



ENERG

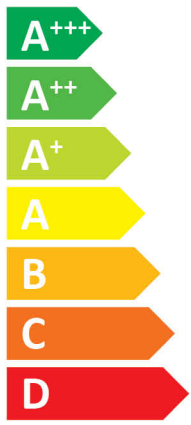
енергия · ενεργεια



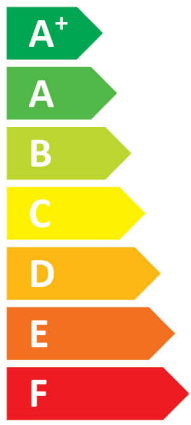
10076341

alpha innotec

WZSV 92H3M



A++



A

47 dB

- dB



- 9 kW
- 8 kW
- 9 kW

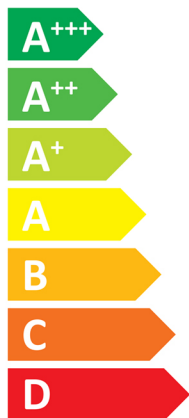


ENERGY

10076341

alpha innotec

WZSV 92H3M



A++



A

Two icons showing sound power levels: a speaker icon with a house and the text "47 dB", and a house icon with a speaker and the text "- dB".



- 9 kW
- 8 kW
- 9 kW

An icon showing a clock face with a dashed line and a stack of coins with an arrow pointing down, representing energy savings or time efficiency.



ENERG

енергия · ενεργεια

Y

IJA

IE

IA

10076341

alpha innotec

WZSV 92H3M + Luxtronik 2.1

Energy label for heating system showing a boiler icon, a radiator icon, and a tap icon with 'XL' label. The label includes two energy efficiency classes: A++ (for heating) and A (for hot water).

Energy efficiency scale for heating system. The scale ranges from A+++ (green) to G (red). A large black arrow on the right points to the A+++ class.

Energy label for hot water system showing a solar panel icon, a hot water tank icon, a control panel icon, and a boiler icon. Each icon is accompanied by a plus sign and a square box. The control panel icon has an 'X' in its box, indicating a specific feature or requirement.

Energy efficiency scale for hot water system. The scale ranges from A+++ (green) to G (red). A large black arrow on the right points to the A class.

package (heat pumps and combination heater with heat pump) WZSV 92H3M + Luxtronik 2.1

Seasonal space heating energy efficiency of heat pump (η_s)

① 148 %

Rated heat output of the heat pump (P_{rated} kW)

8

Temperature control

Class

VII (Table 1)

+

② 3,5 %

Supplementary boiler

package with hot water storage tank

no

P_{sup} kW (rated heat output of supplementary heater)

η_s % (σ_{sup})

$(\eta_s \% (sup) - ①) \times (\alpha_{WP}) = -$ ③ %

(α_{WE} : see Table 3)

(α_{WE})

solar contribution

(A_{Koll} m²)

(η_{Koll} %)

(V_{Sp} m³)

(standstill heat loss of the hot water storage tank in W)

(η_{Sp} : Table 2)

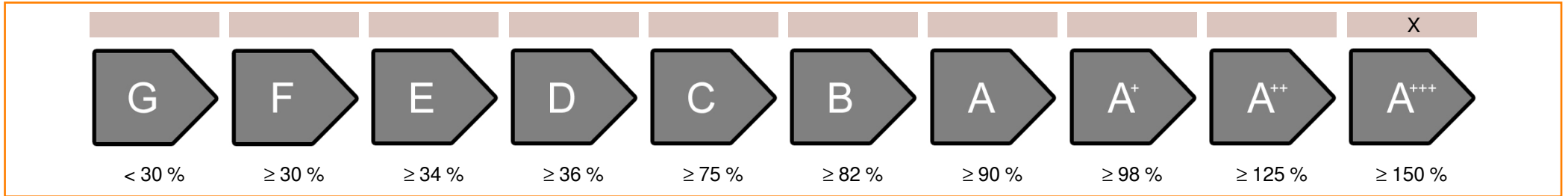
$((294/P_{rated} \times 11) \times (A_{Koll} \text{ m}^2) + (115/P_{rated} \times 11) \times (V_{Sp} \text{ m}^3)) \times 0,45 \times ((\eta_{Koll} \%)/100) \times (\eta_{Sp}) = +$ ④ %

Seasonal space heating energy efficiency of package

⑤ 152 %

rounded to the nearest integer

Seasonal space heating energy efficiency class of package



Seasonal space heating energy efficiency under colder or warmer climate conditions

