



CENTERLINE® 2500 Motor Control Centers Receiving, Handling and Storing

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 motor control center, inspect the shipment for lost items and any damage that may have occurred during transit. Refer to the packing slip for a list of items included in the shipment. If the package appears to be damaged, unpack the equipment for further inspection.
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 your local Rockwell Automation representative that the equipment is damaged.
 - Retain all product packaging for review by the carrier's inspector.

For further assistance, contact your Rockwell Automation representative.

Handling

ATTENTION

Follow local codes and guidelines in addition to your company safety procedures when handling motor control centers.

To avoid personal injury and structural damage to the motor control center, never attempt to lift or move the motor control center by any means other than those listed in this publication. Motor control centers are top- and front-heavy.

The following guidelines are provided to help avoid personal injury and equipment damage during handling, and to facilitate moving the motor control center at the installation site.

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

Handle the motor control center carefully in order to avoid damage to the units, columns and paint. **Keep the motor control center in an upright position.** The motor control center should not have been tipped or laid flat during shipment. Before moving the motor control center, make sure that the route is clear of all obstructions and that fellow workers are a safe distance away.

Forklifting

CENTERLINE 2500 motor control centers have shipping skids that facilitate the insertion of lift truck forks, with fork access from each side.

Refer to the following forklifting procedure.

ATTENTION

Ensure that the forklift truck can handle the weight and size of the motor control center safely. Shipping weights can be found on the packing slip included with each shipment.

1. Forklift only from underneath the shipping skid, using the skid to support the load with the appropriate safety factor. Carefully position the motor control center on the forks for proper balance, noting that motor control centers are 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.
2. Use a belt to secure the motor control center to the forklift truck.
3. 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.

Figure 1 Using a Forklift to Move a Motor Control Center



Overhead Lifting (Crane or Hoist)

Overhead lifting is the recommended method for moving motor control centers supplied with lifting angles. CENTERLINE 2500 Motor Control Center columns are provided with at least one lifting angle. Refer to the figure

with the appropriate number of lifting angles for your motor control center and follow the overhead lifting procedure.

ATTENTION



Ensure that the load rating of the lifting device is sufficient to handle the load safely. Refer to the packing slip included with the shipment for weights.

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1. Attach rigging to overhead crane, hoist or similar lifting device.
 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 motor control center 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



Some motor control centers contain heavy mounted equipment that could be adversely affected if tilted.

Figure 2 Overhead Lifting a Motor Control Center With One Lifting Angle (Front-Only Column)

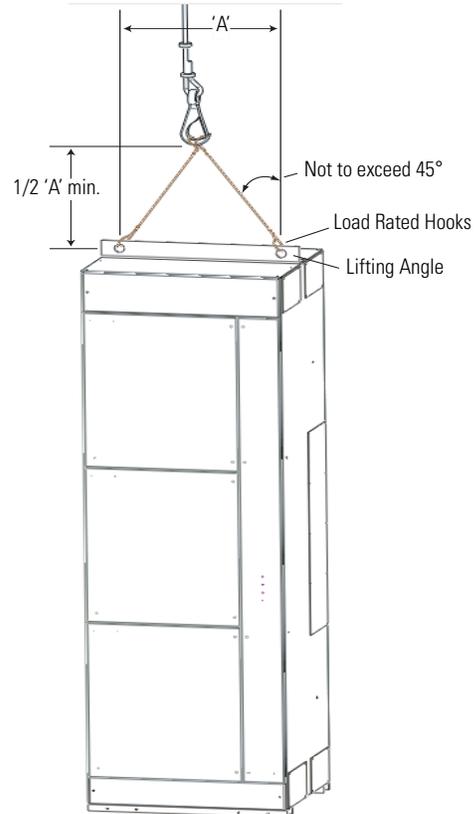
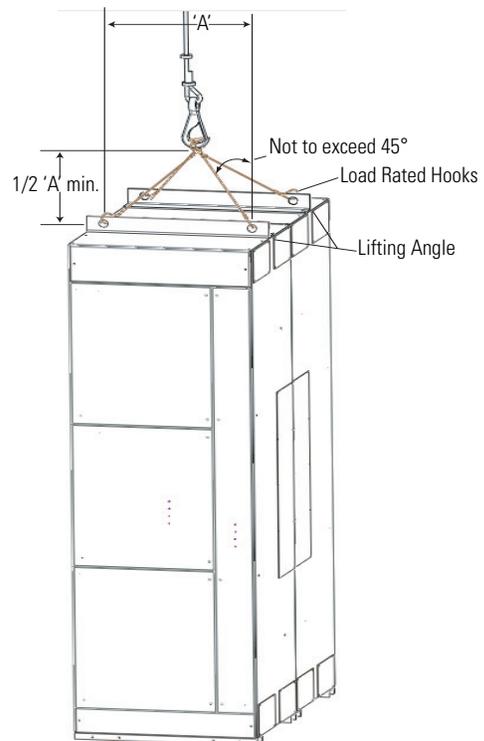


