

VSE1-WM

SINGLE-PHASE 5KVA : 10kVA

Single-phase electromechanical stabilizers

Compatible with PV systems

Wall or ground mounting

TECHNICAL SPECIFICATION



VSE1 SINGLE-PHASE ELECTROMECHANICAL STABILIZERS FROM 5 TO 10KVA

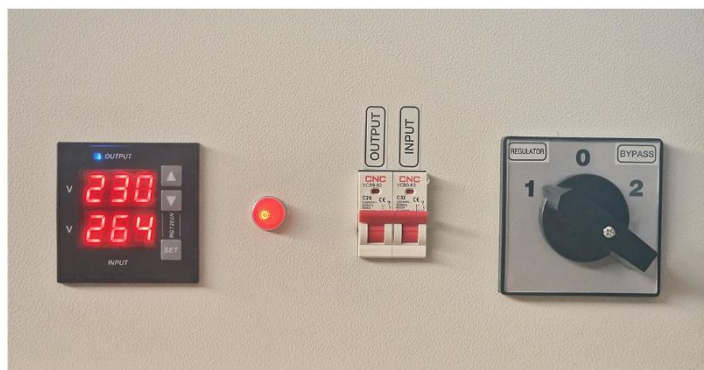
The VSE-WM project stems from a new extremely widespread need: the presence of numerous photovoltaic systems in the home makes the grid highly unstable and subject to production variations. This involves the need to quickly and effectively regulate the voltage, without the limits imposed by the transfer of energy to the electricity grid, with a small system that can also be installed on the wall. Wall or floor mounting accessories supplied as standard. Cable glands included.

VSE stabilizers deliver a constant voltage by correcting voltage drops and rises that occur on the mains or in the internal structure of the electrical system. Our voltage regulators work automatically to regulate the voltage without any user intervention. Once the regulator is switched on, the mains voltage is measured continuously and the necessary raising/lowering operations are carried out automatically, providing the system with the constant voltage required for proper operation. The servo controllers 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 control system that can respond quickly to voltage changes. When the regulation has been completed, the servo motor is de-energized with an electronic braking circuit. Electrical and transient disturbances do not disturb the regulation. È It is possible to safely supply any area that needs a regular power supply without any problems.

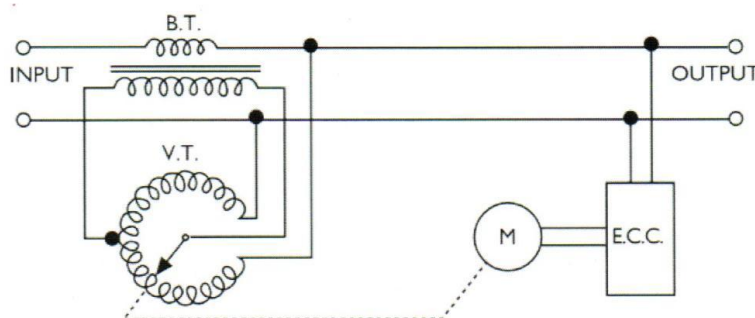


The new VSE1 stabilizers offer features such as:

- Free transfer of PV power to the electricity grid
- Protection of the user from dangerous or harmful voltages.
- Protect you and your device from excessive currents.
- Pure sine wave RMS voltage regulation.
- Extended overload protection and instant protection.
- Balance AC voltage with extreme precision.
- It works smoothly on all loads from 0% to 100%.
- Manual switching to bypass mode without adjustment.
- Records input and output voltage limits.
- Static, non-gradual, dynamically corrected output voltage.
- When protections are turned on, it records the number of protections and the reason for each intervention.
- The standard regulation is $\pm 1.5\%$ (227.7V - 232.3V) stable when the input voltage is within the range



