This information was generated by the HP KEYMARK database on 23 Jun 2022

| Login | DAIKIN ALTHERMA 3 R F+W 14KW (180L) | Reg. No. | 011-1W0499 |
| :--- | :--- | :--- | :--- | :--- |
| Certificate Holder | DAIKIN Europe N.V. |  |  |
| Name | Zandvoordestraat 300 | Zip | B-8400 |
| Address | Oostende | Country | Belgium |
| City | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |  |  |
| Certification Body | DAIKIN ALTHERMA 3 R F+W 14KW (180L) |  |  |
| Subtype title | Outdoor Air/Water |  |  |
| Heat Pump Type | R32 | 3.8 |  |
| Refrigerant | 10.11 .2021 |  |  |
| Mass of Refrigerant | 3.8 |  |  |
| Certification Date | HP KEYMARK certification scheme rules rev. 8 |  |  |
| Testing basis |  |  |  |

## Model: ERLA14DV3 / EBBH16D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBBH16D(6V/9W) |
| Application | Heating (medium temp) |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | No |
| Cooling mode application (optional) | $\mathrm{n} / \mathrm{a}$ |


|  | General Data |
| :--- | :---: |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+\mathbf{7}^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 239 \% | 166 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.04 | 4.23 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+7^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^0]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2431 kWh | Electricity |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 181 \% | 126 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.60 | 3.22 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7{ }^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COPTj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=\mathrm{TOL}$ or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^1]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4935 kWh | 7047 kWh |
| Annual energy consumption Qhe |  |  |

CEN heat pump

## Model: ERLA14DV3 / EBBX16D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBBX16D(6V/9W) |
| Application | Heating (medium temp) |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :---: |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^2]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^3]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DV3 / EBVH16S18D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBVH16S18D(6V/9W) |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | No |
| Cooling mode application (optional) | n/a |


|  | General Data |
| :--- | :---: |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 239 \% | 166 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.04 | 4.23 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+7^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^4]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2431 kWh | Electricity |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 181 \% | 126 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.60 | 3.22 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7{ }^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COPTj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=\mathrm{TOL}$ or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^5]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4935 kWh | 7047 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DV3 / EBVX16S18D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBVX16S18D(6V/9W) |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


|  | General Data |
| :--- | :---: |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^6]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^7]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DV3 / EBVZ16S18D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBVZ16S18D(6V/9W) |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | No |
| Cooling mode application (optional) | n/a |


|  | General Data |
| :--- | :---: |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 239 \% | 166 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.04 | 4.23 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+7^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^8]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2431 kWh | Electricity |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 181 \% | 126 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.60 | 3.22 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7{ }^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COPTj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=\mathrm{TOL}$ or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^9]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4935 kWh | 7047 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Model: ERLA14DW1 / EBBH16D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBBH16D(6V/9W) |
| Application | Heating (medium temp) |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | No |
| Cooling mode application (optional) | $\mathrm{n} / \mathrm{a}$ |


|  | General Data |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 239 \% | 166 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.04 | 4.23 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+7^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^10]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2431 kWh | Electricity |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 181 \% | 126 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.60 | 3.22 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7{ }^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COPTj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=\mathrm{TOL}$ or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^11]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4935 kWh | 7047 kWh |
| Annual energy consumption Qhe |  |  |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DW1 / EBBX16D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBBX16D(6V/9W) |
| Application | Heating (medium temp) |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


|  | General Data |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^12]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~Tj~}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7{ }^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP} \mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COPTj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=\mathrm{TOL}$ or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^13]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DW1 / EBVH16S18D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBVH16S18D(6V/9W) |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | No |
| Cooling mode application (optional) | $\mathrm{n} / \mathrm{a}$ |


|  | General Data |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 239 \% | 166 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.04 | 4.23 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+7^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^14]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2431 kWh | Electricity |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\mathrm{n}_{\mathrm{s}}$ | 181 \% | 126 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.60 | 3.22 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP} \mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh Tj $=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=\mathrm{Tbiv}$ | 2.99 | 1.87 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^15]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4935 kWh | 7047 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DW1 / EBVX16S18D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBVX16S18D(6V/9W) |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


|  | General Data |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^16]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^17]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DW1 / EBVZ16S18D(6V/9W)

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBVZ16S18D(6V/9W) |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | No |
| Cooling mode application (optional) | $\mathrm{n} / \mathrm{a}$ |


|  | General Data |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 239 \% | 166 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.04 | 4.23 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+7^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^18]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2431 kWh | Electricity |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 181 \% | 126 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.60 | 3.22 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10^{\circ} \mathrm{C}$ | $-10^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7{ }^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| $\operatorname{COPTj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=\mathrm{TOL}$ or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^19]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4935 kWh | 7047 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Model: ERLA14DV3 / EBBH16D(6V/9W) + cooling kit

