Industrial Solutions

QL Dry Type Transformers

Up to 99% efficient

100% tested

by ABB

QL Dry Type Transformers

Trying to make your job easier.

ABB transformers are built to last and are designed with exclusive features. With easy installation and all of the specifications you trust, it's easy to see why ABB QL dry type transformers are the ones contractors prefer.

Designed and equipped to make your job easier

- Lug kit included (up to 150kVA) so you don't have to remember it.
- Free copper ground bar kit (up to 150KVA) so you don't have to remember it.
- Outward-facing mounting feet. Move it into position, mount it, and you're done.
- Quick removal front panel is a real innovation. Don't remove the screws, just loosen them!
- ABB's exclusive wood crate packaging minimizes damage — and hassles.
- Available Fast Ship Service. Order by 1:00 pm and get it the next day at no additional charge.

Specifications and features you trust

- Seismic qualified to the requirements of ASCE 7.05, IEEE-693-2005, and IBC/CBC-2006
- 200% neutral standard
- Full capacity universal taps consisting of two 2.5% above nominal and four 2.5% below nominal
- 220°C insulation system
- Sound levels equivalent to or exceeding NEMA ST-20
- 40°C ambient
- 10kV- BIL
- Aluminum or copper windings
- Copper ground strap
- UL listed
- Standard NEMA 1/2 drip-proof enclosure with optional weather shield kit for field conversion to NEMA 3R outdoor
- Lifting eyes provided in top clamp
- NEMA 3R stainless steel (Type 316) enclosure is available up to and including 150kVA
- Clear comprehensive documentation and labeling
- Single-piece front/back for easier service
- One year limited warranty

QL General Purpose

Designed and equipped to make your job easier

ABB QL general purpose transformers are the brand contractors prefer because they're built to last, easy to install, and priced right.

- Reliable design and quiet performance
- 3-phase from 15-750kVA
- 1-phase from 15-100kVA
- Meets DOE 2016 efficiency

QL K-Factor

How to handle non-linear loads

K-Factor transformers are more robust than standard transformers, so they are better able to withstand the additional heating that accompanies the presence of harmonics in electrical systems. K-factor transformers are designed not to eliminate harmonics, but to withstand their negative effects.

- UL K-Factor Listed. UL 1561 listed
- Full-width copper electrostatic shielding standard
- Effective coupling capacitance 30 PF between primary and secondary
- Meets DOE 2016 efficiency

QL Guard I, II, III Noise Isolation

Extra protection for sensitive equipment

Installations with sensitive electronic equipment –computer rooms, x-ray rooms, electrical laboratories, etc. – need the extra protection offered by ABB's Guard I, II and III transformers.

Guard I

- Grounded copper electrostatic shield between primary and secondary windings
- 120dB common-mode noise protection
- 30dB transverse-mode noise protection
- Meets DOE 2016 efficiency

Guard II

- Grounded copper electrostatic shield between primary and secondary windings
- Noise suppressors and spike/surge suppressors
- 120dB common-mode noise protection
- 60dB transverse-mode noise protection
- Meets DOE 2016 efficiency

Guard III

Guard III harmonic mitigating transformers don't just filter out unwanted electrical noise, they actually reduce the effects of harmonic currents.

- Reduces transformer overheating and high operating temperatures
- Maintains energy efficiency even when harmonics are present in the electrical system
- Helps eliminate power quality problems that K-factor transformers do not
- Meets DOE 2016 efficiency

QL Totally Enclosed Non-Ventilated (TENV)

Totally Enclosed Non-Ventilated (TENV) transformers are an excellent choice for applications where standard dry-type transformer enclosure openings are not acceptable because dust, dirt or lint may be present or because transformers are subject to sprays or controlled wash-down conditions.

- Convenient wiring compartment beneath the transformer has removable front and rear covers
- Clearly labeled copper bus bars are located at the front of the wiring compartment
- All electrical connections between the transformer and bus bars are factory wired
- Does not meet DOE 2016 efficiency

QL Drive Isolation Transformers (DIT)

Built for SCR stresses

QL Drive Isolation Transformers (DIT) are designed specifically to handle the use of SCR control circuitry of adjustable-speed drives. Symmetrically placed taps and added coil bracing are able to withstand the mechanical forces involved. They also reduce line pollution feedback resulting from SCR firing circuits.

- Voltages up to 600V
- Conforms to ANSI, NEMA, UL and IEEE standards
- 11 – 440 kVA, 3-phase
- Does not meet DOE 2016 efficiency

QL Low Noise

The quiet performers

These low noise transformers operate at reduced noise levels. The vibrations within the magnetic steel core have been greatly reduced, thus reducing transformer hum. QL Low-Noise transformers operate at 3dB less than NEMA/ANSI standards.

- Great for noise-sensitive areas
- Operation at –3dB or –5dB below NEMA standard
- 150°C, 115°C or 80°C rise
- Meets DOE 2016 efficiency

QL Guard I, II, III Noise Isolation

QL Totally Enclosed Non-Ventilated (TENV)

QL Drive Isolation Transformers (DIT)




QL Transformer Selection Guide

Application	QL General Purpose	QL K-Factor (K=4)	QL K-Factor (K=13)	QL K-Factor (K=20)	QL Low Noise	QL Drive Isolation
AC or DC variable speed drives						●
Computer installations				●		
Critical care facilities				●	●	
Data processing equipment circuits				●		
HID lighting		●				
Hospital operating rooms				●		
Incandescent lighting	●	●				
Induction heaters		●				
Instrumentation				●		
Motor generators (without solid state drives)	●	●				
Motors	●	●				
Multiple receptacle circuits in heath care facilities			●			
Office buildings			●		●	
PLC & solid state controls		●				
Production or assembly line equipment			●			
Programmable controllers				●		
Rectifier outputs						●
Resistance heating	●	●				
Schools & classroom facilities			●		●	
SCR variable speed drives				●		
UPS with optional input filtering		●				
UPS without optional input filtering			●			
Welders		●				
X-ray equipment				●		

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