





55 °C

35 °C



A⁺⁺

 A^{+}

A

_

A++

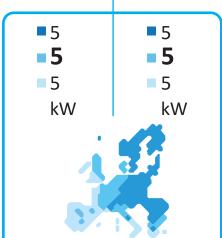




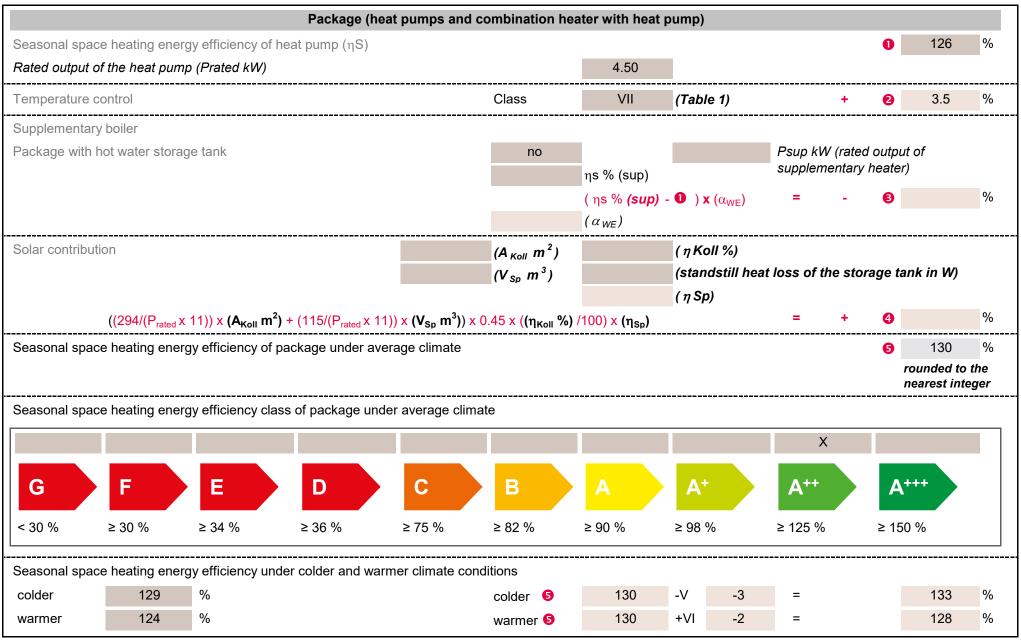
48 dB



--- dB



2019 811/2013



The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as the efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.



Product fiche

Manufacturer	CTA AG
Model	OH 1-5es 230V B/W



Information on energy efficiency class and rated output

	Average / Average /		
	Low temperature	Medium temperature	
Space heating energy efficiency class	A+++	A++	-
Rated heat output	5.00	4.50	kW
Seasonal space heating energy efficiency	179	126	%
Annual final energy consumption space heating	2152	2727	kWh
		· ·	
Sound power level indoors	48	dB	

Special precautions during assembly, installation or maintenance

All instructional work in the installation and maintenance manual may only be carried out by qualified specialist personnel in compliance with local regulations. Any special precautions can be found in the manual on the website www.cta.ch

Additional information	Low temperature	Medium temperature	
Rated heat output colder climate	5.00	4.50	kW
Rated heat output warmer climate	5.00	4.50	kW
Seasonal space heating energy efficiency colder climate	185	129	%
Seasonal space heating energy efficiency warmer climate	176	124	%
Annual final energy consumption colder climate	2525	3217	kWh
Annual final energy consumption warmer climate	1399	1779	kWh

Technical data of the temperature controller

Manufacturer	S	Siemens			
Model	RVS 61				
Class of the controller		I vai			
	· · ·	VII	- 0/		
Contribution of the controller to seasonal space heating energy efficiency		3.5	9		

