BOSCH

Compress 3000 AWP

CS3000AWP 53 MBC

8738214012

To the extent applicable to the product, the following data are based on the requirements of Regulations (EU) 811/2013 and (EU) 813/2013.

Productdata	Symbol	Unit	8738214012
Energy Efficiency Class			A+
Energy efficiency class (low temperature application)			A+
Rated heat output (average climate conditions)	Prated	kW	52
Rated heat output (low temperature application, average climate conditions)	Prated	kW	48
Seasonal space heating energy efficiency (average climate conditions)	η_S	%	113
Seasonal space heating energy efficiency (low temperature application, average climate conditions)	η_S	%	149
Annual energy consumption (average climate conditions)	Q_{HE}	kWh	36978
Annual energy consumption (low temperature application, average climate conditions)	Q_{HE}	kWh	25852
Sound power level, indoors	L_{WA}	dB	-
Special precautions to be taken during assembly, installation or maintenance (if applicable): see product accompanying documents			
Rated heat output (colder climate conditions)	Prated	kW	52
Rated heat output (low temperature application, colder climate conditions)	Prated	kW	43
Rated heat output (warmer climate conditions)	Prated	kW	53
Rated heat output (low temperature application, warmer climate conditions)	Prated	kW	58
Seasonal space heating energy efficiency (colder climate conditions)	η_S	%	99
Seasonal space heating energy efficiency (low temperature application, colder climate conditions)	η_S	%	133
Seasonal space heating energy efficiency (warmer climate conditions)	η_S	%	139
Seasonal space heating energy efficiency (low temperature application, warmer climate conditions)	η_S	%	190
Annual energy consumption (colder climate conditions)	Q_{HE}	kWh	49913
Annual energy consumption (low temperature application, colder climate conditions)	Q_{HE}	kWh	31462
Annual energy consumption (warmer climate conditions)	Q_{HE}	kWh	19936
Annual energy consumption (low temperature application, warmer climate conditions)	Q_{HE}	kWh	16214
Sound power level, outdoors	L_{WA}	dB	71
Air-to-water heat pump			Yes
Water-to-water heat pump			No
Brine-to-water heat pump			No
Low temperature heat pump			No
Equipped with a supplementary heater?			No
Heat pump combination heater			No
Additional data for integrated temperature control			
Class of the temperature control			II
Contribution of the temperature control to seasonal space heating efficiency		%	2,0
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C (average climate conditions)	Pdh	kW	42,9
Tj = + 2 °C (average climate conditions)	Pdh	kW	26,6
Tj = + 7 °C (average climate conditions)	Pdh	kW	35,2
Tj = + 12 °C (average climate conditions)	Pdh	kW	29,9
Tj = bivalent temperature (average climate conditions)	Pdh	kW	44,2
Tj = operation limit temperature (average climate conditions)	Pdh	kW	40,5
For air-to-water heat pumps: Tj = - 15 °C (if TOL < - 20 °C) (colder climate conditions)	Pdh	kW	38,0
Bivalent temperature (average climate conditions)	T_{biv}	°C	-6
Bivalent temperature (warmer climate conditions)	T_{biv}	°C	2
Cycling interval capacity for heating (average climate conditions)	Pcych	kW	-

