

## Subtype Hi-Therma Smart M 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 M 8 10                                    |
| Registration number | 011-1W0968  |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R290  |
| Mass of Refrigerant | 0.98 kg   |
| Certification Date  | 14.02.2025  |
| Testing basis       | HP KEYMARK certification scheme rules rev. 14             |

## Model AHZ-080HCPB1A

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | AHZ-080HCPB1A         |
| Application                         | Heating (medium temp) |
| Units                               | 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 outdoor | 54 dB(A)        | 53 dB(A)           |

### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 199 %           | 154 %              |
| Prated         | 7.80 kW         | 7.80 kW            |
| SCOP           | 5.05            | 3.93               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 6.97 kW         | 6.92 kW            |
| COP Tj = -7°C  | 3.29            | 2.43               |
| Cdh Tj = -7 °C | 0.900           | 0.900              |
| Pdh Tj = +2°C  | 4.26 kW         | 4.21 kW            |
| COP Tj = +2°C  | 4.70            | 3.83               |
| Cdh Tj = +2 °C | 0.900           | 0.900              |
| Pdh Tj = +7°C  | 2.69 kW         | 3.01 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 7.04        | 5.24        |
| Cdh Tj = +7 °C                                      | 0.900       | 0.900       |
| Pdh Tj = 12°C                                       | 2.39 kW     | 2.38 kW     |
| COP Tj = 12°C                                       | 8.35        | 6.42        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.900       |
| Pdh Tj = Tbiv                                       | 6.97 kW     | 6.92 kW     |
| COP Tj = Tbiv                                       | 3.29        | 2.43        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.85 kW     | 7.82 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90        | 2.16        |
| 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     | 0.00 kW     |
| Annual energy consumption Qhe                       | 3193 kWh    | 4105 kWh    |

## Model AHZ-100HCPB1A

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | AHZ-100HCPB1A         |
| Application                         | Heating (medium temp) |
| Units                               | 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 outdoor | 55 dB(A)        | 54 dB(A)           |

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 197 %           | 149 %              |
| Prated         | 8.80 kW         | 8.90 kW            |
| SCOP           | 5.00            | 3.81               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 7.86 kW         | 7.94 kW            |
| COP Tj = -7°C  | 3.12            | 2.36               |
| Cdh Tj = -7 °C | 0.900           | 0.900              |
| Pdh Tj = +2°C  | 4.61 kW         | 4.77 kW            |
| COP Tj = +2°C  | 4.69            | 3.67               |
| Cdh Tj = +2 °C | 0.900           | 0.900              |
| Pdh Tj = +7°C  | 3.00 kW         | 3.10 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 7.04        | 5.14        |
| Cdh Tj = +7 °C                                      | 0.900       | 0.900       |
| Pdh Tj = 12°C                                       | 2.51 kW     | 2.22 kW     |
| COP Tj = 12°C                                       | 8.62        | 6.25        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.900       |
| Pdh Tj = Tbiv                                       | 7.86 kW     | 7.94 kW     |
| COP Tj = Tbiv                                       | 3.12        | 2.36        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.62 kW     | 8.66 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.81        | 2.02        |
| 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                          | 0.18 kW     | 0.24 kW     |
| Annual energy consumption Qhe                       | 3636 kWh    | 4827 kWh    |