



## 1. GENERAL APPLICATIONS

- 1.1 The protector is for protecting your valued equipment from surges, transients, lightning impulses coupled into power system via direct or indirect strikes, an on/off or a short circuit in the transmission lines, induced or coupled into a DC voltage system, providing the safety of your personnel, communication equipment, computers and any other electronic equipment e.g. solar power system and etc.
- 1.2 The protector is able to protect Transient ( also called " Surge " ) such as an impulse of 8/20  $\mu$ Sec. and / or impulse of 10/350  $\mu$ Sec. waveform.
- 1.3 Metal Oxide Varistor ( MOV ), surge protecting component, is manufactured by TDK-EPCOS ( formerly named SIEMENS ) with the approval of UL1449.
- 1.4 The protector housing is made of nonflammable class material in according with UL94V-0 standard and DIN rail 35 mm. mountable.
- 1.5 The protector is plug in module unit with base element type for easy installation and replacement.
- 1.6 The protector is designed, manufactured and tested according to the standard of IEC 61643-31 and EN 50539.

## 3M1D3 series

SURGE PROTECTOR FOR PHOTOVOLTAIC



**3M1D36HE1**

Size : 100 x 55 x 70 mm.

## 2. TECHNICAL DATA



Descriptions	3M1D312V4	3M1D324V4	3M1D348V4	3M1D36HE1	3M1D38HE1	3M1D31TE1
2.1 Nominal operating voltage	12 Vdc	24 Vdc	48 Vdc	600 Vdc	800 Vdc	1000 Vdc
2.2 Max. operating voltage (Uc)	15 Vdc	30 Vdc	60 Vdc	700 Vdc	900 Vdc	1100 Vdc
2.3 Response time	< 25 nSec					
2.4 Operating temperature	-20 °C to + 85 °C					
2.5 DC load current	Independent ( Un-limited )					
2.6 Max. Impulse current (Iimp) ( at 10/350 $\mu$ Sec. )	-			1.5 kA		
2.7 Nominal discharge current (In) ( at 8/20 $\mu$ Sec. )	2 kA			20 kA		
2.8 Max. discharge current (Imax) ( at 8/20 $\mu$ Sec. )	4 kA			40 kA		
2.9 Residual voltage (Ures) ( Combination wave 6 kV/3 kA )	< 320 V	< 360 V	< 450 V	< 3.2 kV	< 3.6 kV	< 4 kV
2.10 Protection mode	All modes ( [+]-G , [-]-G , [+]-[-] )					
2.11 Status display	Normal or Fault indicator					
2.12 Housing material	UL94V-0 standard					
2.13 Mounting	DIN rail 35 mm.					
2.14 Connection type	Screw terminal					
2.15 Dimension ( W x L x H )	Approx. 100 x 55 x 70 mm.					
2.16 Weight	Approx. 450 grams					
2.17 Standard according	IEC 61643-31 and EN 50539					

