

Subtype Grant Aerona HPR290i160

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 HPR290i160
Registration number	041-K005-09
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.65 kg
Certification Date	14.01.2025
Testing basis	Heat Pump Keymark Scheme Rules Rev 15

Model Grant Aerona HPR290i160

Model name	Grant Aerona HPR290i160
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}	118.2 %
COP	2.74
Heating up time	01:39 h:min
Standby power input	58 W
Reference hot water temperature	55.7 °C
Mixed water at 40°C	333 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	16.16 kW	16.34 kW
El input	3.43 kW	5.69 kW
COP	4.72	2.87

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	182 %	133 %
Prated	14.8 kW	14 kW
SCOP	4.63	3.4

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.09 kW	12.4 kW
COP Tj = -7°C	2.67	1.82
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	8.79 kW	7.71 kW
COP Tj = +2°C	4.72	3.39
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	5.79 kW	5.19 kW
COP Tj = +7°C	6.21	4.73
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	4.22 kW	4.63 kW
COP Tj = 12°C	7.82	6.56
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	13.2 kW	12.4 kW
COP Tj = Tbiv	2.67	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.79 kW	11.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.2	1.9
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	60 °C	60 °C
Poff	9 W	9 W
PTO	30 W	30 W
PSB	9 W	9 W
PCK	19 W	19 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.86 kW	2.04 kW
Annual energy consumption Qhe	6605 kWh	8505 kWh