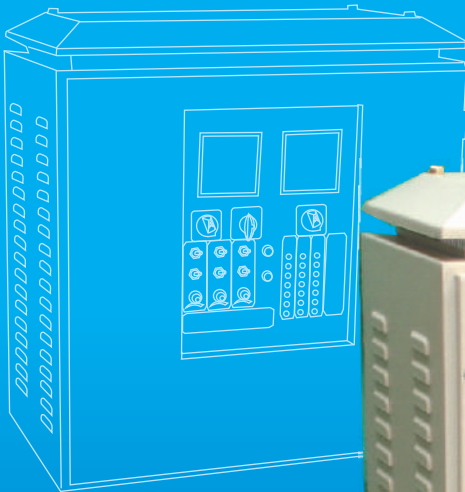


# Servo Controlled Voltage Stabilizer

*Confirming to IS:9815*



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## Standard operating features

- LED indications with detailed legends
- Voltmeter to indicate & input & Output & Output voltage
- Auto manual operation
- Output voltage setting potentiometer
- Plug in control cards

## Optional Features

We can offer a wide range of useful features at customer's request. They may be for special indications, protective controls, special metering etc. The list below is just to give an idea of the features offered and is not exhaustive.

### A) Special Meters :

1. Ammeter to indicate load current with ph selector switch for 3 ph units.
2. Frequency meter.
3. Digital meters.

### B) Monitoring of Faults :

**Visual and/or audible indication can be had if**

- a) The output voltage is above or below a specified load.
- b) Load current exceeds safe limit. This alarm remains even when there is tripping provision
- c) One more phases in a 3 phase input has failed.
- d) Frequency of supply is not within permissible range.
- e) Audible alarm acknowledgement facility.

### C) Tripping on faults :

**Protection :** Suitable contactors may be provided on output side and/or input side to trip of the supply to the equipments connected to the stabilizer when any of the above fault occurs. Normally a time-delay is provided to avoid nuisance tripping when the fault is of temporary nature.

### D) Remote control facility :

On Special request the stabilizer may be provided with remote control panels. This feature is particularly suitable for use where due to some constraints the voluminous power handling sections are not easy to install.



## Guidelines for selecting a model

Servo stabilizers are manufactured in various standard and non-standard models to suit individual customer's requirements.

Standard models cater for the following ranges of input and output voltages :

- a) 1 Phase units : Input range 180 to 260 volts or 160 to 260 volts.  
Output : 230 or 240V  $\pm$  1%.
- b) 3 Phase models : Input 300 to 460 volts or 360 to 460 volts, 4 wire balanced supply  
Output : Either 400 volts or 415 volts.

A load unbalanced of upto 25% between phases (provided load in any phase does not exceed the rated per phase output current) can be catered by these stabilizers. A higher unbalance in loads may affect the output voltage stability to some extent.

(Upto  $\pm$  2% in case of 50% unbalance).

Unbalance in supply voltage is reflected on the output side. In such a case and particularly when the output voltage between each phase and neutral are to be maintained within a precise limit, 3 single phase units are to be connected in star. It is to be noted that in such cases the user should specify the required input voltage range and output voltage BETWEEN EACH PHASE AND NEUTRAL.

No correction of power factor unbalanced or frequency is possible by servo-controlled stabilizer.

## Information Needed With Enquiry

It will be helpful for us to suggest and offer the most economic stabilizer when the following particulars are provided.

- Number of phases.
- Whether neutral wire is available.
- Input voltage variation in case of unbalanced supply voltage, the maximum variation between any phase and neutral.
- Nominal output voltage.
- Whether output voltage should be suitable within a specified range.
- Capacity in KVA
- Maximum current in any phase.
- Speed of correction required
- Nature of load
- Space limitation if any
- Optional features : if desired.



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