

This information was generated by the HP KEYMARK database on 22 Jun 2022

[Login](#)

| | | | |
|---------------------|-------------------------------------------------------|----------|------------|
| Summary of | Aquarea Monobloc 9-12 kW T-CAP (H Series) | Reg. No. | 011-1W0206 |
| Certificate Holder | | | |
| Name | Panasonic Marketing Europe GmbH | | |
| Address | Hagenauer Strasse 43, Wiesbaden | Zip | 65203 |
| City | Wiesbaden | Country | Germany |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | |
| Subtype title | Aquarea Monobloc 9-12 kW T-CAP (H Series) | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R410A | | |
| Mass of Refrigerant | 2.3 kg | | |
| Certification Date | 08.01.2020 | | |
| Testing basis | HP KEYMARK certification scheme rules V8 | | |

Model: WH-MXC09H3E5

| Configure model | |
|-------------------------------------|---------------------------------|
| Model name | WH-MXC09H3E5 |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate Zone | Colder Climate + Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |

| General Data | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |

Cooling

| EN 14511-2 | | |
|------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 9.00 kW | 9.00 kW |
| El input | 1.86 kW | 3.06 kW |
| COP | 4.84 | 2.94 |

| EN 14511-4 | |
|--------------------------------------------|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

Warmer Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 235 % | 158 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 5.95 | 4.02 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.90 kW | 9.00 kW |
| COP Tj = +2°C | 3.49 | 2.39 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|-------------|-------------|
| Cdh Tj = +2 °C | 1.000 | 1.000 |
| Pdh Tj = +7°C | 5.70 kW | 5.70 kW |
| COP Tj = +7°C | 5.49 | 3.33 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |
| Pdh Tj = 12°C | 6.00 kW | 5.30 kW |
| COP Tj = 12°C | 7.29 | 5.35 |
| Cdh Tj = +12 °C | 0.990 | 0.990 |
| Pdh Tj = Tbiv | 8.90 kW | 9.00 kW |
| COP Tj = Tbiv | 3.49 | 2.39 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.90 kW | 9.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.49 | 2.39 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.10 kW | 0.00 kW |
| Annual energy consumption Qhe | 2020 kWh | 2991 kWh |

Colder Climate

This information was generated by the HP KEYMARK database on 22 Jun 2022

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 160 % | 125 % |
| Prated | 11.00 kW | 11.00 kW |
| SCOP | 4.08 | 3.20 |
| Tbiv | -15 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 6.70 kW | 6.50 kW |
| COP Tj = -7°C | 3.28 | 2.56 |
| Cdh Tj = -7 °C | 0.990 | 1.000 |
| Pdh Tj = +2°C | 4.30 kW | 4.00 kW |
| COP Tj = +2°C | 4.99 | 3.91 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.00 kW | 4.80 kW |
| COP Tj = +7°C | 6.29 | 4.99 |
| Cdh Tj = +7 °C | 0.980 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = 12°C | 5.80 kW | 5.70 kW |
| COP Tj = 12°C | 7.45 | 6.32 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 9.20 kW | 8.90 kW |
| COP Tj = Tbiv | 2.48 | 1.93 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.80 kW | 8.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.85 | 1.52 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.20 kW | 2.10 kW |
| Annual energy consumption Qhe | 6651 kWh | 8468 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 9.20 | 8.90 |
| COP Tj = -15°C (if TOL<-20°C) | 2.48 | 1.93 |
| Cdh Tj = -15 °C | 1.000 | 1.000 |

Average Climate

This information was generated by the HP KEYMARK database on 22 Jun 2022

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 181 % | 130 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 4.59 | 3.32 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.50 kW | 7.70 kW |
| COP Tj = -7°C | 2.75 | 2.11 |
| Cdh Tj = -7 °C | 1.000 | 1.000 |
| Pdh Tj = +2°C | 4.70 kW | 4.80 kW |
| COP Tj = +2°C | 4.57 | 3.24 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.00 kW | 4.60 kW |
| COP Tj = +7°C | 5.89 | 4.17 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = 12°C | 6.10 kW | 5.50 kW |
| COP Tj = 12°C | 7.67 | 5.74 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 9.00 kW | 8.70 kW |
| COP Tj = Tbiv | 2.71 | 2.00 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.00 kW | 8.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71 | 2.00 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.30 kW |
| Annual energy consumption Qhe | 4049 kWh | 5596 kWh |

