = +12°C COPd 5,09	-
Tj = bivalent temperature Pdh 8,5 kW Tj = bivalent temperature COPd 3,05	-
Tj = operation limit temperature Pdh 8,3 kW Tj = operation limit temperature COPd 2,82	-
For air-to-water heat pumps: Tj Pdh - kW For air-to-water heat pumps: Tj COPd - = -15°C (if TOL < -20°C)	-
Bivalent temperature T <sub>biv</sub> -7 °C For air-to-water heat pumps: TOL -10 Operation limit temperature	°C
Cycling interval capacity for Pcych - kW Cycling interval efficiency COPcyc - heating	-
Degradation co-efficient (**)  Cdh  1,0  - Heating water operating limit WTOL 60 temperature	°C
Power consumption in modes other than active mode Supplementary heater	
Off mode P <sub>OFF</sub> 0,015 kW Rated heat output Psup 1,3	kW
Thermostat-off mode P <sub>TO</sub> 0,015 kW Type of energy input electrical	
Standby mode P <sub>SB</sub> 0,015 kW	
Crankcase heater mode P <sub>CK</sub> - kW	
Other items	
Capacity control fixed For air-to-water heat pumps: Rated air flow rate, outdoors	m <sup>3</sup> /h
sound power level, indoors/outdoors L <sub>WA</sub> 44 / - dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	m <sup>3</sup> /h
Emissions of nitrogen oxides NO <sub>X</sub> - mg/kWh	
For heat pump combination heater:	
Declared load profile XL Water heating energy efficiency η <sub>wh</sub> 108	%
Daily electricity consumption Q <sub>elec</sub> 7,063 kWh Daily fuel consumption Qfuel -	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 heat 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.	ing

Semination   Sem	Model				WZS 102H3M			
Mater-to-water heat pump: (yes/no)   no	Air-to-water heat pump: (yes/no)							
Coveremperature heat pumps; (yes/no)   yes   y	Brine-to-water heat pump: (yes/no)				yes			
Equipped with supplementary heater: (yes/no) yes application: (low/medium) low average    Interest   Symbol   Value   Unit   Item   Symbol   Value   Unit   Unit   Unit   Item   Symbol   Value   Unit   Un	Water-to-water heat pump: (yes/no)				no			
posibination heater with: (yes/no) yes pplication: (low/medium) low papilication: (colder/average/warmer)  Item Symbol Value Unit Item Sy	Low-temperature heat pump: (yes/no)				no			
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 7   Declared coefficient 20°C and outdoor temperature 7   Declared coefficient 20°C and outdoor temperature 7   Declared 20°C and outdoor temperature 8   Declared 20°C and outdoor temperature 8   Declared 20°C and outdoor 4   Declared 20°C and 20°C					yes			
Symbol   Value   Unit   Item   Symbol   Value   Unit	combination heater with: (yes/no)				yes			
Symbol   Value   Unit   Item   Symbol   Value   Unit   Item   Seasonal space heating energy efficiency   \( \text{n} \)   \	application: (low/medium)				low			
Prated heat output Prated 11 kW Seasonal space heating energy efficiency of performance for part load at Indoor temperature 20 °C and outdoor temperature Tj	climate: (colder/average/warmer)				average			
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature T1  Tj = 7°C Pdh 9,4 kW Tj = 7°C QPdh 9,5 kW Tj = 4°C QPd 5,23 .  Tj = 4°C Pdh 9,6 kW Tj = 4°C QPd 6,52 .  Tj = 5°C QPd 7,50 .  Tj = 5°C QPd 7,50 .  Tj = 5°C QPd 7,0 .  Tj = 5°C QP	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
temperature 20 °C and outdoor temperature TJ         temperature 20 °C and outdoor temperature TJ           Tj = -7° C         Pdh         9.4         kW         Tj = -7° C         COPd         5.23         -           Tj = +2° C         Pdh         9.5         kW         Tj = +2° C         COPd         5.63         -           Tj = +12° C         Pdh         9.6         kW         Tj = +2° C         COPd         6.52         -           Tj = bivalent temperature         Pdh         9.7         kW         Tj = +12° C         COPd         6.52         -           Tj = bivalent temperature         Pdh         9.4         kW         Tj = bivalent temperature         COPd         5.23         -           Tj = operation limit temperature         Pdh         9.3         kW         Tj = cir-10-water heat pumps: Tj         COPd         5.05         -           For air-10-water heat pumps: Tj         Pdh         -         kW         For air-10-water heat pumps: Tj         COPd         -         -           Bivalent temperature         Tbw         -7         °C         For air-10-water heat pumps: Tj         COPd         -         -         -           Cycling interval capacity for neature         For air-10 water heat pumps: Ts         T	Rated heat output	Prated	11	kW		ηS	214,2	%
