

Subtype 32. Yutaki S (N1) & S Combi (NW1) 220L 5HP R410A

Certificate Holder	Johnson Controls-Hitachi AirConditioning Spain
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Certification Body	BRE Global Limited
Subtype title	32. Yutaki S (N1) & S Combi (NW1) 220L 5HP R410A
Registration number	041-K002-53
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.4 kg
Certification Date	08.02.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09
Testing laboratory	Centro de Ensayos, Innovación y Servicios (CEIS), ES

**Model 03. RAS-5WHVNPE RWD-5.0NW1E-220S - Heating Only**

Model name	03. RAS-5WHVNPE RWD-5.0NW1E-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 ηDHW	127 %
COP	3.10
Heating up time	1:05 h:min
Standby power input	34.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	288 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	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	183 %	133 %
Prated	14.00 kW	12.00 kW

SCOP	4.65	3.39
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	10.25 kW
COP Tj = -7°C	2.55	1.70
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.30 kW	6.24 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.01 kW
COP Tj = +7°C	6.54	4.60
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.50 kW	3.50 kW
COP Tj = 12°C	7.55	5.50
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.00 kW	10.25 kW
COP Tj = Tbiv	2.55	1.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.10 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.00 kW
Annual energy consumption Qhe	6022 kWh	7066 kWh

**Model 04. RAS-5WHVNPE RWD-5.0NW1E-220S - with cooling kit**

Model name	04. RAS-5WHVNPE RWD-5.0NW1E-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	127 %
COP	3.10
Heating up time	1:05 h:min
Standby power input	34.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	288 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	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.79 kW	2.88 kW
Cooling capacity	9.50	12.90
EER	3.40	4.48

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	185 %	133 %
P <sub>rated</sub>	14.00 kW	12.00 kW
SCOP	4.69	3.41
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh Tj = -7°C</sub>	12.00 kW	10.25 kW
COP T <sub>j</sub> = -7°C	2.55	1.70
C <sub>dh Tj = -7 °C</sub>	0.900	0.900
P <sub>dh Tj = +2°C</sub>	7.30 kW	6.24 kW
COP T <sub>j</sub> = +2°C	4.70	3.60
C <sub>dh Tj = +2 °C</sub>	0.900	0.900
P <sub>dh Tj = +7°C</sub>	4.70 kW	4.01 kW
COP T <sub>j</sub> = +7°C	6.54	4.60
C <sub>dh Tj = +7 °C</sub>	0.900	0.900
P <sub>dh Tj = 12°C</sub>	3.50 kW	3.50 kW
COP T <sub>j</sub> = 12°C	7.55	5.50
C <sub>dh Tj = +12 °C</sub>	0.900	0.900
P <sub>dh Tj = T<sub>biv</sub></sub>	12.00 kW	10.25 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.55	1.70
P <sub>dh Tj = T<sub>designh</sub></sub> if TOL < T <sub>designh</sub>	12.10 kW	9.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.50	1.60
C <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	0.900	0.900
WTOL	55 °C	55 °C
P <sub>off</sub>	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.00 kW
Annual energy consumption Q <sub>he</sub>	5974 kWh	7018 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	9.50 kW	12.90 kW
SEER	5.34	8.14
P <sub>dc Tj = 35°C</sub>	9.50 kW	12.90 kW
EER T <sub>j</sub> = 35°C	3.40	4.48
P <sub>dc Tj = 30°C</sub>	7.00 kW	9.51 kW

EER Tj = 30°C	4.75	7.11
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.50 kW	7.20 kW
EER Tj = 25°C	5.88	9.98
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.20 kW	7.80 kW
EER Tj = 20°C	7.84	12.97
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	623 kWh	554 kWh

**Model 05. RAS-5WHVNPE RWD-5.0NW1E-220S-K - UK Version - Heating Only**

Model name	05. RAS-5WHVNPE RWD-5.0NW1E-220S-K - UK Version - 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 ηDHW	127 %
COP	3.10
Heating up time	1:05 h:min
Standby power input	34.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	288 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	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	183 %	133 %
Prated	14.00 kW	12.00 kW

SCOP	4.65	3.39
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	10.25 kW
COP Tj = -7°C	2.55	1.70
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.30 kW	6.24 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.01 kW
COP Tj = +7°C	6.54	4.60
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.50 kW	3.50 kW
COP Tj = 12°C	7.55	5.50
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.00 kW	10.25 kW
COP Tj = Tbiv	2.55	1.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.10 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.00 kW
Annual energy consumption Qhe	6022 kWh	7066 kWh

