COMMISSION REGULATION (EU) No. 813/2013

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

Model: Samsung AE160RXYDEG EU & Joule 300L 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**

Applicable Standards:

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

Item	Symbol	Value	Unit
Rated heat output (*)	***Prated***	**16**	**kW**
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T_j			
Tj = -7 °C	*Pdh*	14.2	kW
Tj = +2 °C	*Pdh*	8.6	kW
Tj = +7 °C	*Pdh*	5.5	kW
Tj = +12 °C	*Pdh*	5.2	kW
Tj = bivalent temperature	*Pdh*	14.2	kW
Tj = operation limit temperature	*Pdh*	13.8	kW
For air-to-water heat pumps: Tj = -15°C (if TOL , -20°C)	*Pdh*	-	kW
Bivalent temperature	*Tbiv*	-7	°C
Cycling interval capacity for heating	*Pcych*	-	kW
Degradation co-efficient (**)	*Cdh*	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}	-/66	dB
Emissions of nitrogen oxides	NO_x	-	mg/kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	**176**	**%**
Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature T_j			
Tj = -7 °C	*COPd*	2.65	-
Tj = +2 °C	*COPd*	4.11	-
Tj = +7 °C	*COPd*	6.86	-
Tj = +12 °C	*COPd*	8.81	-
Tj = bivalent temperature	*COPd*	2.65	-
Tj = operation limit temperature	*COPd*	2.37	-
For air-to-water heat pumps: Tj = -15°C (if TOL , -20°C)	*Pdh*	-	-
For air-to-water heat pumps: Operation limit temperature	*TOL*	-10	°C
Cycling interval efficiency	*COPcyc*	-	-
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		7080	m^3/h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:

Declared load profile		-	
Daily electricity consumption	Q_{elec}	-	kWh

Water heating energy efficiency	η_{wh}	-	%
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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