

## Subtype Aquarea Monobloc 9-12 kW T-CAP (J Series) + TD23

|                     |  |
|---------------------|--|
| 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 9-12 kW T-CAP (J Series) + TD23               |
| Registration number | 011-1W0565   |
| Heat Pump Type      | Outdoor Air/Water  |
| Refrigerant         | R32  |
| Mass of Refrigerant | 1.6 kg   |
| Certification Date  | 22.12.2022   |
| Testing basis       | European KEYMARK Scheme for Heat Pumps Rev. 10 (as of 2022-06) |

## Model WH-MXC09J3E5 + PAW-TD23B6E5

|                                     |                             |
|-------------------------------------|-----------------------------|
| Model name                          | WH-MXC09J3E5 + PAW-TD23B6E5 |
| 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

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 108 %      |
| COP                             | 2.52       |
| Heating up time                 | 0:52 h:min |
| Standby power input             | 60.0 W     |
| Reference hot water temperature | 50.4 °C    |
| Mixed water at 40°C             | 246 l      |

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

## EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 9.00 kW         | 9.00 kW            |
| El input    | 1.77 kW         | 2.92 kW            |
| COP         | 5.08            | 3.08               |

## EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.83 kW    |             |
| Cooling capacity | 9.00       |             |
| EER              | 3.18       |             |

## EN 12102-1 | Average Climate

|  | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

|   |                 |                    |
|---|-----------------|--------------------|
| Sound power level outdoor                           | 65 dB(A)        | 65 dB(A)           |
| EN 14825   Average Climate                          |                 |                    |
|   | Low temperature | Medium temperature |
| $\eta_s$  | 195 %           | 140 %              |
| Prated  | 9.00 kW         | 9.00 kW            |
| SCOP  | 4.96            | 3.57               |
| Tbiv  | -10 °C          | -10 °C             |
| TOL   | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 8.00 kW         | 8.00 kW            |
| COP Tj = -7°C                                       | 3.04            | 2.33               |
| Cdh Tj = -7 °C                                      | 1.000           | 1.000              |
| Pdh Tj = +2°C                                       | 4.90 kW         | 4.90 kW            |
| COP Tj = +2°C                                       | 4.93            | 3.46               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 5.40 kW         | 5.10 kW            |
| COP Tj = +7°C                                       | 6.26            | 4.48               |
| Cdh Tj = +7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = 12°C                                       | 6.30 kW         | 6.10 kW            |
| COP Tj = 12°C                                       | 8.19            | 6.02               |
| Cdh Tj = +12 °C                                     | 0.990           | 0.990              |
| Pdh Tj = Tbiv                                       | 9.00 kW         | 9.00 kW            |
| COP Tj = Tbiv                                       | 2.90            | 2.04               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.00 kW         | 9.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90            | 2.04               |
| WTOL  | 55 °C           | 55 °C              |
| Poff  | 9 W             | 9 W                |
| PTO   | 10 W            | 10 W               |
| PSB   | 9 W             | 9 W                |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input          | Electricity     | Electricity        |
| Supplementary Heater: PSUP                          | 0.00 kW         | 0.00 kW            |
| Annual energy consumption Qhe                       | 3747 kWh        | 5208 kWh           |
| EN 14825   Cooling                                  |                 |                    |
|   | +7°C/+12°C      | +18°C/+23°C        |
| Pdesignc  | 9.00 kW         |                    |
| SEER  | 4.80            |                    |
| Pdc Tj = 35°C                                       | 9.00 kW         |                    |
| EER Tj = 35°C                                       | 3.18            |                    |
| Pdc Tj = 30°C                                       | 6.63 kW         |                    |
| EER Tj = 30°C                                       | 4.20            |                    |
| Cdc Tj = 30 °C                                      | 0.9             |                    |

|                               |         |
|-------------------------------|---------|
| Pdc Tj = 25°C                 | 4.60 kW |
| EER Tj = 25°C                 | 5.32    |
| Cdc Tj = 25 °C                | 0.9     |
| Pdc Tj = 20°C                 | 4.80 kW |
| EER Tj = 20°C                 | 6.16    |
| Cdc Tj = 20 °C                | 0.9     |
| Poff                          | 9 W     |
| PTO                           | 1 W     |
| PSB                           | 9 W     |
| PCK                           | 0 W     |
| Annual energy consumption Qce | 656 kWh |

