SOLLATEK AVR3LS RANGE WITH DIGITAL METERS

THREE PHASE AUTOMATIC VOLTAGE REGULATOR 70 kVA TO 140 kVA

Actual unit may differ from shown

DESCRIPTION

The Sollatek AVR3LS-K range is a solid-state stabiliser, micro-processor technology-controlled Voltage Regulator. At the heart of the unit is an advanced microcomputer that not only ensures very accurate control of output voltage to the load but also provides a host of advanced features.

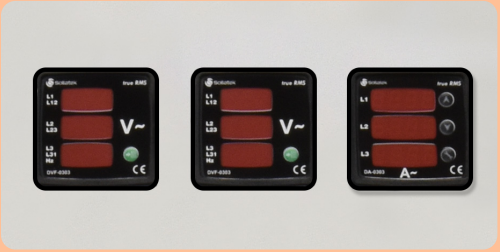
The AVR L-Series output voltage accuracy is 3% or better exceeding the most demanding advanced utilities minimum standards around the world. This range can cope with the harshest environments yet is designed to ensure it is affordable for demanding applications where cost is also an important consideration.

SUITABLE FOR:

- 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
- Offices and factories

FEATURES

- Wide input range of +/-20%
- Output accuracy of 3.5% exceeds the Electricity Quality and Supply Regulations (EQS) [EN50160] of 400/230 +/-10%
- Extremely fast speed of correction (>10 times faster than mechanical/ servo stabilisers)
- Solid state, no moving parts and maintenance free
- Digital Meters: Input and output voltage, output current & frequency
- USB-B interface for efficient downloading of historical data
- DSP Class II surge protection
- Wide input frequency tolerance allows the unit to function properly in areas of severe voltage disturbances
- Output circuit breaker
- 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 from Mild Steel with High Impact resistant Powder Coat Paint
- Warranty of 2 years. Sollatek provides full back up support on all its products, with local support in over twenty countries worldwide



AVR DISPLAY PANEL

Displays Input / Output Voltage and Current

TECHNICAL SPECIFICATION

INPUT	
Input Voltage	230/400 V ±20%
Frequency Range	45 Hz to 75 Hz
Additional Voltage THD	<0.2% at input (tested at 100% linear load)
Maximum Input THD	Can withstand <10% THD from the supply
OUTPUT	
Output Accuracy	230/400 V ±3%
Speed of Correction	240 ms or better (from max deviation)
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)
Synchronisation	Output synchronised to input
Permissible Overload at 25°C Ambient	1000% for 100 ms 150% for 4 mins 110% for 10 mins
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 Silicon Controlled Rectifiers (SCR or Thyristor) switching
Efficiency	>98% (at 100% linear load)
Control	Microcontroller based control system provides self-checks, system integrity monitoring fault detection, diagnostic indicators and reporting
Control Protection	Internal surge arrestors and filters in control circuit protect against disturbances. Filtering algorithms and faulty tolerant software protect against disturbances and false measurements
Power Connections (Cable Connection)	Supply phases, neutral and earth. Load phases, neutral and earth Input / output terminal box on the rear of the unit
Surge Protection	Heavy duty input and output surge arrestors to protect against extreme surges and lightning on the supply. Dual mode. 2880 Joules total. Class II surge 8/20us protection as standard on input and output of each phase. A total of 3780 Joules.
Output Circuit Breaker	Output circuit breaker
Digital Meters	Accurate measurement of the AC RMS I/P and O/P voltage currents in three-phase systems Accuracy: 0.5% + 1 digit
Ambient Temperature	-10°C to +55°C
Relative Humidity	>95%, non-condensing
Environmental Protection	IP21
Acoustic Noise	<45 dB (A), <65 dB with fans on
Expected Service Life	>25 years
Standards	Manufactured to comply with: ISO9001:2015, CE, EN 55022, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11. CE

