AGT Constant Voltage Transformers

AGT Constant Voltage Transformers (CVT) are ideal maintenance free solutions for loads that can suffer erratic operation or be damaged by electrical noise (common or series mode), local transients, mains power sags, surges and brownouts.

Features

- Constant Voltage Transformer (CVT)
- Galvanic Isolation
- High common and normal mode noise attenuation
- Sag, surge and brownout protection
- Sine wave output (regardless of input waveform)
- Low installation and running costs (maintenance free)
- High Mean Time Between Failure (MTBF), over 200,000 hours (22.8 years)
- Easy to install

Operation

Using a Constant Voltage Transformer (CVT), an input voltage variation of +/-15% is automatically stabilized to within +/-3% of nominal on the output. When faced with an extreme transient such as a local lightning strike, the CVT will present a low impedance to the mains protecting both itself and any connected loads. The Constant Voltage Transformer generates a perfect sine wave output even when fed from square or quasi-square wave sources.

AGT 15000VA for large industrial loads

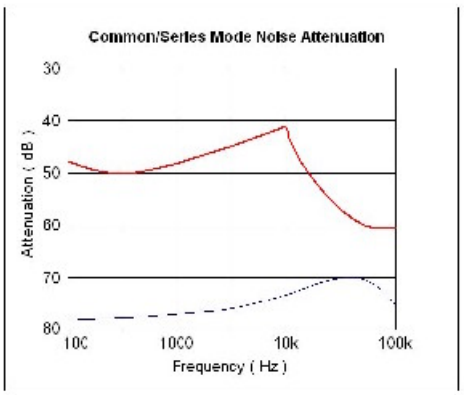
Options

- Any nominal Input/Output up to 660Vac
- 19" rack mounting kit available
- Mains voltage and frequency to suit geographic location
- Plug and socket variations and terminals as standard
- Parallel and Series operation for enhanced reliabilty and larger power ratings
- Custom designs with multiple and/or DC outputs
- For sizes above 15KVA contact sales@aelgroup.co.uk

AGT 1000VA - all standard units come with a baseplate for ease of fixing

Outstanding Spike and Electrical Noise Protection

Providing unparalleled reliability and conditioning performance, spikes and electrical noise are neutralised with attenuation as high as 75dB. In addition the input and output transformer windings are physically separated (Galvanic Isolation), this separation ensures that there is no connection between the mains supply and the load. A CVT therefore provides an impenetrable barrier to spikes and high frequency electrical noise. This barrier also works in reverse to prevent a 'noisy' load from polluting the mains supply.



Superior Sag, Surge and Brownout Protection

Mains Voltage Sags and Surges of as much as 50% are automatically corrected by a CVT. A CVT will ride through most brownouts or mains dips because of its resonant property.

As long as at least 30% of the normal supply voltage is present a suitably selected CVT can provide adequate power for your critical load.

Advance Electronics Limited. Advance Park, Wrexham. LL14 3YR United Kingdom
Sales: 01978 821 000 Accounts: 01978 821 149 Fax: 01978 810 852 Web: www.aelgroup.co.uk
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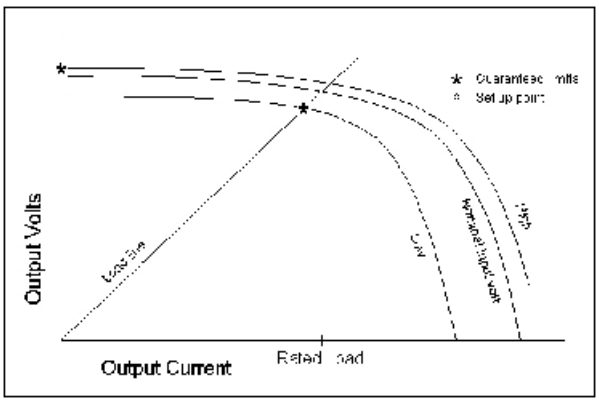
Applications

- Medical Equipment requiring separation from the mains supply EN 60601 and Isolated Power Systems (IPS)
- Industrial PLCs and process control applications
- Weighbridges
- Grid link applications and G5/4
- Rail signalling and critical systems
- Sensitive Electronic test systems

Automatic Sine-wave Generation

Ferro-resonant transformer technology ensures that each power conditioner will always generate a pure stable sine-wave even when fed from a polluted mains or distorted square-wave supply.

A = Input B = Output



Output voltage regulated to within 5%, overloads drag the output voltage down and a complete short circuit shuts down the CVT with no harm. Removal of the short circuit restores the output with no intervention.

Perfect Switched Mode Power Supply (SMPS) Driver

Ferro-resonant transformer technology also provides waveform shoulder-lifting. A CVT is the most efficient way to drive a switched mode power supply (SMPS). Input surges are reduced prolonging life and conduction times are lengthened. In addition the CVT provides harmonic buffering and improved reservoir capacitor hold up for the inevitable supply micro-breaks, which occur with grid protection switching.

	Model No	Power Rating VA 1.0pf	Dimensions W x D x H mm	Net Weight Kg	Connections
Single phase	AGT 100*	100	146 x 185 x 190	7.5	Terminals or Plug and Socket
	AGT 250*	250	185 x 230 x 190	12.5	
	AGT 450*	450	185 x 250 x210	18	
	AGT 650*	650	185 x 280 x 210	22	
	AGT 1000*	1000	185 x 320 x 210	32.5	
	AGT 1300*	1300	268 x 400 x 290	36.5	
	AGT 1600*	1600	268 x 400 x 290	42	
	AGT 2000*	2000	268 x 500 x 290	63	
	AGT 2500*	2500	268 x 500 x 290	72	
Single phase	AGT 3000*	3 KVA	405 x 637 x 455	89	Terminals
	AGT 4000*	4 KVA	405 x 637 x 455	100	
	AGT 5000*	5 KVA	405 x 637 x 610	132.5	
	AGT 7000*	7 KVA	405 x 637 x 610	168	
	AGT 8000*	8 KVA	405 x 637 x 765	194	
	AGT 10000*	10 KVA	405 x 637 x 765	202	
	AGT 12500*	12.5 KVA	405 x 637 x 920	243	
	AGT 15000*	15 KVA	405 x 637 x 920	268	
Three phase†	ATT 9000*	9 KVA	650 x 1325 x 773	410	Terminals
	ATT 12000*	12 KVA	650 x 1325 x 773	485	
	ATT 15000*	15 KVA	650 x 1325 x 773	530	
	ATT 18000*	18 KVA	650 x 1325 x 773	575	
	ATT 21000*	21 KVA	650 x 1325 x 773	680	
	ATT 24000*	24 KVA	650 x 1325 x 773	745	
	ATT 30000*	30 KVA	650 x 1325 x 773	785	
	ATT 37500*	37.5 KVA	650 x 1325 x 773	864	
	ATT 45000*	45 KVA	650 x 1325 x 773	864	

* suffix assigned on voltage and connection choice
† ATT three phase CVTs are star output and CANNOT be used to power DELTA loads

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