

Subtype 20. Yutaki M 5.0HP (mono)

Certificate Holder	Johnson Controls-Hitachi AirConditioning Spain
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella
ZIP	08233
City	Vacarisses, Barcelona
Country	ES
Certification Body	BRE Global Limited
Subtype title	20. Yutaki M 5.0HP (mono)
Registration number	041-K002-20
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	3.1 kg

Model RASM-5VNE - Heating Only

Model name	RASM-5VNE - Heating Only
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	175 %	133 %
Prated	14.00 kW	12.00 kW
SCOP	4.45	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	10.25 kW
COP Tj = -7°C	2.55	1.70
Pdh Tj = +2°C	7.30 kW	6.24 kW
COP Tj = +2°C	4.70	3.60
Pdh Tj = +7°C	4.70 kW	4.01 kW
COP Tj = +7°C	5.70	4.60
Pdh Tj = 12°C	3.50 kW	3.50 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	12.00 kW	10.25 kW

COP $T_j = T_{biv}$	2.55	1.70
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	12.10 kW	10.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.50	1.70
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	55 °C	55 °C
P _{off}	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	1.50 kW
Annual energy consumption Q _{he}	6313 kWh	7042 kWh

Model RASM-5VNE - with cooling kit

Model name	RASM-5VNE - with cooling kit
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	14.00 kW	14.00 kW
El input	2.97 kW	5.00 kW
COP	4.71	2.80

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	134 %
Prated	14.00 kW	12.00 kW
SCOP	4.48	3.43
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.00 kW	10.25 kW
COP Tj = -7°C	2.55	1.70
Pdh Tj = +2°C	7.30 kW	6.24 kW
COP Tj = +2°C	4.70	3.60
Pdh Tj = +7°C	4.70 kW	4.01 kW
COP Tj = +7°C	5.70	4.60
Pdh Tj = 12°C	3.50 kW	3.50 kW
COP Tj = 12°C	6.00	5.50
Pdh Tj = Tbiv	12.00 kW	10.25 kW

COP $T_j = T_{biv}$	2.55	1.70
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	12.10 kW	10.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.50	1.70
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	55 °C	55 °C
P _{off}	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	1.50 kW
Annual energy consumption Q _{he}	6265 kWh	6994 kWh