

100778HV941

alpha innotec

LWAV+ 82R1/3-HV 9-1/3



55 °C

35 °C



\(++

 A^+

A

B

L

D



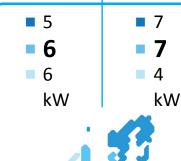




44 dB



50 dB





2019

811/2013



100778HV941

alpha innotec

LWAV+ 82R1/3-HV 9-1/3



55 °C

35 °C



Λ ++

Δ+

Δ

D

L

A⁺⁺

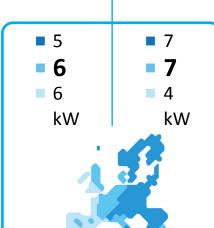




44 dB



50 dB



2019

811/2013



IJA ENERG енергия · ενεργεια

100778HV941

alpha innotec

LWAV+ 82R1/3-HV 9-1/3 + Luxtronik 2.1





































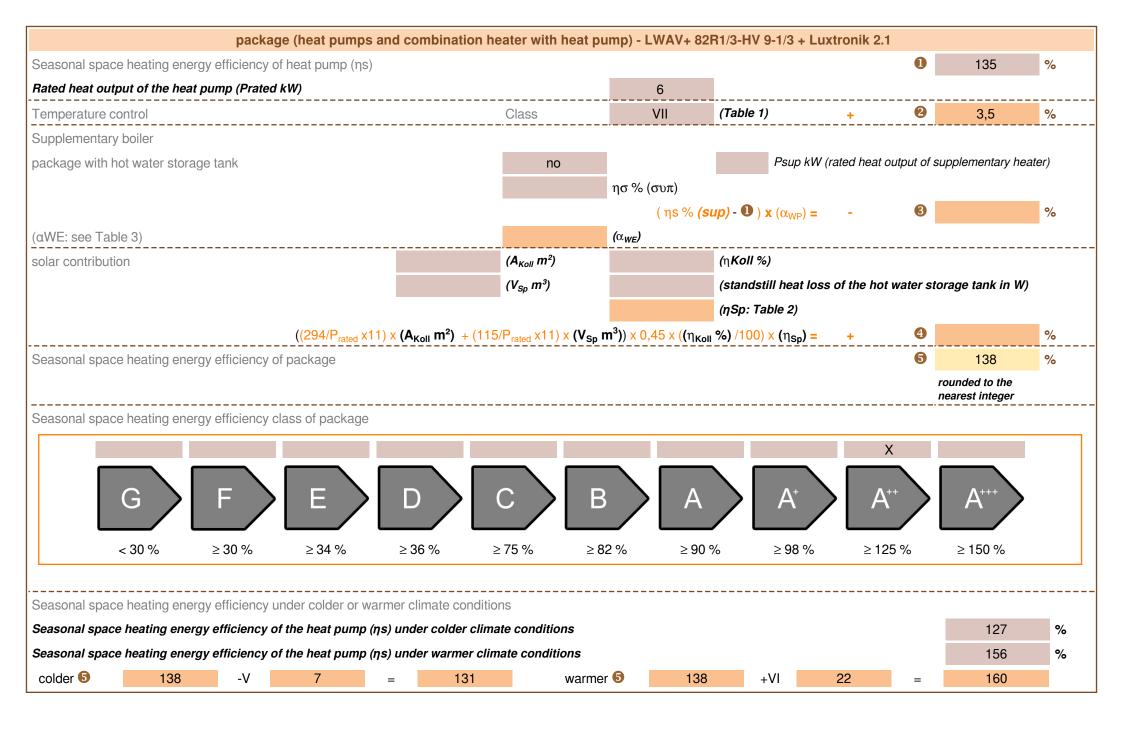












heatpump datasheet:					
manufacturar	alpha ippatas				
manufacturer:	alpha innotec				
model:	LWAV+ 82R1/3-HV 9-	1/3			
	ted beet enterit.				
Information concerning energy efficiency class and rate	led neat output:				
	average / low	average / medium			
energy efficiency class space heater:	A+++	A++	-		
rated heat output:	7	6	kW		
energy efficiency space heater:	180	135	%		
annual final energy consumption space heater	3029	3390	kWh		
	•	<u>.</u>			
sound power level indoors		44	dB		
special precautions concerning assembly, installation All instructional work in this manual may only be carried out be		nnel in compliance with loca	al		
regulations.					
additional information	low	medium			
rated heat output colder climate	7	5	kW		
rated heat output warmer climate	4	6	kW		
energy effiency space heater colder climate	145	127	%		
energy effiency space heater warmer climate	214	156	%		
annual energy consumption space heater colder climate	4339	3781	kWh		
annual energy consumption space heater warmer climate	1009	1844	kWh		
sound power level outdoors		50	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				LWAV+ 82R1/3-HV 9-1/3			
Air-to-water heat pump: (yes/no)	ir-to-water heat pump: (yes/no)			yes			
Brine-to-water heat pump: (yes/no) Water-to-water heat pump: (yes/no) Low-temperature heat pump: (yes/no)			no	no			
			no				
			no				
Equipped with supplementary he	ater: (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	6	kW	Seasonal space heating energy efficiency	ηS	134,7	%
Declared coefficient of perfor temperature 20°C and outdoo			indoor	Declared coefficient of perfor temperature 20°C and outdoor			indoor
Tj = -7°C	Pdh	5,0	kW	Tj = -7°C	COPd	2,31	-
Tj = +2°C	Pdh	3,5	kW	Tj = +2°C	COPd	3,43	-
Tj = +7°C	Pdh	3,0	kW	Tj = +7°C	COPd	4,86	-
Tj = +12°C	Pdh	3,4	kW	Tj = +12°C	COPd	6,56	-
Tj = bivalent temperature	Pdh	5,0	kW	Tj = bivalent temperature	COPd	2,31	-
Tj = operation limit temperature	Pdh	4,2	kW	Tj = operation limit temperature	COPd	2,12	-
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}	-7	°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	60	°C
Power consumption in modes	other than	active mod	le	Supplementary heater			•
Off mode	P _{OFF}	0,031	kW	Rated heat output	Psup	1,4	kW
Thermostat-off mode	P _{TO}	-	kW	Type of energy input	•	electrical	•
Standby mode	P_SB	0,031	kW				
Crankcase heater mode	P _{CK}	-	kW				
Other items	•				•		
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	2.500	m ³ /h
sound power level, indoors/outdoors	L _{WA}	44 / 50	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	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	 	and GmbH Ir	ndustriestr. 3	95359 Kasendorf Germany			
	put of a supp	olementary he	eater Psup is	the rated heat output Prated is equestion equal to the supplementary capacition coefficient is Cdh = 0.9.			eating

