

DATA SHEET

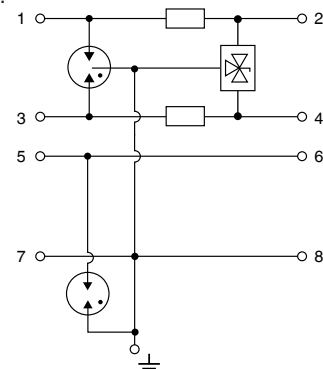
SPD for Shielded Cable RayDat SSH-3 Series D1 • C1 • C2 • C3

*UL Listed



IEC/EN Category: D1/C1/C2/C3
Surge Discharge Ratings: I_n : 10 kA, I_{max} : 20 kA, I_{imp} : 2.5 kA
Voltages: 5*, 12*, 15, 24, 30*, 48, 60 V DC
Frequency Range: 30 MHz
Housing: Modular Design
Compliance: IEC/EN 61643-21
UL 497B 4th Edition

Configuration:



Technical Data

SSH-3 Series

5* 12* 15 24 30* 48 60

Electrical

Lines Protected		1 (2 Conductors)						
Nominal Operating Voltage (DC)	U_n	5V	12V	15V	24V	30V	48V	60V
Maximum Continuous Operating Voltage (DC)	U_c	6V	15V	18V	28V	33V	52V	64V
Rated Load Current at 25°C	I_L	1 A						
C2 Nominal Discharge Current (8/20µs)	I_n	10 kA						
Maximum Discharge Current (8/20µs)	I_{max}	20 kA						
D1 Impulse Current (10/350µs)	I_{imp}	2.5 kA						
Residual Voltage at 5 kA (8/20µs)	(Line-Line) U_{res}	<22V	<42V	<48V	<70V	<80V	<140V	<160V
Rated Spark Overvoltage	(Shield-Ground)	184-276V						
	(Line-Line), (Line-Ground)	7-10V	16-21V	20-24V	30-36V	35-43V	55-68V	67-85V
Response Time Overvoltage Protection (Shield-Ground)	t_A	<100ns						
	(Line-Line), (Line-Ground)	<1 ns						
Insulation Resistance of the Protection (Shield-Ground)	R_{iso}	> 1 GΩ/100V						
	(Line-Line), (Line-Ground)	≥ 6 KΩ	≥ 15 MΩ	≥ 18 MΩ	≥ 28 MΩ	≥ 33 MΩ	≥ 52 MΩ	≥ 64 MΩ
Serial Resistance per Path	R	1.6-2.0Ω						
Transverse Capacitance (Shield-Ground)	C	5 pF						
	(Line-Line), (Line-Ground)	50 pF						
Cut-off Frequency	f_G	30 MHz						

Mechanical

Temperature Range	-40 °F to +176 °F [-40 °C to +80 °C]						
Terminal Cross Section Multi-strand (max.)	12 AWG [4 mm², 2.5 mm² Q Version]						
Terminal Screw Torque	4.5 lbf-in [0.5 Nm]						
Degree of Protection IEC/EN 60529	IP 20 (built-in)						
Housing Material	Thermoplastic; Grey; Extinguishing Degree V-0						
Mounting IEC/EN 60715	35 mm DIN Rail						

Order Information

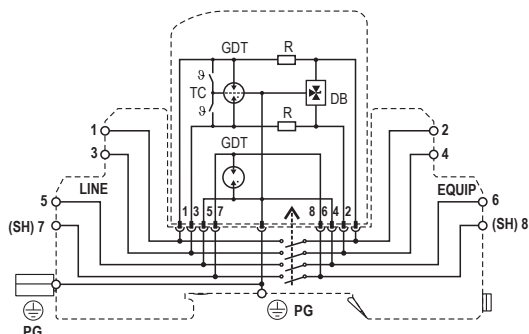
Order Code	5*	12*	15	24	30*	48	60
SSH-3-xxx	7086.01	7086.02	7086.03	7086.04	7086.05	7086.06	7086.07
SSH-3-xxxQ (Quick Connect Terminals)	7086.90	7086.91	7086.92	7086.93	7086.94	7086.95	7086.96
SSH-3-xxxM (module)	7086.09	7086.10	7086.11	7086.12	7086.13	7086.14	7086.15

RayDat SSH-3 Series

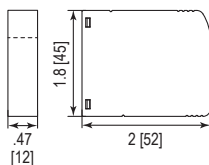
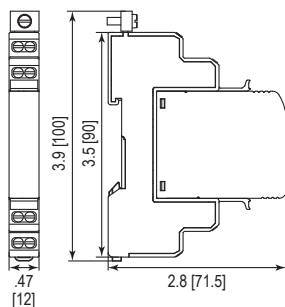
Internal Configuration

Legend

- DB Diode Block
- GDT Gas Discharge Tube
- PG Protective Grounding
- R Resistor
- SH Shielded
- TC Thermo-clip



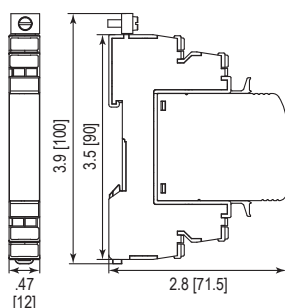
Dimensions & Packaging



SSH-3 Series	5	12	15	24	30	48	60
Dimensions							
Weight per Unit	2.11 oz [60 g]						
Dimensions DIN 43880	2/3 TE						
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102 mm]						
Minimum Package Quantity	15 pieces						

SSH-3-xxxM Series	5	12	15	24	30	48	60
Dimensions							
Weight per Unit	.91 oz [26 g]						
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102 mm]						
Minimum Package Quantity	15 pieces						

Quick Connect Terminals



SSH-3-xxxQ Series	5	12	15	24	30	48	60
Dimensions							
Weight per Unit	2.18 oz [62 g]						
Dimensions DIN 43880	2/3 TE						
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102 mm]						
Minimum Package Quantity	15 pieces						

inches
[mm]

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



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