



# LS ELECTRIC XBC-DR32 Programmable Logic Controller Instruction Manual

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**LS ELECTRIC XBC-DR32 Programmable Logic Controller**



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.



## 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)

### A 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 product.
8. When disposing of PLC and battery, treat it as industrial waste.

## Operating Environment

To install, observe the below conditions.

Item	Specification				Standard
Ambient temp.	0 – 55°C				
Storage temp.	-25 – 70°C				
Ambient humidity	5 – 95%RH, non-condensing				
Storage humidity	5 – 95%RH, non-condensing				
Vibration Resistance	Occasional vibration				
	Frequency	Acceleration	Amplitude	Times	IEC 61131-2
	5:5f<8.4Hz		3.5mm	10 times in each direction for <b>X, Y,Z</b>	
	8.4:5f:5150Hz	9.8m/s'(1g)			
	Continuous vibration				
	Frequency	Frequency	Amplitude		
	5:5f<8.4Hz		1.75mm		
	8.4:5f:5150Hz	4.9mg(0.5g)			

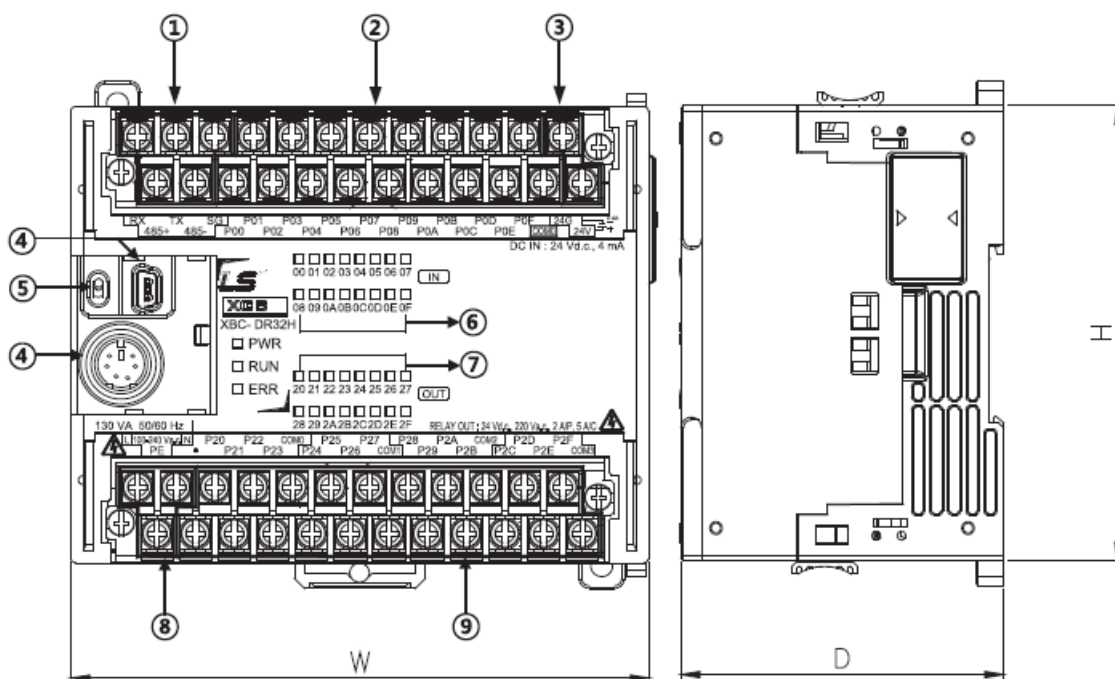
## Performance specifications

This is Performance specification of XGB. For more details, refer to related manual.

Operation method	Reiterative operation, fixed cycle operation, Interrupt operation, constant period scan
1/0 control method	Scan synchronous batch processing (refresh method) Direct method by instruction
Operation speed	Basic instruction: 60ns/step
Program memory capacity	XBC:15Kstep, XEC: 250KB
Max expansion slot	Main + Expansion 10 Slot(expansion slot)
Operating mode	RUN, STOP, DEBUG
Self-diagnosis	Delay of operation, abnormal memory, abnormal 1/0
Program port	USB(1Ch), RS-232C(1Ch)
Data keeping method at power failure	Setting latch(retain) area at basic parameter
Built-in function	Cnet(RS-232C,RS-485), PIO, High speed counter, RTC

## Parts name and Dimension (mm)

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



1. CD Built-in Communication Terminal block
2. CD Input terminal block
3. 24V Output(Sub-power, Not applied to /DC power unit)
4. RUN/STOP mode switch
5. Output status LED

6. Input status LED
7. Power terminal block
8. Output terminal block

#### **Dimension(mm)**

<b>Product</b>	<b>w</b>	<b>D</b>	<b>H</b>
XB(E)C-DR(N)32H(/DC)	114	64	90
XB(E)C-DR(N)64H(/DC)	180	64	90

#### **Applicable Support Software**

For system configuration, the following version is necessary.

