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

- **Model:** Samsung AE120JXYDEH & 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 a supplementary heater:** Yes
- **Heat Pump combination heater:** Yes
- **Parameters are declared for:** medium-temperature application
- **Parameters are declared for:** average climate conditions

<table>
<thead>
<tr>
<th>Item</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated heat output</td>
<td>$P_{rated}$</td>
<td>8</td>
<td>kW</td>
</tr>
</tbody>
</table>

Declared capacity for heating for part load at indoor temperature $20^\circ C$ and outdoor temperature $T_j$:

- $T_j = -7^\circ C$ $P_{dh}$ 7.10 kW
- $T_j = +2^\circ C$ $P_{dh}$ 4.30 kW
- $T_j = +7^\circ C$ $P_{dh}$ 3.30 kW
- $T_j = +12^\circ C$ $P_{dh}$ 8.00 kW
- $T_j$ = operation limit temperature $P_{dh}$ 8.00 kW

Bivalent temperature $T_{biv}$ -10.00 $^\circ C$

Degradation co-efficient $C_{dh}$ 0.9

Seasonal space heating energy efficiency $\eta_s$ 115 %

Declared coefficient of performance for part load at indoor temperature $20^\circ C$ and outdoor temperature $T_j$:

- $T_j = -7^\circ C$ $COP_d$ 1.76
- $T_j = +2^\circ C$ $COP_d$ 2.79
- $T_j = +7^\circ C$ $COP_d$ 3.73
- $T_j = +12^\circ C$ $COP_d$ 6.71
- $T_j$ = operation limit temperature $COP_d$ 1.51

Operation limit temperature $TOL$ -10 $^\circ C$

Heating water operating limit temperature $WTOL$ 55 $^\circ C$

Power consumption in modes other than active mode:

- Off mode $P_{off}$ 0.08 kW
- Thermostat-off mode $P_{TO}$ 0.011 kW
- Standby mode $P_{SB}$ 0.011 kW
- Crankcase heater mode $P_{CK}$ 0 kW

Supplementary heater

Rated heat output $P_{sup}$ 3 kW

Type of energy Input: Electricity

Other items:

- Capacity control: Variable
- Outdoor sound power level $L_{WA}$ 64 dB

For heat pump combination heater:

- Declared load profile $L$ kW
- Standby cylinder heat loss 2.352 kWh

Water heating energy efficiency $\eta_{wh}$ 95.5 %

Reference hot water temperature 49.43 $^\circ C$

DHW volume accounted for in test 263 L

Contact details

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