The Trusted Indian Brand For Power Solutions

AIRKOM®

ULTRA ISOLATION TRANSFORMER

UIT / IT / K-RATED TRANSFORMER

RATING - 3 KVA - 2500 KVA



RUGGED, RELIABLE, SAFE AND SECURE POWER SUPPLY

FOR CNC MACHINES, MEDICAL, CRITICAL EQUIPEMENTS

ELECTRICAL NOISES CAN INTERFERE WITH THE OPERATION OF DIGITAL ELECTRONIC EQUIPMENT, TRANSISTORS, MICROPROCESSORS, SENSITIVE DEVICES, REMOTE CONTROL EQUIPMENT, AND TELECOMMUNICATION EQUIPMENT, ETC. AIRKOM ULTRA ISOLATION TRANSFORMER ELIMINATES ALL TYPES OF ELECTRICAL NOISE, PREDOMINANTLY COMMON MODE NOISES. THESE TRANSFORMERS ARE AVAILABLE IN DIFFERENT LEVELS OF NOISE ATTENUATION CAPABILITIES.

A new generation of agility

SALIENT FEATURES

- Designed with split winding constructions and bifilar connections to reduce overall capacitance of the winding.
- The use of higher grade insulating materials and special shielding techniques results in attenuating common mode and minimizing transverse mode noise.
- The core and its magnetic properties are properly selected to exhibit sufficient leakage inductance to provide greatest possible attenuation of normal mode power line noise, consistent with the transfer of fundamental power frequency. But all higher frequencies are blocked.
- The use of Faraday's Unique Box shielding and special techniques totally block the transfer of electric noise even by static charge, by way of proximity or R.F. Noises.
- Due to better regulation, it does not generate common mode impedance coupling effect.

BENEFITS

- Protect against strong lightning, Impulse noise, bus short-circuit, accidental discharge of capacitors etc.
- Protect the microprocessor based machines and equipments from damage due to electrical noise, spikes etc.

Airkom Electronics Pvt Ltd is a leading provider of power protection product and service solutions including Servo Stabilizer, Static Stabilizer, Online UPS, Inverter, Ultra Isolation Transformer, Electrical Control Panel, APFC Panel, Power Saver Unit, Solar Power Pack System, Battery banks etc.

Part of the Airkom Group, Airkom Electronics Pvt Ltd has established an enviable reputation based on passion, quality, innovation, reliability and integrity for power protection technology, service excellence, complete customer satisfaction and confidence unmatched within the industry.

Airkom has a diverse customer base which includes the Telecom, Textile, CNC & Automobiles, Petroleum, Retail Chain, Printing, Packaging, Medical, IT, Financial services, Government and other manufacturing industries.

APPLICATION AREAS

- If ground potential of system units are different from each other & are exposed to the effects of instability at high frequencies
- If ground of the equipment cannot be earthed
- Where no slightest current leakage is permitted

Metro
Medical
Lab
Security
Network
Industrial
Telecom
Data Center

PAN INDIA REACH

"Protection For Your System, Peace Of Mind For You"

- Servo Controlled Voltage Stabilizer
- Static Voltage Stabilizer
- Static Frequency Voltage Regulator
- True Online UPS
- Static UPS / Inverter
- Ultra Isolation & K-Rated Transformer
- Constant Voltage Transformer
- APFC Panel
- Electrical Control Panels
- Solar Roof-Top System
- Solar PCU / Inverter
- Energy Saver Unit

CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2015

20 YEARS Since 2003

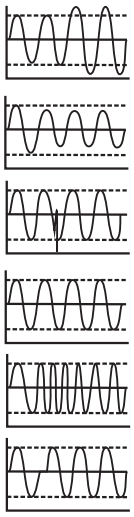
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Specifications

Regulation	2-3 % for 100 % changes in current at unity P.F
Connection	Delta / star for 3 phase supply
Di-electric strength	3000 V for 60 seconds
Common mode attenuation	100 db / 120 db
Insulation resistance	Greater than 1000 Mega Ohms
Coupling capacitance	0.1 pf for 100db & 0.05 for 120db.
Leakage current	Less than 20 micro Amps.
Ambient temp	0 - 45 °C.
Cooling	Air Cooled / Oil Cooled
Rating	1 KVA to 50 KVA for single phase 3 KVA to 1000 KVA for three phase

Power Problems



Surge, over-voltage

Sag, Under-voltage

Voltage Spikes

High Frequency Noise

Frequency Variation

Waveshape Faults - Frequency Shift or Harmonics

K-Rated Transformers

WHAT K-FACTOR TO USE?

- K-Factor transformers are available from a K-4 rating to a K-20 rating.
- K-4 Rated transformer is rated for 35% nonlinear load.
- K-7 Rated transformer is rated for 50% linear and 50% non-linear. The mix may be 50/50 at one point in time and change to 80/20 in the future.
- K-13 Rated transformer is rated for 75% nonlinear loading. This transformer would take care of most present and future needs.
- K-20 Rated transformer is for installations that have an unusually high harmonic or nonlinear content. Here again there is a price premium for the additional insurance.

SERIES ULTRA K

K-Rated Shielded Isolation Transformer - Computer Grade Transformers

PRODUCT FUNCTION AND DESCRIPTION

The overall function of the ULTRA K Isolation Transformer is to deliver conditioned power to a nonlinear high-harmonic current load and operate at safe temperatures while minimizing the harmonic current delivered to the power grid. An additional function of the ULTRA K is to attenuate both common mode and transverse mode noise going to the load.

The product is offered with four different K-Factors (K-4, K-7, K-13 & K-20) standard. The K-Factor is a means of rating the transformer's ability to withstand the heating effects of harmonic and fundamental current flowing in the transformer. Utilization of the proper K-Factor is absolutely essential in every installation. If too low a K-Factor is used, it can result in failure, fire, overheating, and wave form distortion.

Salient Features of AIRKOM K-Rated Series :

The ULTRA K has many features to assure the user of reliable, trouble free, safe operation if the proper K-rating is utilized.

- Multiple K-rating selection, K-4, K-7, K-13, K-20
- Designed for linear and nonlinear loads
- Removes triplen harmonic currents from the line
- High Efficiency
- Double or triple shield for high common mode noise attenuation
- Transverse mode noise attenuation
- Optional filter for additional high-frequency mode noise attenuation
- Solves 88% of typical power disturbance problems
- Heavy-duty cabinet construction
- Input / Output breakers - Optional

We pursue a policy of continuous development & product improvement.
Specifications & front panel controls, may be subject to change, without notice.

For more product information please contact us:
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PAN INDIA REACH

Our Sales & Service Network :

Ahmedabad	Delhi	Kolhapur	Raipur
Amritsar	Dhanbad	Kolkatta	Rajkot
Aurangabad	Guwahati	Lucknow	Tirunelveli
Bangalore	Hyderabad	Ludhiana	Tirvandram
Belgaum	Indore	Madurai	Trichy
Bhopal	Jabalpur	Mumbai	Vadodara
Chennai	Jammu	Mysuru	Vapi
Coimbatore	Kochi	Pune	Vijayawada

20 YEARS Since 2003