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBBH16D(6V/9W) + cooling kit |
| Application | Heating (medium temp) |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :--- |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^20]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^21]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Model: ERLA14DV3 / EBVH16S18D(6V/9W) + cooling kit

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBVH16S18D(6V/9W) + cooling kit |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :--- |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
|  | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test |  |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^22]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^23]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

CEN heat pump

This information was generated by the HP KEYMARK database on 23 Jun 2022

## Model: ERLA14DW1 / EBBH16D(6V/9W) + cooling kit

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBBH16D(6V/9W) + cooling kit |
| Application | Heating (medium temp) |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
|  | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test |  |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+7^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^24]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh $\mathrm{Tj}=$ Tbiv | 11.0 kW | 11.1 kW |
| :---: | :---: | :---: |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.05 kW | 2.04 kW |
| Annual energy consumption Qhe | 2330 kWh | 3717 kWh |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^25]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

CEN heat pump

## Model: ERLA14DW1 / EBVH16S18D(6V/9W) + cooling kit

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBVH16S18D(6V/9W) + cooling kit |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
|  | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test |  |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+\mathbf{7}^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^26]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2330 kWh | 271 kWh |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^27]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

CEN heat pump

## Model: ERLA14DV3 / EBVZ16S18D(6V/9W) + cooling kit

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DV3 / EBVZ16S18D(6V/9W) + cooling kit |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :--- |
| Power supply | $1 \times 230 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
|  | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test |  |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+\mathbf{7}^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^28]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2330 kWh | 271 kWh |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^29]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Model: ERLA14DW1 / EBVZ16S18D(6V/9W) + cooling kit

| Configure model |  |
| :--- | :--- |
| Model name | ERLA14DW1 / EBVZ16S18D(6V/9W) + cooling kit |
| Application | Heating + DHW + low temp |
| Units | Indoor + Outdoor |
| Climate Zone | Warmer Climate |
| Reversibility | Yes |
| Cooling mode application (optional) | $+7^{\circ} \mathrm{C} / 12^{\circ} \mathrm{C}$ |


| General Data |  |
| :--- | :--- |
| Power supply | $3 \times 400 \mathrm{~V} 50 \mathrm{~Hz}$ |

Heating

| EN 14511-2 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Heat output | 12.00 kW | 11.87 kW |
| El input | 2.46 kW | 4.11 kW |
| COP | 4.87 | 2.89 |


| EN 14511-4 |  |
| :--- | :--- |
|  | passed |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test |  |

## Cooling

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2 |  |
| :--- | :--- |
|  | $+\mathbf{7}^{\circ} \mathbf{C} / \mathbf{+ 1 2}^{\circ} \mathbf{C}$ |
| El input | 4.34 kW |
| Cooling capacity | 12.92 |
| EER | 2.98 |

EN 14825

This information was generated by the HP KEYMARK database on 23 Jun 2022

|  | $+\mathbf{7}^{\circ} \mathrm{C} /+12^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Pdesignc | 12.90 kW |
| SEER | 5.86 |
| Pdc $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 12.90 kW |
| EER $\mathrm{Tj}=35^{\circ} \mathrm{C}$ | 2.96 |
| Pdc $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 8.80 kW |
| EER $\mathrm{Tj}=30^{\circ} \mathrm{C}$ | 4.77 |
| Cdc | 0.990 |
| Pdc $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 6.20 kW |
| EER $\mathrm{Tj}=25^{\circ} \mathrm{C}$ | 7.00 |
| Cdc | 0.970 |
| Pdc $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 5.90 kW |
| EER $\mathrm{Tj}=20^{\circ} \mathrm{C}$ | 8.88 |
| Cdc | 0.960 |
| Poff | 23 W |
| PTO | 23 W |
| PSB | 23 W |
| PCK | 0 W |
| Annual energy consumption Qce | 1314 kWh |

## Warmer Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44 \mathrm{~dB}(\mathrm{~A})$ | $44 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62 \mathrm{~dB}(\mathrm{~A})$ | $62 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |
| :---: | :---: | :---: |
|  | Low temperature | Medium temperature |
| $\eta_{s}$ | 249 \% | 171 \% |
| Prated | 11 kW | 12.1 kW |
| SCOP | 6.31 | 4.35 |
| Tbiv | $2^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| TOL | $2^{\circ} \mathrm{C}$ | $2{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 11.0 kW | 10.1 kW |
| $\operatorname{COP~Tj}=+2^{\circ} \mathrm{C}$ | 3.51 | 2.20 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 7.4 kW | 7.6 kW |
| $\operatorname{COP~} \mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 5.77 | 3.83 |
| Cdh Tj $=+{ }^{\circ}{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.2 kW | 5.0 kW |
| $\operatorname{COP} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 7.73 | 5.69 |
| Cdh $\mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |

