

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

## ECODESIGN REQUIREMENTS FOR HEAT PUMP SPACE HEATERS AND HEAT PUMP COMBINATION HEATERS<sup>1)</sup>

A	Model(s) : AE090RXEDEG / AE090RNYDEG
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : yes
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(5)</sup>	8 kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	Pdh	7,1 kW
-	Tj = +2 °C	Pdh	4,3 kW
-	Tj = +7 °C	Pdh	2,8 kW
-	Tj = +12 °C	Pdh	2,6 kW
T	Tj = bivalent temperature	Pdh	7,1 kW
U	Tj = operation limit temperature	Pdh	4,9 kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	- kW
W	Bivalent temperature	Tbiv	-7 °C
Y	Cycling interval capacity for heating	Pcyc	- kW
AB	Degradation co-efficient <sup>(1)</sup>	Cdh	0,9
AD	Power consumption in modes other than active mode		
AF	Off mode	Poff	0,022 kW
AG	Thermostat-off mode	Pto	0,022 kW
AH	Standby mode	Psa	0,022 kW
AI	Crankcase heater mode	Pcx	0,000 kW
AL	Other items		
AM	Capacity control	variable <sup>(6N)</sup>	
AQ	Sound power level, indoors/outdoors	Lwa	40/64 dB
AR	Emissions of nitrogen oxides	NOx	- mg/kWh
AT	For heat pump combination heater		
AU	Declared load profile		-
AW	Daily electricity consumption	Qelec	- kWh
AY	Annual electricity consumption	AEC	- kWh
AZ	Contact details	Samsung Electronics, PO Box 12987, Blackrock, Co. Dublin, Ireland or Blackbushe Business Park, Yateley, Gu46 6GG, UK	
P	Seasonal space heating energy efficiency	$\eta_s$	127 %
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	COPd <sup>(5)</sup>	1,76
-	Tj = +2 °C	COPd <sup>(5)</sup>	3,23
-	Tj = +7 °C	COPd <sup>(5)</sup>	4,62
-	Tj = +12 °C	COPd <sup>(5)</sup>	5,88
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1,76
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1,35
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	-
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Z	Cycling interval efficiency	COPcyc <sup>(6A)</sup>	-
AC	Heating water operating limit temperature	WTOL	- °C
AE	Supplementary heater		
N	Rated heat output <sup>(1)</sup>	Psup	3,1 kW
AJ	Type of energy input	Electrical <sup>(6K)</sup>	
AL	Other items		
AO	For air-to-water heat pumps : Rated air flow rate, outdoors	-	3960 m <sup>3</sup> /h <sup>(6P)</sup>
AS	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	m <sup>3</sup> /h <sup>(6P)</sup>
AT	For heat pump combination heater		
AV	Water heating energy efficiency	$\eta_{wh}$	- %
AX	Daily fuel consumption	Qfuel	- kWh
AY	Annual electricity consumption	AEC	- GJ

BA<sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

BB<sup>(2)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

BC<sup>(3)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BD<sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly, dismantling and battery removability, please send an email to: erims.sec@samsung.com