

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 μ Sec. 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.**

TC3M40W



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

2. GENERAL DATA

- | | |
|---------------------------|--|
| 2.1 Protection Mode | All modes (L-N, L-G, N-G, L-L) |
| 2.2 Operating Temperature | - 20 °C + 70 °C |
| 2.3 Isolation Resistance | > 100 M Ω at test 100 Volt (DC) |
| 2.4 Response Time | < 25 nSec. |
| 2.5 Status Display | Power and Fault LED indicator |
| 2.6 AC Load Current | Independent (Un-limited) |



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

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 μ Sec |
| 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) |



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

4. OPTIONS

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



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

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

Ordering format :
Model : _____ (with option : __+__+__)
Ordering 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

