

This information was generated by the HP KEYMARK database on 17 Dec 2020

| | | | |
|----------------------------|--|----------|-------------|
| Summary of | 18. Yutaki M 3.0HP (mono | Reg. No. | 041-K002-18 |
| 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 | 18. Yutaki M 3.0HP (mono | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R410a | | |
| Mass Of Refrigerant | 2.4 kg | | |

Model: RASM-3VNE - 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 | 7.50 kW | 7.50 kW |
| El input | 1.65 kW | 2.78 kW |
| COP | 4.55 | 2.70 |
| Indoor water flow rate | 1.29 m ³ /h | 0.80 m ³ /h |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

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

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 164 % | 125 % |
| Prated | 7.00 kW | 6.00 kW |
| SCOP | 4.18 | 3.20 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.90 kW | 5.10 kW |
| COP Tj = -7°C | 2.50 | 1.84 |
| Pdh Tj = +2°C | 3.59 kW | 3.10 kW |
| COP Tj = +2°C | 4.40 | 3.20 |
| Pdh Tj = +7°C | 2.31 kW | 2.00 kW |
| COP Tj = +7°C | 5.35 | 4.45 |
| Pdh Tj = 12°C | 2.10 kW | 2.30 kW |
| COP Tj = 12°C | 6.15 | 5.96 |
| Pdh Tj = Tbiv | 5.90 kW | 5.10 kW |
| COP Tj = Tbiv | 2.50 | 1.84 |

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| | | |
|--|-------------|-------------|
| P _{dh} T _j = TOL | 6.40 kW | 5.20 kW |
| COP T _j = TOL | 2.30 | 1.65 |
| C _{dh} | 0.90 | 0.90 |
| WTOL | 55 °C | 55 °C |
| P _{off} | 15 W | 15 W |
| PTO | 0 W | 0 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.60 kW | 0.60 kW |
| Annual energy consumption Q _{he} | 3298 kWh | 3726 kWh |

Model: RASM-3VNE - 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 | 7.50 kW | 7.50 kW |
| El input | 1.65 kW | 2.78 kW |
| COP | 4.55 | 2.70 |
| Indoor water flow rate | 1.29 m ³ /h | 0.80 m ³ /h |

Average Climate

This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1

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

EN 14825

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 167 % | 127 % |
| Prated | 7.00 kW | 6.00 kW |
| SCOP | 4.25 | 3.25 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.90 kW | 5.10 kW |
| COP Tj = -7°C | 2.50 | 1.84 |
| Pdh Tj = +2°C | 3.59 kW | 3.10 kW |
| COP Tj = +2°C | 4.40 | 3.20 |
| Pdh Tj = +7°C | 2.31 kW | 2.00 kW |
| COP Tj = +7°C | 5.35 | 4.45 |
| Pdh Tj = 12°C | 2.10 kW | 2.30 kW |
| COP Tj = 12°C | 6.15 | 5.96 |
| Pdh Tj = Tbiv | 5.90 kW | 5.10 kW |
| COP Tj = Tbiv | 2.50 | 1.84 |

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| | | |
|--|-------------|-------------|
| Pdh Tj = TOL | 6.40 kW | 5.20 kW |
| COP Tj = TOL | 2.30 | 1.65 |
| Cdh | 0.90 | 0.90 |
| WTOL | 55 °C | 55 °C |
| Poff | 15 W | 15 W |
| PTO | 0 W | 0 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | electricity | electricity |
| Supplementary Heater: PSUP | 0.60 kW | 0.60 kW |
| Annual energy consumption Qhe | 3242 kWh | 3671 kWh |