DATA SHEET SPD with Terminal Connection for Bus Systems RayDat KNX D1 • C1 • C2 • C3

IEC/EN Category: D1/C1/C2/C3 Voltages: 110 V DC

Max. Operating Voltage: 180 V DC
Surge Discharge Ratings: I_n: 5 kA, I_{max}: 10 kA
Series Load Current: 7 A
Housing: Compact Design

Compliance: IEC/EN 61643-21





Technical Data

RayDat KNX

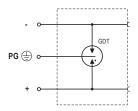
ayDat KNX			
lectrical			
Number of Protected Pairs			1 (2 conductors)
Nominal Operating Voltage (DC)		U _n	110V
Maximum Continuous Operating Voltage	(DC)	U_c	170V
Rated Load Current at 25°C		IL	7A
C2 Nominal Discharge Current (8/20 µs)		In	5kA
Maximum Discharge Current (8/20 µs)		I _{imp}	1 kA
Residual Voltage at 5 kA (8/20 µs)	(Line-Ground)	U _{res}	<600 V
	(Line-Line)		<1000 V
Response Time Overvoltage Protection		t _A	<100 ns
Thermal Protection			No
Insulation Resistance of the Protection		R _{iso}	≥1 GΩ
Serial Resistance per Path		R	<0.1Ω
Cut-off Frequency		f _G	50 MHz
echanical			
Temperature Range			-40 °F to +176 °F [-40 °C to +80 °C]
Line Conductors Cross Section (max.)			20 AWG [0.5 mm ²]
Ground Conductor Cross Section (max.)			18 AWG [0.75 mm²]
Connecting Conductor Length			5.9" [150 mm]
Degree of Protection IEC/EN 60529			IP20 (built-in)
Housing Material			Thermoplastic; Grey; Extinguishing Degree V-0
rder Information			
Order Code			
RayDat KNX			127 649



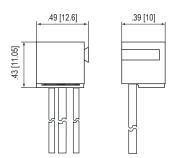
RayDat KNX

Internal Configuration

Legend
GDT Gas Discharge Tube
PG Protective Grounding



Dimensions & Packaging



RayDat KNX

Dimensions	
Weight per Unit	.28 oz [8 g]
Packaging Dimensions (Single Unit)	3.1 × .91 × .4.3" [78 × 23 × 108 mm]
Minimum Package Quantity	12 pieces

inches [mm]

Information contained in this document is subject to change at any time without notice.



