# **STABIL** AC LINE SURGE PROTECTOR







#### 1. GENERAL APPLICATIONS

- 1.1 The protector is for protecting your valued equipment from surges, TOVs, transients, lightning impulses coupled into AC power system via direct or indirect strikes, an on/off or a short circuit in the transmission lines, induced or coupled into TN-C-S low voltage system, single phase 230 Volt 50 Hz or three phase four wire 400/230 Volt 50 Hz, which providing the safety of your personnel, communication equipment, computers and any other electronic equipment.
- 1.2 The protector is able to protect two types of surge as follows:
  - 1.2.1 Transient ( also called " Surge " ) such as a discharge current of 8/20 µSec. waveform according to IEC 61643-11-2011 and ANSI / IEEE C62.41-1991.
  - 1.2.2 Temporary Over Voltage or TOVs ( again also referred to as " Surge " ) caused by power frequency electrical system such as switching of the capacitor banks in the electrical system according to ANSI / IEEE C62.41.1-2002.
- 1.3 Metal Oxide Varistor ( MOV ), surge protecting component, is manufactured by TDK-EPCOS (formerly named SIEMENS) with the approval of UL1449 and CSA.
- 1.4 The protector housing is made of nonflammable material ( according to UL94V-0 standard ) and DIN rail 35 mm. mountable.
- 1.5 The protector is designed, manufactured and tested according to the standard of IEC 61643-11-2011, ANSI / IEEE C62.41.1-2002 and วสท. EIT 2007-53.

### 2. GENERAL DATA

2.1 Protection Mode All modes (L-N, L-G, N-G, L-L)

- 20 °C ..... + 70 °C 2.2 Operating Temperature

> 100 M $\Omega$  at test 100 Volt ( DC ) 2.3 Isolation Resistance

2.4 Response Time < 25 nSec.

Power and Fault LED indicator 2.5 Status Display 2.6 AC Load Current Independent (Un-limited)

#### 3. ELECTRICAL DATA

3.1 Line Voltage 230 Volt or 400/230 Volt 50 Hz

3.2 Max. Continuous Operating Voltage 280 Volt 50 Hz

3.3 Leakage Current < 5 mA at 230 Volt 50 Hz (exclude indicator display)

3.4 Surge Capability 40 kA / Phase at 8/20 µSec 3.5 Let Through Voltage (Transient) < 1.5 kV at category B3/C1 3.6 TOVs Surge Current > 5 A in 20 mSec. 50 Hz

3.7 Let Through Voltage (TOVs) < 450 Volt ( Due to TOVs Surge Current )

#### 4. OPTIONS

4.1 IB1 = Indoor Box	for single phase 230 Volt 50 Hz with accessories	
4.2 OB1 = Outdoor Box	and 1 unit of protector is included.	
4.3 IB3 = Indoor Box	for three phase four wire 400/230 Volt 50 Hz with	
4.4 OB3 = Outdoor Box	accessories and 3 units of protector are included.	
4.5 SM = Single MOV	one unit of MOV at Max.Transient Surge Current	
4.6 TOVC = TOVs Surge	TOVs Surge Current Counter Model: TOVC	
3 digits display / counts from 5 A ± 20% at one cycle of 50 Hz up		

Type of AC Line Surge Protector	
Model	Surge Capability (8/20 μSec)
TC3M40W	40 kA

Odering format:

Model: \_\_\_ \_\_\_\_ ( with option : \_\_+\_\_+\_\_ )

Odering example:

Model: TC3M40W (with option: IB1+SM+TOVC)

means Surge Protector 40 kA for single phase 230 Volt 50 Hz with indoor box and single MOV and TOVs surge current counter

## TC3M40W



Model: TC3M40W Size: 52 x 90 x 71 mm.



Model: TC3M40W (with option: IB1) Size: 260 x 250 x 110 mm.



Model: TC3M40W (with option: IB1+TOVC) Size:  $260 \times 250 \times 110$  mm.



Model: TC3M40W (with option: IB3+TOVC) Size: 350 x 260 x 150 mm.





