

Subtype Grant Aeron 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 Aeron 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 Aeron HPR290i40

| | |
|-------------------------------------|--------------------------|
| Model name | Grant Aeron 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 η_{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 |
|----------------------|-----------------|--------------------|
| P _{designh} | 4.09 kW | 4.36 kW |
| η_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 |