Model: WH-MXC12H9E8

| Configure model | |
|-------------------------------------|---------------------------------|
| Model name | WH-MXC12H9E8 |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate Zone | Colder Climate + Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |

| General Data | |
|--------------|-------------|
| Power supply | 3x400V 50Hz |

Cooling

| EN 14511-2 | | |
|------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| El input | 3.56 kW | 1.95 kW |
| Cooling capacity | 10.00 | 10.00 |
| EER | 2.81 | 5.13 |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 12.00 kW |
| El input | 2.53 kW | 4.16 kW |
| COP | 4.74 | 2.88 |

| EN 14511-4 | |
|--------------------------------------------|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

Warmer Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 231 % | 158 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.86 | 4.02 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 11.90 kW | 11.70 kW |
| COP Tj = +2°C | 3.18 | 2.15 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|----------|----------|
| Cdh Tj = +2 °C | 1.000 | 1.000 |
| Pdh Tj = +7°C | 7.60 kW | 7.80 kW |
| COP Tj = +7°C | 5.25 | 3.33 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |
| Pdh Tj = 12°C | 5.90 kW | 5.70 kW |
| COP Tj = 12°C | 7.33 | 5.39 |
| Cdh Tj = +12 °C | 0.990 | 0.990 |
| Pdh Tj = Tbiv | 11.90 kW | 11.70 kW |
| COP Tj = Tbiv | 3.18 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.90 kW | 11.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.18 | 2.15 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | n/a | |
| Supplementary Heater: PSUP | 0.10 kW | 0.30 kW |
| Annual energy consumption Qhe | 2738 kWh | 3990 kWh |

Colder Climate

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 160 % | 125 % |
| Prated | 14.00 kW | 13.00 kW |
| SCOP | 4.08 | 3.20 |
| Tbiv | -15 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 8.40 kW | 7.90 kW |
| COP Tj = -7°C | 3.20 | 2.54 |
| Cdh Tj = -7 °C | 1.000 | 1.000 |
| Pdh Tj = +2°C | 5.00 kW | 4.10 kW |
| COP Tj = +2°C | 5.09 | 3.97 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.10 kW | 4.80 kW |
| COP Tj = +7°C | 6.61 | 4.89 |
| Cdh Tj = +7 °C | 0.980 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|----------|-----------|
| Pdh Tj = 12°C | 5.90 kW | 5.60 kW |
| COP Tj = 12°C | 7.99 | 6.00 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 11.20 kW | 10.40 kW |
| COP Tj = Tbiv | 2.48 | 1.94 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.90 kW | 8.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.92 | 1.50 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | n/a | |
| Supplementary Heater: PSUP | 3.10 kW | 4.10 kW |
| Annual energy consumption Qhe | 8460 kWh | 10012 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 11.20 | 10.40 |
| COP Tj = -15°C (if TOL<-20°C) | 2.48 | 1.94 |
| Cdh Tj = -15 °C | 1.000 | 1.000 |

Average Climate

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 170 % | 130 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 4.32 | 3.32 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 10.70 kW | 10.80 kW |
| COP Tj = -7°C | 2.84 | 2.03 |
| Cdh Tj = -7 °C | 1.000 | 1.000 |
| Pdh Tj = +2°C | 6.70 kW | 6.10 kW |
| COP Tj = +2°C | 3.96 | 3.19 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.10 kW | 4.70 kW |
| COP Tj = +7°C | 5.93 | 4.38 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|----------|----------|
| Pdh Tj = 12°C | 6.00 kW | 5.70 kW |
| COP Tj = 12°C | 7.88 | 5.89 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 12.00 kW | 11.70 kW |
| COP Tj = Tbiv | 2.56 | 1.95 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.00 kW | 11.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.56 | 1.95 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | n/a | |
| Supplementary Heater: PSUP | 0.00 kW | 0.30 kW |
| Annual energy consumption Qhe | 5745 kWh | 7466 kWh |

