

# Powering Business

The expertise to design and manufacture a full range of dry type transformers



# World Class Construction

## Products

### Industrial Control Transformers

- Single-phase transformers
- Standard efficiency
- 50 to 5000 VA
- 50 / 60 Hz

### Buck-Boost

- Single and three phase encapsulated transformers
- Standard efficiency
- 50 VA to 10 kVA
- NEMA 3R enclosures
- Steps voltage up or down to solve over/under voltage problems economically
- Lighting and commercial applications

### Single-Phase Encapsulated

- Standard efficiency
- 50 VA to 50 kVA
- NEMA 3R enclosures
- Class I, Div 2 (option)
- Lighting, industrial and commercial applications

### Three-Phase Encapsulated

- Standard efficiency
- 3 to 75 kVA
- NEMA 3R enclosures
- Class I, Div 2 (option)

### Single-Phase Ventilated

- DOE / C802 efficiency
- 15 to 667 kVA
- NEMA 3R enclosures

### Three-Phase Ventilated

- DOE / C802 efficiency
- 15 to 2500 kVA
- NEMA 3R enclosures

### Non-Linear, K-Factor

- Non-linear loads
- DOE / C802 efficiency
- 15 to 1000 kVA
- Electrostatically shielded
- Meet harmonic load demands of solid state devices including lighting ballasts, computers and communication equipment

### Drive Isolation

- Drive and motor loads
- Standard / DOE / C802 efficiency
- 3 to 990 kVA
- Meets the demands of AC and DC variable speed drives

### Totally Enclosed Non Ventilated

- Standard efficiency
- 15 to 500 kVA
- NEMA 3R, 4 / 4X / 12 / 12X
- For use in adverse ambient environments

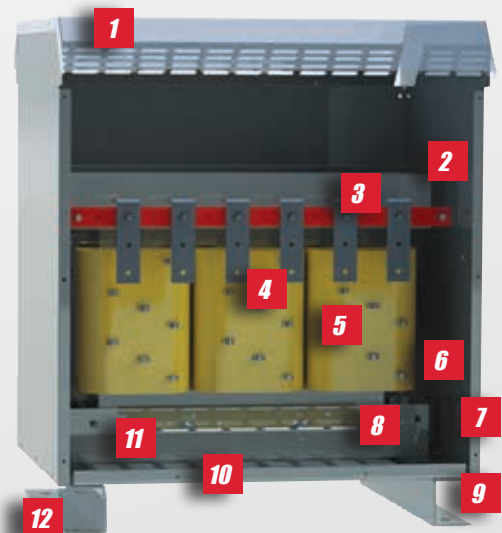
### Power Transformers

- Medium voltage dry-type
- DOE / C802 efficiency
- Through 10,000 kVA
- 5 to 35 kV primaries
- Switchgear, traction, mining and marine duty available

## Features

### Ventilated Transformers

- Standard enclosure – NEMA 3R for indoor and outdoor applications
- 1** Removable cover for access to lifting points
- 2** Tightly stacked electrical steel core provides lower losses and low noise
- 3** Insulated terminal board
- 4** Standard aluminum coils
- 5** Front loop taps are staggered for easy connection
- 6** Flexible core ground strap
- 7** Ground stud bolt
- 8** Vibration isolation pads provide quiet operation
- 9** Side or bottom conduit access for convenient mounting options
- 10** Front cover has slots to meet stationary bolts that hold panel in place during easy installation
- 11** Punched bottom ventilations allow maximum air flow
- 12** Easy access mounting holes



## Highest Standards

Our products are backed by a strict ISO-based quality assurance system. Each unit is thoroughly tested before leaving the plant to ensure proper operation. All products are designed to conform to the appropriate NEMA, ANSI, UL, and CSA standards.

We stand behind each unit we sell with a strong customer service department and Application Engineers knowledgeable in the use of transformers.

## Certifications

Seismic, ABS, UL, CSA, CE, C802



## Seismic Qualified

- Available for both encapsulated and ventilated models
- Wall and floor mounted models rated up to 2.00g, z/h=1.00, Ip=1.5
- Meet International and California Building Codes 2006/2009 IBC and 2007/2010 CBC
- OSHPD # OSP-0109-10
- ICC-ES AC156 seismic qualifications

