

PRODUCT DATA SHEET
ISOLATION SPARK GAPS (ISGs)

Brand Name: DCTron 25

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Application: DC decoupling device for cathodic protected systems

Description

DCTron is especially designed to dissipate AC currents in systems with cathodic protection, while blocking DC currents, where due to the cathodic protection, direct connection to the earthing system is not possible. DCTron dissipates the AC currents while at the same time it maintains the cathodic protection operational. Additionally it is providing protection against lightning and surge currents of up to 100 kA (10/350 μ s).

The decoupling main circuit, is consisted of a L-C filter with low AC voltage drop (<1,5 Vrms) at the maximum AC dissipation current (25 A), thus providing protection from touch and induction voltages. Also is limiting the leakage current to minimum (<1 μ A) in order to maintain the cathodic protection operational. Additionally it is equipped with a DC overvoltage protection circuit in case the DC voltage exceeds the limits.



Technical characteristics

Technical characteristics of AC filter

AC current permanent dissipation	25 A
Cathodic protection maximum voltage (-DC)	- 25 V
AC current dissipation (50 Hz, t=0,1 s)	3000 A
Leakage current @ max DC operational voltage	< 1 μ A
Maximum capacitance	2 x 3000 μ F

Technical characteristics of SPD

AC sparkover voltage at 50Hz	70 V \pm 20%
Sparkover voltage at 1kV/ μ s	950V
Lightning current discharge 10/350 μ s, I _{imp}	3 x 100 kA
Surge current discharge 8/20 μ s	10 x 100 kA
AC current discharge 50Hz, t=1s	1 x 200 A _{rms}
AC current discharge 50Hz, t=0,25s	1 x 3000 A _{rms}
Insulation resistance at 100V DC	1 G Ω
Dimensions (WxHxD)	151 x 162 x 135 mm
Connection terminals	2 x 16 mm ² green yellow PVC insulated copper conductor
Ability of check without disconnection	Optional
Relative humidity	5% \div 95%
Operating temperature range	-40°C \div +80°C
Housing material	Metal
Housing protection category	IP 67
Classification according IEC EN 62561-3	H
Installation only by qualified electrician	IEC 60417 – 6182

ELEMKO management systems

- ISO 9001
- ISO 14001
- ISO 45001

Country of Origin

Greece

Unit: piece / Package: 1 piece

We reserve the right to introduce changes in the component due to technical evolution.