



LS XGF-AH6A Programmable Logic Controller Installation Guide

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LS XGF-AH6A Programmable Logic Controller



This installation guide provides simple function information on PLC control. Please read carefully this data sheet and manuals before using products. Especially read safety precautions and handle the products properly.

Safety Precautions

Meaning of warning and caution inscription

WARNING

indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

WARNING

1. Do not contact the terminals while the power is applied.
2. Protect the product from being gone into foreign metallic matter.
3. Do not manipulate the battery(charge, disassemble, hitting, short, soldering).

CAUTION

1. Be sure to check the rated voltage and terminal arrangement before wiring.
2. When wiring, tighten the screw of the terminal block with the specified torque range.
3. Do not install flammable things in the surroundings.
4. Do not use the PLC in an environment of direct vibration.
5. Except for expert service staff, do not disassemble fix or modify the product.
6. Use the PLC in an environment that meets the general specifications contained in this datasheet.

7. Be sure that the external load does not exceed the rating of the output module.
8. When disposing of PLC and battery, treat it as industrial waste.

Operating Environment

No	Item	Specification			Standard	
1	Ambient temp.	0 ~ 55℃			-	
2	Storage temp.	-25 ~ 70℃			-	
3	Ambient humidity	5 ~ 95%RH, non-condensing			-	
4	Storage humidity	5 ~ 95%RH, non-condensing			-	
5	Vibration Resistance	Occasional vibration			-	IEC 61131-2
		Frequency	Acceleration	Amplitude	10 times in each direction for X, Y, Z	
		5≤f<8.4Hz	-	3.5mm		
		8.4≤f≤150Hz	9.8m/s²(1g)	-		
		Continuous vibration				
		Frequency	Acceleration	Amplitude		
		5≤f<8.4Hz	-	1.75mm		
		8.4≤f≤150Hz	4.9m/s²(0.5g)	-		

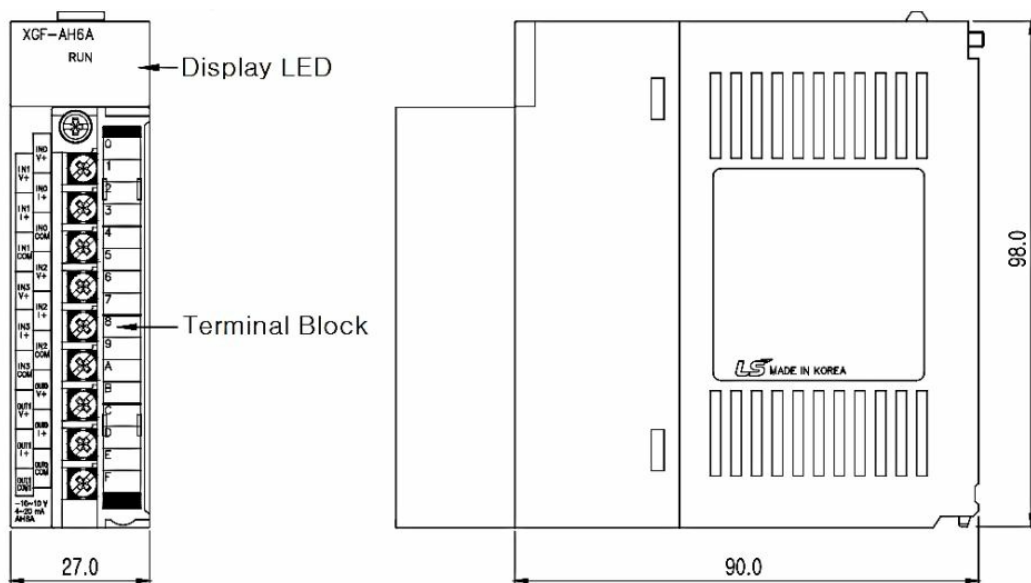
To install, observe the below conditions

Applicable Support Software

For system configuration, the following version is necessary.

