VOLTAGE PROTECTION

REGULATORS

AVR

Voltright™

SOLLATEK AUTOMATIC VOLTAGE REGULATOR (AVR)

THREE PHASE STATIC AVR

Actual unit may differ from shown

Model:

AVR3S250-DM
Three phase: 172.5kVA

Features:

Designed for regions with voltage supply instability. Designed for remote operation where a high degree of reliability is essential.

Fully electronic with no moving parts for:

- High reliability
- Speed of operation
- Immunity to dust and other environmental conditions

The AVR is specified and used by a number of large organisations including:

- Satellite operators
- Infrastructure telecom companies
- Embassies worldwide for reliable electrification of their posts
- Medical systems for digital imaging, scanning and x-ray equipment
- Mobile phone operators
- Grid utility companies for voltage regulation to their sub-stations
- Wind Farms
- Various United Nations divisions including WHO, UNICEF and WFP

Equipped with:

- Automatic Voltage Switcher with HVD and LVD (*optional* - A)
- Class II Surge protection as standard (D)
- Digital display: input and output voltage, output current (M)
- Manual bypass transferring the load to the utility grid (*optional* - Y)
- Input circuit breaker (*optional* - B)
- Output circuit breaker (*optional* - C)
- Modem for remote monitoring (*optional* - G)
- Volt free contact alarms: (*optional* - V)
  - General Fault
  - High Temp Alarm
  - Over Temp Alarm
  - Internal Bypass Status
  - External Bypass Status
  - I/P Circuit Breaker Status
  - O/P Circuit Breaker Status
  - LVD Alarm
  - HVD Alarm
- Anti-condensation heaters (*optional*)
- Internal automatic bypass as standard

Special features include:

- Wide input voltage range ±20%. Wider ranges available
- High output protection accuracy ±3%
- High overload capability with up to 150% for 4 minutes
- Very low losses and minimal heat dissipation due to an efficiency of over 98% at full load
- Enclosure made of galvanised steel construction with high anti-corrosion paint finish
- Warranty of 2 years. Sollatek provides full back up support on all its products, with local support in over twenty countries worldwide

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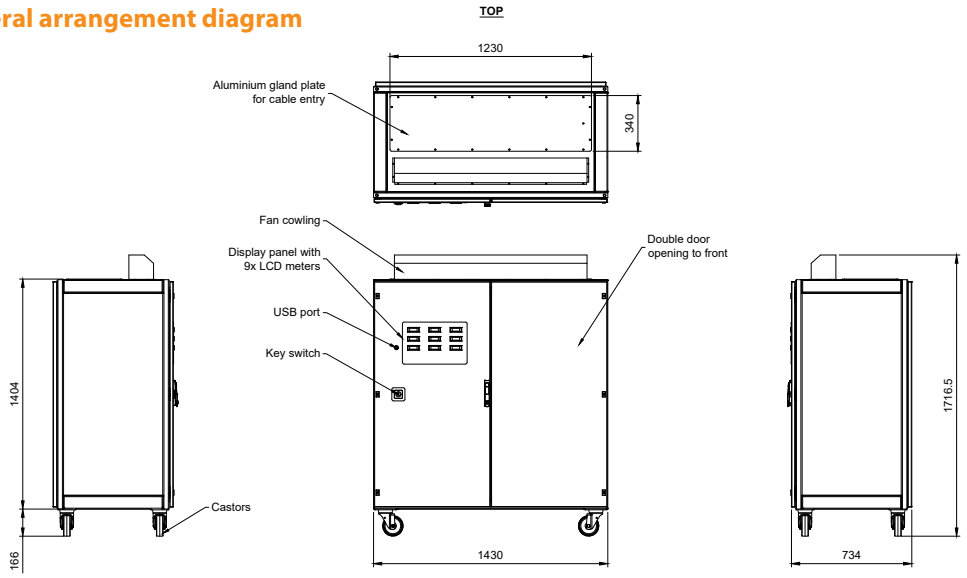
Specifications

Input		
	Input voltage	230/400V, ±20%. (wider input range optional).
	Frequency range	45Hz - 65Hz.
	Additional Voltage THD	<0.2% at input (tested at 100% linear load), (No PWM methods used).
	Maximum Input THD	Can withstand >10% THD from the supply.
Output		
	Output voltage	230/400V, ±3%.
	Maximum Output Current	3 x 250 Amps.
	Maximum Output Power	172.5kVA.
	Correction time	5 cycles per tap. 600ms for 0-20% (0 to 100% load).
	Additional Voltage THD	<0.25% at output (tested at 100% linear load), (No PWM methods used).
	Crest Factor	> 1: 3 permissible on load current (tested at 100% load).
	Synchronization	Output synchronized to input.
	Permissible Overload	1000% for 100ms, 150% for 4 minutes, 110% for 10 minutes.
	Load Types	Designed to run lighting, motors, battery chargers, communications equipment, office equipment, SMPS, air- conditioners, compressors, industrial machines, medical equipment and others. Suitable for all domestic, commercial and industrial sites.
General		
	Technology	All solid state (static) switching.
	Efficiency	>98% (at 100% linear load).
	Heat Dissipation	3.5kW at 172.5kVA at regulation extremes (-20% or +20%).
	Control	Microcontroller based control system provides self checks, system integrity monitoring and diagnostic indicators.
	Control Protection	Internal surge arrestors and filters in control circuit protect against disturbances. Filtering algorithms and fault tolerant software protect against disturbances and false measurements.
	Power Connections	Supply phases, neutral and earth. Load phases, neutral and earth.
	D Surge Protection	Heavy duty input and output surge arrestors to protect against extreme surges and lightning on the supply. Dual mode. 9600 joules total.
	M Displays	Digital display, per phase for input voltage, output voltage, output current and frequency.
	Ambient Temperature Range	-10 to 55ºC.
	Relative Humidity	>95%, non condensing.
	Environmental Protection	IP21.
	Acoustic Noise	< 45 dB (A).
	Expected Service Life	> 25 years.
	Standards	Manufactured to comply with :- ISO9001:2000, CE, EN 50081-1:1992, EN 50082-1:1998, EN 55022:1998, EN 61000-4-2:1995/1998, EN 61000-4-3:1996, EN 61000-4-4:1995, EN 61000-4-5:1995, EN 61000-4-6:1996, EN 61000-4-11:1994, DD ENV 50204. CE
	Dimensions	1430mm (W) x 734mm (D) x 1716mm (H).
	Weight	875kg.

General arrangement diagram



For more information on the Sollatek product range visit www.sollatek.com

Sollatek™
the power to protect

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