



# TEST CERTIFICATE

Number **O-39-00880-15**

**Manufacturer** Samsung Electronics Corporation  
 Yeongtong-gu, Suwon-si  
 443-74 Gyeonggi-do  
 Korea

**Product** Air/water heat pump, split

**Type designation / Trade mark** **Samsung AE090JXEDEH/EU + AE090JNYDEH/EU**  
**Samsung AE140JXEDGH/EU + AE160JNYDGH/EU**  
**Samsung AE140JXEDEH/EU + AE160JNYDEH/EU**  
**Samsung AE160JXEDEH/EU + AE160JNYDEH/EU**  
**Samsung AE160JXEDGH/EU + AE160JNYDGH/EU**

**Test Procedure** ČSN EN 14511-1:2014 to ČSN EN 14511-4:2014;  
 ČSN EN 14825:2014; ČSN EN 12102:2014;  
 EHPA Testing Regulation – Testing of Air/Water Heat Pumps – version 2.0

**Basis of certificate** Test Reports: 39-10563/T/3A of 2015-07-08, 39-10563/H/3 of 2015-06-30,  
 39-10563/T/4A of 2015-07-03, 39-10563/H/4 of 2015-07-03  
 Technical documents submitted by Samsung Electronics Corporation

**Reference heating season** „A“ = **average** (reference design conditions for heating  $T_{designh} = -10\text{ °C}$ )

**Conditions specification:**

<b>Compressor speed control</b>	Inverter	<b>Rated liquid flow rate - Outdoor heat exchanger</b>	---
<b>Outlet water temperature - Indoor heat exchange</b>	Variable	<b>Rated liquid flow rate - Indoor heat exchanger</b>	Variable
<b>Heating only / Reversible</b>	Reversible		



Registered Test Centre







			Samsung AE090JXEDEH/ EU + AE090JNYDEH/ EU (Not tested)	Samsung AE140JXEDGH/ EU + AE160JNYDGH/ EU (Tested)	Samsung AE140JXEDEH/ EU + AE160JNYDEH/ EU (Not tested)	Samsung AE160JXEDEH/ EU + AE160JNYDEH/ EU (Tested)	Samsung AE160JXEDGH/ EU + AE160JNYDGH/ EU (Not tested)
<b>Low temperature application</b> (reference water temperature 35 °C)							
<b>Full load heating</b>	$P_{designh}$	[kW]	6.80	11.50	11.50	12.50	12.50
<b>Bivalent temperature</b>	$T_{bivalent}$	[°C]	-10	-10	-10	-10	-10
<b>Seasonal coefficient of performance</b>	<b>SCOP</b>	[-]	4.45	4.73	4.48	4.56	4.45

**High temperature application**  
(reference water temperature 55 °C)

<b>Full load heating</b>	$P_{designh}$	[kW]	6.20	8.50	8.50	9.50	9.50
<b>Bivalent temperature</b>	$T_{bivalent}$	[°C]	-10	-10	-10	-10	-10
<b>Seasonal coefficient of performance</b>	<b>SCOP</b>	[-]	3.21	2.91	2.75	3.04	2.75

**Sound power level**

A7W55*, accuracy class 2	<b>LWA</b> (outdoor unit)	[dB(A)]	64.0 ± 1.5	65.4 ± 1.5	64.0 ± 1.5	66.2 ± 1.5	66.0 ± 1.5
	<b>LWA</b> (indoor unit)	[dB(A)]	40.0 ± 1.5	36.2 ± 1.5	47.0 ± 1.5	34.3 ± 1.5	47.0 ± 1.5

(\*)Comment to abbreviated marking:  
„A“ air, „7“ inlet temperature (dry temperature) in °C, „W“ water, „55“ outlet temperature in °C.

(Tested) This test sample was tested in the Testing Laboratory.

(Not tested) The technical data were declared by the Manufacturer according to the model range specifications and were not tested by the Testing Laboratory.

The Engineering Test Institute, Public Enterprise, approves with this test certificate that testing of the product in question was performed with the results as stated above. The Engineering Test Institute, Public Enterprise, is accredited testing laboratory No. 1045.1.

Brno, 2015-07-15

**Milan Holomek**

Head of Heat and Ecological Equipment  
Testing Laboratory Manager



- END OF TEST CERTIFICATE -

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