Low Voltage AutoTransformer with LINEATOR™ Harmonic Filter

Multi-Pulse performance for 6-Pulse Variable Frequency Drives on Low Voltage Service

- Treats all major harmonics generated by Variable Speed Drives and other 3-phase 6-Pulse rectifier loads (5th, 7th, 11th, 13th ...)
- Easily applied to input of a single or group of VSD's
  - No need to phase shift against other VSD's
  - No need for costly harmonic studies
- Will meet IEEE 519 standard for both current and voltage distortion
- Input current demand distortion < 8% over entire operating range
- Power factor 0.98 lagging to 0.95 leading over the normal operating range
- Compatible with engine generators since capacitive reactance is < 15% of rated kVA even under light loads
- Will not resonate with other power system components
- Will not be overloaded by other line side harmonic sources
- Suppresses overvoltages caused by capacitor switching and other fast changing loads
- Removal of harmonics improves overall system power factor
- Used on low voltage applications where there is a need to step-down or step-up line voltage to match the voltage of a 6-pulse VFD or rectifier load
- Reduces RF Interference generated by VSD

The use of 6-pulse Variable Speed Drives and other static power conversion equipment has grown rapidly in recent years. With this growth has come concern over the level of current harmonics generated by such equipment. Harmonic currents and the voltage distortion these currents create can have devastating effects on a power distribution system and its connected equipment.

Present methods of harmonic treatment on low voltage 6-pulse VFD applications where the VFD voltage rating is different from the service voltage, require a special replacement 18-Pulse VFD, or a separate transformer to match the existing 6-Pulse VFD voltage along with tuned passive filters, or expensive active filters.

The innovative AutoTranslineator™ is the best advance in the area of low voltage passive harmonic mitigation available today. No other device on the market can meet the limits of IEEE STD 519 at an equivalent size, efficiency and cost.

When the application calls for harmonic treatment for low voltage 6-pulse VFD applications where the VFD voltage rating is different from the service voltage, the AutoTranslineator™ is the only logical choice.

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