

Subtype 24. YUTAKI S (N2) & S Combi (NW2) 2.5HP R32

Certificate Holder	Johnson Controls-Hitachi AirConditioning Spain
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Country	ES
Certification Body	BRE Global Limited
Subtype title	24. YUTAKI S (N2) & S Combi (NW2) 2.5HP R32
Registration number	041-K002-71
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.2 kg
Certification Date	13.09.2024
Testing basis	Heat Pump Keymark Scheme Rules v14
Testing laboratory	Centro de Ensayos, Innovación y Servicios (CEIS), ES

**Model RAS-2.5WHVRP2E - RWM-2.5R2E - Heating only**

Model name	RAS-2.5WHVRP2E - RWM-2.5R2E - 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	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
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.00 kW	6.00 kW
EI input	1.20 kW	2.22 kW
COP	5.00	2.70

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	125 %
Prated	5.80 kW	5.00 kW
SCOP	4.45	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.10 kW	4.42 kW
COP Tj = -7°C	2.50	1.85
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.10 kW	2.69 kW
COP Tj = +2°C	4.45	3.15
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.00 kW	2.43 kW

COP Tj = +7°C	6.65	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.05 kW	2.80 kW
COP Tj = 12°C	9.00	6.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.10 kW	4.42 kW
COP Tj = Tbiv	2.50	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.30 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
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	0.50 kW	1.10 kW
Annual energy consumption Qhe	2677 kWh	3218 kWh

**Model RAS-2.5WHVRP2E - RWM-2.5R2E - with Cooling kit**

Model name	RAS-2.5WHVRP2E - RWM-2.5R2E - 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	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
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.00 kW	6.00 kW
El input	1.20 kW	2.22 kW
COP	5.00	2.70

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	1.47 kW	1.19 kW
Cooling capacity	5.30	6.30
EER	3.60	5.30

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	178 %	127 %
Prated	5.80 kW	5.00 kW
SCOP	4.52	3.25
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.10 kW	4.42 kW
COP Tj = -7°C	2.50	1.85
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.10 kW	2.69 kW
COP Tj = +2°C	4.45	3.15
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.00 kW	2.43 kW
COP Tj = +7°C	6.65	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.05 kW	2.80 kW
COP Tj = 12°C	9.00	6.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.10 kW	4.42 kW
COP Tj = Tbiv	2.50	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.30 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
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	0.50 kW	1.10 kW
Annual energy consumption Qhe	2633 kWh	3149 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	5.30 kW	6.30 kW
SEER	5.48	8.50
Pdc Tj = 35°C	5.30 kW	6.30 kW
EER Tj = 35°C	3.60	5.30
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	3.91 kW	4.64 kW
EER Tj = 30°C	4.50	7.00
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	2.51 kW	2.98 kW
EER Tj = 25°C	6.30	9.90
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	2.88 kW	2.65 kW
EER Tj = 20°C	8.20	12.61
Cdc Tj = 20 °C	0.900	0.900

Poff	12 W	12 W
PTO	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Annual energy consumption Qce	581 kWh	445 kWh

**Model RAS-2.5WHVRP2E - RWD-2.5RW2E-220S - Heating only**

Model name	RAS-2.5WHVRP2E - RWD-2.5RW2E-220S - Heating only
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	126 %
COP	3.10
Heating up time	1:40 h:min
Standby power input	32.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	283 l

**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	6.00 kW	6.00 kW
El input	1.20 kW	2.20 kW
COP	5.00	2.70

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	125 %
Prated	5.80 kW	5.00 kW

SCOP	4.45	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.10 kW	4.42 kW
COP Tj = -7°C	2.50	1.85
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.10 kW	2.69 kW
COP Tj = +2°C	4.45	3.15
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.00 kW	2.43 kW
COP Tj = +7°C	6.65	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.05 kW	2.80 kW
COP Tj = 12°C	9.00	6.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.10 kW	4.42 kW
COP Tj = Tbiv	2.50	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.30 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
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	0.50 kW	1.10 kW
Annual energy consumption Qhe	2677 kWh	3218 kWh

**Model RAS-2.5WHVRP2E - RWD-2.5RW2E-220S - with Cooling kit**

Model name	RAS-2.5WHVRP2E - RWD-2.5RW2E-220S - with Cooling kit
Application	Heating + DHW + low 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	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency ηDHW	126 %
COP	3.10
Heating up time	1:40 h:min
Standby power input	34.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	283 l

**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	6.00 kW	6.00 kW
El input	1.20 kW	2.22 kW
COP	5.00	2.70

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	1.47 kW	1.19 kW
Cooling capacity	5.30	6.30
EER	3.60	5.30

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	51 dB(A)	51 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	178 %	127 %
P <sub>rated</sub>	5.80 kW	5.00 kW
SCOP	4.52	3.25
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh Tj = -7°C</sub>	5.10 kW	4.42 kW
COP T <sub>j</sub> = -7°C	2.50	1.85
C <sub>dh Tj = -7 °C</sub>	0.900	0.900
P <sub>dh Tj = +2°C</sub>	3.10 kW	2.69 kW
COP T <sub>j</sub> = +2°C	4.45	3.15
C <sub>dh Tj = +2 °C</sub>	0.900	0.900
P <sub>dh Tj = +7°C</sub>	3.00 kW	2.43 kW
COP T <sub>j</sub> = +7°C	6.65	4.80
C <sub>dh Tj = +7 °C</sub>	0.900	0.900
P <sub>dh Tj = 12°C</sub>	3.05 kW	2.80 kW
COP T <sub>j</sub> = 12°C	9.00	6.80
C <sub>dh Tj = +12 °C</sub>	0.900	0.900
P <sub>dh Tj = T<sub>biv</sub></sub>	5.10 kW	4.42 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.50	1.85
P <sub>dh Tj = T<sub>OL</sub> or P<sub>dh Tj = T<sub>designh</sub></sub> if T<sub>OL</sub> &lt; T<sub>designh</sub></sub>	5.30 kW	3.90 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.50	1.70
C <sub>dh Tj = T<sub>OL</sub> or P<sub>dh Tj = T<sub>designh</sub></sub> if T<sub>OL</sub> &lt; T<sub>designh</sub></sub>	0.900	0.900
WT <sub>OL</sub>	55 °C	55 °C
P <sub>off</sub>	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	0.50 kW	1.10 kW
Annual energy consumption Q <sub>he</sub>	2633 kWh	3174 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	5.30 kW	6.30 kW
SEER	5.48	8.50
P <sub>dc Tj = 35°C</sub>	5.30 kW	6.30 kW
EER T <sub>j</sub> = 35°C	3.60	5.30
C <sub>dc Tj = 35 °C</sub>	0.900	0.900

Pdc Tj = 30°C	3.91 kW	4.64 kW
EER Tj = 30°C	4.50	7.00
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	2.51 kW	2.98 kW
EER Tj = 25°C	6.30	9.90
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	2.88 kW	2.65 kW
EER Tj = 20°C	8.20	12.61
Cdc Tj = 20 °C	0.900	0.900
Poff	12 W	12 W
PTO	0 W	0 W
PSB	12 W	12 W
PCK	0 W	0 W
Annual energy consumption Qce	581 kWh	445 kWh