MEDIUM VOLTAGE DISTRIBUTION, LARGE POWER & CUSTOM DRY-TYPE TRANSFORMERS

HPS MILLENNIUM™ ENERGY EFFICIENT MEDIUM VOLTAGE DISTRIBUTION TRANSFORMERS

HPS Millennium™ 2.5 & 5 kV class energy efficient medium voltage transformers are designed to step down incoming high voltage power to utilize voltages for commercial, institutional or industrial applications. Standard features include:

- Meet DOE 10 CFR Part 431 and the Canadian Efficiency levels at 50% of rated load.
- 1ph ratings from 15 kVA to 333 kVA, 3ph from 15 kVA to 1500 kVA.
- Standard Primary Voltages of 2400 and 4160 volts.
- UL listed and CSA certified.
- Available in aluminum, copper and optional shield.
- NEMA 3R enclosure (optional NEMA 4, 12 or stainless).
- Special voltages, kVA sizes and custom features are available.

DRY-TYPE MEDIUM VOLTAGE (POWER) DISTRIBUTION TRANSFORMERS

Our medium voltage (power) distribution transformers are regarded for their high level of quality and service reliability that has become synonymous with HPS transformer products. HPS manufactures the largest dry-type power transformers in the world; the dry-type medium voltage distribution transformer ratings up to 34 MVA and 46 kV class. These transformers are suitable for any commercial, industrial manufacturing or production process application including the most demanding of environments.

- Standard and Energy Efficient units available.
- Complete line of Outdoor Medium Voltage(Power) Transformers
- Environmentally friendly.
- Encapsulation Resin or Epoxy.
- Short Circuit with standibility tested and documented.
- Fully compliant with CSA, NEMA, ANSI, UL, and IEC.

SPECIALTY & CUSTOM TRANSFORMERS

HPS's extensive engineering experience, cost effective designs and manufacturing capability allows us to offer you the most complete line of specialty and custom transformers available anywhere.

- Cycloconverters
- Excitation Transformers
- Rectifier Duty Transformers
- Traction Duty Transformers
- Mining Duty and Excavator Transformers
- Large Indoor/Outdoor Current Limiting Air-Core Reactors
- 12, 18 and 24 Multi-Pulse Drive/Inverter Duty Transformers

CATALOG AND CONTACT INFORMATION

If you would like one of the catalogs shown below, please fill in the information below and fax it to:
Literature Services in Canada at (519) 822-9701 or in the U.S. (608) 355-7623.

☐ **HTP-10 Transformer Products Catalog (printed version)**

☐ **HPWR - MV Distribution (Power) Transformer Catalog (printed version)**

Web Site: www.hammondpowersolutions.com

E-mail: catalog@hammondpowersolutions.com

Name _____

Company _____

Address _____

City, State/Prov. _____

Zip/Postal _____

Telephone _____

Fax Number _____

DISTRIBUTED BY:

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Showcase of Products

Hammond Power Solutions Inc.

Your First Source for Transformers

COMPANY PROFILE

HAMMOND POWER SOLUTIONS

Hammond Power Solutions Inc. is the North American stand-alone leader for the design and manufacture of high quality custom electrical dry-type transformers and related engineered magnetic devices. The company is also a significant producer of standard products that are built to industry wide specifications. HPS excels at designing products that have very specific size and power constraints for many demanding applications. Having an extensive engineering resource, HPS offers the broadest range of electrical products in the industry and as a result, the company has grown in many diverse markets and provides services to many global leaders.

Hammond Power Solutions Inc., with its headquarters in Guelph, Ontario, Canada, operates out of seven facilities:

Guelph, Ontario	Walkerton, Ontario	Monterrey, Mexico
Baraboo, Wisconsin	Compton, California	Granby, Quebec

QUALITY

HPS has been regarded for quality since its very inception. Customers have come to rely on our products and services and continue to depend on us for support at the most critical stages of their need. Our stability and integrity as a supplier are paramount particularly in an industry environment where demands must be resolved quickly and effectively. Extensive testing programs and an exemplary field service record ensures that HPS products not only meet all the standards necessary, but more importantly, fulfill customers expectations and requirements.