No Nation No No No No No No No	Model				LWAV+ 82R1/3-HV 9-1/3			
National Content National Co	Air-to-water heat pump: (yes/no)				yes			
No No No No No No No No	Brine-to-water heat pump: (yes/n	o)			no			
Second S	Water-to-water heat pump: (yes/no)			no				
Description: Desc	Low-temperature heat pump: (yes/no)			no				
Internation	Equipped with supplementary he	ater: (yes/no	0)		yes			
Average Average Average Average Average	combination heater with: (yes/no))			no			
Symbol Value Unit Item Symbol Value Unit Item Symbol Value Unit Rated heat output Prated 7 kW Seasonal space heating energy efficiency \(\text{n} \) \(\text{N} \) \(\text{Seasonal space heating energy efficiency} \) \(\text{n} \) \(\text{N} \) \(\text{Seasonal space heating energy efficiency} \) \(\text{n} \) \(\text{N} \) \(\text{Seasonal space heating energy efficiency} \) \(Pole clared coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor temperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor femperature 20°C and outdoor femperature Tj \text{Pole coefficient of performance for part load at indoor emperature 20°C and outdoor femperature 20°C and	application: (low/medium)				low			
Prated 7 kW Seasonal space heating energy efficiency 7 kW Seasonal space heating energy efficiency 7 8 9 8 179,8 9 8 179,8 9 179,8	climate: (colder/average/warmer)				average			
Peckalared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 71 Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 71 Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 71 Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 71 Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 71 Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature 71 Declared coefficient of performance for part load at indoor temperature 72°C COPd 3,26 Declared coefficient 71 Declared coefficient 71 Declared coefficient 72°C Declared coefficient 73°C Dec	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
temperature 20°C and outdoor temperature Tj temperature 20°C and outdoor temperature Tj 1 - 7°C Pdh 5.9 kW Tj = -7°C COPd 3.26 - 1 Tj = +2°C Pdh 3.8 kW Tj = +2°C COPd 4.70 - 1 Tj = +7°C Pdh 3.3 kW Tj = +2°C COPd 5.97 - 1 Tj = +12°C Pdh 3.4 kW Tj = +12°C COPd 5.97 - 1 Tj = +12°C Pdh 3.4 kW Tj = bivalent temperature Pdh 5.9 kW Tj = bivalent temperature COPd 3.26 - 1 Tj = operation limit temperature Pdh 5.1 kW Tj = operation limit temperature COPd 3.18 - 1 To air-to-water heat pumps: Tj Pdh - kW For air-to-water heat pumps: Tj COPd - 1 To air-to-water heat pumps: Tj Pdh - kW For air-to-water heat pumps: Tj COPd - 1 To air-to-water heat pumps: Tj Pcych - kW Cycling interval efficiency COPcyc - 1 To air-to-water heat pumps: Tj COPd - 1 To air-to-water heat pumps: Tj Pcych - kW Cycling interval efficiency COPcyc - 1 To air-to-water heat pumps: Tj Pcych - kW Cycling interval efficiency COPcyc - 1 To air-to-water heat pumps: Tj Pcych - kW Cycling interval efficiency COPcyc - 1 To air-to-water heat pumps: Tj Pcych - kW Type of energy input Electrical To air-to-water heat pumps: Tj Pcych - kW Type of energy input Electrical To air-to-water heat pumps: Tj Pcych - kW Type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of energy input Electrical To appear to a type of e	Rated heat output	Prated	7	kW		ηS	179,8	%
Fig. = +2°C				indoor				indoor
Fig. = +7°C	Tj = -7°C	Pdh	5,9	kW	Tj = -7°C	COPd	3,26	-
Fig. +12°C Pdh 3,4 kW Tj = +12°C COPd 7,92 - Tj = bivalent temperature Pdh 5,9 kW Tj = bivalent temperature COPd 3,26 - Tj = operation limit temperature Pdh 5,1 kW Tj = operation limit temperature COPd 3,26 - Tj = operation limit temperature Pdh 5,1 kW Tj = operation limit temperature COPd 3,18 - Tj = operation limit temperature limit temperat	Tj = +2°C	Pdh	3,8	kW	Tj = +2°C	COPd	4,70	-
