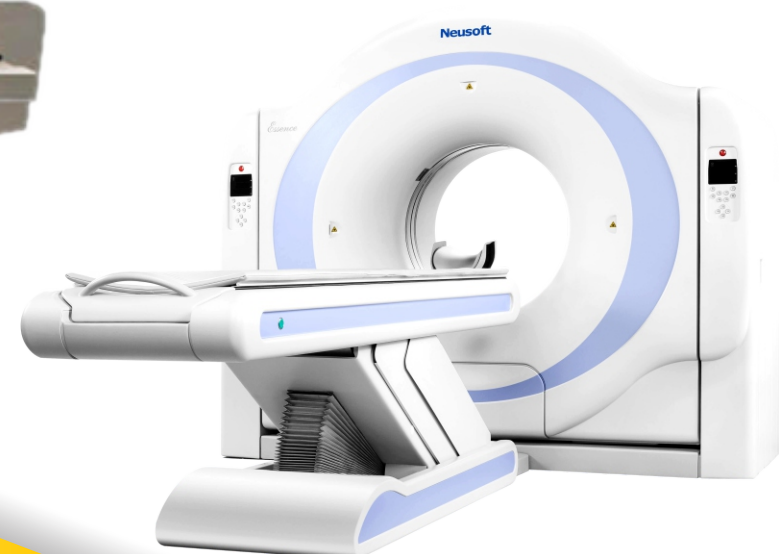




BTS POWER SYSTEM

Deals : UPS, Battery, Servo Stabilizer, Solar System
Invertor, Isolation, Earthing, CC TV Camera,
Computer Networking & All Types of
Electronics & Electrical



Haidary Art # 9039034447



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 : 7869991113, 7049991113, 7089991113
 : btspowersystem27@gmail.com

ISO 9001 : 2015



Salient Features

- * Output Isolation * Soft Start Facility
- * Back-up upto 8 hrs. * Wide Input Window
- * Generator Compatible * High Crest Factor > 3:1
- * Compact, Sleek Design * Inverter Efficiency > 90 %
- * Distortion Less Than 3 % * High Input Power Factor
- * Float-cum-boost Charger * Low Noise < 55db Upto 50 KVA
- * Micro Processor / Dsp Based Design
- * IGBT Based Hi-frequency Pwm Inverter
- * Crystal Controlled Output Frequency (50hz + 0.01%)

Technical Specifications

AC INPUT PARAMETERS

AC Input Voltage

- * Single Phase : 160V-270V AC 3 Wire
 - * Three Phase : Normal, 415 V 4 wire, variation : 300V-470V. Input Power Factor > 0.9
- PS : UPS with higher input range can also be supplied on request.

Input Frequency

- a) 47Hz - 53 Hz Can also work on Generators

DC Output (Rectifier)

- UPS CAPACITY DC OUTPUT VOLTAGE (NOMINAL)
 - a) 1.0 KVA to 50 KVA 120- 144- 180- 360V
- PS : System with other DC Voltage canalso be supplied on request.

OUT PUT PARAMETERS

- | | | |
|--|---|---|
| * a) Output Voltage (Nominal) | 230 V AC Single Phase | 415 V AC Three Phase |
| * b) Voltage Stability | + 1% for DC Input variation & Output Load variation | |
| * c) Frequency | 50 Hz + 0.05 Hz (Crystal controlled) or | 60 Hz + 0.06 Hz or any optional frequency |
| * d) Waveform | Sinewave | |
| * e) Harmonic Distortion | Less than 3% | |
| * f) Efficiency (Inverter) | > 93 % for 360 V DC | > 90% for 180 V DC |
| * g) Power Factor | 0.8 lagging to unity | |
| * h) Over Load | 110% for 10 minutes | 200% for 5 cycles, 400% for cycles or as per customer's requirement |
| * i) Crest Factor | > 3:1 or as per customer's requirement | |
| * j) Transient Recovery | Within 3 cycles | |
| * k) Phase Displacement for 3 phase Output | 120° + 1° | |
| * l) Audible Noise | Less than 55db at 1 meter upto 50 KVA | |