ISO 9001

With our commitment to 'Excellence' and 'Continuous Improvement', we build value and reliability into every HPS product. All facilities have implemented quality management systems based on ISO 9001:2008 with the Guelph facility having certification to that quality standard.

CUSTOMER SERVICE

HPS customer service personnel are available to answer questions immediately. Our teams are technically trained and are able to answer most questions over the phone. Stock checks, expediting, quotations or technical information are always readily available. The commitment to customer service means you will be an informed, relaxed and satisfied customer as quickly as possible.

DESIGN CAPABILITIES

HPS engineering services are located throughout the manufacturing facilities. Our designs are cost effective and our transformers are built with modern manufacturing techniques. We particularly emphasize our Value Added Engineering whereby our design staff will interface with your team to produce the optimum transformer. Our 3-D modelling design and CAD facilities permits quick and effective communication when time is vital.

OUR VISION

Keeping current with technology and innovation has been the key to our success. The vision of HPS is:

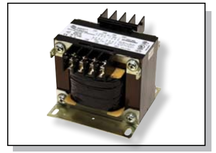
- A growing and profitable supplier of transformers and magnetics
- Supplied both direct as well as through distribution
- Providing super service that includes:
  - A broad range of products to meet the global needs of our customers
  - Providing lead times defined by our markets

CONTROL TRANSFORMERS

HPS IMPERATOR® ENCAPSULATED MACHINE TOOL INDUSTRIAL CONTROL TRANSFORMERS

HPS Imperator® transformers are used where high performance, reliability and quality are utmost to meet your needs.

- 11 standard voltage groups.
- VA range from 50 VA to 1500 VA.
- Available with standard secondary or optional primary fuse clips.
- 8 terminations per side.
- cULus Listed.
- CE mark standard on all units.
- Lifetime Warranty (Limited).
- RoHS Compliant.



HPS SPARTAN™ INDUSTRIAL OPEN CORE & COIL CONTROL TRANSFORMERS

HPS Spartan™ industrial open-style control transformers are ideally suited for general purpose, industrial, light duty loads.

- Open style, 50/60 Hz.
- VA range from 50 VA to 5000 VA.
- Vacuum impregnated.
- Bolted core construction.
- Meets NEMA and ANSI standards.
- CSA certified, UL Listed.
- CE Marked and RoHS compliant.

MEDIUM VOLTAGE CONTROL TRANSFORMERS

HPS's control product line extends to medium voltage to suit any application and duty.

- Open style, 50/60 Hz.
- c/w standard 24" leads (optional terminal board available).
- Standard voltage range from 2.4 kV to 7.2 kV.
- Standard VA range from 500 VA to 5000 VA.
- Vacuum impregnated.
- Custom units designed to customer specifications.

REACTORS, MOTOR STARTING AUTOTRANSFORMERS & DRIVE ISOLATION TRANSFORMERS

LINE REACTORS AND DV/DT FILTERS

HPS 'RM' series line reactors can be used on the input and output side of variable speed drives. The 'RC' series DV/DT filter combines the current limiting ability of an AC line reactor plus a resistive capacitance circuit that forms a damped, low pass filter. Standard features include:

- Sizes available for 0.5 to 1200 HP motors (600 HP for DV/DT).
- Maximum system voltage is 1.2 kV (600V for DV/DT).
- UL listed, CSA certified and CE marked.
- Standard core & coil (optional NEMA 2 or 3R enclosure).
- Maximum 60 Hz.
- DV/DT Switching frequency from 2.5 KHz up to 20 KHz.

MOTOR STARTING AUTOTRANSFORMERS

The motor starting autotransformer is suitable for use with magnetic or manually operated motor controllers. Standard features include:

- Three phase, 3 coil, standard designs, using economical open core and coil construction (two coil units also available).
- 150°C rise insulation.
- Vacuum impregnation.
- Heavy solid copper tabs with holes provide reliable termination.
- Copper construction.

