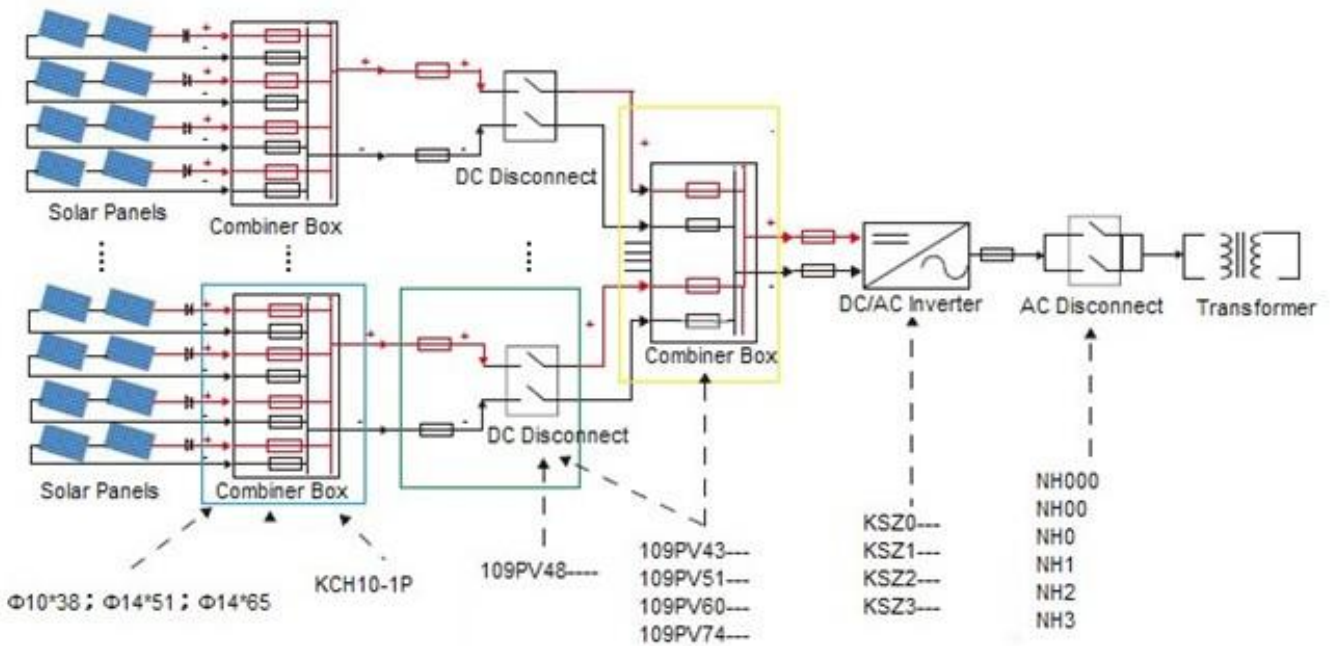



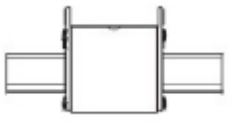
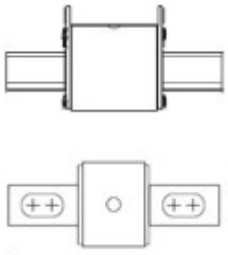
Fuse Rating for PV Applications 光伏直流熔断器应用:



Photovoltaic circuit: 光伏系统电路:



