

**Subtype 30. Yutaki S (N1) & S Combi (NW1) 220L 4HP R410A**

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	30. Yutaki S (N1) & S Combi (NW1) 220L 4HP R410A
Registration number	041-K002-51
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.3 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-4WHVNPE RWD-4.0NW1E-220S - Heating Only**

Model name	03. RAS-4WHVNPE RWD-4.0NW1E-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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	181 %	135 %
Prated	11.00 kW	10.00 kW

SCOP	4.60	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.45 kW	8.60 kW
COP Tj = -7°C	3.05	1.80
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.75 kW	5.23 kW
COP Tj = +2°C	4.50	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.52 kW
COP Tj = +7°C	6.00	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	7.50	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.45 kW	8.60 kW
COP Tj = Tbiv	3.05	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	7.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.70
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	0.50 kW	2.60 kW
Annual energy consumption Qhe	4801 kWh	5815 kWh

**Model 04. RAS-4WHVNPE RWD-4.0NW1E-220S - with cooling kit**

Model name	04. RAS-4WHVNPE RWD-4.0NW1E-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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	1.87 kW	2.31 kW
Cooling capacity	7.20	10.40
EER	3.84	4.50

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
--	-----------------	--------------------

Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	183 %	136 %
P <sub>rated</sub>	11.00 kW	10.00 kW
SCOP	4.64	3.45
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh Tj = -7°C</sub>	9.45 kW	8.60 kW
COP T <sub>j</sub> = -7°C	3.05	1.80
C <sub>dh Tj = -7 °C</sub>	0.900	0.900
P <sub>dh Tj = +2°C</sub>	5.75 kW	5.23 kW
COP T <sub>j</sub> = +2°C	4.50	3.60
C <sub>dh Tj = +2 °C</sub>	0.900	0.900
P <sub>dh Tj = +7°C</sub>	3.70 kW	3.52 kW
COP T <sub>j</sub> = +7°C	6.00	4.80
C <sub>dh Tj = +7 °C</sub>	0.900	0.900
P <sub>dh Tj = 12°C</sub>	3.70 kW	3.60 kW
COP T <sub>j</sub> = 12°C	7.50	5.80
C <sub>dh Tj = +12 °C</sub>	0.900	0.900
P <sub>dh Tj = T<sub>biv</sub></sub>	9.45 kW	8.60 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.05	1.80
P <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	10.50 kW	7.40 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.65	1.70
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	0.50 kW	2.60 kW
Annual energy consumption Q <sub>he</sub>	4753 kWh	5767 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	7.20 kW	10.40 kW
SEER	5.13	6.36
P <sub>dc Tj = 35°C</sub>	7.20 kW	10.40 kW
EER T <sub>j</sub> = 35°C	3.84	4.50
P <sub>dc Tj = 30°C</sub>	5.30 kW	7.66 kW

EER Tj = 30°C	4.60	6.30
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	3.50 kW	4.93 kW
EER Tj = 25°C	5.80	7.20
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.60 kW	5.10 kW
EER Tj = 20°C	7.50	8.20
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	491 kWh	572 kWh

**Model 05. RAS-4WHVNPE RWD-4.0NW1E-220S-K - UK Version - Heating Only**

Model name	05. RAS-4WHVNPE RWD-4.0NW1E-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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	181 %	135 %
Prated	11.00 kW	10.00 kW

SCOP	4.60	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.45 kW	8.60 kW
COP Tj = -7°C	3.05	1.80
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.75 kW	5.23 kW
COP Tj = +2°C	4.50	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.52 kW
COP Tj = +7°C	6.00	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	7.50	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.45 kW	8.60 kW
COP Tj = Tbiv	3.05	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	7.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.70
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	0.50 kW	2.60 kW
Annual energy consumption Qhe	4801 kWh	5815 kWh

**Model 06. RAS-4WHVNPE RWD-4.0NW1E-220S-K - UK Version - with cooling kit**

Model name	06. RAS-4WHVNPE RWD-4.0NW1E-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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

