

# ALUMINIUM INDUSTRIES LTD. RELAYS DIVISION

Receiving, Handling, and Storing of ALIND make Numerical Control and Relay Panels

### Receiving

**IMPORTANT:** Delivery of equipment from **ALIND** to the carrier is considered delivery to the buyer. The carrier becomes liable for any damage that occurs during transit. It is then the buyer's responsibility to notify the proper party if damage is found. The buyer may forfeit any right to recovery for loss or damages by failing to comply with the following steps.

- 1 Upon delivery of the ALIND control & Relay panel, inspect the shipment for lost items and any damage that may have occurred during transit. If the package appears to be damaged, it may be necessary to unpack the equipment and inspect it for further damage.
- 2 In case there is evidence of loss or damage, the buyer must follow this procedure:
  Note on the delivery receipt that the equipment being received is damaged.
  Contact the carrier that made the delivery and schedule an inspection.
  Inform the ALIND representative that the equipment is damaged.

# Handling

**Attention:** Large or freestanding Control & Relay panels are top- and front-heavy. To avoid personal injury and structural damage to the industrial control panel, never attempt to lift or move the industrial control panel by any means other than those listed in this publication.

These guidelines are provided to help avoid personal injury and equipment damage during handling and facilitate moving the large or freestanding control panel at the job site.

Due to varying control panel configurations, a number of different shipping skids are used. To help prevent distortion and minimize tipping of the control panel during the moving process, keep the shipping skid bolted to the control panel until the control panel is delivered to its final installation area.

Handle the control panel carefully to avoid damage to the components, enclosure, and finish. Keep the control panel in an upright position. Before moving the control panel, make sure that the route is clear of all obstructions and that fellow workers are a safe distance away.

### Use a Forklift Truck

ALIND control & Relay panels have shipping skids that facilitate the insertion of lift truck forks, with fork access from the narrow end.

- 1. Verify that the forklift truck can handle the weight and size of the control & Relay panel safely.
- 2. Forklift only from underneath the shipping skid, by using the skid to support the load.
  - a. Carefully position the industrial control panel on the forks for proper balance, noting that control & Relay panels are top- and front-heavy.
  - b. Make sure that the forks support the load.
  - c. Keep the load against the carriage.
  - d. Tilt the load backward toward the mast of the forklift truck.
- 3. Use a belt to secure the control & Relay panel to the forklift truck.



#### **Overhead Lifting**

Overhead lifting provides a convenient method for moving industrial control panels. This handling method is recommended for industrial control panels that are supplied with lifting angles (including NEMA Type 3R construction with optional lifting angle) or lifting eyes, follow the overhead lifting procedure.

1. Attach rigging to lifting means.

ATTENTION: Verify that the load rating of the lifting device is sufficient to handle the load safely. See the shipping weights on the packing slip enclosed in the shipment.

- 2. Do not pass ropes or cables through the support holes in the lifting angle. Use slings with load-rated hooks or shackles.
- 3. Select or adjust the rigging lengths to compensate for any unequal weight distribution of the load and support the industrial control panel in an upright position.
- 4. Reduce tension on the rigging and compression on the lifting angle by making sure the angle between the lifting cables and vertical plane does not exceed 45°.

#### **Lifting Sling**

The use of a lifting sling is the preferred method for overhead lifting of export packaged sections, but you can use this method for all types of sections without a lifting angle. Follow the lifting sling procedure.

- 1. Place the lifting sling under the shipping platform.
- 2. The spreader bar must have a larger span (overhang) than the Control & Relay panel load.
- 3. Carefully stabilize the Control & Relay panel during handling

### Storing

If it is necessary to store the industrial control panel for any length of time, take the following precautions:

- · Wrap the control panel in a covering of heavy-duty plastic or similar material to help prevent the entry of dirt and dust.
- For industrial control panels not installed and energized immediately, store in a clean, dry place. Maintain a storage temperature between -30...+65°C (-22...+149 °F). If the storage temperature fluctuates or humidity exceeds 60%, use a space heater to help prevent condensation. We recommend that you store industrial control panels in a heated building that offers adequate air circulation and protection from dirt and water.
- Control panels that are designed for indoor applications do not keep in outdoor storage. If they are to be stored outdoors, install temporary electrical heating to help prevent condensation and add packaging for protection from the outside elements.