



Isolation transformer spectrum & selection guide

Two-winding isolation transformers that separate primary and secondary circuits to reduce noise transfer and improve safety for critical and sensitive loads. Optional electrostatic shields limit transient coupling. Oil-filled or dry as specified — built to IS / IEC practice.

1. kVA ratings

Compact isolation Up to 50 kVA

Labs, medical-adjacent and IT racks — 1:1 or specified ratio with optional shield for clean secondary.

Medium isolation 50 kVA - 500 kVA

Floor UPS, imaging and process panels — galvanic separation with low coupling capacitance options.

Large isolation 500 kVA - 2,500 kVA+

Critical facility feeders — high kVA isolation with project shields, taps and enclosure options.

2. Technical specifications by tier

Parameter	Compact (≤50 kVA)	Medium (50–500 kVA)	Large (500–2,500 kVA+)
Primary / secondary	1:1 or specified · LV typical	1:1 / ratio as specified	LV / MV isolation as specified
Cooling	AN / ONAN	AN / ONAN / ONAF	ONAN / ONAF or AN / ANAF
Efficiency	Low-loss isolation design	High efficiency continuous duty	TOC-optimised isolation
Impedance	Project %Uk	Project %Uk	Custom %Uk
Core	Low-loss CRGO	CRGO	High-grade CRGO
Windings	Separate Cu / Al · shield optional	Two-winding · electrostatic shield option	Shielded Cu / Al · reinforced
Tap changing	Fixed / OCTC	OCTC optional	OCTC / project taps
Applications	Lab · IT · Medical-adjacent	UPS · Imaging · Process panel	Critical facility feeders
Standards	IS / IEC	IS / IEC	IS / IEC · facility specs

3. Why choose an isolation transformer?

True galvanic separation

Separate primary and secondary windings break metallic continuity — improving safety and limiting common-mode noise to sensitive equipment.

Noise & transient control

Optional electrostatic shields and careful winding geometry reduce capacitive coupling of spikes and RF from dirty upstream feeds.

Cleaner secondary reference

A local secondary neutral / earth reference helps labs, imaging and IT loads that misbehave on shared dirty neutrals.

Flexible build

Oil-filled or dry-type, 1:1 or stepped ratios, with taps and enclosures matched to indoor fire codes and facility specs.

4. Applications

Labs & test

Instrumentation and test benches needing a clean, isolated secondary reference.

Medical-adjacent / imaging

Sensitive imaging and clinical-support loads where galvanic separation and low noise matter.

Critical IT / UPS

Floor UPS and critical feeders up to multi-hundred kVA with optional shields.