

1-14. Information Table

1-14-2. PZH3

1-14-2-1. 4-Way Cassette Type S-3650PU3E(50)×3 / U-140PZH3E8

Information requirements for heat pumps

| | | |
|---|-----------------------------|----|
| Model(s): | Outdoor Unit Indoor Unit | X3 |
| Outdoor side heat exchanger of heat pump: | air | |
| Indoor side heat exchanger of heat pump: | air | |
| Indication if the heater is equipped with a supplementary heater: | no | |
| If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine] | electric motor | |

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|---|---|----------|------|---|---|-------|------------------------------------|
| Rated heating capacity | $P_{rated,h}$ | 16.0 | kW | Seasonal space heating energy efficiency | $\eta_{h,s}$ | 181.6 | % |
| Refrigeration load | $P_{design,h}$ | 10.6 | kW | | | | |
| Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j | | | | | | | |
| $T_j = -7\text{ °C}$ | | 9.3 | kW | $T_j = -7\text{ °C}$ | | 3.1 | % |
| $T_j = +2\text{ °C}$ | | 5.7 | kW | $T_j = +2\text{ °C}$ | | 4.4 | % |
| $T_j = +7\text{ °C}$ | | 3.6 | kW | $T_j = +7\text{ °C}$ | | 6.1 | % |
| $T_j = +12\text{ °C}$ | | 3.8 | kW | $T_j = +12\text{ °C}$ | | 7.6 | % |
| $T_{biv} = \text{bivalent temperature}$ | P_{biv} | 10.6 | kW | $T_{biv} = \text{bivalent temperature}$ | COP ₂ or GUE _{2,biv} / AEF _{2,biv} | 2.7 | % |
| $T_{OL} = \text{operation limit}$ | | 6.7 | kW | $T_{OL} = \text{operation limit}$ | | 2.0 | % |
| For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $T_{OL} < -20\text{ °C}$) | | - | kW | For water-to-air heat pumps: $T_j = -15\text{ °C}$ (if $T_{OL} < -20\text{ °C}$) | | - | % |
| Bivalent temperature | T_{biv} | -10 | °C | For water-to-air heat pumps: Operation limit temperature | T_{OL} | -20 | °C |
| Degradation co-efficient heat pumps** | C_{ph} | 0.25 | - | | | | |
| Power consumption in modes other than 'active mode' | | | | | | | |
| Off mode | P_{OFF} | 0.012 | kW | Supplementary heater back-up heating capacity * | e_{bu} | 0.0 | kW |
| Thermostat-off mode | P_{TO} | 0.016 | kW | Type of energy input | | | |
| Crankcase heater mode | P_{CK} | 0.000 | kW | Standby mode | P_{SB} | 0.012 | kW |
| Other items | | | | | | | |
| Capacity control | | variable | | For air-to-air heat pumps: air flow rate, outdoor | | 6960 | m³/h |
| Sound power level, outdoor | L_{WA} | 71.0 | dB | For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger | | - | m³/h |
| Sound power level, indoor | L_{WA} | 47.0 | dB | Emissions of nitrogen oxides (if applicable) | NO _x *** | - | mg/kWh fuel input GCV |
| | | | | GWP of the refrigerant | | 675 | kg CO ₂ -eq (100 years) |
| Contact details | Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr. 15, 22525 Hamburg, Germany | | | | | | |

** If C_{ph} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.

*** from 26 September 2018.

Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

Information requirements for air-to-air air conditioners

| | | |
|---|-----------------------------|----|
| Model(s): | Outdoor Unit Indoor Unit | X3 |
| Outdoor side heat exchanger of air conditioner: | air | |
| Indoor side heat exchanger of air conditioner: | vapour compression | |
| Type: compressor driven vapour compression or sorption process | electric motor | |
| If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine] | | |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|---|----------|------|--|--|-------|------------------------------------|
| Rated cooling capacity | $P_{rated,c}$ | 14.0 | kW | Seasonal space cooling energy efficiency | $\eta_{c,s}$ | 290.4 | % |
| Refrigeration load | $P_{design,c}$ | 14.0 | kW | | | | |
| Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27°/19°C (dry/wet bulb) | | | | | | | |
| $T_j = +35\text{ °C}$ | | 14.0 | kW | $T_j = +35\text{ °C}$ | | 3.4 | % |
| $T_j = +30\text{ °C}$ | | 10.3 | kW | $T_j = +30\text{ °C}$ | | 5.0 | % |
| $T_j = +25\text{ °C}$ | P_{25} | 6.6 | kW | $T_j = +25\text{ °C}$ | EER ₂₅ or GUE _{25,biv} / AEF _{25,biv} | 9.0 | % |
| $T_j = +20\text{ °C}$ | | 4.2 | kW | $T_j = +20\text{ °C}$ | | 14.3 | % |
| Degradation co-efficient for air conditioners** | C_{ac} | 0.25 | - | | | | |
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| Power consumption in modes other than 'active mode' | | | | | | | |
| Off mode | P_{OFF} | 0.012 | kW | Crankcase heater mode | P_{CK} | 0.000 | kW |
| Thermostat-off mode | P_{TO} | 0.014 | kW | Standby mode | P_{SB} | 0.012 | kW |
| Other items | | | | | | | |
| Capacity control | | variable | | For air-to-air air conditioner: air flow rate, outdoor | | 7740 | m³/h |
| Sound power level, outdoor | L_{WA} | 71.0 | dB | | | | |
| Sound power level, indoor | L_{WA} | 47.0 | dB | If engine driven: Emissions of nitrogen oxides | NO _x *** | - | mg/kWh fuel input GCV |
| | | | | GWP of the refrigerant | | 675 | kg CO ₂ -eq (100 years) |
| Contact details | Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr. 15, 22525 Hamburg, Germany | | | | | | |

** If C_{ac} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.

*** from 26 September 2018.

Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.