

## Subtype MDV A series 8 10 kW

|                     |  |
|---------------------|--|
| Certificate Holder  | GD Midea Heating & Ventilating Equipment Co., Ltd. |
| Address             | Penglai Industry Road                              |
| ZIP                 | 528311   |
| City                | Beijiao, Shunde, Foshan                            |
| Country             | CN   |
| Certification Body  | BRE Global Limited                                 |
| Subtype title       | MDV A series 8 10 kW                               |
| Registration number | 041-K007-24  |
| Heat Pump Type      | Outdoor Air/Water                                  |
| Refrigerant         | R32  |
| Mass of Refrigerant | 1.65 kg  |
| Certification Date  | 13.11.2023   |
| Testing basis       | Heat Pump KEYMARK certification Scheme rules v08   |

## Model AHPS-V10W/D2N8-B+AHB-A100/C\*\*\*\*GN8-B

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Model name                          | AHPS-V10W/D2N8-B+AHB-A100/C****GN8-B |
| Application                         | Heating (medium temp)                |
| Units                               | Indoor, Outdoor                      |
| Climate zone (for heating)          | Warmer Climate, Colder Climate       |
| 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 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 42 dB(A)        | 42 dB(A)           |
| Sound power level outdoor | 60 dB(A)        | 60 dB(A)           |

#### EN 14825 | Average Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| $\eta_s$        | 205 %           | 137 %              |
| Prated          | 9.17 kW         | 7.67 kW            |
| SCOP            | 5.19            | 3.49               |
| Tbiv            | -7 °C           | -7 °C              |
| TOL             | -10 °C          | -10 °C             |
| Pdh Tj = -7°C   | 8.11 kW         | 6.78 kW            |
| COP Tj = -7°C   | 3.23            | 2.24               |
| Cdh Tj = -7 °C  | 0.9             | 0.9                |
| Pdh Tj = +2°C   | 5.18 kW         | 4.29 kW            |
| COP Tj = +2°C   | 5.01            | 3.42               |
| Cdh Tj = +2 °C  | 0.9             | 0.9                |
| Pdh Tj = +7°C   | 3.32 kW         | 2.77 kW            |
| COP Tj = +7°C   | 7.08            | 4.52               |
| Cdh Tj = +7 °C  | 0.9             | 0.9                |
| Pdh Tj = 12°C   | 1.65 kW         | 1.58 kW            |
| COP Tj = 12°C   | 8.58            | 5.68               |
| Cdh Tj = +12 °C | 0.9             | 0.9                |
| Pdh Tj = Tbiv   | 8.11 kW         | 6.78 kW            |

|   |             |             |
|---|-------------|-------------|
| COP $T_j = T_{biv}$   | 3.23        | 2.24        |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 7.4 kW      | 5.39 kW     |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 2.96        | 1.83        |
| WTOL  | 65 °C       | 65 °C       |
| P <sub>off</sub>  | 14 W        | 14 W        |
| PTO   | 24 W        | 24 W        |
| PSB   | 14 W        | 14 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input                              | Electricity | Electricity |
| Supplementary Heater: PSUP  | 1.76 kW     | 2.28 kW     |
| Annual energy consumption Q <sub>he</sub>                               | 3647 kWh    | 4539 kWh    |

#### EN 12102-1 | Colder Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 42 dB(A)        | 42 dB(A)           |
| Sound power level outdoor | 60 dB(A)        | 60 dB(A)           |

#### EN 14825 | Colder Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 170 %           | 116 %              |
| Prated  | 7.75 kW         | 6.71 kW            |
| SCOP  | 4.32            | 2.99               |
| $T_{biv}$   | -15 °C          | -15 °C             |
| TOL   | -22 °C          | -22 °C             |
| $P_{dh} T_j = -7^{\circ}C$  | 4.83 kW         | 4.27 kW            |
| COP $T_j = -7^{\circ}C$   | 3.6             | 2.54               |
| $C_{dh} T_j = -7^{\circ}C$  | 0.9             | 0.9                |
| $P_{dh} T_j = +2^{\circ}C$  | 2.94 kW         | 2.57 kW            |
| COP $T_j = +2^{\circ}C$   | 5.26            | 3.51               |
| $C_{dh} T_j = +2^{\circ}C$  | 0.9             | 0.9                |
| $P_{dh} T_j = +7^{\circ}C$  | 1.92 kW         | 1.66 kW            |
| COP $T_j = +7^{\circ}C$   | 7.08            | 4.37               |
| $C_{dh} T_j = +7^{\circ}C$  | 0.9             | 0.9                |
| $P_{dh} T_j = 12^{\circ}C$  | 1.66 kW         | 1.48 kW            |
| COP $T_j = 12^{\circ}C$   | 7.96            | 5.96               |
| $C_{dh} T_j = +12^{\circ}C$   | 0.9             | 0.9                |
| $P_{dh} T_j = T_{biv}$  | 6.32 kW         | 5.48 kW            |
| COP $T_j = T_{biv}$   | 2.64            | 2                  |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 4.63 kW         | 2.8 kW             |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 1.97            | 1.22               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 14 W            | 14 W               |

