

# PRODUCT DATA SHEET

## Surge Protective devices

### SPDs for telecom and signaling

**Code: 6845124-70**

**Description: SPD DataTron PR 2-24, code 6845124-70**

#### 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 outcoming cables are connected, such as interfaces RS 485 and RS 422. Quick and easy installation by clipping on DIN rail. It is consisted of a plug-in protection module and a base. The signal pass through the base in order to operate uninterruptible even with the module removed. The plug-in protection module can be replaced in no time with no need to cut-off the signal. The SPD is providing the options to connect the cable's shield to the ground directly or through spark gap. The spark gap connects the shield to the ground only in case of overvoltage, when it operates, while in normal conditions it keeps the shield ungrounded in order to reduce the noise from scattered currents.



#### Technical characteristics

Protection type EN / IEC 61643-21	C1, C2, C3, D1
Number of poles	4 + GND
Number of protected pairs	1 + shield
Connection between terminals	L1-L2, L1-GND, L2-GND
Maximum operating voltage, $U_c$	28 V
Maximum operating current, $I_L$	1 A
Maximum signal frequency, $F$	30 MHz
Series line resistance (input - output), $R$	2 Ohms
Line capacitance (input - output), $C$	50 pF
$I_{imp}$ , D1 test, (10/350 $\mu$ s), 2P / 1P	2,5 kA / 1,25 kA
$I_n$ , C2 test, (8/20 $\mu$ s), 2P / 1P	20 kA / 10 kA

Up, (at 5 kA), L-L & L-GND	< 70 V
Up, C3 (at 1 kV), L-L & L-GND	< 37 V
Up, C3 (at 1 kV), shield - GND	< 276 V
Main circuit	GDT + TVS diode
Response time, tA	1 ns
Connection to network	In line
Dimensions WxHxD (mm)	12x95x84,5 mm
Maximum conductor for terminal	0,75 - 4 mm <sup>2</sup>
Conductor terminals tightening torque	1 Nm
Housing material	Thermoplastic V-0
Protection level of housing	IP20
Operating temperature	-40 °C ÷ +80 °C
Relative humidity	5% ÷ 95%
Rail mounting	DIN-3 (TS-35/EN50022)
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