

Power Solutions

Ensuring Seamless Growth



Constant Voltage Transformer (CVT)



CONSTANT VOLTAGE TRANSFORMERS (CVT)

Line spikes and transients, sags and surges, momentary brown outs etc. results in erratic behavior of computers and similar loads. CVT provides sufficient degree of output voltage regulation against random changes in the input voltage and load. The load is completely protected against spikes, surges and brown outs.

DESIGN

The AC mains power the input winding which is widely separated physically from the isolated output winding. The input winding normally runs at very moderate flux linkage levels. The output winding exhibits on intrinsic energy storage characteristic. This energy storage operates in conjunction with the mains capacitor to produce self- generated AC flux fields, which is indirectly excited from the input windings.

RESULT

Instantaneous Voltage Regulation. No Transient and Spikes, Sine wave output. A perfect answer and remedy for every electronic equipments voltage problems.

Constant Voltage Transformer

SPECIAL FEATURES

- No semiconductors or moving parts used, hence very high reliability
- No feedback control used
- Intrinsic current limiting and short circuit protection
- Output voltage correction with $\frac{1}{2}$ cycle (10 milliseconds) from no load to full load for specified load & line variation
- Short term over load capacity
- Energy storage for line loss up to 3 milliseconds at typical load
- Higher input voltage control range, for loads less than rated load
- Very high line transient/spike rejection capability and excellent isolation characteristic
- Output floating (optional)

APPLICATIONS & USERS

- Petrol pumps/Diesel retail outlets
- Computers
- Data processing equipment
- Colour photography labs
- Bio-medical equipment
- PA equipment
- Telecommunication
- TV, VCD/DVD recorders & players
- Office automation (fax & copiers)
- And all other sensitive electronics devices

TECHNICAL SPECIFICATIONS

Range (KVA)	0.5, 1.0, 2.0, 3.0, 5.0, 10 and 20 KVA
Input Voltage	180-270 V
Frequency	50 Hz \pm 2.5 Hz
Output Voltage	220/230 \pm 1 %
Efficiency	>87% (At full linear load)
Output Waveform	Sine wave
Total Harmonic Distortion	Within 5% at rated load at 220 V input
Response Time	30 ms
Galvanic Isolation from Mains	Ultra high isolation
Output Voltage Correction	2 Cycle (Max), for no load to full load conditions
Common-Mode Noise Attenuation	1:3000, Typical (10 KHz to 5 MHz: 85 to 21 db typical)
Normal-Mode Noise Attenuation	1:3000, Typical (10 KHz to 5 MHz: 62 to 21 db typical)
General	
Ambient Temperature	Up to 55°C at 95% RH
Insulation Class	Class 'F'
Insulation Resistance	> 100 MW at 500 VDC
High Voltage/Insulation Test	2 KV AC applied for 1 minute
Audible Noise	30 db to 65 db proportionate to the unit capacity

*In the interest of continuous product improvement, all specifications are subject to change without notice.

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