

Page 1 of 6

This information was generated by the HP KEYMARK database on 18 Mar 2022

Login

| Summary of | JAMA Star-15 | Reg. No. | 012-SC0662-18 |
|---------------------|--------------|----------|---------------|
| Certificate Holder | | | |
| Name | Kaukora | | |
| Address | Tuotekatu 11 | Zip | FI-21200 |
| City | Raisio | Country | Finland |
| Certification Body | RISE CERT | | |
| Subtype title | JAMA Star-15 | | |
| Heat Pump Type | Brine/Water | | |
| Refrigerant | R407c | | |
| Mass of Refrigerant | 2 kg | | |



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Model: Star-15

| Configure model | | |
|-------------------------------------|-----------------------|--|
| Model name | Star-15 | |
| Application | Heating (medium temp) | |
| Units | Indoor | |
| Climate Zone | Colder Climate | |
| Reversibility | No | |
| Cooling mode application (optional) | n/a | |

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

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 10.42 kW | 14.83 kW |
| El input | 3.63 kW | 5.05 kW |
| СОР | 4.25 | 2.94 |

| EN 14511-4 | | |
|--|--------|--|
| | | |
| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed | |
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed | |
| Shutting off the heat transfer medium flow | passed | |
| Complete power supply failure | passed | |

Average Climate



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| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 43 dB(A) | 43 dB(A) |

| EN 14825 | | |
|---------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 175 % | 138 % |
| Prated | 18.00 kW | 18.00 kW |
| SCOP | 4.57 | 3.65 |
| Tbiv | -6 °C | -5 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 15.40 kW | 6.00 kW |
| COP Tj = -7°C | 4.52 | 3.16 |
| Pdh Tj = +2°C | 15.60 kW | 14.80 kW |
| COP Tj = +2°C | 4.70 | 3.72 |
| Pdh Tj = +7°C | 15.70 kW | 15.10 kW |
| COP Tj = +7°C | 4.82 | 4.01 |
| Pdh Tj = 12°C | 15.80 kW | 15.40 kW |
| COP Tj = 12°C | 4.73 | 4.27 |
| Pdh Tj = Tbiv | 15.50 kW | 14.60 kW |
| COP Tj = Tbiv | 4.55 | 3.27 |

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





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| | 1 | |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 15.40 kW | 14.60 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.41 | 2.96 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.98 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| РТО | 60 W | 60 W |
| PSB | 7 W | 7 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 2.60 kW | 3.40 kW |
| Annual energy consumption Qhe | 8134 kWh | 10194 kWh |

Colder Climate

| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 43 dB(A) | 43 dB(A) |

| EN 14825 | | |
|------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{S} | 180 % | 141 % |
| Prated | 18.00 kW | 18.00 kW |
| | | ı |



Page 5 of 6 This information was generated by the HP KEYMARK database on 18 Mar 2022

| | 1 | The catabase on 10 Mai 2022 |
|---|----------|-----------------------------|
| SCOP | 4.70 | 3.72 |
| Tbiv | -17 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 15.60 kW | 14.70 kW |
| COP Tj = -7°C | 4.73 | 3.60 |
| Pdh Tj = +2°C | 15.70 kW | 15.00 kW |
| COP Tj = +2°C | 4.85 | 3.95 |
| Pdh Tj = $+7$ °C | 15.80 kW | 15.30 kW |
| $COP Tj = +7^{\circ}C$ | 4.84 | 4.21 |
| Pdh Tj = 12°C | 15.80 kW | 15.50 kW |
| COP Tj = 12°C | 4.49 | 4.35 |
| Pdh Tj = Tbiv | 15.50 kW | 14.60 kW |
| COP Tj = Tbiv | 4.58 | 3.29 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 15.40 kW | 14.60 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.41 | 2.96 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.98 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| РТО | 60 W | 60 W |
| PSB | 7 W | 7 W |
| PCK | 35 W | 35 W |
| | | |



Page 6 of 6

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| Supplementary Heater: Type of energy input | Electricity | Electricity |
|--|-------------|-------------|
| Supplementary Heater: PSUP | 2.60 kW | 3.40 kW |
| Annual energy consumption Qhe | 9454 kWh | 11893 kWh |