

+++++

**Topic: description of the high temperature of G120XA side shell surface**

**Problem:**

When using G120XA frequency converter, the customer found that the surface temperature on one side of the shell was too high, and they were worried about problems.

**Answer:**

Due to the internal circuit layout of G120XA, the switching power supply transformer is close to the side plastic shell. In standby mode, the transformer is always in the power on state, which will generate heat, and at this time the internal fan does not work, resulting in the heat can not be dissipated. This will increase the temperature of the side enclosure close to the transformer.

According to the requirements of IEC 60417 and W017-SIO, when the temperature of plastic shell exceeds 80 °C, the warning label of G120XA needs to be pasted on the shell. The label is as shown. In the case of long-term standby, the side temperature of G120XA will exceed 80°C, which is a normal phenomenon and does not affect the use of customers.



However, considering the influence of high temperature on the life performance of components, the manual specifies the installation requirements of G120XA FSA FSB FSC as follow:  
For tolerance reasons, we recommend a lateral clearance of approx. 1 mm. For converters FSA ... FSC, the side-by-side mounting (with 0 mm lateral clearance) allows a maximum surrounding air temperature during operation of 55 °C; in case of the surrounding air temperature higher than 55 °C, a lateral clearance of 50 mm or greater is required.

That is, for application with ambient temperature exceeding 55°C, it is recommended that G120XA frequency converter be installed side by side with a clearance greater than 50mm.

**Keywords (for SIOS search):**

G120XA shell overheat

**Scope of publicity:**

- Open to hotlines
- Hotline and Service
- Intranet/Extranet (Siemens only)
- Internet (includes Intranet and Extranet)

**Date:**

2019-07-02

**Author:**

Name: He Wei

Unrestricted

+++++

Department: SNC CSA TCC  
Telephone: 02587119083  
E-mail: he-wei@siemens.com