

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

Summary of	13. Yutaki S80 5.0HP (mono)	Reg. No.	041-K002-13
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	13. Yutaki S80 5.0HP (mono)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.4 kg		

# Model: RAS-5WHVNPE RWH-5.0VNFE - Type 1

## General Data

Power supply	1x230V 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	14.00 kW	14.00 kW
El input	2.97 kW	4.39 kW
COP	4.71	3.19
Indoor water flow rate	2.40 m <sup>3</sup> /h	1.50 m <sup>3</sup> /h

## Average Climate

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### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	57 dB(A)	57 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	174 %	131 %
Prated	14.00 kW	14.00 kW
SCOP	4.43	3.35
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	12.38 kW
COP Tj = -7°C	2.55	2.19
Pdh Tj = +2°C	7.30 kW	7.54 kW
COP Tj = +2°C	4.70	3.10
Pdh Tj = +7°C	4.70 kW	4.85 kW
COP Tj = +7°C	5.70	4.60
Pdh Tj = 12°C	3.50 kW	4.10 kW
COP Tj = 12°C	6.00	6.40
Pdh Tj = Tbiv	12.00 kW	14.00 kW

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COP $T_j = T_{biv}$	2.55	2.12
P <sub>dh</sub> $T_j = TOL$	12.10 kW	14.00 kW
COP $T_j = TOL$	2.50	2.12
C <sub>dh</sub>	0.90	0.90
WTOL	55 °C	55 °C
P <sub>off</sub>	17 W	17 W
P <sub>TO</sub>	0 W	0 W
P <sub>SB</sub>	17 W	17 W
P <sub>CK</sub>	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: P <sub>SUP</sub>	1.90 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	6330 kWh	8648 kWh

## Model: RAS-5WHVNPE RWH-5.0VNFWE - Type 2

### General Data

Power supply	1x230V 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	14.00 kW	14.00 kW
El input	2.97 kW	4.39 kW
COP	4.71	3.19
Indoor water flow rate	2.40 m <sup>3</sup> /h	1.50 m <sup>3</sup> /h

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Pdh Tj = +7°C	4.70 kW	4.85 kW
COP Tj = +7°C	5.70	4.60
Pdh Tj = 12°C	3.50 kW	4.10 kW
COP Tj = 12°C	6.00	6.40
Pdh Tj = Tbiv	12.00 kW	14.00 kW

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COP $T_j = T_{biv}$	2.55	2.12
P <sub>dh</sub> $T_j = TOL$	12.10 kW	14.00 kW
COP $T_j = TOL$	2.50	2.12
C <sub>dh</sub>	0.90	0.90
WTOL	55 °C	55 °C
P <sub>off</sub>	17 W	17 W
P <sub>TO</sub>	0 W	0 W
P <sub>SB</sub>	17 W	17 W
P <sub>CK</sub>	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: P <sub>SUP</sub>	1.90 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	6330 kWh	8648 kWh