

### Summary

Single-phase buck-boost transformer. 2.5 kVA capacity. 120/240V primary, 12/24V secondary. Resin encapsulated. NEMA 3R indoor/outdoor enclosure. cETLus listed, wall mount.

### Product Description

This single-phase buck-boost transformer is designed for voltage adjustment in commercial, industrial, and OEM applications. Rated at 2.5 kVA with 120/240V primary and 12/24V secondary windings, this unit can be wired as an isolation transformer or configured as a buck-boost autotransformer to raise or lower line voltage.

The encapsulated core construction uses epoxy resin potting to eliminate audible hum and provide reliable thermal performance under continuous duty. Aluminum windings with 180°C insulation class ensure long-term durability.

Housed in a NEMA 3R rated steel enclosure with ANSI 61 grey finish. Features a front access wiring panel, six 3/4" NPT knockouts (side and bottom), and a surface mounting bracket for wall mount installation.



TX-B3-025K-124202 - NEMA 3R Encapsulated, cETLus Listed

### Specifications

| Specification       | Value                    | Specification         | Value                        |
|---------------------|--------------------------|-----------------------|------------------------------|
| Phase               | Single Phase (1-PH), AC  | Transformer Type      | Isolation Transformer        |
| Capacity            | 2.5 kVA                  | Configuration         | Encapsulated Autotransformer |
| Primary Voltage     | 120/240V                 | Primary Termination   | Lead Wires                   |
| Secondary Voltage   | 12/24V AC                | Secondary Termination | Terminal Lugs                |
| Frequency           | 50/60 Hz                 | Termination Access    | Front Access Cover           |
| Insulation          | 180°C                    | Winding Material      | Aluminum                     |
| Temperature Rise    | 115°C                    | Enclosure Material    | Steel                        |
| Maximum Primary OCP | 30A                      | Finish Color          | ANSI 61 Grey                 |
| Wiring Knockouts    | (6) 3/4" NPT             | Weight                | 52 lbs                       |
| Dimensions          | 7.68"W x 6.38"D x 12.2"H |                       |                              |

### Ratings & Certifications

- Listed for United States
- Listed for Canada
- NEMA 3R Indoor/Outdoor Enclosure
- Built to UL-50 Standards
- CE Certified
- Epoxy Resin Encapsulated
- RoHS Compliant
- Can be Wired as Buck/Boost
- Can be Wired as Autotransformer