## Model WH-MXC09J3E8 + PAW-TD23B6E5

|                                     |                             |
|-------------------------------------|-----------------------------|
| Model name                          | WH-MXC09J3E8 + PAW-TD23B6E5 |
| 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     | 3x400V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

## EN 16147 | Average Climate

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 108 %      |
| COP                             | 2.52       |
| Heating up time                 | 0:52 h:min |
| Standby power input             | 60.0 W     |
| Reference hot water temperature | 50.4 °C    |
| Mixed water at 40°C             | 246 l      |

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

## EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 9.00 kW         | 9.00 kW            |
| El input    | 1.77 kW         | 2.92 kW            |
| COP         | 5.08            | 3.08               |

## EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.83 kW    |             |
| Cooling capacity | 9.00       |             |
| EER              | 3.18       |             |

## EN 12102-1 | Average Climate

|  | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

|   |                 |                    |
|---|-----------------|--------------------|
| Sound power level outdoor                           | 65 dB(A)        | 65 dB(A)           |
| EN 14825   Average Climate                          |                 |                    |
|   | Low temperature | Medium temperature |
| $\eta_s$  | 195 %           | 140 %              |
| Prated  | 9.00 kW         | 9.00 kW            |
| SCOP  | 4.96            | 3.57               |
| Tbiv  | -10 °C          | -10 °C             |
| TOL   | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 8.00 kW         | 8.00 kW            |
| COP Tj = -7°C                                       | 3.04            | 2.33               |
| Cdh Tj = -7 °C                                      | 1.000           | 1.000              |
| Pdh Tj = +2°C                                       | 4.90 kW         | 4.90 kW            |
| COP Tj = +2°C                                       | 4.93            | 3.46               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 5.40 kW         | 5.10 kW            |
| COP Tj = +7°C                                       | 6.26            | 4.48               |
| Cdh Tj = +7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = 12°C                                       | 6.30 kW         | 6.10 kW            |
| COP Tj = 12°C                                       | 8.19            | 6.02               |
| Cdh Tj = +12 °C                                     | 0.990           | 0.990              |
| Pdh Tj = Tbiv                                       | 9.00 kW         | 9.00 kW            |
| COP Tj = Tbiv                                       | 2.90            | 2.04               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.00 kW         | 9.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90            | 2.04               |
| WTOL  | 55 °C           | 55 °C              |
| Poff  | 9 W             | 9 W                |
| PTO   | 10 W            | 10 W               |
| PSB   | 9 W             | 9 W                |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input          | Electricity     | Electricity        |
| Supplementary Heater: PSUP                          | 0.00 kW         | 0.00 kW            |
| Annual energy consumption Qhe                       | 3747 kWh        | 5208 kWh           |
| EN 14825   Cooling                                  |                 |                    |
|   | +7°C/+12°C      | +18°C/+23°C        |
| Pdesignc  | 9.00 kW         |                    |
| SEER  | 4.80            |                    |
| Pdc Tj = 35°C                                       | 9.00 kW         |                    |
| EER Tj = 35°C                                       | 3.18            |                    |
| Pdc Tj = 30°C                                       | 6.63 kW         |                    |
| EER Tj = 30°C                                       | 4.20            |                    |
| Cdc Tj = 30 °C                                      | 0.9             |                    |

|                               |         |
|-------------------------------|---------|
| Pdc Tj = 25°C                 | 4.60 kW |
| EER Tj = 25°C                 | 5.32    |
| Cdc Tj = 25 °C                | 0.9     |
| Pdc Tj = 20°C                 | 4.80 kW |
| EER Tj = 20°C                 | 6.16    |
| Cdc Tj = 20 °C                | 0.9     |
| Poff                          | 9 W     |
| PTO                           | 1 W     |
| PSB                           | 9 W     |
| PCK                           | 0 W     |
| Annual energy consumption Qce | 656 kWh |

