

10048342

alpha innotec

WWC 160H/X



55 °C

35 °C



Δ++

A⁺

A

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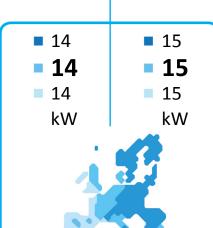
A+++







- dB



2019

811/2013



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alpha innotec

WWC 160H/X



55 °C

35 °C



A+++



Λ+

Λ

В

C



50 dB



- dB

1414

■ 14 kW -

15

15

kW



2019

811/2013



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

10048342

alpha innotec

WWC 160H/X + Luxtronik 2.0



























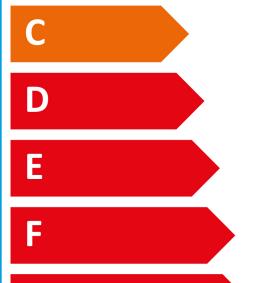




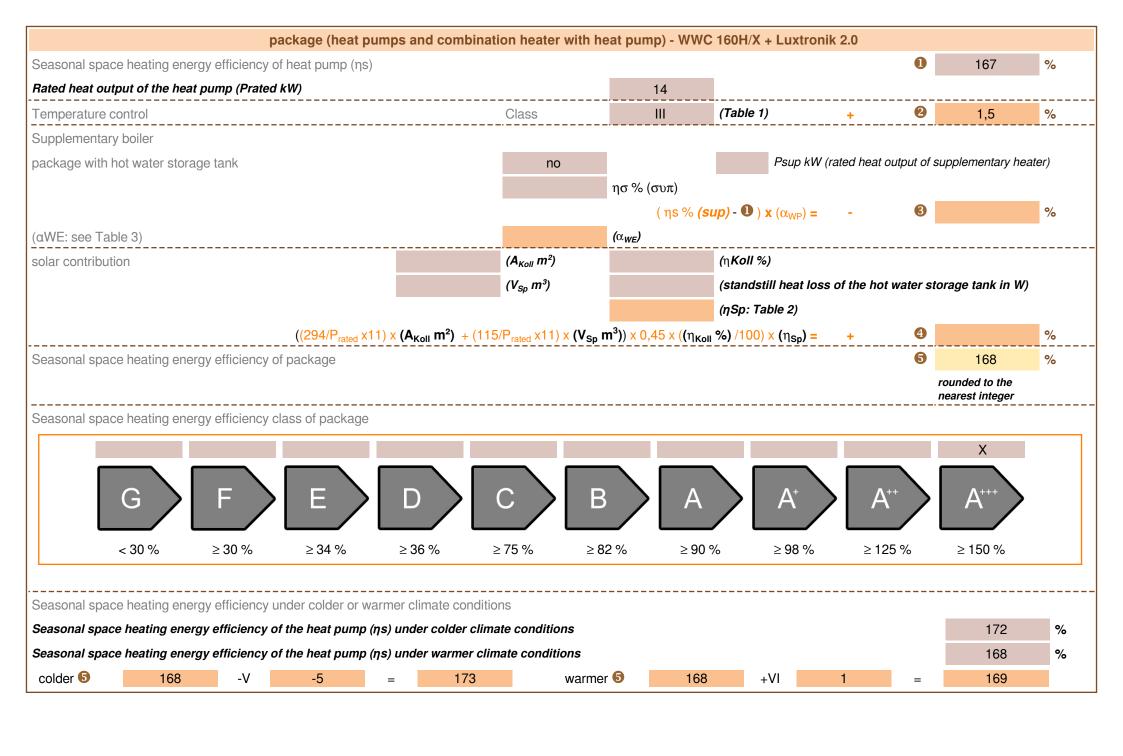








2015 811/2013



heatpump datasheet:			
	1		
manufacturer:	alpha innotec		
model:	WWC 160H/X		
Information concerning energy efficiency class and rat	ed heat output:		
	average / low	average / medium	
energy efficiency class space heater:	A+++	A+++	-
rated heat output:	15	14	kW
energy efficiency space heater:	221	167	%
annual final energy consumption space heater	5278	6534	kWh
	-	•	
sound power level indoors		50	dB
additional information	low	medium	
rated heat output colder climate	15	14	kW
rated heat output warmer climate	15	14	kW
energy effiency space heater colder climate	246	172	%
energy effiency space heater warmer climate	240	168	%
annual energy consumption space heater colder climate	5716	7568	kWh
annual energy consumption space heater warmer climate	3172	4197	kWh
		.	-
sound power level outdoors		-	dB

technical data of the temperature controller						
manufacturer:	alpha innotec					
model:	Luxtronik 2.0					
controller class	III	-				
contribution of the controller to the energy efficiency space hea	ater 1,5	%				