## Main Characteristics 主要技术数据:

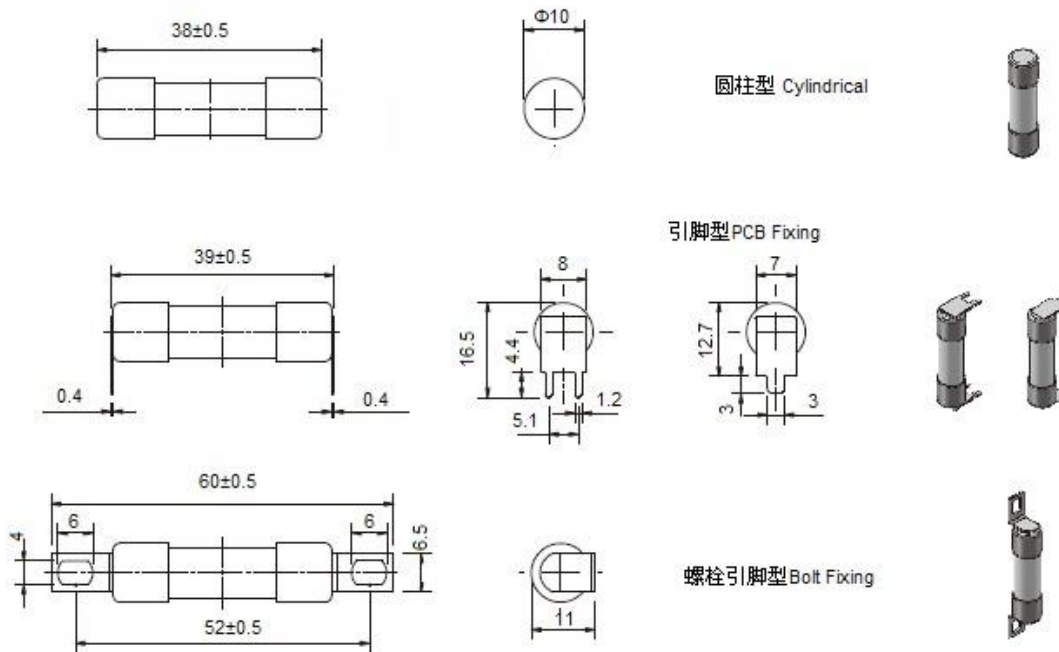
| Type<br>型号   | Size<br>瓷管代号 | Fuse type<br>熔断器结构             | Catalog<br>Number<br>订货号 | Current<br>Rating<br>电流(A)            | Voltage<br>Rating<br>电压(V) | Standard<br>标准 |
|--|--------------|--------------------------------|--------------------------|---------------------------------------|----------------------------|----------------|
| Ferrule 圆柱型结构<br>       | Φ10*38       | Cylindrical 圆柱型                | KD10-B                   | 1A-6A<br>8A-10A<br>12A-15A<br>16A-20A | 1000VDC                    | IEC60269-6.    |
|  |              | PCB2 fixing<br>印刷电路板<br>(两个引脚) | KD10-PCB2                |                                       |                            |                |
|  |              | PCB1 fixing<br>印刷电路板<br>(一个引脚) | KD10-PCB1                |                                       |                            |                |
|  |              | Bolt fixing 螺栓引脚               | KD10-L                   |                                       |                            |                |
|  | Φ14*51       | cylindrical 圆柱型                | KD14-B                   | 15A;20A; 25A; 32A                     | 1000VDC<br>1100VDC         | IEC60269-6.    |
|  | Φ14*65       | cylindrical 圆柱型                | KD14-B                   | 15A; 20A; 25A; 32A                    | 1300VDC<br>1500VDC         | IEC60269-6.    |
| Bolt fixing 印刷电路板  |              | KD14-L                         | 15A; 20A; 25A; 32A       | 1300VDC<br>1500VDC                    | IEC60269-6.                |                |
| NH 刀型结构<br>           | DIN1         | NH                             | 109PV48----              | 50A;63A;80A;<br>100A;125A;160A        | 1000VDC                    | IEC60269-6.    |
| Square-body 方体型结构<br> | DIN0-43      | NH 型<br>Bolt fixing 型<br>螺栓安装  | 109PV43---               | 63A;80A;100A;<br>125A;160A            | 1000VDC                    | IEC60269-6.    |
|  | M0-43        |                                |                          | 50A;63A;<br>80A;100A;<br>125A;160A    | 1500VDC                    | IEC60269-6.    |
|  | DIN1-51      |                                | 109PV51---               | 200A                                  | 1000VDC                    | IEC60269-6.    |
|  | M1-51        |                                |                          | 100A;125A;<br>160A;200A               | 1500VDC                    | IEC60269-6.    |
|  | DIN2-60      |                                | 109PV60---               | 200A;250A;<br>315A                    | 1000VDC                    | IEC60269-6.    |
|  | M2-60        |                                |                          | 125A;160A;<br>200A;250A               | 1500VDC                    | IEC60269-6.    |
|  | DIN3-74      |                                | 109PV74---               | 350A;400A;<br>500A;630A               | 1000VDC                    | IEC60269-6.    |
|  | M3-74        |                                |                          | 250A;315A;<br>355A;400A               | 1500VDC                    | IEC60269-6.    |

