

# PRODUCT DATA SHEET

## Surge Protective devices

### SPDs for telecom and signaling

**Code: 6817048-70**

**Description: SPD DataTron PCB 48, code 6817048-70**

#### Description

Surge protective device, suitable for the protection of electrical and electronic equipment, operating at low voltage digital and analogue signals. It is providing protection, to 1 cable pair and shield, against external transients and surges caused by lightning, induction and switching overvoltages. Especially designed to be

installed in switchboards and control panels with limited space and where a numerous of incoming and outgoing cables are connected, such as interfaces RS 485 and RS 422. Quick and easy installation by clipping on DIN rail. Thanks to its innovative design with 3 protection levels (GDT + TVD Diode + Zener) it succeeds stable residual voltage, regardless the value of the surge current. In contrast with the common SPDs for signals protection, DataTron PCB coordinates the 3 protection levels through the use of MOSFETs, which are limiting the incoming current between the protection levels, ensuring this way longer life duration of the more sensitive protection levels and thus of the surge protective device.



#### Technical characteristics

Protection type EN / IEC 61643-21	C1, C2, C3
Number of poles	2 + GND
Number of protected pairs	1 + GND
Connection between terminals	L1-L2, L1-GND, L2-GND
Maximum operating voltage, $U_c$	48 V
Maximum operating current, $I_L$	1 A
Maximum signal frequency, $F$	10 MHz
Insertion losses	<0,35 dB @ 10 MHz / <-3 dB @ 23 MHz
Series line resistance (input - output), $R$	1,5 Ohms
Line capacitance (input - output), $C$	< 10 nF
$I_n$ , C2 test, (8/20 $\mu$ s), 2P / 1P	10 kA / 5 kA
$U_p$ , (at $I_n$ ), L-L & L-GND	< 226 V

Up, C3 (at 1 kV), L-L & L-GND	< 69 V
Discharge capability of 100 A (10/1000μs), 1P	x300 times
Main circuit	GDT + TVS diode + Zener + MOSFET
Response time, tA	1 ns
Connection to network	In line
Dimensions WxHxL (mm)	16,2x22x87 mm
Maximum conductor for terminal	0,75 - 1,5 mm <sup>2</sup>
Conductor terminals tightening torque	0,4 Nm
Housing material	Thermoplastic V-0
Protection level of housing	IP00
Operating temperature	-40 oC ÷ +80 oC
Relative humidity	5% ÷ 95%
Rail mounting	DIN-3 (TS-35/EN50022) & busbar
Certification	STR by OVE, CE
Conformity with	LVD 2014/35/EU
Installation only by qualified electrician	IEC 60417-6182
ELEMKO management systems	ISO 9001, ISO 14001, ISO 45001