

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

Summary of	12. Yutaki S80 4.0HP (mono)	Reg. No.	041-K002-12
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	12. Yutaki S80 4.0HP (mono)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.3 kg		

# Model: RAS-4WHVNPE RWH-4.0VNFE - 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	11.00 kW	11.00 kW
El input	2.20 kW	3.31 kW
COP	5.00	3.32
Indoor water flow rate	1.89 m <sup>3</sup> /h	1.18 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	61 dB(A)	61 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	187 %	142 %
Prated	11.00 kW	11.00 kW
SCOP	4.75	3.63
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.60 kW	9.73 kW
COP Tj = -7°C	2.74	2.30
Pdh Tj = +2°C	5.84 kW	5.92 kW
COP Tj = +2°C	5.20	3.60
Pdh Tj = +7°C	3.76 kW	3.81 kW
COP Tj = +7°C	5.80	4.70
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	6.40	6.00
Pdh Tj = Tbiv	9.60 kW	11.00 kW

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COP $T_j = T_{biv}$	2.74	2.20
P <sub>dh</sub> $T_j = TOL$	10.50 kW	11.00 kW
COP $T_j = TOL$	2.65	2.20
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>	0.50 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	4732 kWh	6261 kWh

## Model: RAS-4WHVNPE RWH-4.0VNFWE - 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	11.00 kW	11.00 kW
El input	2.20 kW	3.31 kW
COP	5.00	3.32
Indoor water flow rate	1.89 m <sup>3</sup> /h	1.18 m <sup>3</sup> /h

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COP Tj = +7°C	5.80	4.70
Pdh Tj = 12°C	3.70 kW	3.60 kW
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Pdh Tj = Tbiv	9.60 kW	11.00 kW

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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
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