INDICATORS

Mains On Output On Inverter Overload Battery Low Output High Back Up

AMBIENT CONDITIONS

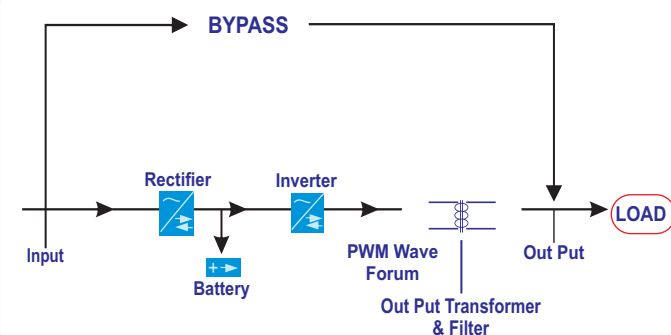
Operating : 0 C - 45 C Storage: 0 C - 60 C Relative Humidity : 95% RH Operating Altitude : upto 2000 meters

METERING

Digital Metering available for Output Voltage : Output Frequency or any other parameters as per customers as per customer's requirement.

METERING (Optional)

Static By-Pass Switch Serial RS 232 Inter Face Auto File Shutdown Microprocessor based Digital Metering



IGBT & PWM TECHNOLOGY

A widely used and developed semiconductor, IGBT (INSULATED GATE BIPOLAR TRANSISTOR), are used in the inverter part of the UPS. With the Sinusoidal pulse Width Modulation Technique, Maximum operational efficiency is obtained and thus even the non-linear loads are fed with precise sinusoidal signal



Power & Distribution Transformer

For efficient supply, well engineered and reliable transformers are essential. SERVOSTAR with its Two decades expertise in transformer has established state-of-the-art facilities for distribution and power facility.

Power Transformer

We manufacture power transformers upto 2 MVP capacity with 11/22/33/66 KV class. Transformers cores are built with CRGO, low loss silicon steel lamination. Use of High grade and laser scribed laminations for the core significantly reduces no load losses and noise levels as committed. Power Transformer winding are made of electrolytic grade copper with continuously transposed conductors

as per the designs requirement. The winding has axial and radial cooling ducts to ensure effective heat dissipation into the oil and elimination the hot spots. For high voltage windings, disc coils with excellent mechanical strength are used to take the stresses due to voltage level. A special interleaved or shielded construction offers most uniform voltage distribution despite system transients. Power Transformers, core-oil assembly are rigidly supported by a common pressure ring of dandified wood at the top and bottom, for precise alignment. Well profiled angled rings are placed between HV and LV windings to reduce voltage stress levels. The ends an tapping leads to all the windings are connected by special extra flexible, insulated coppers cables, which are rigidly braked in position. The core-coil assembly is put into the tank with proper locating arrangements. The tank is then filled with hot oil, filtrated by high vacuum Oil filtration plant. Power Transformers. Tanks are built with mild steel plates to withstand full vacuum. conforming international Standards. Lugs for Jacking, lifting and hauling are routinely tested for dye penetration. thanks have welded or bolted to cover. Tanks are shot blasted to get a surface finish to have double coat of E paint p p after double coat of Epoxy primer. The transformer is made ready for final inspection after assembly of bushings. conservator, radiators etc.