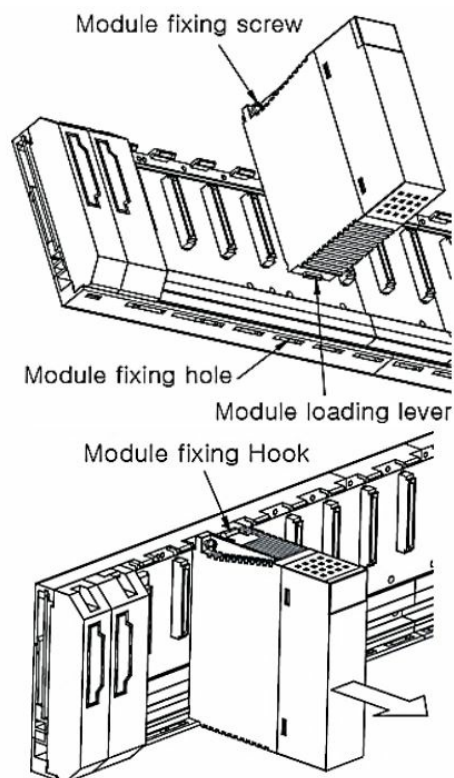
1. XGI CPU: V2.1 or above
2. XGK CPU: V3.0 or above
3. XGR CPU: V1.3 or above
4. XG5000 Software : V3.1 or above

Parts Name and Dimension (mm)



This is the front part of the CPU. Refer to each name when driving the system. For more information, refer to the user manual.

Installing / Removing Modules



Here describes the method to attach each product to the base or remove it.

1. Installing module
2. Slide the upper part of the module to fix it to the base, and then fit it to the base by using the module-fixed screw.
3. Pull the upper part of the module to check if it is installed to the base completely.
4. Removing module
5. Loosen the fixed screws of the upper part of the module from the base.
6. Hold the module with both hands and press the fixed hook of the module thoroughly.
7. By pressing the hook, pull the upper part of the module from the axis of the lower part of the module.
8. By lifting the module upward, remove the fixed projection of the module from the fixing hole.

Performance Specifications

Item	Input		Output	
Analog input/output range	DC 1~5V DC 0~5V DC 0~10V DC -10~10V	DC 4~20mA	DC 1~5V DC 0~5V DC 0~10V DC -10~10V	DC 4~20mA
Resolution	1/8,000		1/8,000	
Precision	$\pm 0.2\%$ or less(25°C) $\pm 0.3\%$ or less(0~55°C)		$\pm 0.2\%$ or less(25°C) $\pm 0.3\%$ or less(0~55°C)	

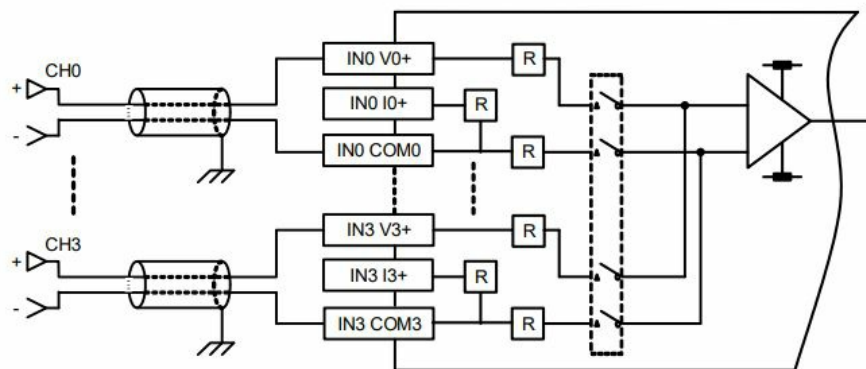
Wiring

Precaution for wiring

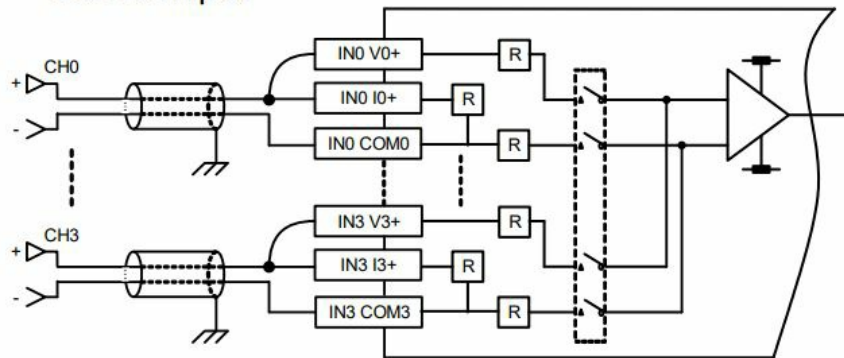
1. Don't let the AC power line near to analog module's external input/output signal line. With enough distance kept between them, it will be free from surge or inductive noise.
2. Cable shall be selected in due consideration of ambient temperature and allowable current. More than AWG22 (0.3) is recommended.
3. Don't let the cable be too close to the hot device and material or in direct contact with oil for long, which will cause damage or abnormal operation due to short-circuit.
4. Check the polarity when wiring the terminal.
5. Wiring with a high-voltage line or power line may produce inductive hindrance causing abnormal operation or defect.

