

According to Commission Regulation (EU) No 206/2012

Function (indicate if present)				If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'			
cooling		Y		Average		Y	
heating		Y		Warmer (if designated)		N	
				Colder (if designated)		Y	
Item	symbol	value	unit	Item	symbol	value	unit
Design load				Seasonal efficiency			
Cooling	P <sub>designc</sub>	2,5	kW	cooling	SEER	8,5	-
heating/Average	P <sub>designh</sub>	2,5	kW	heating/Average	SCOP/A	4,6	-
heating/Warmer	P <sub>designh</sub>	-	kW	heating/Warmer	SCOP/W	-	-
heating/Colder	P <sub>designh</sub>	3,5	kW	heating/Colder	SCOP/C	3,8	-
Declared capacity(*) for cooling, at indoor temperature 27(19) °C and outdoor temperature T <sub>j</sub>				Declared energy efficiency ratio(*), at indoor temperature 27(19) °C and outdoor temperature T <sub>j</sub>			
Item	symbol	value	unit	Item	symbol	value	unit
T <sub>j</sub> = 35 °C	P <sub>dc</sub>	2,5	kW	T <sub>j</sub> = 35 °C	EER <sub>d</sub>	4,8	-
T <sub>j</sub> = 30 °C	P <sub>dc</sub>	2,0	kW	T <sub>j</sub> = 30 °C	EER <sub>d</sub>	7,2	-
T <sub>j</sub> = 25 °C	P <sub>dc</sub>	1,3	kW	T <sub>j</sub> = 25 °C	EER <sub>d</sub>	11,6	-
T <sub>j</sub> = 20 °C	P <sub>dc</sub>	1,4	kW	T <sub>j</sub> = 20 °C	EER <sub>d</sub>	15,4	-
Declared capacity(*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance(*)/Average season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7 °C	P <sub>dh</sub>	2,3	kW	T <sub>j</sub> = -7 °C	COP <sub>d</sub>	2,8	-
T <sub>j</sub> = 2 °C	P <sub>dh</sub>	1,5	kW	T <sub>j</sub> = 2 °C	COP <sub>d</sub>	4,9	-
T <sub>j</sub> = 7 °C	P <sub>dh</sub>	0,9	kW	T <sub>j</sub> = 7 °C	COP <sub>d</sub>	5,3	-
T <sub>j</sub> = 12 °C	P <sub>dh</sub>	1,0	kW	T <sub>j</sub> = 12 °C	COP <sub>d</sub>	6,8	-
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	2,5	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2,5	-
T <sub>j</sub> = operating limit	P <sub>dh</sub>	2,5	kW	T <sub>j</sub> = operating limit	COP <sub>d</sub>	2,5	-
Declared capacity(*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance(*)/Warmer season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = 2 °C	P <sub>dh</sub>	-	kW	T <sub>j</sub> = 2 °C	COP <sub>d</sub>	-	-
T <sub>j</sub> = 7 °C	P <sub>dh</sub>	-	kW	T <sub>j</sub> = 7 °C	COP <sub>d</sub>	-	-
T <sub>j</sub> = 12 °C	P <sub>dh</sub>	-	kW	T <sub>j</sub> = 12 °C	COP <sub>d</sub>	-	-
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	-	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	-	-
T <sub>j</sub> = operating limit	P <sub>dh</sub>	-	kW	T <sub>j</sub> = operating limit	COP <sub>d</sub>	-	-
Declared capacity(*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance(*)/Colder season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7 °C	P <sub>dh</sub>	2,2	kW	T <sub>j</sub> = -7 °C	COP <sub>d</sub>	2,9	-
T <sub>j</sub> = 2 °C	P <sub>dh</sub>	1,4	kW	T <sub>j</sub> = 2 °C	COP <sub>d</sub>	4,9	-
T <sub>j</sub> = 7 °C	P <sub>dh</sub>	0,9	kW	T <sub>j</sub> = 7 °C	COP <sub>d</sub>	5,4	-
T <sub>j</sub> = 12 °C	P <sub>dh</sub>	1,0	kW	T <sub>j</sub> = 12 °C	COP <sub>d</sub>	6,8	-
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	2,9	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2,4	-
T <sub>j</sub> = operating limit	P <sub>dh</sub>	2,6	kW	T <sub>j</sub> = operating limit	COP <sub>d</sub>	2,2	-
T <sub>j</sub> = -15 °C	P <sub>dh</sub>	2,9	kW	T <sub>j</sub> = -15 °C	COP <sub>d</sub>	2,4	-
Bivalent temperature				Operating limit temperature			
heating/Average	T <sub>biv</sub>	-10	°C	heating/Average	T <sub>ol</sub>	-10	°C
heating/Warmer	T <sub>biv</sub>	-	°C	heating/Warmer	T <sub>ol</sub>	-	°C
heating/Colder	T <sub>biv</sub>	-15	°C	heating/Colder	T <sub>ol</sub>	-25	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	P <sub>cycc</sub>	-	kW	for cooling	EER <sub>cycc</sub>	-	-
for heating	P <sub>cyhc</sub>	-	kW	for heating	COP <sub>cyhc</sub>	-	-
Degradation co-efficient cooling(**)	C <sub>dc</sub>	0,25	kW	Degradation co-efficient heating(**)	C <sub>dh</sub>	0,25	-
Electric power input in power modes other than 'active mode'				Annual electricity consumption			
off mode	P <sub>OFF</sub>	0,0	kW	cooling	Q <sub>CE</sub>	103	kWh/a
standby mode	P <sub>SB</sub>	0,0	kW	heating/Average	Q <sub>HE</sub>	761	kWh/a
thermostat-off mode	P <sub>TO</sub>	0,0	kW	heating/Warmer	Q <sub>HE</sub>	-	kWh/a
crankcase heater mode	P <sub>CK</sub>	0,000	kW	heating/Colder	Q <sub>HE</sub>	1934	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	L <sub>WA</sub>	58,0/59,0	dB(A)
staged	N			Global warming potential	GWP	1975	kgCO <sub>2</sub> eq.
variable	Y			Rated air flow (indoor/outdoor)	-	720/1920	m <sup>3</sup> /h
Contact details for obtaining more information							

