

Buck-boost

Encapsulated transformers



Buck-boost transformers are small, single-phase, dry type distribution transformers designed and shipped as insulating/isolating transformers. They have a dual voltage primary and a dual voltage secondary. These transformers can be connected for a wide range of voltage combinations.

01 Wiring diagram for product as shipped

The most common use is to buck (lower) or boost (raise) the supply voltage a small amount, usually 5 to 27%. Buck-boost transformers comply with NEC Article 210-9, Exception 1, when field connected as an autotransformer.

ABB bucking and boosting transformers provide an economical and convenient means for bucking or boosting voltage, usually no more than $\pm 20\%$ on single- and three-phase circuits. They are compact, relatively light in weight, and can be easily installed for indoor or outdoor service.

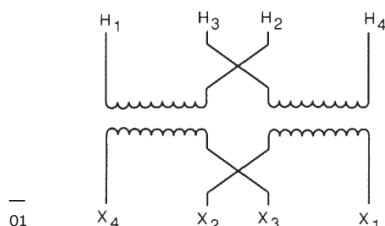
Buck-boost transformers are employed primarily for boosting single- and three-phase circuits by connecting them as autotransformers. When connected as an autotransformer, only the low-voltage, high-current capacity secondary windings are required to carry the load. Because this load is only transformed over a small change in voltage, the buck-boost transformer can handle loads many times its nameplate kVA rating.

Benefits

- Efficient insulating materials permit compact size and light weight
- Dual voltage primary and dual voltage secondary for maximum versatility
- Large, front-accessible wiring compartment permits fast, easy wiring
- Convenient conduit knockouts located on side, bottom and back of wiring compartment
- Need help determining kVA? Use our calculator in empower Quote
- Many ABB buck-boost transformers fit competitor mounting footprints
- Indoor or outdoor service
- UL and cUL Listed
- Qualified to the seismic requirements of IEEE-693-2018, CBC 2019 and IBC 2018

Technical specifications

- Capacity: 0.05 kVA to 3 kVA
- Primary voltages: 120, 240 or 480 V
- Secondary voltages: 12, 16, 24, 32, or 48 V



Buck-boost autotransformer connection diagrams

Use empower Quote to find the corresponding configuration

