

N1000 Autotransformer

APPLICATIONS

When power quality is an issue the N1000 provides an easily installed solution. The N1000 is equally suited to panel board and busduct installations, where neutral current, neutral ground voltage and 3rd harmonic require treatment. Its compact and efficient design ensures maximum power quality correction with a minimal space requirement. The N1000 reduces system voltage distortion, lowers transformer losses, frees up transformer and feeder capacity and reduces phase current imbalance. It is ideally suited to all applications where existing equipment fails to treat 3rd harmonic current and voltage distortion.

DESCRIPTION AND CHARACTERISTICS

Powersmiths N1000 is an easily installed solution to quality correct power in your electrical system. The N1000 is parallel-connected to the electrical system creating a local path for all zero sequence currents including 3rd, 9th and 15th, as well as the unbalanced portion of the 60Hz current flowing in the neutral conductor. The N1000's parallel connection enables easy and non-disruptive installation with no need for system shutdown, in most cases.

ADDITIONAL OPTIONS

Powersmiths factory installed options allow you to reduce field installation costs. Options available for the N1000 include:.

Voltage Surge Suppression – Supplied by Powersmiths Pro Series TVSS

ENVIRONMENTAL BENEFIT

The N1000 is built in an ISO 9001 (quality management) and ISO 14001 (environmental management) certified facility. Throughout the manufacturing process Powersmiths takes steps to ensure that waste is eliminated and hazardous materials are avoided.



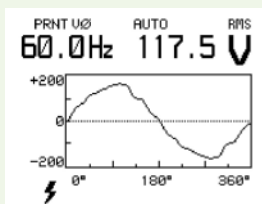
TESTING AND WARRANTY

During manufacturing and assembly N1000 is subjected to rigorous testing to ensure efficiency under various load profiles and loading conditions, quiet operation and insulation integrity. Powersmiths is the only manufacturer to production-test all transformers with actual computer power loading under exacting ISO 9001 procedures. Data can be provided for individual units by selecting the NLT option with your order.

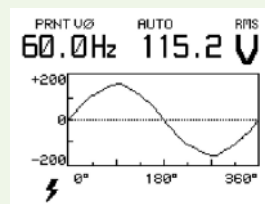
The N1000's long life and dependable performance is backed up by Powersmiths 10 year pro-rated warranty. The warranty is extended to 25-years pro-rated with the installation of Powersmiths Cyberhawk MPC at the building entrance

KEY FEATURES

- Delivers high quality power and conserves space
- Treats neutral current and neutral-ground voltage
- Treats 3rd, 9th and other zero sequence currents
- Reduces 3rd harmonic voltage distortion to support compliance with IEEE 519
- Improves reliability by reducing downtime and equipment failure
- Produced in an ISO 9001 and ISO 14001 environment, assuring high quality and low environmental impact



Before N1000



With N1000

STANDARD CONFIGURATION

Powersmiths N1000 is a 3-phase common-core copper-wound dry-type autotransformer, built in an ISO 9001 and ISO14001 environment to NEMA ST-20 and other applicable ANSI and IEEE standards. Windings have less than 0.95% zero sequence impedance and less than .03% zero sequence reactance.

The N1000 has 220° C class insulation, comes with a NEMA-1 ventilated indoor enclosure, 130°C operating temperature rise and is 60Hz rated for 208/120V wire systems.

SELECT

AMPs: Rating of unit (60 - 1200A)

V: System voltage, (208/120V, 480/277V)

SAMPLE PART NUMBER

N1000 - 100A - 208V - N1 - T130 - F60

TECHNICAL DATA

Neutral Current	Rated Phase Current (Amps)	Phase Protection (CB or Fuse)	Weight (lbs)	Case Size (Inches)
60	20	20	120 - 140	A (18W x 17D x 27H)
100	33	40	150 - 180	B (26W x 18D x 30H)
150	50	50	220 - 260	B (26W x 18D x 30H)
225	75	80	260 - 300	B (26W x 18D x 30H)
300	100	100	300 - 350	B (26W x 18D x 30H)
400	133	150	400 - 480	C (32W x 22D x 40H)
600	200	200	620 - 750	C (32W x 22D x 40H)
800	267	275	810 - 960	C (32W x 22D x 40H)
1000	333	350	890 - 1100	C (32W x 22D x 40H)
1200	400	400	1050 - 1200	D (38W x 27D x 48H)

The above data applies to N1000 standard 208V, 60 Hz configuration. Other configurations can be larger and heavier. Some options may change enclosure size and weight. Consult factory for detailed product data sheet for these and other configurations.

AVAILABLE OPTIONS

N1: Standard NEMA 1, ventilated drip proof enclosure

N3R: NEMA 3R, ventilated enclosure

NVE: Non-ventilated enclosure

T115: 115 °C operating Temp. rise

T80: 80 °C operating Temp. rise

F50: 50Hz design

SPD: (120/208V, 277/480V) 1 unit primary or 2 units on secondary.

PRO80: 80kA, 7 mode, Filter

PRO120: 120kA, 7 mode, Filter

PRO160: 160kA, 7 mode, Filter

PRO200: 200kA, 7 mode, Filter

PRO240: 240kA, 7 mode, Filter

PROXX: Where xx is custom ID

LK: Lug kit, screw-type

COL: Color other than the factory standard



Warranty: Our Commitment to lasting performance is spelled out in the longest transformer warranty in the business – 10 years pro-rated. 25 year pro-rated warranty with the installation of the Cyberhawk MPC at the building entrance. N1000 is a trademark of Powersmiths International Corp.

Technical specifications subject to change without notice. Paper contains 50% recycled content including 25% post consumer waste.

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