## Model WH-MXC12J6E5 + PAW-TD23B6E5

|                                     |                             |
|-------------------------------------|-----------------------------|
| Model name                          | WH-MXC12J6E5 + PAW-TD23B6E5 |
| 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

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 108 %      |
| COP                             | 2.52       |
| Heating up time                 | 0:52 h:min |
| Standby power input             | 60.0 W     |
| Reference hot water temperature | 50.4 °C    |
| Mixed water at 40°C             | 246 l      |

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

## EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12.00 kW        | 12.00 kW           |
| El input    | 2.50 kW         | 3.94 kW            |
| COP         | 4.80            | 3.05               |

## EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 4.14 kW    |             |
| Cooling capacity | 12.00      |             |
| EER              | 2.90       |             |

## EN 12102-1 | Average Climate

|  | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|



|   |                 |                    |
|---|-----------------|--------------------|
| Sound power level outdoor                           | 65 dB(A)        | 65 dB(A)           |
| EN 14825   Average Climate                          |                 |                    |
|   | Low temperature | Medium temperature |
| $\eta_s$  | 195 %           | 140 %              |
| Prated  | 9.00 kW         | 9.00 kW            |
| SCOP  | 4.96            | 3.57               |
| Tbiv  | -10 °C          | -10 °C             |
| TOL   | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 8.00 kW         | 8.00 kW            |
| COP Tj = -7°C                                       | 3.04            | 2.33               |
| Cdh Tj = -7 °C                                      | 1.000           | 1.000              |
| Pdh Tj = +2°C                                       | 4.90 kW         | 4.90 kW            |
| COP Tj = +2°C                                       | 4.93            | 3.46               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 5.40 kW         | 5.10 kW            |
| COP Tj = +7°C                                       | 6.26            | 4.48               |
| Cdh Tj = +7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = 12°C                                       | 6.30 kW         | 6.10 kW            |
| COP Tj = 12°C                                       | 8.19            | 6.02               |
| Cdh Tj = +12 °C                                     | 0.990           | 0.990              |
| Pdh Tj = Tbiv                                       | 9.00 kW         | 9.00 kW            |
| COP Tj = Tbiv                                       | 2.90            | 2.04               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.00 kW         | 9.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90            | 2.04               |
| WTOL  | 55 °C           | 55 °C              |
| Poff  | 9 W             | 9 W                |
| PTO   | 10 W            | 10 W               |
| PSB   | 9 W             | 9 W                |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input          | Electricity     | Electricity        |
| Supplementary Heater: PSUP                          | 0.00 kW         | 0.00 kW            |
| Annual energy consumption Qhe                       | 3747 kWh        | 5208 kWh           |
| EN 14825   Cooling                                  |                 |                    |
|   | +7°C/+12°C      | +18°C/+23°C        |
| Pdesignc  | 12.00 kW        |                    |
| SEER  | 4.79            |                    |
| Pdc Tj = 35°C                                       | 12.00 kW        |                    |
| EER Tj = 35°C                                       | 2.90            |                    |
| Pdc Tj = 30°C                                       | 8.84 kW         |                    |
| EER Tj = 30°C                                       | 4.02            |                    |
| Cdc Tj = 30 °C                                      | 0.9             |                    |

|                               |         |
|-------------------------------|---------|
| Pdc Tj = 25°C                 | 5.68 kW |
| EER Tj = 25°C                 | 5.40    |
| Cdc Tj = 25 °C                | 0.9     |
| Pdc Tj = 20°C                 | 4.90 kW |
| EER Tj = 20°C                 | 6.30    |
| Cdc Tj = 20 °C                | 0.9     |
| Poff                          | 9 W     |
| PTO                           | 1 W     |
| PSB                           | 9 W     |
| PCK                           | 0 W     |
| Annual energy consumption Qce | 878 kWh |