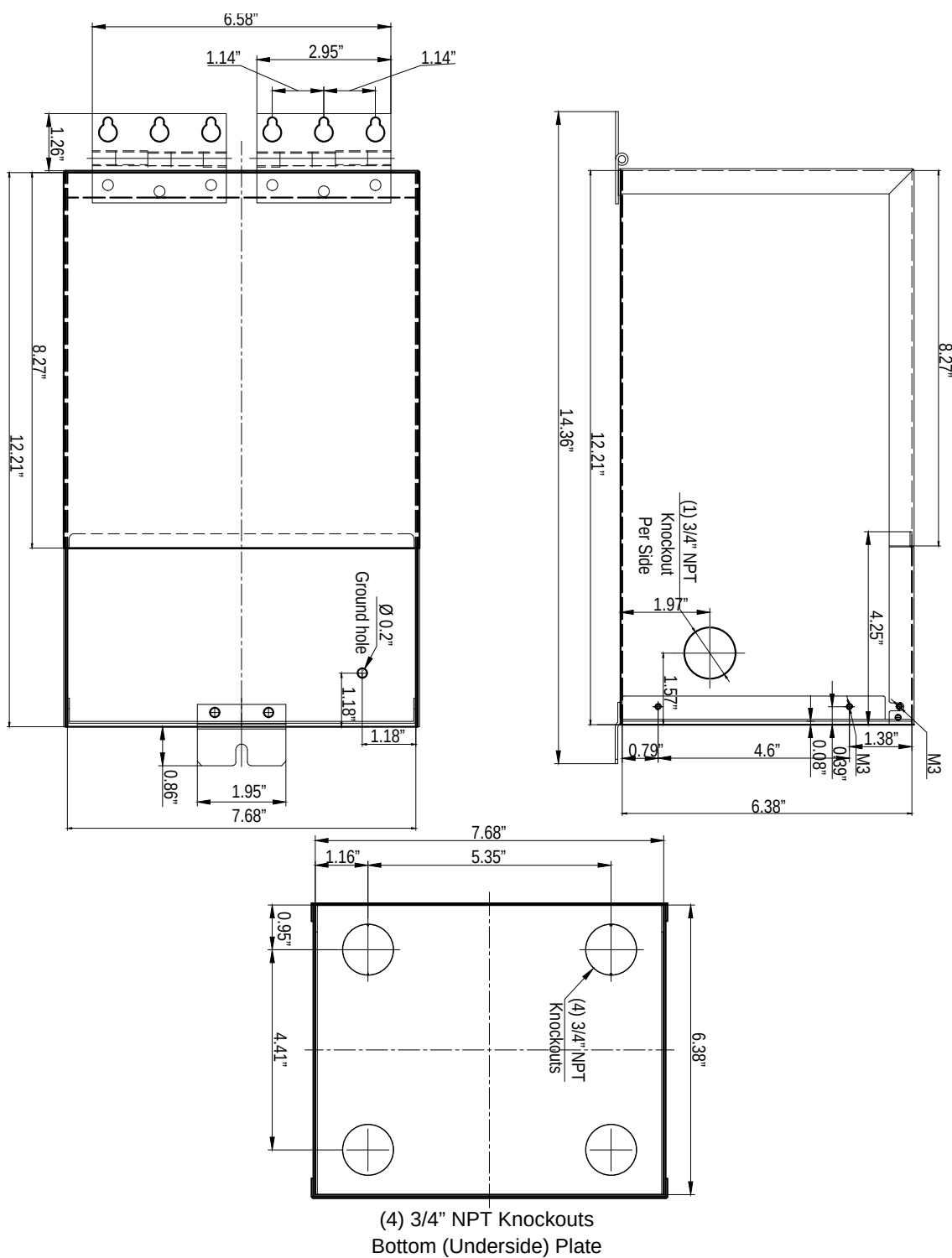


### Common Applications

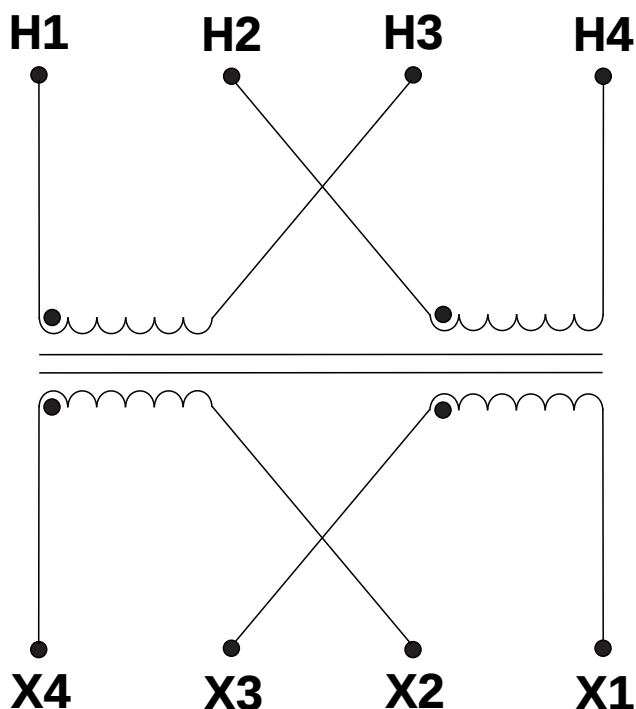
- HVAC & Minisplit
- CNC Machines
- Pump Stations
- Packaging Machines
- Commercial Kitchen Equipment
- Motor Loads
- EV Chargers
- Server Racks & IT Equipment
- Refrigeration & Walk-in Coolers
- Fans & Blowers
- Conveyor Systems
- Overhead Doors

**Important:** Buck-boost transformers applied as autotransformers do not provide circuit isolation and do not create a neutral. Contact us if your application requires isolation or neutral creation.

## Dimensions



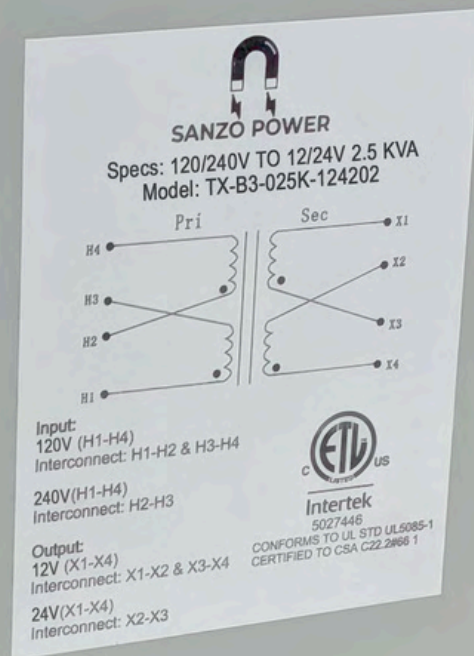
## Wiring Diagram



This unit is approved for connection as a buck/boost autotransformer to adjust line voltage up or down. All autotransformer installations must be wired in accordance with the applicable wiring configurations shown in Diagrams A2–P2.

- Diagrams A2-D2 for single phase
- Diagrams E2-H2 for three phase open delta
- Diagrams I2-L2 for three phase wye

Ensure that the primary and secondary windings are connected as illustrated for the intended buck or boost function. Confirm that voltage and kVA ratings are suitable for the load before energizing the transformer.



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*Side View*





*Rear View - Surface Mount Bracket*



*Wiring Compartment - Terminal Leads*





*Interior - Epoxy Resin Encapsulated Core*