

**From:** Hebe Smith  
**Sent:** 16 December 2025 14:36  
**To:** Planning Scanning  
**Subject:** FW: Updated - Applications BR/184/25/PL and BR/185/25/L - The Royal Norfolk Hotel, Bognor Regis  
**Attachments:** 1 (1).png; Solis\_datasheet\_S5-GC(25-40)K\_GBR\_V1,5\_202507.pdf

Hello,

Please could this be uploaded to BR/284/25/PL as planning correspondence. It's a Response to EH comments and will need redacting.

Thanks very much,

**Hebe Smith (she/her)**  
Senior Planning Officer, Planning Department

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**From:** Joe Colannino  
**Sent:** 15 December 2025 20:42  
**To:** Hebe Smith <Hebe.Smith@arun.gov.uk>  
**Subject:** RE: Updated - Applications BR/184/25/PL and BR/185/25/L - The Royal Norfolk Hotel, Bognor Regis

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Hi Hebe,

Just wanted to add one more question if that's okay and comment on the EH's recent question regarding plant...

- 1) Regarding the Town Council objection, now we've updated to suit yours / the conservation officers concerns to the main elevation would the Town Council still be objecting to the new design? Was the objection related to seeing the solar panels from the main street view and now this will no longer be the case hopefully the changes will have mitigated the Town Council's concern or was there other concerns?
- 2) We've seen the Environmental Health response to the application, they state... *the application does not discuss the location of any plant associated with the solar panels such as the inverters which produce a high-pitched hum. If these are internal then there should be no impact on the nearby properties* - I can confirm that the inverter will be located internally, within the existing room allocated for electrical infrastructure. Therefore no impact will be had on nearby properties, the inverter typically emits under 60dB as shown on the attached datasheet.

Look forward to receiving the agenda, many thanks.

Kind regards  
Joe

## S5-GC(25-40)K

# Solis Three Phase Grid-Tied Inverters

### Features:

- Max. efficiency 98.7%
- 3/4 MPPT design, suitable for multi-facing roof
- AFCI protection, proactively reduces fire risk
- Nighttime PID recovery function (optional)
- Intelligent string monitoring, smart I-V curve scan
- 24-hour load consumption monitoring
- IP66