|  |             |             |
|--|-------------|-------------|
| PTO  | 24 W        | 24 W        |
| PSB  | 14 W        | 14 W        |
| PCK  | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input     | Electricity | Electricity |
| Supplementary Heater: PSUP                     | 3.13 kW     | 3.91 kW     |
| Annual energy consumption Q <sub>he</sub>      | 4424 kWh    | 5540 kWh    |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL | 6.32        | 5.48        |
| COP T <sub>j</sub> = -15°C (if TOL             | 2.64        | 2           |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C        | 0.9         | 0.9         |

#### EN 12102-1 | Warmer Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 42 dB(A)        | 42 dB(A)           |
| Sound power level outdoor | 60 dB(A)        | 60 dB(A)           |

#### EN 14825 | Warmer Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η <sub>s</sub>  | 279 %           | 180 %              |
| Prated  | 8.58 kW         | 8.63 kW            |
| SCOP  | 7.12            | 4.58               |
| T <sub>biv</sub>  | 7 °C            | 7 °C               |
| TOL   | 2 °C            | 2 °C               |
| P <sub>dh</sub> T <sub>j</sub> = +2°C   | 8.44 kW         | 8.06 kW            |
| COP T <sub>j</sub> = +2°C   | 3.84            | 2.59               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = +7°C   | 5.52 kW         | 5.55 kW            |
| COP T <sub>j</sub> = +7°C   | 6.18            | 4.1                |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = 12°C   | 2.62 kW         | 2.53 kW            |
| COP T <sub>j</sub> = 12°C   | 9.04            | 5.82               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C   | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>   | 5.52 kW         | 5.55 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>   | 6.18            | 4.1                |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 8.44 kW         | 8.16 kW            |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 3.84            | 2.61               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 14 W            | 14 W               |
| PTO   | 24 W            | 24 W               |
| PSB   | 14 W            | 14 W               |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input  | Electricity     | Electricity        |
| Supplementary Heater: PSUP  | 0.14 kW         | 0.48 kW            |
| Annual energy consumption Q <sub>he</sub>   | 1628 kWh        | 2516 kWh           |

## Model AHPS-V8W/D2N8-B+AHB-A100/C\*\*\*\*GN8-B

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Model name                          | AHPS-V8W/D2N8-B+AHB-A100/C****GN8-B |
| Application                         | Heating (medium temp)               |
| Units                               | Indoor, Outdoor                     |
| Climate zone (for heating)          | Warmer Climate, Colder Climate      |
| 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 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 42 dB(A)        | 42 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

## EN 14825 | Average Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| $\eta_s$        | 205 %           | 132 %              |
| Prated          | 8.12 kW         | 6.6 kW             |
| SCOP            | 5.21            | 3.36               |
| Tbiv            | -7 °C           | -7 °C              |
| TOL             | -10 °C          | -10 °C             |
| Pdh Tj = -7°C   | 7.19 kW         | 5.84 kW            |
| COP Tj = -7°C   | 3.35            | 2.16               |
| Cdh Tj = -7 °C  | 0.9             | 0.9                |
| Pdh Tj = +2°C   | 4.65 kW         | 3.76 kW            |
| COP Tj = +2°C   | 5.09            | 3.3                |
| Cdh Tj = +2 °C  | 0.9             | 0.9                |
| Pdh Tj = +7°C   | 2.9 kW          | 2.43 kW            |
| COP Tj = +7°C   | 6.82            | 4.34               |
| Cdh Tj = +7 °C  | 0.9             | 0.9                |
| Pdh Tj = 12°C   | 1.63 kW         | 1.4 kW             |
| COP Tj = 12°C   | 8.35            | 5.33               |
| Cdh Tj = +12 °C | 0.9             | 0.9                |
| Pdh Tj = Tbiv   | 7.19 kW         | 5.84 kW            |