Main Characteristics 主要技术参数: 电压1000VDC-Φ10x38 电流范围: from 1A to 20 A

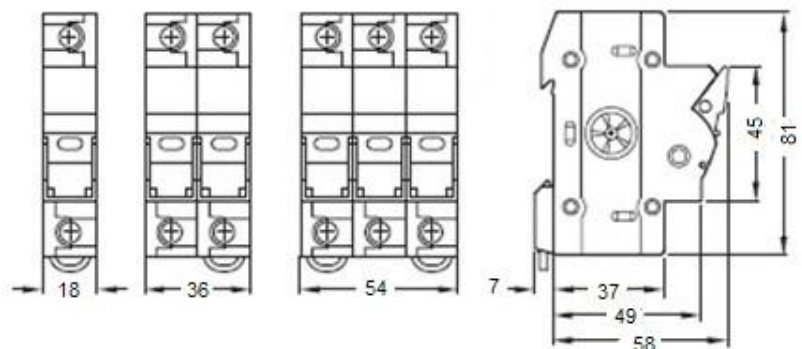
- Standards/Approvals: 执行标准 Manufactured in accordance with IEC 60269-6.
- Ratings:等级  
Volts电压:1000Vdc; Amps电流: 1A to 6A, 8A, 10A, 12A & 15A,16A,20A.
- Breaking Capacity分断能力:  
电流1A to 6A 40KA dc IEC ; 电流8A to 15A 33KA dc IEC ; 电流16A to 20A 10KA dc IEC.
- Time constant时间常数 (L/R): Under 1 ms~3ms.
- Min Interrupting最小分断电流:1.35 x I<sub>n</sub>
- IPV Fuse Link Coordination with: 4", 5" & 6" solar cells用于4", 5" & 6"光伏电池保护
- Modular fuse holder光伏熔断器底座: KCH10-1P



Dimensions(mm)安装示意图:



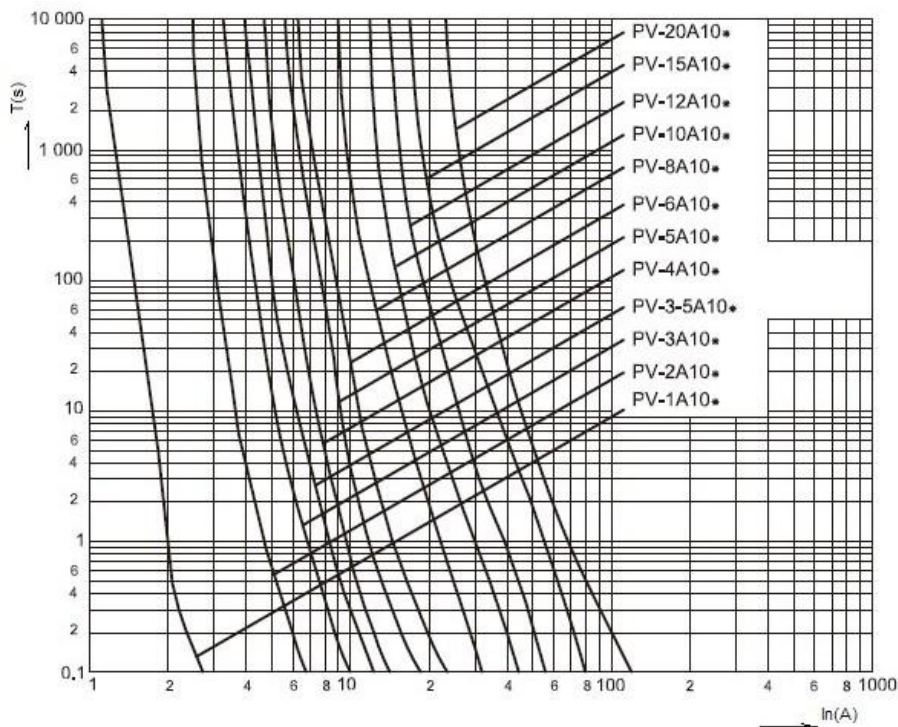
Cylindrical fuse holders 底座 KCH10-32A



Main Characteristics 主要技术参数: 电压1000VDC-Φ 10x38 电流范围: from 1A to 20 A

| Catalog Number<br>订货号                |                     | Cross Reference<br>参考序号 | Current Rating | Watts loss<br>功耗   |                | Pre-arcing<br>弧前<br>I <sup>2</sup> t-value | Total 熔断<br>I <sup>2</sup> t-value | Breaking Capacity<br>分断能力 |
|--------------------------------------|---------------------|-------------------------|----------------|--------------------|----------------|--|------------------------------------|---------------------------|
|                                      |                     |                         | 电流 (A)         | 0.8 I <sub>n</sub> | I <sub>n</sub> | (A <sup>2</sup> S)                         | (A <sup>2</sup> S)                 |                           |
| Φ10×38<br>Without<br>striker<br>无撞击器 | KD10-1A/1000VDCgR   | PV-1A10F                | 1A             | 0.8                | 1.5            | 0.15                                       | 0.4                                | 40KA<br>@DC1000V<br>1ms   |
|                                      | KD10-2A/1000VDCgR   | PV-2A10F                | 2A             | 0.6                | 1.0            | 1.2  | 3.4                                |                           |
|                                      | KD10-3A/1000VDCgR   | PV-3A10F                | 3A             | 0.8                | 1.3            | 4  | 11                                 |                           |
|                                      | KD10-3.5A/1000VDCgR | PV-3.5A10F              | 3.5A           | 0.9                | 1.3            | 7  | 20                                 |                           |
|                                      | KD10-4A/1000VDCgR   | PV-4A10F                | 4A             | 1.0                | 1.3            | 9.5  | 26                                 |                           |
|                                      | KD10-5A/1000VDCgR   | PV-5A10F                | 5A             | 1.0                | 1.6            | 19   | 50                                 |                           |
|                                      | KD10-6A/1000VDCgR   | PV-6A10F                | 6A             | 1.1                | 1.8            | 30   | 90                                 |                           |
|                                      | KD10-8A/1000VDCgR   | PV-8A10F                | 8A             | 1.2                | 2.1            | 3  | 32                                 | 33KA<br>@DC1000V<br>1ms   |
|                                      | KD10-10A/1000VDCgR  | PV-10A10F               | 10A            | 1.2                | 2.3            | 7  | 70                                 |                           |
|                                      | KD10-12A/1000VDCgR  | PV-12A10F               | 12A            | 1.5                | 2.7            | 12   | 120                                |                           |
|                                      | KD10-15A/1000VDCgR  | PV-15A10F               | 15A            | 1.7                | 2.9            | 22   | 220                                | 30KA<br>@DC1000V1ms       |
|                                      | KD10-16A/1000VDCgR  | PV-16A10F               | 16A            | 1.9                | 3.1            | 28   | 230                                |                           |
|                                      | KD10-20A/1000VDCgR  | PV-20A10F               | 20A            | 2.1                | 3.5            | 34   | 240                                |                           |

Time vs. current characteristics 时间电流特性曲线:



Above: Curves indicate, for each rated current, pre-arcing time vs. R.M.S. pre-arcing current.

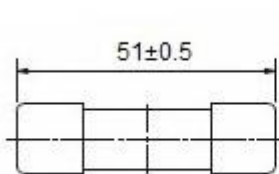
Main Characteristics 主要技术参数: 1000V~1100VDC-Φ14x51 电流: from 15A to 32 A

- Standards/Approvals 执行标准: Manufactured in accordance with IEC 60269-6.
- Ratings:等级
- Volts电压:1000Vdc Amps电流: 25A to 32A,:
- Volts电压:1100Vdc Amps电流: 15A to 20A,
- Breaking Capacity 分断能力: 10kA dc IEC.
- Time constant 时间常数(L/R): Under 1~3ms.
- IPV Fuse Link Coordination with: 4", 5" & 6" solar cells 用于4", 5" & 6" 光伏电池保护
- Modular fuse holder 光伏熔断器底座: KCH14-1P



| Catalog Number<br>订货号        | Cross Reference<br>参考序号 | Current rating<br>电流 (A) | Watts loss<br>功耗   |                | Pre-arcing<br>弧前<br>I <sup>2</sup> t-value<br>(A <sup>2</sup> S) | Total熔断<br>I <sup>2</sup> t-value<br>(A <sup>2</sup> S) | Breaking<br>Capacity<br>分断能力 |                     |
|------------------------------|-------------------------|--------------------------|--------------------|----------------|--|---|------------------------------|---------------------|
|                              |                         |                          | 0.8 I <sub>n</sub> | I <sub>n</sub> |  |   |                              |                     |
| Φ14×51<br>Without<br>striker | KD14-15A/1100VDCgR      | PV-15A14F                | 15A                | 2.1            | 4  | 14  | 265                          | 10KA                |
|                              | KD14-20A/1100VDCgR      | PV-20A14F                | 20A                | 2.7            | 5  | 27  | 568                          | @DC1100V<br>1ms~3ms |
|                              | KD14-25A/1000VDCgR      | PV-25A14F                | 25A                | 2.7            | 5.1  | 65  | 943                          | 10KA                |
|                              | KD14-32A/1000VDCgR      | PV-32A14F                | 32A                | 3.3            | 6.2  | 120   | 1740                         | @DC1000V<br>1ms~3ms |

