

Experience Uninterrupted Performance with Secure Isolation

ISOLATION TRANSFORMER

1KVA – 1000KVA



+91 75070 53131
+91 93701 32711



sales@technovisionenergy.com
www.TechnoVisionEnergy.com

Features

- Isolates impurities on LV side of grid power
- Delta-Star Step-down and Step-up options
- Clean Power, Surge & Noise Free
- Eliminates Earthing Problems
- Error free data in Process Control Instruments
- Manufactured with electrical steel with low losses and copper windings
- Free standing, floor or wheel mounted models available
- Compact and rugged in construction
- Metal casing with sufficient ventilation
- High efficiency, reliability and accuracy
- High insulation values
- Tap options customizable on I/P or O/P side
- Toroidal type of transformer available for medical industries
- Customizable to client needs – voltage, taps, thermal switches, and MS/SS housing with specified IP rating.

Advantages



Protection against
Spikes and noise



Earthing
benefits



Accurate
feedback signals



Provides
Clean power



Protections



Spike and Surge Protection



Harmonic Filtering



Overvoltage



Fault Isolation

Applications



○ Automobile

○ Plastic Moulding

○ Healthcare

○ Robotics

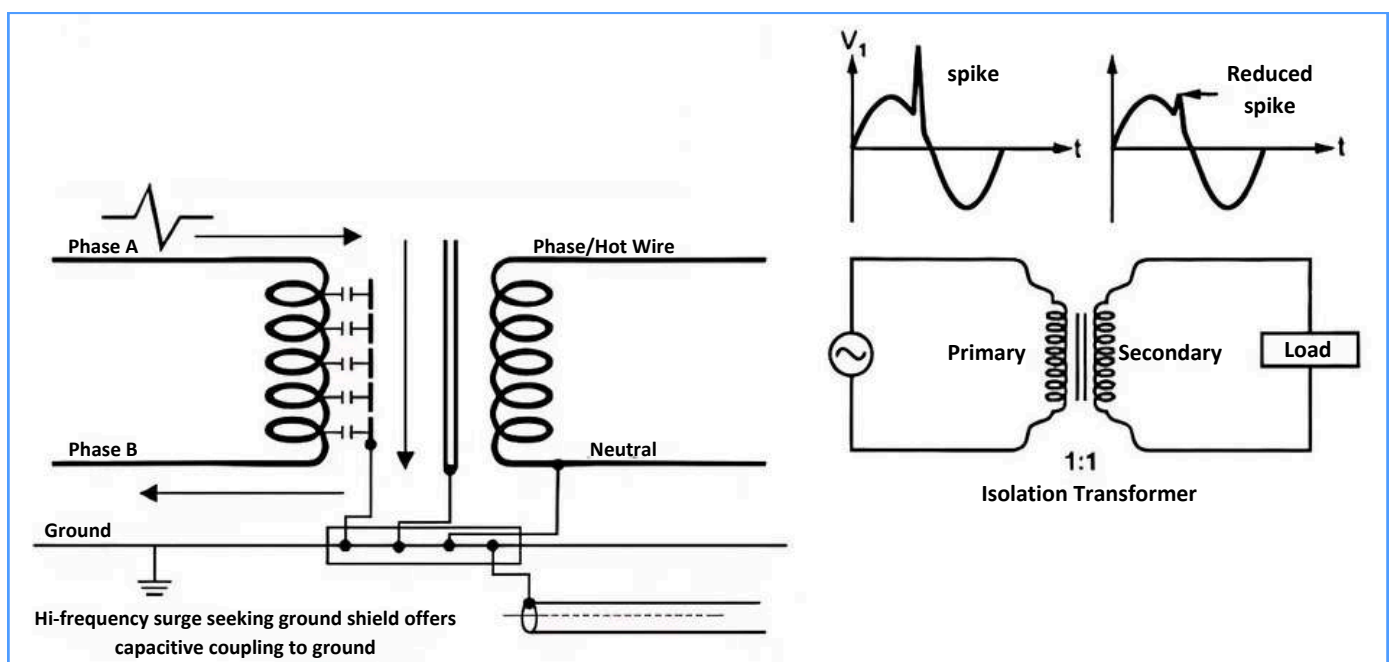
○ Research

○ Mining

Introduction

An isolation transformer for industrial use is designed to provide electrical isolation between the input and output circuits. This helps in protecting sensitive equipment from electrical noise, surges, and faults, while ensuring safety and reliability in industrial environments. By separating the primary and secondary windings, isolation transformers effectively prevent ground loops, reduce electromagnetic interference, and enhance overall system performance. These transformers are essential for machinery, control systems, and other industrial applications where stable and clean power is critical to avoid downtime and damage to expensive equipment.

Working Principle



Isolation transformer works on the principle of electromagnetic induction and is designed to provide electrical isolation between the primary and secondary circuits while transferring power. It consists of two windings—primary (input) and secondary (output)—which are magnetically coupled but electrically isolated. When alternating current (AC) flows through the primary winding, it generates a magnetic field in the core, which induces a voltage in the secondary winding through mutual induction. The voltage output on the secondary side depends on the turns ratio between the two windings, allowing the transformer to either step up or step down the voltage as needed.

