

## Subtype HPi3210/12

|                     |  |
|---------------------|--|
| Certificate Holder  | Rinnai UK Ltd                                    |
| Address             | 9 Christleton Ct                                 |
| ZIP                 | WA7 1ST  |
| City                | Runcorn  |
| Country             | GB   |
| Certification Body  | ICIM S.p.A.                                      |
| Subtype title       | HPi3210/12                                       |
| Registration number | ICIM-PDC-000292                                  |
| Heat Pump Type      | Outdoor Air/Water                                |
| Refrigerant         | R32  |
| Mass of Refrigerant | 2.5 kg   |
| Certification Date  | 23.10.2024                                       |
| Testing basis       | HP KEYMARK certification scheme rules rev. no. 7 |

| Model HPi3212                              |                       |                    |
|--|-----------------------|--------------------|
| Model name                                 | HPi3212               |                    |
| Application                                | Heating (medium temp) |                    |
| Units                                      | Outdoor               |                    |
| Climate zone (for heating)                 | n/a                   |                    |
| Reversibility                              | Yes                   |                    |
| Cooling mode application (optional)        | +7°C/12°C             |                    |
| Any additional heat sources                | n/a                   |                    |
| General data                               |                       |                    |
| Power supply                               | 1x230V 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                |                    |
| Starting and operating test                | passed                |                    |
| EN 14511-2   Heating                       |                       |                    |
|  | Low temperature       | Medium temperature |
| Heat output                                | 11.80 kW              | 11.37 kW           |
| El input                                   | 2.73 kW               | 4.10 kW            |
| COP  | 4.32                  | 2.78               |
| EN 14511-2   Cooling                       |                       |                    |
|  | +7°C/+12°C            | +18°C/+23°C        |
| El input                                   | 2.79 kW               |                    |
| Cooling capacity                           | 8.51                  |                    |
| EER  | 3.05                  |                    |
| EN 12102-1   Average Climate               |                       |                    |
|  | Low temperature       | Medium temperature |
| Sound power level outdoor                  | 62 dB(A)              | 62 dB(A)           |
| EN 14825   Average Climate                 |                       |                    |
|  | Low temperature       | Medium temperature |
| ηs   | 176 %                 | 131 %              |
| Prated                                     | 10.00 kW              | 10.00 kW           |
| SCOP                                       | 4.47                  | 3.36               |
| Tbiv                                       | -7 °C                 | -7 °C              |
| TOL  | -20 °C                | -15 °C             |

|   |          |          |
|---|----------|----------|
| Pdh Tj = -7°C                                       | 8.90 kW  | 8.50 kW  |
| COP Tj = -7°C                                       | 2.88     | 2.08     |
| Cdh Tj = -7 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +2°C                                       | 5.40 kW  | 5.20 kW  |
| COP Tj = +2°C                                       | 4.31     | 3.35     |
| Cdh Tj = +2 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +7°C                                       | 4.30 kW  | 4.20 kW  |
| COP Tj = +7°C                                       | 5.82     | 4.24     |
| Cdh Tj = +7 °C                                      | 0.974    | 0.981    |
| Pdh Tj = 12°C                                       | 4.90 kW  | 4.80 kW  |
| COP Tj = 12°C                                       | 7.81     | 5.31     |
| Cdh Tj = +12 °C                                     | 0.969    | 0.979    |
| Pdh Tj = Tbiv                                       | 8.90 kW  | 8.50 kW  |
| COP Tj = Tbiv                                       | 2.88     | 2.08     |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.80 kW  | 8.70 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.64     | 1.96     |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000    | 1.000    |
| WTOL  | 60 °C    | 60 °C    |
| Poff  | 22 W     | 22 W     |
| PTO   | 22 W     | 22 W     |
| PSB   | 22 W     | 22 W     |
| PCK   | 0 W      | 0 W      |
| Supplementary Heater: Type of energy input          | n/a      | n/a      |
| Supplementary Heater: PSUP                          | 1.20 kW  | 1.30 kW  |
| Annual energy consumption Qhe                       | 4630 kWh | 5941 kWh |

#### EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 8.51 kW    |             |
| SEER           | 4.43       |             |
| Pdc Tj = 35°C  | 8.51 kW    |             |
| EER Tj = 35°C  | 3.05       |             |
| Pdc Tj = 30°C  | 6.28 kW    |             |
| EER Tj = 30°C  | 4.03       |             |
| Cdc Tj = 30 °C | 1.000      |             |
| Pdc Tj = 25°C  | 3.98 kW    |             |
| EER Tj = 25°C  | 4.58       |             |
| Cdc Tj = 25 °C | 0.978      |             |
| Pdc Tj = 20°C  | 4.23 kW    |             |
| EER Tj = 20°C  | 6.32       |             |
| Cdc Tj = 20 °C | 0.972      |             |
| Poff           | 22 W       |             |
| PTO            | 0 W        |             |

|                               |          |
|-------------------------------|----------|
| PSB                           | 28 W     |
| PCK                           | 0 W      |
| Annual energy consumption Qce | 1153 kWh |

## Model HPi3210

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | HPi3210               |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | n/a                   |
| Reversibility                       | Yes                   |
| Cooling mode application (optional) | +7°C/12°C             |
| Any additional heat sources         | n/a                   |

## General data

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 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 |
| Starting and operating test   | passed |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 10.10 kW        | 9.73 kW            |
| El input    | 2.28 kW         | 3.50 kW            |
| COP         | 4.43            | 2.78               |

### EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.39 kW    |             |
| Cooling capacity | 7.53       |             |
| EER              | 3.15       |             |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |

### EN 14825 | Average Climate

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_s$ | 178 %           | 135 %              |
| Prated   | 9.00 kW         | 9.00 kW            |
| SCOP     | 4.53            | 3.45               |
| Tbiv     | -7 °C           | -7 °C              |
| TOL      | -20 °C          | -15 °C             |

|   |          |          |
|---|----------|----------|
| Pdh Tj = -7°C                                       | 8.30 kW  | 8.10 kW  |
| COP Tj = -7°C                                       | 2.93     | 2.13     |
| Cdh Tj = -7 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +2°C                                       | 5.30 kW  | 5.20 kW  |
| COP Tj = +2°C                                       | 4.32     | 3.41     |
| Cdh Tj = +2 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +7°C                                       | 4.20 kW  | 4.10 kW  |
| COP Tj = +7°C                                       | 6.01     | 4.30     |
| Cdh Tj = +7 °C                                      | 0.973    | 0.980    |
| Pdh Tj = 12°C                                       | 4.90 kW  | 4.80 kW  |
| COP Tj = 12°C                                       | 8.08     | 6.36     |
| Cdh Tj = +12 °C                                     | 0.969    | 0.975    |
| Pdh Tj = Tbiv                                       | 8.30 kW  | 8.10 kW  |
| COP Tj = Tbiv                                       | 2.93     | 2.13     |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.30 kW  | 8.10 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71     | 1.96     |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000    | 1.000    |
| WTOL  | 60 °C    | 60 °C    |
| Poff  | 22 W     | 22 W     |
| PTO   | 22 W     | 22 W     |
| PSB   | 22 W     | 22 W     |
| PCK   | 0 W      | 0 W      |
| Supplementary Heater: Type of energy input          | n/a      | n/a      |
| Supplementary Heater: PSUP                          | 0.70 kW  | 0.90 kW  |
| Annual energy consumption Qhe                       | 4293 kWh | 5462 kWh |

