PRODUCT DATA SHEET

Surge Protective devices

DC Decoupling devices

Code: 6603001-70

Description: DC decoupling device for cathodic protected systems DCTron 25, code 6603001-70

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 μs).

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 μA) 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

Protection type EN / IEC 62561-3	H
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 μA
Maximum capacitance	2 x 3000 μF
AC sparkover voltage at 50Hz	70 V ± 20%
Sparkover voltage at 1kV/μs	950V
Lightning current discharge 10/350μs, Iimp	3x100 kA
Surge current discharge 8/20μs	10x100 kA
AC current discharge 50Hz, t=1s	1x200 Arms
AC current discharge 50Hz, t=0,25s	1x3000 Arms

Insulation resistance at 100V DC	1 GΩ
Dimensions (WxHxD)	151 x 162 x 135 mm
Connection terminals	2 x 16 mm2 green yellow PVC insulated copper conductor
Ability of check without disconnection	Optional
Protection level of housing	IP67
Housing material	Metal
Operating temperature	-40 oC ÷ +80 oC
Relative humidity	5% ÷ 95%
Installation only by qualified electrician	IEC 60417–6182
ELEMKO management systems	ISO 9001, ISO 14001, ISO 45001