

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

Summary of	11. Yutaki S 10.0HP (tri)	Reg. No.	041-K002-11
Certificate Holder			
Name	Johnson Controls-Hitachi AirConditioning Spain		
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella	Zip	08233
City	Vacarisses, Barcelona	Country	Spain
Certification Body	BRE Energy & Communications Division		
Name of testing laboratory	CEIS		
Subtype title	11. Yutaki S 10.0HP (tri)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	5 kg		

# Model: RAS-10WHNPE RWM-10.0NE - Heating Only

## General Data

Power supply	3x400V 50Hz
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## 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
Defrost test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	24.00 kW	24.00 kW
El input	5.59 kW	9.06 kW
COP	4.29	2.65
Indoor water flow rate	4.11 m <sup>3</sup> /h	2.57 m <sup>3</sup> /h

## Average Climate

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### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	74 dB(A)	74 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	141 %	116 %
Prated	20.00 kW	18.00 kW
SCOP	3.60	2.98
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.40 kW	15.60 kW
COP Tj = -7°C	2.30	1.65
Pdh Tj = +2°C	10.77 kW	9.50 kW
COP Tj = +2°C	3.60	3.10
Pdh Tj = +7°C	8.70 kW	8.30 kW
COP Tj = +7°C	5.10	4.35
Pdh Tj = 12°C	8.70 kW	8.50 kW
COP Tj = 12°C	4.90	4.60
Pdh Tj = Tbiv	17.40 kW	15.60 kW

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COP Tj = Tbiv	2.10	1.65
Pdh Tj = TOL	18.00 kW	14.00 kW
COP Tj = TOL	2.30	1.45
Cdh	0.90	0.90
WTOL	55 °C	55 °C
Poff	36 W	36 W
PTO	0 W	0 W
PSB	36 W	36 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.70 kW	3.60 kW
Annual energy consumption Qhe	11410 kWh	12210 kWh

# Model: RAS-10WHNPE RWM-10.0NE - with cooling kit

## General Data

Power supply	3x400V 50Hz
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## 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
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SCOP	3.60	2.98
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.40 kW	15.60 kW
COP Tj = -7°C	2.30	1.65
Pdh Tj = +2°C	10.77 kW	9.50 kW
COP Tj = +2°C	3.60	3.10
Pdh Tj = +7°C	8.70 kW	8.30 kW
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PSB	36 W	36 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.70 kW	3.60 kW
Annual energy consumption Qhe	11278 kWh	12078 kWh