

K-RATED DRY-TYPE TRANSFORMERS

**Engineered for Harmonic - Rich
Non -Linear Loads**

OMEX K-rated dry-type transformers are designed for facilities with harmonic-rich non-linear loads such as UPS systems, variable frequency drives, servers, LED lighting, and electronic equipment. Available in selected single- and three-phase configurations, these ventilated designs provide added thermal capability for harmonic currents, electrostatic shielding, and application-specific voltage options.



Phase
Single & Three
Selected & standard custom

Rating
15-1,500 kVA
Availability varies by phases

K-Factor
K4/K9/K13/K20
Final selection by load profile



Harmonic Ready

Designed for non-linear loads



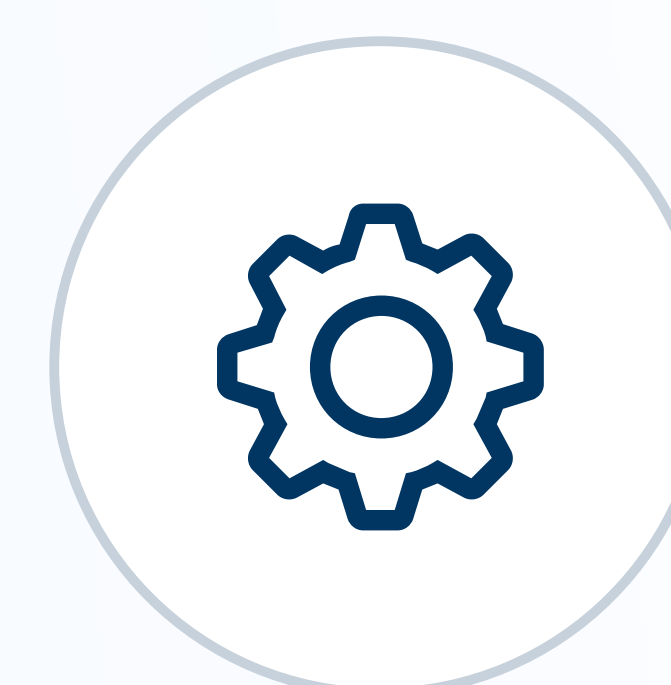
Shielded Design

Electrostatic shield included



Thermal Capacity

220°C insulation system



Engineered Selection

K-factor matched to load profile

Key Benefits

- ✓ K-rated design withstands harmonic heating; K-factor does not remove harmonics from the electrical system
- ✓ Aluminum windings are standard on many designs; copper windings are available
- ✓ NEMA 3R ventilated enclosure with 150°C standard temperature rise; alternate designs available
- ✓ Common configurations include 480Δ-208Y/120 V, 480Δ-240/120 V and 208Δ-480Y/277 V.

