

## Subtype AHP70-65

|                     |   |
|---------------------|---|
| Certificate Holder  | GUILLOT INDUSTRIES SAS - Groupe ATLANTIC  |
| Address             | 1, Route de Fleurville  |
| ZIP                 | 01190   |
| City                | Ponte De Vaux   |
| Country             | FR  |
| Certification Body  | SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise) |
| Subtype title       | AHP70-65  |
| Registration number | 037-0186-24   |
| Heat Pump Type      | Outdoor Air/Water   |
| Refrigerant         | R290  |
| Mass of Refrigerant | 4.35 kg   |
| Certification Date  | 07.11.2024  |
| Testing basis       | HP Keymark certification scheme rules rev. no.14                                  |
| Testing laboratory  | Wärmepumpen-Testzentrum (WPZ), CH   |

### Model APTAE AHP70-65 (Brand: ATLANTIC)

|                                     |                                  |
|-------------------------------------|----------------------------------|
| Model name                          | APTAE AHP70-65 (Brand: ATLANTIC) |
| Application                         | Heating (medium temp)            |
| Units                               | Outdoor                          |
| Climate zone (for heating)          | n/a                              |
| Reversibility                       | Yes                              |
| 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 |
| Starting and operating test   | passed |

#### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 40.89 kW        | 38.32 kW           |
| EI input    | 8.89 kW         | 11.88 kW           |
| COP         | 4.60            | 3.23               |

#### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 75 dB(A)        | 75 dB(A)           |

#### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 160 %           | 130 %              |
| Prated         | 59.59 kW        | 56.56 kW           |
| SCOP           | 4.08            | 3.32               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 52.71 kW        | 50.03 kW           |
| COP Tj = -7°C  | 3.07            | 2.28               |
| Cdh Tj = -7 °C | 1.000           | 1.000              |
| Pdh Tj = +2°C  | 34.05 kW        | 32.87 kW           |
| COP Tj = +2°C  | 3.99            | 3.25               |
| Cdh Tj = +2 °C | 1.000           | 1.000              |
| Pdh Tj = +7°C  | 42.00 kW        | 40.23 kW           |

|   |           |           |
|---|-----------|-----------|
| COP Tj = +7°C                                       | 5.10      | 4.24      |
| Cdh Tj = +7 °C                                      | 0.969     | 0.976     |
| Pdh Tj = 12°C                                       | 48.12 kW  | 46.47 kW  |
| COP Tj = 12°C                                       | 5.80      | 5.06      |
| Cdh Tj = +12 °C                                     | 0.967     | 0.975     |
| Pdh Tj = Tbiv                                       | 52.71 kW  | 50.03 kW  |
| COP Tj = Tbiv                                       | 3.07      | 2.28      |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 49.47 kW  | 47.32 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90      | 2.14      |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000     | 1.000     |
| WTOL  | 70 °C     | 70 °C     |
| Poff  | 183 W     | 183 W     |
| PTO   | 276 W     | 231 W     |
| PSB   | 183 W     | 183 W     |
| PCK   | 0 W       | 0 W       |
| Supplementary Heater: Type of energy input          | n/a       | n/a       |
| Supplementary Heater: PSUP                          | 10.11 kW  | 9.24 kW   |
| Annual energy consumption Qhe                       | 30212 kWh | 35240 kWh |

## Model IZEA AHP70-65 (Brand: ACV)

|                                     |                            |
|-------------------------------------|----------------------------|
| Model name                          | IZEA AHP70-65 (Brand: ACV) |
| Application                         | Heating (medium temp)      |
| Units                               | Outdoor                    |
| Climate zone (for heating)          | n/a                        |
| Reversibility                       | Yes                        |
| Cooling mode application (optional) | n/a                        |
| Any additional heat sources         | n/a                        |

## General data

|                  |     |
|------------------|-----|
| Power supply     | n/a |
| 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 | 40.89 kW        | 38.32 kW           |
| El input    | 8.89 kW         | 11.88 kW           |
| COP         | 4.60            | 3.23               |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 75 dB(A)        | 75 dB(A)           |

### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 160 %           | 130 %              |
| Prated         | 59.59 kW        | 56.56 kW           |
| SCOP           | 4.08            | 3.32               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 52.71 kW        | 50.03 kW           |
| COP Tj = -7°C  | 3.07            | 2.28               |
| Cdh Tj = -7 °C | 1.000           | 1.000              |
| Pdh Tj = +2°C  | 34.05 kW        | 32.87 kW           |
| COP Tj = +2°C  | 3.99            | 3.25               |
| Cdh Tj = +2 °C | 1.000           | 1.000              |
| Pdh Tj = +7°C  | 42.00 kW        | 40.23 kW           |

|   |           |           |
|---|-----------|-----------|
| COP Tj = +7°C                                       | 5.10      | 4.24      |
| Cdh Tj = +7 °C                                      | 0.969     | 0.976     |
| Pdh Tj = 12°C                                       | 48.12 kW  | 46.47 kW  |
| COP Tj = 12°C                                       | 5.80      | 5.06      |
| Cdh Tj = +12 °C                                     | 0.967     | 0.975     |
| Pdh Tj = Tbiv                                       | 52.71 kW  | 50.03 kW  |
| COP Tj = Tbiv                                       | 3.07      | 2.28      |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 49.47 kW  | 47.32 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90      | 2.14      |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000     | 1.000     |
| WTOL  | 70 °C     | 70 °C     |
| Poff  | 183 W     | 183 W     |
| PTO   | 276 W     | 231 W     |
| PSB   | 183 W     | 183 W     |
| PCK   | 0 W       | 0 W       |
| Supplementary Heater: Type of energy input          | n/a       | n/a       |
| Supplementary Heater: PSUP                          | 10.11 kW  | 9.24 kW   |
| Annual energy consumption Qhe                       | 30212 kWh | 35240 kWh |