## Filters, Reactors and Chokes

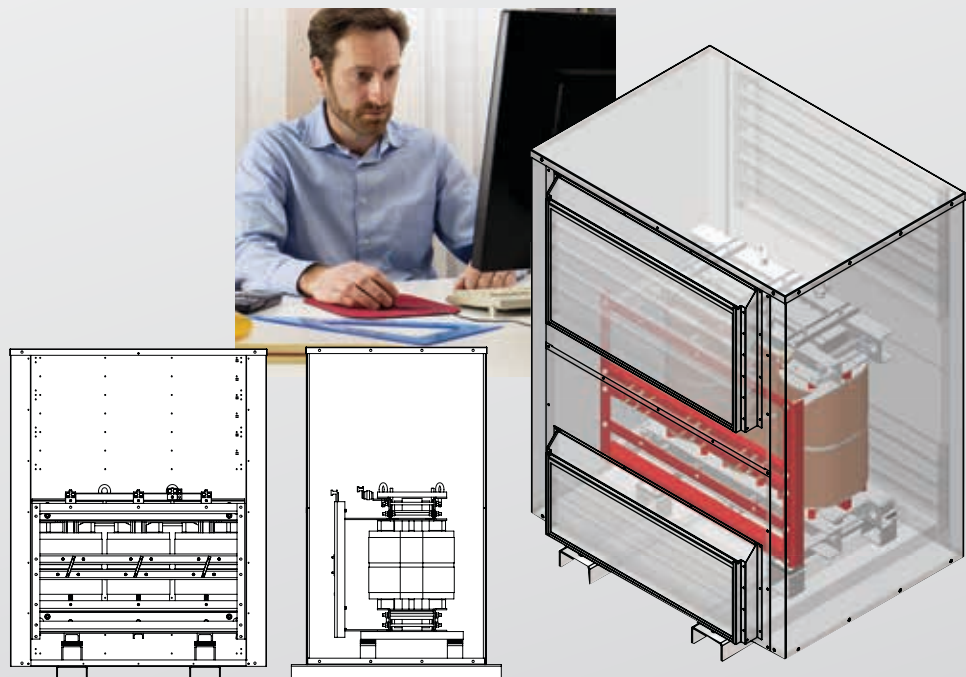
- Armature chokes and ripple filter assemblies to reduce the audible motor noise produced by DC drives
- Line and load reactors used in power factor control and regeneration

## Custom Solutions

### We will design to meet your requirements

Trained staff utilizing state of the art engineering and modeling software provide precision design, documentation and performance calculations prior to commencing manufacturing.

- Power: 50 VA through 10,000 kVA
- Input through 35 kV
- Multiple primaries and secondaries, and phase angles
- Frequencies: 60, 50, 400 or special
- Primary tap configuration
- Core and winding material options
- Ambient temperature and rise
- Impedance
- Inrush
- Electrical noise attenuation (shields)
- Harmonic content and mitigation
- Rectifier / inverter duty: 6, 12 and 18 pulse configurations
- Altitude
- Sound level
- Forced air cooling
- Efficiency at a specified load
- Harsh, indoor or outdoor environmental requirements
- Enclosure style and color: NEMA 1, 3R, 4, 4X, 12, 12X
- Accessories: terminal blocks, fusing, disconnects
- Agency and seismic certifications



# Powering Business

The Pioneer Companies have been innovators of transformer and reactor products since 1915. We enjoy a rich tradition of meeting the highest industry standards for quality, durability, and reliability in the commercial, industrial and OEM markets.

Pioneer's Dry Type Transformer Division continues this tradition today, providing highly-engineered solutions for applications in the utility, industrial, commercial and backup power markets.

## Industries we serve

- Oil and gas
- Transit systems
- Lighting installations
- Elevator equipment
- HVAC
- Commercial construction
- Plant maintenance and repair
- Medical facilities
- Alternative energy
- Battery charging stations
- Switchgear suppliers
- Plant automation
- Data centers
- Robotics machinery
- Power quality equipment
- Drive manufacturing
- Mining sites
- Drilling rigs

## PIONEER TRANSFORMERS: Why us?

### Scale

We produce over 100,000 transformers every year. With this high level of production comes buying power, a broad knowledge base and rapid work flow to meet the needs of our customers' magnetic products in a wide variety of applications and industries.

- Purchasing power of raw materials
- Large engineering staff for quick design turnaround
- Best delivery of custom options

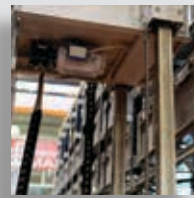
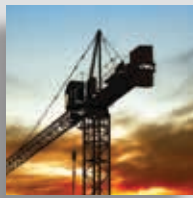
### Support

Our application engineers are available toll-free to help customers select the best transformer to meet their needs and assist in answering installation questions.

Customer service representatives are available to assist in placing and tracking orders, expediting shipments and answering order processing questions.

We're ready to help fulfill your transformer needs, call 800-892-3755 or visit us at [jeffersonelectric.com](http://jeffersonelectric.com).

## The experience and capability to satisfy your unique magnetic needs



Dry-Type Transformer Division Headquarters  
**JEFFERSON ELECTRIC**  
800-892-3755  
[jeffersonelectric.com](http://jeffersonelectric.com)

Canadian Sales  
**BEMAG TRANSFORMERS**  
800-892-3755  
[bemag.ca](http://bemag.ca)

Latin American Sales Office  
**TRANSFELEC INDUSTRIAL SA DE CV**  
+52 (81)1099-5070  
[mfbarahona@gmail.com](mailto:mfbarahona@gmail.com)

### Our Partners

