

# 产品规格书

## PRODUCT SPECIFICATION

客户名称/Customer	
客户料号/Part No	
客户承认签章 Custome Approved Signatures	

供方/Supplier	友容新源电气（昆山）有限公司
文件编号/Spec No	CF-PS0903010
品名/Description	HV FUSE
型号/Model	PV10-□□A-B
日期/Date	2019/3/27
设计/Designed	批准/Approvded
kevin	陈斌

地址：中国江苏省昆山市周市镇陆扬友谊北路153号  
ADD:No.153, Youyi North road, Zhoushi Town, Kunshan City,  
Jiangsu Province in china

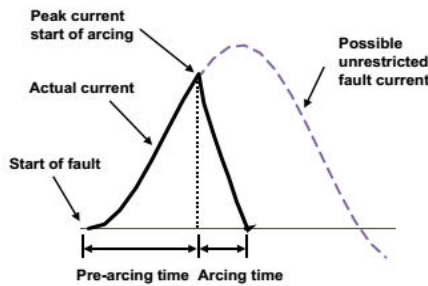
电话/Tel: 86-512-36698841

传真/Fax: 86-512-36698843

Http: [www.cfriend-electric.com](http://www.cfriend-electric.com)

**PV10-FUSES Fuses for Semiconductor Protection IEC60269-6/UL248-19 standard**

SIZE	Rated Voltage	Operating Class	Rated Breaking Capacity
10	dc 1000V	gPV	1000V@ 20kA



**型号 Product model**

- PV10-□□A-B

**型号诠释 Product interpretation**

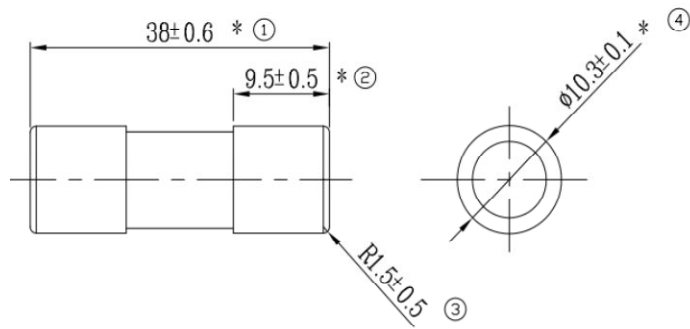
PV 10 - □□A-B  
 ①      ②                  ③      ④

- ① 保护对象 Protection object: PV:太阳能光伏阵列保护用熔断器  
Fuses for solar photovoltaic array protection
- ② 直径尺寸 Diameter: 10:熔管直径Fusion tube diameter Φ10.3
- ③ 额定电流 Rated Current: A
- ④ 序列号 serial number: B

**描述 Description**

- 优越的电气性能，快速保护PV系统，迅速切断系统中的故障电流。  
Excellent electric performance, quick protection for PV system, cut down the fault current of the system.
- 设计符合 IEC60269-6、UL248-19 Product design conforms to IEC60269、UL248-19
- 产品过程符合IS09001质量管理体系要求 Product process conforms to IS09001
- 产品符合RoHS Product conforms to RoHS