$T_j = +2^{\circ}C \qquad \qquad \text{Pdh} \qquad 9,5 \qquad \text{kW} \qquad T_j = +2^{\circ}C \qquad \qquad \text{COPd} \qquad 5,63 \qquad - \\ T_j = +7^{\circ}C \qquad \qquad \text{Pdh} \qquad 9,6 \qquad \text{kW} \qquad T_j = +7^{\circ}C \qquad \qquad \text{COPd} \qquad 6,05 \qquad - \\ T_j = +12^{\circ}C \qquad \qquad \text{Pdh} \qquad 9,7 \qquad \text{kW} \qquad T_j = +12^{\circ}C \qquad \qquad \text{COPd} \qquad 6,05 \qquad - \\ T_j = \text{bivalent temperature} \qquad \qquad \text{Pdh} \qquad 9,4 \qquad \text{kW} \qquad T_j = \text{bivalent temperature} \qquad \text{COPd} \qquad 5,23 \qquad - \\ T_j = \text{operation limit temperature} \qquad \text{Pdh} \qquad 9,3 \qquad \text{kW} \qquad T_j = \text{operation limit temperature} \qquad \text{COPd} \qquad 5,23 \qquad - \\ T_j = \text{operation limit temperature} \qquad \text{Pdh} \qquad 9,3 \qquad \text{kW} \qquad T_j = \text{operation limit temperature} \qquad \text{COPd} \qquad 5,05 \qquad - \\ \text{For air-to-water heat pumps: } T_j \qquad \text{Pdh} \qquad - \qquad \text{kW} \qquad \text{For air-to-water heat pumps: } T_j \qquad \text{COPd} \qquad - \qquad - \\ \text{For air-to-water heat pumps: } T_j \qquad - \text{COPd} \qquad - \qquad - \\ \text{Elivalent temperature} \qquad T_{biv} \qquad - 7 \qquad ^{\circ}C \qquad \text{For air-to-water heat pumps: } TOL \qquad - 10 \qquad ^{\circ}C \qquad \text{Polycling interval capacity for heating} \qquad - \\ \text{Power consumption of modes other than active mode} \qquad \text{Cycling interval efficiency} \qquad \text{COPcyc} \qquad - \qquad - \\ \text{Power consumption in modes other than active mode} \qquad \text{Supplementary heater} \qquad - \\ \text{Diff mode} \qquad P_{OFF} \qquad 0,015 \qquad \text{kW} \qquad \text{Type of energy input} \qquad \text{electrical} \qquad + \\ \text{Standby mode} \qquad P_{SB} \qquad 0,015 \qquad \text{kW} \qquad \text{Type of energy input} \qquad \text{electrical} \qquad + \\ \text{Standby mode} \qquad P_{SB} \qquad 0,015 \qquad \text{kW} \qquad - \\ \text{Standby mode} \qquad P_{CK} \qquad - \qquad \text{kW} \qquad - \\ \text{Other items} \qquad - \qquad \text{Copacity control} \qquad \text{fixed} \qquad \qquad \text{For air-to-water heat pumps: } \qquad - \qquad - \qquad \qquad$	Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Ti						indoor	
$T] = +7^{\circ}C \qquad Pdh \qquad 9,6 \qquad kW \qquad T] = +7^{\circ}C \qquad COPd \qquad 6,05 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,7 \qquad kW \qquad T] = +12^{\circ}C \qquad COPd \qquad 6,52 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,7 \qquad kW \qquad T] = +12^{\circ}C \qquad COPd \qquad 6,52 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,4 \qquad kW \qquad T] = +12^{\circ}C \qquad COPd \qquad 6,52 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,4 \qquad kW \qquad T] = 1/2^{\circ}C \qquad COPd \qquad 6,52 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,4 \qquad kW \qquad T] = 1/2^{\circ}C \qquad COPd \qquad 6,52 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,4 \qquad kW \qquad T] = 1/2^{\circ}C \qquad COPd \qquad 5,05 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,3 \qquad kW \qquad T] = 1/2^{\circ}C \qquad COPd \qquad 5,05 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad 9,3 \qquad kW \qquad T] = 1/2^{\circ}C \qquad COPd \qquad 5,05 \qquad -T] = 1/2^{\circ}C \qquad Pdh \qquad -T] \qquad -T$	Tj = -7°C	Pdh	9,4	kW	Tj = -7°C	COPd	5,23	-
