

Page 1 of 29

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Summary of	34. Yutaki S (N1) & S Combi (NW1) 220L 6HP R410A	Reg. No.	041-K002-55	
Certificate Holder	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	Vacarisses, Barcelona Country Spain		
Certification Body	BRE Global Limited			
Subtype title	34. Yutaki S (N1) & S Combi (NW1) 220L 6HP R410A			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R410A			
Mass of Refrigerant	int 3.4 kg			
Certification Date	08.02.2022			
Testing basis	Heat Pump Keymark Scheme Rules Rev 09			

# Model: 03. RAS-6WHVNPE RWD-6.0NW1E-220S - Heating Only

Configure model		
Model name	03. RAS-6WHVNPE RWD-6.0NW1E-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	16.00 kW	16.00 kW	
El input	3.50 kW	6.40 kW	
СОР	4.57	2.50	

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	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	134 %
Prated	16.00 kW	14.00 kW
SCOP	4.12	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.80 kW	11.20 kW
COP Tj = -7°C	2.40	1.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = $+2$ °C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	6.16	4.80
Cdh Tj = +7 °C	0.900	0.900





3.50 kW	3.60 kW
7.10	7.05
0.900	0.900
13.80 kW	11.20 kW
2.40	1.94
14.10 kW	10.50 kW
2.30	1.40
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
1.90 kW	3.50 kW
7822 kWh	7640 kWh
	7.10  0.900  13.80 kW  2.40  14.10 kW  2.30  0.900  55 °C  13 W  0 W  13 W  0 W  Electricity  1.90 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: 04. RAS-6WHVNPE RWD-6.0NW1E-220S - with cooling kit

Configure model		
Model name	04. RAS-6WHVNPE RWD-6.0NW1E-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	16.00 kW	16.00 kW	
El input	3.50 kW	6.40 kW	
СОР	4.57	2.50	

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	3.25 kW	3.19 kW
Cooling capacity	10.50	13.50
EER	3.23	4.23

#### EN 14825



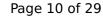


	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.50 kW	13.50 kW
SEER	5.23	7.87
Pdc Tj = 35°C	10.50 kW	13.50 kW
EER Tj = 35°C	3.23	4.23
Pdc Tj = 30°C	7.80 kW	9.95 kW
EER Tj = 30°C	4.56	6.86
Cdc	0.900	0.900
Pdc Tj = 25°C	5.00 kW	7.20 kW
EER Tj = 25°C	5.77	9.54
Cdc	0.900	0.900
Pdc Tj = 20°C	3.20 kW	7.80 kW
EER Tj = 20°C	7.69	12.47
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	702 kWh	601 kWh



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	163 %	135 %
Prated	16.00 kW	14.00 kW
SCOP	4.15	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.80 kW	11.20 kW
COP Tj = -7°C	2.40	1.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = $+2^{\circ}$ C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = $+7^{\circ}$ C	5.40 kW	4.38 kW
COP Tj = +7°C	6.16	4.80
Cdh Tj = +7 °C	0.900	0.900





		Titt database on 25 jan 202
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	7.10	7.05
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.80 kW	11.20 kW
COP Tj = Tbiv	2.40	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.40
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	o w
PSB	13 W	13 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.50 kW
Annual energy consumption Qhe	7774 kWh	7592 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-6WHVNPE RWD-6.0NW1E-220S-K - UK Version - Heating Only

Configure model		
Model name	05. RAS-6WHVNPE RWD-6.0NW1E-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	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
СОР	4.57	2.50

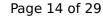
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## **Average Climate**



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	134 %
Prated	16.00 kW	14.00 kW
SCOP	4.12	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.80 kW	11.20 kW
COP Tj = -7°C	2.40	1.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.40 kW	4.38 kW
$COP Tj = +7^{\circ}C$	6.16	4.80
Cdh Tj = +7 °C	0.900	0.900
	<u>'</u>	





		Tit database on 25 jan 2021
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	7.10	7.05
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.80 kW	11.20 kW
COP Tj = Tbiv	2.40	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.40
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	o 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	3.50 kW
Annual energy consumption Qhe	7822 kWh	7640 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: 06. RAS-6WHVNPE RWD-6.0NW1E-220S-K - UK Version - with cooling kit

