

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

Summary of	JAMA Star-40	Reg. No.	012-SC0670-18
Certificate Holder			
Name	Kaukora		
Address	Tuotekatu 11	Zip	FI-21200
City	Raisio	Country	Finland
Certification Body	RISE CERT		
Name of testing laboratory	AIT		
Subtype title	JAMA Star-40		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass Of Refrigerant	3.4 kg		

Model: Star-40

General Data

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

Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	39.94 kW	37.80 kW
El input	8.90 kW	11.90 kW
COP	4.49	3.18
Indoor water flow rate	7.92 m ³ /h	4.95 m ³ /h

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

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

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	182 %	143 %
Prated	46.00 kW	46.00 kW
SCOP	4.75	3.78
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	40.10 kW	38.20 kW
COP Tj = -7°C	4.62	3.33
Pdh Tj = +2°C	40.30 kW	39.10 kW
COP Tj = +2°C	4.78	3.79
Pdh Tj = +7°C	20.30 kW	19.90 kW
COP Tj = +7°C	5.11	4.21
Pdh Tj = 12°C	20.40 kW	20.10 kW
COP Tj = 12°C	5.09	4.51
Pdh Tj = Tbiv	40.10 kW	28.40 kW
COP Tj = Tbiv	4.63	3.41

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

Pdh Tj = TOL	40.00 kW	37.80 kW
COP Tj = TOL	4.50	3.19
Cdh	0.98	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	100 W	100 W
PSB	7 W	7 W
PCK	80 W	80 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	8.20 kW
Annual energy consumption Qhe	19996 kWh	25093 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	190 %	149 %
Prated	46.00 kW	46.00 kW

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

SCOP	4.95	3.93
Tbiv	-17 °C	-16 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	40.40 kW	39.00 kW
COP Tj = -7°C	4.86	3.70
Pdh Tj = +2°C	20.30 kW	19.80 kW
COP Tj = +2°C	5.16	4.19
Pdh Tj = +7°C	20.40 kW	20.00 kW
COP Tj = +7°C	5.22	4.50
Pdh Tj = 12°C	20.40 kW	20.20 kW
COP Tj = 12°C	4.95	4.65
Pdh Tj = Tbiv	40.20 kW	38.40 kW
COP Tj = Tbiv	4.67	3.43
Pdh Tj = TOL	40.00 kW	37.80 kW
COP Tj = TOL	4.50	3.19
Cdh	0.98	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	100 W	100 W
PSB	7 W	7 W
PCK	80 W	80 W

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

Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	6.00 kW	8.20 kW
Annual energy consumption Q _{he}	22939 kWh	28857 kWh