

# AUTOMATIC VOLTAGE STABILIZERS-TYPE EMS-14 1 to 5 KVA ( Single Phase)



## AUTOMATIC VOLTAGE STABILIZER, TYPE EMS-14

The difficulties caused by variations in supply voltage are now too well-known to be elaborated. While on one side, these variations have become a common phenomenon in the Power supply system, on the other hand, equipments working on such power supplies are becoming more complicated and sophisticated, and are consequently becoming more sensitive to voltage fluctuations.

Automatic Voltage Stabilizers type 'EMS' are being manufactured by 'AE' for more than 25 years and consequently the rich experience gained in this field is comparatively exclusive to 'AE'. These Stabilizers were initially designed and manufactured for Defence requirements where they have been subjected to rigorous and hazardous working conditions at difficult sites. They have proved their reliability and subsequently over the years they have received world-wide recognition.

As a tradition, these Stabilizers are undergoing constant developments and updating of technologies. In line with these traditions of 'AE', we have now come out with the latest version of our 'EMS' series of Servo controlled Voltage Stabilizers type-'EMS-14'.

The new development has got some unique advantage over the current mode Type EMS-12.

In 'EMS-14' the Power Circuit does not include a separate Buck-Boost Transformer but, instead, a double wound dimmerstat is employed which combines the functions of a normal dimmerstat and a Buck-Boost Transformer. This has resulted in reduction in the size, weight and cost of the Stabilizer. However, because of certain manufacturing limitations, presently it has become necessary to restrict the capacity of this type of stabilizers upto 5 KVA only in single phase versions. For 3-phase applications, either a combined 3-phase Unit can be employed, for balanced supply voltage and load conditions, or three single phase units, connected in 3-phase star configuration, can be employed for unbalanced supply voltage and load conditions. The capacities of 3-phases units are restricted up to 3 x 5 KVA, i.e. 15 KVA.

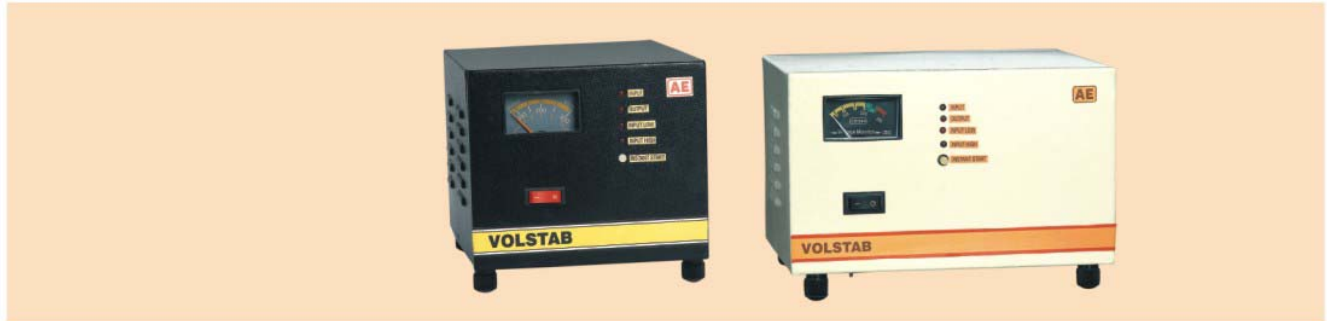
The general specifications of the EMS-14, Stabilizers is as under:-

Input	:	160V to 260V AC Single Phase, 50 Hz. & 170V to 270V AC
Output	:	220V OR 230V OR 240V $\pm$ 0.5%
Capacity	:	1KVA, 2KVA, 3KVA and 5KVA
Speed	:	30V per second.



ISO-9001

## Single Phase Voltage Stabilizer



The stabilizer consists of a multiple tap auto transformer and solid state control circuit. This maintains the output voltage within  $\pm 12\%$  of nominal voltage for large variations in input voltage. These can be used for Air conditioners, refrigerators, lights loads etc.

### FEATURES

- Tripping of output voltage during under voltage and overvoltage conditions.
- Provision of time delay after startup, under voltage cut of and over voltages cut of conditions.
- In case time delay is not required, then the stabilizer can be switched on by pressing the instant Start push button provided on the front side.
- Compact and light weight.
- Provision of status LED's for input ON, input On equal voltage (low) and input voltage (High) on the front side.

### TECHNICAL SPECIFICATION

Input Voltage	:	170V to 270V Ac
Output voltage	:	225V $\pm$ 12% AC
Output current	:	14 Amp
Capacity	:	4 KVA
Regulation	:	Better than 2%
Under voltage out put	:	140V
Over voltage out put	:	280V
Time Delay	:	120 Seconds (Approximately)
Size	:	(250 x 180 x 170) cubic mm
Weight	:	Max. 15kg. (depending on the model).