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Login

Summary of	37. Yutaki S (N1) 10.0HP R410A (3ph)	Reg. No.	041-K002-58
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 Global Limited		
Subtype title	37. Yutaki S (N1) 10.0HP R410A (3ph)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	5.3 kg		
Certification Date	08.02.2022		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09		

Model: 01. RAS-10WHNPE RWM-10.0N1E - Heating Only

Configure model	
Model name	01. RAS-10WHNPE RWM-10.0N1E - 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	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	24.00 kW	24.00 kW
El input	5.59 kW	9.06 kW
COP	4.29	2.65

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	47 dB(A)	47 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	141 %	116 %
Prated	20.00 kW	18.00 kW
SCOP	3.60	2.98
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.40 kW	15.60 kW
COP Tj = -7°C	2.30	1.65
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	10.77 kW	9.50 kW
COP Tj = +2°C	3.60	3.10
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.70 kW	8.30 kW
COP Tj = +7°C	5.10	4.35
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	8.70 kW	8.50 kW
COP Tj = 12°C	4.90	4.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	17.40 kW	15.60 kW
COP Tj = Tbiv	2.10	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.45
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	36 W	36 W
PTO	0 W	0 W
PSB	36 W	36 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.00 kW	4.00 kW
Annual energy consumption Qhe	11410 kWh	12210 kWh

Model: 02. RAS-10WHNPE RWM-10.0N1E - with cooling kit

Configure model	
Model name	02. RAS-10WHNPE RWM-10.0N1E - 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	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	24.00 kW	24.00 kW
El input	5.59 kW	9.06 kW
COP	4.29	2.65

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	47 dB(A)	47 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	142 %	118 %
Prated	20.00 kW	18.00 kW
SCOP	3.60	2.98
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.40 kW	15.60 kW
COP Tj = -7°C	2.30	1.65
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	10.77 kW	9.50 kW
COP Tj = +2°C	3.60	3.10
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.70 kW	8.30 kW
COP Tj = +7°C	5.10	4.35
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	8.70 kW	8.50 kW
COP Tj = 12°C	4.90	4.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	17.40 kW	15.60 kW
COP Tj = Tbiv	2.30	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.00 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.45
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	36 W	36 W
PTO	0 W	0 W
PSB	36 W	36 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.00 kW	4.00 kW
Annual energy consumption Qhe	11278 kWh	12078 kWh

Cooling

EN 14511-2

	+7°C/+12°C	+18°C/+23°C
El input	6.23 kW	5.54 kW
Cooling capacity	17.50	20.00
EER	2.81	3.61

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	17.50 kW	20.00 kW
SEER	4.06	5.44
Pdc Tj = 35°C	17.50 kW	20.00 kW
EER Tj = 35°C	2.81	3.61
Pdc Tj = 30°C	12.90 kW	14.74 kW
EER Tj = 30°C	3.53	5.50
Cdc	0.900	0.900
Pdc Tj = 25°C	8.20 kW	8.20 kW
EER Tj = 25°C	4.87	6.50
Cdc	0.900	0.900
Pdc Tj = 20°C	8.00 kW	8.50 kW
EER Tj = 20°C	5.50	6.60
Cdc	0.900	0.900
Poff	36 W	36 W
PTO	0 W	0 W
PSB	36 W	36 W
PCK	0 W	0 W
Annual energy consumption Qce	1510 kWh	1286 kWh