|   |             |             |
|---|-------------|-------------|
| COP $T_j = T_{biv}$   | 3.35        | 2.16        |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 6.45 kW     | 4.91 kW     |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 3.04        | 1.84        |
| WTOL  | 65 °C       | 65 °C       |
| P <sub>off</sub>  | 14 W        | 14 W        |
| PTO   | 24 W        | 24 W        |
| PSB   | 14 W        | 14 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input                              | Electricity | Electricity |
| Supplementary Heater: PSUP  | 1.68 kW     | 1.69 kW     |
| Annual energy consumption Q <sub>he</sub>                               | 3223 kWh    | 4056 kWh    |

#### EN 12102-1 | Colder Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 42 dB(A)        | 42 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

#### EN 14825 | Colder Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 170 %           | 112 %              |
| Prated  | 6.98 kW         | 5.78 kW            |
| SCOP  | 4.32            | 2.88               |
| $T_{biv}$   | -15 °C          | -15 °C             |
| TOL   | -22 °C          | -22 °C             |
| $P_{dh} T_j = -7^{\circ}C$  | 4.46 kW         | 3.86 kW            |
| COP $T_j = -7^{\circ}C$   | 3.66            | 2.48               |
| $C_{dh} T_j = -7^{\circ}C$  | 0.9             | 0.9                |
| $P_{dh} T_j = +2^{\circ}C$  | 2.7 kW          | 2.21 kW            |
| COP $T_j = +2^{\circ}C$   | 5.2             | 3.35               |
| $C_{dh} T_j = +2^{\circ}C$  | 0.9             | 0.9                |
| $P_{dh} T_j = +7^{\circ}C$  | 1.66 kW         | 1.44 kW            |
| COP $T_j = +7^{\circ}C$   | 6.53            | 4.11               |
| $C_{dh} T_j = +7^{\circ}C$  | 0.9             | 0.9                |
| $P_{dh} T_j = 12^{\circ}C$  | 1.66 kW         | 1.47 kW            |
| COP $T_j = 12^{\circ}C$   | 7.96            | 5.92               |
| $C_{dh} T_j = +12^{\circ}C$   | 0.9             | 0.9                |
| $P_{dh} T_j = T_{biv}$  | 5.69 kW         | 4.71 kW            |
| COP $T_j = T_{biv}$   | 2.83            | 1.9                |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 4.06 kW         | 2.8 kW             |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 1.95            | 1.22               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 14 W            | 14 W               |

|  |             |             |
|--|-------------|-------------|
| PTO  | 24 W        | 24 W        |
| PSB  | 14 W        | 14 W        |
| PCK  | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input     | Electricity | Electricity |
| Supplementary Heater: PSUP                     | 2.91 kW     | 2.99 kW     |
| Annual energy consumption Q <sub>he</sub>      | 3978 kWh    | 4950 kWh    |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL | 5.69        | 4.71        |
| COP T <sub>j</sub> = -15°C (if TOL             | 2.83        | 1.9         |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C        | 0.9         | 0.9         |

#### EN 12102-1 | Warmer Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 42 dB(A)        | 42 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

#### EN 14825 | Warmer Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η <sub>s</sub>  | 273 %           | 177 %              |
| Prated  | 8.12 kW         | 8.37 kW            |
| SCOP  | 6.99            | 4.5                |
| T <sub>biv</sub>  | 7 °C            | 7 °C               |
| TOL   | 2 °C            | 2 °C               |
| P <sub>dh</sub> T <sub>j</sub> = +2°C   | 7.57 kW         | 7.55 kW            |
| COP T <sub>j</sub> = +2°C   | 3.98            | 2.59               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = +7°C   | 5.22 kW         | 5.38 kW            |
| COP T <sub>j</sub> = +7°C   | 6.26            | 4.01               |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = 12°C   | 2.45 kW         | 2.32 kW            |
| COP T <sub>j</sub> = 12°C   | 9.02            | 5.55               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C   | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>   | 5.22 kW         | 5.38 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>   | 6.26            | 4.01               |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 7.57 kW         | 7.55 kW            |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 3.98            | 2.59               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 14 W            | 14 W               |
| PTO   | 24 W            | 24 W               |
| PSB   | 14 W            | 14 W               |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input  | Electricity     | Electricity        |
| Supplementary Heater: PSUP  | 0.55 kW         | 0.82 kW            |
| Annual energy consumption Q <sub>he</sub>   | 1569 kWh        | 2485 kWh           |

