

Subtype Grant Aerona HPR290i40

|                     |                                       |
|---------------------|---------------------------------------|
| Certificate Holder  | Grant Engineering (Ireland) ULC       |
| Address             | Barrack St                            |
| ZIP                 | R42 D788                              |
| City                | Ballinree, Birr                       |
| Country             | IE                                    |
| Certification Body  | BRE Global Limited                    |
| Subtype title       | Grant Aerona HPR290i40                |
| Registration number | 041-K005-05                           |
| Heat Pump Type      | Outdoor Air/Water                     |
| Refrigerant         | R290                                  |
| Mass of Refrigerant | 0.61 kg                               |
| Certification Date  | 14.01.2025                            |
| Testing basis       | Heat Pump Keymark Scheme Rules Rev 15 |

**Model Grant Aerona HPR290i40**

|                                     |                          |
|-------------------------------------|--------------------------|
| Model name                          | Grant Aerona HPR290i40   |
| Application                         | Heating + DHW + low temp |
| Units                               | Outdoor                  |
| Climate zone (for heating)          | n/a                      |
| Cooling mode application (optional) | n/a                      |
| Any additional heat sources         | n/a                      |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 132 %       |
| COP                             | 3.11        |
| Heating up time                 | 03:08 h:min |
| Standby power input             | 40 W        |
| Reference hot water temperature | 55 °C       |
| Mixed water at 40°C             | 330 l       |

**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 | 4.09 kW         | 4.36 kW            |
| El input    | 0.82 kW         | 1.36 kW            |
| COP         | 4.99            | 3.19               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 32 dB(A)        | 33 dB(A)           |
| Sound power level outdoor | 47 dB(A)        | 48 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| Pdesignh | 4.09 kW         | 4.36 kW            |
| $\eta_s$ | 200 %           | 146 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 4.09 kW     | 4.36 kW     |
| SCOP  | 5.08        | 3.74        |
| Tbiv  | -8 °C       | -8 °C       |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 3.78 kW     | 3.93 kW     |
| COP Tj = -7°C                                       | 3.57        | 2.48        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 2.4 kW      | 2.34 kW     |
| COP Tj = +2°C                                       | 5.19        | 3.73        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 1.7 kW      | 1.92 kW     |
| COP Tj = +7°C                                       | 6.47        | 4.69        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 1.35 kW     | 1.25 kW     |
| COP Tj = 12°C                                       | 6.23        | 6.06        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 3.98 kW     | 3.93 kW     |
| COP Tj = Tbiv                                       | 3.29        | 2.32        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 3.77 kW     | 3.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.05        | 2.21        |
| Rated airflow rate                                  | 2300 m³/h   | 2300 m³/h   |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 60 °C       | 60 °C       |
| Poff  | 7 W         | 7 W         |
| PTO   | 21 W        | 21 W        |
| PSB   | 7 W         | 7 W         |
| PCK   | 20 W        | 20 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0.3 kW      | 0.52 kW     |
| Annual energy consumption Qhe                       | 1664 kWh    | 2411 kWh    |