

Solutions for AC Drives

INSPECTION AND INSTALLATION:

Inspect unit for damage incurred during shipping. Also, verify that the ratings shown on the nameplate of the unit match the order specifications.

- Do not use unit if damaged or if the ratings are incorrect.
- Remove the screws attaching the cover to the unit.
 (Most units have four screws; larger units have six or more screws).
- Consider verifying the ohm value of the unit with an ohmmeter. It is also recommended that the continuity of the thermal switch be checked. Thermal switches are normally closed.

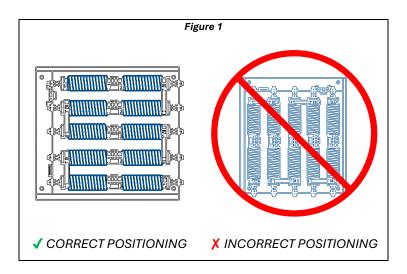
Installation should be performed by a qualified electrician per applicable industry codes and local regulations (Please refer to the latest NEC Handbook).

- Mounting holes can be found inside the enclosure or on optional legs. Units up to 28" wide, single-stacked, may be mounted vertically* or horizontally (*CSA Certified/UL Listed units should not be mounted vertically).
- When mounting the enclosure, make sure resistor elements are horizontally positioned (see Figure 1).
 Enclosures less than 28" wide should be fastened securely with 3/8" hardware.
- All units wider than 28" must be horizontally mounted.
 These enclosures should be securely fastened using 1/2" hardware.
- After mounting, the unit is ready to be wired. For wire rating information, refer to the latest NEC handbook.
- Use UL Listed or UL Recognized crimp-on connectors or ring terminals.
- Terminal blocks are provided as an option, however if no terminal block is present, use high temperature rated wire to connect directly to the resistors.
- If a thermal switch is provided, it should be wired to the protective circuit of the drive.

CLEARANCE REQUIREMENTS:

<u>Convection cooled</u>: For adequate air ventilation, provide six inch clearance around unit, and a minimum of two foot clearance above unit.

<u>Fan cooled</u>: For adequate air ventilation, provide a minimum of two foot clearance around and above unit.



Tighten all electrical connections in accordance with the torque values provided in the table below. Loose connections are dangerous and a potential source of power resistor failures.

Recommended Torque Values for Electrical Connections			
Hardware Size	IN-LBS	FT-LBS	Nm
#10-32	24	2.0	2.7
1/4"-20	72	6	8
5/16"-18	120	10	14

Install the cover and secure with the screws provided.

TIGHTEN SCREWS!

PLEASE NOTE: Resistive load banks should be checked periodically for loose connections and the accumulation of dust and dirt. Service the unit if necessary. When doing so, remove all power and make sure the unit has cooled and discharged all leftover voltage.

CAUTION: THE RESISTORS SHOULD NOT GLOW RED UNDER NORMAL OPERATING CONDITIONS! If the resistors glow red, please contact Bonitron for assistance with the unit or for help in determining what design is appropriate for the given application.

DERATING GUIDELINES:

<u>Altitude</u> - For applications at altitudes up to 6,000 feet, the listed ratings are applicable. Between 6,000 and 15,000 feet derate to 75% of the standard watt ratings, or derate to 86% of the current rating.

<u>Ambient Temperature</u> - For ambient temperatures above 40°C, derate resistors to approximately 90% for 50°C ambient, 80% for 80°C and 70% for 100°C of full load watts.