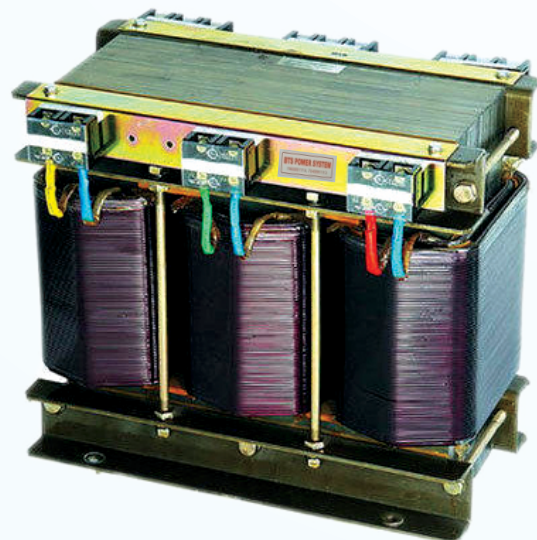


ISOLATION TRANSFORMER

Isolation Transformers are effective and sensitive equipment which save from Line Voltage Transients, Spike & DC Leakage etc. They are specially designed for sensitive critical equipments like computers & peripherals, medical instrumenttion digital communication telemetry systems, CNC Machines etc. and stopping such disturbance generated by the equipments load from being injected into the power line.

TECHNICAL SPECIFICATIONS

Capacity	: 1 KVA to 1500 KVA
Phase	: Single Phase and Three Phase
Input Voltage	: 220,230V in Singal Phase. 400V, 415V in Three Phase
Output Voltage	: 220,230V in Singal Phase. 400V, 415V in Three Phase or as per requirement
Frequency	: 50 Hz
Transformer Ratio	: 1:1 (as per requirement)
Type	: Indoor
Vector Group	: DYN 11 (as per requirement)
Winding	: Copper Winding
Lamination	: CRGO
% Impedance	: 5%
Type of Cooling	: Natural Air/ Oil Cooled
Ambient Temperature	: 1 Degree to 55 Degree C
Power Factor	: 0.75 Lag to Lead
C.M.N.R.	: 100 db
Class of Insulation	: Class B to H
Insulation Resistance	: More than 100 M Ohms
Coupling Capacitance	: Less than 0.01 pF
VI Electric Strength	: 2500V AC for 120 Sec.
Over Load Capicity	: 110% for 10 Minutes
Duty Cycle	: Continuous
Efficiency	: Better than 97%
IS Confirming to	: IS : 2026
Termination	: All Input & Output Terminals Brought out on a terminal board through studs of adequate rating.



TECHNICAL SPECIFICATIONS

Capacity	: 0.5 KVA to 10 KVA
Input Voltage	: 140V, 280V ,110-270V, 90-270V
Output Voltage	: 220V+/-9%
Insulation	: 5 Ohms
Frequency	: 50 Hz
Outer Body	: Powder Coated MS Sheet
Other Features	: Mains indicator lamps. With start switch. fitted with three core power lead of 5 Feet and with Option of input output volt reader, air cooling holes on the sides workable upto 50 Degree C. Ambient, wall and Floor mounted.
Duty Cycle	: Continuos
Winding	: Copper / Aluminium
Mounting	: Wall/Floor Mounting
Operation	: Relay Operated
Temperature Rise	: 45 Degree C above Ambient
Optional Protection	: High and Low Voltage Cut Off, TDR



TECHNICAL SPECIFICATIONS OF CVT

Capacity	: 150 VA to 10 KVA
Phase	:Single Phase
Input Voltage Range	: 180-260 V
Input/Output Voltage	: 50 Hz (+/-1 Hz or better)
Output Voltage	:230 V AC (+/-1% or better)
Output Voltage	:Sinusoidal
Efficiency	: 95% or More
Power Factor	: Unity
Ambient Temperature	: Upto 50 Deg. Cel.
Wheel Mounted (for movement)	: Wheel Mounted (If Requirement)
Protection	: Short Circuit and Overlaod Optional
Termination	: Input & Output Terminal blocks
Relative Humidity	: 95% Non-condensation





Autoatic voltage stabilizer (Linear Type)

L.T. Autoatic Voltage Stabilizers hold its potential for units having either L.T. Supply or Low capacity H.T. Connectin. The same can be manufactured for Balanced Supply for unbalanced Loads or Unbalanced Supply for Unbalanced Loads. The range of input Supply for which the stabilizer is designed depends upon the voltage condition at the supply point. How Some Standard ranges for L.T. Stabilizer are as under :

