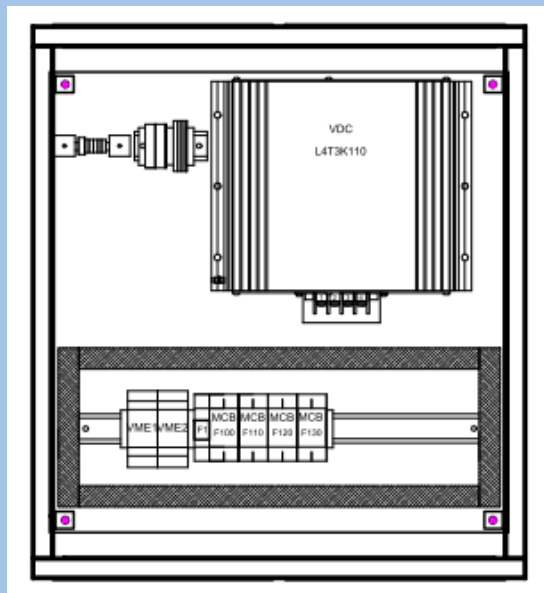
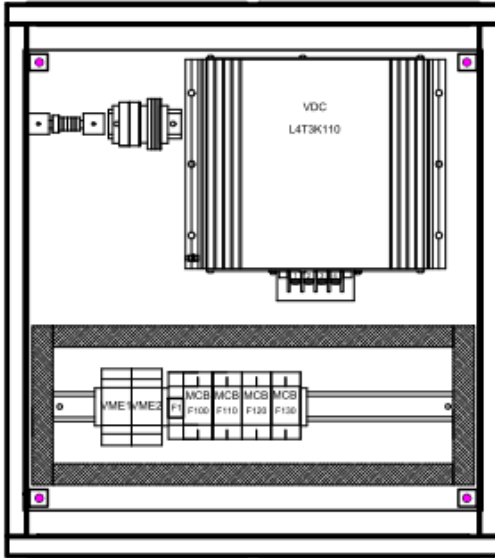


# Voltage Dip Compensators E940 Series

Designed to comply with SEMI F47 standard



## Voltage Dip Compensators E940 Series Designed to comply with SEMI F47 standard



### Product description of E940 Series

The reliability of electrical power is the major concern for critical industries like semiconductor plant, production factory and data centers where milliseconds of voltage dips can cause millions dollar of losses. Most of the plant can ride through such voltage dips by virtue of their mechanical and electrical inertia. However, this not the case for electrical contractors and relays that used to control the motors, machinery and production tools, any contactors contact drop can cause the plant shut down. Products reworks, plant restart, scraping of materials could be very costing and time consuming.

Eetarp Voltage Dip Compensator E940 series is designed to maintain the control voltage during voltage sags and effectively keep the plant running without affected by the voltage dips with compliance with Semif47 standard.

### Multi-Functional Monitoring Relay (VME421H)



The voltage relays of the VME421H series are designed to monitor the under voltage and over voltage in AC and DC systems. The voltages are measured as root mean square values and any over or under voltage that exceeded the threshold will be trigger the alarm contact relay with the present response delay. Due to adjustable response times, installation-specific characteristics, it was implemented in E940 series panel as the sensors to trip the circuits for 50% and 80% barriers as specified in SEMI F47 standard.

### Voltage Dip Compensators Specification

#### AC INPUT SUPPLY

Input voltage:	110/120/208/220/230Vac
Maximum Surge Current	550A
Rate power:	1kVA/3kVA/5kVA

#### AC OUTPUT

Output voltage:	+/- 10% of rated voltage
Rate power:	1kVA/3kVA/5kVA
Wave shape:	Sinusoidal

#### DIP DURATION TIMER

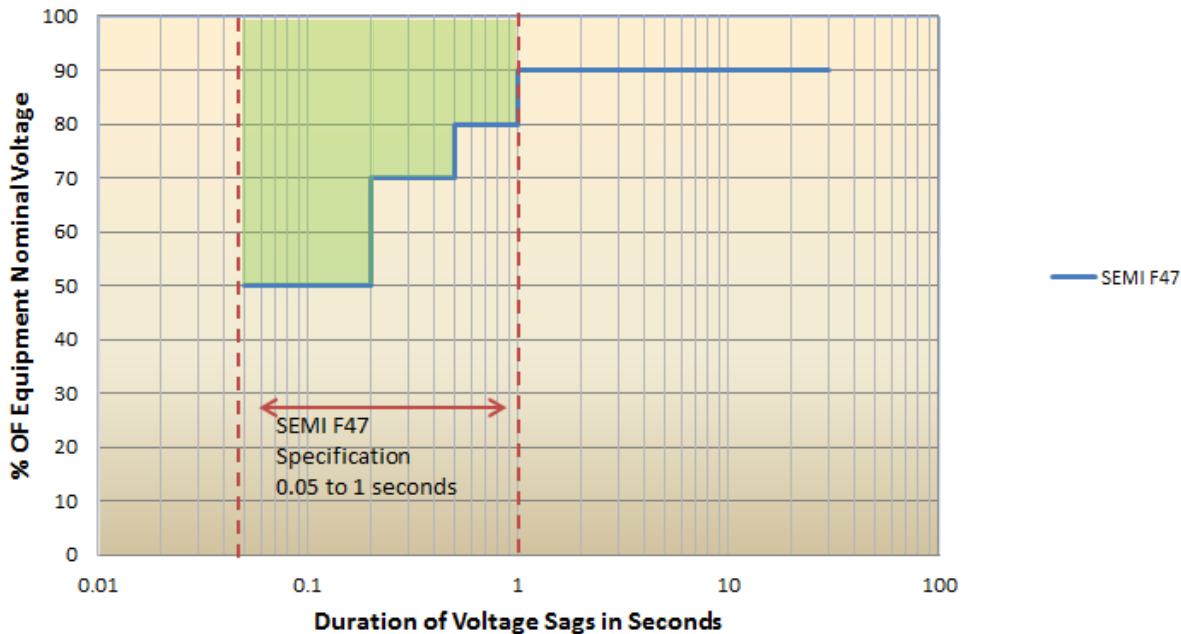
Maximum Uptime	50% dips, 7s
Setting:	20ms steps

## SEMI F47 Standard

SEMI F47 is an industry standard for voltage sag immunity. In essence, SEMI F47 requires that equipment tolerate voltage sags on their ac power line. Specifically, they must tolerate sags to 50% for from 50ms up to 200ms, sags to 70% for up to 0.5 seconds, and sags to 80% for up to one second.

The green zone represents the operation area where no equipment faults must occur due to voltage sags on the supply. The “no fault” window is from 50ms to 1 second with maximum voltage dips up to maximum of 50% of the nominal supply voltage.

### SEMI F47 Standard



**Ordering Information**

- 9 1st three digit fix code for Eetarp DB
- 0 4 = DB installed with VDC
- x Reserved
- 
- x 1=120Vac , 2=208Vac, 3=220Vac, 4=230Vac, 5=110VAC
- x 1=VDC 1kVA , 2=VDC 3kVA, 3=VDC 5kVA
- x Reserved
- 
- x Number of Bender VME in DB
- x Reserved
- x Reserved

**Example of E940 Series (110Vac/3kVA)**