Contact CT	CTA AG, Hunzigenstrasse 2, CH-3110 Münsingen
--------------	--

Model				OH 1-5es 230V B/W	1			
Brine-to-water heat pump: (Yes/No)	ımn: (Yes/No)		Yes					
Water-to-water heat pump: (Yes/No) Air-to-water heat pump: (Yes/No)		No No						
							Low temperature heat pump: (Yes/N	o)
Equipped with supplementary heater: (Yes/No)		Yes						
Heat pump combination heater: (Yes/No)		No	— AC — Cooling — Heating					
Application: (Low temperature/Mediu		ıre)		Medium temperature				
Climate: (Colder/Average/Warmer)	III temperate	110)		Average				
, , , , , , , , , , , , , , , , , , , ,		Symbol	Value	Unit				
Rated heat output	Prated	4.50	kW	Seasonal space heating energy	ηS	126	%	
Rated Heat Output	Trated	4.50	NVV	efficiency	ησ	120	70	
Declared capacity for heating for p		ndoor	1	Declared coefficient of performar	nce for part le	oad at indo	or	
temperature 20°C and outdoor tem	perature Tj			temperature 20°C and outdoor te	mperature Tj			
Tj = -7°C	Pdh	4.60	kW	Tj = -7°C	COPd	2.81	-	
Tj = +2°C	Pdh	4.80	kW	Tj = +2°C	COPd	3.40	-	
Tj = +7°C	Pdh	4.90	kW	Tj = +7°C	COPd	3.77	-	
Tj = +12°C	Pdh	5.00	kW	Tj = +12°C	COPd	4.35	-	
Tj = biv	Pdh	4.50	kW	Tj = biv	COPd	2.63	-	
Tj = TOL	Pdh	4.50	kW	Tj = TOL	COPd	2.63	-	
Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	Tj = -15°C if TOL < -20°C)	COPd	-	-	
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-	
Degradation co-efficient	Cdh	1	-	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in modes other	er than activ	/e mode	I	Supplementary heater			1	
Off mode	POFF	0.01	kW	Rated heat output	Psup	-	kW	
Thermostat-off mode	Рто	0.01	kW	Type of energy input		-	<u>I</u>	
Standby mode	PSB	0.01	kW	1				
Crankcase heater mode	РСК	0	kW					
Other items	<u> </u>	<u>I</u>	<u> </u>					
Capacity control		fixed		Rated air flow rate, outdoors	-	-	m ³ /h	
Sound power level, indoors/outdoors	LWA	48 / -	dB	Rated brine or water flow rate, outdoor heat exchanger	-	1.0	m ³ /h	
Emissions of nitrogen oxides	NO _X	-	mg/kWh					
For heat pump combination heate	r	1	I	1				
Declared load profile		-		Water heating energy efficiency	η _{wh}	-	%	
Daily electricity consumption	Q elec	-	kWh	Daily fuel consumption	Qfuel	-	kWh	
Contact	CTA AG. H	unziaens	strasse 2. C	L - 5 CH-3110 Münsingen			1	

Model				OH 1-5es 230V B/W				
Brine-to-water heat pump: (Yes/No)	(Yes/No)		Yes					
Water-to-water heat pump: (Yes/No) Air-to-water heat pump: (Yes/No)		No No						
							Low temperature heat pump: (Yes/N	0)
Equipped with supplementary heater: (Yes/No) Heat pump combination heater: (Yes/No)		Yes AC Cooling Heatin						
							Application: (Low temperature/Mediu	
Climate: (Colder/Average/Warmer)	- Tricinperate			Average				
Item			Value	Unit				
Rated heat output	Prated	5.00	kW	Seasonal space heating energy	Symbol ηS	179	%	
Rateu Heat Output	Trated	3.00	NVV	efficiency	ησ	119	70	
Declared capacity for heating for p		ndoor	1	Declared coefficient of performar	•		or	
temperature 20°C and outdoor ten	perature Tj			temperature 20°C and outdoor te	mperature Tj			
Tj = -7°C	Pdh	5.00	kW	Tj = -7°C	COPd	4.49	-	
Tj = +2°C	Pdh	5.10	kW	Tj = +2°C	COPd	4.78	-	
Tj = +7°C	Pdh	5.10	kW	Tj = +7°C	COPd	5.10	-	
Tj = +12°C	Pdh	5.20	kW	Tj = +12°C	COPd	5.46		
Tj = biv	Pdh	5.00	kW	Tj = biv	COPd	4.35	-	
Tj = TOL	Pdh	5.00	kW	Tj = TOL	COPd	4.35	-	
Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	Tj = -15°C if TOL < -20°C)	COPd	-	-	
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-	
Degradation co-efficient	Cdh	1	-	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in modes oth	er than activ	e mode	•	Supplementary heater	•		•	
Off mode	POFF	0.01	kW	Rated heat output	Psup	-	kW	
Thermostat-off mode	РТО	0.01	kW	Type of energy input		-	<u>I</u>	
Standby mode	PSB	0.01	kW	1				
Crankcase heater mode	РСК	0	kW					
Other items		<u> </u>	<u>!</u>					
Capacity control		fixed		Rated air flow rate, outdoors	-	-	m ³ /h	
Sound power level, indoors/outdoors	LWA	48 / -	dB	Rated brine or water flow rate, outdoor heat exchanger	-	1.0	m ³ /h	
Emissions of nitrogen oxides	NO _X	-	mg/kWh					
For heat pump combination heate		1		l				
Declared load profile		-		Water heating energy efficiency	η _{wh}	-	%	
Daily electricity consumption	Q elec	-	kWh	Daily fuel consumption	Qfuel	-	kWh	
Contact	CTA AG. H	unziaens	strasse 2. C	L - 5 CH-3110 Münsingen			1	