DRIVE ISOLATION TRANSFORMERS

HPS drive isolation transformers are suitable for both AC and DC variable speed drives. They are sized to match standard motor horsepower and voltage ratings. Standard features include:

- Standard Efficiency Drive Isolation.
- HPS Tribune™ Energy Efficient Drive Isolation.
- Meets UL and CSA short circuit withstand.
- 60 Hz. standard (optional 50 Hz. available).
- 3ph ratings from 7 kVA to 660 kVA in many voltages.
- Available in aluminum, copper and optional shield.
- NEMA 3R enclosure (optional NEMA 4, 12 or stainless).

ENERGY EFFICIENT DISTRIBUTION TRANSFORMERS

HPS SENTINEL® SERIES ENERGY EFFICIENT GENERAL PURPOSE TRANSFORMERS

Energy efficient general purpose transformers are designed for linear loads and are most frequently used for applications such as commercial buildings which will supply a variety of general loads.

HPS Sentinel®

- Meets DOE 10 CFR Part 431 and C802.2 efficiencies at 35% of rated load.

HPS SuperSentinel®

- Exceeds DOE 10 CFR part 431 and C802.2 efficiencies at an operating range from 35% to 65% of rated load.

HPS SYNERGY® SERIES ENERGY EFFICIENT K-FACTOR TRANSFORMERS

Energy efficient k-factor transformers are designed to tolerate heating due to harmonics associated with non-linear loads.

HPS Synergy®

- Meets DOE 10 CFR Part 431 and C802.2 efficiencies at 35% of rated load.

HPS SuperSynergy®

- Efficiency performance will be 25% better than DOE 10 CFR part 431 and C802.2 standards when measured under a linear load profile at an operating range from 35% to 65% of rated load.

HPS CENTURION® SERIES ENERGY EFFICIENT HARMONIC MITIGATING TRANSFORMERS

Designed to treat the harmonics generated by computer equipment and other non-linear, power electronic loads.

HPS Centurion®

- Meets DOE CFR Part 431 and C802.2 efficiencies at an operating range from 35%-65% of rated linear load.

HPS SuperCenturion®

- Exceeds DOE 10 CFR Part 431 and C802.2 efficiencies at an operating range from 35% to 65% of rated load.
- Efficiency performance will be 25% better than DOE 10 CFR Part 431 and C802.2 standards when measured under a linear load profile.

ENCAPSULATED TRANFORMERS

HPS UNIVERSAL™ BUCK-BOOST TRANSFORMERS

HPS buck-boost transformers offer an economical solution to the adjustment of line voltages that are slightly above or below normal. Standard features include:

- 50/60 Hz.
- Available in sizes ranging from 50 VA to 10,000 VA.
- 1ph, welded core construction.
- Made with high quality, high permeability silicon steel laminations.

HPS FORTRESS™ COMMERCIAL ENCAPSULATED TRANSFORMERS

The HPS Fortress™ is an innovative design that provides the ideal solution for commercial applications where quality, ease of installation, and low cost are key. Standard features include:

- 1ph ratings from 50 VA to 37.5 kVA, 3ph from 2 kVA to 150 kVA.
- Standard shield on all 3ph units and 1ph units 750 VA and up.
- NEMA 3R Enclosure.
- CSA and UL approved.

HPS TITAN® ENCAPSULATED TRANSFORMERS FOR HAZARDOUS & HARSH LOCATIONS

The HPS Titan® series are specifically designed for installation in harsh environments. Typical applications are oil & gas plants, marine and shipboard installations, steel mills, mining, etc. Standard features include:

- 1ph ratings from 50 VA to 37.5 kVA, 3ph from 2 kVA to 150 kVA.
- NEMA 3R enclosure (optional NEMA 4, 12 or stainless).
- Meets UL Standard 1604 - Class 1, Division 2, Group A, B, C & D Hazardous Locations (File No. E258346).
- Meets ABS Type Approval (Certificate No. 04-HS435190/1 - PDA).
- Standard shield on all 3ph units and 1ph units 750 VA and up.