Isolation Transformer

Main Specifications

Specifications	Technical Details
Related Standards	IS 2026, IS 11171
Ratings	1 KVA - 1000 KVA
Input Voltage	415, 220, 200 VAC - 3Ph
Output Voltage	200 VAC, 220 VAC, 240 VAC, 415 VAC, 480 VAC - 3 Phase. As required
Acceptable Input Range	±10%
Efficiency	98% @ 100% Load
Regulation	2-4% for 100% change in load at Unity P.F.
Impedance	< 2%
Connection	Delta-Star, Star-Delta, Star-Star
Operating Load Power Factor	0.75 Lagging to 0.9 Leading
DC Galvanic Isolation	> 1000 Mega Ohms
Common mode noise rejection	120 DB up to 10Khz 70 DB for range 10 KHz to 50 KHz, 50 DB for range 50 KHz to 1Mhz
Dielectric Strength	2.5 KV, 50Hz for 1 Minute
Coupling Capacitance	0.01 Pico Farads
Line Leakage Current	< 20 Micro Amps
Operating Temperature	-10 to +55 C
Insulation	Class F
Core & Winding	CRGO and Aluminum Winding (Copper winding on request)
Degree Of Protection	IP21 (Other ingress protection on Request)
Color	Siemens Grey RAL7035 (Customizable)
Type of Cooling	Forced Cooling as per design requirement
Metering	Digital

"Technical specifications are subject to change as a result of continuous development.
Any customizations required to meet special applications can be provided by us."



Core Purpose

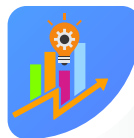


Protect Mission Critical Equipments Backed by Technology and Trust

Core Values



Responsive to
Change

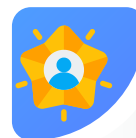


Growth through

- Merit and Hard Work
- Solution Oriented Approach



Human and
Machine Safety



Customer
Centricity



OUR PRODUCTS

AC Solutions

- Industrial Inverters
- Static Voltage Stabilizers
- AVR 100 KVA to 2000 KVA
- Industrial UPS - 1KVA to 500KVA
- Isolation Transformer - 1KVA to 1000KVA
- Static Frequency Converter - 1KVA to 500KVA
- Servo Controlled Voltage Stabilizers - 1KVA to 300KVA

DC Solutions

- Battery Chargers – SCR /IGBT technology (10A to 1000A)
- Battery Chargers – SMPS technology (10 A to 500A)
- DC rails
- DC-DC converters
- Battery jump starters
- Solar Charge Controllers
- Lithium battery based Solutions

CONTACTS

 www.TechnoVisionEnergy.com



 93701 32709, 93701 32710, 93701 32711, 75070 53131

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