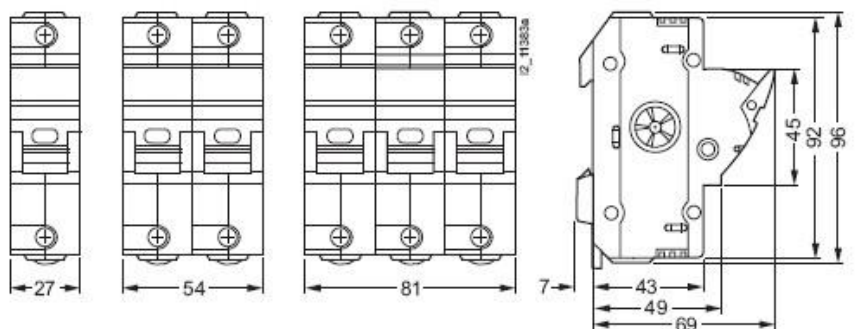
Dimensions(mm) 安装示意图:



圆柱型 Cylindrical

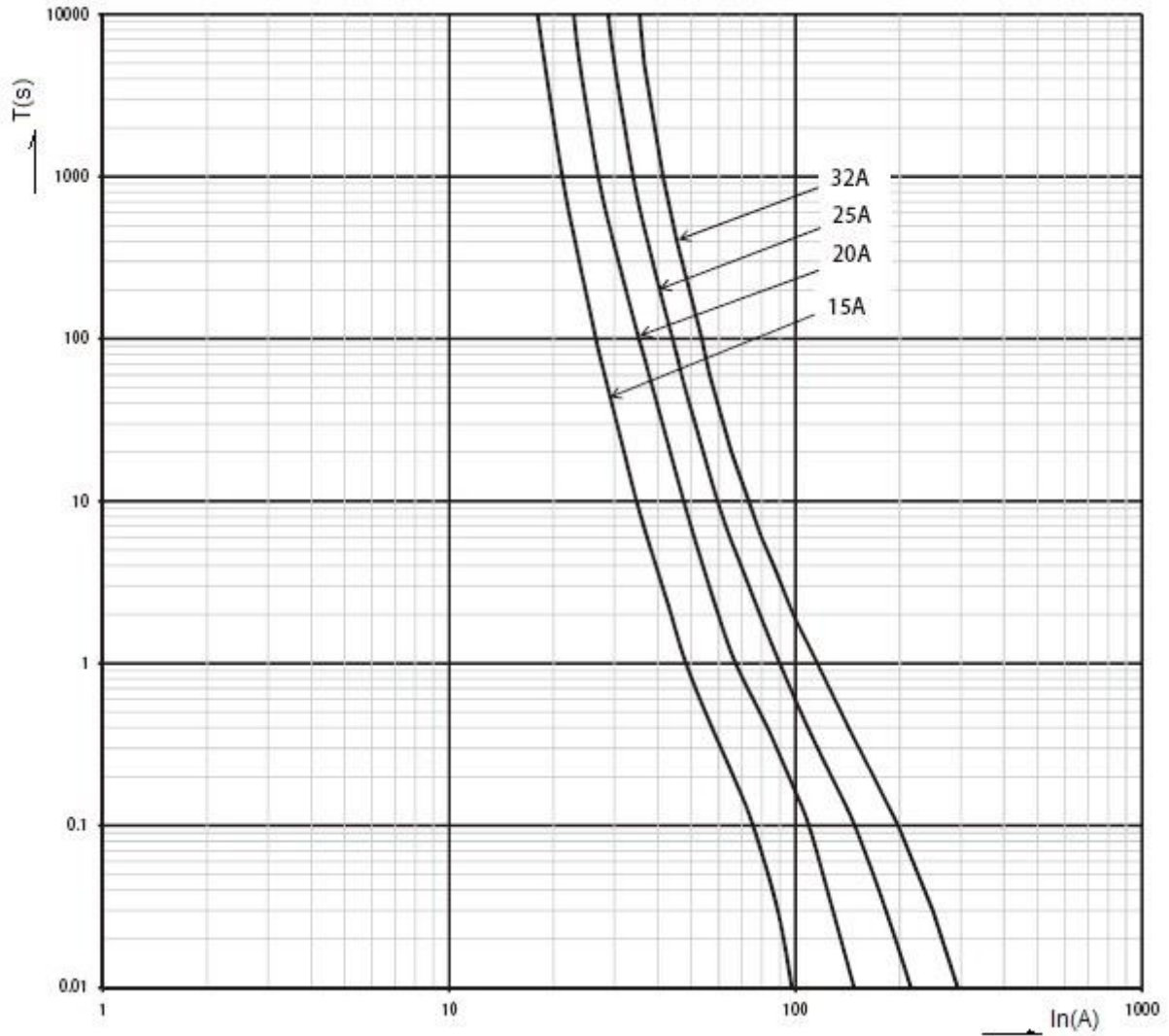


fuse holders 光伏底座 KCH14-63A



Main Characteristics 主要技术参数: 1000V~1100VDC- $\Phi$  14x51 电流: from 15A to 32 A

Time vs. current characteristics 时间电流常数:



Above: Curves indicate, for each rated current, pre-arcing time vs. R.M.S. pre-arcing current.

