

100602HTD02

alpha innotec

LWD 70A-HTD









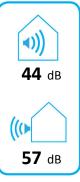


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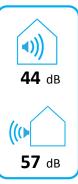




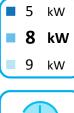














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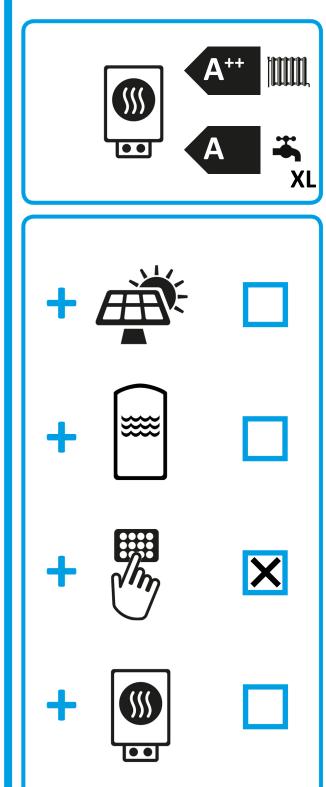


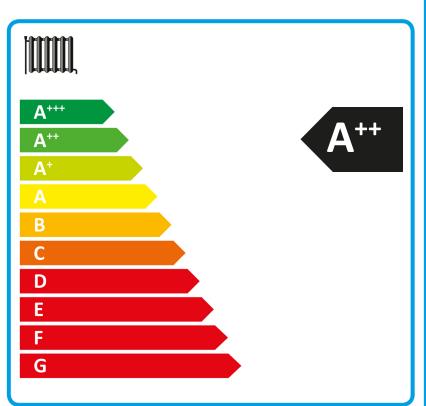
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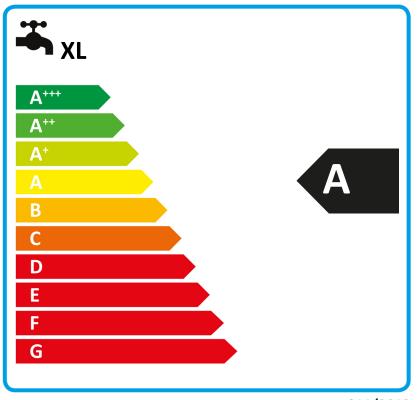
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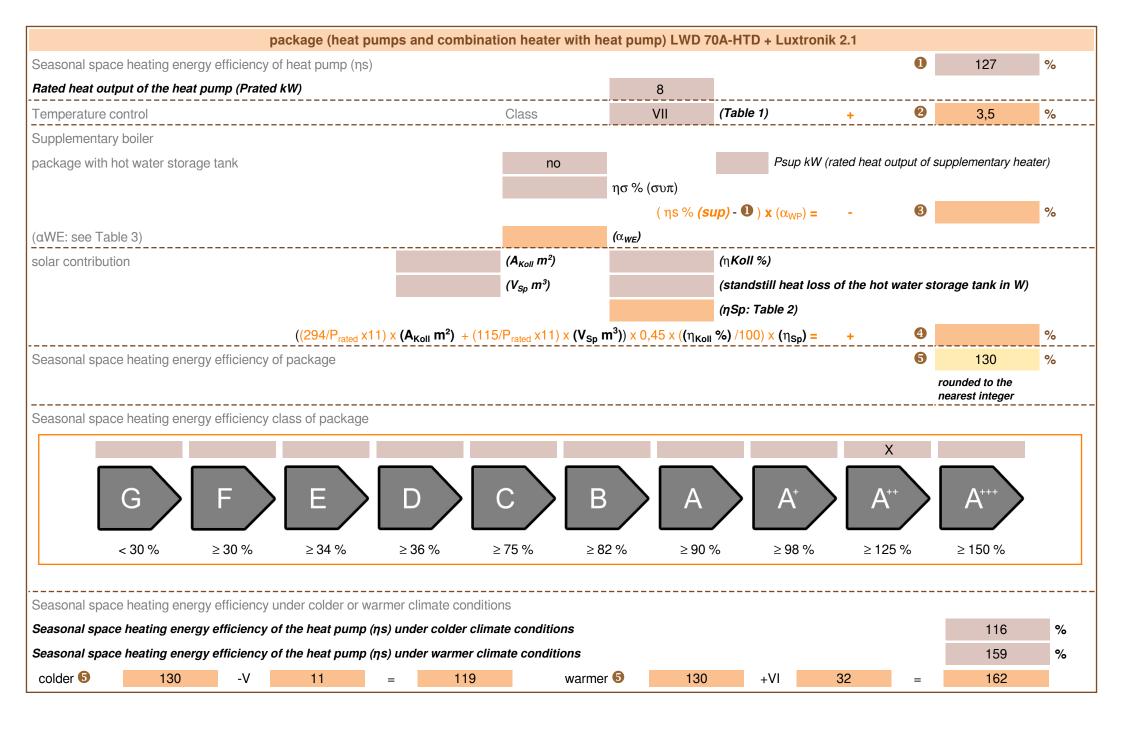
alpha innotec

