

This information was generated by the HP KEYMARK database on 17 Dec 2020

|                            |   |          |            |
|----------------------------|---|----------|------------|
| Summary of                 | TERRA 11 HPLA   | Reg. No. | 011-1W0418 |
| Certificate Holder         |   |          |            |
| Name                       | Ochsner Wärmepumpen GmbH                              |          |            |
| Address                    | Krackowizerstraße 4                                   | Zip      | 4020       |
| City                       | Linz  | Country  | Austria    |
| Certification Body         | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |          |            |
| Name of testing laboratory | VDE Prüf- und Zertifizierungsinstitut                 |          |            |
| Subtype title              | TERRA 11 HPLA   |          |            |
| Heat Pump Type             | Brine/Water   |          |            |
| Refrigerant                | R410a   |          |            |
| Mass Of Refrigerant        | 2.03 kg   |          |            |
| Certification Date         | 30.09.2020  |          |            |
| Testing basis              | HP KEYMARK certification scheme rules rev. 7          |          |            |

## Model: TERRA 11 HPLA

### General Data

|              |             |
|--------------|-------------|
| Power supply | 3x400V 50Hz |
|--------------|-------------|

## Heating

### EN 14511-4

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Starting and operating test                | passed |

### EN 14511-2

|                        | Low temperature        | Medium temperature     |
|------------------------|------------------------|------------------------|
| Heat output            | 10.31 kW               | 9.28 kW                |
| El input               | 2.05 kW                | 3.18 kW                |
| COP                    | 5.02                   | 2.91                   |
| Indoor water flow rate | 2.60 m <sup>3</sup> /h | 2.20 m <sup>3</sup> /h |

## Average Climate

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### EN 12102-1

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 48 dB(A)        | 48 dB(A)           |
| Sound power level outdoor | 0 dB(A)         | 0 dB(A)            |

### EN 14825

|               | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| $\eta_s$      | 216 %           | 137 %              |
| Prated        | 10.00 kW        | 9.00 kW            |
| SCOP          | 5.61            | 3.63               |
| Tbiv          | -10 °C          | -10 °C             |
| TOL           | -20 °C          | -10 °C             |
| Pdh Tj = -7°C | 9.20 kW         | 9.20 kW            |
| COP Tj = -7°C | 2.97            | 2.97               |
| Pdh Tj = +2°C | 9.60 kW         | 9.60 kW            |
| COP Tj = +2°C | 3.56            | 3.56               |
| Pdh Tj = +7°C | 9.90 kW         | 9.90 kW            |
| COP Tj = +7°C | 4.03            | 4.03               |
| Pdh Tj = 12°C | 10.10 kW        | 10.10 kW           |
| COP Tj = 12°C | 4.60            | 4.60               |
| Pdh Tj = Tbiv | 10.30 kW        | 9.10 kW            |

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|  |             |             |
|--|-------------|-------------|
| COP Tj = Tbiv                              | 5.03        | 2.83        |
| Pdh Tj = TOL                               | 9.10 kW     | 9.10 kW     |
| COP Tj = TOL                               | 2.83        | 2.83        |
| Rated airflow rate                         | 0 m³/h      | 0 m³/h      |
| Cdh  | 0.90        | 0.90        |
| WTOL                                       | 65 °C       | 65 °C       |
| Poff                                       | 0 W         | 0 W         |
| PTO  | 84 W        | 84 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              | 3799 kWh    | 5167 kWh    |

