

# Temporary Storage

## User Manual



These instructions are intended as an aid to qualified, licensed installers and service personnel for proper installation, adjustment and operation of this unit. Read and understand these instructions thoroughly before attempting installation or operation. Failure to follow these instructions may result in improper installation, adjustment, service or maintenance possibly resulting in fire, electrical shock, carbon monoxide poisoning, explosion, personal injury or property damage.

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## INTRODUCTION

Read this manual thoroughly before operating or servicing this unit.

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## WARNINGS

**⚠ WARNING:**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

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## RECEIVING

Refer to the back of the packing slip for receiving unit instructions.

On receipt of the unit, check for damage. Inspect protective covers for punctures or other signs that there may be internal damage. Remove protective covers and check for internal damage. Replace covers if the unit is not being assembled or installed at this time. Open access doors and check for internal damage. Close access doors when the inspection is complete.

All units are pre-tested at the factory immediately prior to shipping and are ensured to be in good operating condition at that time. If damage is found follow the instructions on the packing slip.

## TEMPORARY STORAGE

If a unit is to be stored prior to installation the following precautions are required:

- Store in a well-drained area that will not accumulate surface water.
- Store in an area where the unit will not get damaged.
- The entire perimeter and any full height cross members of the unit must be supported by a level surface and the supporting surface must be adequate for supporting the entire weight of the unit.
- All protective coverings that were provided for shipping must be in place.
- Protect indoor units from rain and snow.
- Openings such as condenser fans, cabinet ventilation, etc. may require additional protective coverings for extended storage or dirty environments.

Units must be stored level. Failure to do so can cause water to be trapped in drain pans or operational problems that can void warranty. Failure to do so can result in injury or death,

damage the equipment and/or building and can be a cause of poor indoor air quality.

Equipment stored outdoors shall be placed on a suitable foundation, temporary cribbing or support to ensure the equipment does not sink over time.

Equipment stored outdoors shall be free from ground contact and covered for weather, dirt, and pest protection.

When equipment is stored in final installation location, all openings (including supply and return/exhaust openings, piping chases, electrical conduit, etc.) to building shall be covered in a manner to prevent warm humid air from migrating from the building to the equipment.

Periodic visual inspection of equipment shall be performed to ensure it remains in an acceptable stored condition:

- Determine if additional protection is necessary or if original protection is in need of restoration. Appropriate action shall be taken if found necessary for the proper care of any item.
- Interior sections of the equipment including electrical/control cabinets shall be inspected for signs of moisture. If moisture is evident, drain and flush with solvent, dry completely and restore protective coverings.

If required, to avoid internal damage caused by moisture entrainment, place desiccant in each section of the air handler including electrical/control cabinets. Replace desiccant as required.

Storage records should be maintained.

## FANS/MOTORS/ BEARINGS

Lubricate bearings prior to extended shutdown or storage. On a monthly basis all fans/shafts/motors shall be rotated several times by hand while adding enough grease to replenish the bearing surfaces to maintain a full bearing cavity to aid in corrosion protection. The fan/shaft/motor should be left at approximately 90-180 degrees from that of the previous month.

## BELT ADJUSTMENT

For long-term storage, the belt tension should be reduced to less than half the specified value for the fan’s design to prevent a sag/set from forming in the shafts and belts.

## FILTERS AND SHIPPED LOOSE ITEMS

Filters and shipped loose items shall be kept in a secure, dry/clean environment/ location where they will be kept free from damage.

## COILS/WATER COOLED PLATES AND CONDENSERS/DRAIN TRAPS WINTERIZATION

Water coils, and condensers that are not in use must be protected from freezing. Coils, water cooled plates and condensers should be drained and blown out with compressed air and then filled and drained several times with appropriate strength pre-mixed inhibited HVAC glycol or other suitable fluid. Do not use propylene glycol with CPVC piping.

During freezing periods, primed traps may need to be heat traced or drain and plug the trap when not in use.

## REFRIGERATION

All refrigeration fittings and caps should be checked for tightness to ensure proper O-ring seat to prevent loss of refrigerant.

## EC MOTORS

EC motors (ie: Ziehl-Abegg condenser fans) have a maximum permissible storage duration or standstill period without line supply because the dielectric material in the capacitor degrades and the electrolyte evaporates. Depending on the period without line supply, use the following table for information on the dc-link capacitors.

Period without line supply	Action before start-up
Under 1 year	None
1-2 years	Device for 1 hour (without enable) connected to line voltage
Longer than 2 years	<p><b>Reformation (without enable) by adjustable voltage supply</b></p> <ol style="list-style-type: none"> <li>1. For 1 hour 30% of line voltage</li> <li>2. For 1 hour 60% of line voltage</li> <li>3. For 2 hours 85% of line voltage</li> <li>4. For 3 hours 100% of line voltage</li> </ol> <p>Line voltage refers to the technical data of the respective device, for wide voltage range use the upper value of line voltage indication.</p>

## BEFORE START-UP

When the equipment is removed from storage:

- Remove tie-down bolts, straps and blocks on fan and compressor vibration isolators, tilt equipped heat pipes and enthalpy/desiccant wheels if supplied.
- All bearings should be lubricated as per IO&M guidelines.
- Belts tension should be re-adjusted to proper tension.
- Drain traps should be primed as required.

Refer to equipment IO&M for further details.