## 外形尺寸 Dimensions

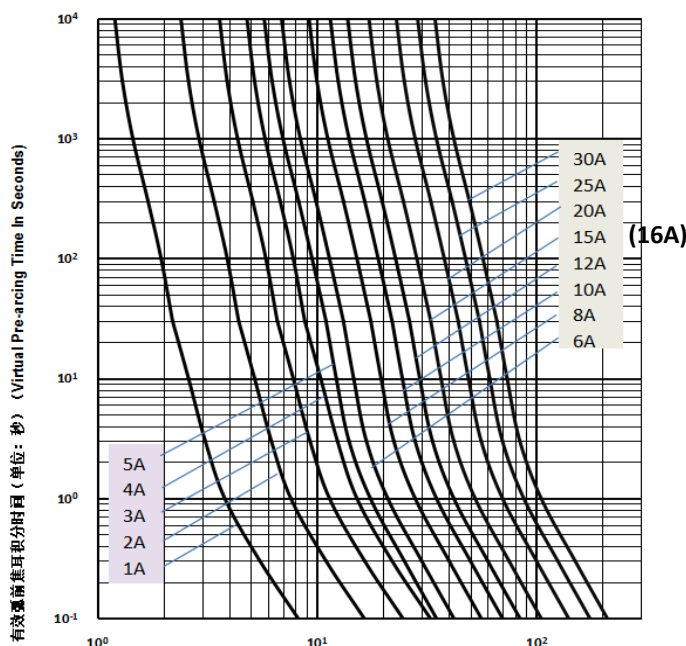


## 物料选择 Selection and ordering data

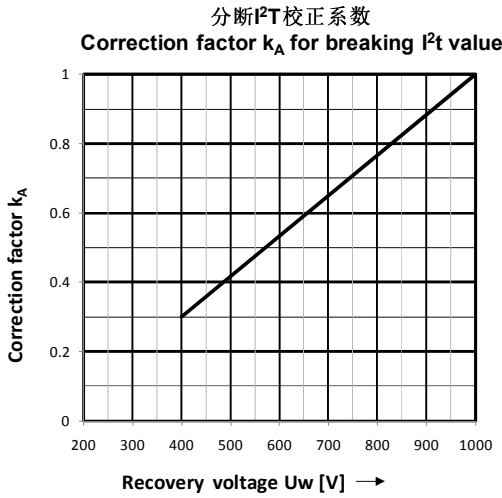
Rated current 【A】	Rated voltage 【V】	Part Number	Power Loss 【W】	Pre-arcing $I^2t$ 【A <sup>2</sup> S】	Total@1000V $I^2t$ 【A <sup>2</sup> S】	Weight 【Kg/1】	Pack
1	1000	PV10-1A-B	1.4	0.7	1.2	0.01	20
2	1000	PV10-2A-B	1.1	1.2	3.4	0.01	20
3	1000	PV10-3A-B	1.4	4	11	0.01	20
4	1000	PV10-4A-B	1.6	9.5	26	0.01	20
5	1000	PV10-5A-B	1.7	19	50	0.01	20
6	1000	PV10-6A-B	1.8	30	90	0.01	20
8	1000	PV10-8A-B	2	3	32	0.01	20
10	1000	PV10-10A-B	2.2	7	70	0.01	20
12	1000	PV10-12A-B	2.4	12	120	0.01	20
15	1000	PV10-15A-B	2.5	22	220	0.01	20
16	1000	PV10-16A-B	2.6	25	240	0.01	20
20	1000	PV10-20A-B	2.7	34	350	0.01	20
25	1000	PV10-25A-B	2.9	120	1250	0.01	20
30	1000	PV10-30A-B	3.4	165	1820	0.01	20

## 时间电流特性曲线 Time- Current Characteristics Curve

PV10-(1-30)A 1000Vdc  
时间-电流曲线 (Time -Current Curve)

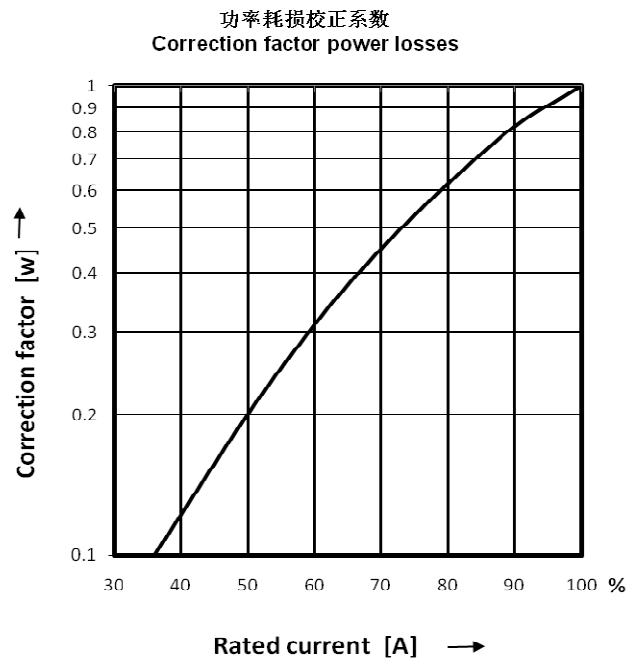


分断I<sup>2</sup>t校正系数  
Correction factor k<sub>A</sub> for breaking I<sup>2</sup>t value