## Model WH-MXC12J9E8 + PAW-TD23B6E5

|                                     |                             |
|-------------------------------------|-----------------------------|
| Model name                          | WH-MXC12J9E8 + PAW-TD23B6E5 |
| 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     | 3x400V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

## EN 16147 | Average Climate

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 108 %      |
| COP                             | 2.52       |
| Heating up time                 | 0:52 h:min |
| Standby power input             | 60.0 W     |
| Reference hot water temperature | 50.4 °C    |
| Mixed water at 40°C             | 246 l      |

## EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

## EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12.00 kW        | 12.00 kW           |
| El input    | 2.50 kW         | 3.94 kW            |
| COP         | 4.80            | 3.05               |

## EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 4.14 kW    |             |
| Cooling capacity | 12.00      |             |
| EER              | 2.90       |             |

## EN 12102-1 | Average Climate

|  | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

|   |                 |                    |
|---|-----------------|--------------------|
| Sound power level outdoor                           | 65 dB(A)        | 65 dB(A)           |
| EN 14825   Average Climate                          |                 |                    |
|   | Low temperature | Medium temperature |
| $\eta_s$  | 195 %           | 140 %              |
| Prated  | 9.00 kW         | 9.00 kW            |
| SCOP  | 4.96            | 3.57               |
| Tbiv  | -10 °C          | -10 °C             |
| TOL   | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 8.00 kW         | 8.00 kW            |
| COP Tj = -7°C                                       | 3.04            | 2.33               |
| Cdh Tj = -7 °C                                      | 1.000           | 1.000              |
| Pdh Tj = +2°C                                       | 4.90 kW         | 4.90 kW            |
| COP Tj = +2°C                                       | 4.93            | 3.46               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 5.40 kW         | 5.10 kW            |
| COP Tj = +7°C                                       | 6.26            | 4.48               |
| Cdh Tj = +7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = 12°C                                       | 6.30 kW         | 6.10 kW            |
| COP Tj = 12°C                                       | 8.19            | 6.02               |
| Cdh Tj = +12 °C                                     | 0.990           | 0.990              |
| Pdh Tj = Tbiv                                       | 9.00 kW         | 9.00 kW            |
| COP Tj = Tbiv                                       | 2.90            | 2.04               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.00 kW         | 9.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90            | 2.04               |
| WTOL  | 55 °C           | 55 °C              |
| Poff  | 9 W             | 9 W                |
| PTO   | 10 W            | 10 W               |
| PSB   | 9 W             | 9 W                |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input          | Electricity     | Electricity        |
| Supplementary Heater: PSUP                          | 0.00 kW         | 0.00 kW            |
| Annual energy consumption Qhe                       | 3747 kWh        | 5208 kWh           |
| EN 14825   Cooling                                  |                 |                    |
|   | +7°C/+12°C      | +18°C/+23°C        |
| Pdesignc  | 12.00 kW        |                    |
| SEER  | 4.79            |                    |
| Pdc Tj = 35°C                                       | 12.00 kW        |                    |
| EER Tj = 35°C                                       | 2.90            |                    |
| Pdc Tj = 30°C                                       | 8.84 kW         |                    |
| EER Tj = 30°C                                       | 4.02            |                    |
| Cdc Tj = 30 °C                                      | 0.9             |                    |

|                               |         |
|-------------------------------|---------|
| Pdc Tj = 25°C                 | 5.68 kW |
| EER Tj = 25°C                 | 5.40    |
| Cdc Tj = 25 °C                | 0.9     |
| Pdc Tj = 20°C                 | 4.90 kW |
| EER Tj = 20°C                 | 6.30    |
| Cdc Tj = 20 °C                | 0.9     |
| Poff                          | 9 W     |
| PTO                           | 1 W     |
| PSB                           | 9 W     |
| PCK                           | 0 W     |
| Annual energy consumption Qce | 878 kWh |