

# Drive Isolation Transformers

*We can do that!*

- VPI, Encapsulated or Cast Coil designs
- Three Phase 15 thru 5000 kVA
- Various Voltage Combinations thru 34.5 kV
- BIL ratings thru 150 kV
- Single or Multiple secondary windings
- Frequencies of 60, 50 or 50/60 hertz
- Variable Temperature Rise designs
- Core and coil or multiple enclosure styles available
- Retrofit capabilities
- Custom buswork available
- Electrostatic shield(s) available
- Forced Air (FA) or Future Forced Air (FFA) available
- Loss Efficient Designs



**Quality...Durability...  
Performance...Support**

**Nothing less than what you'd  
expect from Olsun Electrics**

Olsun Electrics Drive Isolation Transformers have met user specifications and required features for motor drive applications for nearly 70 years by utilizing superior materials and design approaches in the manufacturing of our Drive Isolation transformer products. The result has been expectation surpassing performance, application reliability and transformer life longevity.

Each Drive Isolation transformer is designed and manufactured to customer specification requirements and information unique to the application provided to Olsun by customers. All pertinent loading and performance factors in a motor drive application are considered by Olsun's experienced Engineering team so the design and manufacture of the Olsun drive isolation product is right for the application. Of course, all products are designed, manufactured and tested right here in the United States in accordance with the latest applicable UL, cUL, NEMA, ANSI and IEEE standards.



Drive Isolation (Motor Drive) Transformers (DIT's) are for use with variable frequency drives (VFD's) controlling the speed of motors. They are specially designed to address non-linear loading characteristics seen by the transformer when connected to these non-linear (SCR) drive devices. The electrical isolation provided by these two-winding transformers provides a beneficial level of attenuation between the input line (system distribution) side and the non-linear loading effects of the drive. The result is better power quality for the feeding distribution system relative to voltage changes, reduction of drive induced ground currents and common mode noise. The Olsun Electric's DIT will ensure these results on the distribution system feeding motor drives.



## Standard Features

- VPI with Aluminum Windings
- Cylindrical coil design
- LV-LV, MV-LV or LV to MV voltage class combinations available
- 150° C Temperature rise
- Class R, 220°C Insulation
- AA rated
- Designed to minimize short circuit stresses
- Highest quality Grain Oriented Electrical Steel (GOES)
- Application accommodating terminal/bus configurations
- Accessible no-load, +/- 1 at 5% rated tap changing links
- NEMA ST-20 standard sound levels with noise isolating pads
- ANSI 61 gray powder coat painted enclosures
- Core and coil assembly or bolt together ("knock-downable") NEMA 1 enclosure
- 8 stage, electrostatically applied powder coat enclosure paint system
- Buy American compliant. Designed, manufactured and tested in the United States.

Olsun DIT's will also facilitate the proper voltage required to a drive when the available distribution voltage differs from the drive. Medium distribution voltages down to low voltage drive levels or even vice-versa can be readily addressed using Olsun transformers. Drive duty traits such as harmonics or noise reflected back to the transformer are addressable as well using options like K ratings and electrostatic shielding. Over 60 years of Olsun drive isolation transformer application experience bears this out.

## Optional Features

- Copper Windings
- Dual secondary / phase shifted windings
- K-Factor rated
- 200% neutral
- Low Inrush current
- Various temperature rise designs
- Forced Air (FA) and Future Forced Air (FFA) packages
- Temperature Monitor with alarm contacts and SCADA interface
- Thermal switches / alarm contacts
- Electrostatic shield(s)
- NEMA 3R or TENV type enclosures
- Compartmentalized padmount enclosures
- 316 stainless steel enclosures and/or base
- Air terminal chamber(s)
- Forkliftable base
- Externally removable and washable ventilation filters
- Severe weather ventilation baffles
- Custom Paint colors
- Surge arresters
- Infrared viewing port(s)
- Primary fused or unfused load break switches
- Interlocks
- Low voltage breaker(s)
- Enhanced structural bracing
- Extended Warranty

**Transforming the Industry with:**  
**Exceptional Service • Engineered Solutions • Handcrafted Quality • Superior Materials**

Olsun Electric's is a leading dry type transformer manufacturing company that has been providing solutions in the most challenging environments and applications for over seven decades.