

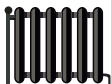


ENERG

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I - Klima - Kälte - Wärme || OP 100ed - W/W Art.Nr.: B10870



55 °C

35 °C



75 dB





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■ 119
 ■ **119**
 ■ 119
 kW

■ 134
 ■ **134**
 ■ 134
 kW



Product fiche		 AC Cooling Heating	
Manufacturer	CTA AG		
Model	Optipro 100ed W/W		
Information on energy efficiency class and rated output			
	Average / Low temperature	Average / Medium temperature	
Space heating energy efficiency class	A++	A++	-
Rated heat output	133.30	118.80	kW
Seasonal space heating energy efficiency	236	168	%
Annual final energy consumption space heating	45158	55819	kWh
Sound power level indoors	75		dB
Special precautions during assembly, installation or maintenance			
see installation and maintenance instructions			
Additional information			
	Low temperature	Medium temperature	
Rated heat output colder climate	133.30	118.80	kW
Rated heat output warmer climate	133.30	118.80	kW
Seasonal space heating energy efficiency colder climate	239	169	%
Seasonal space heating energy efficiency warmer climate	239	168	%
Annual final energy consumption colder climate	53245	65995	kWh
Annual final energy consumption warmer climate	28830	35941	kWh
Sound power level outdoors		-	dB
Technical data of the temperature controller			
Manufacturer	Carel		
Model	pCO5+		
Class of the controller		VII	-
Contribution of the controller to seasonal space heating energy efficiency		3.5	%
Contact	CTA AG, Hunzigenstrasse 2, CH-3110 Münsingen		

Model				Optipro 100ed W/W						
Brine-to-water heat pump: (Yes/No)				No						
Water-to-water heat pump: (Yes/No)				Yes						
Air-to-water heat pump: (Yes/No)				No						
Low temperature heat pump: (Yes/No)				No						
Equipped with supplementary heater: (Yes/No)				No						
Heat pump combination heater: (Yes/No)				No						
Application: (Low temperature/Medium temperature)				Medium temperature						
Climate: (Colder/Average/Warmer)				Average						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output	Prated	118.80	kW	Seasonal space heating energy efficiency	η_S	168	%			
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj						
Tj = -7°C	Pdh	121.00	kW	Tj = -7°C	COPd	3.91	-			
Tj = +2°C	Pdh	128.20	kW	Tj = +2°C	COPd	4.94	-			
Tj = +7°C	Pdh	132.60	kW	Tj = +7°C	COPd	5.77	-			
Tj = +12°C	Pdh	136.90	kW	Tj = +12°C	COPd	6.85	-			
Tj = biv	Pdh	118.80	kW	Tj = biv	COPd	3.66	-			
Tj = TOL	Pdh	118.80	kW	Tj = TOL	COPd	3.66	-			
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	P _{psych}	-	kW	Cycling interval efficiency	COP _{psych}	-	-			
Degradation co-efficient	Cdh	0.9	-	Heating water operating limit temperature	WTOL	63	°C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.003	kW	Rated heat output	P _{sup}	-	kW			
Thermostat-off mode	P _{TO}	0.012	kW	Type of energy input	-					
Standby mode	P _{SB}	0.003	kW							
Crankcase heater mode	P _{CK}	0.003	kW							
Other items										
Capacity control	staged			Rated air flow rate, outdoors	-	-	m ³ /h			
Sound power level, indoors/outdoors	L _{WA}	75 / -	dB	Rated brine or water flow rate, outdoor heat exchanger	-	27.3	m ³ /h			
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	Q _{fuel}	-	kWh			
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Water-to-water heat pump: (Yes/No)				Yes						
Air-to-water heat pump: (Yes/No)				No						
Low temperature heat pump: (Yes/No)				No						
Equipped with supplementary heater: (Yes/No)				No						
Heat pump combination heater: (Yes/No)				No						
Application: (Low temperature/Medium temperature)				Low temperature						
Climate: (Colder/Average/Warmer)				Average						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output	Prated	133.30	kW	Seasonal space heating energy efficiency	η_S	236	%			
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature Tj						
Tj = -7°C	Pdh	134.00	kW	Tj = -7°C	COPd	6.10	-			
Tj = +2°C	Pdh	136.90	kW	Tj = +2°C	COPd	6.85	-			
Tj = +7°C	Pdh	139.10	kW	Tj = +7°C	COPd	7.52	-			
Tj = +12°C	Pdh	140.50	kW	Tj = +12°C	COPd	8.04	-			
Tj = biv	Pdh	133.30	kW	Tj = biv	COPd	5.93	-			
Tj = TOL	Pdh	133.30	kW	Tj = TOL	COPd	5.93	-			
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	P _{psych}	-	kW	Cycling interval efficiency	COP _{psych}	-	-			
Degradation co-efficient	Cdh	0.9	-	Heating water operating limit temperature	WTOL	63	°C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.003	kW	Rated heat output	P _{sup}	-	kW			
Thermostat-off mode	P _{TO}	0.012	kW	Type of energy input	-					
Standby mode	P _{SB}	0.003	kW							
Crankcase heater mode	P _{CK}	0.003	kW							
Other items										
Capacity control	staged			Rated air flow rate, outdoors	-	-	m ³ /h			
Sound power level, indoors/outdoors	L _{WA}	75 / -	dB	Rated brine or water flow rate, outdoor heat exchanger	-	27.3	m ³ /h			
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	Q _{fuel}	-	kWh			
Contact	CTA AG, Hunzigenstrasse 2, CH-3110 Münsingen									