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# Trystar Tuff Panel

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## Installation, Operation, and Maintenance Manual

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### **IMPORTANT:**

Save this instruction sheet for future use  
of the product

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### **Warning**

Electrical potentials hazardous to human life can exist within this equipment when energized. Disconnect all input power before opening case or touching internal parts.

Use proper lock-out/tag-out procedures.

The Information contained herein may not cover all variations in equipment or provide for all contingencies. Failure to follow instructions may result in death or serious injury.

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## Introduction

This manual covers up to 600 Volt, single and three phase Trystar Tuff Panels. These instructions set out the limiting factors for satisfactory performance of the panels. The information contained herein outlines and describes the proper inspection, installation and maintenance of the panels.

## Inspection upon Receiving

Panels should be carefully inspected upon receipt to ensure that no damage has occurred during shipment. Any damage should be reported at once and a claim should be placed against the transportation company. If any problems are found or parts are missing please contact Trystar at 1-866.TRYSTAR.

## Installation and Operating Safety

The panels are provided with a door and a dead front to facilitate installation and should never be operated without these securely mounted in place. A safety program must be established, verified and followed by all personnel involved with the cabinets.

## Grounding

The panel should be grounded securely and effectively as a safety precaution. Grounding must be in accordance with NEC and local electrical codes.

## Wire Selection

Connection cables must be rated for at least 90 degrees C. Connection cables must meet NEC and local electrical codes.

## Technical Specifications

This panel is rated at 40 degree C.  
The panel is rated at 95% humidity.  
This panel is also rated at 65KVA.

## Inspection During Installation

The panel should be carefully inspected for any damage due to handling after receipt. The nameplate rating on the unit should be checked against the job specifications to ensure use of the correct panel. The panel should be connected only as described on its nameplate to match the available line voltage.

## Installation and Operation

### Procedures

1. Ensure the area is well ventilated and free from explosive or corrosive gas or vapors.
2. Check the panel nameplate and verify that it is the correct line and load voltage for the application.
3. Shut off primary voltage using approved lock-out/tag-out procedures. If energizing this panel from a generator, do not start generator until the end of this procedure. Also make sure all circuit breakers in the Tuff Panel are in the off position.
4. Ground the cabinet in accordance with NEC and local electrical codes.
5. Connect supply conductors to the panel via the Cam Lock connection points on the back of the panel. Connect in labeled sequence making sure that the connections are fully inserted and turned clockwise to full stop position.

6. Use properly sized cable determined by the NEC.
7. Connect any loads to the receptacles mounted to the side of the Tuff Panel at this time.
8. If for any reason you suspect the unit has been exposed to moisture during transit or storage, it should be dried out before being energized.
9. Ensure the dead front and main door are closed and latched
10. Re-energize primary voltage to the Tuff Panel, or start generator to power up the Tuff Panel.
11. Main door may now be opened to turn on desired Tuff Panel breakers. Dead front should always remain closed during operation.

## **Maintenance**

The Tuff Panel shall only be maintained, serviced and inspected by qualified personnel.

All power to the Tuff Panel must be disconnected and tested to confirm that the box is safe to work on.

Check Integrity of the enclosure by visually inspecting it for any defects.

### Check all badges

1. Make sure all badges are clean and legible.
2. If badges are losing adhesion, replace.

### Check door latches and cams

1. Make sure that the door latches turn freely.
2. Make sure that when latched the door is firmly closed so that the gasket creates a good seal.

### Check door hinges

1. Make sure door hinges swing freely and do not bind.
2. Make sure the fasteners for door hinges are tight

### Check Phase Lights

- a. Ensure that the phase lights only turn on when corresponding cam locks are plugged in

## **Spare parts.**

If any of the parts need to be replaced contact Trystar at 1-866-TRYSTAR.