Figure 3 Overhead Lifting a Motor Control Center With Two Lifting Angles (Double-Front Columns)

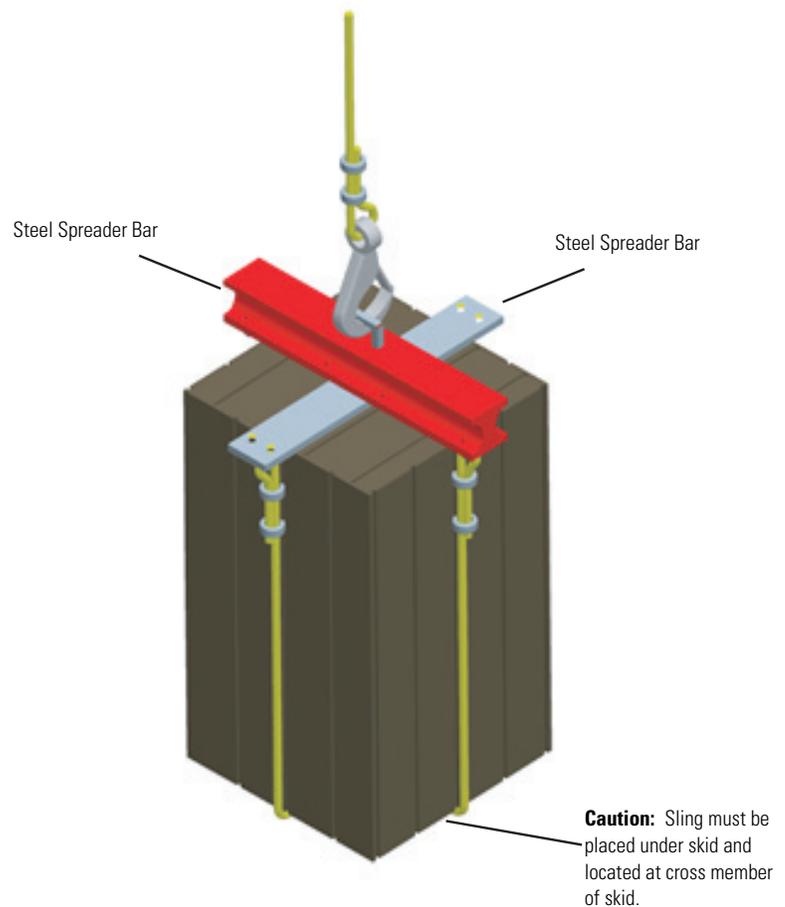


Lifting Sling

Using a lifting sling is the preferred method for overhead lifting of heavy duty/export packaged columns, but it may be used for other types of columns. Refer to the following procedure.

1. Place the lifting sling under the shipping platform. Ensure that slack has been eliminated and that the lifting sling remains in place under the load.
2. The spreader bar must have a larger span (overhang) than the motor control center load.
3. Carefully stabilize the motor control center during handling. All rigging must be designed to support the load (refer to the packing slip for weight) with the appropriate safety factor.

Figure 4 Lifting Sling on a Heavy Duty/Export Packaged Motor Control Center



Storing

CENTERLINE 2500 motor control centers are designed to be stored according to the conditions described in IEC 60439-1:1999 + A1:2004, 6.3.1. If it is necessary to store the motor control center for any extended length of time, take the following precautions:

1. Wrap the motor control center in a covering of heavy-duty plastic or similar material to help prevent the entry of dirt and dust.
2. Motor control centers not installed and energized immediately must be stored in a clean, dry place. Maintain a storage temperature between -25°C and $+55^{\circ}\text{C}$. If the storage temperature fluctuates or humidity exceeds 60%, use a space heater (contact your local Rockwell Automation representative for more information) to help prevent condensation. It is preferable to store a motor control center in a heated building that offers adequate air circulation and protection from dirt and moisture.
3. Motor control centers that are designed for indoor applications do not have sufficient packaging for outdoor storage. If they are to be stored outdoors, install temporary electrical heating (contact your local Rockwell Automation representative for more information) to help prevent condensation and add packaging for protection from the outside elements. Ensure that space heaters are rated appropriately for each column in the motor control center. Loose packaging and flammable materials must be removed prior to energizing space heaters.
4. Unenergized motor control centers for outdoor use (IP 54) must be kept dry internally by installing temporary heating (see item 3 above) or energizing optional self-contained space heaters (contact your local Rockwell Automation representative for more information).

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