

# COMMISSION REGULATION (EU) No. 813/2013

## Information requirements for heat pump space heaters and heat pump combination heaters

Model: Samsung AE050RXYDEG EU & Joule 200L H.G Cyclone

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 supplementary heater: No

Heat pump combination heater: Yes

Parameters are declared for: Low-temp application, 35°C

Parameters are declared for: **Average climate conditions**



**SAMSUNG**

### Applicable Standards:

EN14511: 2013, EN14825: 2016, EN 16147: 2017, EN12102: 2017

Item	Symbol	Value	Unit
<b>Rated heat output (*)</b>	<b>Prated</b>	<b>6</b>	<b>kW</b>
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	$P_{dh}$	4.9	kW
$T_j = +2^\circ\text{C}$	$P_{dh}$	3.0	kW
$T_j = +7^\circ\text{C}$	$P_{dh}$	1.9	kW
$T_j = +12^\circ\text{C}$	$P_{dh}$	1.9	kW
$T_j = \text{bivalent temperature}$	$P_{dh}$	4.9	kW
$T_j = \text{operation limit temperature}$	$P_{dh}$	4.6	kW
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL, -20°C)	$P_{dh}$	-	kW
Bivalent temperature	$T_{biv}$	-7	°C
Cycling interval capacity for heating	$P_{cyc}$	-	kW
Degradation co-efficient (**)	$C_{dh}$	0.9	-
Power consumption in modes other than active mode			
Off mode	$P_{OFF}$	0.022	kW
Thermostat-off mode	$P_{TO}$	0.022	kW
Standby mode	$P_{SB}$	0.022	kW
Crankcase heater mode	$P_{CK}$	0.000	kW
Other items			
Capacity control	Variable		
Sound power level, indoors/outdoors	$L_{WA}$	-/63	dB
Emissions of nitrogen oxides	$NO_x$	-	mg/kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	$\eta_s$	175	%
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^{\circ}\text{C}$	$COP_d$	2.99	-
$T_j = +2^{\circ}\text{C}$	$COP_d$	4.18	-
$T_j = +7^{\circ}\text{C}$	$COP_d$	6.11	-
$T_j = +12^{\circ}\text{C}$	$COP_d$	7.70	-
$T_j = \text{bivalent temperature}$	$COP_d$	2.99	-
$T_j = \text{operation limit temperature}$	$COP_d$	2.74	-
For air-to-water heat pumps: $T_j = -15^{\circ}\text{C}$ (if TOL , -20°C)	$P_{dh}$	-	-
For air-to-water heat pumps:      Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	$COP_{cyc}$	-	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)	$P_{sup}$	-	kW
Type of energy Input			
For air-to-water heat pumps: Rated air flow rate, outdoors		3060	m <sup>3</sup> /h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h

For heat pump combination heater:

<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	kWh
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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output  $Prated$  is equal to the design load for heating  $Pdesignh$ , and the rated 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  $Cdh = 0.9$ .

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