Manuals+ — User Manuals Simplified.

LS XBL-EMTA Programmable Logic Controller Installation Guide

Contents

LS XBL-EMTA Programmable Logic Controller

Specifications

- **C/N**: 10310000852
- **Product**: Programmable Logic Controller – XGB FEnet XBL-EMTA
- **Dimensions**: 100mm

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

Safety Precautions

- Meaning of warning and caution label

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

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. Be sure there are no foreign metallic matters.
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 flammable things on the surroundings.

4. Do not use the PLC in an environment of direct vibration

5. Except for 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 the external load does not exceed the rating of output module.

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

9. I/O signal or communication line shall be wired at least 100mm away from a high-voltage cable or power line.

Operating Environment

- To install, observe the below conditions.

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			–	–
		Frequency	Acceleration	Amplitude	Number	IEC 61131-2
		5≤f<8.4	–	3.5mm	10 times in each direction for X, Y, Z	
		8.4≤f≤150	9.8 (1g)	–		
		Continuous vibration				
		Frequency	Acceleration	Amplitude		
		5≤f<8.4	–	1.75mm		
		8.4≤f≤150	4.9 (0.5g)	–		

Applicable Support Software

For system configuration, the following version is necessary.

1. XBC Series : SU(V1.5 or above), H(V2.4 or above), U(V1.1 or above)

2. XEC Series : SU(V1.4 or above), H(V1.8 or above), U(V1.1 or above)

3. XBM Series : S(V3.5 or above), H(V1.0 or above)

4. XG5000 Software : V4.00 or above
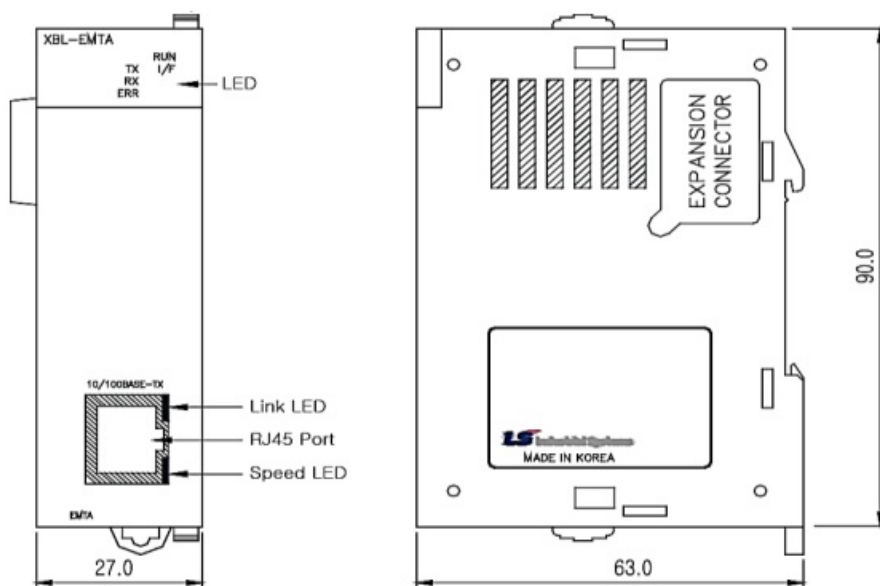
Accessories and Cable Specifications

Cable is recommended for CAT5E over S-FTP cable. Cable types vary depending on your system configuration and environment. Please consult a professional supplier before installation.

1. Electrical Characteristic

Item	Unit	Value	Condition
Conductor resistance	Ω/km	93.5 Or less	25℃
Voltage endurance(DC)	V/1min	500V	In air
Insulation resistance(Min)	MΩ-km	2,500	25℃
Characteristic impedance	Ω	100±15	10MHz
Attenuation	Db/100m Or less	6.5	10MHz
		8.2	16MHz
		9.3	20MHz
Near-end crosstalk Attenuation	Db/100m Or less	47	10MHz
		44	16MHz
		42	20MHz

Parts name and Dimension

This is front part of the product. Refer to each name when operating the system. For more information, refer to user's manual.

LED details

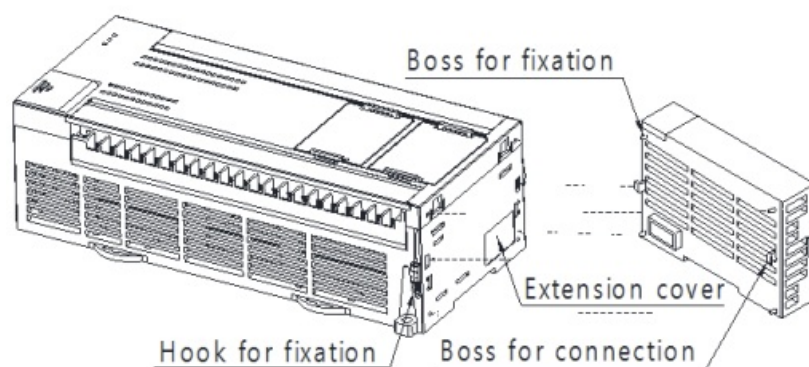| Silk	LED Status		
	On	Blink	Off
RUN	Normal	–	ON when a fatal error occurs
I/F	–	Normal	Stop I/F
ERR	H/W error	S/W error	–
TX	–	When sending	ON when a fatal error occurs
RX	–	When receiving	ON when a fatal error occurs
Link LED	–	Receiving the packet	No receiving the packet
Speed LED	100Mbps	–	10Mbps

Installing / Removing Modules

Here is the method to attach each module to the base or remove it.

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 the Hook For Connection.
    3. After connection, push down the Hook For Fixation and fix it completely.
2. Removing module
    1. Push up the Hook For Disconnection, and then detach the product with two hands. (Do not detach the product by force)
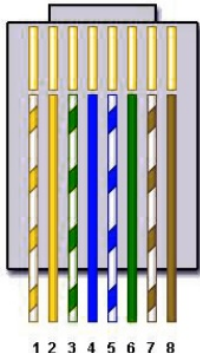

Wiring

Wiring for Communication

1. 10/100BASE-TX's max.extended length between nodes is 100m.
2. This switch module provides Auto Cross Over function so the user can use both cross and direct cable.

Pin No.	Sign	Cable wiring	
		Straight cable	Cross cable
1	TD+	1 —— 1	1 —— 3
2	TD-	2 —— 2	2 —— 6
3	RD+	3 —— 3	3 —— 1
6	RD-	6 —— 6	6 —— 2
4,5,7,8	Not used	–	–

1. White orange
2. Orange
3. White green
4. Blue
5. White blue
6. Green
7. White brown
8. Brown

1 2 3 4 5 6 7 8

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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- 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. (Hoofddorf, Netherlands) Tel: 31-20-654-1424
- LS ELECTRIC Japan Co., Ltd. (Tokyo, Japan) Tel: 81-3-6268-8241
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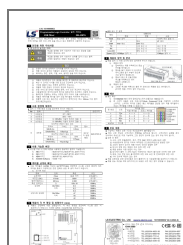
FAQs

Q: What is the operating temperature range of the PLC?
A: The operating temperature range is -25°C to 70°C.

Q: Can I expand the I/O capabilities of this PLC?
A: Yes, you can expand the I/O capabilities using compatible expansion modules.

Documents / Resources

LS XBL-EMTA Programmable Logic Controller [pdf] Installation Guide
XBL-EMTA, XBL-EMTA Programmable Logic Controller, Programmable Logic Controller, Logic Controller, Controller

References

- ⌕ **Electric | The Largest Consumer Energy & Renewables Platform**
- **User Manual**