# SINGLE-PHASE ELECTROMECHANICAL VOLTAGE STABILIZER

## SEM-EM 05-12





#### **DIRECT WI-FI TECHNOLOGY**

The Wi-Fi network function is absolutely the biggest advantage of this device over similar devices.

With the Wi-Fi module, many voltage regulator parameters can be monitored, controlled or changed by connecting to a Wi-Fi network using any browser on a computer, tablet or smartphone.



#### DESCRIPTION

The SEM-EM stabilizers supply a constant voltage, correcting voltage drops and increases that occur on the network or in the internal structure of the electrical system.

Our voltage regulators work automatically to regulate voltage without any user intervention.

Once the regulator is turned on, the mains voltage is continuously measured and the necessary raise/lower operations are performed automatically, providing the system with the constant voltage required for correct operation.

Servo regulators consist of a variator, a servomotor that controls the variator, a multimeter with electronic management that controls the motor and the booster transformer.

The motor's high torque corrects quickly thanks to the DC servo motor and control system that can quickly respond to voltage changes.

When the regulation is completed, the servomotor is de-energized with an electronic braking circuit.

Electrical noise and transients do not disturb the regulation

You can safely power any area that needs regular electrical supply without any problems.

#### **TECHNICAL FEATURES**

Protection of the user from dangerous or harmful voltages.

Protection of user and device from excessive currents.

Pure sinus RMS voltage regulation.

Long-term overload protection and instant protection.

AC voltage balancing with extreme precision.

It runs smoothly on all loads from 0% to 100%.

Manual change to bypass mode without adjustment.

Displays all values in the bypass regime.

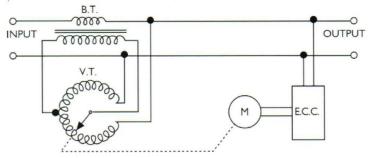
Records input voltage and load current limits.

Static, non-gradual, dynamically corrected output voltage.

When protections are activated, it records the number of protection trips and the reason for each trip.

Standard regulation is  $\pm 1\%$  (227.7V -232.3V) stable when the input voltage is within the range.

### PRINCIPLE OF OPERATION



**Attention**: this product is not tested for operation in systems where the presence of photovoltaic systems also involves the passage of current from the output towards the input of the stabilizer (bidirectional operation). Only the electronic product range (SEM) is tested for bidirectional operation.

MODEL SEM-EM	05	06	07	08	09	11	12	13
Power (KVA/KW)	5/5	7.5/7.5	10/10	15/15	20/20	30/30	40/40	50/50
INPUT								
input voltage	230Vac 1ph + N							
Voltage range	172Vac ~ 264Vac (-25%+15%) [other ranges available on request including 110-240 e 180-280]							
input frequency	47 : 64 Hz							
ОИТРИТ								
Output voltage	230Vac (adjustable 200:250V)							
Output accuracy	± 1%							
Output current (A)	22	32	43	65	86	130	173	217
Power factor	1							
Acceptable overload	200% load 10" – 101:150% load 2'							
Output frequency	47 : 64 Hz (same as input frequency)							
Resonse time	< 1.5/1000 sec							
Regulation speed	80V / sec							
Efficiency	min. 95%							
Display	Digital instrument with output voltage/current reading on each phase and status signals (mains, bypass)							
PROTECTIONS					·			
Input protection	Automatic circuit breaker							
Output protection	Short circuit, over current, low-high voltage, via output contactor							
By-Pass	Manual By-pass included							
MCB output	Optional							
OTHER DATA								
Cooling	Natural ventilation							
Protection	IP20 (other protection grades available on request)							
Max ambient temp.	-10° C ~ +50° C							
Altitude	Up to 1000 m with no derating							
Relative humidity	96% (without condensation)							
Acoustic pressure	< 30dB				< 50dB			
PHYSICAL CHARACTERIS	STICS							
Color	RAL7035							
Dim. WxDxH cm	33x35x56 38x40x61				50x51x86		50x61x86	60x124x115
Weight kg.	35	38	50	55	110	140	150	260

Dimensions and weights are indicative only and can be changed at any time without notice