Fig. bivalent temperature Pdh 5,9 kW Tj = bivalent temperature COPd 3,26 - Tj = operation limit temperature Pdh 5,1 kW Tj = operation limit temperature COPd 3,18 - Tj = operation limit temperature Pdh 5,1 kW Tj = operation limit temperature COPd 3,18 - Tj = operation limit temperature Pdh 5,1 kW Tj = operation limit temperature COPd 3,18 - To = - Tj = operation limit temperature COPd 3,18 - To = - Tj = operation limit temperature COPd 3,18 - To = - Tj = operation limit temperature COPd 3,18 - To = - Tj = operation limit temperature COPd 3,18 - To = - Tj = operation limit temperature COPd 3,18 - To = - T	Tj = +7°C	Pdh	3,3	kW	$Tj = +7^{\circ}C$	COPd	5,97	-
Fig. operation limit temperature Pdh 5,1 kW Tj = operation limit temperature COPd 3,18 - or air-to-water heat pumps: Tj e-15°C (if TOL < -20°C) Pdh - kW For air-to-water heat pumps: Tj e-15°C (if TOL < -20°C) Power consumption in modes other than active mode Defined Power consumption in modes other than active mode Power consumption in modes of Power consumption i	Tj = +12°C	Pdh	3,4	kW	Tj = +12°C	COPd	7,92	-
For air-to-water heat pumps: Tj	Tj = bivalent temperature	Pdh	5,9	kW	Tj = bivalent temperature	COPd	3,26	-
= -15°C (if TOL < -20°C) Bivalent temperature T _{biv} -7 °C For air-to-water heat pumps: Operation limit temperature Cycling interval capacity for Pcych Poeting Degradation co-efficient (**) Cdh 1,0 - Heating water operating limit temperature Cycling interval efficiency COPcyc - Poeting Degradation co-efficient (**) Cdh 1,0 - Heating water operating limit temperature Supplementary heater Cycling interval efficiency COPcyc	Tj = operation limit temperature	Pdh	5,1	kW	Tj = operation limit temperature	COPd	3,18	-
Operation limit temperature Cycling interval capacity for leating Operation co-efficient (**) Operation limit temperature Cycling interval efficiency Operation limit temperature Cycling interval efficiency Cycling interval eff	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW		COPd	-	-
Degradation co-efficient (**) Codh 1,0 - Heating water operating limit temperature Supplementary heater Off mode Poff One of mode One of mode No No No No No No No No No N	Bivalent temperature	T _{biv}	-7	°C		TOL	-10	°C
temperature Supplementary heater	Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Diff mode	Degradation co-efficient (**)	Cdh	1,0	-		WTOL	60	°C
Thermostat-off mode	Power consumption in modes other than active mode			Supplementary heater	•			
Thermostat-off mode	Off mode	P _{OFF}	0,031	kW	Rated heat output	Psup	1,6	kW
Standby mode	Thermostat-off mode		-	kW	Type of energy input		electrical	•
Crankcase heater mode P _{CK} - kW Other items Capacity control variable Rated air flow rate, outdoors Cound power level, andoors/outdoors Capacity control Variable Rated air flow rate, outdoors Capacity control Variable Rated air flow rate, outdoors Capacity control Variable Por air-to-water heat pumps: Por water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Capacity control Variable Por air-to-water heat pumps: Rated air flow rate, outdoors Capacity control Variable Por air-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	Standby mode		0,031	kW				
Capacity control Variable For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Provided air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	Crankcase heater mode		-	kW				
Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Modors/outdoors NO _X - mg/kWh	Other items							
pumps: Rated brine or water flow rate, outdoor heat exchanger Emissions of nitrogen oxides NO _X - mg/kWh	Capacity control	variable				-	2.500	m ³ /h
	sound power level, indoors/outdoors	L _{WA}	44 / 50	dB	pumps: Rated brine or water flow rate, outdoor heat	-	-	m ³ /h
or heat pump combination heater:	Emissions of nitrogen oxides	NO _X	-	mg/kWh				
and the first of the second se	For heat pump combination h	eater:						
Declared load profile - Water heating energy efficiency η _{wh} - %	Declared load profile		-		Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption Q _{elec} - kWh Daily fuel consumption Qfuel - kWh	Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Qfuel	-	kWh
	Contact details		land GmbH Ir	ndustriestr. 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).								eating
**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.	<u> </u>		-					