LWD 70A-HTD + Luxtronik 2.1









heatpump datasheet:				
manufacturer:	alpha innotec			
model:	LWD 70A-HTD			
	•			
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	4549	5278	kWh	
annual electricity consumption waterheating	1948		kWh	
energy efficiency space heater:	158	127	%	
energy efficiency waterheating	86		%	
	•		•	
sound power level indoors		44	dB	
			•	
special precautions concerning assembly, installation or n	naintenance			
All instructional work in this manual may only be carried out by qu	ialified specialist personnel in co	ompliance with local regulations	S.	
additional information	low	medium		
rated heat output colder climate	6	5	kW	
rated heat output warmer climate	9	9	kW	
annual energy consumption space heater colder climate	4000	4484	kWh	
annual energy consumption space heater warmer climate	2558	2938	kWh	
ann. Electricity consumption waterheating colder climate	2148		kWh	
ann. Electricity consumption waterheating warmer climate	1692		kWh	
energy effiency space heater colder climate	144	116	%	
energy effiency space heater warmer climate	193	159	%	
energy efficiency waterheating colder climate	78		%	
energy efficiency DHWwarmer climate	99		%	
	•		-	
sound power level outdoors		57	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			LWD 70A-HTD				
Air-to-water heat pump: (yes/no)			yes				
Brine-to-water heat pump: (yes/no)			no				
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	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	ηS	126,6	%
Declared coefficient of perfor temperature 20°C and outdoor			indoor	Declared coefficient of perfor temperature 20°C and outdoor			indoor
Tj = -7°C	Pdh	5,8	kW	Tj = -7°C	COPd	2,21	-
Tj = +2°C	Pdh	7,5	kW	Tj = +2°C	COPd	3,25	-
Tj = +7°C	Pdh	8,5	kW	Tj = +7°C	COPd	4,20	-
Tj = +12°C	Pdh	11,5	kW	Tj = +12°C	COPd	6,21	-
Tj = bivalent temperature	Pdh	6,4	kW	Tj = bivalent temperature	COPd	2,52	-
Tj = operation limit temperature	Pdh	5,2	kW	Tj = operation limit temperature	COPd	1,92	-
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}	-4	°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	70	°C
Power consumption in modes	other than	active mod	e	Supplementary heater			
Off mode	P _{OFF}	0,015	kW	Rated heat output	Psup	3,1	kW
Thermostat-off mode	P _{TO}	0,015	kW	Type of energy input		electrical	•
Standby mode	P_{SB}	0,015	kW				
Crankcase heater mode	P _{CK}	-	kW				
Other items					•		
Capacity control	fixed			For air-to-water heat pumps: Rated air flow rate, outdoors	-	3.000	m ³ /h
sound power level, indoors/outdoors	L _{WA}	44 / 57	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		XL		Water heating energy efficiency	η_{wh}	86	%
Daily electricity consumption	Q _{elec}	8,870	kWh	Daily fuel consumption	Qfuel	-	kWh
Contact details		land GmbH Ir	ndustriestr. 3	95359 Kasendorf Germany			
				the rated heat output Prated is equ equal to the supplementary capac			eating
(**) If Cdh is not determined by m						,	
· · ·				•			

Model			LWD 70A-HTD				
Air-to-water heat pump: (yes/no)			yes				
Brine-to-water heat pump: (yes/no)			no				
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	ηS	157,8	%
Declared coefficient of performance for part load at indoor			Declared coefficient of perfor temperature 20°C and outdoor			ndoor	
Tj = -7°C	Pdh	6,3	kW	Tj = -7°C	COPd	3,28	-
Tj = +2°C	Pdh	7,8	kW	Tj = +2°C	COPd	4,09	-
Tj = +7°C	Pdh	8,5	kW	Tj = +7°C	COPd	4,81	-
Tj = +12°C	Pdh	11,5	kW	Tj = +12°C	COPd	6,21	-
Tj = bivalent temperature	Pdh	6,8	kW	Tj = bivalent temperature	COPd	3,60	-
Tj = operation limit temperature	Pdh	5,7	kW	Tj = operation limit temperature	COPd	2,95	-
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}	-4	°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	70	°C
Power consumption in modes	other thai	active mod	e	Supplementary heater			•
Off mode	P _{OFF}	0,015	kW	Rated heat output	Psup	3,2	kW
Thermostat-off mode	P _{TO}	0,015	kW	Type of energy input		electrical	
Standby mode	P_{SB}	0,015	kW				
Crankcase heater mode	P _{CK}	-	kW				
Other items							
Capacity control	fixed			For air-to-water heat pumps: Rated air flow rate, outdoors	-	3.000	m ³ /h
sound power level, indoors/outdoors	L _{WA}	44 / 57	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	ait deutsch	land GmbH In	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	easuremen	t then the defa	ault degrada	tion coefficient is Cdh = 0,9.			