[^30]This information was generated by the HP KEYMARK database on 23 Jun 2022

| Pdh Tj = Tbiv | 11.0 kW | 11.1 kW |
| :--- | :--- | :--- |
| COP Tj = Tbiv | 3.51 | 2.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.95 kW | 10.06 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.51 | 2.20 |
| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 0.05 kW | 2.04 kW |
| Supplementary Heater: PSUP | 2330 kWh | 271 kWh |
| Annual energy consumption Qhe |  |  |

## Average Climate

| EN 12102-1 |  |  |
| :--- | :--- | :--- |
|  | Low temperature | Medium temperature |
| Sound power level indoor | $44.0 \mathrm{~dB}(\mathrm{~A})$ | $44.0 \mathrm{~dB}(\mathrm{~A})$ |
| Sound power level outdoor | $62.0 \mathrm{~dB}(\mathrm{~A})$ | $62.0 \mathrm{~dB}(\mathrm{~A})$ |


| EN 14825 |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Low temperature | Medium temperature |  |  |
|  |  |  |  |  |

This information was generated by the HP KEYMARK database on 23 Jun 2022

| $\eta_{\text {s }}$ | 184 \% | 128 \% |
| :---: | :---: | :---: |
| Prated | 11 kW | 11 kW |
| SCOP | 4.68 | 3.26 |
| Tbiv | $-7{ }^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C}$ |
| TOL | $-10{ }^{\circ} \mathrm{C}$ | $-10{ }^{\circ} \mathrm{C}$ |
| Pdh $\mathrm{Tj}=-7^{\circ} \mathrm{C}$ | 9.8 kW | 8.5 kW |
| $\operatorname{COP~} \mathrm{Tj}^{\text {a }}=-7{ }^{\circ} \mathrm{C}$ | 2.99 | 1.80 |
| $\mathrm{Cdh} \mathrm{Tj}=-7^{\circ} \mathrm{C}$ | n/a | 1.0 |
| Pdh $\mathrm{Tj}=+2^{\circ} \mathrm{C}$ | 6.1 kW | 6.2 kW |
| $\operatorname{COPTj}=+2^{\circ} \mathrm{C}$ | 4.35 | 3.28 |
| Cdh Tj $=+2^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 4.6 kW | 4.4 kW |
| COP $\mathrm{Tj}=+7^{\circ} \mathrm{C}$ | 6.70 | 4.88 |
| Cdh $\mathrm{Tj}=+{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=12^{\circ} \mathrm{C}$ | 5.4 kW | 5.3 kW |
| $\operatorname{COP~} \mathrm{Tj}=12^{\circ} \mathrm{C}$ | 8.65 | 6.58 |
| $\mathrm{Cdh} \mathrm{Tj}=+12{ }^{\circ} \mathrm{C}$ | 1.0 | 1.0 |
| Pdh $\mathrm{Tj}=\mathrm{Tbiv}$ | 9.8 kW | 8.9 kW |
| COP $\mathrm{Tj}=$ Tbiv | 2.99 | 1.87 |
| Pdh $\mathrm{Tj}=$ TOL or Pdh $\mathrm{Tj}=$ Tdesignh if TOL < Tdesignh | 9.1 kW | 7.0 kW |
| COP $\mathrm{Tj}=$ TOL or COP $\mathrm{Tj}=$ Tdesignh if TOL $<$ Tdesignh | 2.71 | 1.76 |

[^31]This information was generated by the HP KEYMARK database on 23 Jun 2022

| WTOL | $35^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
| Poff | 23 W | 23 W |
| PTO | 23 W | 23 W |
| PSB | 23 W | 23 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | 1.9 kW | 4.0 kW |
| Supplementary Heater: PSUP | 4851 kWh | 6962 kWh |
| Annual energy consumption Qhe |  |  |

## Domestic Hot Water (DHW)

## Warmer Climate

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ๆDHW | $139 \%$ |
| COP | 3.26 |
| Heating up time | $1: 16 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 38.4 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |

## Average Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147 |  |
| :--- | :--- |
| Declared load profile | L |
| Efficiency ПDHW | $116 \%$ |
| COP | 2.73 |
| Heating up time | $1: 21 \mathrm{~h}: \mathrm{min}$ |
| Standby power input | 42.0 W |
| Reference hot water temperature | $52.7^{\circ} \mathrm{C}$ |
| Mixed water at $40^{\circ} \mathrm{C}$ | 244.0 I |


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