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Productdata	Symbol	Unit	8738214012
Degradation coefficient			-
Degradation co-efficient Tj = - 7 °C	Cdh		0,9
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj /			
Tj = - 7 °C (average climate conditions)	COPd		1,76
Tj = - 7 °C (average climate conditions)	PERd	%	-
Tj = + 2 °C (average climate conditions)	COPd		2,81
Tj = + 2 °C (average climate conditions)	PERd	%	-
Tj = + 7 °C (average climate conditions)	COPd		3,98
Tj = + 7 °C (average climate conditions)	PERd	%	-
Tj = + 12 °C (average climate conditions)	COPd		5,46
Tj = + 12 °C (average climate conditions)	PERd	%	-
Tj = bivalent temperature (average climate conditions)	COPd		1,82
Tj = bivalent temperature (average climate conditions)	PERd	%	-
Tj = operation limit temperature (average climate conditions)	COPd		1,43
Tj = operation limit temperature (average climate conditions)	PERd	%	-
For air-to-water heat pumps: Tj = - 15 °C (if TOL < - 20 °C) (colder climate conditions)	COPd		1,61
For air-to-water heat pumps: Tj = - 15 °C (if TOL < - 20 °C) (colder climate conditions)	PERd	%	-
For air-to-water heat pumps: Operation limit temperature	TOL	°C	-20
Cycling interval efficiency (average climate conditions)	COPcyc		-
Cycling interval efficiency	PERcyc	%	-
Heating water operating limit temperature	WTOL	°C	60
Power consumption in modes other than active mode			
Off mode	P_{OFF}	kW	0,110
Thermostat-off mode	P_{TO}	kW	0,200
In standby mode	P_{SB}	kW	0,110
Crankcase heater mode	P_{CK}	kW	0,010
Supplementary heater			
Rated heat output supplementary heater	Psup	kW	13,0
Type of energy input			Electric
Other items			
Capacity control			variable
Emissions of nitrogen oxides (only gas- or oil fired)	NO_x	mg/kWh	-
For air-to-water heat pumps: Rated air flow rate, outdoors		m^3/h	11
For brine-to-water heat pumps: Rated brine flow rate, outdoor heat exchanger		m^3/h	-

Further important information for installation, maintenance as well as recycling and/or disposal are provided within the installation and operating manuals. Read and follow the installation and operating manuals.

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System data sheet: To the extent applicable to the product, the following data are based on the requirements of Regulation (EU) 811/2013.

The energy efficiency given in this data sheet for the product combination may deviate from the energy efficiency after its installation in a building, since this is influenced by other factors such as heat loss in the distribution system and the dimensioning of the products in relation to the size and characteristics of the building.

Information about calculating the space heating energy efficiency			
I	Value for the space heating energy efficiency of the preferential space heater	113	%
II	Factor for the weighting of the heat output of the preferential and supplementary heaters of a package system	0,00	–
III	Value of the mathematical expression 294/(11 · Prated)	0,38	–
IV	Value of the mathematical expression 115/(11 · Prated)	0,15	–
V	Difference between the seasonal space heating energy efficiency with average and colder climate conditions	14	%
VI	Difference between the seasonal space heating energy efficiency with warmer and average climate conditions	26	%

Seasonal space heating energy efficiency of the heat pump **I** = **1** 113 **%**

Temperature control (From the data sheet of the temperature control) **+** **2** 2,0 **%**

Class: I = 1 %, II = 2 %, III = 1.5 %, IV = 2 %, V = 3 %, VI = 4 %, VII = 3.5 %, VIII = 5 %

Supplementary boiler (From the data sheet of the boiler) (- – **I**) x **II** = **-** **3** - **%**

Seasonal space heating energy efficiency (in %)

Solar contribution (**III** x - + **IV** x -) x 0,45 x (- /100) x - = **+** **4** - **%**

(From the data sheet of the solar device)

Collector size (in m^2)

Storage tank volume (in m^3)

Collector efficiency (in %)

Storage tank rating: A^+ = 0.95, A = 0.91, B = 0.86, C = 0.83, D-G = 0.81

Seasonal space heating energy efficiency of the package system

– with average climate conditions: **5** 115 **%**

Seasonal space heating energy efficiency class of the package system with average climate conditions

G < 30 %, F ≥ 30 %, E ≥ 34 %, D ≥ 36 %, C ≥ 75 %, B ≥ 82 %, A ≥ 90 %, A^+ ≥ 98 %, A^{++} ≥ 125 %, A^{+++} ≥ 150 %

A^+

Seasonal space heating energy efficiency

– with colder climate conditions: **5** 115 – **V** = 111 **%**

– with warmer climate conditions: **5** 115 + **VI** = 141 **%**