**Model 06. RAS-5WHVNPE RWD-5.0NW1E-220S-K - UK Version - with cooling kit**

Model name	06. RAS-5WHVNPE RWD-5.0NW1E-220S-K - UK Version - 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	127 %
COP	3.10
Heating up time	1:05 h:min
Standby power input	34.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	288 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	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

**EN 14511-2 | Cooling**

	Low temperature	Medium temperature
El input	2.79 kW	2.88 kW
Cooling capacity	9.50	12.90
EER	3.40	4.48

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature

Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	185 %	133 %
P <sub>rated</sub>	14.00 kW	12.00 kW
SCOP	4.69	3.41
T <sub>biv</sub>	-7 °C	-7 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	12.00 kW	10.25 kW
COP T <sub>j</sub> = -7°C	2.55	1.70
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	7.30 kW	6.24 kW
COP T <sub>j</sub> = +2°C	4.70	3.60
C <sub>dh T<sub>j</sub></sub> = +2 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +7°C	4.70 kW	4.01 kW
COP T <sub>j</sub> = +7°C	6.54	4.60
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.50 kW	3.50 kW
COP T <sub>j</sub> = 12°C	7.55	5.50
C <sub>dh T<sub>j</sub></sub> = +12 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	12.00 kW	10.25 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.55	1.70
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	12.10 kW	9.00 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	1.60
C <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	0.900	0.900
WTOL	55 °C	55 °C
P <sub>off</sub>	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.00 kW
Annual energy consumption Q <sub>he</sub>	5974 kWh	7018 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	9.50 kW	12.90 kW
SEER	5.34	8.14
P <sub>dc T<sub>j</sub></sub> = 35°C	9.50 kW	12.90 kW
EER T <sub>j</sub> = 35°C	3.40	4.48
P <sub>dc T<sub>j</sub></sub> = 30°C	7.00 kW	9.51 kW

EER Tj = 30°C	4.75	7.11
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.50 kW	7.20 kW
EER Tj = 25°C	5.88	9.98
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.20 kW	7.80 kW
EER Tj = 20°C	7.84	12.97
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	623 kWh	554 kWh

**Model 01. RAS-5WHVNPE RWM-5.0N1E - Heating Only**

Model name	01. RAS-5WHVNPE RWM-5.0N1E - 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	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	14.00 kW	14.00 kW
EI input	2.97 kW	5.00 kW
COP	4.71	2.80

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	183 %	133 %
Prated	14.00 kW	12.00 kW
SCOP	4.65	3.39
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	10.25 kW
COP Tj = -7°C	2.55	1.70
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.30 kW	6.24 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.01 kW

COP Tj = +7°C	6.54	4.60
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.50 kW	3.50 kW
COP Tj = 12°C	7.55	5.50
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.00 kW	10.25 kW
COP Tj = Tbiv	2.55	1.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.10 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.00 kW
Annual energy consumption Qhe	6022 kWh	7066 kWh

**Model 02. RAS-5WHVNPE RWM-5.0N1E - with cooling kit**

Model name	02. RAS-5WHVNPE RWM-5.0N1E - 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	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	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.79 kW	2.88 kW
Cooling capacity	9.50	12.90
EER	3.40	4.48

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	185 %	133 %
Prated	14.00 kW	12.00 kW
SCOP	4.69	3.41
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	10.25 kW
COP Tj = -7°C	2.55	1.70
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.30 kW	6.24 kW
COP Tj = +2°C	4.70	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.01 kW
COP Tj = +7°C	6.54	4.60
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.50 kW	3.50 kW
COP Tj = 12°C	7.55	5.50
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.00 kW	10.25 kW
COP Tj = Tbiv	2.55	1.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.10 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.00 kW
Annual energy consumption Qhe	5974 kWh	7018 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.50 kW	12.90 kW
SEER	5.34	8.14
Pdc Tj = 35°C	9.50 kW	12.90 kW
EER Tj = 35°C	3.40	4.48
Pdc Tj = 30°C	7.00 kW	9.51 kW
EER Tj = 30°C	4.75	7.11
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.50 kW	7.20 kW
EER Tj = 25°C	5.88	9.98
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.20 kW	7.80 kW
EER Tj = 20°C	7.84	12.97
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W

PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	623 kWh	554 kWh