1. XGS000 Software : V4.71 or above
2. XBO-M2MB : V1 .60 or above

#### **Accessories and Cable Specifications**

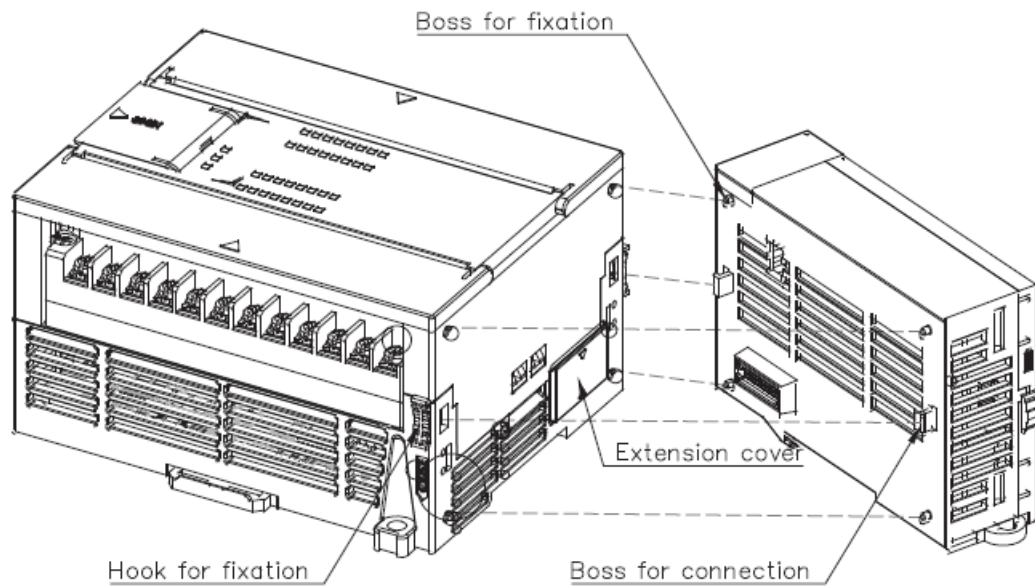
Check the accessory. (Order the cable if need)

1. PMC-31 OS : RS-232 connecting (download) cable.
2. USB-301A : USB connecting(download) cable.

#### **Installing / Removing Modules**

Here describes the method to installing removing product.

1. Installing module
  1. Eliminate the Extension Cover at the product.
  2. Push the product and connect it in agreement with Hook For Fixation of four edges and Hook For Connection at the bottom.
  3. After connection, push down the Hook For Fixation and fix it completely.

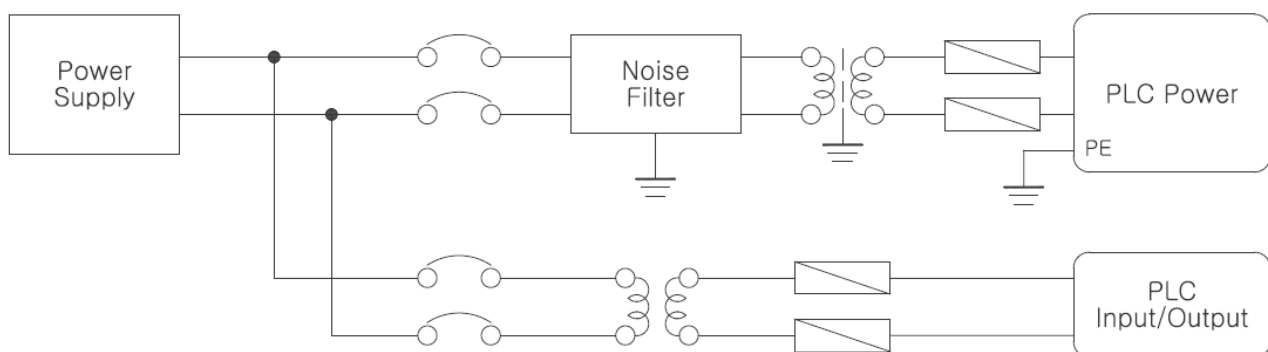


## 2. Removing module

1. Push up the Hook For removing, and then installing the product with two hands. (Do not remove the product by force)

## Wiring

### Power wiring



1. In case that the power change is larger than the range of standard, connect constant voltage transformer
2. Connect the power having the small noise between cables or between earths. In case of having lots of noise, connect the isolating transformer or noise filter.
3. power for PLC, I/O device and other machines should be separate.
4. Use the dedicated earth if possible. In case of Earth works, use 3 class earth (earth resistance 100 Ω or less) and Use more than 2 mm<sup>2</sup> cable for earth.

If the abnormal operation is found according to the earth, separate the earth

## Q Warranty


- Warranty period  
18 months after the production date.
- Scope of Warranty  
18- month warranty is available except:

- The troubles caused by improper condition, environment or treatment except the instructions of LS ELECTRIC.
- The troubles caused by external devices
- The troubles caused by remodeling or repairing based on the user's own discretion.
- The troubles caused by improper usage of the product
- The troubles caused by the reason which exceeded the expectation from science and technology level when LS ELECTRIC manufactured the product
- The troubles caused by natural disaster
- Change in specifications  
Product specifications are subject to change without notice due to continuous product development and improvement.

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## Documents / Resources

	<p><a href="#">LS ELECTRIC XBC-DR32 Programmable Logic Controller</a> [pdf] Instruction Manual XBC-DR32, XBC-DR32 Programmable Logic Controller, Programmable Logic Controller, Logic Controller, Controller</p>
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