## Model AHPM-V10W/D2N8-B\*\*\*\*

|                                     |                                |
|-------------------------------------|--------------------------------|
| Model name                          | AHPM-V10W/D2N8-B****           |
| Application                         | Heating (medium temp)          |
| Units                               | Outdoor                        |
| Climate zone (for heating)          | Warmer Climate, Colder Climate |
| 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 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 60 dB(A)        | 60 dB(A)           |

## EN 14825 | Average Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| $\eta_s$        | 205 %           | 137 %              |
| Prated          | 9.17 kW         | 7.67 kW            |
| SCOP            | 5.19            | 3.49               |
| Tbiv            | -7 °C           | -7 °C              |
| TOL             | -10 °C          | -10 °C             |
| Pdh Tj = -7°C   | 8.11 kW         | 6.78 kW            |
| COP Tj = -7°C   | 3.23            | 2.24               |
| Cdh Tj = -7 °C  | 0.9             | 0.9                |
| Pdh Tj = +2°C   | 5.18 kW         | 4.29 kW            |
| COP Tj = +2°C   | 5.01            | 3.42               |
| Cdh Tj = +2 °C  | 0.9             | 0.9                |
| Pdh Tj = +7°C   | 3.32 kW         | 2.77 kW            |
| COP Tj = +7°C   | 7.08            | 4.52               |
| Cdh Tj = +7 °C  | 0.9             | 0.9                |
| Pdh Tj = 12°C   | 1.65 kW         | 1.58 kW            |
| COP Tj = 12°C   | 8.58            | 5.68               |
| Cdh Tj = +12 °C | 0.9             | 0.9                |
| Pdh Tj = Tbiv   | 8.11 kW         | 6.78 kW            |
| COP Tj = Tbiv   | 3.23            | 2.24               |



|   |             |             |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.4 kW      | 5.39 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.96        | 1.83        |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 14 W        | 14 W        |
| PTO   | 24 W        | 24 W        |
| PSB   | 14 W        | 14 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.76 kW     | 2.28 kW     |
| Annual energy consumption Qhe                       | 3647 kWh    | 4539 kWh    |

#### EN 12102-1 | Colder Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 60 dB(A)        | 60 dB(A)           |

#### EN 14825 | Colder Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 170 %           | 116 %              |
| Prated  | 7.75 kW         | 6.71 kW            |
| SCOP  | 4.32            | 2.99               |
| Tbiv  | -15 °C          | -15 °C             |
| TOL   | -22 °C          | -22 °C             |
| Pdh Tj = -7°C                                       | 4.83 kW         | 4.27 kW            |
| COP Tj = -7°C                                       | 3.6             | 2.54               |
| Cdh Tj = -7 °C                                      | 0.9             | 0.9                |
| Pdh Tj = +2°C                                       | 2.94 kW         | 2.57 kW            |
| COP Tj = +2°C                                       | 5.26            | 3.51               |
| Cdh Tj = +2 °C                                      | 0.9             | 0.9                |
| Pdh Tj = +7°C                                       | 1.92 kW         | 1.66 kW            |
| COP Tj = +7°C                                       | 7.08            | 4.37               |
| Cdh Tj = +7 °C                                      | 0.9             | 0.9                |
| Pdh Tj = 12°C                                       | 1.66 kW         | 1.48 kW            |
| COP Tj = 12°C                                       | 7.96            | 5.96               |
| Cdh Tj = +12 °C                                     | 0.9             | 0.9                |
| Pdh Tj = Tbiv                                       | 6.32 kW         | 5.48 kW            |
| COP Tj = Tbiv                                       | 2.64            | 2                  |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 4.63 kW         | 2.8 kW             |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.97            | 1.22               |
| WTOL  | 65 °C           | 65 °C              |
| Poff  | 14 W            | 14 W               |
| PTO   | 24 W            | 24 W               |
| PSB   | 14 W            | 14 W               |

|  |             |             |
|--|-------------|-------------|
| PCK  | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input     | Electricity | Electricity |
| Supplementary Heater: PSUP                     | 3.13 kW     | 3.91 kW     |
| Annual energy consumption Q <sub>he</sub>      | 4424 kWh    | 5540 kWh    |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL | 6.32        | 5.48        |
| COP T <sub>j</sub> = -15°C (if TOL             | 2.64        | 2           |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C        | 0.9         | 0.9         |

