

SPD系列

Surge Protective Device

QR-SPD06-1IP



产品规格参数

产品型号 Product model	QR-SPD06-1IP					
绝缘等级 Insulation Class	应用领域 Application field					
一类灯具 Class I	TN	TNC	TNS	TNCS	TT	IT
二类灯具 Class II	✓	✓	✓	✓	✓	

电性能参数 Electrical specifications

参数规格 Specifications	参数代号 Parameter	参数值 Value	单位 Unit	测试环境 Condition
冲击类别 / Classification		Class III		Acc. IEC61643-11
保护模式 / Protection mode		Diff. mode & Comm. mode		
最大持续工作电压 (L-N) Max. continuous operating voltage	Uc (L-N)	277	VAC	50 - 60 Hz
最大持续工作电压 (L-GND) Max. continuous operating voltage	Uc (L-GND)	277	VAC	50- 60 Hz
最大持续工作电压 (N-GND) Max. continuous operating voltage	Uc (N-GND)	277	VAC	50- 60 Hz
暂时过电压 Temporary overvoltage TOV	UT	1505	V	HV system fault: 1200 V+305, at tt = 200 ms, TT (L-PE)
暂时过电压 Temporary overvoltage TOV	UT	402.6	V	LV system fault: 305 V x 1.32 at tt = 120 m, TT ,TN
暂时过电压 Temporary overvoltage TOV	UT	528	V	LV system fault: 305 V x $\sqrt{3}$ at tt = 5 s, TT ,TN
电网类型 / Power grids		TN, TT,		Incl. all TN varieties TN-C, TN-C-S, TN-S
标称放电电流 (L-N) Nominal discharge current	In (L-N)	7.5	kA	@ Uoc=15KV; internal resistance=2Ω
标称放电电流 (L-GND) Nominal discharge current	In (L-GND)	7.5	kA	@ Uoc=15KV; internal resistance=2Ω
标称放电电流 (N-GND) Nominal discharge current	In (N-GND)	7.5	kA	@ Uoc=15KV; internal resistance=2Ω
最大电压保护水平 (L-N) Max. voltage protection level at In	Up (L-N)	1,5	kV	@ Uoc=15KV; internal resistance=2Ω
最大电压保护水平 (L-GND) Max. voltage protection level at In	Up (L-GND)	2	kV	@ Uoc=15KV; internal resistance=2Ω
最大电压保护水平 (N-GND) Max. voltage protection level at In	Up (N-GND)	2	kV	@ Uoc=15KV; internal resistance=2Ω
开路电压 / Open-circuit voltage	Uoc	15	kV	
后备保险丝 / Backup fuse		8	A	max., gG fuse
失效指示 / End of life indication		yes		指示灯亮: 正常工作 / Optical, light ON: SPD is functional. 指示灯灭: 产品失效 / Light OFF: SPD has reached end-of-life
最大对地漏电流 Max earth leakage current at Uc		50	μA	Max. rms, to GND
寿命 / Lifetime		100,000	hours	最大外壳温度下90%产品正常工作 Measured @ Tcase-max with min 90% survival



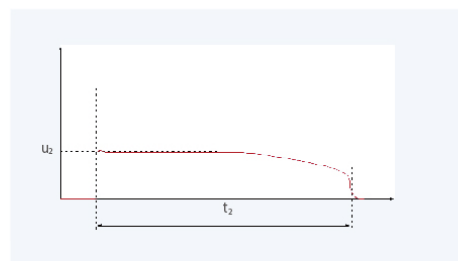
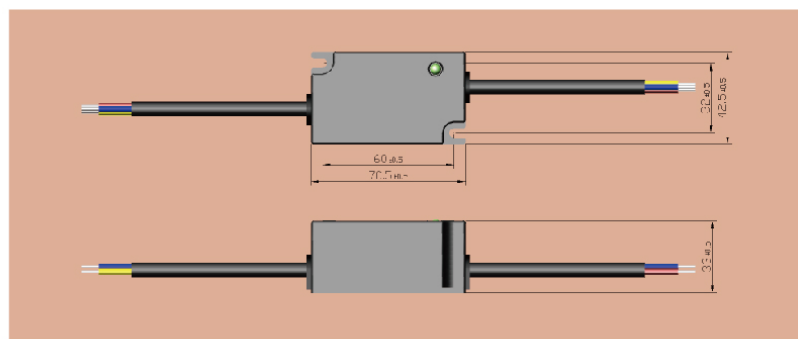
其他参数 Other specifications

参数规格 Specifications	参数代号 Parameter	参数值 Value	单位 Unit	测试环境 Condition
抗冲击能力 Surge withstand capability		1	strike	max. at 10 kA
		30	strikes	min. at 7.5 kA
		50	strikes	min. at 5 kA
额定电流 / Nominal current		4	A	额定负载电流 (50-60Hz) / Rated load current at 50 ... 60 Hz
消耗功率 / Power consumption		1.1	W	max. at $U_c = 277VAC$; Load current=4A
适用灯具 / Suitable for luminaires		Class I、 Class II		绝缘等级按照 IEC60598 / Insulation Class acc. IEC60598

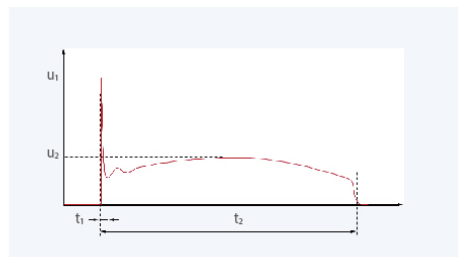
电压保护水平 Protection levels Up

冲击电流 IC 8/20 μs	差模 U_2 / Differential mode U_2	共模 U_1/U_2 / Common mode U_1/U_2
7.5kA	$\leq 1500V$	$\leq 2000V / 1500V$

产品外形 Product dimensions



差模 L-N Differential mode L-N



共模 (L/N - ground, L+N - ground)
Common mode (L/N - ground, L+N - ground)

寿命 Lifetime

参数规格 Specifications	参数值 Value	单位 Unit	测试环境 Condition
寿命 / Lifetime	100,000	hours	最大外壳温度下90%产品正常工作 Measured @ Tcase-max with min 90% survival

使用和储藏环境 Environmental conditions

参数规格 / Specifications	参数值 / Value	单位 / Unit	测试环境 / Condition
环境温度 / Ambient temperature	-40...70	°C	
外壳表面温度 / Tcase-max.	80	°C	在温度测量点测量 / Measured at Tc-point
储藏环境温度 / Storage temperature	-40...85	°C	
相对湿度 / Relative humidity	5...95	%	不结露 / Non-condensing
室外灯适用 / Suitable for outdoor luminaires	Yes		仅室内 / Built-in only