### Models:

S5-GC25K / S5-GC30K

S5-GC33K / S5-GC36K

S5-GC40K



360° View



# DATASHEET

## S5-GC(25-40)K

| Models                                  | 25K                                                                                                                                                                                                            | 30K             | 33K             | 36K             | 40K             |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Input DC                                |                                                                                                                                                                                                                |                 |                 |                 |                 |
| Recommended max. PV power               | 37.5 kW                                                                                                                                                                                                        | 45 kW           | 49.5 kW         | 54 kW           | 60 kW           |
| Max. input voltage                      | 1100 V                                                                                                                                                                                                         |                 |                 |                 |                 |
| Rated voltage                           | 600 V                                                                                                                                                                                                          |                 |                 |                 |                 |
| Start-up voltage                        | 180 V                                                                                                                                                                                                          |                 |                 |                 |                 |
| MPPT voltage range                      | 200 - 1000 V                                                                                                                                                                                                   |                 |                 |                 |                 |
| Max. input current                      | 32 A / 32 A / 32 A                                                                                                                                                                                             |                 |                 | 4 × 32 A        |                 |
| Max. short circuit current              | 40 A / 40 A / 40 A                                                                                                                                                                                             |                 |                 | 4 × 40 A        |                 |
| MPPT number / Max. input strings number | 3 / 6                                                                                                                                                                                                          |                 |                 | 4 / 8           |                 |
| Output AC                               |                                                                                                                                                                                                                |                 |                 |                 |                 |
| Rated output power                      | 25 kW                                                                                                                                                                                                          | 30 kW           | 33 kW           | 36 kW           | 40 kW           |
| Max. apparent output power              | 27.5 kVA                                                                                                                                                                                                       | 33 kVA          | 36.3 kVA        | 39.6 kVA        | 44 kVA          |
| Max. output power                       | 27.5 kW                                                                                                                                                                                                        | 33 kW           | 36.3 kW         | 39.6 kW         | 44 kW           |
| Rated grid voltage                      | 3/N/PE, 220 V / 380 V, 230 V / 400 V                                                                                                                                                                           |                 |                 |                 |                 |
| Rated grid frequency                    | 50 Hz / 60 Hz                                                                                                                                                                                                  |                 |                 |                 |                 |
| Rated grid output current               | 38.0 A / 36.1 A                                                                                                                                                                                                | 45.6 A / 43.3 A | 50.1 A / 47.6 A | 54.7 A / 52.0 A | 60.8 A / 57.7 A |
| Max. output current                     | 41.8 A                                                                                                                                                                                                         | 50.2 A          | 55.1 A          | 60.2 A          | 66.9 A          |
| Power factor                            | > 0.99 (0.8 leading - 0.8 lagging)                                                                                                                                                                             |                 |                 |                 |                 |
| THDi                                    | < 3%                                                                                                                                                                                                           |                 |                 |                 |                 |
| Efficiency                              |                                                                                                                                                                                                                |                 |                 |                 |                 |
| Max. efficiency                         | 98.5%                                                                                                                                                                                                          |                 | 98.6%           | 98.7%           |                 |
| EU efficiency                           | 98.1%                                                                                                                                                                                                          |                 | 98.2%           | 98.3%           |                 |
| Protection                              |                                                                                                                                                                                                                |                 |                 |                 |                 |
| DC reverse-polarity protection          | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Short circuit protection                | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Output over current protection          | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Surge protection                        | DC Type II / AC Type II                                                                                                                                                                                        |                 |                 |                 |                 |
| Grid monitoring                         | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Anti-islanding protection               | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Temperature protection                  | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Strings monitoring                      | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| I/V Curve scanning                      | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Multi peak scan                         | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| Integrated AFCI 2.0                     | Optional                                                                                                                                                                                                       |                 |                 |                 |                 |
| Integrated PID recovery                 | Optional                                                                                                                                                                                                       |                 |                 |                 |                 |
| Integrated DC switch                    | Yes                                                                                                                                                                                                            |                 |                 |                 |                 |
| General Data                            |                                                                                                                                                                                                                |                 |                 |                 |                 |
| Dimensions (W × H × D)                  | 647 × 629 × 252 mm                                                                                                                                                                                             |                 |                 |                 |                 |
| Weight                                  | 38.2 kg                                                                                                                                                                                                        |                 |                 | 42.1 kg         |                 |
| Topology                                | Transformerless                                                                                                                                                                                                |                 |                 |                 |                 |
| Self-consumption (night)                | < 1 W                                                                                                                                                                                                          |                 |                 |                 |                 |
| Operating ambient temperature range     | -25 ~ +60°C                                                                                                                                                                                                    |                 |                 |                 |                 |
| Relative humidity                       | 0 - 100%                                                                                                                                                                                                       |                 |                 |                 |                 |
| Ingress protection                      | IP66                                                                                                                                                                                                           |                 |                 |                 |                 |
| Noise emission (typical)                | ≤ 60 dB(A)                                                                                                                                                                                                     |                 |                 |                 |                 |
| Cooling concept                         | Intelligent fan-cooling                                                                                                                                                                                        |                 |                 |                 |                 |
| Max. operation altitude                 | 4000 m                                                                                                                                                                                                         |                 |                 |                 |                 |
| Grid connection standard                | G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC60068, IEC 61683, EN 50530 |                 |                 |                 |                 |
| Safety / EMC standard                   | IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4                                                                                                                                                                   |                 |                 |                 |                 |
| Features                                |                                                                                                                                                                                                                |                 |                 |                 |                 |
| DC connection                           | MC4 connector                                                                                                                                                                                                  |                 |                 |                 |                 |
| AC connection                           | OT terminal                                                                                                                                                                                                    |                 |                 |                 |                 |
| Display                                 | LCD                                                                                                                                                                                                            |                 |                 |                 |                 |
| Communication                           | RS485, Optional: Wi-Fi, GPRS                                                                                                                                                                                   |                 |                 |                 |                 |

The application does not discuss the location of any plant associated with the solar panels such as the inverters which produce a high-pitched hum. If these are internal then there should be no impact on the nearby properties, however any external plant has the potential to be an issue. Therefore, I would recommend the following condition.

### **Conditions Recommended:**

**EHN23 : Building services plant (BS4142:2014+A1:2019)**

**EH - see notes**

No externally located plant, machinery equipment or building services plant shall be operated on the site until an assessment of the acoustic impact arising from the operation of all such equipment has been submitted to and approved in writing by the Local Planning Authority. The assessment shall be undertaken in accordance with BS 4142:2014+A1:2019 and shall include a scheme of attenuation measures to mitigate the adverse impacts identified in the acoustic assessment. The scheme shall ensure that the rating level of noise emitted from the proposed building