#### EN 12102-1 | Warmer Climate

|                           |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level outdoor | 60 dB(A)        | 60 dB(A)           |

#### EN 14825 | Warmer Climate

|   |                 |                    |
|---|-----------------|--------------------|
|   | Low temperature | Medium temperature |
| η <sub>s</sub>  | 279 %           | 180 %              |
| Prated  | 8.58 kW         | 8.63 kW            |
| SCOP  | 7.12            | 4.58               |
| T <sub>biv</sub>  | 7 °C            | 7 °C               |
| TOL   | 2 °C            | 2 °C               |
| P <sub>dh</sub> T <sub>j</sub> = +2°C   | 8.44 kW         | 8.06 kW            |
| COP T <sub>j</sub> = +2°C   | 3.84            | 2.59               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = +7°C   | 5.52 kW         | 5.55 kW            |
| COP T <sub>j</sub> = +7°C   | 6.18            | 4.1                |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = 12°C   | 2.62 kW         | 2.53 kW            |
| COP T <sub>j</sub> = 12°C   | 9.04            | 5.82               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C   | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>   | 5.52 kW         | 5.55 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>   | 6.18            | 4.1                |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 8.44 kW         | 8.16 kW            |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 3.84            | 2.61               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 14 W            | 14 W               |
| PTO   | 24 W            | 24 W               |
| PSB   | 14 W            | 14 W               |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input  | Electricity     | Electricity        |
| Supplementary Heater: PSUP  | 0.14 kW         | 0.48 kW            |
| Annual energy consumption Q <sub>he</sub>   | 1628 kWh        | 2516 kWh           |

## Model AHPM-V8W/D2N8-B\*\*\*\*

|                                     |                                |
|-------------------------------------|--------------------------------|
| Model name                          | AHPM-V8W/D2N8-B****            |
| Application                         | Heating (medium temp)          |
| Units                               | Outdoor                        |
| Climate zone (for heating)          | Warmer Climate, Colder Climate |
| 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 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

### EN 14825 | Average Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| $\eta_s$        | 205 %           | 132 %              |
| Prated          | 8.12 kW         | 6.6 kW             |
| SCOP            | 5.21            | 3.36               |
| Tbiv            | -7 °C           | -7 °C              |
| TOL             | -10 °C          | -10 °C             |
| Pdh Tj = -7°C   | 7.19 kW         | 5.84 kW            |
| COP Tj = -7°C   | 3.35            | 2.16               |
| Cdh Tj = -7 °C  | 0.9             | 0.9                |
| Pdh Tj = +2°C   | 4.65 kW         | 3.76 kW            |
| COP Tj = +2°C   | 5.09            | 3.3                |
| Cdh Tj = +2 °C  | 0.9             | 0.9                |
| Pdh Tj = +7°C   | 2.9 kW          | 2.43 kW            |
| COP Tj = +7°C   | 6.82            | 4.34               |
| Cdh Tj = +7 °C  | 0.9             | 0.9                |
| Pdh Tj = 12°C   | 1.63 kW         | 1.4 kW             |
| COP Tj = 12°C   | 8.35            | 5.33               |
| Cdh Tj = +12 °C | 0.9             | 0.9                |
| Pdh Tj = Tbiv   | 7.19 kW         | 5.84 kW            |
| COP Tj = Tbiv   | 3.35            | 2.16               |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.45 kW     | 4.91 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.04        | 1.84        |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 14 W        | 14 W        |
| PTO   | 24 W        | 24 W        |
| PSB   | 14 W        | 14 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.68 kW     | 1.69 kW     |
| Annual energy consumption Qhe                       | 3223 kWh    | 4056 kWh    |

