

## STORAGE CONDITION

- Avoid storing capacitors in locations where temperatures exceed the specified limits. Prevent capacitor condensation and maintain the average relative humidity below 75%, with a maximum of 95% throughout the year.
- Do not store capacitors in corrosive environments, especially in the presence of substances like hydrochloric gas, hydrogen sulfide, acids, or organic solvents.
- Clean capacitors stored in dusty environments, particularly near the terminals, to ensure proper electrical insulation between phases and enclosure before installation.
- For capacitors stored for over two years, conduct a visual inspection to check for enclosure integrity, such as corrosion, leaks, or deformations. Measure capacitance values; if they fall within the specified limits on the nameplate and the enclosure is intact, the capacitor can be used.

*For example, a 35 uf + 5 uf with a tolerance of +/- 5% means it can be minus or plus 5% out of range of the rated capacitance so that the capacitor still functions normally. So,*

$$35 \text{ mfd } +/- 5\% = \text{Range Min } 33.25 \text{ mfd } \& \text{ Max } 36.75 \text{ mfd}$$

$$5 \text{ mfd } +/- 5\% = \text{Range Min } 4.75 \text{ mfd } \& \text{ Max } 5.23 \text{ mfd}$$

If not, dispose of the capacitor and replace it with a new BlueStars capacitor with the same specification (microfarad rating, tolerance, voltage, etc.)

## PREVENTIVE MAINTENANCE

### Monthly

- Conduct a visual examination of the capacitors, ensuring the safety device (housing expansion) is activated. If activated, investigate the cause before considering replacement.
- Inspect the capacitors' integrity, examining the tightness of connections and verifying proper temperature and cooling functionality.



- Measure the operating voltage, current, and insulation between terminals and ground.
- Perform a thermographic analysis of connections.

### **Every Six Months**

- Repeat all the monthly procedures, including inspecting the capacitors and checking safety device activation, connection tightness, temperature, and cooling.
- Evaluate the operation of controller outputs and confirm adherence to the discharge time of capacitors.
- Examine supply line harmonics with the capacitor bank activated.
- Clean the panel or the installation site of the capacitors.
- When your AC unit is not in use, consider buying a BlueStars cover to protect your unit under harsh weather conditions, along with dust and debris.