INSTRUCTIONS

RECEIVING, HANDLING, AND STORING INDUSTRIAL CONTROL PANELS

Receiving

IMPORTANT

Delivery of equipment from Rockwell Automation 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 industrial control 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 the event that there is evidence of loss or damage, the buyer must follow the procedure outlined below:
   - 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 local Rockwell Automation representative that the equipment is damaged.
   - Retain all product packaging for review by the carrier’s inspector.

For further assistance, contact Rockwell Automation support at (414) 382-1616. Navigate through the call tree for Allen-Bradley Industrial Control products. For sensors, safety, connection system products press 1, for industrial control products press 2, and for access to the technology support main menu, press 3.
Receiving, Handling, and Storing Industrial Control Panels

Handling

To avoid personal injury and damage to the industrial control panel, never attempt to lift or move the industrial control panel without the use of lifting aids and proper lifting techniques. Large or free-standing industrial control panels can be top and front-heavy and should not be lifted or moved by means other than those listed in this publication.

The following guidelines are provided to help avoid personal injury and equipment damage during handling and facilitate moving the large or free-standing industrial control panel at the job site.

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

Handle the industrial control panel carefully in order to avoid damage to the components, enclosure, and finish. Where possible, keep the industrial control panel in an upright position. The industrial control panel should not have been tipped or laid flat during shipment unless intentionally done by the factory. Before moving the industrial control panel, make sure that the route is clear of all obstructions and that fellow workers are a safe distance away.

Industrial control panels can be similar in size, shape, and weight to motor control centers and should be handled by a “qualified person” as defined by NEMA standards. For this definition and other references on the handling of motor control centers and large industrial control panels, refer to NEMA standards publication number ICS 2.3, Instructions for the Handling, Installation, Operation, and Maintenance of Motor Control Centers.

Forklifting

Many large industrial control panels have shipping skids that facilitate the insertion of lift truck forks, with fork access from the narrow end.

Some industrial control panels have flat shipping skids. Forklift flat shipping skids from the front or broad side. When forklifting a flat shipping skid, use a pry bar (Johnson bar) to lift the skid enough to insert the forks under it.
Receiving, Handling, and Storing Industrial Control Panels

Refer to Figure 1 Forklifting a large industrial control panel and follow the forklifting procedure outlined below.

1. Ensure that the forklift truck can handle the weight and size of the industrial control panel safely.

2. Forklift only from underneath the shipping skid, using the skid to support the load. Carefully position the industrial control panel on the forks for proper balance, noting that industrial control panels can be top- and front-heavy. Make sure that the forks support the load. Keep the load against the carriage. Tilt the load backward toward the lift truck’s mast.

3. Use a belt to secure the industrial control panel to the forklift truck.

4. Start and stop the forklift truck gradually and slowly, avoiding jerky movements. When traveling with the load, drive slowly with the forks carried as low as possible, consistent with safe operation.

For further information on the use of forklift trucks, refer to National Safety Council Data Sheet I-653.

Figure 1 Forklifting a large industrial control panel
Overhead Lifting

Overhead lifting provides a convenient method for moving industrial control panels. This handling method is recommended for industrial control panels supplied with lifting angles (including Type 3R construction with optional lifting angle) or lifting eyes. Refer to Figure 2 and 3 and follow the overhead lifting procedure outlined below.

1. Attach rigging to lifting means.

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 ensuring the angle between the lifting cables and vertical plane does not exceed 45°.

**ATTENTION**

Ensure that the load rating of the lifting device is sufficient to handle the load safely. Refer to the shipping weights on the packing slip enclosed in the shipment.

**ATTENTION**

Some industrial control panels contain heavy, mounted equipment, such as transformers, that could be adversely affected if tilted.
Receiving, Handling, and Storing Industrial Control Panels

Figure 2 Overhead lifting an industrial control panel with single lifting angle

Figure 3 Overhead lifting an industrial control panel with dual lifting angles
Using a lifting sling is the preferred method for overhead lifting of crated or export packaged panels, but it may be used for all types of uncrated panels, without lifting eyes or angles. Follow the lifting sling procedure below:

1. Place the lifting sling under the shipping platform.

2. The spreader bar must have a larger span (overhang) than the industrial control panel load.

3. Carefully stabilize the industrial control panel during handling. All rigging must be designed to support the load (refer to shipping weights) with the appropriate safety factor.

Figure 4 Lifting sling on a crated or export packaged industrial control panel
Figure 5 Lifting sling on an uncrated industrial control panel without lifting angle

CAUTION: Sling must be placed under skid and located at cross member of skid.
Receiving, Handling, and Storing Industrial Control Panels

Rod or Pipe Rollers

With the aid of pinch bars, pipe rolling provides a simple method of moving industrial control panels on one floor level if there is no significant incline. Refer to Figure 6 Pipe rolling an industrial control panel and follow the procedure outlined below.

1. Carefully ease the shipping platform over the pipes until the pipes support the full weight of the industrial control panel.

2. Roll the industrial control panel to its designated location. Use extreme caution to steady the load and prevent it from tipping.

Figure 6 Pipe rolling an industrial control panel

Storing

If it is necessary to store the industrial control panel for any length of time, consult the factory for special instructions.