PRODUCT DATA SHEET

Surge Protective devices

Isolated Spark Gaps

Code: 6601102-70

Description: Isolation spark gap ISG N, code 6601102-70

Description

The Isolating Spark Gaps ISGs are intended to provide indirectly equipotential bond between earthing systems or metalwork where direct bond is not permissible for functional reasons. They are installed between the parts to be indirectly bonded, or in case of external conductive parts connected to the structure, they are installed at the entry point in the structure. If the voltage between the parts exceeds the spark over voltage (e.g. lightning strike) of the ISG, the ISG operates causing the equalisation of the earth potentials. After the equalisation the ISG will return to normal position. They have applications mainly in the following cases:

- in earthing systems of telecommunication systems (under conditions);
- auxiliary earth electrodes of voltage operated earth fault circuit breakers;
- rail earth electrode for AC and DC railways;
- measuring earth electrodes for laboratories;
- in installations with cathodic protection and stray current systems;
- in bypass bonding of insulated flanges and insulated couplings of pipelines.

Technical characteristics

Protection type EN / IEC 62561-3	N
DC sparkover voltage at 100V/s	100 V ± 20%
AC sparkover voltage at 50Hz	70 V ± 20%
Typical impulse sparkover voltage at 1kV/μs	650V
Max impulse sparkover voltage at 1kV/μs	950V
Lightning current discharge 10/350μs, Iimp	3x75 kA (Class N)
DC follow current after the Iimp	150 A / 0,5 s
Surge current discharge 8/20μs	10x100 kA
High energy surge current discharge 10/45μs	20x 60 kA

AC current discharge 50Hz, t=1s	5x100 Arms
AC current discharge 50Hz, t=0,5s	1x200 Arms
AC current discharge 50Hz, t=0,25s	1x4000 Arms
Follow current extinguish capability	At 70 V < 20 Arms
Insulation resistance at 100V DC	1 GΩ
Capacitance at 1kHz	7 pF
Dimensions (Diameter / length)	25 x 88 mm
Mounding connections	M8 Thread
Tightening torque	13 Nm
Protection level of housing	IP67
Operating temperature	-40 oC ÷ +80 oC
Relative humidity	10% ÷ 95%
Housing material	Insulated ceramic
Certification	CE
Conformity with	LVD 2014/35/EU
Installation only by qualified electrician	IEC 60417–6182
ELEMKO management systems	ISO 9001, ISO 14001, ISO 45001