

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

## ECODESIGN REQUIREMENTS FOR SPACE HEATER <sup>1)</sup>

Model(s) :	AM160TNBFEB / AM050NXMDER
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	
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.	
Parameters shall be declared for average climate conditions.	

Item	Symbol	Value	Unit
<b>Rated heat output(*)</b>	Prated	10	kW
Declared capacity for heating for part load at indoor temperature 20 °C and			
Tj = -7 °C	Pdh	9.2	kW
Tj = +2 °C	Pdh	5.6	kW
Tj = +7 °C	Pdh	3.6	kW
Tj = +12 °C	Pdh	1.6	kW
Tj = bivalent temperature	Pdh	9.2	kW
Tj = operation limit temperature	Pdh	10.4	kW
For air-to-water heat pumps Tj = -15 °C (if TOL < -20°C)	Pdh	-	kW
Bivalent temperature	Tbiv	0	°C
Cycling interval capacity for heating	Pcych	-7	kW
Degradation co-efficient (**)	Cdh	0	-
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.032	kW
Thermostat-off mode	P <sub>TO</sub>	0.032	kW
Standby mode	P <sub>SB</sub>	0.032	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	60 / 70	dB
Emissions of nitrogen oxides	NO <sub>x</sub>	-	mg/kWh
For heat pump combination heater			
Declared load profile	-		
Daily electricity consumption	Q <sub>elec</sub>	-	kWh

Item	Symbol	Value	Unit
<b>Seasonal space heating energy efficiency</b>	η <sub>s</sub>	117	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = -7 °C	COPd	1.52	-
Tj = +2 °C	COPd	2.89	-
Tj = +7 °C	COPd	4.51	-
Tj = +12 °C	COPd	5.19	-
Tj = bivalent temperature	COPd	1.52	-
Tj = operation limit temperature	COPd	1.97	-
For air-to-water heat pumps Tj = -15 °C (if TOL < -20°C)	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	-	°C
Supplementary heater			
Rated heat output (*)	Psup	-	kW
Type of energy input			
Other items			
For air-to-water heat pumps Rated air flow rate, outdoors	-	6000	m <sup>3</sup> /h
Forwater-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
For heat pump combination heater			
Water heating energy efficiency	η <sub>wh</sub>	-	%
Daily fuel consumption	Q <sub>fuel</sub>	-	kWh

Contact details	Samsung Electronics, PO Box 12987, Blackrock, Co. Dublin, Ireland or Blackbushe Business Park, Yateley, Gu46 6GG, UK
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(\*) 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).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

If you are a professional looking information on non-destructive disassembly and dismantling, please send a email to : erims.sec@samsung.com