



LS ELECTRIC XBO-AD02A Programmable Logic Controller XGB Analog User Guide

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C/N: 10310001187
XBO-AD02A
XGB Analog

Programmable Logic Controller Installation Guide



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

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Safety Precautions

Meaning of warning and caution inscription

 WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury
 CAUTION	CAUTION indicates a potentially hazardous situation which, 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 by 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 terminal block with the specified torque range.
3. Do not install the flammable things on surroundings.
4. Do not use the PLC in the environment of direct vibration.
5. Except expert service staff, do not disassemble or 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 external load does not exceed the rating of output module.
8. When disposing of PLC and battery, treat it as industrial waste.

Operating Environment

To install, observe the below conditions.

No	Item	Specification			Standard	
1	Ambient temp.	0 – 55t			–	
2	Storage temp.	-25 – 70 t			–	
3	Ambient humidity	5 – 95%RH, non-condensing			–	
4	Storage humidity	5 – 95%RH, non-condensing			–	
5	Vibration Resistance	Occasional vibration			–	–
		Frequency	Acceleration	Amplitude	Number	
		55f<8.4 Hz	–	3.5mm	10 times in each direction for X, Y, Z	
		8.45f5150Hz	9.8mis'(1 g)	–		
		Continuous vibration				
		Frequency	Acceleration	Amplitude		
		55K8.4 Hz	–	1.75mm		
		8.45f5150Hz	4.9rnis'(0.5g)	–		

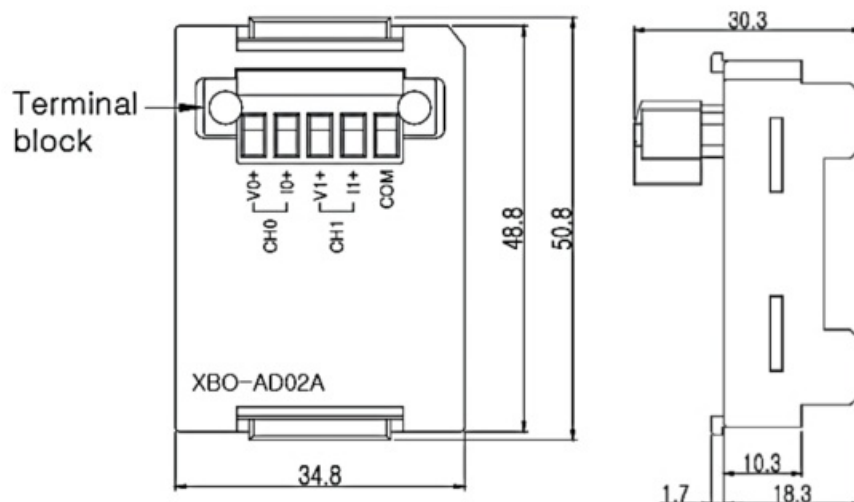
Applicable Support Software

For system configuration, the following version is necessary.

1. XBC Type : E(V1.1 or above), SU(V1.0 or above), H(V1.1 or above)
2. XEC Type : E(V1.1 or above), SU(V1.1 or above), H(V1.2 or above)
3. XG5000 Software : V4.0 or above

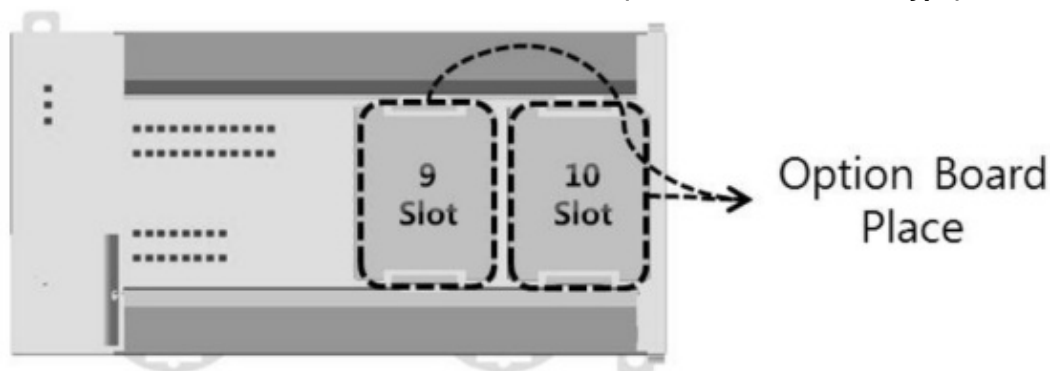
Parts Name and Dimension (mm)

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

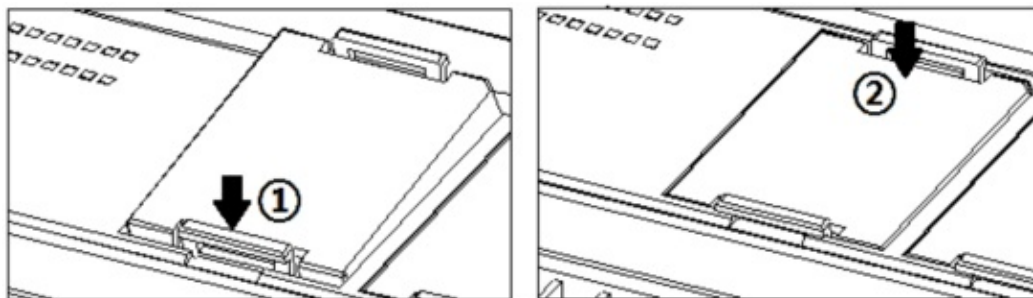


Installing / Removing Modules

Option Board can be installed in 9 or 10 slot of the Main Unit(Standard/Economic Type) as shown below.



