

Attention related to safety (Read carefully before application)

◎ For the purpose of ensuring your personal safety and protecting this product and its peripheral equipment, read this manual regarding the safety functions carefully before installation and operation of the FB PLC. The three safety categories of this manual are classified into 「Danger」, 「Warning」, 「Caution」 grade according to the danger level and are preceded by the “⚠” symbol. Following is their description:



Indicates casualty or serious damage or property loss will result if the correct instruction was not followed.



Casualty or serious damage or property loss may result if the correct instruction was not followed.



Indicates minor damage or property loss will result if the correct instruction was not followed.

◎ This manual is a guideline for qualified personnel on how to install the FB PLC correctly and use it safely. The qualified personnel stated here means professional electromechanical engineering personnel who is familiar with safety specifications and methods of grounding, circuit wiring, peripheral equipment system etc. and possesses practical experience.

Danger

◎ Keep in mind before using the PLC

Abnormality in the external power supply or failure of the PLC itself will result in the PLC or the complete system emerging in an unsafe status, and may cause unpredictable actions. Such actions may cause human injury, death, or serious damage of the unit itself. Thus, please design a separate external safety protection circuit, such as emergency stop circuit, machine replacement device, or redundant safety protection circuit in your application with the following safety considerations:

1. Emergency stop circuit, safety protection circuit, motor positive/reverse interlock circuit, upper/lower limit destruction prevention circuit of position control, etc. These circuits should be hardwired and external to the PLC.
2. The PLC is unable to detect the abnormality of the input signal circuit (such as overload or interrupted PLC input circuit). The PLC interprets them as OFF, then erroneous output may result in the PLC and may cause major safety problems, thus external detection and protection circuits should be provided in addition to the PLC.
3. The output components of the PLC, whether relay, transistor, or TRIAC are possible to cause permanent ON or OFF and resulting in serious accidents, thus protection by additional external circuits or mechanisms is necessary for the output points to avoid major safety problems.