Standards & Compliance



Harmonic-loading application guidance

NEMA ST 20

Energy-efficiency reference

UL 1561

Listing available by model

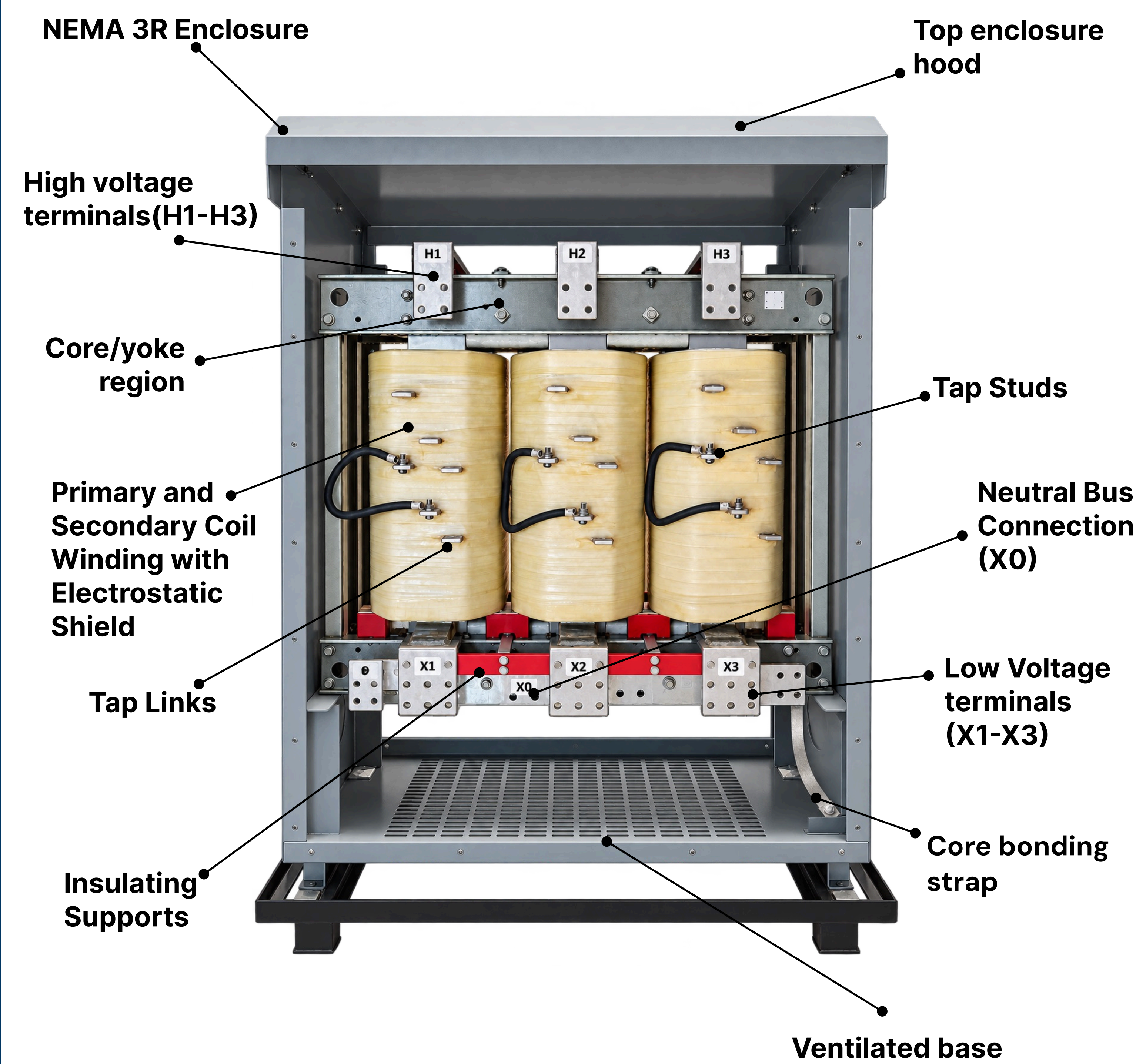
DOE 2016

Where within regulated scope

Specifications

Phase	Selected single-phase and three-phase configurations
Rating Range	15–1,500 kVA; standard availability varies by phase and voltage
K-Factor Options	K1 baseline, K4, K9 and K13 harmonic-rated designs. K20 available on selected configurations
Frequency	60 Hz
Common Voltage Examples	480Δ–208Y/120 V, 480–240/120 V and 208Δ–480Y/277 V
Windings	Aluminum standard on many designs; copper available.
Enclosure	NEMA 3R ventilated enclosure
Temperature Rise	150°C, 115°C or 85°C standard; alternate rises available by design
Shielding	Electrostatic shield.
Maximum Ambient	40°C.
Efficiency	Meets applicable U.S. DOE efficiency requirements within regulated scope
Selection Note	K-factor must be selected from the actual harmonic load profile and confirmed during application review

