

Page 1 of 29

#### This information was generated by the HP KEYMARK database on 18 Mar 2022

#### **Login**

Summary of	30. Yutaki S (N1) & S Combi (NW1) 220L 4HP R410A	Reg. No.	041-K002-51	
Certificate Holder	Certificate Holder			
Name	me Johnson Controls-Hitachi AirConditioning Spain			
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella Zip 08233		08233	
City	Vacarisses, Barcelona Country Spain		Spain	
Certification Body	BRE Global Limited			
Subtype title	30. Yutaki S (N1) & S Combi (NW1) 220L 4HP R410A			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	gerant 3.3 kg			
Certification Date	e 08.02.2022			
Testing basis Heat Pump Keymark Scheme Rules Rev 09				



# Model: 03. RAS-4WHVNPE RWD-4.0NW1E-220S - Heating Only

Configure model		
Model name	03. RAS-4WHVNPE RWD-4.0NW1E-220S - Heating Only	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

#### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	11.00 kW	11.00 kW	
El input	2.20 kW	3.67 kW	
СОР	5.00	3.00	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

#### **Average Climate**



EN 12102-1		
	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		
	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
РТО	0 W	0 W
PSB	13 W	13 W
PCK	0 W	o 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

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	127 %	
СОР	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 I	



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

Configure model		
Model name	04. RAS-4WHVNPE RWD-4.0NW1E-220S - with cooling kit	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

General Data		
Power supply 1x230V 50Hz		

#### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	11.00 kW	11.00 kW	
El input	2.20 kW	3.67 kW	
СОР	5.00	3.00	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## **Average Climate**



EN 12102-1		
	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		
	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
РТО	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

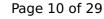
## Cooling





EN 14511-2			
+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 14825





This information was generated by the HP KETMARK database on 16 Mar 202		
	+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	0.900	0.900
Pdc Tj = 25°C	3.50 kW	4.93 kW
EER Tj = 25°C	5.80	7.20
Cdc	0.900	0.900
Pdc Tj = 20°C	3.60 kW	5.10 kW
EER Tj = 20°C	7.50	8.20
Cdc	0.900	0.900
Poff	13 W	13 W
РТО	0 W	0 W
PSB	13 W	13 W
PCK	0 W	o w
Annual energy consumption Qce	491 kWh	572 kWh
		•

## Domestic Hot Water (DHW)





EN 16147	
Declared load profile	L
Efficiency ηDHW	127 %
СОР	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 I



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

Configure model		
Model name	05. RAS-4WHVNPE RWD-4.0NW1E-220S-K - UK Version - Heating Only	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

#### Heating

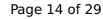
EN 14511-2			
Low temperature Medium temperature			
Heat output	11.00 kW	11.00 kW	
El input	2.20 kW	3.67 kW	
СОР	5.00	3.00	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

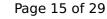
EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	181 %	135 %
Prated	11.00 kW	10.00 kW
SCOP	4.60	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.45 kW	8.60 kW
COP Tj = -7°C	3.05	1.80
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = $+2$ °C	5.75 kW	5.23 kW
COP Tj = +2°C	4.50	3.60
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.52 kW
$COP Tj = +7^{\circ}C$	6.00	4.80
Cdh Tj = +7 °C	0.900	0.900





3.70 kW	3.60 kW
7.50	5.80
0.900	0.900
9.45 kW	8.60 kW
3.05	1.80
10.50 kW	7.40 kW
2.65	1.70
0.900	0.900
55 °C	55 °C
13 W	13 W
0 W	0 W
13 W	13 W
0 W	0 W
Electricity	Electricity
0.50 kW	2.60 kW
4801 kWh	5815 kWh
	7.50  0.900  9.45 kW  3.05  10.50 kW  2.65  0.900  55 °C  13 W  0 W  13 W  0 W  Electricity  0.50 kW

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	127 %	
СОР	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 I	



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

Configure model		
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	n/a	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

General Data		
Power supply	1x230V 50Hz	

#### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
СОР	5.00	3.00

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

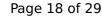


# Average Climate

This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	39 dB(A)	39 dB(A)	
Sound power level outdoor	58 dB(A)	58 dB(A)	

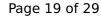
EN 14825		
Low temperature	Medium temperature	
183 %	136 %	
11.00 kW	10.00 kW	
4.64	3.45	
-7 °C	-7 °C	
-10 °C	-10 °C	
9.45 kW	8.60 kW	
3.05	1.80	
0.900	0.900	
5.75 kW	5.23 kW	
4.50	3.60	
0.900	0.900	
3.70 kW	3.52 kW	
6.00	4.80	
	Low temperature  183 %  11.00 kW  4.64  -7 °C  -10 °C  9.45 kW  3.05  0.900  5.75 kW  4.50  0.900  3.70 kW	





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
РТО	o w	0 W
PSB	13 W	13 W
PCK	o 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

## Cooling





EN 14511-2		
	+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

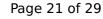
#### EN 14825





This information was generated by the HP KETMARK database on 16 Mar 20.				
	+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	0.900	0.900		
Pdc Tj = 25°C	3.50 kW	4.93 kW		
EER Tj = 25°C	5.80	7.20		
Cdc	0.900	0.900		
Pdc Tj = 20°C	3.60 kW	5.10 kW		
EER Tj = 20°C	7.50	8.20		
Cdc	0.900	0.900		
Poff	13 W	13 W		
РТО	0 W	o w		
PSB	13 W	13 W		
PCK	0 W	o w		
Annual energy consumption Qce	491 kWh	572 kWh		
	•			

### Domestic Hot Water (DHW)





EN 16147		
Declared load profile	L	
Efficiency ηDHW	127 %	
СОР	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 I	



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

Configure model		
Model name 01. RAS-4WHVNPE RWM-4.0N1E - Heating Only		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone n/a		
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

#### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
СОР	5.00	3.00

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	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		
	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
$COP Tj = +7^{\circ}C$	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
РТО	o w	o w
PSB	13 W	13 W
PCK	o w	o 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

Configure model		
Model name	02. RAS-4WHVNPE RWM-4.0N1E - with cooling kit	
Application	Heating (medium temp)	
Units Indoor + Outdoor		
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

General Data		
Power supply 1x230V 50Hz		

#### Heating

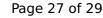
EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
СОР	5.00	3.00

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1				
	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				
	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
РТО	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

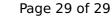
## Cooling





EN 14511-2				
	+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 14825





	+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	0.900	0.900
Pdc Tj = 25°C	3.50 kW	4.93 kW
EER Tj = 25°C	5.80	7.20
Cdc	0.900	0.900
Pdc Tj = 20°C	3.60 kW	5.10 kW
EER Tj = 20°C	7.50	8.20
Cdc	0.900	0.900
Poff	13 W	13 W
РТО	o w	o w
PSB	13 W	13 W
PCK	o w	o w
Annual energy consumption Qce	491 kWh	572 kWh