VOLTAGE TABLE

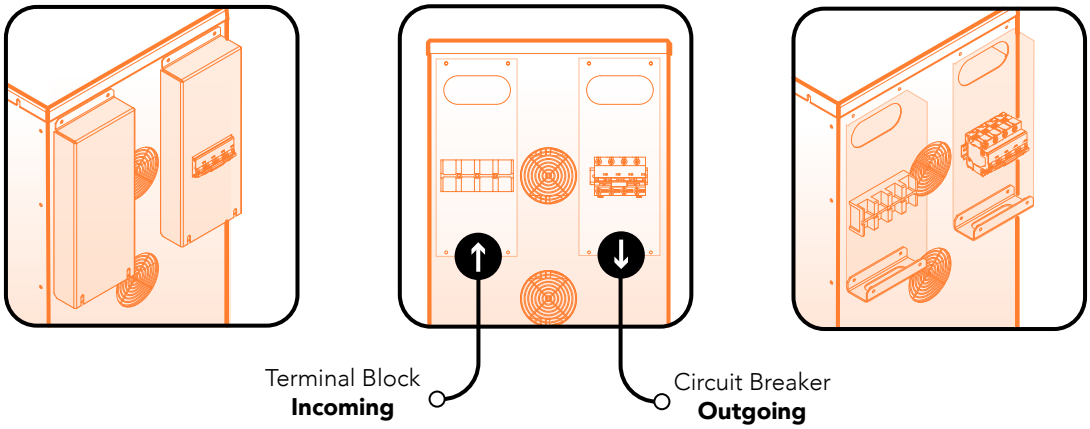
INPUT	OUTPUT
105	OFF
110	134
115	140
120	145
125	152
130	158
135	163
140	170
145	176
150	182
155	188
160	194
165	200
170	206
175	212
180	218
185	225
190	230
195	236
200	232
205	228
210	234
215	228
220	234
225	228
230	234
235	229
240	234
245	229
250	234
255	229
260	234
265	237
270	233
275	237
280	241
285	246
290	251

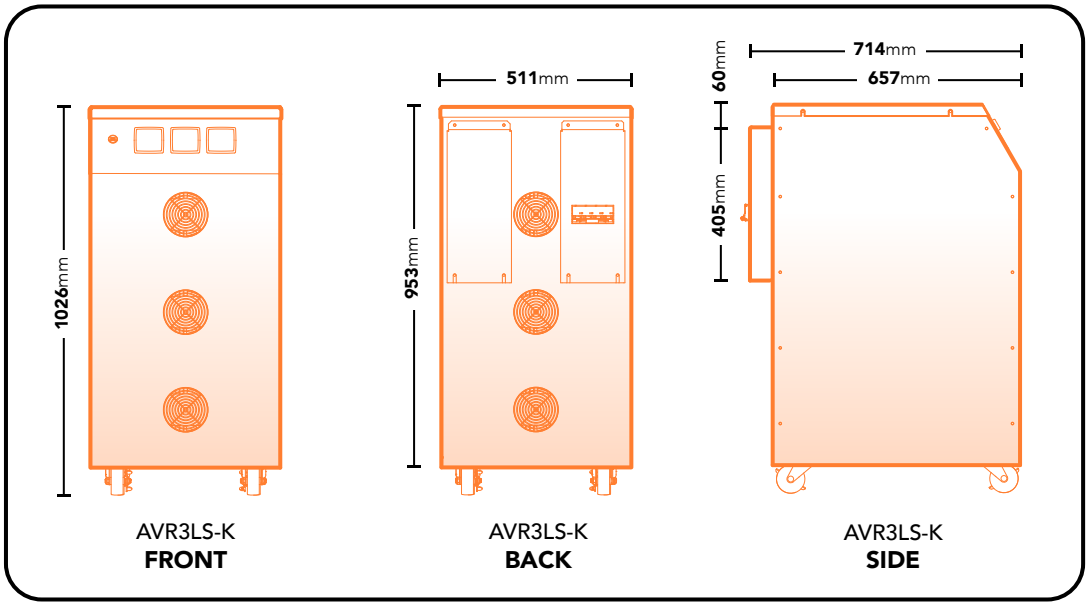
MODEL TABLE

Part Number	Description	Output Power @ 230V	Max Output Current/Phase	Continuous Output Current*	AVR Dimension WxHxD	AVR Weight
973LS075-K	AVR3LS-70kVA 230/400V 3x100/75A M	70 kVA	100 A	75 A	511 x 1026 x 714 mm	250 kg
973LS101-K	AVR3LS-90kVA 230/400V 3x133/100A M	90 kVA	133 A	100 A	511 x 1026 x 714 mm	300 kg
973LS151-K	AVR3LS-140kVA 230/400V 3x200/150A M	140 kVA	200 A	150 A	511 x 1226 x 764 mm	400 kg

**Continuous Output Current on Full Load, Max Boost, 55°C*

DIMENSIONAL DIAGRAM





The diagrams presented are for illustrative purposes only.
Detailed drawings are available upon request.

SOLLATEK (UK) LIMITED
Sollatek House, Waterside Drive, Langley, Slough SL3 6EZ, United Kingdom

Tel: +44 (1753) 214 500
Email: sales@sollatek.com
Web: www.sollatek.com