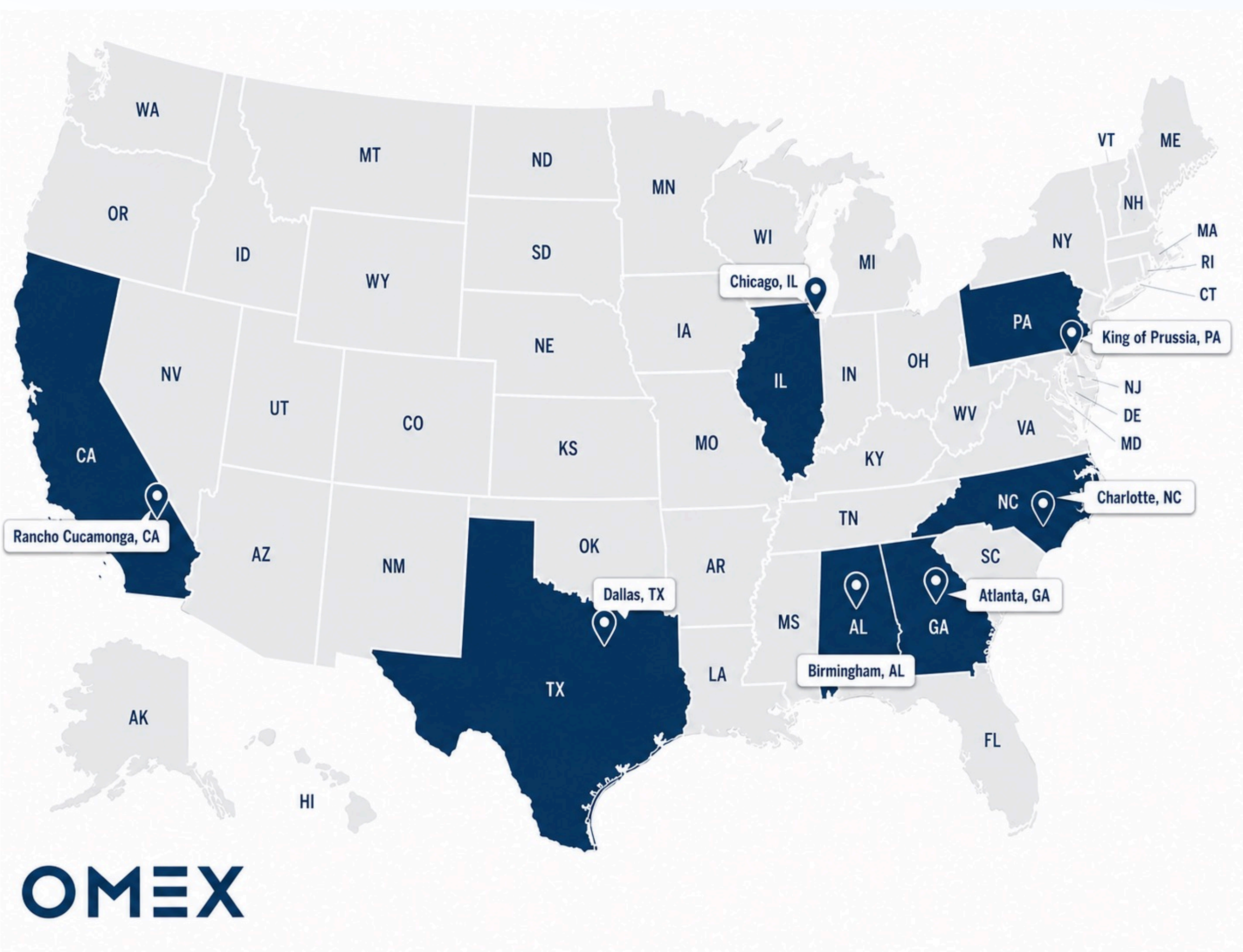
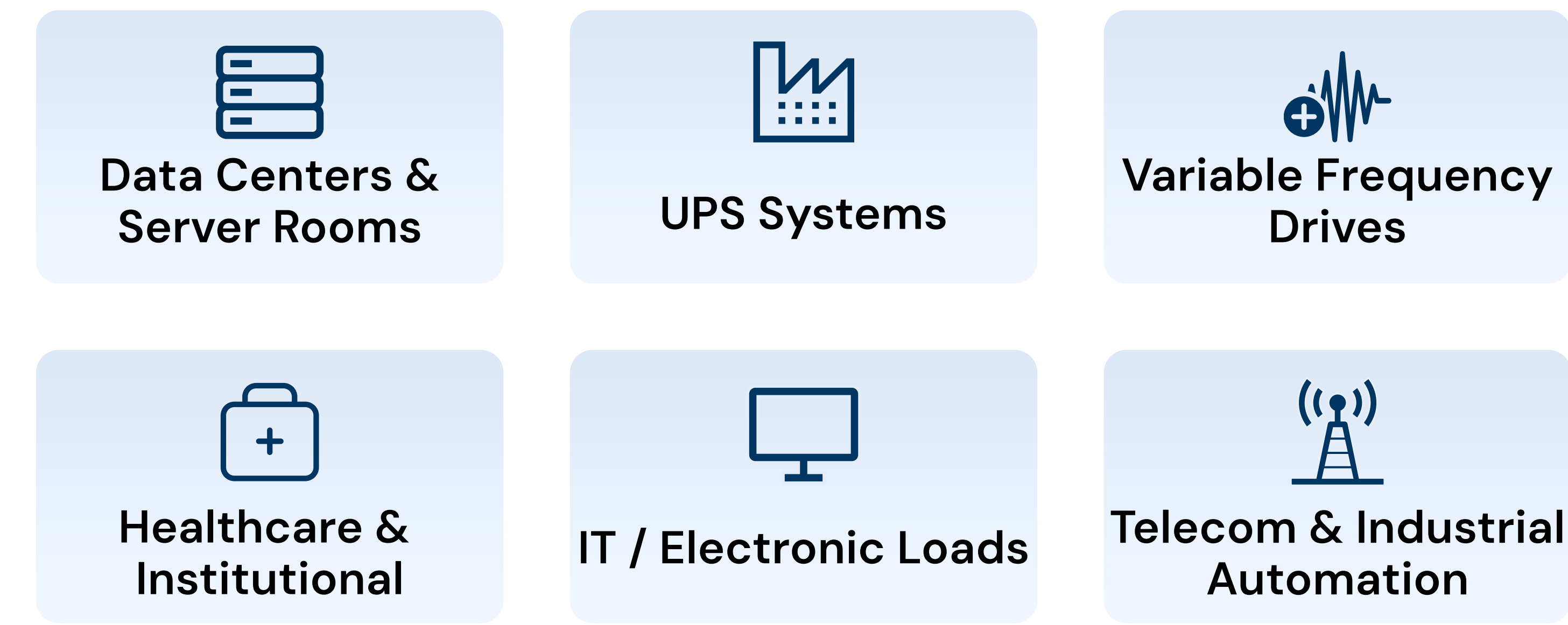
Typical Dry-type Construction



Available Accessories

- ✓ Copper windings
- ✓ Alternate temperature-rise designs
- ✓ Custom primary and secondary voltages
- ✓ Low-noise design options
- ✓ Lug kits
- ✓ Wall-mounting brackets where size permits
- ✓ Vibration-isolation pads
- ✓ Thermal sensors and alarm contacts
- ✓ Special terminal and neutral provisions
- ✓ Project-specific labels and submittals

Applications



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Scan the QR code to learn more about our complete transformer portfolio.

For the Ones // Powering America