XG5000

Programmable Logic Controller
XG5000
XGT Series
For XGK/XGB
Safety Instructions
Before using the product ….
For your safety and effective operation, please read the safety instructions
thoroughly before using the product.
► Safety Instructions should always be observed in order to prevent accident
or risk with the safe and proper use the product.
► Instructions are separated into "Warning"and "Caution", and the
meaning of the terms is as follows:
► The marks displayed on the product and in the user's manual have the
following meanings;
Be careful! Danger may be expected.
Be careful! Electric shock may occur.
► The user's manual even after read should be kept available and accessible
to any user of the product.
Warning This symbol indicates the possibility of serious injury
or death if some applicable instruction is violated.
Caution
This symbol indicates the possibility of slight injury or
damage to products if some applicable instruction is
violated.
Safety Instructions
Safety Instructions when designing
4 Please, install protection circuit on the exterior of PLC to protect
the whole control system from any error in external power or PLC
module.
Any abnormal output or operation may cause serious problem in safety
of the whole system.
- Install applicable protection unit on the exterior of PLC to protect the system from
physical damage such as emergent stop switch, protection circuit, the upper/lowest
limit switch, forward/reverse operation interlock circuit, etc.
- If any system error (watch-dog timer error, module installation error, etc.) is detected
during CPU operation in PLC, the whole output is designed to be turned off and
stopped for system safety. However, in case CPU error if caused on output device
itself such as relay or TR can not be detected, the output may be kept on, which
may cause serious problems. Thus, you are recommended to install an addition
circuit to monitor the output status.
4 Never connect the overload than rated to the output module nor
allow the output circuit to have a short circuit, which may cause a
fire.

4 Never let the external power of the output circuit be designed to be On earlier than PLC power, which may cause abnormal output or operation.

4 In case of data exchange between computer or other external equipment and PLC through communication or any operation of PLC (e.g. operation mode change), please install interlock in the sequence program to protect the system from any error. If not, it may cause abnormal output or operation.

Warning

Safety Instructions

Safety Instructions when designing

4 I/O signal or communication line shall be wired at least 100mm away from a high-voltage cable or power line. If not, it may cause abnormal output or operation.

Caution

4 Use PLC only in the environment specified in PLC manual or general standard of data sheet. If not, electric shock, fire, abnormal operation of the product or flames may be caused.

4 Before installing the module, be sure PLC power is off. If not, electric shock or damage on the product may be caused.

4 Be sure that each module of PLC is correctly secured. If the product is installed loosely or incorrectly, abnormal operation, error or dropping may be caused.

4 Be sure that I/O or extension connecter is correctly secured. If not, electric shock, fire or abnormal operation may be caused.

4 If lots of vibration is expected in the installation environment, don't let PLC directly vibrated. Electric shock, fire or abnormal operation may be caused.

4 Don't let any metallic foreign materials inside the product, which may cause electric shock, fire or abnormal operation.

Caution

Safety Instructions

Safety Instructions when wiring

4 Prior to wiring, be sure that power of PLC and external power is turned off. If not, electric shock or damage on the product may be caused.

4 Before PLC system is powered on, be sure that all the covers of the terminal are securely closed. If not, electric shock may be caused.

Warning

4 Let the wiring installed correctly after checking the voltage rated of each product and the arrangement of terminals. If not, fire, electric shock or abnormal operation may be caused.

4 Secure the screws of terminals tightly with specified torque when wiring. If the screws of terminals get loose, short circuit, fire or

abnormal operation may be caused.

4 Surely use the ground wire of Class 3 for FG terminals, which is exclusively used for PLC. If the terminals not grounded correctly, abnormal operation may be caused.

4 Don't let any foreign materials such as wiring waste inside the module while wiring, which may cause fire, damage on the product or abnormal operation.

Caution

Safety Instructions

Safety Instructions for test-operation or repair

Safety Instructions for waste disposal

4 Product or battery waste should be processed as industrial waste. The waste may discharge toxic materials or explode itself.

Caution

4 Don't touch the terminal when powered. Electric shock or abnormal operation may occur.

4 Prior to cleaning or tightening the terminal screws, let all the external power off including PLC power. If not, electric shock or abnormal operation may occur.

4 Don't let the battery recharged, disassembled, heated, short or soldered. Heat, explosion or ignition may cause injuries or fire.

4 Don't remove PCB from the module case nor remodel the module. Fire, electric shock or abnormal operation may occur.

4 Prior to installing or disassembling the module, let all the external power off including PLC power. If not, electric shock or abnormal operation may occur.