(\*) For staged capacity units, two values divided by a slash (/) will be declared in each box in the section 'Declared capacity of the unit' and 'declared EER/COP' of unit.

(\*\*) If default C<sub>d</sub> = 0,25 is chosen then (results from) cycling tests are not required. Otherwise either the heating or cooling cycling test value is required.

# Energy Labeling Information(AC product)

According to Commission Regulation (EU) No 626/2011

Supplier's name	-	Samsung Electronics Co., Ltd.
Model name (Indoor/Outdoor)	-	AR09FSFKBWTN / AR09FSFKBWTX
Sound Power Level (Inside/Outside)	dBA	58 / 59
Refrigerant name <sup>1)</sup>	-	R-410a
GWP	-	1975
SEER		8.5
Energy efficiency class (SEER)	-	A+++
Q <sub>CE</sub> <sup>2)</sup> (cooling season)	kWh/a	103
P <sub>designc</sub>	kW	2.5
SCOP	-	4.6
Energy efficiency class (SCOP)	-	A++
Q <sub>HE</sub> <sup>3)</sup> (heating season)	kWh/a	761
Other heating seasons suitable for use	-	Colder Season
P <sub>designh</sub> (Average)	kW	2.5
elbu(Tj) (Average)	kW	0
P <sub>designh</sub> (Warmer)	kW	X
elbu(Tj) (Warmer)	kW	X
P <sub>designh</sub> (Colder)	kW	3.5
elbu(Tj) (Colder)	kW	2.57
Declared capacity at reference design conditions	kW	2.5
Assumed backup heating capacity	kW	0

- 1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to [1975]. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [1975] times higher than 1 kg of CO<sub>2</sub>, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
- 2) Energy consumption "XYZ" kWh per year, based on standard test results.  
Actual energy consumption will depend on how the appliance is used and where it is located.
- 3) Energy consumption "XYZ" kWh per year, based on standard test results.  
Actual energy consumption will depend on how the appliance is used and where it is located.



**ENERG**  
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**SAMSUNG**

AR09FSFKBWTN/AR09FSFKBWTX

SEER



A<sup>+++</sup>

A<sup>++</sup>

A<sup>+</sup>

A

B

C

D

A<sup>+++</sup>

kW 2,5

SEER 8,5

kWh/annum 103

SCOP



A<sup>+++</sup>

A<sup>++</sup>

A<sup>+</sup>

A

B

C

D

A<sup>++</sup>

A

kW X

2,5

3,5

SCOP X

4,6

3,8

kWh/annum X

761

1934



58dB



59dB



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626/2011

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