SINGLE-PHASE ELECTROMECHANICAL STABILIZERS – OPERATING PRINCIPLE



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

VSE1 SINGLE-PHASE ELECTROMECHANICAL STABILIZERS FROM 5 TO 10KVA

VSExxxWM MODEL	105	107	110
KVA Power	5	7.5	10
INPUT			
Input voltage	230Vac 1ph + N [other operating voltages available on request]		
Voltage range	172Vac ~ 264Vac (-25%+15%) [other ranges available on request]		
Input Frequency	47 : 64 Hz		
OUTPUT			
Output voltage	230Vac (adjustable 200:250V)		
Output Accuracy	± 1.5%		
Output current A	22	32	43
Power factor	1 (maximum output current available even at the minimum permissible mains voltage)		
Overload capacity	200% load 10" – 101:150% load 2'		
Output frequency	47 : 64 Hz (as input frequency)		
Responsiveness	< 1.5/1000 sec		
Speed adjustment	80V/sec		
Yield	min. 95%		
Display	Digital instrument with input and output voltage reading and status signalling (mains presence)		
PROTECTIONS			
Input Protection	Circuit breaker		
Output Protections	low-high voltage, via output contactor Wi-Fi monitor with optional over-voltage, over-current, leakage protection		
By-Pass	Manual by-pass included		
MCB Output	Circuit breaker		
OTHER DATA			
Cooling	Forced ventilation with internal thermostat		
Protection class	IP20 (other degrees of protection available on request)		
Max. ambient temp.	-10° C ~ +40° C		
Altitude	Up to 1000 m a.s.l. without loss of power		
Relative humidity	96% (non-condensing)		
Sound pressure	< 36dB		
Color	RAL7035		
Dimensions WxDxH mm	403x320x550 (without handle)	453x360x600 (without handle)	
Weight kg.	56	65	70

WI-FI OPTIONAL



The wi-fi monitoring system is installed near the terminal block on the user side, with the function of monitoring and managing the system via the APP and the wi-fi network.

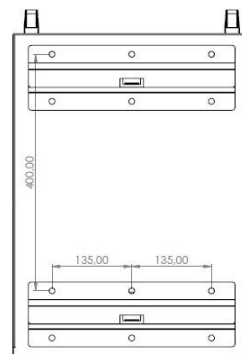
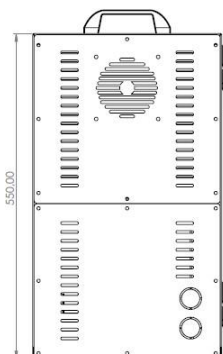
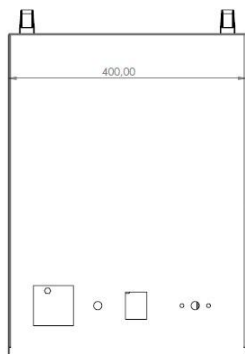
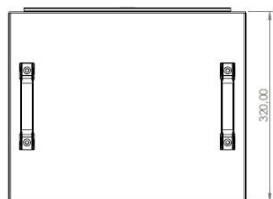
Features:

Wi-Fi Smart Switch: Connect your device via your home Wi-Fi network, unlimited distance with Tuya and Smartlife apps, compatible with Amazon Alexa and Google Assistant, real-time display of power, current, voltage, losses, frequency, cumulative power and other types of data. TWO-WAY MEASUREMENT.

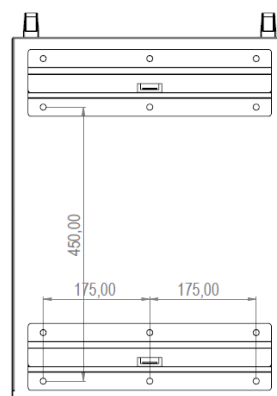
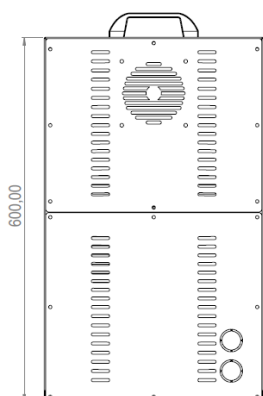
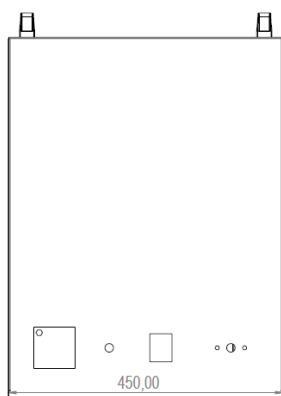
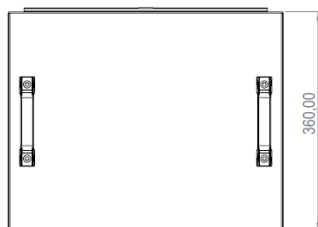
Protection against over-under voltages, overcurrent, leakage, with setting of current thresholds, maximum and minimum voltage, leakage via App. The App also allows you to set timers, scheduled or cyclical switching on and off, scheduled shutdown after switching on, ignition delay after the events that cause the trip.

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DIMENSIONAL DRAWINGS



5KVA VERSION



VERSION 7.5-10KVA

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