**EN 14511-2 | Cooling**

	Low temperature	Medium temperature
El input	1.87 kW	2.31 kW
Cooling capacity	7.20	10.40
EER	3.84	4.50

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature

Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	183 %	136 %
P <sub>rated</sub>	11.00 kW	10.00 kW
SCOP	4.64	3.45
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	9.45 kW	8.60 kW
COP T <sub>j</sub> = -7°C	3.05	1.80
C <sub>dh T<sub>j</sub></sub> = -7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = +2°C	5.75 kW	5.23 kW
COP T <sub>j</sub> = +2°C	4.50	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	3.70 kW	3.52 kW
COP T <sub>j</sub> = +7°C	6.00	4.80
C <sub>dh T<sub>j</sub></sub> = +7 °C	0.900	0.900
P <sub>dh T<sub>j</sub></sub> = 12°C	3.70 kW	3.60 kW
COP T <sub>j</sub> = 12°C	7.50	5.80
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>	9.45 kW	8.60 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.05	1.80
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>	10.50 kW	7.40 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>	2.65	1.70
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	0.50 kW	2.60 kW
Annual energy consumption Q <sub>he</sub>	4753 kWh	5767 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	7.20 kW	10.40 kW
SEER	5.13	6.36
P <sub>dc T<sub>j</sub></sub> = 35°C	7.20 kW	10.40 kW
EER T <sub>j</sub> = 35°C	3.84	4.50
P <sub>dc T<sub>j</sub></sub> = 30°C	5.30 kW	7.66 kW

EER Tj = 30°C	4.60	6.30
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	3.50 kW	4.93 kW
EER Tj = 25°C	5.80	7.20
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.60 kW	5.10 kW
EER Tj = 20°C	7.50	8.20
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	491 kWh	572 kWh

**Model 01. RAS-4WHVNPE RWM-4.0N1E - Heating Only**

Model name	01. RAS-4WHVNPE RWM-4.0N1E - 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	11.00 kW	11.00 kW
EI input	2.20 kW	3.67 kW
COP	5.00	3.00

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	181 %	135 %
Prated	11.00 kW	10.00 kW
SCOP	4.60	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.45 kW	8.60 kW
COP Tj = -7°C	3.05	1.80
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.75 kW	5.23 kW
COP Tj = +2°C	4.50	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.52 kW

COP Tj = +7°C	6.00	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	7.50	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.45 kW	8.60 kW
COP Tj = Tbiv	3.05	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	7.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.70
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	0.50 kW	2.60 kW
Annual energy consumption Qhe	4801 kWh	5815 kWh

**Model 02. RAS-4WHVNPE RWM-4.0N1E - with cooling kit**

Model name	02. RAS-4WHVNPE RWM-4.0N1E - 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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	1.87 kW	2.31 kW
Cooling capacity	7.20	10.40
EER	3.84	4.50

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	183 %	136 %
Prated	11.00 kW	10.00 kW
SCOP	4.64	3.45
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.45 kW	8.60 kW
COP Tj = -7°C	3.05	1.80
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.75 kW	5.23 kW
COP Tj = +2°C	4.50	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.52 kW
COP Tj = +7°C	6.00	4.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	7.50	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.45 kW	8.60 kW
COP Tj = Tbiv	3.05	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	7.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.70
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	0.50 kW	2.60 kW
Annual energy consumption Qhe	4753 kWh	5767 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.20 kW	10.40 kW
SEER	5.13	6.36
Pdc Tj = 35°C	7.20 kW	10.40 kW
EER Tj = 35°C	3.84	4.50
Pdc Tj = 30°C	5.30 kW	7.66 kW
EER Tj = 30°C	4.60	6.30
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	3.50 kW	4.93 kW
EER Tj = 25°C	5.80	7.20
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.60 kW	5.10 kW
EER Tj = 20°C	7.50	8.20
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	491 kWh	572 kWh