Tj = +12°C Pdh 9,7 kW Tj = +12°C COPd 6,52 - Tj = bivalent temperature Pdh 9,4 kW Tj = bivalent temperature COPd 5,23 - Tj = operation limit temperature Pdh 9,3 kW Tj = operation limit temperature COPd 5,23 - Tj = operation limit temperature Pdh 9,3 kW Tj = operation limit temperature COPd 5,05 - For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C) For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)  Bivalent temperature T <sub>bov</sub> -7 °C For air-to-water heat pumps: Operation limit temperature COPd	Tj = +2°C	Pdh	9,5	kW	Tj = +2°C	COPd	5,63	-
Tj = bivalent temperature Pdh 9,4 kW Tj = bivalent temperature COPd 5,23 - Tj = operation limit temperature Pdh 9,3 kW Tj = operation limit temperature COPd 5,05 - Tj = operation limit temperature Pdh 9,3 kW Tj = operation limit temperature COPd 5,05 - For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C) Bivalent temperature T <sub>biv</sub> -7 °C For air-to-water heat pumps: Tj COPd	Tj = +7°C	Pdh	9,6	kW	Tj = +7°C	COPd	6,05	-
Tj = operation limit temperature Pdh 9,3 kW Tj = operation limit temperature COPd 5,05 - For air-to-water heat pumps: Tj = 15° C (if TOL < -20° C)  Bivalent temperature Tbw -7 °C For air-to-water heat pumps: Tj = 15° C (if TOL < -20° C)  Bivalent temperature Tbw -7 °C For air-to-water heat pumps: Tj = 15° C (if TOL < -20° C)  Bivalent temperature Tbw -7 °C For air-to-water heat pumps: ToL -10 °C  Cycling interval capacity for Pcych - kW Cycling interval efficiency COPcyc oneating  Degradation co-efficient (**) Cdh 1,0 - Heating water operating limit temperature  Degradation co-efficient (**) Cdh 1,0 - Heating water operating limit temperature  Deform consumption in modes other than active mode  Supplementary heater  Diff mode PoFF 0,015 kW Rated heat output Psup 1,3 kW  Thermostat-off mode PoK - kW  Crankcase heater mode PoK - kW  Crankcase heater mode PoK - kW  Cother items  Capacity control fixed For air-to-water heat pumps: Rated air flow rate, outdoors  Sound power level, LWA 44/- dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors  Emissions of nitrogen oxides NO <sub>X</sub> - mg/kWh  For heat pump combination heater:  Declared load profile - Water heating energy efficiency Nwh - %  Daily electricity consumption Quee - kWh Daily fuel consumption Qfuel - kWh  Cothact details ait deutschland GmbH Industriestrs. 3 95359 Kasendorf Germany  To Pote teating sup(Tj).	Tj = +12°C	Pdh	9,7	kW	Tj = +12°C	COPd	6,52	-
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)  Bivalent temperature  Tow -7 °C For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)  Bivalent temperature  Tow -7 °C For air-to-water heat pumps: TOL -10 °C Operation limit temperature  Cycling interval capacity for heating  Degradation co-efficient (**) Cdh 1,0 - Heating water operating limit temperature  Cycling interval capacity for heating  Degradation co-efficient (**) Cdh 1,0 - Heating water operating limit temperature  Cycling interval efficiency  COPcyc	Tj = bivalent temperature	Pdh	9,4	kW	Tj = bivalent temperature	COPd	5,23	-
= -15 °C (if TOL < -20 °C)  Bivalent temperature  T biv  T biv  T c C For air-to-water heat pumps: Operation limit temperature  T c Cycling interval capacity for Pcych Peych	Tj = operation limit temperature	Pdh	9,3	kW	Tj = operation limit temperature	COPd	5,05	-
Cycling interval capacity for heating  Degradation co-efficient (**)  Cycling interval efficiency  For heat pump each eater and leave output of a supplementary heater operating limit temperature  Supplementary leaver operating limit temperature  Supplementary leaver operating limit temperating limit temperating limit temperating limit temperating limit temperating limit peresting limit pere	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW		COPd	-	-
Degradation co-efficient (**)  Cdh  1,0  - Heating water operating limit temperature  Supplementary heater  Supplementary heater  Off mode  Poff  Off mode	Bivalent temperature	T <sub>biv</sub>	-7	°C	• •	TOL	-10	°C
