Power Dry™ II

Dry-Type, Small Power Transformers
112.5–13,000 kVA three-phase
600V through 35 kV primary voltage
120V through 15 kV secondary voltage
FLEXIBILITY FOR EVERY IMAGINABLE APPLICATION

**Power-Dry II Transformers**

Schneider Electric is a recognized market leader, offering a full range of distinctively Square D®-designed transformer products such as the Power-Dry II transformer. Like all of our transformers, it is manufactured in ISO-registered facilities that use the industry’s leading manufacturing technology, ensuring products of the highest quality and performance.

At Schneider Electric, we are committed to excellence. Our Power-Dry II transformers are built and tested to stringent Square D brand specifications, and meet or exceed applicable ANSI/IEEE, CSA and NEMA standards. These transformers may be UL or cUL labeled upon request.

**Medium-Voltage, Conventional Dry-Type**

Power-Dry II is a medium-voltage, dry-type, world-class distribution transformer. Dry-type transformers are a solid investment, providing excellent mechanical and short-circuit strength, no danger of fire or explosion, no liquids to leak, less weight than comparable cast-coil units, step-lap mitered cores, low total ownership costs and low initial costs.

For more information about Power-Dry II transformers or other products, please visit www.us.SquareD.com or call 1-888-SquareD.
Cost-Efficient

Power Dry II transformers offer an efficient design with low installation, maintenance and energy costs. Their design flexibility makes them ideal for power upgrades, retrofit designs and every other imaginable application.

Flexible Design

Power Dry II transformers use a UL-listed 220°C insulation system, regardless of temperature rating. This provides an optional reserve overload capacity.

The transformer coils are vacuum-pressure impregnated in high-temperature polyester varnish. The process includes oven drying to remove moisture, complete submersion in varnish under vacuum and pressure, and regulated curing using statistically process-controlled equipment to ensure consistency.

The core is manufactured from high permeability, cold-rolled, grain-oriented, precision-cut, silicon steel. Magnetic flux densities are kept well below the saturation point. The step-lap mitered core construction reduces joint fringing, which in turn reduces core losses and exciting current, ensuring optimum performance and minimal sound levels.

Custom designs are available to suit customer preferences. The transformers feature dry powder, state-of-the-art paint that keeps them looking new for years. Special colors are also available.

Varied Applications

Power Dry II transformers meet the requirements for most industrial and commercial applications. Because their finished coils are effectively protected against moisture, dirt and most other industrial contaminants, they are suitable for use in areas where people work and breathe, both indoors and outdoors.

Environmental Information

Power Dry II transformers are intended for use within relatively clean environments. However, the transformer's finished core is coated with a corrosion-resistant sealant, making it well-suited to withstand the harshest environments imaginable.

Because these dry-type transformers do not require fluids, they pose a low fire risk. They are an excellent upgrade option when replacing PCB-filled or gas-filled transformers.

Power Dry II transformers do not require any special waste-disposal considerations.
Power-Dry II Transformer Ratings

112.5–13,000 kVA three-phase (fan cooling allows higher kVA ratings)
Primary voltages: 600V to 35 kV
Primary BIL: Up to 150 kV
Secondary voltages: 120V to 15 kV
Secondary BIL: Up to 75 kV
Temperature rise: 80/115/150° C
ISO 9001 registered
Optional UL and CSA certification

Special Design Options
Seismic qualifications
Special sound requirements
Low X/R ratios
Higher overload capacity
Special altitude requirements
Retrofit designs
Higher efficiency requirements
Special ambient conditions

Applicable Standards
IEEE C57.12.01™
Standard general requirements for dry-type distribution and power transformers including those with solid cast and/or resin-encapsulated windings.

ANSI C57.12.50
Requirements for ventilated, dry-type distribution transformers, 1–500 kVA single-phase and 15–800 kVA three-phase, with high-voltage 601–34,500 volts, low-voltage 120–600 volts.

ANSI C57.12.51
Requirements for ventilated, dry-type power transformers, 501 kVA and larger three-phase, with high-voltage 601–34,500 volts, low-voltage 208Y/120–4160 volts.

ANSI C57.12.55
Conformance standard for transformers — dry-type transformers used in unit installations, including unit substations.

IEEE C57.12.56™
Standard test procedure for thermal evaluation of insulation systems for ventilated, dry-type power and distribution transformers (ANSI).

IEEE C57.12.58™
Guide for conducting a transient voltage analysis of a dry-type transformer coil (ANSI).

IEEE C57.12.59™
Guide for dry-type transformer through-fault current duration (ANSI).

IEEE C57.12.70™
Terminal markings and connections for distribution and power transformers.

IEEE C57.12.80™
Standard terminology for power and distribution transformers (ANSI).

IEEE C57.12.91™
Test code for dry-type distribution and power transformers.

IEEE C57.94™
Recommended practice for installation, application, operation, and maintenance of dry-type general purpose distribution and power transformers.

IEEE C57.96™
Guide for loading dry-type distribution and power transformers (ANSI).