



Performance Curve CH-HP12UIMPRK

| | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 90Hz | 84Hz | 78Hz | 72Hz | 66Hz | 60Hz | 54Hz | 48Hz | | | | | | | | | | | |
| Heating Capacity (kW) | | | | | | | | | | | | | | | | | | | | |
| Ambient Temperature (°C) | | | | | | | | | | | | | | | | | | | | |
| Water outlet(°C) | -30 | -25 | -20 | -16 | -15 | -12 | -7 | -5 | 0 | 1 | 2 | 5 | 7 | 10 | 14 | 15 | 20 | 25 | 30 | 35 |
| 35 | 4.1 | 5.0 | 6.2 | 7.3 | 7.4 | 8.0 | 9.2 | 9.8 | 11.0 | 11.2 | 11.3 | 12.2 | 12.5 | 13.5 | 14.3 | 14.5 | 16.5 | 16.4 | 14.5 | 16.0 |
| 41 | 4.2 | 5.2 | 6.4 | 7.5 | 7.6 | 8.2 | 9.5 | 10.1 | 11.3 | 11.5 | 11.6 | 12.6 | 12.9 | 13.9 | 13.7 | 13.9 | 15.9 | 15.7 | 13.6 | 15.0 |
| 45 | 4.3 | 5.3 | 6.6 | 7.7 | 7.8 | 8.5 | 9.8 | 10.4 | 11.7 | 11.8 | 12.0 | 12.9 | 13.3 | 14.3 | 14.1 | 14.3 | 16.3 | 15.4 | 14.0 | 15.4 |
| 50 | 4.5 | 5.5 | 6.8 | 8.0 | 8.1 | 8.7 | 10.0 | 10.7 | 11.2 | 11.3 | 11.5 | 12.4 | 12.7 | 13.7 | 13.5 | 13.7 | 15.6 | 15.3 | 12.9 | 14.3 |
| 55 | / | 5.6 | 6.9 | 8.2 | 8.3 | 8.4 | 9.6 | 10.2 | 11.0 | 11.1 | 11.3 | 12.2 | 12.5 | 13.5 | 12.8 | 13.0 | 14.8 | 15.7 | 11.8 | 13.0 |
| 60 | / | / | 6.7 | 7.8 | 7.9 | 8.0 | 9.2 | 9.8 | 10.1 | 10.3 | 10.4 | 11.2 | 11.5 | 12.4 | 13.2 | 13.3 | 15.2 | 13.5 | 12.1 | 13.4 |

| | | | | | | | | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Power Input (kW) | | | | | | | | | | | | | | | | | | | | |
| Ambient Temperature (°C) | | | | | | | | | | | | | | | | | | | | |
| Water outlet(°C) | -30 | -25 | -20 | -16 | -15 | -12 | -7 | -5 | 0 | 1 | 2 | 5 | 7 | 10 | 14 | 15 | 20 | 25 | 30 | 35 |
| 35 | 2.34 | 2.43 | 2.51 | 2.59 | 2.60 | 2.64 | 2.73 | 2.77 | 2.85 | 2.86 | 2.87 | 2.93 | 2.95 | 3.00 | 3.05 | 3.06 | 3.12 | 2.98 | 2.14 | 2.30 |
| 41 | 2.81 | 2.91 | 3.01 | 3.11 | 3.11 | 3.17 | 3.28 | 3.32 | 3.42 | 3.43 | 3.44 | 3.52 | 3.54 | 3.60 | 3.42 | 3.43 | 3.49 | 3.32 | 2.33 | 2.51 |
| 45 | 3.16 | 3.27 | 3.39 | 3.50 | 3.50 | 3.56 | 3.69 | 3.73 | 3.85 | 3.86 | 3.87 | 3.96 | 3.98 | 4.05 | 3.70 | 3.71 | 3.79 | 3.60 | 2.53 | 2.72 |
| 50 | 3.63 | 3.76 | 3.89 | 4.01 | 4.02 | 4.09 | 4.23 | 4.29 | 4.12 | 4.14 | 4.15 | 4.24 | 4.27 | 4.34 | 4.10 | 4.11 | 4.19 | 3.96 | 2.71 | 2.92 |
| 55 | / | 4.12 | 4.27 | 4.40 | 4.41 | 4.19 | 4.33 | 4.39 | 4.20 | 4.21 | 4.23 | 4.32 | 4.35 | 4.42 | 4.15 | 4.16 | 4.24 | 3.98 | 2.65 | 2.84 |
| 60 | / | / | 4.22 | 4.35 | 4.36 | 4.44 | 4.59 | 4.65 | 4.10 | 4.12 | 4.13 | 4.22 | 4.25 | 4.32 | 4.03 | 4.04 | 4.12 | 3.83 | 2.80 | 3.01 |

| | | | | | | | | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| COP | | | | | | | | | | | | | | | | | | | | |
| Ambient Temperature (°C) | | | | | | | | | | | | | | | | | | | | |
| Water outlet(°C) | -30 | -25 | -20 | -16 | -15 | -12 | -7 | -5 | 0 | 1 | 2 | 5 | 7 | 10 | 14 | 15 | 20 | 25 | 30 | 35 |
| 35 | 1.75 | 2.06 | 2.47 | 2.82 | 2.85 | 3.03 | 3.37 | 3.54 | 3.86 | 3.90 | 3.94 | 4.16 | 4.24 | 4.50 | 4.69 | 4.74 | 5.29 | 5.50 | 6.78 | 6.96 |
| 41 | 1.50 | 1.77 | 2.12 | 2.42 | 2.45 | 2.60 | 2.89 | 3.04 | 3.31 | 3.35 | 3.38 | 3.57 | 3.64 | 3.86 | 4.02 | 4.07 | 4.54 | 4.72 | 5.82 | 5.97 |
| 45 | 1.38 | 1.62 | 1.94 | 2.21 | 2.24 | 2.38 | 2.65 | 2.78 | 3.03 | 3.06 | 3.09 | 3.27 | 3.33 | 3.53 | 3.82 | 3.86 | 4.31 | 4.29 | 5.52 | 5.67 |
| 50 | 1.23 | 1.45 | 1.74 | 1.98 | 2.01 | 2.13 | 2.37 | 2.49 | 2.71 | 2.74 | 2.77 | 2.93 | 2.98 | 3.16 | 3.30 | 3.33 | 3.72 | 3.87 | 4.76 | 4.89 |
| 55 | / | 1.36 | 1.63 | 1.86 | 1.88 | 2.00 | 2.22 | 2.34 | 2.61 | 2.64 | 2.66 | 2.82 | 2.87 | 3.04 | 3.09 | 3.12 | 3.48 | 3.96 | 4.46 | 4.58 |
| 60 | / | / | 1.58 | 1.80 | 1.82 | 1.80 | 2.00 | 2.10 | 2.47 | 2.49 | 2.52 | 2.66 | 2.71 | 2.88 | 3.27 | 3.30 | 3.69 | 3.52 | 4.33 | 4.44 |



Performance Curve CH-HP23UIMPRM

90Hz 84Hz 78Hz 72Hz 66Hz 60Hz 54Hz 48Hz

Heating Capacity (kW)

| Water outlet(°C) | Ambient Temperature (°C) | | | | | | | | | | | | | | | | | | | |
|------------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -30 | -25 | -20 | -16 | -15 | -12 | -7 | -5 | 0 | 1 | 2 | 5 | 7 | 10 | 14 | 15 | 20 | 25 | 30 | 35 |
| 35 | 8.04 | 10.49 | 12.25 | 13.23 | 13.43 | 15.60 | 16.75 | 17.61 | 18.67 | 19.68 | 20.13 | 20.76 | 22.54 | 24.15 | 25.51 | 26.63 | 28.58 | 28.79 | 25.80 | 29.52 |
| 41 | 7.79 | 10.15 | 12.08 | 13.14 | 13.51 | 14.86 | 16.09 | 16.64 | 18.41 | 19.48 | 21.15 | 21.72 | 23.22 | 24.93 | 25.12 | 26.01 | 27.67 | 27.47 | 24.99 | 27.07 |
| 45 | 7.54 | 9.82 | 11.64 | 12.85 | 13.08 | 14.84 | 15.51 | 16.05 | 17.73 | 18.77 | 20.66 | 22.19 | 22.83 | 24.40 | 24.61 | 25.46 | 26.95 | 26.56 | 24.66 | 26.12 |
| 50 | 7.69 | 10.24 | 11.53 | 12.12 | 12.36 | 14.70 | 15.29 | 15.79 | 16.60 | 18.49 | 19.91 | 21.55 | 22.45 | 23.42 | 22.84 | 23.62 | 25.59 | 25.95 | 21.20 | 22.46 |
| 55 | — | 7.88 | 10.00 | 10.59 | 10.76 | 13.38 | 12.99 | 13.44 | 14.93 | 15.60 | 17.37 | 18.80 | 20.57 | 21.34 | 20.59 | 21.29 | 22.83 | 21.98 | 19.10 | 20.24 |
| 60 | — | — | 9.42 | 9.87 | 10.21 | 11.02 | 11.80 | 12.61 | 14.25 | 15.23 | 15.79 | 16.83 | 17.74 | 19.77 | 21.38 | 22.04 | 20.60 | 21.67 | 21.72 | 23.01 |