m ge ponal space heating y efficiency red coefficient of perfore reture 20°C and outdoo °C 2°C 7°C 12°C valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd COPd COPd COPd COPd COPd COPd		Unit % ndoor - - - - -
properties of partial space heating y efficiency red coefficient of performerature 20°C and outdoor °C 2°C 7°C 12°C valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	ηS mance for remperate COPd COPd COPd COPd COPd COPd COPd COPd	166,9 part load at i ure Tj 3,61 4,28 4,92 5,60 3,40 3,40 -	% ndoor
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erature 20°C and outdoor °C 2°C 7°C 12°C valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd COPd COPd COPd COPd COPd COPd	3,61 4,28 4,92 5,60 3,40 3,40 -	- - - -
2°C 7°C 12°C valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd COPd COPd COPd TOL COPcyc	4,28 4,92 5,60 3,40 3,40 -	- - - -
7°C 12°C valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd COPd COPd TOL COPcyc	4,92 5,60 3,40 3,40 -	-
valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20 °C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd COPd TOL COPcyc	5,60 3,40 3,40 -	-
valent temperature peration limit temperature -to-water heat pumps: Tj C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd TOL COPcyc	3,40 3,40 - -10	-
recration limit temperature -to-water heat pumps: Tj C (if TOL < -20 °C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	COPd COPd TOL COPcyc	3,40 - -10	- - - °C
-to-water heat pumps: Tj C (if TOL < -20 °C) -to-water heat pumps: tion limit temperature g interval efficiency g water operating limit	TOL COPcyc	- -10	- - °C
C (if TOL < -20°C) -to-water heat pumps: tion limit temperature g interval efficiency	TOL COPcyc		- °C
tion limit temperature g interval efficiency g water operating limit	COPcyc		°C
g water operating limit	_	-	_
	WTO		-
rature	WTOL	65	°C
ementary heater	•		
heat output	Psup	-	kW
of energy input		electrical	•
-to-water heat pumps: air flow rate, outdoors	-	-	m ³ /h
: Rated brine or water te, outdoor heat	-	3	m ³ /h
heating energy efficiency	η_{wh}	-	%
	Qfuel	-	kWh
uel consumption			•
wa nps ra hai	water-/brine-to-water heat hps: Rated brine or water rate, outdoor heat hanger ter heating energy efficiency y fuel consumption	water-/brine-to-water heat nps: Rated brine or water rate, outdoor heat hanger ter heating energy efficiency η_{wh} y fuel consumption Qfuel	water-/brine-to-water heat - 3 nps: Rated brine or water rate, outdoor heat hanger - 1 ter heating energy efficiency η_{wh} -

Model			WWC 160H/X				
Air-to-water heat pump: (yes/no)			no				
Brine-to-water heat pump: (yes/no)			no				
Water-to-water heat pump: (yes/no)			yes				
Low-temperature heat pump: (ye	s/no)			no			
Equipped with supplementary he	ater: (yes/n	0)		yes			
combination heater with: (yes/no)			no				
application: (low/medium)				low			
climate: (colder/average/warmer))			average			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	Prated	15	kW	Seasonal space heating energy efficiency	ηS	220,6	%
Declared coefficient of perfor temperature 20°C and outdoor			indoor	Declared coefficient of perfor temperature 20°C and outdoor			indoor
Tj = -7°C	Pdh	14,6	kW	Tj = -7°C	COPd	5,39	-
Tj = +2°C	Pdh	14,7	kW	Tj = +2°C	COPd	5,70	-
Tj = +7°C	Pdh	14,8	kW	Tj = +7°C	COPd	5,97	-
Tj = +12°C	Pdh	14,9	kW	Tj = +12°C	COPd	6,31	-
Tj = bivalent temperature	Pdh	14,6	kW	Tj = bivalent temperature	COPd	5,35	-
Tj = operation limit temperature	Pdh	14,6	kW	Tj = operation limit temperature	COPd	5,35	-
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}	-10	°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	le	Supplementary heater	•	•	•
Off mode	P _{OFF}	0,007	kW	Rated heat output	Psup	-	kW
Thermostat-off mode	P _{TO}	0,007	kW	Type of energy input		electrical	
Standby mode	P _{SB}	0,007	kW				
Crankcase heater mode	P _{CK}	-	kW				
Other items							
Capacity control	fixed			For air-to-water heat pumps: Rated air flow rate, outdoors	-	-	m ³ /h
sound power level, indoors/outdoors	L _{WA}	50 / -	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	3	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	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	neasuremen	t then the defa	ault degrada	tion coefficient is Cdh = 0,9.		•	