## Warmer Climate

| <b>EN 12102-1</b>         |                        |                           |
|---------------------------|------------------------|---------------------------|
|                           | <b>Low temperature</b> | <b>Medium temperature</b> |
| Sound power level indoor  | 48 dB(A)               | 48 dB(A)                  |
| Sound power level outdoor | 0 dB(A)                | 0 dB(A)                   |

| <b>EN 14825</b> |
|-----------------|
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|                    | <b>Low temperature</b> | <b>Medium temperature</b> |
|--------------------|------------------------|---------------------------|
| $\eta_s$           | 215 %                  | 136 %                     |
| Prated             | 10.00 kW               | 9.00 kW                   |
| SCOP               | 5.59                   | 3.60                      |
| Tbiv               | 2 °C                   | 2 °C                      |
| TOL                | 0 °C                   | 0 °C                      |
| Pdh Tj = -7°C      | 0.00 kW                | 0.00 kW                   |
| COP Tj = -7°C      | 0.00                   | 0.00                      |
| Pdh Tj = +2°C      | 10.30 kW               | 9.10 kW                   |
| COP Tj = +2°C      | 5.03                   | 2.83                      |
| Pdh Tj = +7°C      | 10.40 kW               | 9.50 kW                   |
| COP Tj = +7°C      | 5.43                   | 3.28                      |
| Pdh Tj = 12°C      | 10.60 kW               | 10.00 kW                  |
| COP Tj = 12°C      | 6.10                   | 4.21                      |
| Pdh Tj = Tbiv      | 10.30 kW               | 9.10 kW                   |
| COP Tj = Tbiv      | 5.03                   | 2.83                      |
| Pdh Tj = TOL       | 10.30 kW               | 9.10 kW                   |
| COP Tj = TOL       | 5.03                   | 2.83                      |
| Rated airflow rate | 0 m³/h                 | 0 m³/h                    |
| Cdh                | 0.90                   | 0.90                      |
| WTOL               | 65 °C                  | 65 °C                     |

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|  |             |             |
|--|-------------|-------------|
| Poff                                       | 0 W         | 0 W         |
| PTO  | 84 W        | 84 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              | 2466 kWh    | 3367 kWh    |

## Colder Climate

| <b>EN 12102-1</b>         |                        |                           |
|---------------------------|------------------------|---------------------------|
|                           | <b>Low temperature</b> | <b>Medium temperature</b> |
| Sound power level indoor  | 48 dB(A)               | 48 dB(A)                  |
| Sound power level outdoor | 0 dB(A)                | 0 dB(A)                   |

| <b>EN 14825</b> |                        |                           |
|-----------------|------------------------|---------------------------|
|                 | <b>Low temperature</b> | <b>Medium temperature</b> |
| $\eta_s$        | 224 %                  | 224 %                     |
| Prated          | 13.00 kW               | 13.00 kW                  |
| SCOP            | 5.81                   | 5.80                      |
| Tbiv            | -15 °C                 | -15 °C                    |
| TOL             | -22 °C                 | -22 °C                    |

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|--|-------------|-------------|
| Pdh Tj = -7°C                              | 10.50 kW    | 10.50 kW    |
| COP Tj = -7°C                              | 5.75        | 5.74        |
| Pdh Tj = +2°C                              | 10.60 kW    | 10.60 kW    |
| COP Tj = +2°C                              | 6.07        | 6.07        |
| Pdh Tj = +7°C                              | 10.70 kW    | 10.70 kW    |
| COP Tj = +7°C                              | 6.36        | 6.36        |
| Pdh Tj = 12°C                              | 10.70 kW    | 10.70 kW    |
| COP Tj = 12°C                              | 6.40        | 6.40        |
| Pdh Tj = Tbiv                              | 10.50 kW    | 10.50 kW    |
| COP Tj = Tbiv                              | 5.60        | 5.60        |
| Pdh Tj = TOL                               | 10.50 kW    | 10.30 kW    |
| COP Tj = TOL                               | 5.60        | 5.03        |
| Rated airflow rate                         | 0 m³/h      | 0 m³/h      |
| Cdh  | 0.90        | 0.90        |
| WTOL                                       | 65 °C       | 65 °C       |
| Poff                                       | 0 W         | 0 W         |
| PTO  | 84 W        | 84 W        |
| PSB  | 9 W         | 9 W         |
| PCK  | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP                 | 2.55 kW     | 2.55 kW     |

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|---|----------|----------|
| Annual energy consumption Q <sub>he</sub> | 5457 kWh | 5457 kWh |
|---|----------|----------|