## Main Characteristics 主要技术参数: 1300V~1500VDC-Φ14x65 电流: from 15A to 32 A

●Standards/Approvals 执行标准: Manufactured in accordance with IEC 60269-6.

●Ratings 等级:

Volts 电压: 1300Vdc Amps 电流: 25A to 32A,; Volts 电压: 1500Vdc Amps 电流: 15A to 20A,

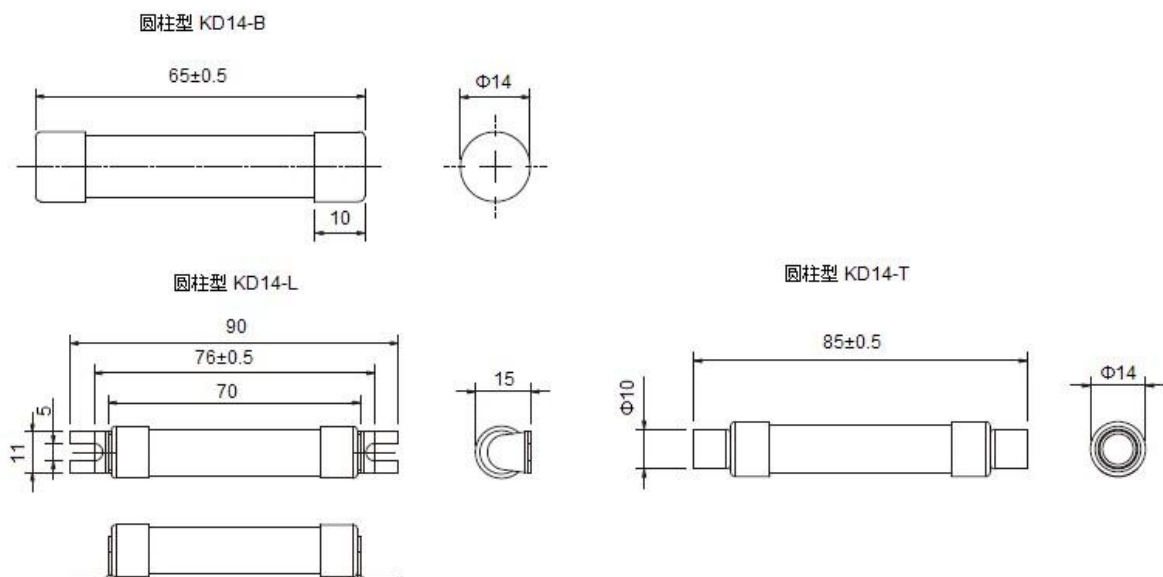
●Breaking Capacity 分断能力:

10kA dc IEC. Time constant 时间常数 (L/R): Under 1~3ms.