Seasonal space heating energy efficiency of the heat pump (η_s) under colder climate conditions

161 %

Seasonal space heating energy efficiency of the heat pump (η_s) under warmer climate conditions

156 %

colder ⑤ 152 -V -12 = 164 warmer ⑤ 152 +VI 8 = 160

heatpump datasheet:			
manufacturer:	alpha innotec		
model:	WZSV 92H3M		
Information concerning energy efficiency class and rated heat output:			
load profile water heating	XL	-	
	average / low	average / medium	
energy efficiency class space heater:	A+++	A++	-
energy efficiency class waterheating	A		-
rated heat output:	9	8	kW
annual final energy consumption space heater	3337	3963	kWh
annual electricity consumption waterheating	1642		kWh
energy efficiency space heater:	203	148	%
energy efficiency waterheating	102		%
sound power level indoors	47		dB
special precautions concerning assembly, installation or maintenance			
All instructional work in this manual may only be carried out by qualified specialist personnel in compliance with local regulations.			
additional information	low	medium	
rated heat output colder climate	9	9	kW
rated heat output warmer climate	9	9	kW
annual energy consumption space heater colder climate	3964	4967	kWh
annual energy consumption space heater warmer climate	2257	2763	kWh
ann. Electricity consumption waterheating colder climate	1642		kWh
ann. Electricity consumption waterheating warmer climate	1642		kWh
energy efficiency space heater colder climate	203	161	%
energy efficiency space heater warmer climate	193	156	%
energy efficiency waterheating colder climate	102		%
energy efficiency DHWarmer climate	102		%
sound power level outdoors	-		dB

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

Model				WZSV 92H3M			
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)				yes			
combination heater with: (yes/no)				yes			
application: (low/medium)				medium			
climate: (colder/average/warmer)				average			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	8	kW	Seasonal space heating energy efficiency	η_S	148,4	%
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	6,6	kW	Tj = -7°C	COPd	2,96	-
Tj = +2°C	Pdh	4,1	kW	Tj = +2°C	COPd	3,95	-
Tj = +7°C	Pdh	2,6	kW	Tj = +7°C	COPd	4,55	-
Tj = +12°C	Pdh	1,8	kW	Tj = +12°C	COPd	4,91	-
Tj = bivalent temperature	Pdh	6,9	kW	Tj = bivalent temperature	COPd	2,86	-
Tj = operation limit temperature	Pdh	6,9	kW	Tj = operation limit temperature	COPd	2,82	-
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	COPd	-	-
Bivalent temperature	T _{biv}	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcyc	-	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	P _{OFF}	0,012	kW	Rated heat output	P _{sup}	-	kW
Thermostat-off mode	P _{TO}	0,019	kW	Type of energy input	electrical		
Standby mode	P _{SB}	0,012	kW				
Crankcase heater mode	P _{CK}	-	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	-	m ³ /h
sound power level, indoors/outdoors	L _{WA}	47 / -	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1	m ³ /h
Emissions of nitrogen oxides	NO _x	-	mg/kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Q _{elec}	7,478	kWh	Daily fuel consumption	Q _{fuel}	-	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.							

Model				WZSV 92H3M			
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)				yes			
combination heater with: (yes/no)				yes			
application: (low/medium)				low			
climate: (colder/average/warmer)				average			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	9	kW	Seasonal space heating energy efficiency	η_S	202,5	%
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	7,5	kW	Tj = -7°C	COPd	4,01	-
Tj = +2°C	Pdh	4,6	kW	Tj = +2°C	COPd	5,33	-
Tj = +7°C	Pdh	3,0	kW	Tj = +7°C	COPd	6,11	-
Tj = +12°C	Pdh	1,7	kW	Tj = +12°C	COPd	6,64	-
Tj = bivalent temperature	Pdh	7,9	kW	Tj = bivalent temperature	COPd	3,82	-
Tj = operation limit temperature	Pdh	7,9	kW	Tj = operation limit temperature	COPd	3,78	-
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	COPd	-	-
Bivalent temperature	T _{biv}	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcyc	-	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	P _{OFF}	0,012	kW	Rated heat output	P _{sup}	-	kW
Thermostat-off mode	P _{TO}	0,019	kW	Type of energy input	electrical		
Standby mode	P _{SB}	0,012	kW				
Crankcase heater mode	P _{CK}	-	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	-	m ³ /h
sound power level, indoors/outdoors	L _{WA}	47 / -	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1	m ³ /h
Emissions of nitrogen oxides	NO _x	-	mg/kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	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.							