

# Control Power Transformers

## Installation Instructions

c3controls' Series CPT Control Power Transformers are open-type control transformers ranging from 50 to 5000VA with reliable output voltage stability and designed for lower inrush applications (Lighting, Motor Control, Circuit Isolation, etc). These transformers are commonly preferred solutions to power control circuits, including: PLCs, protective relays, meters, control panels, and other auxiliary devices. Additionally, they are widely used in electrical substations, data centers, and other power systems.

### **Safety Instructions:**

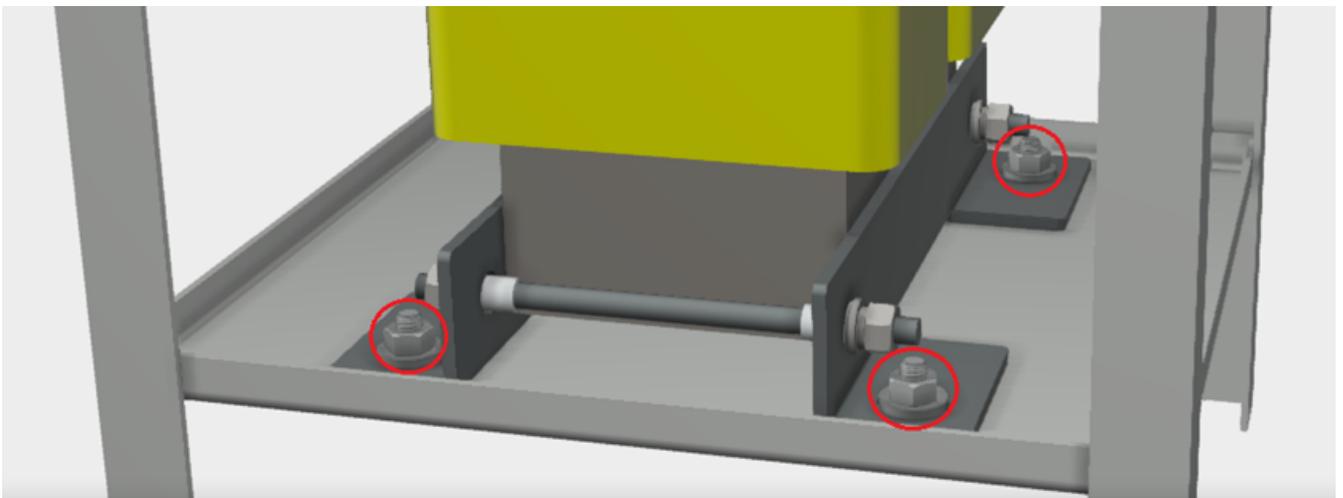
1. Use appropriate Personal Protective Equipment (PPE): Safety gloves, safety boots, and protective eyewear.
2. Lift with caution: As the higher VA transformers are considerably much heavier, appropriate lifting of equipment must be used. (e.g., an overhead / Mini crane / Forklift).
3. Two-person operation: Recommended for added safety.
4. Secure the work area: Ensure the area is clear of obstacles and properly lit.

### **Important Installation Notes:**

1. Before commencing installation, disconnect the power supply to prevent the risk of electrical shock or damage to equipment.
2. Transformers are foot-mount, using M4 (50-750VA) & M6 (1000-5000VA) screws.
3. The chosen mounting surface for the transformer installation must be of sufficient size to support the transformer's weight and comply with all specified mounting criteria.
4. Unpacking of Transformers with Higher VA Ratings (1500-5000VA):

#### **a. Unboxing**

- i. Ensure the surface is flat and stable to prevent the transformer from tipping during the unboxing process.
- ii. Carefully lift and remove the cardboard box from the transformer and ensure no parts or accessories remain inside the box.
- iii. Cut or peel off the plastic wrap from around the transformer and metal cage.
- iv. Locate the bolts securing the transformer to the metal frame and use the appropriate spanner (10mm or 3/8") to unbolt the transformer from the metal frame.
- v. Ensure the transformer remains stable throughout the process.

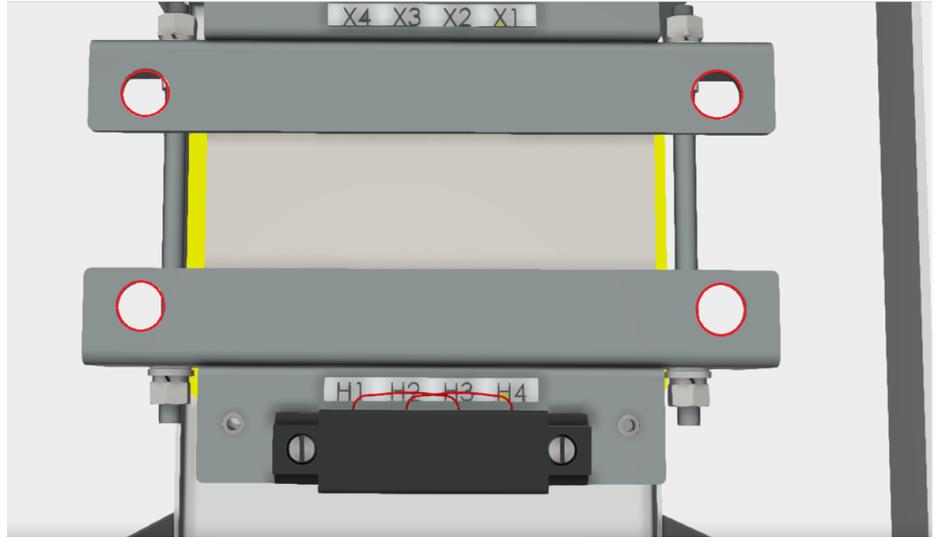
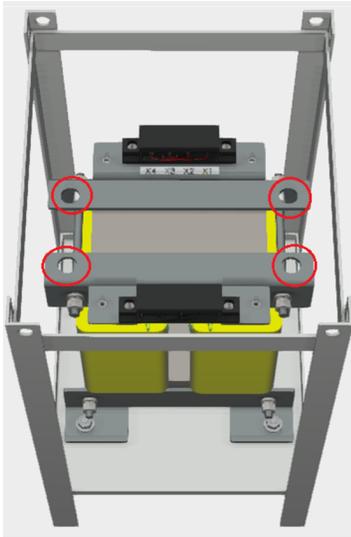


#### **WARNING**

- Disconnect power before proceeding with any work on this equipment.
- Installation and maintenance by technical personnel only.
- Install products in accordance with the operation instructions and the NEC (U.S. National Electrical Code) regulations or local applicable codes and standards.

## b. Lifting and Handling the Transformer

- i. Identify the lifting holes on clamps of the transformer designed for handling.



- ii. Securely attach a lifting hook to the designated points and use an appropriate lifting device to raise the transformer, if necessary.
- iii. Important: Always lift the transformer evenly to avoid tilting or sudden shifts.
- iv. Lower the transformer carefully to the designated worksite and ensure it is aligned properly before releasing the lifting device.

## c. Installation Checklist:

- i. Verify that no damage occurred during movement.
- ii. Bolt the transformer firmly to its installation frame or platform.
- iii. Follow all safety protocols when connecting to the electrical system.
- iv. Ensure proper functioning of the transformer before full operation.
- v. Connect the primary and secondary sides as per the wiring diagram provided on the product or in the catalog, and ensure the wire sizes are appropriately selected as specified.



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