

## Subtype 13. Yutaki S80 5.0HP (mono)

Certificate Holder	Johnson Controls-Hitachi AirConditioning Spain
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella
ZIP	08233
City	Vacarisses, Barcelona
Country	ES
Certification Body	BRE Global Limited
Subtype title	13. Yutaki S80 5.0HP (mono)
Registration number	041-K002-13
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.4 kg
Testing laboratory	Centro de Ensayos, Innovación y Servicios (CEIS), ES

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

Model name	RAS-5WHVNPE RWH-5.0VNFE - Type 1
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 50Hz
Off-peak product	n/a

### Outdoor Air/Water

#### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed

#### EN 14511-2 | Heating

	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

#### EN 12102-1 | Average Climate

	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 | Average Climate

	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
COP Tj = Tbiv	2.55	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.10 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	55 °C	55 °C
Poff	17 W	17 W
PTO	0 W	0 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	0.00 kW
Annual energy consumption Qhe	6330 kWh	8648 kWh

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

Model name	RAS-5WHVNPE RWH-5.0VNFWE - Type 2
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

### General data

Power supply	1x230V 50Hz
Off-peak product	n/a

### Outdoor Air/Water

#### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed

#### EN 14511-2 | Heating

	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

#### EN 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
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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
COP Tj = Tbiv	2.55	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.10 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	55 °C	55 °C
Poff	17 W	17 W
PTO	0 W	0 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	0.00 kW
Annual energy consumption Qhe	6330 kWh	8648 kWh