

10076841

alpha innotec

SWCV 92K3



55 °C

35 °C



\Lambda ++

 A^+

Α

В

L

A++

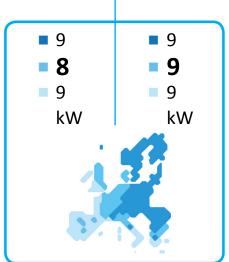
A***



47 dB



dB



2019

811/2013



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SWCV 92K3



55 °C

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\Lambda ++

 \mathbf{A}^{+}

Λ

В

C



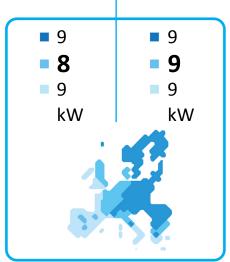






- dB

2019



811/2013



ENERG Y (JA) ehepγuя · ενεργεια (Ε) (ΙΑ)

10076841

alpha innotec

SWCV 92K3 + Luxtronik 2.1































C

D

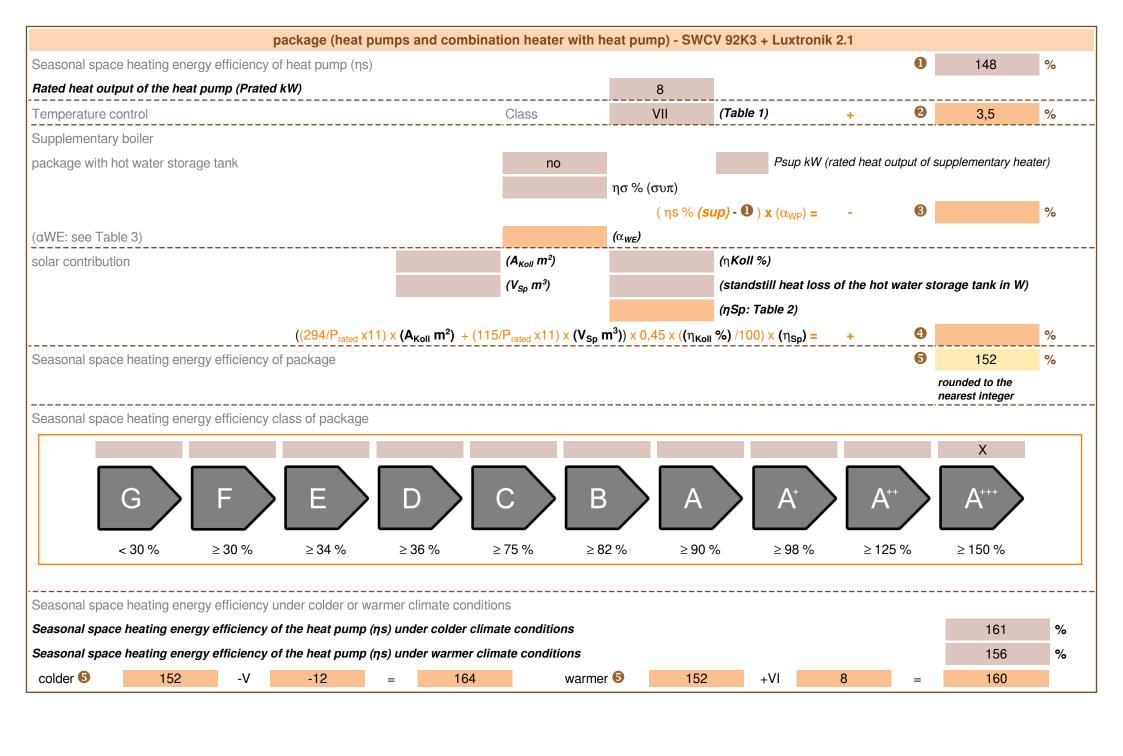
Ε

F

G



2015 811/2013



heatpump datasheet:				
manufacturer:	alpha innotec SWCV 92K3			
model:				
	· ·			
Information concerning energy efficiency class and rate	ted heat output:			
	average / low	average / medium		
energy efficiency class space heater:	A+++	A++	-	
rated heat output:	9	8	kW	
energy efficiency space heater:	203	148	%	
annual final energy consumption space heater	3337	3963	kWh	
	•	•		
sound power level indoors		47	dB	
additional information	low	medium		
rated heat output colder climate	9	9	kW	
rated heat output warmer climate	9	9	kW	
energy effiency space heater colder climate	203	161	%	
energy effiency space heater warmer climate	193	156	%	
annual energy consumption space heater colder climate	3964	4967	kWh	
annual energy consumption space heater warmer climate	2257	2763	kWh	
	•	•		
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 en	ergy efficiency space heater	3,5	%

