Summary of	06. Yutaki S & S Combi 6.0HP (mono)	Reg. No.	041-K002-06
Certificate Holder			
Name	Johnson Controls-Hitachi AirConditioning Spain		
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella	Zip	08233
City	Vacarisses, Barcelona	Country	Spain
Certification Body	BRE Energy & Communications Division		
Name of testing laboratory	CEIS		
Subtype title	06. Yutaki S & S Combi 6.0HP (mono)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.4 kg		

Model: RAS-6WHVNPE RWM-6.0NE - Heating Only

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	153 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.20
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8287 kWh	8780 kWh

Model: RAS-6WHVNPE RWD-6.0NWE-200S - Heating Only

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	153 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.20
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8287 kWh	8780 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	130 %
COP	3.25
Standby power input	42.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	263 l
Heating up time	1:10 h:min

Model: RAS-6WHVNPE RWD-6.0NWE-260S - Heating Only

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	153 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.20
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8287 kWh	8780 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	134 %
COP	3.35
Standby power input	44.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	350 l
Heating up time	1:25 h:min

Model: RAS-6WHVNPE RWD-6.0NWE-200S-K - UK- Heating Only

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	153 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.20
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8287 kWh	8780 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	130 %
COP	3.25
Standby power input	42.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	263 l
Heating up time	1:10 h:min

Model: RAS-6WHVNPE RWD-6.0NWE-260S-K - UK- Heating Only

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	153 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.20
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8287 kWh	8780 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	134 %
COP	3.35
Standby power input	44.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	350 l
Heating up time	1:25 h:min

Model: RAS-6WHVNPE RWD-6.0NWSE-260S - Solar - Heating Only

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	153 %	125 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.20
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8287 kWh	8780 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	134 %
COP	3.35
Standby power input	44.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	350 l
Heating up time	1:25 h:min

Model: RAS-6WHVNPE RWM-6.0NE - with cooling kit

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	153 %	126 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.23
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8239 kWh	8732 kWh

Model: RAS-6WHVNPE RWD-6.0NWE-200S - with cooling kit

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
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EN 14825		
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η_s	153 %	126 %
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SCOP	3.90	3.23
Tbiv	-7 °C	-7 °C
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Pdh Tj = +7°C	5.40 kW	4.38 kW
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Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8239 kWh	8732 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	130 %
COP	3.25
Standby power input	42.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	263 l
Heating up time	1:10 h:min

Model: RAS-6WHVNPE RWD-6.0NWE-260S - with cooling kit

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
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EN 14825		
	Low temperature	**Medium temperature**
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Pdh Tj = +7°C	5.40 kW	4.38 kW
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Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8239 kWh	8732 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	XL
Efficiency ηDHW	134 %
COP	3.35
Standby power input	44.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	350 l
Heating up time	1:25 h:min

Model: RAS-6WHVNPE RWD-6.0NWSE-260S - Solar - with cooling kit

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	16.00 kW
El input	3.50 kW	6.40 kW
COP	4.57	2.50
Indoor water flow rate	2.74 m³/h	1.71 m³/h

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	39 dB(A)	39 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	153 %	126 %
Prated	16.00 kW	14.00 kW
SCOP	3.90	3.23
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	1.60
Pdh Tj = +2°C	8.40 kW	6.82 kW
COP Tj = +2°C	3.90	3.35
Pdh Tj = +7°C	5.40 kW	4.38 kW
COP Tj = +7°C	5.00	4.35
Pdh Tj = 12°C	3.50 kW	3.60 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	13.80 kW	11.20 kW

COP Tj = Tbiv	2.40	1.60
Pdh Tj = TOL	14.10 kW	10.50 kW
COP Tj = TOL	2.30	1.40
Cdh	0.90	0.90
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	3.10 kW
Annual energy consumption Qhe	8239 kWh	8732 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	134 %
COP	3.35
Standby power input	44.0 W
Reference hot water temperature	54.0 °C
Mixed water at 40°C	350 l
Heating up time	1:25 h:min