Login

| Summary of | JAMA Star-8 | Reg. No. | 012-SC0658-18 |
|---|---|---|---|
| Certificate Holder | | | |
| Name | Kaukora | | |
| Address | Tuotekatu 11 | Zip | FI-21200 |
| City | Raisio | Country | Finland |
| Certification Body | RISE CERT | | |
| Subtype title | JAMA Star-8 | | |
| Heat Pump Type | Brine/Water | | |
| Refrigerant | R407c | | |
| Mass of Refrigerant | 1.8 kg | | |

# Model: Star-8

| Configure model | |
|---|---|
| Model name | Star-8 |
| 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 14511-4 | |
|---|---|
| | |
| 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 |

| EN 14511-2 | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| Heat output | 8.01 kW | 6.36 kW |
| El input | 1.74 kW | 2.06 kW |
| COP | 4.60 | 3.09 |

## Colder Climate

## EN 12102-1

| | Low temperature | Medium temperature |
|---|---|---|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

## EN 14825

| | Low temperature | Medium temperature |
|---|---|---|
| $\eta_s$ | 194 % | 145 % |
| Prated | 9.00 kW | 8.00 kW |
| SCOP | 5.05 | 3.83 |
| Tbiv | -17 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 8.00 kW | 6.70 kW |
| COP Tj = -7°C | 5.06 | 3.71 |
| Pdh Tj = +2°C | 8.20 kW | 7.10 kW |
| COP Tj = +2°C | 5.20 | 4.07 |
| Pdh Tj = +7°C | 8.30 kW | 7.50 kW |
| COP Tj = +7°C | 5.26 | 4.36 |
| Pdh Tj = 12°C | 8.30 kW | 7.70 kW |
| COP Tj = 12°C | 5.06 | 4.45 |
| Pdh Tj = Tbiv | 7.80 kW | 6.40 kW |
| COP Tj = Tbiv | 4.56 | 3.46 |

| | | |
|---|---|---|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.70 kW | 5.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.67 | 3.07 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 15 W | 15 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.30 kW | 2.10 kW |
| Annual energy consumption Qhe | 4393 kWh | 5142 kWh |

## Average Climate

| **EN 12102-1** | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| **EN 14825** | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| $\eta_s$ | 188 % | 141 % |
| Prated | 9.00 kW | 8.00 kW |

| | | |
|---|---|---|
| SCOP | 4.90 | 3.73 |
| Tbiv | -7 °C | -5 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.80 kW | 6.20 kW |
| COP Tj = -7°C | 4.79 | 3.28 |
| Pdh Tj = +2°C | 8.00 kW | 6.90 kW |
| COP Tj = +2°C | 4.99 | 3.81 |
| Pdh Tj = +7°C | 8.20 kW | 7.20 kW |
| COP Tj = +7°C | 5.17 | 4.13 |
| Pdh Tj = 12°C | 8.30 kW | 7.60 kW |
| COP Tj = 12°C | 5.23 | 4.41 |
| Pdh Tj = Tbiv | 7.80 kW | 6.40 kW |
| COP Tj = Tbiv | 4.81 | 3.44 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.70 kW | 5.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.67 | 3.07 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 15 W | 15 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |

| | | |
|---|---|---|
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.30 kW | 2.10 kW |
| Annual energy consumption Qhe | 3797 kWh | 4433 kWh |

# Model: Star-8 RST

| Configure model | |
|---|---|
| Model name | Star-8 RST |
| Application | Heating + DHW + low temp |
| Units | Indoor |
| Climate Zone | Colder Climate |
| Reversibility | No |
| Cooling mode application (optional) | n/a |

| General Data | |
|---|---|
| Power supply | 3x400V 50Hz |
| Off-peak product | No |

## Heating

| 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 |

| EN 14511-2 | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| Heat output | 8.01 kW | 6.36 kW |
| El input | 1.74 kW | 2.06 kW |
| COP | 4.60 | 3.09 |

## Colder Climate

| EN 12102-1 | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| EN 14825 | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| $\eta_s$ | 194 % | 145 % |
| Prated | 9.00 kW | 8.00 kW |
| SCOP | 5.05 | 3.83 |
| Tbiv | -17 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 8.00 kW | 6.70 kW |
| COP Tj = -7°C | 5.06 | 3.71 |
| Pdh Tj = +2°C | 8.20 kW | 7.10 kW |
| COP Tj = +2°C | 5.20 | 4.07 |
| Pdh Tj = +7°C | 8.30 kW | 7.50 kW |
| COP Tj = +7°C | 5.26 | 4.36 |
| Pdh Tj = 12°C | 8.30 kW | 7.70 kW |
| COP Tj = 12°C | 5.06 | 4.45 |
| Pdh Tj = Tbiv | 7.80 kW | 6.40 kW |
| COP Tj = Tbiv | 4.56 | 3.46 |

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|---|---|---|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.70 kW | 5.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.67 | 3.07 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 15 W | 15 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.30 kW | 2.10 kW |
| Annual energy consumption Qhe | 4393 kWh | 5142 kWh |

## Average Climate

| **EN 12102-1** | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| **EN 14825** | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| $\eta_s$ | 188 % | 141 % |
| Prated | 9.00 kW | 8.00 kW |

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|---|---|---|
| SCOP | 4.90 | 3.73 |
| Tbiv | -7 °C | -5 °C |
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| Pdh Tj = -7°C | 7.80 kW | 6.20 kW |
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| COP Tj = +2°C | 4.99 | 3.81 |
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| COP Tj = 12°C | 5.23 | 4.41 |
| Pdh Tj = Tbiv | 7.80 kW | 6.40 kW |
| COP Tj = Tbiv | 4.81 | 3.44 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.70 kW | 5.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.67 | 3.07 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 15 W | 15 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |

| | | |
|---|---|---|
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.30 kW | 2.10 kW |
| Annual energy consumption Qhe | 3797 kWh | 4433 kWh |

## Domestic Hot Water (DHW)

## Colder Climate

| **EN 16147** | |
|---|---|
| | |
| Declared load profile | XL |
| Efficiency ηDHW | 100 % |
| COP | 2.51 |
| Heating up time | 01:28 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 240 l |

## Average Climate

## EN 16147

| | |
|---|---|
| Declared load profile | XL |
| Efficiency ηDHW | 100 % |
| COP | 2.51 |
| Heating up time | 01:28 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 240 l |