1. When installing Option Board, push the lower part(①) of the Option Board to contact with connector.



2. After pushing the lower part(①) completely, push the upper(②) part of the Option Board entirely.

Performance Specifications

Performance specifications are as follows

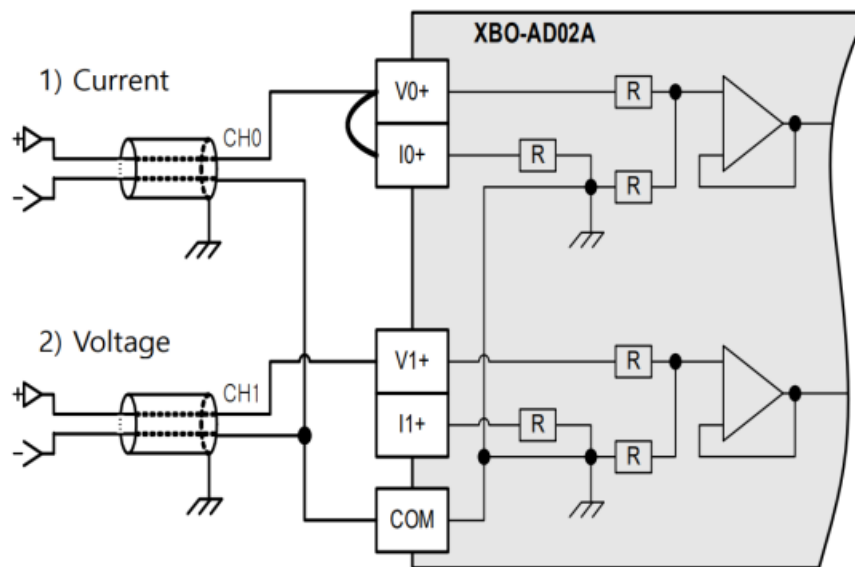
Item		XBO-ADO2A		
Analog input	Type		Voltage	Current
	Range		DC 0-10V	DC 4-20mA DC 0-20mA
Digital output	Type		12bit binary data	
	Range	Unsigned value	0-4,000	
		Sig Signed value	-2,000-2,000	
		Precise value	0-1,000 (DC 0 – 10V)	400-2,000(DC 4-20mA) 0-2,000(DC 0-20mA)
		Percentile value	0-1,000	
Max. resolution			114,000	
Accuracy			±1.0% or less	

Wiring

Precaution for wiring

1. Don't let AC power line near to analog input module's external output signal line.
With an enough distance kept away between, 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 too close to 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 high-voltage line or power line may produce inductive hindrance causing abnormal operation or defect.
6. Enable the channel that you want to use.

Wiring example



1. In case of current input, connect V+ terminal and I+ terminal.
2. Input resistance of current input circuit is 250Ω. (typ.)
3. Input resistance of voltage input circuit is 1 MΩ. (min.)

Warranty

- The warranty period is 36 months from the date of manufacture.
 - The initial diagnosis of faults should be conducted by the user. However, upon request, LS ELECTRIC or its representative(s) can undertake this task for a fee. If the cause of the fault is found to be the responsibility of LS ELECTRIC, this service will be free of charge.
 - Exclusions from warranty
1. Replacement of consumable and life-limited parts (e.g. relays, fuses, capacitors, batteries, LCDs, etc.)
 2. Failures or damages caused by improper conditions or handling outside those specified in the user manual
 3. Failures caused by external factors unrelated to the product
 4. Failures caused by modifications without LS ELECTRIC's consent
 5. Use of the product in unintended ways

6. Failures that cannot be predicted/solved by current scientific technology at the time of manufacture
7. Failures due to external factors such as fire, abnormal voltage, or natural disasters
8. Other cases for which LS ELECTRIC is not responsible

- For detailed warranty information, please refer to the user's manual.
- The content of the installation guide is subject to change without notice for product performance improvement.

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Documents / Resources

	LS ELECTRIC XBO-AD02A Programmable Logic Controller XGB Analog [pdf] User Guide XBO-AD02A, XBO-AD02A Programmable Logic Controller XGB Analog, XBO-AD02A, Programmable Logic Controller XGB Analog, Logic Controller XGB Analog, XGB Analog, Analog
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References

- [Electric | The Largest Consumer Energy & Renewables Platform](#)
- [User Manual](#)

