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Dear Customers,

KOHZU Precision Co., Ltd.
Sales Division

Safety measure for Photosensor Circuit Board

Thank you for your using our products.

Power-supply voltage of our standard photosensor circuit boards is maximum 24VDC. Please caution that overvoltage may cause burnout.

It's difficult to determine the cause of the overvoltage, because it depends on the circuit and environment on the power supply side. But the following two points are conceivable.

- Ringing at power On
- Surge such as static electricity

Ringing is a phenomenon which the waveform vibrates greatly due to reflection and resonance from both ends of the wire in the electric circuit. When the waveform at power on is a rectangle, more than 24VDC voltage is likely to be applied at startup, and it will be repeated due to ringing and will lead to burnout.
One of the countermeasures is to build a circuit which has a slow rising speed of the power supply input and does not cause ringing.
Using 12V power supply is also an effective countermeasure.
Since there is a possibility of failure due to surges such as static electricity and thunder, please also implement generally recommended surge countermeasures.

Subjected Photosensor board：F-101、F-102、F-103、F-104、F-105、F-106、F-106R、F-107、F-108、F-113、F-115、F-115R、F-116、F-116R