

## Subtype OERTLI MONO AWHP 11

|                     |   |
|---------------------|---|
| Certificate Holder  | BDR Thermea FR (OERTLI)   |
| Address             | 57 rue de la Gare   |
| ZIP                 | 67580   |
| City                | Mertzwiller   |
| Country             | FR  |
| Certification Body  | SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise) |
| Subtype title       | OERTLI MONO AWHP 11   |
| Registration number | 037-0045-20   |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R410A   |
| Mass of Refrigerant | 3.3 kg  |
| Certification Date  | 30.01.2020  |
| Testing basis       | HP Keymark scheme rules rev. no. 7  |
| Testing laboratory  | SZU Brno, CZ  |

## Model MONO AWHP 11 MR

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | MONO AWHP 11 MR       |
| 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 |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.20 kW        | 11.20 kW           |
| El input    | 2.47 kW         | 4.15 kW            |
| COP         | 4.54            | 2.70               |

### 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 |
|----------------|-----------------|--------------------|
| $\eta_s$       | 174 %           | 135 %              |
| Prated         | 10.00 kW        | 10.00 kW           |
| SCOP           | 4.41            | 3.44               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -20 °C          | -20 °C             |
| Pdh Tj = -7°C  | 8.90 kW         | 9.00 kW            |
| COP Tj = -7°C  | 3.17            | 1.99               |
| Cdh Tj = -7 °C | 0.995           | 0.997              |
| Pdh Tj = +2°C  | 5.40 kW         | 5.70 kW            |
| COP Tj = +2°C  | 4.23            | 3.30               |
| Cdh Tj = +2 °C | 0.988           | 0.991              |
| Pdh Tj = +7°C  | 3.60 kW         | 4.70 kW            |
| COP Tj = +7°C  | 5.33            | 4.86               |
| Cdh Tj = +7 °C | 0.978           | 0.984              |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = 12°C                                       | 4.30 kW     | 4.10 kW     |
| COP Tj = 12°C                                       | 7.66        | 6.35        |
| Cdh Tj = +12 °C                                     | 0.973       | 0.977       |
| Pdh Tj = Tbiv                                       | 8.90 kW     | 9.00 kW     |
| COP Tj = Tbiv                                       | 3.17        | 1.99        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.35 kW     | 8.42 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.76        | 1.87        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.970       | 0.970       |
| WTOL  | 60 °C       | 60 °C       |
| Poff  | 15 W        | 15 W        |
| PTO   | 15 W        | 15 W        |
| PSB   | 15 W        | 15 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.65 kW     | 1.58 kW     |
| Annual energy consumption Qhe                       | 4681 kWh    | 5998 kWh    |

## Model MONO AWHP 11 TR

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | MONO AWHP 11 TR       |
| 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     | 3x400V 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 |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.20 kW        | 11.20 kW           |
| El input    | 2.47 kW         | 4.15 kW            |
| COP         | 4.54            | 2.70               |

### 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 |
|----------------|-----------------|--------------------|
| $\eta_s$       | 173 %           | 134 %              |
| Prated         | 10.00 kW        | 10.00 kW           |
| SCOP           | 4.40            | 3.44               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -20 °C          | -20 °C             |
| Pdh Tj = -7°C  | 8.90 kW         | 9.00 kW            |
| COP Tj = -7°C  | 3.17            | 1.99               |
| Cdh Tj = -7 °C | 0.992           | 0.995              |
| Pdh Tj = +2°C  | 5.40 kW         | 5.70 kW            |
| COP Tj = +2°C  | 4.23            | 3.29               |
| Cdh Tj = +2 °C | 0.983           | 0.987              |
| Pdh Tj = +7°C  | 3.60 kW         | 4.70 kW            |
| COP Tj = +7°C  | 5.31            | 4.88               |
| Cdh Tj = +7 °C | 0.968           | 0.977              |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = 12°C                                       | 4.30 kW     | 4.10 kW     |
| COP Tj = 12°C                                       | 7.66        | 6.35        |
| Cdh Tj = +12 °C                                     | 0.961       | 0.966       |
| Pdh Tj = Tbiv                                       | 8.90 kW     | 9.00 kW     |
| COP Tj = Tbiv                                       | 3.17        | 1.99        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.35 kW     | 8.42 kW     |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.76        | 1.87        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.950       | 0.960       |
| WTOL  | 60 °C       | 60 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 1.65 kW     | 1.58 kW     |
| Annual energy consumption Qhe                       | 4693 kWh    | 6012 kWh    |