

Model(s): RHBX16CB9W / RRLQ014CAW1

Boiler:

Air-to-water heat pump Yes

Water-to-water heat pump: No

Brine-to-water heat pump: No

Low-temperature heat pump: No

Supplementary heater Yes

Heat pump combination heater: No

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.

Parameters shall be declared for average, colder and warmer climate conditions.

Item	Symbol	Value	Unit
Rated heat output (3)	<i>Prated</i>	12.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j			
$T_j = -7$ °C	<i>Pdh</i>	9.97	kW
$T_j = +2$ °C	<i>Pdh</i>	6.76	kW
$T_j = +7$ °C	<i>Pdh</i>	4.66	kW
$T_j = +12$ °C	<i>Pdh</i>	5.26	kW
$T_j =$ bivalent temperature	<i>Pdh</i>	11.0	kW
$T_j =$ operation limit temperature	<i>Pdh</i>	12.2	kW
For air-to-air heat pumps: $T_j = -15$ °C (if $TOL < -20$ °C)	<i>Pdh</i>		kW
Bivalent temperature	T_{biv}	-6.00	°C
Cycling interval capacity for heating	<i>Pcyc</i>		kW
Degradation co-efficient (4)	<i>Cdh</i>	1.00	—
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.055	kW
Thermostat-off mode	P_{TO}	0.057	kW
Standby mode	P_{SB}	0.055	kW
Crankcase heater mode	P_{CK}	0.055	kW
Other items			
Capacity Control	fixed/variable		
Sound power level, indoors/outdoors	L_{WA}	64.0 / 44.0	dB
Annual energy consumption	Q_{HE}	7,900	kWh or GJ

For heat pump combination heater:

Declared load profile	Symbol	Value	Unit
Daily electricity consumption	Q_{elec}		kWh
Annual electricity consumption	<i>AEC</i>		kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	123	%
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>COPd or PERd</i>	1.76 / 70.4	– or %
$T_j = +2$ °C	<i>COPd or PERd</i>	3.55 / 142	– or %
$T_j = +7$ °C	<i>COPd or PERd</i>	4.22 / 169	– or %
$T_j = +12$ °C	<i>COPd or PERd</i>	5.44 / 218	– or %
$T_j =$ bivalent temperature	<i>COPd or PERd</i>	1.92 / 76.8	– or %
$T_j =$ operation limit temperature	<i>COPd or PERd</i>	1.75 / 70.0	– or %
For air-to-water heat pumps: $T_j = -15$ °C (if $TOL < -20$ °C)	<i>COPd or PERd</i>		– or %
For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	-10.0	°C
Cycling interval efficiency	<i>COPcyc or PERcyc</i>		– or %
Heating water operating limit temperature	<i>WTOL</i>	55.0	°C
Supplementary heater			
Rated heat output (4)	P_{sup}	9.00	kW
Type of energy input	Electrical		
Inverter			
For air-to-water heat pumps: Rated air flow rate, outdoors	—	5,400	m ³ /h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	—		m ³ /h

Water heating energy efficiency	Symbol	Value	Unit
Daily fuel consumption	Q_{fuel}		kWh
Annual fuel consumption	<i>AFC</i>		GJ

(3) For heat pump space heaters and heat pump combination heaters, the rated heat output P_{rated} is equal to the design load for heating $P_{designh}$, and the rated heat output of a supplementary heater P_{sup} is equal to the supplementary capacity for heating $sup(T_j)$.

(4) If C_{dh} is not determined by measurement then the default degradation coefficient is $C_{dh} = 0,9$.