Model				SWCV 92K3				
			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)			no					
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	ηS	148,4	%	
Declared coefficient of perfor temperature 20°C and outdoo			indoor		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	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 tha	n active mod	e	Supplementary heater				
Off mode	P _{OFF}	0,012	kW	Rated heat output	Psup	-	kW	
Thermostat-off mode	P _{TO}	0,019	kW	Type of energy input		electrical	1	
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 h	eater:							
Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Qfuel	-	kWh	
Contact details		land GmbH Ir	dustriestr. 3	95359 Kasendorf Germany	•	-	-	
				the rated heat output Prated is equ equal to the supplementary capac			eating	
(**) If Cdh is not determined by m	neasuremen	t then the defa	ault degrada	tion coefficient is Cdh = 0,9.		•		

Second S	Model				SWCV 92K3			
National Converted Part Principle (National Converted Part Part Part Part Part Part Part Part	Air-to-water heat pump: (yes/no)							
cove-temperature heat pump; (yes/no) Guipped with supplementary heater: (yes/no) pointhalion heater with: (yes/no) pointhalion heater: pointhalion heater with: (yes/no) pointhalion heaters and heat pump; (yes/no) pointhalion heaters and heat pump; (yes/no) possible distribution of performance for part load at indoor average perfect of the member at the member at the mode of the member at th	Brine-to-water heat pump: (yes/no)			yes				
Equipped with supplementary heater: (yes/no)	Water-to-water heat pump: (yes/no)			no				
	Low-temperature heat pump: (yes/no)			no				
Declared coefficient of performance for part load at indoor temperature Time Tim	Equipped with supplementary he	ater: (yes/no	o)		yes			
Symbol Value Unit Item Seasonal space heating ns 202,5 %	combination heater with: (yes/no)				no			
Symbol Value Unit Rated heat output Prated 9 kW Seasonal space heating energy efficiency ηS 202.5 % % Prated 9 kW Seasonal space heating energy efficiency ηS 202.5 % % Prated 9 kW Seasonal space heating energy efficiency ηS 202.5 % % Prated 9 kW Prated	application: (low/medium)				low			
Prated 9 kW Seasonal space heating energy efficiency 1 1 1 1 1 1 1 1 1	climate: (colder/average/warmer) average							
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature T1 Tij = 7°C Pdh 7,5 kW Tij = 7°C Pdh 4,6 kW Tij = 7°C Pdh 3,0 kW Tij = 47°C COPd 6,11 - Tij = +7°C Pdh 1,7 kW Tij = +12°C COPd 6,64 - Tij = +12°C Pdh 7,9 kW Tij = +12°C COPd 6,64 - Tij = bizilent temperature Pdh 7,9 kW Tij = bizilent temperature Pdh 7,9 kW Tij = operation limit temperature Pdh 7,9 kW Por air-to-water heat pumps: Tij COPd 3,78 - Tij = operation limit temperature Pdh 7,9 kW Por air-to-water heat pumps: Tij COPd 3,78 - Tij = operation limit temperature Pdh 7,9 kW Por air-to-water heat pumps: Tij COPd 3,78 - Tij = operation limit temperature Pdh 7,9 kW Por air-to-water heat pumps: Tij COPd 3,78 - Tij = operation limit temperature Pdh 7,9 kW Por air-to-water heat pumps: Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdh 7,9 kW Por air-to-water heat pumps: Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij = operation limit temperature Pdr (Tij COPd 3,78 - Tij =	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
temperature 20°C and outdoor temperature T]	Rated heat output	Prated	9	kW		ηS	202,5	%
$T_j = +2^{\circ}C \qquad \qquad Pdh \qquad 4,6 \qquad kW \qquad T_j = +2^{\circ}C \qquad \qquad COPd \qquad 5,33 \qquad -T_j = +7^{\circ}C \qquad \qquad Pdh \qquad 3,0 \qquad kW \qquad T_j = +7^{\circ}C \qquad \qquad COPd \qquad 6,11 \qquad -T_j = +12^{\circ}C \qquad \qquad Pdh \qquad 1,7 \qquad kW \qquad T_j = +12^{\circ}C \qquad \qquad COPd \qquad 6,64 \qquad -T_j = +12^{\circ}C \qquad \qquad COPd \qquad 6,64 \qquad -T_j = +12^{\circ}C \qquad \qquad COPd \qquad 6,64 \qquad -T_j = -T_j = 0$ $T_j = \text{bivalent temperature} \qquad Pdh \qquad 7,9 \qquad kW \qquad T_j = \text{bivalent temperature} \qquad COPd \qquad 3,82 \qquad -T_j = 0$ $T_j = \text{operation limit temperature} \qquad Pdh \qquad 7,9 \qquad kW \qquad T_j = \text{operation limit temperature} \qquad COPd \qquad 3,78 \qquad -T_j = 0$ $T_j = \text{operation limit temperature} \qquad Pdh \qquad 7,9 \qquad kW \qquad T_j = \text{operation limit temperature} \qquad COPd \qquad 3,78 \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad -T_j = -15^{\circ}C \text{ (if TOL < -}20^{\circ}C)} \qquad$				indoor				ndoor
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Tj = -7°C	Pdh	7,5	kW	Tj = -7°C	COPd	4,01	-
