

**SINE331-EVR**  
ELECTRONIC VOLTAGE REGULATORS



SINEPOWER's ELECTRONIC VOLTAGE REGULATORS are used in power quality applications where speed and performance advantages make it a better fit than the mechanical voltage regulator.

SINE33 EVR units provide consistent voltage regulation and voltage conditioning with fast correction without regular maintenance or moving parts.

**Sinepower**

Zona Industrial do Mamodeiro  
Rua Augusto Marques Branco, Lote 21-A  
3810-783 Aveiro, Portugal

**Phone:** +351 234 946 000  
**Fax:** +351 234 946 007  
**GPS:** N40°34'20", W8°33'48"

**E-mail:** [sinepower@sinepower.pt](mailto:sinepower@sinepower.pt)  
**Webpage:** [www.sinepower.com](http://www.sinepower.com)

SINE33 EVR units guarantee protection against voltage fluctuations on the mains or other power sources. With fast voltage regulation, under/over voltage, sags and swells are corrected in <5ms for 10% regulation and 40ms for 20% and 30% regulation. The voltage quality is also improved by sinusoidal shaping.



- **CE Mark Certified** (IEC 61000-6-4:2006+AMD1:2010 - Electromagnetic compatibility (EMC). Part 6-4: Generic standards - Emission standard for industrial environments; IEC 61000-6-2:2016 - Electromagnetic compatibility (EMC). Part 6-2: Generic standards - Immunity for industrial environments; Low Voltage Directive (LVD) 2014/35/EU)
- **State of the art semiconductor technology** (IGBT)
- **High Efficiency** (up to 98% efficiency)
- **User friendly control panel**
- **Data logging**
- **IP54 enclosures** for outdoor use in extreme environmental conditions
- **Low noise emission** (<65dBA@1m)

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## POWER QUALITY

### INPUT

- State of the art semiconductor technology (IGBT) Rectifier.
- 98% efficiency

### OUTPUT

- Phase independant Voltage Regulation
- Differential Inverter

### EFFICIENCY

- Up to 98%
- Green Standby Function losses: 20W
- No load losses: 0.2%

### PROTECTION AND SAFETY

- Enclosure Protection class up to Ip54
- Over/under voltage at output
- Regulator Overload capability designed for:
  - Power stage 150% - Continuous
  - Magnetics 120% - Continuous
- Regulator Overload protections set at:
  - 120% for 600seconds
  - 150% for 60 seconds
  - 200% for 2 seconds
- Over temperature protection

## INTERFACE AND COMMUNICATIONS

- RS232

### OPTIONAL FEATURES

- Current Harmonic Filter
- Communications
  - Monitoring by Web, SNMP and MODBUS TC/IP
  - MODBUS RS485
  - Remote control box

### NORMS AND STANDARDS

- **IEC 62040-1-1:2008** - Uninterruptible power systems (UPS). Part 1: General and safety requirements for UPS.
- **IEC 61558-2-6:2009** - Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1100 V. Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers.
- **IEC 61000-6-4:2006+AMD1:2010** - Electromagnetic compatibility (EMC). Part 6-4: Generic standards - Emission standard for industrial environments.
- **IEC 61000-6-2:2016** - Electromagnetic compatibility (EMC). Part 6-2: Generic standards - Immunity for industrial environments.

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## SPECIFICATIONS

### INPUT

3 Phase 380V/400V/415V AC .....	± 10%, 20%*
50Hz or 60Hz .....	± 10%

### OUTPUT

3 Phase 380V/400V/415V .....	± 1%*
Voltage Harmonic Reduction .....	THDv < 3%
Response .....	< 5mS
Efficiency 10% Regulation .....	99%
Efficiency 20% Regulation .....	98%

### ENVIRONMENTAL CONDITIONS

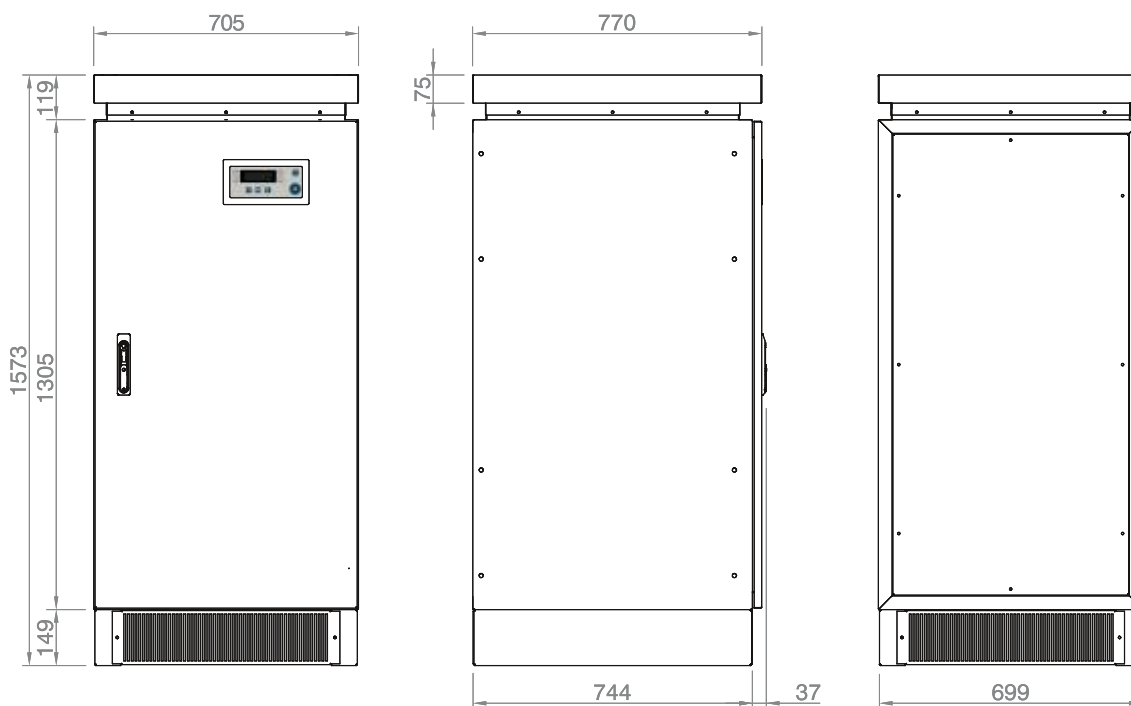
Temperature range at sea level .....	0 - 40 °C (full load)
	30 °C at 2000m (full load)
Humidity .....	10% to 100%
Noise Level .....	< 65 dBA a 1 meter
Altitude .....	up to 2500m without de-rating

### CABINET

Lifting eyes .....	Optional
Cabinet .....	Powder coated steel or Stainless steel

\* Other Voltages and Frequencies available on request

## INDOOR | OUTDOOR | AERONAUTICAL APPLICATIONS



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