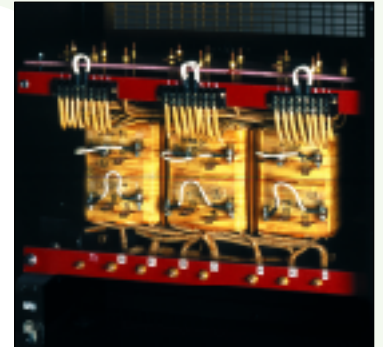


Harmonic Conditioner

- *Range of products designed to treat 5th, 7th, 11th, 13th harmonics in 3-phase systems*
- *Treats harmonic currents created by 3-phase rectifiers, including drives*
- *Common applications include telecom, internet, and industrial equipment*
- *Available built-in surge protection*
- *Packaged with engineering application support*



Technical Specification

Powersmiths Harmonic Conditioners are 3-phase common-core copper-wound dry-type transformers or autotransformers that are built to NEMA ST-20 and other applicable ANSI and IEEE standards. They have a 220°C class insulation system and the standard configuration is for a 60Hz system, and a 150°C operating temperature rise. Efficiency ranges from 97% to 99% depending on model selected.



Description

Harmonic conditioners are available in a wide variety of configurations to match just about every application.

Specify the "ISO" option where galvanic isolation between the electrical system and the load is required. Electrostatic shielding is optional.

Specify the "AUTO" option when galvanic isolation is not required. Voltage transformation and electrostatic shielding are not available for this model.

Specify the "UNIVERSAL" option to configure the product to provide a wide range of input and output voltages that are field tap-selectable. Electrostatic shield is optional.

Multiple-output configurations with a variety of phase angle shifts are also available to cancel targeted harmonic currents. Specific phase angle shifts can also be specified.

Harmonic Conditioner

Technical Data

kVA	ISO Model			AUTO Model			UNIVERSAL Model		
	Impedance (+/-SEQ.)	Weight (lbs)	Case Size (Inches)	Impedance (+/-SEQ.)	Weight (lbs)	Case Size (Inches)	Impedance (+/-SEQ.)	Weight (lbs)	Case Size (Inches)
15	2.8-3.9%	200-230	A (18W x 17D x 27H)	1.0-1.25%	120-150	A (18W x 17D x 27H)	4.4%	300-385	B (26W x 18D x 30H)
30	2.8-3.9%	370-450	B (26W x 18D x 30H)	1.0-1.25%	210-240	A (18W x 17D x 27H)	4.4%	520-590	B (26W x 18D x 30H)
45	2.8-3.9%	460-580	B (26W x 18D x 30H)	1.0-1.25%	290-320	B (26W x 18D x 30H)	4.5%	640-720	C (32W x 22D x 40H)
75	2.8-3.9%	690-790	C (32W x 22D x 40H)	1.0-1.25%	430-460	B (26W x 18D x 30H)	4.1%	1000-1100	C (32W x 22D x 40H)
112.5	3.2-4.5%	820-990	C (32W x 22D x 40H)	1.0-1.25%	520-560	B (26W x 18D x 30H)	3.1%	1200-1400	D (38W x 27D x 48H)
150	3.2-4.9%	1010-1240	D (38W x 27D x 48H)	1.0-1.25%	660-700	C (32W x 22D x 40H)	3.3%	1700-1850	D (38W x 27D x 48H)
225	3.2-4.9%	1400-1750	D (38W x 27D x 48H)	1.0-1.25%	830-860	C (32W x 22D x 40H)			
300	3.2-4.9%	2000-2400	D+ (38W x 32D x 52H)	1.0-1.25%	1150-1200	C (32W x 22D x 40H)			
500	3.2-4.9%	2800-3100	E (52W x 32D x 61H)	1.0-1.25%	1800-1900	D (38W x 27D x 48H)			

THE ABOVE INFORMATION IS FOR 60Hz, 150°C RISE, SINGLE OUTPUT TRANSFORMER CONFIGURATION. DUE TO THE WIDE VARIETY OF CONFIGURATIONS, IT IS PARTICULARLY IMPORTANT TO CONFIRM DIMENSIONAL AND OTHER DATA. UP TO 5000kVA, 15kV CLASS AVAILABLE.

Standard Configuration

MODEL

ISO00: 0° shift, isolation, 3 wire input, 4 wire output
ISO30: 30° shift, isolation, 3 wire input, 4 wire output
AUTO: 30° phase shift, no isolation
UNIVERSAL: Multi voltage, multi tap model
kVA: Rating of unit
PV: Primary voltage
SV: Secondary voltage (AUTO model; same as PV)
N1: Standard NEMA 1, ventilated drip proof enclosure
T150: Standard 150 deg. C operating Temperature rise
F60: Standard 60Hz design

Available Options

N3R: NEMA 3R, ventilated enclosure
NVE: Non-ventilated enclosure
T130: 130 deg. C operating Temp. rise
T115: 115 deg. C operating Temp. rise
T80: 80 deg. C operating Temp. rise
F50: 50Hz design
TP1: NEMA TP1 compliant
ECO: ECOLOGO certified
1S: Single electrostatic shield
2S: Dual electrostatic shields
3S: Triple electrostatic shields
 } - ISO and UNI only
PRO702: 208V TVSS, 70kA/mode internal
PRO902: 208V TVSS, 90kA/mode internal
PRO904: 480V TVSS, 90kA/mode internal
PRO1502: 208V TVSS, 150kA/mode internal
PRO1504: 480V TVSS, 150kA/mode internal
TVSSxx: Where xx is custom ID
LK: Lug kit, screw-type
COL: Color other than factory standard
TS: Thermal Sensors at 170°C and 200°C



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Warranty

5 years pro-rated
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