Wiring examples

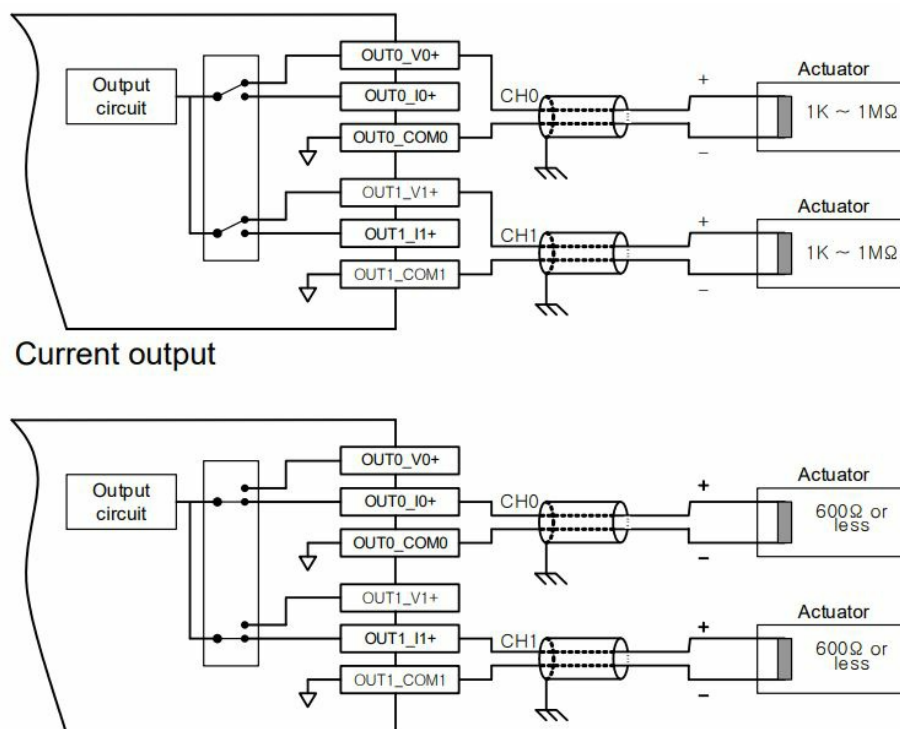
Voltage input



Current input



1. Use a 2-re twisted shielded wire.



2. The Input resistance voltage input is 250Ω(typ.).
3. The Input resistance current input is 1 (min.).

Warranty

- Warranty period: 18 months after the production date.
- Scope of Warranty: 18-month warranty is available except:
- The troubles caused by improper conditions, environment or treatment except for the instructions of LS ELECTRIC.
- The troubles caused by external devices are the troubles caused by remodelling or repairing based on the user's discretion.
- The troubles caused by improper usage of the product
- The troubles caused by the reason that exceeded the expectations from the science and technology level when LS ELECTRIC manufactured the product
- The troubles caused by natural disasters

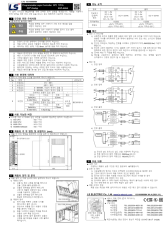
Change in specifications

Product specifications are subject to change without notice due to continuous product development and improvement. LS ELECTRIC Co., Ltd. www.ls-electric.com 10310000984 V4.4 (2021.11)

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- LS-ELECTRIC Vietnam Co., Ltd. (Hanoi, Vietnam) Tel: 84-93-631-4099
- LS ELECTRIC Middle East FZE (Dubai, U.A.E.) Tel: 971-4-886-5360
- LS ELECTRIC Europe B.V. (Hoofddorp, Netherlands) Tel: 31-20-654-1424
- LS ELECTRIC Japan Co., Ltd. (Tokyo, Japan) Tel: 81-3-6268-8241

- LS ELECTRIC America Inc. (Chicago, USA) Tel: 1-800-891-2941
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Documents / Resources

	<p>LS XGF-AH6A Programmable Logic Controller [pdf] Installation Guide XGF-AH6A Programmable Logic Controller, XGF-AH6A, Programmable Logic Controller, Logic Controller, Controller</p>
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References

- [Electric | The Largest Consumer Energy & Renewables Platform](#)
- [LS ELECTRIC Co., Ltd.](#)
- [LS ELECTRIC Co., Ltd.](#)
- [User Manual](#)