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 = bivalent temperature COPd 3,82 - Tj = operation limit temperature Pdh 7,9 kW Tj = operation limit temperature COPd 3,78 - Tj = operation limit temperature Pdh 7,9 kW Tj = operation limit temperature COPd 3,78 - Tj = -15°C (if TOL < -20°C) Tj = -15°C (if TOL < -20°C) Tj = operation limit temperature COPd 3,78 - ToPd	Tj = +2°C	Pdh	4,6	kW	Tj = +2°C	COPd	5,33	-
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 - Tj = operation limit temperature Pdh 7,9 kW Tj = operation limit temperature COPd 3,78 - Tj = operation limit temperature Pdh 7,9 kW Tj = operation limit temperature COPd 3,78 - Tj = operation limit temperature COPd 5,78 - Tj = operation limit temperature COPd 5	Tj = +7°C	Pdh	3,0	kW	Tj = +7°C	COPd	6,11	-
Tj = operation limit temperature Pdh 7,9 kW Tj = operation limit temperature COPd 3,78	Tj = +12°C	Pdh	1,7	kW	Tj = +12°C	COPd	6,64	-
For air-to-water heat pumps: Tj	Tj = bivalent temperature	Pdh	7,9	kW	Tj = bivalent temperature	COPd	3,82	-
=-15 °C (if TOL < -20 °C) Givalent temperature Toty -8 °C For air-to-water heat pumps: Operation limit temperature Toty Operation limit temperature Toty Operation limit temperature Cycling interval capacity for Peych - Neating Operation limit temperature Cycling interval efficiency Efficiency Supplementary heater Type of energy input electrical Examples of energy input electrical Exampl	Tj = operation limit temperature	Pdh	7,9	kW	Tj = operation limit temperature	COPd	3,78	-
Operation limit temperature Cycling interval capacity for Pcych Reating Coperation coefficient (**) Codh	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW		COPd	-	-
Degradation co-efficient (**) Codh 1,0	Bivalent temperature	T _{biv}	-8	°C		TOL	-10	°C
Power consumption in modes other than active mode Off mode Poff mode Poff 0,012 kW Rated heat output Psup - kW Thermostat-off mode Psup - kW Thermostat-off mode Psup - kW Tope of energy input electrical Potentians Capacity control Variable Conduct details NO _X - mg/kWh For heat pump combination heater: Declared load profile Ait deutschland GmbH Industriestr. 3 95359 Kasendorf Germany Enter the design load for heating energy efficiency Ait and the rated heat output Prated is equal to the design load for heating energy efforts 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	65	°C
Thermostat-off mode	Power consumption in modes other than active mode			Supplementary heater	•			
Thermostat-off mode	Off mode	P _{OFF}	0,012	kW	Rated heat output	Psup	-	kW
Crankcase heater mode	Thermostat-off mode		0,019	kW	Type of energy input		electrical	
Capacity control Variable 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 heat pump combination heater: Declared load profile Contact details A Wh Contact details Por water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Water heating energy efficiency NO _X Water heating energy efficiency NO _Y Note the pump combination heater: Note the pump combination heater: Note the pump combination heater: Note the pump combination the pump combination heaters, the rated heat output Prated is equal to the design load for heating energy efficiency or heating sup (Tj).	Standby mode	P_{SB}	0,012	kW				
Capacity control Variable 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 air flow rate, outdoors Water heating energy efficiency Nuh Nuh Nuh Nuh Nuh Nuh Nuh Nu	Crankcase heater mode	P _{CK}	-	kW				
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 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 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 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 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 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 brine or water flow rate, outdoor heat pumps: R	Other items				_			
pumps: Rated brine or water flow rate, outdoor heat exchanger 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 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	variable			• •	-	1	m ³ /h
For heat pump combination heater: Declared load profile Coally electricity consumption Qelec A Wh Daily fuel consumption Qfuel A Wh Contact details A it 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 Podesignh, 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 _{WA}	47 / -	dB	pumps: Rated brine or water flow rate, outdoor heat	-	1	m ³ /h
Declared load profile - Water heating energy efficiency η_{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 _X	-	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	η_{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 _{elec}		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	easuremen	t then the defa	ault degrada	tion coefficient is Cdh = 0,9.			