



IEC/EN Category: C1/C2/C3
 Mode of Protection: Longitudinal, Transverse
 Location of Use: DC Power Systems
 Coarse Protection: MOV
 Voltages: 12, 24, 48V DC
 Surge Discharge Ratings: I_n : 10kA, I_{max} : 20kA
 Serial Inductivity: 10–14μH
 Series Load Current: 4A
 Enclosure: DIN 43880 2/3TE, DIN Rail Mount
 Terminals: Stranded to 4 mm²
 Housing: Modular Design
 Compliance: IEC/EN 61643-21

The RayDat PSC-2 Series has been developed to protect power supplies.

Coarse protection is provided by varistors, while fine protection is provided using a high-speed silicon stage.

Internal thermal disconnectors are used to reduce the hazards of thermal runaway during fault conditions, or if mains incursion onto the low voltage data circuit occurs.

If the module is unplugged out of the base, the connection lines remain enabled.

Technical Data

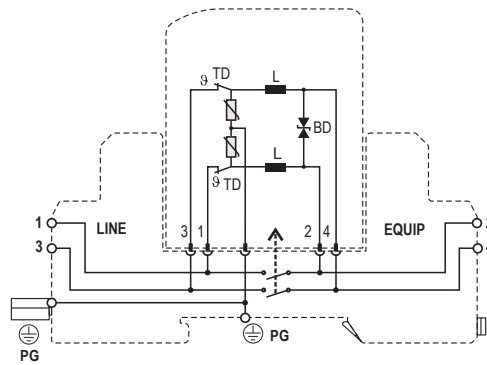
PSC-2 Series		12V	24V	48V
Electrical				
Lines Protected		1 (2 Conductors)		
Nominal Operating Voltage (DC)	U_n	12V	24V	48V
Maximum Continuous Operating Voltage (DC)	U_c	15V	28V	52V
Rated Operating Current at 25 °C	I_L	4A		
C2 Nominal Discharge Current (8/20μs)	I_n	10kA		
Maximum Discharge Current (8/20μs)	I_{max}	20kA		
Residual Voltage at 5kA (8/20μs)	U_{res}	<32V	<60V	<135V
Rated Spark Overvoltage	(1, 2-PG)	90-110V	90-110V	90-110V
	(1, 2)	16-20V	30-36V	57-69V
Response Time Overvoltage Protection	t_A	<1 ns		
Thermal Protection		Thermal Disconnection		
Insulation Resistance of the Protection	R_{iso}	≥ 15MΩ	≥ 28MΩ	≥ 52MΩ
Serial Inductance per Path	L	10–14μH		
Transverse Capacitance	C	<5nF	<3nF	<1.5nF
Mechanical				
Temperature Range		-40 °C to +80 °C		
Terminal Cross Section Multi-strand		4 mm ²		
Terminal Screw Torque		0.5Nm		
Degree of Protection IEC/EN 60529		IP 20		
Housing Material		Thermoplastic; Grey; Extinguishing Degree V-0		
Mounting IEC/EN 60715		35 mm DIN Rail		
Order Information				
Order Code		12V	24V	48V
PSC-2-xx		7086.83	7086.84	7086.85
PSC-2-xxM (module)		7086.86	7086.87	7086.88

RayDat PSC-2 Series

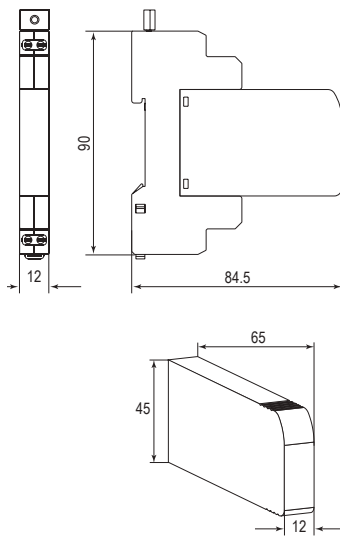
Internal Configuration

Legend

- GDT Gas Discharge Tube
- MOV Metal Oxide Varistor
- PE Ground
- R Resistor
- RC Remote Control (NC)



Dimensions & Packaging



PSC-2 Series	12V	24V	48V
Dimensions			
Weight per Unit	64g		
Dimensions DIN 43880	2/3 TE		
Packaging Dimensions (Single Unit)	87 × 15 × 102 mm		
Minimum Package Quantity	15 pieces		

PSC-2-xxM	12V	24V	48V
Dimensions			
Weight per Unit	36g		
Packaging Dimensions (Single Unit)	87 × 15 × 102 mm		
Minimum Package Quantity	15 pieces		