

Subtype 10. Yutaki M 2.0HP R32

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	10. Yutaki M 2.0HP R32
Registration number	041-K002-38
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.2 kg
Certification Date	02.08.2019

**Model 01. RASM-2VRE - Heating Only**

Model name	01. RASM-2VRE - Heating Only
Application	Heating (medium temp)
Units	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
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.30 kW	4.30 kW
El input	0.82 kW	1.43 kW
COP	5.25	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	181 %	133 %
Prated	4.00 kW	4.00 kW
SCOP	4.60	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.54 kW	3.50 kW
COP Tj = -7°C	3.20	2.13
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.35 kW	2.10 kW
COP Tj = +2°C	4.80	3.35
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.00 kW	2.43 kW
COP Tj = +7°C	6.20	5.15

Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.05 kW	2.80 kW
COP Tj = 12°C	8.30	6.80
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.54 kW	3.50 kW
COP Tj = Tbiv	3.20	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	1.90
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	1798 kWh	2401 kWh

**Model 02. RASM-2VRE - with cooling kit**

Model name	02. RASM-2VRE - with cooling kit
Application	Heating (medium temp)
Units	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	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
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.30 kW	4.30 kW
EI input	0.82 kW	1.43 kW
COP	5.25	3.00

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
EI input	1 kW	1.02 kW
Cooling capacity	4	5.5
EER	4	5.4

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	186 %	136 %
Prated	4.00 kW	4.00 kW
SCOP	4.73	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	3.54 kW	3.50 kW
COP Tj = -7°C	3.20	2.13
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.35 kW	2.10 kW
COP Tj = +2°C	4.80	3.35
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.00 kW	2.43 kW
COP Tj = +7°C	6.20	5.15
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.05 kW	2.80 kW
COP Tj = 12°C	8.30	6.80
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	3.54 kW	3.50 kW
COP Tj = Tbiv	3.20	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	1.90
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	1754 kWh	2357 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	4 kW	5.5 kW
SEER	5.57	8.04
Pdc Tj = 35°C	4 kW	5.5 kW
EER Tj = 35°C	4	5.4
Pdc Tj = 30°C	2.95 kW	4.05 kW
EER Tj = 30°C	5	7.2
Cdc Tj = 30 °C	1	1
Pdc Tj = 25°C	2.05 kW	2.61 kW
EER Tj = 25°C	6.45	9.6
Cdc Tj = 25 °C	0.9	0.9
Pdc Tj = 20°C	2.88 kW	2.51 kW
EER Tj = 20°C	8	10.3
Cdc Tj = 20 °C	0.9	0.9
Poff	12 W	12 W
PTO	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W

Annual energy consumption Qce

431 kWh

410 kWh

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