#### EN 14825 | Cooling

|                |            |             |
|----------------|------------|-------------|
|                | +7°C/+12°C | +18°C/+23°C |
| Pdesignc       | 7.53 kW    |             |
| SEER           | 4.34       |             |
| Pdc Tj = 35°C  | 7.53 kW    |             |
| EER Tj = 35°C  | 3.15       |             |
| Pdc Tj = 30°C  | 5.49 kW    |             |
| EER Tj = 30°C  | 3.92       |             |
| Cdc Tj = 30 °C | 0.986      |             |
| Pdc Tj = 25°C  | 3.56 kW    |             |
| EER Tj = 25°C  | 4.46       |             |
| Cdc Tj = 25 °C | 0.976      |             |
| Pdc Tj = 20°C  | 4.35 kW    |             |
| EER Tj = 20°C  | 6.36       |             |
| Cdc Tj = 20 °C | 0.972      |             |
| Poff           | 22 W       |             |
| PTO            | 0 W        |             |

|                                    |          |
|------------------------------------|----------|
| PSB                                | 28 W     |
| PCK                                | 0 W      |
| Annual energy consumption $Q_{ce}$ | 1040 kWh |

## Model HPi3210T

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | HPi3210T              |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | n/a                   |
| Reversibility                       | Yes                   |
| Cooling mode application (optional) | +7°C/12°C             |
| 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 |
| Starting and operating test                | passed |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 10.10 kW        | 9.73 kW            |
| El input    | 2.28 kW         | 3.50 kW            |
| COP         | 4.43            | 2.78               |

### EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.39 kW    |             |
| Cooling capacity | 7.53       |             |
| EER              | 3.15       |             |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |

### EN 14825 | Average Climate

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_s$ | 178 %           | 135 %              |
| Prated   | 9.00 kW         | 9.00 kW            |
| SCOP     | 4.53            | 3.45               |
| Tbiv     | -7 °C           | -7 °C              |
| TOL      | -20 °C          | -15 °C             |



|   |          |          |
|---|----------|----------|
| Pdh Tj = -7°C                                       | 8.30 kW  | 8.10 kW  |
| COP Tj = -7°C                                       | 2.93     | 2.13     |
| Cdh Tj = -7 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +2°C                                       | 5.30 kW  | 5.20 kW  |
| COP Tj = +2°C                                       | 4.32     | 3.41     |
| Cdh Tj = +2 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +7°C                                       | 4.20 kW  | 4.10 kW  |
| COP Tj = +7°C                                       | 6.01     | 4.30     |
| Cdh Tj = +7 °C                                      | 0.973    | 0.980    |
| Pdh Tj = 12°C                                       | 4.90 kW  | 4.80 kW  |
| COP Tj = 12°C                                       | 8.08     | 6.36     |
| Cdh Tj = +12 °C                                     | 0.969    | 0.975    |
| Pdh Tj = Tbiv                                       | 8.30 kW  | 8.10 kW  |
| COP Tj = Tbiv                                       | 2.93     | 2.13     |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.30 kW  | 8.10 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71     | 1.96     |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000    | 1.000    |
| WTOL  | 60 °C    | 60 °C    |
| Poff  | 22 W     | 22 W     |
| PTO   | 22 W     | 22 W     |
| PSB   | 22 W     | 22 W     |
| PCK   | 0 W      | 0 W      |
| Supplementary Heater: Type of energy input          | n/a      | n/a      |
| Supplementary Heater: PSUP                          | 0.70 kW  | 0.90 kW  |
| Annual energy consumption Qhe                       | 4293 kWh | 5462 kWh |

#### EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 7.53 kW    |             |
| SEER           | 4.34       |             |
| Pdc Tj = 35°C  | 7.53 kW    |             |
| EER Tj = 35°C  | 3.15       |             |
| Pdc Tj = 30°C  | 5.49 kW    |             |
| EER Tj = 30°C  | 3.92       |             |
| Cdc Tj = 30 °C | 0.986      |             |
| Pdc Tj = 25°C  | 3.56 kW    |             |
| EER Tj = 25°C  | 4.46       |             |
| Cdc Tj = 25 °C | 0.976      |             |
| Pdc Tj = 20°C  | 4.35 kW    |             |
| EER Tj = 20°C  | 6.36       |             |
| Cdc Tj = 20 °C | 0.972      |             |
| Poff           | 22 W       |             |
| PTO            | 0 W        |             |

|                               |          |
|-------------------------------|----------|
| PSB                           | 28 W     |
| PCK                           | 0 W      |
| Annual energy consumption Qce | 1040 kWh |

