

## Subtype Monoblock A2W Heat Pump 12kw R290

|                     |   |
|---------------------|---|
| Certificate Holder  | Foshan Shunde Zealux Electrical Appliances Co., Ltd.  |
| Address             | No.2-8, No.9 Road, Science and Technology zone, Xingtan Industrial Park, Xingtan Town, Shunde District, Foshan City |
| ZIP                 | 528325  |
| City                | Guangdong   |
| Country             | CN  |
| Certification Body  | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH   |
| Subtype title       | Monoblock A2W Heat Pump 12kw R290   |
| Registration number | 011-1W0814  |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R290  |
| Mass of Refrigerant | 1 kg  |
| Certification Date  | 18.07.2024  |
| Testing basis       | HP KEYMARK certification scheme rules V14   |

## Model XAH12Csi9

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | XAH12Csi9             |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | n/a                   |
| 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 | 11.95 kW        | 11.97 kW           |
| El input    | 2.70 kW         | 4.10 kW            |
| COP         | 4.40            | 2.90               |

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 191 %           | 142 %              |
| Prated         | 9.59 kW         | 8.61 kW            |
| SCOP           | 4.86            | 3.62               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 8.48 kW         | 7.61 kW            |
| COP Tj = -7°C  | 3.24            | 2.29               |
| Cdh Tj = -7 °C | 0.980           | 0.980              |
| Pdh Tj = +2°C  | 5.09 kW         | 4.52 kW            |
| COP Tj = +2°C  | 4.90            | 3.69               |
| Cdh Tj = +2 °C | 0.940           | 0.950              |
| Pdh Tj = +7°C  | 4.40 kW         | 4.18 kW            |
| COP Tj = +7°C  | 6.88            | 5.00               |

|   |             |             |
|---|-------------|-------------|
| Cdh Tj = +7 °C                                      | 0.910       | 0.930       |
| Pdh Tj = 12°C                                       | 5.18 kW     | 4.96 kW     |
| COP Tj = 12°C                                       | 9.46        | 7.15        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.910       |
| Pdh Tj = Tbiv                                       | 8.48 kW     | 7.61 kW     |
| COP Tj = Tbiv                                       | 3.24        | 2.29        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.17 kW     | 7.33 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.96        | 2.07        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.980       | 0.980       |
| WTOL  | 75 °C       | 75 °C       |
| Poff  | 5 W         | 5 W         |
| PTO   | 59 W        | 59 W        |
| PSB   | 5 W         | 5 W         |
| PCK   | 32 W        | 32 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.42 kW     | 1.28 kW     |
| Annual energy consumption Qhe                       | 4076 kWh    | 4732 kWh    |

## Model ALSAVO HEAT 12i9

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | ALSAVO HEAT 12i9      |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | n/a                   |
| 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 | 11.95 kW        | 11.97 kW           |
| El input    | 2.70 kW         | 4.10 kW            |
| COP         | 4.40            | 2.90               |

## EN 12102-1 | Average Climate

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

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 191 %           | 142 %              |
| Prated         | 9.59 kW         | 8.61 kW            |
| SCOP           | 4.86            | 3.62               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 8.48 kW         | 7.61 kW            |
| COP Tj = -7°C  | 3.24            | 2.29               |
| Cdh Tj = -7 °C | 0.980           | 0.980              |
| Pdh Tj = +2°C  | 5.09 kW         | 4.52 kW            |
| COP Tj = +2°C  | 4.90            | 3.69               |
| Cdh Tj = +2 °C | 0.940           | 0.950              |
| Pdh Tj = +7°C  | 4.40 kW         | 4.18 kW            |
| COP Tj = +7°C  | 6.88            | 5.00               |

|   |             |             |
|---|-------------|-------------|
| Cdh Tj = +7 °C                                      | 0.910       | 0.930       |
| Pdh Tj = 12°C                                       | 5.18 kW     | 4.96 kW     |
| COP Tj = 12°C                                       | 9.46        | 7.15        |
| Cdh Tj = +12 °C                                     | 0.900       | 0.910       |
| Pdh Tj = Tbiv                                       | 8.48 kW     | 7.61 kW     |
| COP Tj = Tbiv                                       | 3.24        | 2.29        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.17 kW     | 7.33 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.96        | 2.07        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.980       | 0.980       |
| WTOL  | 75 °C       | 75 °C       |
| Poff  | 5 W         | 5 W         |
| PTO   | 59 W        | 59 W        |
| PSB   | 5 W         | 5 W         |
| PCK   | 32 W        | 32 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.42 kW     | 1.28 kW     |
| Annual energy consumption Qhe                       | 4076 kWh    | 4732 kWh    |