

Page 1 of 29

## This information was generated by the HP KEYMARK database on 23 Jun 2022

#### **Login**

Summary of	30. Yutaki S (N1) & S Combi (NW1) 220L 4HP R410A	Reg. No.	041-K002-51
Certificate Holder			
Name	Johnson Controls-Hitachi AirConditioning Spain		
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella	Ronda Shimizu, 1. Pol. Ind. Can Torrella Zip 08233	
City	Vacarisses, Barcelona	Country	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	nt 3.3 kg		
Certification Date	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
$COP Tj = +7^{\circ}C$	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	0 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	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

# 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





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
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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	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

# 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



# 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

# **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





-	
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

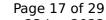
Configure model		
Model name	06. RAS-4WHVNPE RWD-4.0NW1E-220S-K - UK Version - with cooling kit	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

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



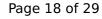


Cooling

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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



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





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
4753 kWh	5767 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: 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	

# **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	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	

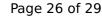
General Data		
Power supply 1x230V 50Hz		

# 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

# 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



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	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	4753 kWh	5767 kWh