#### EN 12102-1 | Colder Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

#### EN 14825 | Colder Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 170 %           | 112 %              |
| Prated  | 6.98 kW         | 5.78 kW            |
| SCOP  | 4.32            | 2.88               |
| Tbiv  | -15 °C          | -15 °C             |
| TOL   | -22 °C          | -22 °C             |
| Pdh Tj = -7°C                                       | 4.46 kW         | 3.86 kW            |
| COP Tj = -7°C                                       | 3.66            | 2.48               |
| Cdh Tj = -7 °C                                      | 0.9             | 0.9                |
| Pdh Tj = +2°C                                       | 2.7 kW          | 2.21 kW            |
| COP Tj = +2°C                                       | 5.2             | 3.35               |
| Cdh Tj = +2 °C                                      | 0.9             | 0.9                |
| Pdh Tj = +7°C                                       | 1.66 kW         | 1.44 kW            |
| COP Tj = +7°C                                       | 6.53            | 4.11               |
| Cdh Tj = +7 °C                                      | 0.9             | 0.9                |
| Pdh Tj = 12°C                                       | 1.66 kW         | 1.47 kW            |
| COP Tj = 12°C                                       | 7.96            | 5.92               |
| Cdh Tj = +12 °C                                     | 0.9             | 0.9                |
| Pdh Tj = Tbiv                                       | 5.69 kW         | 4.71 kW            |
| COP Tj = Tbiv                                       | 2.83            | 1.9                |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 4.06 kW         | 2.8 kW             |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.95            | 1.22               |
| WTOL  | 65 °C           | 65 °C              |
| Poff  | 14 W            | 14 W               |
| PTO   | 24 W            | 24 W               |
| PSB   | 14 W            | 14 W               |

|  |             |             |
|--|-------------|-------------|
| PCK  | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input     | Electricity | Electricity |
| Supplementary Heater: PSUP                     | 2.91 kW     | 2.99 kW     |
| Annual energy consumption Q <sub>he</sub>      | 3978 kWh    | 4950 kWh    |
| P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL | 5.69        | 4.71        |
| COP T <sub>j</sub> = -15°C (if TOL             | 2.83        | 1.9         |
| C <sub>dh</sub> T <sub>j</sub> = -15 °C        | 0.9         | 0.9         |

#### EN 12102-1 | Warmer Climate

|                           |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

#### EN 14825 | Warmer Climate

|   |                 |                    |
|---|-----------------|--------------------|
|   | Low temperature | Medium temperature |
| η <sub>s</sub>  | 273 %           | 177 %              |
| Prated  | 8.12 kW         | 8.37 kW            |
| SCOP  | 6.99            | 4.5                |
| T <sub>biv</sub>  | 7 °C            | 7 °C               |
| TOL   | 2 °C            | 2 °C               |
| P <sub>dh</sub> T <sub>j</sub> = +2°C   | 7.57 kW         | 7.55 kW            |
| COP T <sub>j</sub> = +2°C   | 3.98            | 2.59               |
| C <sub>dh</sub> T <sub>j</sub> = +2 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = +7°C   | 5.22 kW         | 5.38 kW            |
| COP T <sub>j</sub> = +7°C   | 6.26            | 4.01               |
| C <sub>dh</sub> T <sub>j</sub> = +7 °C  | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = 12°C   | 2.45 kW         | 2.32 kW            |
| COP T <sub>j</sub> = 12°C   | 9.02            | 5.55               |
| C <sub>dh</sub> T <sub>j</sub> = +12 °C   | 0.9             | 0.9                |
| P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>   | 5.22 kW         | 5.38 kW            |
| COP T <sub>j</sub> = T <sub>biv</sub>   | 6.26            | 4.01               |
| P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 7.57 kW         | 7.55 kW            |
| COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 3.98            | 2.59               |
| WTOL  | 65 °C           | 65 °C              |
| P <sub>off</sub>  | 14 W            | 14 W               |
| PTO   | 24 W            | 24 W               |
| PSB   | 14 W            | 14 W               |
| PCK   | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input  | Electricity     | Electricity        |
| Supplementary Heater: PSUP  | 0.55 kW         | 0.82 kW            |
| Annual energy consumption Q <sub>he</sub>   | 1569 kWh        | 2485 kWh           |