

Drive TransFilter™

ULTRA-HIGH EFFICIENCY HARMONIC MITIGATING DRIVE ISOLATION TRANSFORMER

PRODUCT BENEFITS

- Ultra-High Efficiency
- Saves Energy by Reducing Harmonic Losses
- Reduces Apparatus Heating
- Increases Primary Feeder and Bus Capacity
- Reduces K-Factor of Non-Linear Drive
- Reduces Voltage Distortion to <5%THD_v (IEEE 519-1992)
- Reduces Harmonic Current Injection into PPC
- Meets NEMA TP-1 and CSA C802.2-00 Standards
- EPA Energy Star® Compliant
- Provides Isolation from Upstream Transients
- Clamps Phase-Ground Voltage Excursions at Drive
- Assures Distribution System Compatibility with Drive



PRODUCT DESCRIPTION

Drive TransFilter™ - Harmonic Mitigating Drive Isolation Transformers are Ultra-High Efficiency three-phase drive isolation transformers that have been specifically designed to mitigate the power quality problems associated with three-phase, six and twelve-pulse Adjustable Speed Drives (ASD).

Unlike conventional Drive Isolation Transformers, which are only intended to provide positive and negative sequence impedance and isolation, **Drive TransFilters™** will cancel the 5th, 7th, 11th, 13th, 17th, 19th, --- positive and negative sequence harmonic currents on the transformers' common primary bus.

Drive TransFilters™ are supplied with an off-load tap-changer that provides for the on-site adjustment of the transformer's output voltage.

When correctly applied, **Drive TransFilters™** will reduce peak phase current, average phase current, total harmonic distortion of current (THDi), total harmonic distortion of voltage (THDv), load K-Factor, system losses and overheating, apparatus vibration and noise, prevent misoperation of electronic protective devices, and increase system capacity and power factor.

Drive TransFilters™ are also available with multiple outputs for addition cancellation of positive and negative sequence harmonics.

The ROI, Payback and Power Quality benefits, associated with **Drive TransFilters™**, are maximized when applied as part of **The PQI Solution™**, an engineered system solution.



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SELECTION TABLES

kVA	Enclosure Size (Inches)	Weight (lbs.)*
8	20.50W x 16.00D x 21.00H	160
11	20.50W x 16.00D x 21.00H	225
14	20.50W x 20.75D x 26.25H	280
20	20.50W x 20.75D x 26.25H	330
27	20.50W x 20.75D x 26.25H	380
34	20.25W x 20.75D x 26.50H	370
40	24.50W x 22.00D x 31.50H	460
51	24.50W x 22.00D x 31.50H	540
63	24.50W x 22.00D x 31.50H	790
75	24.50W x 22.00D x 31.50H	850
93	30.75W x 27.75D x 30.75H	970
118	30.75W x 27.75D x 30.75H	1150
145	40.00W x 31.00D x 44.00H	1550
175	40.00W x 31.00D x 44.00H	1700
220	40.00W x 31.00D x 44.00H	1850
275	40.00W x 31.00D x 44.00H	2100
330	40.00W x 31.00D x 44.00H	2450
440	46.00W x 40.00D x 62.00H	2800
550	46.00W x 40.00D x 62.00H	3000
660	60.00W x 45.00D x 69.25H	4300
775	60.00W x 45.00D x 69.25H	4600
880	60.00W x 45.00D x 69.25H	5300
990	73.00W x 45.50D x 79.00H	6150
1100	73.00W x 45.50D x 79.00H	6450

Other up to 3500kVA * = Approx

THE ABOVE DATA APPLIES TO SINGLE OUTPUT CONFIGURATIONS UP TO 600V, WITH NEMA 1 ENCLOSURE AND STANDARD TEMPERATURE RISE (150°C). SELECTION OF MULTIPLE OUTPUTS AND SOME OPTIONS MAY CHANGE ENCLOSURE SIZE AND WEIGHTS. CONSULT FACTORY FOR DETAILED PRODUCT DATA SHEET FOR THESE AND OTHER CONFIGURATIONS. SPECIFIC ENCLOSURE USED DETERMINED BY FACTORY UNLESS SPECIFIED.

Technical Specifications

UL Listed
 CSA Approved
 Related Standards: CSA C9-M1981, CSA 22.2 No.47-1977
 CSA C802.2-00, UL-506, ANSI C75.110
 NEMA ST-20, NEMA TP-1
 Voltage Class: 1.2kV [Standards to 35kV]
 BIL Rating: 30kV [Standard for Class]
 Voltage: 480:277/480 [Standards to 35kV]
 Frequency: 60Hz. [50Hz][400Hz][Other]
 Type: ANN
 Temp. Rise: 150° C [130°C][115°C][80°C][Other]
 Insulation Class: 220° C
 Colors: PQI White [ASA 61][Other]

Definitions

Type: DY [0] [15] [30] [45] [Other]
 Type: DY0/30 [15/45]
 Hz: Frequency
 kVA: Rating of unit
 PV: Primary Voltage
 SV: Secondary Voltage
 Temp: Temperature Rise: 150°C (Standard)
 [130°C][115°C][80°C](Optional)

Options

Enclosure: N1-NEMA1 (Standard)
 N3R - NEMA 3R (Optional)
 Other (Optional)
 Electrostatic Shield: 1ES - Single Electrostatic Shield
 2ES - Dual Electrostatic Shield
 3ES - Triple Electrostatic Shield

TS: Thermal Sensors
 Color: PQI White [Other]

Part Number Configuration

Type Phase Shift-Hz-kVA-PV:SV-Temp-Options

Sample Part Number

DY15-60-075-480:120/208-150-N3R-2ES-TS-EPA



PQI Warranty - 10 years pro-rated.

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