



HGS 100 CC

- High power gas discharge tubes are intended for equipotential bonding between inactive parts, which are not conductively interconnected due to the operating conditions.
- In case of origin of potential difference between those parts, the high power gas discharge tube ignites and conductively interconnects both insulated parts for a transient time.
- High protection degree of the housing allows using indoors, outdoors and also in the underground.
- They can be used, for example, between utility pipelines and external lightning protection systems, between pipelines and other inactive metal parts, or between insulated flanges used on pipelines.
- The RW variant is primarily designed for railway systems where it provides effective protection for persons who may come into contact with inanimate parts of metallic structures in the event of lightning strikes or catenary failures.
- High power gas discharge tubes are able to discharge the highest lightning impulse currents, which ranks them in the class H – for heavy loads.

| Type | | HGS 100 CC |
|---|-------------|---------------------|
| Certified for explosive areas | | No |
| Class according to EN 62561-3, IEC 62561-3 | | H (for heavy loads) |
| DC ignition voltage | | 400 ÷ 750 V |
| Nominal discharge current (8/20) | I_n | 100 kA |
| Rated AC withstand voltage of mains frequency | U_{WAC} | 285 V |
| Rated DC withstand voltage | U_{WDC} | 350 V |
| Rated impulse sparkover voltage | $U_{r imp}$ | < 1 400 V |
| Impulse discharge current (10/350) | I_{imp} | 100 kA |
| Charge | Q | 50 As |
| Specific energy | W/R | 2 500 kJ/Ω |
| Insulation resistance at 100 V DC | R_i | > 1 GΩ |
| Capacitance at 1 MHz | C | < 25 pF |
| Housing material | | Stainless steel |
| Casing | | Polyurethane resin |
| Degree of protection | | IP67 |
| Operating temperature | θ | -40 ÷ 70 °C |
| Operating position | | Any |
| Installation | | By cable |
| Lifetime | | > 100 000 h |
| Designed according to standards | | |
| Lightning protection system components (LPSC) – Requirements for isolating spark gaps (ISG) | | IEC 62561-3:2017 |
| Application standards | | |
| Protection against lightning | | IEC 62305:2010 |

Ordering, packaging and additional data

| | | |
|--------------------|---|---------------|
| Mass | m | 455 g |
| ETIM group | | EG000021 |
| ETIM class | | EC000510 |
| Customs tariff no. | | 85354000 |
| EAN code | | 8590681173404 |
| Art. number | | 10 202 |



The link in the QR code leads to the online presentation of the **HGS 100 CC**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit www.hakel.com



Internal diagram

