

## Subtype 11. Yutaki S 10.0HP (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       | 11. Yutaki S 10.0HP (tri)                      |
| Registration number | 041-K002-11                                    |
| Heat Pump Type      | Outdoor Air/Water                              |
| Refrigerant         | R410A  |
| Mass of Refrigerant | 5 kg   |

## Model RAS-10WHNPE RWM-10.0NE - Heating Only

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Model name                          | RAS-10WHNPE RWM-10.0NE - Heating Only |
| Application                         | Heating (medium temp)                 |
| Units                               | Indoor, 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 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 74 dB(A)        | 74 dB(A)           |

## EN 14825 | Average Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 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               |
| Pdh Tj = +2°C                                       | 10.77 kW        | 9.50 kW            |
| COP Tj = +2°C                                       | 3.60            | 3.10               |
| Pdh Tj = +7°C                                       | 8.70 kW         | 8.30 kW            |
| COP Tj = +7°C                                       | 5.10            | 4.35               |
| Pdh Tj = 12°C                                       | 8.70 kW         | 8.50 kW            |
| COP Tj = 12°C                                       | 4.90            | 4.60               |
| 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 | 0.90        | 0.90        |
| 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                          | 1.70 kW     | 3.60 kW     |
| Annual energy consumption Qhe                       | 11410 kWh   | 12210 kWh   |

## Model RAS-10WHNPE RWM-10.0NE - with cooling kit

|                                     |   |
|-------------------------------------|---|
| Model name                          | RAS-10WHNPE RWM-10.0NE - with cooling kit |
| Application                         | Heating (medium temp)                     |
| Units                               | Indoor, 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 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 74 dB(A)        | 74 dB(A)           |

## EN 14825 | Average Climate

|   | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| $\eta_s$  | 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               |
| Pdh Tj = +2°C                                       | 10.77 kW        | 9.50 kW            |
| COP Tj = +2°C                                       | 3.60            | 3.10               |
| Pdh Tj = +7°C                                       | 8.70 kW         | 8.30 kW            |
| COP Tj = +7°C                                       | 5.10            | 4.35               |
| Pdh Tj = 12°C                                       | 8.70 kW         | 8.50 kW            |
| COP Tj = 12°C                                       | 4.90            | 4.60               |
| 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 | 0.90        | 0.90        |
| 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                          | 1.70 kW     | 3.60 kW     |
| Annual energy consumption Qhe                       | 11278 kWh   | 12078 kWh   |