TECHNICAL SPECIFICATIONS

Capacity	: 100 KVA to 2000KVA
Input Voltage	: 300-460V, 340-460V, 360-460V (Phase to Phase)
Output Voltage	: 400V /415Volts \pm 1% (Phase to Phase)
Type	: Suitable for: Balanced Load & Balanced Supply
Application	: Indoor/ Outdoor Type (Optional)
Phase	: 3-Ph, 4Wires
Frequency	: 50 Hz
Response Time	: Fraction of Second
Speed of Correction	: 8-16 V/Sec
Mode of Operation	: Automatic/ Manual/ hand Control
Suitability	: Suitable for all Power Factors
Wave Form Distortion	: Nil
Duty Cycle	: 100% Continuous
Efficiency	: 98%
Cooling	: ONAN (Oil Natural Air Natural)
Is Standard	: IS : 2026
Transformer Oil	: IS : 335
Operating Temp	: 0°C - 50(°C Above Ambient
Laminations Used	: CRGO Laminations - M4 Grade
Copper Used	: 99.9%(Pure Electrolytic Grade
Carbon Rollers Used	: High Grade Graphite Rollers



CONSTRUCTION

The Rolling Contact Servo unit consists of following:

- a) Buck n Boost Transformer : Double Copper Wound, Open/ Open Connected.
- b) On Load Stepless Voltage Regulators having "Carbon Roller Assembly" : Copper Auto Wound and Delta Connected.
- c) Automatic Control Gear : For automatic correction of fluctuating supply voltage, we shall provide Electronic Relay which in its simplest form, senses the Output Voltage and provide signal to the driving motor for necessary correction.
 - i) One Electronic Voltage Relay
 - ii) One Motor having Reversing Gear Facility.
 - iii) Two limits switches in order to control over running at highest and lowest positions.
 - iv) Chain Drive, Coupling device and all electrical connections
- e) Control Panel consists of:
 - i) IC based solid-state, front loading plug in control cards for online serviceability, fitted inside of the panel.
 - ii) Increase Decease Push Button Switches with higher and lower limit switches.



TECHNICAL SPECIFICATIONS

Capacity	: 1 KVA to 2000 KVA
Phase Input Voltage	: 3 Phase 240-480V, 300-470V,340-460V 1 Phase 140-280V, 170-270V, 196-265V or any other Input ranges as per requirement of the Clients.
Input Frequency	: 48 to 52 Hz
Output Voltage	: Three Phase 400V/415V \pm 1% Single Phase 230/240V \pm 1%
Accuracy/ Regulation	: \pm 1%
Output Frequency	: 50 Hz
Output Waveform	: True to Input
Mode of OPERATION	: Auto/Manual
Voltage Correction Speed	: 6V to 40 Volts (as per requirement)
Response Time	: Less than 10m/Sec.
Correction Method	: Step-less correction through variable Transformer
Type og Cooling	: ONAN
Operating Temprature	: 45 Degree C above ambient
Insulation Class	: Class B to F
Duty Cycle	: 100% Continuous
Efficiency	: \gt - 98%
Auto Transformer	: Copper Electrolytic Grae, Heavy Duty
Buck Boost Transformer	: Copper Electrolytic Grae, Heavy Duty
Servo Motor	: High Torque, Quick Response
Suitability Type	: Suitable for Three Phase Inbalanced/ Balanced Supply and Load
Control Circuit	: Fully automatic IC Based Solid Stat, glass epoxy control card for easy on line serviceability.
Digital Control Card Display	: Having following features:- : Digital with Class 1 accuracy Input Voltage Output Voltage Output Current (Auto Scrolling)
Auto Protection Alarm	: Under Voltage, Auto Reset Over Voltage, Auto Reset Short Circuit & Password Protection
Indications	: Mains on Under Volt Over Volt Over Load
Load Application	: Capacitive, Resistive, any Combination of the load
Component Losses	: As per IS : 9815
Load Losses	: As per IS : 9815
No Load Current	: As per IS : 9815
Quality Process	: ISO : 9001 (2008)
IS Standard	: IS : 9815, IS : 2026, IS : 335

