

Information requirements for heat pump space heaters and heat pump combination heaters- 813/2013

Model: Samsung AE160JXYDEH & 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: Yes
Equipped with a supplementary heater: Yes
Heat Pump combination heater: Yes
Parameters are declared for: low-temperature application
Parameters are declared for: average climate conditions

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output	<i>Prated</i>	12.5	kW	Seasonal space heating energy efficiency	η_s	176	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T_j				Declared coefficient of performance for part load at indoor temperature 20°C and outdoor temperature T_j			
$T_j = -7^\circ\text{C}$	<i>Pdh</i>	11.10	kW	$T_j = -7^\circ\text{C}$	<i>COPd</i>	2.68	-
$T_j = +2^\circ\text{C}$	<i>Pdh</i>	6.70	kW	$T_j = +2^\circ\text{C}$	<i>COPd</i>	4.03	-
$T_j = +7^\circ\text{C}$	<i>Pdh</i>	4.30	kW	$T_j = +7^\circ\text{C}$	<i>COPd</i>	6.49	-
$T_j = +12^\circ\text{C}$	<i>Pdh</i>	3.30	kW	$T_j = +12^\circ\text{C}$	<i>COPd</i>	9.80	-
$T_j = \text{operation limit temperature}$	<i>Pdh</i>	12.50	kW	$T_j = \text{operation limit temperature}$	<i>COPd</i>	2.44	-
Bivalent temperature	<i>Tbiv</i>	-10.00	°C	Operation limit temperature	<i>TOL</i>	-10	°C
Degradation co-efficient	<i>Cdh</i>	0.9	-	Heating water operating limit temperature	<i>WTOL</i>	55	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P_{OFF}</i>	0.08	kW	Rated heat output	<i>P_{sup}</i>	3	kW
Thermostat-off mode	<i>P_{TO}</i>	0.011	kW	Type of energy Input	Electricity		
Standby mode	<i>P_{SB}</i>	0.011	kW				
Crankcase heater mode	<i>P_{CK}</i>	0	kW				
Other items				Outdoor sound power level			
Capacity control		Variable		L_{WA}		66	dB

For heat pump combination heater:

Declared load profile	XL		Water heating energy efficiency	η_{wh}	96.8	%
Standby cylinder heat loss	2.352	kWh	Reference hot water temperature		49.95	°C
			DHW volume accounted for in test		351	L

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