## Model HPi3212T

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | HPi3212T              |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | n/a                   |
| Reversibility                       | Yes                   |
| Cooling mode application (optional) | +7°C/12°C             |
| 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 |
| Starting and operating test   | passed |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 11.80 kW        | 11.37 kW           |
| El input    | 2.73 kW         | 4.10 kW            |
| COP         | 4.32            | 2.78               |

### EN 14511-2 | Cooling

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.79 kW    |             |
| Cooling capacity | 8.51       |             |
| EER              | 3.05       |             |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |

### EN 14825 | Average Climate

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_s$ | 176 %           | 131 %              |
| Prated   | 10.00 kW        | 10.00 kW           |
| SCOP     | 4.47            | 3.36               |
| Tbiv     | -7 °C           | -7 °C              |
| TOL      | -20 °C          | -15 °C             |

|   |          |          |
|---|----------|----------|
| Pdh Tj = -7°C                                       | 8.90 kW  | 8.50 kW  |
| COP Tj = -7°C                                       | 2.88     | 2.08     |
| Cdh Tj = -7 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +2°C                                       | 5.40 kW  | 5.20 kW  |
| COP Tj = +2°C                                       | 4.31     | 3.35     |
| Cdh Tj = +2 °C                                      | 1.000    | 1.000    |
| Pdh Tj = +7°C                                       | 4.30 kW  | 4.20 kW  |
| COP Tj = +7°C                                       | 5.82     | 4.24     |
| Cdh Tj = +7 °C                                      | 0.974    | 0.981    |
| Pdh Tj = 12°C                                       | 4.90 kW  | 4.80 kW  |
| COP Tj = 12°C                                       | 7.81     | 5.31     |
| Cdh Tj = +12 °C                                     | 0.969    | 0.979    |
| Pdh Tj = Tbiv                                       | 8.90 kW  | 8.50 kW  |
| COP Tj = Tbiv                                       | 2.88     | 2.08     |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.80 kW  | 8.70 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.64     | 1.96     |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000    | 1.000    |
| WTOL  | 60 °C    | 60 °C    |
| Poff  | 22 W     | 22 W     |
| PTO   | 22 W     | 22 W     |
| PSB   | 22 W     | 22 W     |
| PCK   | 0 W      | 0 W      |
| Supplementary Heater: Type of energy input          | n/a      | n/a      |
| Supplementary Heater: PSUP                          | 1.20 kW  | 1.30 kW  |
| Annual energy consumption Qhe                       | 4630 kWh | 5941 kWh |

#### EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 8.51 kW    |             |
| SEER           | 4.43       |             |
| Pdc Tj = 35°C  | 8.51 kW    |             |
| EER Tj = 35°C  | 3.05       |             |
| Pdc Tj = 30°C  | 6.28 kW    |             |
| EER Tj = 30°C  | 4.03       |             |
| Cdc Tj = 30 °C | 0.988      |             |
| Pdc Tj = 25°C  | 3.98 kW    |             |
| EER Tj = 25°C  | 4.58       |             |
| Cdc Tj = 25 °C | 0.978      |             |
| Pdc Tj = 20°C  | 4.23 kW    |             |
| EER Tj = 20°C  | 6.32       |             |
| Cdc Tj = 20 °C | 0.972      |             |
| Poff           | 22 W       |             |
| PTO            | 0 W        |             |

|                               |          |
|-------------------------------|----------|
| PSB                           | 28 W     |
| PCK                           | 0 W      |
| Annual energy consumption Qce | 1153 kWh |