●IPV Fuse Link Coordination with: 4", 5" & 6" solar cells 用于 4", 5" & 6" 光伏电池保护



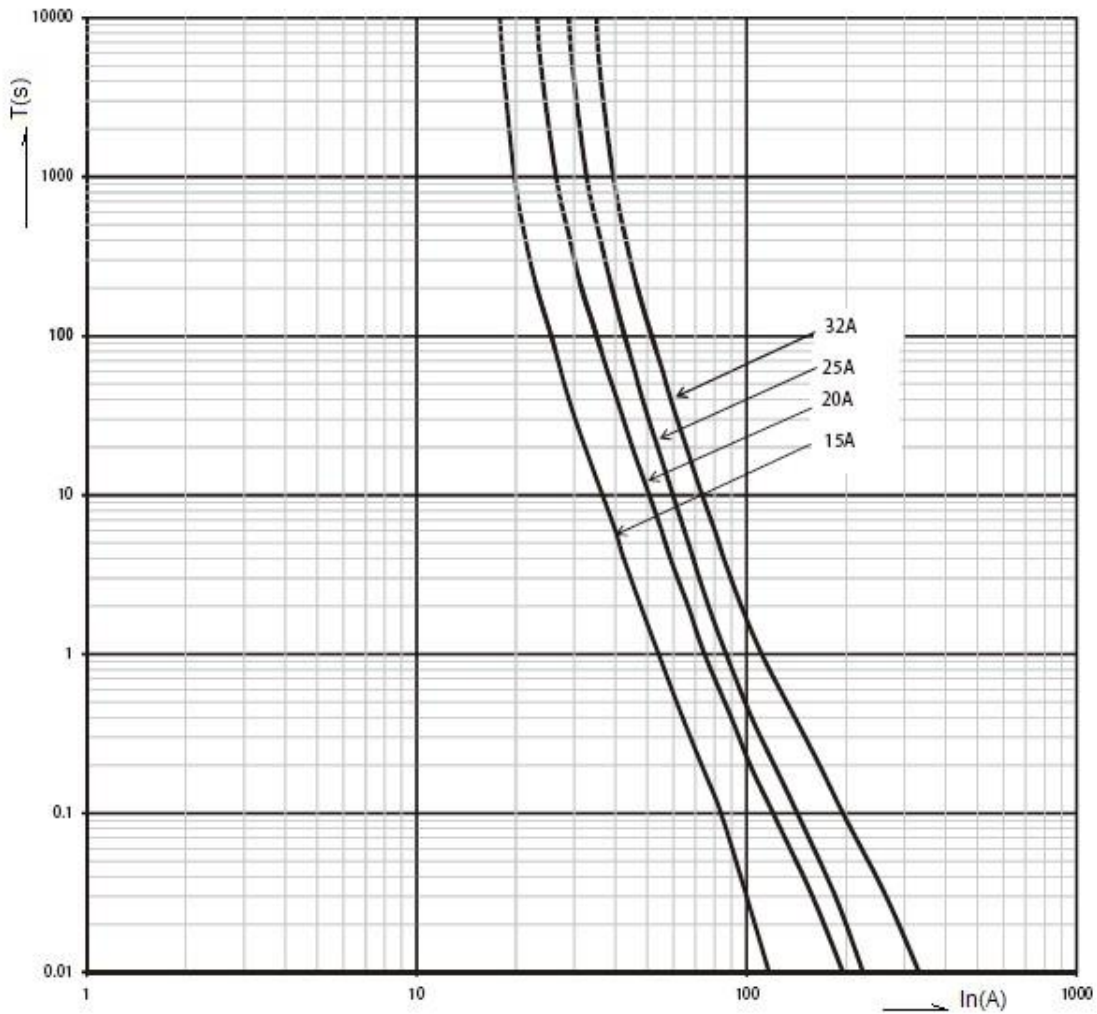
## Dimensions(mm) 安装示意图:



Main Characteristics 主要技术参数: 1300V~1500VDC-Φ14x65 电流: from 15A to 32 A

| Catalog Number<br>订货号        | Cross Reference<br>参考序号 | Current Rating<br>电流 | Watts loss<br>功耗 |       | Pre-arcing<br>弧前<br>$I^2t$ -value | Total 熔断<br>$I^2t$ -value | Breaking Capacity<br>分断能力 |                         |
|------------------------------|-------------------------|----------------------|------------------|-------|-----------------------------------|---------------------------|---------------------------|-------------------------|
|                              |                         | (A)                  | 0.8 $I_n$        | $I_n$ | (A <sup>2</sup> S)                | (A <sup>2</sup> S)        |                           |                         |
| Φ14×65<br>Without<br>striker | KD14-15A/1500VDCgR      | PV-15A14LF           | 15A              | 3.2   | 5.8                               | 14                        | 160                       | 10KA@DC1500V<br>1ms~3ms |
|                              | KD14-20A/1500VDCgR      | PV-20A14LF           | 20A              | 3.6   | 6.5                               | 34                        | 400                       |                         |
|                              | KD14-25A/1300VDCgR      | PV-25A14LF           | 25A              | 4.1   | 7.5                               | 65                        | 550                       | 10KA@DC1300V<br>1ms~3ms |
|                              | KD14-32A/1300VDCgR      | PV-32A14LF           | 32A              | 5.7   | 10.4                              | 105                       | 900                       |                         |

Time vs. current characteristics 时间电流常数:



Above: Curves indicate, for each rated current, pre-arcing time vs. R.M.S. pre-arcing current.



