# Product Ecodesign Information

Model No.: WH-SDC16H9E8 / WH-UD16HE8

| | | | |
|---|---|---|---|
| Air-to-water heat pump [YES/NO]: | YES | Low-temperature heat pump [YES/NO]: | NO |
| Water-to-water heat pump [YES/NO]: | NO | Brine-to-water heat pump [YES/NO]: | NO |
| Equipped with a supplementary heater [YES/NO]: | YES | | |
| Heat pump combination heater [YES/NO]: | NO | | |

Parameters shall be declared for medium-temperature application.

Parameters shall be declared for AVERAGE climate conditions:-

| Item | Symb. | Value | Unit | Item | Symb. | Value | Unit |
|---|---|---|---|---|---|---|---|
| *Rated heat output (*)* | $P_{rated}$ | 13 | kW | Seasonal space heating energy efficiency | $\eta_s$ | 130 | % |
| Bivalent temperature | $T_{biv}$ | -3 | °C | Operation limit temperature | *TOL* | -10 | °C |
| Degradation coefficient (**) | $C_{dh}$ | 0,9 | — | Heating water operating limit temperature | *WTOL* | 55 | °C |
| 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 °C | $P_{dh}$ | 9,0 | kW | $T_j$ = – 7 °C | $COP_d$ | 2,07 | — |
| $T_j$ = + 2 °C | $P_{dh}$ | 7,1 | kW | $T_j$ = + 2 °C | $COP_d$ | 3,29 | — |
| $T_j$ = + 7 °C | $P_{dh}$ | 4,9 | kW | $T_j$ = + 7 °C | $COP_d$ | 4,85 | — |
| $T_j$ = + 12 °C | $P_{dh}$ | 5,8 | kW | $T_j$ = + 12 °C | $COP_d$ | 6,11 | — |
| $T_j$ = T biv | $P_{dh}$ | 9,5 | kW | $T_j$ = T biv | $COP_d$ | 2,46 | — |
| $T_j$ = TOL | $P_{dh}$ | 8,7 | kW | $T_j$ = TOL | $COP_d$ | 1,88 | — |
| $T_j$ = – 15 °C (if TOL < – 20 °C) | $P_{dh}$ | — | kW | $T_j$ = – 15 °C (if TOL < – 20 °C) | $COP_d$ | — | — |
| Cycling interval capacity for heating | $P_{cych}$ | — | kW | Cycling interval efficiency | $COP_{cyc}$ | — | — |

| Power consumption in modes other than active mode: | | | | Other items: (◊) (□) | | | |
|---|---|---|---|---|---|---|---|
| Off mode | $P_{OFF}$ | 0,003 | kW | Capacity control | | *Variable* | |
| Thermostat-off mode | $P_{TO}$ | 0,012 | kW | Sound power level, indoor (◊) | $L_{WA}$ | 46 | dB |
| Standby mode | $P_{SB}$ | 0,012 | kW | Sound power level, outdoor (◊) | $L_{WA}$ | 65 | dB |
| Crankcase heater mode | $P_{CK}$ | 0,039 | kW | Sound power level, indoor (□) | $L_{WA}$ | 46 | dB |
| Supplementary heater | $P_{sup}$ | 9,0 | kW | Sound power level, outdoor (□) | $L_{WA}$ | 72 | dB |
| Rated heat output (*) | | | | Annual energy consumption | $Q_{HE}$ | 8076 | kWh |
| Type of energy input | ELECTRICAL HEATER | | | Rated air flow rate, outdoor | — | 5400 | $m^3/h$ |
| For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger | — | — | $m^3/h$ | Emissions of nitrogen oxides | $NO_X$ | — | mg/kWh |

For heat pump combination heater:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Declared load profile** | — | | | **Water heating energy efficiency** | $\eta_{wh}$ | — | % |
| Daily electricity consumption | $Q_{elec}$ | — | kWh | Daily fuel consumption | $Q_{fuel}$ | — | kWh |

| | |
|---|---|
| Contact details for obtaining more information | (Name and address of the manufacturer or of its authorized representative.)<br>Panasonic Testing Centre, Panasonic Marketing Europe GmbH<br>Winsbergring 15, 22525 Hamburg, Germany |

REMARK:

- You can find information and precautions relevant for installation and maintenance in the Operation Instructions.
- You can find information relevant for recycling and/or disposal at end-of-life in the Operation Instructions.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output $P_{rated}$ is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater $P_{sup}$ is equal to the supplementary capacity for heating sup($T_j$).

