



VERTEX Constant Voltage Transformer
SINGLE PHASE - AIRCOOLED
500 VA – 5000 VA

SALIENT FEATURES:

- No moving parts used, hence very high reliability
- Faster voltage correction almost instantaneous
- Intrinsic current limiting and short circuit protection
- Short term over load capability
- Very high line transient/spike rejection capability and excellent input to output isolation characteristics

Vertex Power Solutions Pvt. Ltd., is managed by a team of Engineers with over 25 years of experience in the field of Power conditioning Equipment. The Products are manufactured at Chennai, under the brand name of **VERTEX**.

VERTEX, through its quality products & service, has made its presence felt in various segments like Textile, Telecom, Engineering & Automobile, Printing, Packaging, Medical, Analytical, Audio/Video, IT, etc.

Constant Voltage Transformer (CVT) or Ferroresonant Transformer (Ferro) is a non-linear transformer, which passively provides a regulated voltage output through an electromagnetic phenomenon called ferroresonance (where the term ferroresonant transformer was derived). Ferroresonance is associated with the behavior of iron cores while operating near a point of magnetic saturation, wherein the core is so strongly magnetized that further variation in the input voltage results in little or no increase in magnetic flux. Basically, the ferroresonant action is a flux limiter rather than a voltage regulator. Nonetheless, with a fairly constant supply frequency, the CVT can maintain an almost constant output voltage even as the input voltage varies widely. In fact, the output voltage of the ferro varies about 1.2% for every 1% change in supply frequency, such that even with a considerable generator frequency change (2-Hertz), results in an output voltage change of only 4%.

In short, CVTs are basically 1:1 transformers that are excited high on their saturation curves, thereby providing an output voltage which is not significantly affected by input voltage variations. This special characteristic is the foundation of the application of ferroresonant transformers as power conditioners.

TECHNICAL SPECIFICATIONS – Constant Voltage Transformer (CVT)

Type of CVT	Ferro-Resonant
Type of Application	Indoor Application
Type Of Cooling	Aircooled
Input Voltage Range	180 V - 260 V
Input Frequency	50 Hz \pm 0.5%
Output Voltage	220 / 230 V \pm 1%
Output Voltage Regulation	2% at no load to full load
Output Waveform	Sinusoidal
Waveform Distortion	5% (approx under full load)
Load Factor	0.75% lag to 0.9% lead
Efficiency	90% (approx) under full load conditions
Input / Output Connection	Input Cable / Output Sockets
Ambient Temperature	5° C to 50° C
Standard kVA Ratings	500 VA to 5000 VA

Specifications are subject to change without notice, on account of development in product design

Applications:

Computers, Data Processing Equipment, Audio/Video Equipment, Photo Processing Equipment, Bio-Medical Equipment, Telex, Fax, Cash Registers, Electronic Type Writers, Control Panels, Etc,

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