Login

| Summary of | 36. Yutaki S (N1) 8.0HP R410A (3ph) | Reg. No. | 041-K002-57 |
|---|---|---|---|
| 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 | 36. Yutaki S (N1) 8.0HP R410A (3ph) | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R410A | | |
| Mass of Refrigerant | 5 kg | | |
| Certification Date | 08.02.2022 | | |
| Testing basis | Heat Pump Keymark Scheme Rules Rev 09 | | |

# Model: 01. RAS-8WHNPE RWM-8.0N1E - Heating Only

| Configure model | |
|---|---|
| Model name | 01. RAS-8WHNPE RWM-8.0N1E - 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 | 20.00 kW | 20.00 kW |
| El input | 4.65 kW | 7.35 kW |
| COP | 4.30 | 2.72 |

| 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 | 59 dB(A) | 59 dB(A) |

| EN 14825 | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| $\eta_s$ | 150 % | 120 % |
| Prated | 18.00 kW | 16.00 kW |
| SCOP | 3.83 | 3.08 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 15.60 kW | 13.80 kW |
| COP Tj = -7°C | 2.50 | 1.65 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 9.50 kW | 8.40 kW |
| COP Tj = +2°C | 3.85 | 3.10 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |
| Pdh Tj = +7°C | 6.10 kW | 6.00 kW |
| COP Tj = +7°C | 5.40 | 4.76 |
| Cdh Tj = +7 °C | 0.900 | 0.900 |

| | | |
|---|---|---|
| Pdh Tj = 12°C | 7.00 kW | 6.80 kW |
| COP Tj = 12°C | 4.65 | 5.10 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 15.60 kW | 13.80 kW |
| COP Tj = Tbiv | 2.50 | 1.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.00 kW | 12.10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.40 | 1.50 |
| 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 | 3.90 kW |
| Annual energy consumption Qhe | 9513 kWh | 10452 kWh |

# Model: 02. RAS-8WHNPE RWM-8.0N1E - with cooling kit

| Configure model | |
|---|---|
| Model name | 02. RAS-8WHNPE RWM-8.0N1E - 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 | 20.00 kW | 20.00 kW |
| El input | 4.65 kW | 7.35 kW |
| COP | 4.30 | 2.72 |

| 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 | 59 dB(A) | 59 dB(A) |

| EN 14825 | | |
|---|---|---|
| | **Low temperature** | **Medium temperature** |
| $\eta_s$ | 152 % | 122 % |
| Prated | 18.00 kW | 16.00 kW |
| SCOP | 3.83 | 3.08 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 15.60 kW | 13.80 kW |
| COP Tj = -7°C | 2.50 | 1.65 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 9.50 kW | 8.40 kW |
| COP Tj = +2°C | 3.85 | 3.10 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |
| Pdh Tj = +7°C | 6.10 kW | 6.00 kW |
| COP Tj = +7°C | 5.40 | 4.76 |
| Cdh Tj = +7 °C | 0.900 | 0.900 |

| | | |
|---|---|---|
| Pdh Tj = 12°C | 7.00 kW | 6.80 kW |
| COP Tj = 12°C | 4.65 | 5.10 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 15.60 kW | 13.80 kW |
| COP Tj = Tbiv | 2.50 | 1.65 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.00 kW | 12.10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.40 | 1.50 |
| 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 | 3.90 kW |
| Annual energy consumption Qhe | 9382 kWh | 10320 kWh |

## Cooling

## EN 14511-2

| | +7°C/+12°C | +18°C/+23°C |
|---|---|---|
| El input | 4.48 kW | 4.46 kW |
| Cooling capacity | 14.00 | 17.00 |
| EER | 3.12 | 3.81 |

## EN 14825

| | **+7°C/+12°C** | **+18°C/+23°C** |
|---|---|---|
| Pdesignc | 14.00 kW | 17.00 kW |
| SEER | 4.29 | 5.40 |
| Pdc Tj = 35°C | 14.00 kW | 17.00 kW |
| EER Tj = 35°C | 3.12 | 3.81 |
| Pdc Tj = 30°C | 10.32 kW | 12.53 kW |
| EER Tj = 30°C | 3.92 | 5.60 |
| Cdc | 0.900 | 0.900 |
| Pdc Tj = 25°C | 6.50 kW | 8.20 kW |
| EER Tj = 25°C | 5.30 | 6.50 |
| Cdc | 0.900 | 0.900 |
| Pdc Tj = 20°C | 8.00 kW | 8.50 kW |
| EER Tj = 20°C | 5.80 | 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 | 1142 kWh | 1102 kWh |