(**) If $C_{dh}$ is not determined by measurement, then the default degradation coefficient is $C_{dh}$ = 0,9.

(◊) Nominal A-Weighted Sound Power Level ( $L_{WA}$ ), according to regulation 811/2013, 813/2013 and standard EN14825 at A7(6), in dB (A).

(□) Maximum A-Weighted Sound Power Level ( $L_{WA}$ ), according to EN12102-1 at A7(6) W55(47), in dB (A).

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ENERGY ЕНЕРГИЯ · ΕΝΕΡΓΕΙΑ

## Product Information Sheet

| | Panasonic | | WARMER | | | | AVERAGE | | | | | | | | | | COLDER | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Indoor Unit | Outdoor Unit | $P_{rated}$ | $\eta_s$ | $Q_{HE}$ | $P_{sup}$ | A+++ ~ D | A+++ ~ D | $P_{rated}$ | $\eta_s$ | $Q_{HE}$ | | | | | $P_{sup}$ | $P_{rated}$ | $\eta_s$ | $Q_{HE}$ | $P_{sup}$ |
| | | | kW (35/55°C) | % (35/55°C) | kWh (35/55°C) | kW | 35°C | 55°C | kW (35/55°C) | % (35/55°C) | kWh (35/55°C) | dB (A) (55°C) *3 | dB (A) (55°C) *3 | dB (A) *4 | dB (A) *4 | kW | kW (35/55°C) | % (35/55°C) | kWh (35/55°C) | kW |
| *1 | WH-SDC09H3E8 | WH-UD09HE8 | 9/9 | 245% / 159% | 1936 / 2967 | 3 | A+++ | A++ | 9/8 | 190% / 133% | 3863 / 4844 | 46 | 68 | 46 | 65 | 3 | 10/8 | 168% / 121% | 5757 / 6368 | 3 |
| *1 | WH-SDC12H9E8 | WH-UD12HE8 | 11/9 | 245% / 159% | 2368 / 2970 | 9 | A+++ | A++ | 10/8 | 190% / 134% | 4286 / 4840 | 46 | 69 | 46 | 65 | 9 | 11/9 | 168% / 121% | 6327 / 7147 | 9 |
| *1 | WH-SDC16H9E8 | WH-UD16HE8 | 13/10 | 245% / 169% | 2801 / 3104 | 9 | A+++ | A++ | 12/13 | 190% / 130% | 5146 / 8076 | 46 | 72 | 46 | 65 | 9 | 12/10 | 168% / 121% | 6911 / 7955 | 9 |

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*1
R410A (GWP=2088)
Refrigerant leakage contributes to climates change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 2088. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 2088 times higher than 1 kg of $CO_2$, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

*2
R407C (GWP=1774)
Refrigerant leakage contributes to climates change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 1774. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 1774 times higher than 1 kg of $CO_2$, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.

*3
Maximum A-Weighted Sound Power Level ($L_{WA}$), according to EN12102-1 at A7(6) W55(47), in dB (A).

*4
Nominal A-Weighted Sound Power Level ($L_{WA}$), according to regulation 811/2013, 813/2013 and standard EN14825 at A7(6), in dB (A).

Energy consumption “XYZ” kWh per year, based on standard test results.
Actual energy consumption will depend on how the appliance is used and where it is located.

- You can find information and precautions relevant for installation and maintenance in the Operation Instructions.
- You can find information relevant for recycling and/or disposal at end-of-life in the Operation Instructions.

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