Power consumption in modes other than active mode  Off mode  Poff 0,015 kW Rated heat output Psup 1,3 kW  Thermostat-off mode PsB 0,015 kW  Standby mode PsB 0,015 kW  Crankcase heater mode PcK - kW  Other items  Capacity control fixed For air-to-water heat pumps: Rated air flow rate, outdoors  Sound power level, ndoors/outdoors  Emissions of nitrogen oxides NO <sub>X</sub> - mg/kWh  For heat pump combination heater:  Declared load profile - kWh Daily fuel consumption Qslec - kWh Daily fuel consumption Qslec is quality of heating energy (*) 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).	Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Off mode	Degradation co-efficient (**)	Cdh	1,0	-		WTOL	60	°C
Thermostat-off mode	Power consumption in modes	other thai	active mod	e	Supplementary heater	•		•
Thermostat-off mode	Off mode	P <sub>OFF</sub>	0,015	kW	Rated heat output	Psup	1,3	kW
Standby mode	Thermostat-off mode		0,015	kW	Type of energy input		electrical	
Capacity control  fixed  fixed  For air-to-water heat pumps: Rated air flow rate, outdoors  For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat exchanger  For heat pump combination heater:  Declared load profile  -  Water heating energy efficiency  Awh  Paily fuel consumption  Qelec  -  kWh  Daily fuel consumption  Qfuel  -  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).	Standby mode	$P_{SB}$	0,015	kW				
Capacity control  fixed  fixed  For air-to-water heat pumps: Rated air flow rate, outdoors  For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors  For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated air flow rate, outdoors  Water heating energy efficiency Rated brine or water Ra	Crankcase heater mode	P <sub>CK</sub>	-	kW				
Rated air flow rate, outdoors  Sound power level, indoors/outdoors  LWA 44/- dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger  Emissions of nitrogen oxides NO <sub>X</sub> - mg/kWh  For heat pump combination heater:  Declared load profile - Water heating energy efficiency \(\eta_{wh}\) - %  Daily electricity consumption \(\text{Q}_{elec}\) - kWh Daily fuel consumption \(\text{Q}_{flec}\) 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).	Other items							
pumps: Rated brine or water flow rate, outdoor heat exchanger  Emissions of nitrogen oxides NO <sub>X</sub> - mg/kWh  For heat pump combination heater:  Declared load profile - Water heating energy efficiency n <sub>wh</sub> - %  Daily electricity consumption Q <sub>elec</sub> - kWh Daily fuel consumption Qfuel - 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).	Capacity control		fixed			-	-	m <sup>3</sup> /h
For heat pump combination heater:  Declared load profile  - Water heating energy efficiency n <sub>wh</sub> - %  Daily electricity consumption Q <sub>elec</sub> - kWh Daily fuel consumption Qfuel - kWh  Contact details  (*) 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).	sound power level, indoors/outdoors	L <sub>WA</sub>	44 / -	dB	pumps: Rated brine or water flow rate, outdoor heat	-	2	m <sup>3</sup> /h
Declared load profile  - Water heating energy efficiency $\eta_{wh}$ - %  Daily electricity consumption $Q_{elec}$ - kWh Daily fuel consumption Qfuel - 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).	Emissions of nitrogen oxides	NO <sub>X</sub>	-	mg/kWh				
Daily electricity consumption  Qelec  - kWh Daily fuel consumption Qfuel - 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).	For heat pump combination h	eater:						
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).	Declared load profile				Water heating energy efficiency	$\eta_{wh}$	-	%
(*) 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).	Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).	Contact details	ait deutsch	land GmbH Ir	dustriestr. 3	95359 Kasendorf Germany			
								eating
	(**) If Cdh is not determined by m	neasuremen	t then the defa	ault degrada	tion coefficient is Cdh = 0,9.			