

| Information requirements for heat pump space heaters and heat pump combination heaters |                           |                         |               | Source: 811/2013 & 813/2013 |
|--|---------------------------|-------------------------|---------------|-----------------------------|
| Model(s):  | Outdoor unit: RAS-3WHVRP1 | Indoor unit: RWM-3.0R1E | Tank model: - |                             |
| Air-to-water heat pump:  |                           |                         |               | Yes                         |
| Low-temperature heat pump:   |                           |                         |               | No                          |
| Equipped with a supplementary heater:  |                           |                         |               | Yes                         |
| Heat pump combination heater:  |                           |                         |               | No                          |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|------|--------|-------|------|------|--------|-------|------|
|------|--------|-------|------|------|--------|-------|------|

#### Average

|  |                 |      |     |  |             |      |    |
|--|-----------------|------|-----|--|-------------|------|----|
| Rated heat output (3)  | Prated          | 6    | kW  | Seasonal space heating energy efficiency   | $\eta_s$    | 125% | %  |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |                 |      |     | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |             |      |    |
| Tj = - 7 °C  | Pdh             | 5,1  | kW  | Tj = - 7 °C  | COPd        | 1,84 | —  |
| Tj = + 2 °C  | Pdh             | 3,1  | kW  | Tj = + 2 °C  | COPd        | 3,10 | —  |
| Tj = + 7 °C  | Pdh             | 2,0  | kW  | Tj = + 7 °C  | COPd        | 4,65 | —  |
| Tj = + 12 °C   | Pdh             | 2,2  | kW  | Tj = + 12 °C   | COPd        | 6,55 | —  |
| Tj = bivalent temperature  | Pdh             | 5,1  | kW  | Tj = bivalent temperature  | COPd        | 1,84 | —  |
| Tj = operation limit temperature   | Pdh             | 5,0  | kW  | Tj = operation limit temperature   | COPd        | 1,50 | —  |
| For air-to-water heat pumps:<br>Tj = - 15 °C (if TOL < - 20 °C)                                    | Pdh             | X    | kW  | For air-to-water heat pumps:<br>Tj = - 15 °C (if TOL < - 20 °C)  | COPd        | X    | —  |
| Bivalent temperature   | Tbiv            | -7   | °C  | For air-to-water HP : Operation limit temperature  | TOL         | -10  | °C |
| Cycling interval capacity for heating  | Pcyc            | X    | kW  | Cycling interval efficiency  | COPcyc      | X    | —  |
|  |                 |      |     | Heating water operating limit temperature  | WTOL        | 55   | °C |
| Degradation coefficient (4)  | Cdh             | 0,9  | —   | Supplementary heater   |             |      |    |
| Annual Energy consumption  | Q <sub>HE</sub> | 3723 | kWh | Rated heat output (3)  | Psup        | 1,0  | kW |
|  |                 |      |     | Type of energy input   | Electricity |      |    |

#### Colder

|                           |                 |      |     |  |             |      |    |
|---------------------------|-----------------|------|-----|--|-------------|------|----|
| Rated heat output (3)     | Prated          | 6    | kW  | Seasonal space heating energy efficiency | $\eta_s$    | 118% | %  |
|                           |                 |      |     | Supplementary heater                     |             |      |    |
| Annual Energy consumption | Q <sub>HE</sub> | 4910 | kWh | Rated heat output (3)                    | Psup        | 1,2  | kW |
|                           |                 |      |     | Type of energy input                     | Electricity |      |    |

#### Warmer

|                           |                 |      |     |  |             |      |    |
|---------------------------|-----------------|------|-----|--|-------------|------|----|
| Rated heat output (3)     | Prated          | 6    | kW  | Seasonal space heating energy efficiency | $\eta_s$    | 170% | %  |
|                           |                 |      |     | Supplementary heater                     |             |      |    |
| Annual Energy consumption | Q <sub>HE</sub> | 1857 | kWh | Rated heat output (3)                    | Psup        | 0    | kW |
|                           |                 |      |     | Type of energy input                     | Electricity |      |    |

#### Power consumption in modes other than active mode

|                       |                  |       |    |
|-----------------------|------------------|-------|----|
| Off mode              | P <sub>OFF</sub> | 0,012 | kW |
| Thermostat-off mode   | P <sub>TO</sub>  | 0     | kW |
| Standby mode          | P <sub>SB</sub>  | 0,012 | kW |
| Crankcase heater mode | P <sub>CK</sub>  | 0     | kW |

#### Other items

|                             |                 |          |       |
|-----------------------------|-----------------|----------|-------|
| Capacity control            | fixed/variable  | Variable |       |
| Sound power level, indoors  | L <sub>WA</sub> | 37       | dB(A) |
| Sound power level, outdoors | L <sub>WA</sub> | 57       | dB(A) |

#### Outdoor heat exchanger

|   |                             |      |                   |
|---|-----------------------------|------|-------------------|
| For air-to-water HP: Rated air flow rate  | Q <sub>airsource</sub>      | 2982 | m <sup>3</sup> /h |
| For air-to-water HP: Rated air flow rate  | or Q <sub>watersource</sub> | X    | m <sup>3</sup> /h |
| For water-to-water: Rated water flow rate | or Q <sub>brinesource</sub> | X    | m <sup>3</sup> /h |

#### For heat pump combination heater

|                               |                   |   |     |                                 |                   |   |     |
|-------------------------------|-------------------|---|-----|---------------------------------|-------------------|---|-----|
| Declared load profile         | -                 | - | —   | Water heating energy efficiency | $\eta_{wh}$       | - | %   |
| Daily electricity consumption | Q <sub>elec</sub> | - | kWh | Daily fuel consumption          | Q <sub>fuel</sub> | X | kWh |
| Annual energy consumption     | AEC               | - | kWh |                                 |                   |   |     |

|  |  |
|--|--|
| Contact details  | Johnson Controls Hitachi Air Conditioning Spain, S.A.U.<br>Ronda Shimizu, 1. Políg. Ind. Can Torrella.<br>08233 Vacarisses (Barcelona) |
| <b>Legend</b>  |  |
| For instructions on assembly, installation or maintenance, please refer to the operating manual. This document declares also information concerning disassembly, recycling and disposal.   |  |
| (3) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). |  |
| (4) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.   |  |