

Subtype Aquarea Monobloc 5 kW STD (J Series)

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|---------------------|---|
| Certificate Holder | Panasonic Marketing Europe GmbH |
| Address | Hagenauer Strasse 43, Wiesbaden |
| ZIP | 65203 |
| City | Wiesbaden |
| Country | DE |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |
| Subtype title | Aquarea Monobloc 5 kW STD (J Series) |
| Registration number | 011-1W0398 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R32 |
| Mass of Refrigerant | 1.3 kg |
| Certification Date | 06.08.2020 |
| Testing basis | HP KEYMARK certification scheme rules V8 |

Model WH-MDC05J3E5

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|-------------------------------------|-----------------------|
| Model name | WH-MDC05J3E5 |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate zone (for heating) | n/a |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C |
| Any additional heat sources | n/a |

General data

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|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water
EN 14511-4 | Heating

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|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| η_s | 202 % | 142 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 5.12 | 3.63 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 4.40 kW | 4.50 kW |
| COP Tj = -7°C | 2.76 | 2.30 |
| Cdh Tj = -7 °C | 0.970 | 0.980 |
| Pdh Tj = +2°C | 2.60 kW | 2.70 kW |
| COP Tj = +2°C | 5.44 | 3.58 |
| Cdh Tj = +2 °C | 0.910 | 0.940 |
| Pdh Tj = +7°C | 3.00 kW | 2.80 kW |
| COP Tj = +7°C | 7.15 | 4.89 |
| Cdh Tj = +7 °C | 0.890 | 0.920 |
| Pdh Tj = 12°C | 3.50 kW | 3.40 kW |
| COP Tj = 12°C | 8.65 | 6.92 |
| Cdh Tj = +12 °C | 0.880 | 0.910 |
| Pdh Tj = Tbiv | 5.00 kW | 5.00 kW |
| COP Tj = Tbiv | 2.50 | 1.98 |

| | | |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.00 kW | 5.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.50 | 1.98 |
| WTOL | 55 °C | 55 °C |
| Poff | 2 W | 2 W |
| PTO | 44 W | 44 W |
| PSB | 10 W | 10 W |
| PCK | 10 W | 10 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 2018 kWh | 2849 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 160 % | 115 % |
| Prated | 6.00 kW | 4.00 kW |
| SCOP | 4.08 | 2.95 |
| Tbiv | -15 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 3.60 kW | 2.40 kW |
| COP Tj = -7°C | 3.73 | 2.53 |
| Cdh Tj = -7 °C | 0.95 | 0.95 |
| Pdh Tj = +2°C | 2.50 kW | 2.30 kW |
| COP Tj = +2°C | 4.50 | 3.53 |
| Cdh Tj = +2 °C | 0.92 | 0.93 |
| Pdh Tj = +7°C | 3.00 kW | 2.80 kW |
| COP Tj = +7°C | 7.25 | 5.61 |
| Cdh Tj = +7 °C | 0.89 | 0.91 |
| Pdh Tj = 12°C | 3.50 kW | 3.40 kW |
| COP Tj = 12°C | 8.45 | 7.55 |
| Cdh Tj = +12 °C | 0.89 | 0.90 |
| Pdh Tj = Tbiv | 4.90 kW | 3.30 kW |
| COP Tj = Tbiv | 2.80 | 1.77 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 4.00 kW | 4.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.19 | 1.49 |
| WTOL | 55 °C | 55 °C |
| Poff | 2 W | 2 W |
| PTO | 44 W | 44 W |
| PSB | 10 W | 10 W |

| | | |
|--|-------------|-------------|
| PCK | 10 W | 10 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 3.00 kW | 3.00 kW |
| Annual energy consumption Q _{he} | 3625 kWh | 3338 kWh |
| P _{dh} T _j = -15°C (if TOL | 4.90 | 3.30 |
| COP T _j = -15°C (if TOL | 2.80 | 1.77 |
| C _{dh} T _j = -15 °C | 0.98 | 0.98 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A) | 59 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η _s | 237 % | 165 % |
| Prated | 5.00 kW | 4.00 kW |
| SCOP | 6.00 | 4.20 |
| T _{biv} | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| P _{dh} T _j = +2°C | 5.10 kW | 4.00 kW |
| COP T _j = +2°C | 3.05 | 3.00 |
| C _{dh} T _j = +2 °C | 0.97 | 0.97 |
| P _{dh} T _j = +7°C | 3.30 kW | 2.60 kW |
| COP T _j = +7°C | 5.75 | 3.63 |
| C _{dh} T _j = +7 °C | 0.92 | 0.94 |
| P _{dh} T _j = 12°C | 3.50 kW | 3.30 kW |
| COP T _j = 12°C | 8.58 | 6.17 |
| C _{dh} T _j = +12 °C | 0.89 | 0.92 |
| P _{dh} T _j = T _{biv} | 5.00 kW | 4.00 kW |
| COP T _j = T _{biv} | 3.89 | 2.46 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 5.00 kW | 4.00 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.89 | 2.46 |
| WTOL | 55 °C | 55 °C |
| P _{off} | 2 W | 2 W |
| PTO | 44 W | 44 W |
| PSB | 10 W | 10 W |
| PCK | 10 W | 10 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 3.00 kW | 3.00 kW |
| Annual energy consumption Q _{he} | 1113 kWh | 1274 kWh |

Model WH-MDC05J3E5 + DGC200

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|-------------------------------------|--------------------------|
| Model name | WH-MDC05J3E5 + DGC200 |
| Application | Heating + DHW + low temp |
| Units | Outdoor |
| Climate zone (for heating) | n/a |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water
EN 16147 | Average Climate

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|---------------------------------|-------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 125 % |
| COP | 2.96 |
| Heating up time | 01:31 h:min |
| Standby power input | 40.0 W |
| Reference hot water temperature | 53.3 °C |
| Mixed water at 40°C | 268 l |