

## Subtype Hi-Therma Smart Hydro 8 10

|                     |  |
|---------------------|--|
| Certificate Holder  | Qingdao Hisense Hitachi Air-conditioning Systems Co.,Ltd.    |
| Address             | Qianwangang Road   |
| ZIP                 | 266555   |
| City                | Qingdao, Shandong  |
| Country             | CN   |
| Certification Body  | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH        |
| Subtype title       | Hi-Therma Smart Hydro 8 10                                   |
| Registration number | 011-1W1065   |
| Heat Pump Type      | Outdoor Air/Water  |
| Refrigerant         | R290   |
| Mass of Refrigerant | 0.98 kg  |
| Certification Date  | 03.07.2025   |
| Testing basis       | HP KEYMARK certification scheme rules rev. 14                |
| Testing laboratory  | Intertek Testing Services Shenzhen LTD. Guangzhou Branch, CN |

## Model AHW-080HCPB1/AHM-100HCWBAA

|                                     |                            |
|-------------------------------------|----------------------------|
| Model name                          | AHW-080HCPB1/AHM-100HCWBAA |
| Application                         | Heating (medium temp)      |
| Units                               | Indoor, Outdoor            |
| Climate zone (for heating)          | n/a                        |
| Reversibility                       | Yes                        |
| Cooling mode application (optional) | n/a                        |
| Any additional heat sources         | n/a                        |

## General data

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

## Outdoor Air/Water

## 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 | 8.00 kW         | 8.00 kW            |
| El input    | 1.57 kW         | 2.50 kW            |
| COP         | 5.10            | 3.20               |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 44 dB(A)        | 44 dB(A)           |
| Sound power level outdoor | 55 dB(A)        | 54 dB(A)           |

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 197 %           | 146 %              |
| Prated         | 7.80 kW         | 7.70 kW            |
| SCOP           | 5.01            | 3.73               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 6.98 kW         | 6.82 kW            |
| COP Tj = -7°C  | 3.20            | 2.34               |
| Cdh Tj = -7 °C | 0.900           | 0.900              |
| Pdh Tj = +2°C  | 4.34 kW         | 4.23 kW            |
| COP Tj = +2°C  | 4.79            | 3.61               |
| Cdh Tj = +2 °C | 0.900           | 0.900              |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 2.75 kW     | 2.79 kW     |
| COP Tj = +7°C                                       | 6.70        | 4.89        |
| Cdh Tj = +7 °C                                      | 0.900       | 0.900       |
| Pdh Tj = 12°C                                       | 2.47 kW     | 2.32 kW     |
| COP Tj = 12°C                                       | 8.29        | 6.30        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.900       |
| Pdh Tj = Tbiv                                       | 6.98 kW     | 6.82 kW     |
| COP Tj = Tbiv                                       | 3.20        | 2.34        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.89 kW     | 7.69 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.88        | 2.06        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900       | 0.900       |
| WTOL  | 75 °C       | 75 °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     | 0.01 kW     |
| Annual energy consumption Qhe                       | 3255 kWh    | 4274 kWh    |

## Model AHW-100HCPB1/AHM-100HCWBAA

|                                     |                            |
|-------------------------------------|----------------------------|
| Model name                          | AHW-100HCPB1/AHM-100HCWBAA |
| Application                         | Heating (medium temp)      |
| Units                               | Indoor, Outdoor            |
| Climate zone (for heating)          | n/a                        |
| Reversibility                       | Yes                        |
| Cooling mode application (optional) | n/a                        |
| Any additional heat sources         | n/a                        |

## General data

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

## Outdoor Air/Water

## 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 | 10.00 kW        | 10.00 kW           |
| El input    | 2.08 kW         | 3.23 kW            |
| COP         | 4.80            | 3.10               |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 44 dB(A)        | 44 dB(A)           |
| Sound power level outdoor | 56 dB(A)        | 55 dB(A)           |

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 192 %           | 142 %              |
| Prated         | 8.70 kW         | 8.70 kW            |
| SCOP           | 4.89            | 3.61               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 7.72 kW         | 7.70 kW            |
| COP Tj = -7°C  | 3.10            | 2.23               |
| Cdh Tj = -7 °C | 0.900           | 0.900              |
| Pdh Tj = +2°C  | 4.47 kW         | 4.62 kW            |
| COP Tj = +2°C  | 4.67            | 3.41               |
| Cdh Tj = +2 °C | 0.900           | 0.900              |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 2.98 kW     | 3.27 kW     |
| COP Tj = +7°C                                       | 6.61        | 4.99        |
| Cdh Tj = +7 °C                                      | 0.900       | 0.900       |
| Pdh Tj = 12°C                                       | 2.28 kW     | 2.39 kW     |
| COP Tj = 12°C                                       | 7.95        | 6.53        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.900       |
| Pdh Tj = Tbiv                                       | 7.72 kW     | 7.70 kW     |
| COP Tj = Tbiv                                       | 3.10        | 2.23        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.30 kW     | 8.58 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.84        | 1.96        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900       | 0.900       |
| WTOL  | 75 °C       | 75 °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                          | 0.40 kW     | 0.12 kW     |
| Annual energy consumption Qhe                       | 3690 kWh    | 4976 kWh    |