

Warm climate and Medium temperature

Model(s):	CTC EcoHeat 410		
Air-to-water heat pump:	No	Energy efficiency class:	-
Water-to-water heat pump:	No	Controller class:	VII -
Brine-to-water heat pump:	Yes	Controller contribution:	3,5 %
Low-temperature heat pump:	No	Package efficiency:	128 %
Equipped with a supplementary heater:	Yes	Package efficiency class:	-
Heat pump combination heater:	Yes		

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>P_{rated}</i>	10	kW	Seasonal space heating energy efficiency	η_s	124	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	<i>P_{dh}</i>	na	kW	T _j = - 7 °C	<i>COP_d</i>	na	-
T _j = + 2 °C	<i>P_{dh}</i>	9,3	kW	T _j = +2 °C	<i>COP_d</i>	2,86	-
T _j = + 7 °C	<i>P_{dh}</i>	9,5	kW	T _j = +7 °C	<i>COP_d</i>	3,20	-
T _j = + 12 °C	<i>P_{dh}</i>	9,8	kW	T _j = +12 °C	<i>COP_d</i>	3,78	-
T _j = bivalent temperature	<i>P_{dh}</i>	9,3	kW	T _j = bivalent temperature	<i>COP_d</i>	2,96	-
T _j = operation limit temperature	<i>P_{dh}</i>	9,3	kW	T _j = operation limit temperature	<i>COP_d</i>	2,86	-
For air-to-water heat pumps: T _j = - 15 °C (if TOL < - 20 °C)	<i>P_{dh}</i>	na	kW	For air-to-water heat pumps: T _j = - 15 °C (if TOL < - 20 °C)	<i>COP_d</i>	na	-
Bivalent temperature	<i>T_{biv}</i>	3	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P_{cych}</i>	na	kW	Cycling interval efficiency	<i>COP_{cyc}</i>	na	-
Degradation co-efficient	<i>C_{dh}</i>	0,99	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P_{OFF}</i>	0,018	kW	Rated heat output	<i>P_{sup}</i>	0,8	kW
Thermostat-off mode	<i>P_{TO}</i>	0,026	kW	Type of energy input	Electric		
Standby mode	<i>P_{SB}</i>	0,018	kW				
Crankcase heater mode	<i>P_{CK}</i>	0,000	kW				
Other items							
Capacity control	Fixed			For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m ³ /h
Sound power level, indoors/ outdoors	<i>L_{WA}</i>	49/na	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1,9	m ³ /h
Annual energy consumption	<i>Q_{HE}</i>	4090	kWh				

For heat pump combination heater:

Declared load profile / Energy efficiency class	L / A			Water heating energy efficiency	η_{wh}	87	%
Daily electricity consumption	<i>Q_{elec}</i>	5,377	kWh	Daily fuel consumption	<i>Q_{fuel}</i>	na	kWh
Annual electricity consumption	<i>AEC</i>	1183	kWh	Annual fuel consumption	<i>AFC</i>	na	GJ

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.