

## SG50B

### Power Line Surge Suppression



#### Functions

- High surge current rating
- Shunt configuration design
- Fast response time
- Normal mode protection
- Max discharge current (Imax): 100kA
- Terminal interface for hard wire
- Easy to Installation
- Remote alarm interface
- DIN rail mounting



#### Overview

Shogun's series of power line surge suppression products (SG50B models) have been specially developed to match the protection requirement of surge protection on AC line low voltage application according to the recommendation of various standards such as IEC, UL etc. SG50B models are available for both shunt protection and series protection with high capability in suppressing both short duration (impulse voltage limiting) and long duration surge that could occur in power lines.

SG50B models use the high energy handling Transient Voltage Surge Suppression (TVSS) device which offers greater protection capability, higher surge rating, faster response time, and longer operational life. Models available for single phase and three phase systems and level of protection by means of surge rating can reach up to 100kA per phase at 8/20us standard lightning waveform.

#### Specification

Single Stage High Energy Handling Design incorporated with TVSS module and Remote Alarm circuit.

##### Electrical System :

Nominal Line Voltage L-N ( $U_n$ ) :	220-270Vrms, 50-60Hz
Max. Line Voltage ( $U_c$ ) :	275Vrms, 50-60Hz
Rate Current :	Unlimited

##### Reference Standard :

IEC 61643-11:2011, EN 61643-11:2012, DIN VDE 0675, UL-1449, ANSI/IEEE C62.41-2-2002

##### Category IEC/EN/VDE :

Class I+II / Type1+2 / B+C

##### Protection Config :

Installation :	Shunt (L-N, Neutral-Protective Earth, PE)
Protective Device :	Single MOV
Responstme ( $t_n$ ) :	<25 nanosec
Recommended back-up fuse :	125A gL

##### Surge Rating :

Nominal discharge surge current (8/20 $\mu$ s) ( $I_n$ ) :	50kA
Max. discharge surge current (8/20 $\mu$ s) ( $I_{max}$ ) :	100kA

##### Control & Monitoring :

Display :	Status display
Remote Alarm:	NO/NC volt free contact, 0.5A 250Vac/ 3A 125V

##### Surge Performance:

Protection level ( $U_p$ ) :	< 1.2kV (L-N)
Temporary over voltage, TOV ( $U_T$ ) :	415V (5s / withstand mode) 445V (60min / safe failure mode)
Lightning Impulse current (10/350 $\mu$ s) ( $I_{imp}$ )	15kA

##### Physical:

Operating Temperature :	- 40 to 80 °C
Housing material :	PBT/PA, UL94 V-0
Degree of protection :	IP 20
Mounting on :	DIN rail 35mm
Dimensions (W x L x H) mm :	35 x 90 x 68
Weight:	240g