功率耗损校正系数  
factor prwer losses

Correction



使用条件 Operating condition

No	项目 Item	要求 Requirements
1	使用电压范围 Operating voltage	≤1000V
2	使用环境 Operating environment	-40℃~90℃ RH<50% (≥40℃) RH<90% (≤20℃)
3	保存环境 Storage environment	-5℃~40℃ RH<75%
4	海拔高度 altitude	≤3000m
5	安装扭矩 Install torque	
6	污秽等级 Pollution level	III

额定电流基本选择 Rated current basic selection

- 熔断器正常使用的条件 Normal usage condition for fuses  
连接母线电流密度 Amp density for connecting busbar: 1.3amp/mm<sup>2</sup>; 连续工作环境温度 Continous operation
- 熔断器非正常使用条件的修正系数 Correction under abnormal operation cordition for fuses

$$I_b = I_n \times K_t \times K_e \times K_v \times K_f \times K_b$$

I<sub>b</sub>: 允许的最大负载电流 The max permissible continuous RMS load

I<sub>n</sub>: 熔断器的额定电流 Rated current of a given fuse

K<sub>t</sub>: 环境温度的修正系数 Ambient temp. correction factor acc. to fig 1

K<sub>e</sub>: 热连接修正系数 Thermal connection factor acc. to fig 2

K<sub>v</sub>: 空气冷却修正系数 Cooling air correction factor acc. to fig 3

K<sub>f</sub>: 频率修正系数 Frequency correction factor acc. to fig 4

K<sub>b</sub>: 陶瓷熔断管体系数为1.0, 纤维熔断管体系数为0.8 Fuse load constant. For fuses with porcelain body it is normally 1.0 , For fiber body fuses the factor normally 0.8

fig1

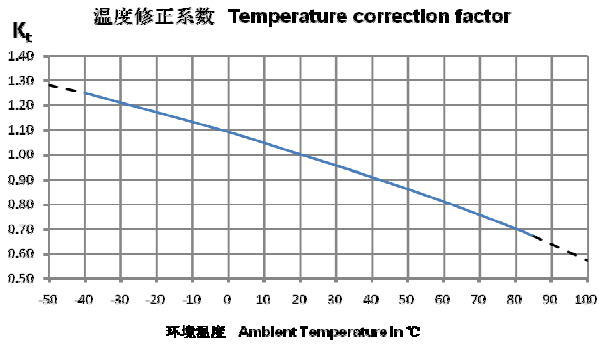


fig2

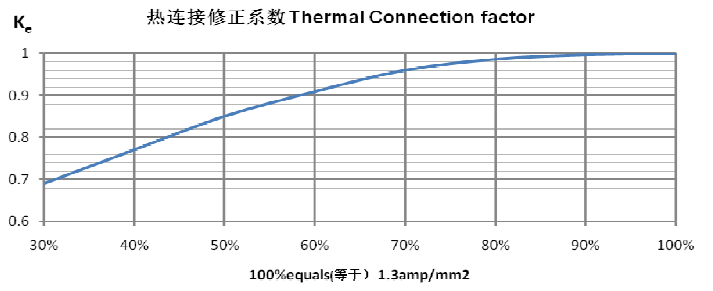


fig3

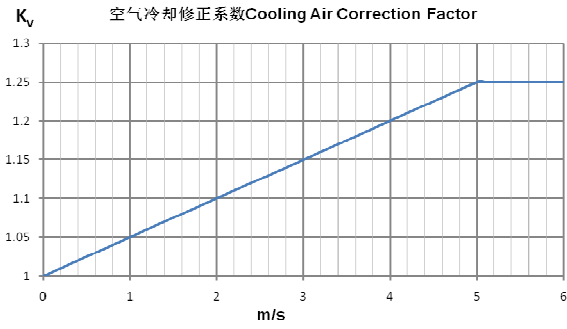


fig4