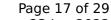
Configure model		
Model name	06. RAS-6WHVNPE RWD-6.0NW1E-220S-K - UK Version - with cooling kit	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C and +18°C/+23°C	

General Data		
Power supply 1x230V 50Hz		

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
СОР	4.57	2.50

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

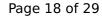




# Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.25 kW	3.19 kW
Cooling capacity	10.50	13.50
EER	3.23	4.23

#### EN 14825





	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.50 kW	13.50 kW
SEER	5.23	7.87
Pdc Tj = 35°C	10.50 kW	13.50 kW
EER Tj = 35°C	3.23	4.23
Pdc Tj = 30°C	7.80 kW	9.95 kW
EER Tj = 30°C	4.56	6.86
Cdc	0.900	0.900
Pdc Tj = 25°C	5.00 kW	7.20 kW
EER Tj = 25°C	5.77	9.54
Cdc	0.900	0.900
Pdc Tj = 20°C	3.20 kW	7.80 kW
EER Tj = 20°C	7.69	12.47
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	702 kWh	601 kWh



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	163 %	135 %
Prated	16.00 kW	14.00 kW
SCOP	4.15	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.80 kW	11.20 kW
COP Tj = -7°C	2.40	1.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	6.16	4.80
Cdh Tj = +7 °C	0.900	0.900





Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	7.10	7.05
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.80 kW	11.20 kW
COP Tj = Tbiv	2.40	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.40
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	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.90 kW	3.50 kW
Annual energy consumption Qhe	7774 kWh	7592 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-6WHVNPE RWM-6.0N1E - Heating Only

Configure model		
Model name	01. RAS-6WHVNPE RWM-6.0N1E - 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	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
СОР	4.57	2.50

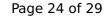
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## **Average Climate**



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	162 %	134 %
Prated	16.00 kW	14.00 kW
SCOP	4.12	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.80 kW	11.20 kW
COP Tj = -7°C	2.40	1.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	6.16	4.80
Cdh Tj = +7 °C	0.900	0.900





Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	7.10	7.05
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.80 kW	11.20 kW
COP Tj = Tbiv	2.40	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.40
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	3.50 kW
Annual energy consumption Qhe	7822 kWh	7640 kWh

# Model: 02. RAS-6WHVNPE RWM-6.0N1E - with cooling kit

Configure model		
Model name	02. RAS-6WHVNPE RWM-6.0N1E - 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	

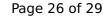
General Data		
Power supply 1x230V 50Hz		

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
СОР	4.57	2.50

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

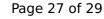
## Cooling





EN 14511-2				
	+7°C/+12°C	+18°C/+23°C		
El input	3.25 kW	3.19 kW		
Cooling capacity	10.50	13.50		
EER	3.23	4.23		

#### EN 14825



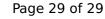


	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.50 kW	13.50 kW
SEER	5.23	7.87
Pdc Tj = 35°C	10.50 kW	13.50 kW
EER Tj = 35°C	3.23	4.23
Pdc Tj = 30°C	7.80 kW	9.95 kW
EER Tj = 30°C	4.56	6.86
Cdc	0.900	0.900
Pdc Tj = 25°C	5.00 kW	7.20 kW
EER Tj = 25°C	5.77	9.54
Cdc	0.900	0.900
Pdc Tj = 20°C	3.20 kW	7.80 kW
EER Tj = 20°C	7.69	12.47
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	702 kWh	601 kWh



EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	39 dB(A)	39 dB(A)		
Sound power level outdoor	60 dB(A)	60 dB(A)		

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	163 %	135 %	
Prated	16.00 kW	14.00 kW	
SCOP	4.15	3.45	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	13.80 kW	11.20 kW	
COP Tj = -7°C	2.40	1.94	
Cdh Tj = -7 °C	0.900	0.900	
Pdh Tj = +2°C	8.40 kW	6.82 kW	
COP Tj = +2°C	3.90	3.35	
Cdh Tj = +2 °C	0.900	0.900	
Pdh Tj = +7°C	5.40 kW	4.38 kW	
COP Tj = +7°C	6.16	4.80	
Cdh Tj = +7 °C	0.900	0.900	





Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	7.10	7.05
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.80 kW	11.20 kW
COP Tj = Tbiv	2.40	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.10 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.40
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	1.90 kW	3.50 kW
Annual energy consumption Qhe	7774 kWh	7592 kWh