Power Input (kW)

| Water outlet(°C) | Ambient Temperature (°C) | | | | | | | | | | | | | | | | | | | |
|------------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | -30 | -25 | -20 | -16 | -15 | -12 | -7 | -5 | 0 | 1 | 2 | 5 | 7 | 10 | 14 | 15 | 20 | 25 | 30 | 35 |
| 35 | 4.69 | 4.76 | 4.81 | 4.84 | 4.88 | 4.87 | 4.93 | 4.96 | 4.98 | 5.05 | 5.11 | 5.14 | 5.20 | 5.22 | 5.29 | 5.31 | 5.34 | 5.10 | 4.10 | 4.23 |
| 41 | 5.15 | 5.23 | 5.29 | 5.32 | 5.34 | 5.36 | 5.42 | 5.46 | 5.48 | 5.55 | 5.62 | 5.65 | 5.72 | 5.74 | 5.43 | 5.45 | 5.48 | 5.21 | 4.10 | 4.23 |
| 45 | 5.67 | 5.75 | 5.82 | 5.85 | 5.88 | 5.89 | 5.96 | 6.01 | 6.03 | 6.11 | 6.18 | 6.22 | 6.30 | 6.32 | 5.97 | 5.99 | 6.03 | 5.73 | 4.51 | 4.65 |
| 50 | 6.28 | 6.37 | 6.44 | 6.48 | 6.51 | 6.53 | 6.57 | 6.60 | 6.23 | 6.31 | 6.39 | 6.43 | 6.51 | 6.53 | 6.14 | 6.16 | 6.20 | 5.86 | 4.50 | 4.64 |
| 55 | / | 6.44 | 6.51 | 6.55 | 6.57 | 6.59 | 6.19 | 6.24 | 6.26 | 6.34 | 6.42 | 6.46 | 6.54 | 6.56 | 6.14 | 6.16 | 6.20 | 5.81 | 4.32 | 4.46 |
| 60 | / | / | 6.54 | 6.58 | 6.59 | 6.60 | 6.14 | 6.19 | 6.21 | 6.29 | 6.37 | 6.41 | 6.49 | 6.51 | 6.59 | 6.60 | 6.05 | 6.19 | 5.07 | 5.23 |

COP

| Water outlet(°C) | Ambient Temperature (°C) | | | | | | | | | | | | | | | | | | | |
|------------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | -30 | -25 | -20 | -16 | -15 | -12 | -7 | -5 | 0 | 1 | 2 | 5 | 7 | 10 | 14 | 15 | 20 | 25 | 30 | 35 |
| 35 | 1.72 | 2.21 | 2.55 | 2.73 | 2.76 | 3.20 | 3.40 | 3.55 | 3.75 | 3.90 | 3.94 | 4.04 | 4.33 | 4.63 | 4.82 | 5.02 | 5.35 | 5.64 | 6.29 | 6.98 |
| 41 | 1.51 | 1.94 | 2.28 | 2.47 | 2.53 | 2.77 | 2.97 | 3.05 | 3.36 | 3.51 | 3.76 | 3.84 | 4.06 | 4.34 | 4.63 | 4.77 | 5.05 | 5.27 | 6.10 | 6.40 |
| 45 | 1.33 | 1.71 | 2.00 | 2.20 | 2.22 | 2.52 | 2.60 | 2.67 | 2.94 | 3.07 | 3.34 | 3.57 | 3.63 | 3.86 | 4.12 | 4.25 | 4.47 | 4.64 | 5.47 | 5.61 |
| 50 | 1.23 | 1.61 | 1.79 | 1.87 | 1.90 | 2.25 | 2.33 | 2.39 | 2.67 | 2.93 | 3.12 | 3.35 | 3.45 | 3.59 | 3.72 | 3.83 | 4.13 | 4.43 | 4.72 | 4.84 |
| 55 | / | 1.23 | 1.54 | 1.62 | 1.64 | 2.03 | 2.10 | 2.15 | 2.39 | 2.46 | 2.70 | 2.91 | 3.15 | 3.25 | 3.36 | 3.46 | 3.68 | 3.78 | 4.42 | 4.54 |
| 60 | / | / | 1.44 | 1.50 | 1.55 | 1.67 | 1.92 | 2.04 | 2.30 | 2.42 | 2.48 | 2.63 | 2.73 | 3.04 | 3.24 | 3.34 | 3.40 | 3.50 | 4.28 | 4.40 |