

Subtype 22. Yutaki M 4.0HP (tri)

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	22. Yutaki M 4.0HP (tri)
Registration number	041-K002-22
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.8 kg

Model RASM-4NE - Heating Only

Model name	RASM-4NE - 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	3x400V 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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	135 %
Prated	11.00 kW	10.00 kW
SCOP	4.73	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.60 kW	8.60 kW
COP Tj = -7°C	2.74	1.80
Pdh Tj = +2°C	5.84 kW	5.23 kW
COP Tj = +2°C	5.20	3.60
Pdh Tj = +7°C	3.76 kW	3.52 kW
COP Tj = +7°C	5.80	4.80
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	6.40	5.80
Pdh Tj = Tbiv	9.60 kW	8.60 kW

COP $T_j = T_{biv}$	2.74	1.80
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	10.50 kW	8.80 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.65	1.90
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	55 °C	55 °C
P _{off}	19 W	19 W
PTO	0 W	0 W
PSB	19 W	19 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	1.20 kW
Annual energy consumption Q _{he}	4736 kWh	5808 kWh

Model RASM-4NE - with cooling kit

Model name	RASM-4NE - 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	3x400V 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	11.00 kW	11.00 kW
El input	2.20 kW	3.67 kW
COP	5.00	3.00

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	189 %	137 %
Prated	11.00 kW	10.00 kW
SCOP	4.80	3.50
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.60 kW	8.60 kW
COP Tj = -7°C	2.74	1.80
Pdh Tj = +2°C	5.84 kW	5.23 kW
COP Tj = +2°C	5.20	3.60
Pdh Tj = +7°C	3.76 kW	3.52 kW
COP Tj = +7°C	5.80	4.80
Pdh Tj = 12°C	3.70 kW	3.60 kW
COP Tj = 12°C	6.40	5.80
Pdh Tj = Tbiv	9.60 kW	8.60 kW

COP $T_j = T_{biv}$	2.74	1.80
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	10.50 kW	8.80 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.65	1.90
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.90	0.90
WTOL	55 °C	55 °C
P _{off}	19 W	19 W
PTO	0 W	0 W
PSB	19 W	19 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	1.20 kW
Annual energy consumption Q _{he}	4666 kWh	5738 kWh