Inverter Storage

Inverters incorporate electrolytic capacitors and other electronic components that incorporate chemical changes. The characteristics of these components may change during long periods of storage. When storing inverters for long periods of time, observe the following precautions in order to maintain service lifetime and reliability.

1. Storage Place
   (1) Temperature and Humidity
       Store the inverter in a place with -10 to 40°C and 95% RH, free from condensing or icing, direct sunlight. Temperature from -20 to 60°C is allowed only for storage for a short period of time (approx. one month) in case of transport or the like. During transport, package and store the product in such a way that avoids the influence of vibration or shock.

   (2) Dust and Oil Mist
       Avoid storing the inverter in a place with excessive dust or oil mist such as on the production floor of a cement plant or spinning plant.

   (3) Corrosive gases
       Avoid storing the inverter in a place where corrosive gases may occur such as a chemical plant, refinery or sewage treatment plant site.

   (4) Salt Damage
       Avoid storing the inverter in a place that may result in salt damage such as near beaches, especially in a salt damage specified area. In addition, do not store the inverter under any adverse conditions that can normally be considered; store in a warehouse or office which is free from such negative influences.
2. Periodic Application of Power

If there has been no power applied for two years or more, ramp up the applied voltage little by little over a three minute period using a variable power supply (variac). Leave inverter powered up for one hour minimum. This will allow the main circuit electrolytic capacitors to “reform” to their original performance.

Afterwards, use the regular wiring to confirm that no fault occurs, and that there is no overcurrent, motor oscillation, or speed fluctuation during run.

① Ramp up voltage from 0 up to inverter rated voltage little by little in case of AC variable power supply.
   Ramp up voltage from 0 up to DC voltage obtained by multiplying inverter rated voltage by $\sqrt{2}$ little by little in case of DC variable power supply.

② Terminals R, S and (T) can be used regardless of whether AC or DC is applied.

③ When using AC variable power supply, single phase or three phase can be used.

3. Others (Environment-resistance Specifications)

Basically, the inverters must not be used beyond specified environmental conditions. However, inverters with special design specifications against humidity, oil, gas, vibration, or salt that have more environmental resistance may be available. For the details, contact your Yaskawa representative. However, even the specifically designed inverters do not guarantee their use under extreme adverse conditions.