

Subtype JAMA Star-6 inverter

Certificate Holder	Kaukora
Address	Tuotekatu 11
ZIP	FI-21200
City	Raisio
Country	FI
Certification Body	RISE CERT
Subtype title	JAMA Star-6 inverter
Registration number	012-SC0664-18
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R407c
Mass of Refrigerant	1.16 kg
Certification Date	16.04.2024
Testing basis	EN 14511:2013, EN 16147:2011, EN 14825:2013, EN12102:2013
Testing laboratory	Austrian Institute of Technology (AIT)

Model Star-6 inverter

Model name	Star-6 inverter
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
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EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	3.15 kW	2.78 kW
El input	0.67 kW	0.93 kW
COP	4.72	2.99

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	200 %	150 %
Prated	5.50 kW	5.50 kW
SCOP	5.20	3.95
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	4.37	3.06
Pdh Tj = +2°C	3.10 kW	3.00 kW
COP Tj = +2°C	5.24	3.97
Pdh Tj = +7°C	2.00 kW	2.00 kW
COP Tj = +7°C	5.92	4.63
Pdh Tj = 12°C	1.30 kW	1.20 kW
COP Tj = 12°C	5.95	4.86
Pdh Tj = Tbiv	5.40 kW	5.40 kW
COP Tj = Tbiv	4.15	2.84

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.40 kW	5.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.15	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	10 W	7 W
PSB	7 W	7 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2188 kWh	2875 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	211 %	157 %
Prated	5.50 kW	5.50 kW
SCOP	5.48	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.40 kW	3.40 kW
COP Tj = -7°C	5.17	3.77
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.10 kW	2.10 kW
COP Tj = +2°C	5.91	4.51
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.40 kW	1.40 kW
COP Tj = +7°C	6.36	5.12
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.30 kW	1.20 kW
COP Tj = 12°C	4.15	4.81
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	5.40 kW	5.50 kW
COP Tj = Tbiv	4.15	2.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.40 kW	5.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.15	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980

WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	10 W	7 W
PSB	7 W	7 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	2481 kWh	3287 kWh

Water/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.30 kW	3.82 kW
El input	0.66 kW	1.00 kW
COP	6.49	3.83

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	270 %	214 %
Prated	7.00 kW	7.00 kW
SCOP	6.95	5.55
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	6.30 kW	6.30 kW
COP T _j = -7°C	6.07	4.52
P _{dh} T _j = +2°C	3.90 kW	3.90 kW
COP T _j = +2°C	7.09	5.62
P _{dh} T _j = +7°C	2.50 kW	2.50 kW
COP T _j = +7°C	7.84	6.34
P _{dh} T _j = 12°C	1.80 kW	1.60 kW
COP T _j = 12°C	7.97	6.57
P _{dh} T _j = T _{biv}	7.00 kW	7.00 kW
COP T _j = T _{biv}	5.79	4.21
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.00 kW	7.00 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.79	4.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.97
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	18 W	15 W
PSB	10 W	7 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2078 kWh	2611 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	282 %	222 %
Prated	7.00 kW	7.00 kW
SCOP	7.25	5.75
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.30 kW	4.30 kW
COP Tj = -7°C	7.00	5.39
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	7.83	6.21
Pdh Tj = +7°C	1.80 kW	1.80 kW
COP Tj = +7°C	8.14	6.85
Pdh Tj = 12°C	1.80 kW	1.60 kW
COP Tj = 12°C	7.70	6.64
Pdh Tj = Tbiv	7.00 kW	7.00 kW
COP Tj = Tbiv	5.79	4.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.79	4.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.95	0.96
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	18 W	15 W
PSB	10 W	7 W
PCK	9 W	9 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	2378 kWh	3005 kWh

Model Star-6 RST inverter

Model name	Star-6 RST inverter
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Brine/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	102 %
COP	2.55
Heating up time	02:23 h:min
Standby power input	50.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	245 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	102 %
COP	2.55
Heating up time	02:23 h:min
Standby power input	50.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	245 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
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EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	3.15 kW	2.78 kW
El input	0.67 kW	0.93 kW
COP	4.72	2.99

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	42 dB(A)	42 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	200 %	150 %
Prated	5.50 kW	5.50 kW
SCOP	5.20	3.95
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.00 kW	5.00 kW
COP Tj = -7°C	4.37	3.06
Pdh Tj = +2°C	3.10 kW	3.00 kW
COP Tj = +2°C	5.24	3.97
Pdh Tj = +7°C	2.00 kW	2.00 kW
COP Tj = +7°C	5.92	4.63
Pdh Tj = 12°C	1.30 kW	1.20 kW
COP Tj = 12°C	5.95	4.86
Pdh Tj = Tbiv	5.40 kW	5.40 kW
COP Tj = Tbiv	4.15	2.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.40 kW	5.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.15	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	10 W	7 W
PSB	7 W	7 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2188 kWh	2875 kWh

EN 12102-1 Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
EN 14825 Colder Climate		
	Low temperature	Medium temperature
η_s	211 %	157 %
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COP Tj = -7°C	5.17	3.77
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.10 kW	2.10 kW
COP Tj = +2°C	5.91	4.51
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.40 kW	1.40 kW
COP Tj = +7°C	6.36	5.12
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Pdh Tj = 12°C	1.30 kW	1.20 kW
COP Tj = 12°C	4.15	4.81
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.15	2.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.970	0.980
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	10 W	7 W
PSB	7 W	7 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2481 kWh	3287 kWh

Water/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	117 %
COP	2.93
Heating up time	02:09 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	240 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	117 %
COP	2.93
Heating up time	02:09 h:min
Standby power input	45.0 W

Reference hot water temperature	49.0 °C
Mixed water at 40°C	240 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.30 kW	3.82 kW
El input	0.66 kW	1.00 kW
COP	6.49	3.83

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	270 %	214 %
Prated	7.00 kW	7.00 kW
SCOP	6.95	5.55
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	6.30 kW
COP Tj = -7°C	6.07	4.52
Pdh Tj = +2°C	3.90 kW	3.90 kW
COP Tj = +2°C	7.09	5.62
Pdh Tj = +7°C	2.50 kW	2.50 kW
COP Tj = +7°C	7.84	6.34
Pdh Tj = 12°C	1.80 kW	1.60 kW
COP Tj = 12°C	7.97	6.57
Pdh Tj = Tbiv	7.00 kW	7.00 kW
COP Tj = Tbiv	5.79	4.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	7.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.79	4.21
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.96	0.97
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	18 W	15 W
PSB	10 W	7 W
PCK	9 W	9 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	2078 kWh	2611 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	282 %	222 %
Prated	7.00 kW	7.00 kW
SCOP	7.25	5.75
T _{biv}	-22 °C	-22 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7°C	4.30 kW	4.30 kW
COP T _j = -7°C	7.00	5.39
P _{dh} T _j = +2°C	2.70 kW	2.70 kW
COP T _j = +2°C	7.83	6.21
P _{dh} T _j = +7°C	1.80 kW	1.80 kW
COP T _j = +7°C	8.14	6.85
P _{dh} T _j = 12°C	1.80 kW	1.60 kW
COP T _j = 12°C	7.70	6.64
P _{dh} T _j = T _{biv}	7.00 kW	7.00 kW
COP T _j = T _{biv}	5.79	4.21
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.00 kW	7.00 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	5.79	4.21
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.95	0.96
WTOL	65 °C	65 °C
P _{off}	2 W	2 W
PTO	18 W	15 W
PSB	10 W	7 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	2378 kWh	3005 kWh