Model: WH-MXC09H3E8

| Configure model | |
|-------------------------------------|---------------------------------|
| Model name | WH-MXC09H3E8 |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate Zone | Colder Climate + Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |

| General Data | |
|--------------|-------------|
| Power supply | 3x400V 50Hz |

Cooling

| EN 14511-2 | | |
|------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 9.00 kW | 9.00 kW |
| El input | 1.86 kW | 3.06 kW |
| COP | 4.84 | 2.94 |

| EN 14511-4 | |
|--------------------------------------------|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

Warmer Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 235 % | 158 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 5.95 | 4.02 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 8.90 kW | 9.00 kW |
| COP Tj = +2°C | 3.49 | 2.39 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|----------|----------|
| Cdh Tj = +2 °C | 1.000 | 1.000 |
| Pdh Tj = +7°C | 5.70 kW | 5.70 kW |
| COP Tj = +7°C | 5.49 | 3.33 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |
| Pdh Tj = 12°C | 6.00 kW | 5.30 kW |
| COP Tj = 12°C | 7.29 | 5.35 |
| Cdh Tj = +12 °C | 0.990 | 0.990 |
| Pdh Tj = Tbiv | 8.90 kW | 9.00 kW |
| COP Tj = Tbiv | 3.49 | 2.39 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.90 kW | 9.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.49 | 2.39 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | n/a | |
| Supplementary Heater: PSUP | 0.10 kW | 0.00 kW |
| Annual energy consumption Qhe | 2020 kWh | 2991 kWh |

Colder Climate

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 160 % | 125 % |
| Prated | 11.00 kW | 11.00 kW |
| SCOP | 4.08 | 3.20 |
| Tbiv | -15 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 6.70 kW | 6.50 kW |
| COP Tj = -7°C | 3.28 | 2.56 |
| Cdh Tj = -7 °C | 0.990 | 1.000 |
| Pdh Tj = +2°C | 4.30 kW | 4.00 kW |
| COP Tj = +2°C | 4.99 | 3.91 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.00 kW | 4.80 kW |
| COP Tj = +7°C | 6.29 | 4.99 |
| Cdh Tj = +7 °C | 0.980 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|----------|----------|
| Pdh Tj = 12°C | 5.80 kW | 5.70 kW |
| COP Tj = 12°C | 7.45 | 6.32 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 9.20 kW | 8.90 kW |
| COP Tj = Tbiv | 2.48 | 1.93 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.80 kW | 8.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.85 | 1.52 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | n/a | |
| Supplementary Heater: PSUP | 1.20 kW | 2.10 kW |
| Annual energy consumption Qhe | 6651 kWh | 8468 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 9.20 | 8.90 |
| COP Tj = -15°C (if TOL<-20°C) | 2.48 | 1.93 |
| Cdh Tj = -15 °C | 1.000 | 1.000 |

Average Climate

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 181 % | 130 % |
| Prated | 9.00 kW | 9.00 kW |
| SCOP | 4.59 | 3.32 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.50 kW | 7.70 kW |
| COP Tj = -7°C | 2.75 | 2.11 |
| Cdh Tj = -7 °C | 1.000 | 1.000 |
| Pdh Tj = +2°C | 4.70 kW | 4.80 kW |
| COP Tj = +2°C | 4.57 | 3.24 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.00 kW | 4.60 kW |
| COP Tj = +7°C | 5.89 | 4.17 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|----------|----------|
| Pdh Tj = 12°C | 6.10 kW | 5.50 kW |
| COP Tj = 12°C | 7.67 | 5.74 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 9.00 kW | 8.70 kW |
| COP Tj = Tbiv | 2.71 | 2.00 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.00 kW | 8.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71 | 2.00 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | n/a | |
| Supplementary Heater: PSUP | 0.00 kW | 0.30 kW |
| Annual energy consumption Qhe | 4049 kWh | 5596 kWh |