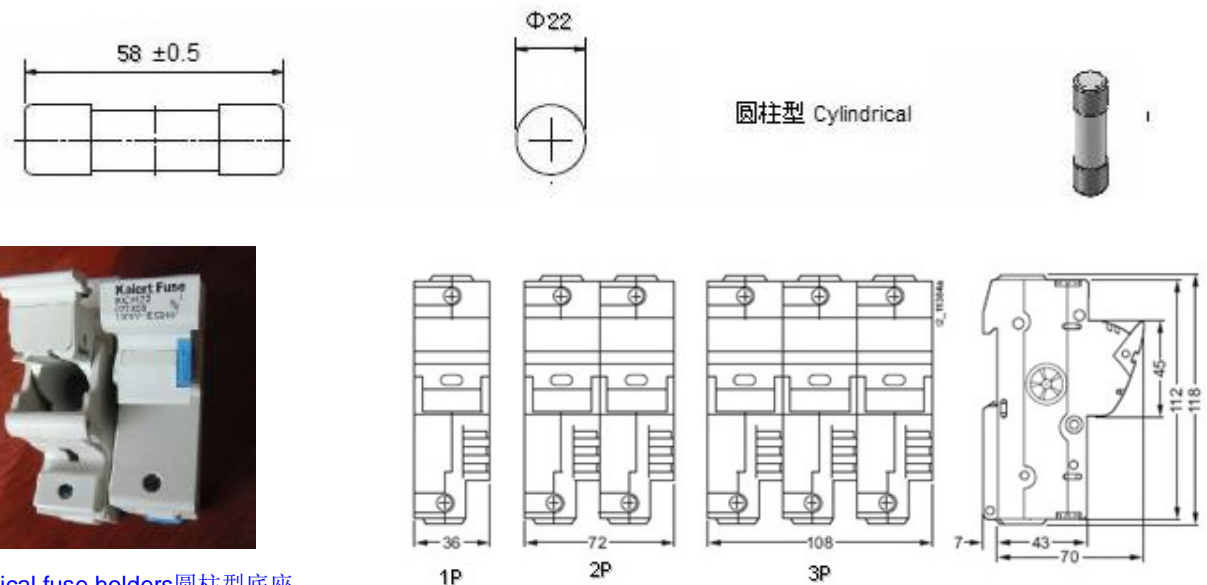
Main Characteristics 主要技术参数: 1000V~1100VDC-Φ22x58 电流: from 40A to 100A

- Standards/Approvals 执行标准: Manufactured in accordance with IEC 60269-6.
- Ratings: 等级  
Volts 电压: 1000Vdc Amps 电流: 60A to 100A, ;  
Volts 电压: 1100Vdc Amps 电流: 40A to 50A,
- Breaking Capacity 分断能力: 10kA dc IEC.
- Time constant 时间常数(L/R): Under 1~3ms.
- IPV Fuse Link Coordination with: 4", 5" & 6" solar cells 用于4", 5" & 6" 光伏电池保护
- Modular fuse holder 光伏熔断器底座: KCH22-1P



| Catalog Number<br>订货号          | Cross Reference<br>参考序号  | Current Rating<br>电流(A) | Watts loss<br>功耗   |                | Pre-arcing<br>弧前<br>I <sup>2</sup> t-value<br>(A <sup>2</sup> S) | Total熔断<br>I <sup>2</sup> t-value<br>(A <sup>2</sup> S) | Breaking<br>Capacity<br>分断能力 |              |
|--------------------------------|--------------------------|-------------------------|--------------------|----------------|--|---|------------------------------|--------------|
|                                |                          |                         | 0.8 I <sub>n</sub> | I <sub>n</sub> |  |   |                              |              |
| Φ22×58                         | KD22-40A/1000VDCgR22*58  | PV-40A22F               | 40A                | 3.2            | 5.5  | 140   | 726                          | 10KA         |
| Without<br>striker<br>无指示<br>器 | KD22-50A/1000VDCgR22*58  | PV-50A22F               | 50A                | 3.9            | 6.7  | 159   | 1431                         | @DC1100V10ms |
|                                | KD22-63A/1000VDCgR22*58  | PV-63A22F               | 63A                | 4.9            | 8.5  | 467   | 4203                         |              |
|                                | KD22-80A/1000VDCgR22*58  | PV-80A22F               | 80A                | 6.2            | 10.8   | 638   | 5742                         | 10KA         |
|                                | KD22-100A/1000VDCgR22*58 | PV-100A22F              | 100A               | 7.5            | 13.2   | 1300  | 11700                        | @DC1000V10ms |

Dimensions(mm) 安装示意图:



Cylindrical fuse holders 圆柱型底座  
KCH22-125A

Cylindrical fuse holders 圆柱型底座 KCH22-125A