

Subtype 36. Yutaki S (N1) 8.0HP R410A (3ph)

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	36. Yutaki S (N1) 8.0HP R410A (3ph)
Registration number	041-K002-57
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	5 kg
Certification Date	08.02.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09

**Model 01. RAS-8WHNPE RWM-8.0N1E - Heating Only**

Model name	01. RAS-8WHNPE RWM-8.0N1E - Heating Only
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	3x400V 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
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	20.00 kW	20.00 kW
EI input	4.65 kW	7.35 kW
COP	4.30	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	150 %	120 %
Prated	18.00 kW	16.00 kW
SCOP	3.83	3.08
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	15.60 kW	13.80 kW
COP Tj = -7°C	2.50	1.65
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.50 kW	8.40 kW
COP Tj = +2°C	3.85	3.10
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.10 kW	6.00 kW

COP Tj = +7°C	5.40	4.76
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	7.00 kW	6.80 kW
COP Tj = 12°C	4.65	5.10
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	15.60 kW	13.80 kW
COP Tj = Tbiv	2.50	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.00 kW	12.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
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	2.00 kW	3.90 kW
Annual energy consumption Qhe	9513 kWh	10452 kWh

**Model 02. RAS-8WHNPE RWM-8.0N1E - with cooling kit**

Model name	02. RAS-8WHNPE RWM-8.0N1E - with cooling kit
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

**General data**

Power supply	3x400V 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
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	20.00 kW	20.00 kW
El input	4.65 kW	7.35 kW
COP	4.30	2.72

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	4.48 kW	4.46 kW
Cooling capacity	14.00	17.00
EER	3.12	3.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	152 %	122 %
Prated	18.00 kW	16.00 kW
SCOP	3.83	3.08
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	15.60 kW	13.80 kW
COP Tj = -7°C	2.50	1.65
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.50 kW	8.40 kW
COP Tj = +2°C	3.85	3.10
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.10 kW	6.00 kW
COP Tj = +7°C	5.40	4.76
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	7.00 kW	6.80 kW
COP Tj = 12°C	4.65	5.10
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	15.60 kW	13.80 kW
COP Tj = Tbiv	2.50	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.00 kW	12.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
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	2.00 kW	3.90 kW
Annual energy consumption Qhe	9382 kWh	10320 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	14.00 kW	17.00 kW
SEER	4.29	5.40
Pdc Tj = 35°C	14.00 kW	17.00 kW
EER Tj = 35°C	3.12	3.81
Pdc Tj = 30°C	10.32 kW	12.53 kW
EER Tj = 30°C	3.92	5.60
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	6.50 kW	8.20 kW
EER Tj = 25°C	5.30	6.50
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	8.00 kW	8.50 kW
EER Tj = 20°C	5.80	6.60
Cdc Tj = 20 °C	0.900	0.900
Poff	36 W	36 W

PTO	0 W	0 W
PSB	36 W	36 W
PCK	0 W	0 W
Annual energy consumption Qce	1142 kWh	1102 kWh