### Model ECOMOD 290 HT AHP70-65 (Brand: IDEAL)

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Model name                          | ECOMOD 290 HT AHP70-65 (Brand: IDEAL) |
| Application                         | Heating (medium temp)                 |
| Units                               | Outdoor                               |
| Climate zone (for heating)          | n/a                                   |
| Reversibility                       | Yes                                   |
| Cooling mode application (optional) | n/a                                   |
| Any additional heat sources         | n/a                                   |

### General data

|                  |     |
|------------------|-----|
| Power supply     | n/a |
| 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 | 40.89 kW        | 38.32 kW           |
| El input    | 8.89 kW         | 11.88 kW           |
| COP         | 4.60            | 3.23               |

#### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 75 dB(A)        | 75 dB(A)           |

#### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 160 %           | 130 %              |
| Prated         | 59.59 kW        | 56.56 kW           |
| SCOP           | 4.08            | 3.32               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 52.71 kW        | 50.03 kW           |
| COP Tj = -7°C  | 3.07            | 2.28               |
| Cdh Tj = -7 °C | 1.000           | 1.000              |
| Pdh Tj = +2°C  | 34.05 kW        | 32.87 kW           |
| COP Tj = +2°C  | 3.99            | 3.25               |
| Cdh Tj = +2 °C | 1.000           | 1.000              |
| Pdh Tj = +7°C  | 42.00 kW        | 40.23 kW           |

|   |           |           |
|---|-----------|-----------|
| COP Tj = +7°C                                       | 5.10      | 4.24      |
| Cdh Tj = +7 °C                                      | 0.969     | 0.976     |
| Pdh Tj = 12°C                                       | 48.12 kW  | 46.47 kW  |
| COP Tj = 12°C                                       | 5.80      | 5.06      |
| Cdh Tj = +12 °C                                     | 0.967     | 0.975     |
| Pdh Tj = Tbiv                                       | 52.71 kW  | 50.03 kW  |
| COP Tj = Tbiv                                       | 3.07      | 2.28      |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 49.47 kW  | 47.32 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90      | 2.14      |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000     | 1.000     |
| WTOL  | 70 °C     | 70 °C     |
| Poff  | 183 W     | 183 W     |
| PTO   | 276 W     | 231 W     |
| PSB   | 183 W     | 183 W     |
| PCK   | 0 W       | 0 W       |
| Supplementary Heater: Type of energy input          | n/a       | n/a       |
| Supplementary Heater: PSUP                          | 10.11 kW  | 9.24 kW   |
| Annual energy consumption Qhe                       | 30212 kWh | 35240 kWh |

## Model TYNEHAM 290 HT AHP70-65 (Brand: HAMWORTHY)

|                                     |  |
|-------------------------------------|--|
| Model name                          | TYNEHAM 290 HT AHP70-65 (Brand: HAMWORTHY) |
| Application                         | Heating (medium temp)                      |
| Units                               | Outdoor                                    |
| Climate zone (for heating)          | n/a  |
| Reversibility                       | Yes  |
| Cooling mode application (optional) | n/a  |
| Any additional heat sources         | n/a  |

## General data

|                  |     |
|------------------|-----|
| Power supply     | n/a |
| 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 | 40.89 kW        | 38.32 kW           |
| EI input    | 8.89 kW         | 11.88 kW           |
| COP         | 4.60            | 3.23               |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 75 dB(A)        | 75 dB(A)           |

## EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 160 %           | 130 %              |
| Prated         | 59.59 kW        | 56.56 kW           |
| SCOP           | 4.08            | 3.32               |
| Tbiv           | -7 °C           | -7 °C              |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 52.71 kW        | 50.03 kW           |
| COP Tj = -7°C  | 3.07            | 2.28               |
| Cdh Tj = -7 °C | 1.000           | 1.000              |
| Pdh Tj = +2°C  | 34.05 kW        | 32.87 kW           |
| COP Tj = +2°C  | 3.99            | 3.25               |
| Cdh Tj = +2 °C | 1.000           | 1.000              |
| Pdh Tj = +7°C  | 42.00 kW        | 40.23 kW           |



|   |           |           |
|---|-----------|-----------|
| COP Tj = +7°C                                       | 5.10      | 4.24      |
| Cdh Tj = +7 °C                                      | 0.969     | 0.976     |
| Pdh Tj = 12°C                                       | 48.12 kW  | 46.47 kW  |
| COP Tj = 12°C                                       | 5.80      | 5.06      |
| Cdh Tj = +12 °C                                     | 0.967     | 0.975     |
| Pdh Tj = Tbiv                                       | 52.71 kW  | 50.03 kW  |
| COP Tj = Tbiv                                       | 3.07      | 2.28      |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 49.47 kW  | 47.32 kW  |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.90      | 2.14      |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000     | 1.000     |
| WTOL  | 70 °C     | 70 °C     |
| Poff  | 183 W     | 183 W     |
| PTO   | 276 W     | 231 W     |
| PSB   | 183 W     | 183 W     |
| PCK   | 0 W       | 0 W       |
| Supplementary Heater: Type of energy input          | n/a       | n/a       |
| Supplementary Heater: PSUP                          | 10.11 kW  | 9.24 kW   |
| Annual energy consumption Qhe                       | 30212 kWh | 35240 kWh |