Model: WH-MXC12H6E5

| Configure model | |
|-------------------------------------|---------------------------------|
| Model name | WH-MXC12H6E5 |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate Zone | Colder Climate + Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |

| General Data | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |

Cooling

| EN 14511-2 | | |
|------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| El input | 3.56 kW | 1.95 kW |
| Cooling capacity | 10.00 | 10.00 |
| EER | 2.81 | 5.13 |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 12.00 kW |
| El input | 2.53 kW | 4.16 kW |
| COP | 4.74 | 2.88 |

| EN 14511-4 | |
|--------------------------------------------|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

Warmer Climate

| EN 12102-1 | | |
|---------------------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

| EN 14825 | | |
|-----------------|------------------------|---------------------------|
| | Low temperature | Medium temperature |
| η_s | 231 % | 158 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.86 | 4.02 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 11.90 kW | 11.70 kW |
| COP Tj = +2°C | 3.18 | 2.15 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|-------------|-------------|
| Cdh Tj = +2 °C | 1.000 | 1.000 |
| Pdh Tj = +7°C | 7.60 kW | 7.80 kW |
| COP Tj = +7°C | 5.25 | 3.33 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |
| Pdh Tj = 12°C | 5.90 kW | 5.70 kW |
| COP Tj = 12°C | 7.33 | 5.39 |
| Cdh Tj = +12 °C | 0.990 | 0.990 |
| Pdh Tj = Tbiv | 11.90 kW | 11.70 kW |
| COP Tj = Tbiv | 3.18 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.90 kW | 11.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.18 | 2.15 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.10 kW | 0.30 kW |
| Annual energy consumption Qhe | 2738 kWh | 3990 kWh |

Colder Climate

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 160 % | 125 % |
| Prated | 14.00 kW | 13.00 kW |
| SCOP | 4.08 | 3.20 |
| Tbiv | -15 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 8.40 kW | 7.90 kW |
| COP Tj = -7°C | 3.20 | 2.54 |
| Cdh Tj = -7 °C | 1.000 | 1.000 |
| Pdh Tj = +2°C | 5.00 kW | 4.10 kW |
| COP Tj = +2°C | 5.09 | 3.97 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.10 kW | 4.80 kW |
| COP Tj = +7°C | 6.61 | 4.89 |
| Cdh Tj = +7 °C | 0.980 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = 12°C | 5.90 kW | 5.60 kW |
| COP Tj = 12°C | 7.99 | 6.00 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 11.20 kW | 10.40 kW |
| COP Tj = Tbiv | 2.48 | 1.94 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.90 kW | 8.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.92 | 1.50 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 3.10 kW | 4.10 kW |
| Annual energy consumption Qhe | 8460 kWh | 10012 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 11.20 | 10.40 |
| COP Tj = -15°C (if TOL<-20°C) | 2.48 | 1.94 |
| Cdh Tj = -15 °C | 1.000 | 1.000 |

Average Climate

EN 12102-1

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | dB(A) | dB(A) |
| Sound power level outdoor | 65 dB(A) | 65 dB(A) |

EN 14825

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 170 % | 130 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 4.32 | 3.32 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 10.70 kW | 10.80 kW |
| COP Tj = -7°C | 2.84 | 2.03 |
| Cdh Tj = -7 °C | 1.000 | 1.000 |
| Pdh Tj = +2°C | 6.70 kW | 6.10 kW |
| COP Tj = +2°C | 3.96 | 3.19 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.10 kW | 4.70 kW |
| COP Tj = +7°C | 5.93 | 4.38 |
| Cdh Tj = +7 °C | 0.990 | 0.990 |

This information was generated by the HP KEYMARK database on 22 Jun 2022

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = 12°C | 6.00 kW | 5.70 kW |
| COP Tj = 12°C | 7.88 | 5.89 |
| Cdh Tj = +12 °C | 0.980 | 0.990 |
| Pdh Tj = Tbiv | 12.00 kW | 11.70 kW |
| COP Tj = Tbiv | 2.56 | 1.95 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.00 kW | 11.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.56 | 1.95 |
| WTOL | 55 °C | 55 °C |
| Poff | 3 W | 3 W |
| PTO | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 33 W | 33 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.30 kW |
| Annual energy consumption Qhe | 5745 kWh | 7466 kWh |