

# SOLLATEK AUTOMATIC VOLTAGE REGULATOR

SINGLE PHASE AUTOMATIC VOLTAGE REGULATOR 20 TO 75 AMPS

# DESCRIPTION

As both high and low mains voltage can damage your electrical equipment, the Sollatek AVR is designed to monitor and correct the incoming supply continuously. If the mains voltage rises or drops, the AVR will stabilise the output to ensure that the voltage reaching your equipment remains constant at 230 V  $\pm$ 4%, within the input operating range of the unit. The Sollatek single phase AVRs are suitable for all applications including domestic and small/medium office use.

Using state of the art technology the Sollatek AVR displays load current, input voltage and output voltage (the display toggles between input and output voltage, using a switch). The AVR is fitted as standard with Class III spike/surge protection. Increased protection up to Class I-II is available, fitted before and after the AVR. Installing an AVR will provide the most comprehensive solution to ensure a stable voltage supply to your valuable equipment.

# **SUITABLE FOR**

- Offices
- Homes/Apartments
- Workshops
- Mobile phone operators
- Medical systems:
  - Digital imaging
  - Scanning
  - X-ray equipment

# **FEATURES**

- Digital display: input and output voltage, output current
- Wide input frequency tolerance allowing unit to function properly in areas of severe voltage disturbances
- High overload capability with up to 150% for 4 minutes
- Very low losses and minimal heat dissipation due to an efficiency of over 96% at full load
- Warranty of 2 years. Sollatek provides full back up support on all its products, with local support in over twenty countries worldwide
- Fitted with output circuit breakers to protect the load



AVR20-22, AVR30-22, AVR40-22



AVR50-22, AVR75-22

# **TECHNICAL SPECIFICATION**

#### **VOLTAGE TABLE**

INPUT		INPUT	OUTPUT
Input Voltage	Nominal 220 V (-30% to +22% input window)		OFF
Frequency Range	45 Hz to 75 Hz (i.e. 50 Hz, -10% to +50% or 60 Hz, -25% to +25%)		186
Additional Voltage THD	<0.2% at input (tested at 100% linear load), (no PWM methods used)		200
Maximum Input THD	Can withstand ≤10% THD from the supply		214
Output Voltage	220 V (115 V models available)		220
Correction Time	60 ms (0 to 100% load)	165	228
Additional Voltage THD	<0.25% at output (tested at 100% linear load), (no PWM methods used)	175	223
Crest Factor	> 1: 3 permissible on load current (tested at 100% load)	185	219
Synchronization	Output synchronized to input	195	212
Permissible Overload	1000% for 100 milliseconds, 150% for 4 minutes, 110% for 10 minutes	205	222
Load Types	Designed to run lighting, motors, battery chargers, communication equipment, office equipment. Suitable for all domestic, commercial and industrial sites	210	229
GENERAL		215	214
Technology	All solid state (static) switching	220	220
Efficiency	>96% (at 100% linear load)	225	225
Control	Microcontroller based control provides system integrity monitoring and	235	219
Control	diagnostic indicators	240	223
Control Protection	Filtering algorithms and fault tolerant software protect against disturbances and false measurements	245 255	228 217
Power Connections	Rear terminals (nut fixing)	265	226
Surge Protection	Class III integrated as standard. Higher protection Class II and Class I-II available	275	234
Displays	Digital display	285	242
Ambient Temperature Range	-10 °C to +55°C	295	251
Relative Humidity	>95%, non-condensing	305	260
Environmental Protection	IP21	315	315
Acoustic Noise	< 45 dB (A), 65 dB with fans on	010	010
Expected Service Life	> 25 years		
Standards	Manufactured to comply with: 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		
Weight	See model specification table		

## **MODEL SPECIFICATION**

MODEL	PRODUCT CODE	DESCRIPTION	AMPS	kVA	WEIGHT (kg)	DIMS (L x W x H)
AVR20-22	97102027-CM	AVR20-22 5kVA 20A 230V 50Hz Tower	20	4.6	40	215 x 347 x 520
AVR30-22	97103027-CM	AVR30-22 7.5kVA 30A 230V 50Hz Tower	30	6.9	55	215 x 347 x 520
AVR40-22	97104027-CM	AVR40-22 10kVA 40A 230V 50Hz Tower	40	9.2	60	215 x 347 x 520
AVR50-22	97105027-CM	AVR50-22 12kVA 50A 220-240V 50/60Hz	50	11.5	82	460 x 785 x 445
AVR75-22	97107527-CM	AVR75-22 18KVA 75A 220-240V 50/60Hz	75	17.2	100	460 x 785 x 445

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