



LS GSL-D22C Programmable Logic Controller Installation Guide

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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.

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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 the flammable things on surroundings
4. Do not use the PLC in the environment of direct vibration
5. Except expert A/S 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.
9. I/O signal or communication line shall be wired at least 100mm away from a highvoltage cable or power line.

Operating Environment

- To install, observe the below conditions.

N o	Item	Specification				Stand ard	
1	Ambient te mp.	0 ~ 55°C				—	
2	Storage te mp.	-25 ~ 70°C				—	
3	Ambient hu midity	5 ~ 95%RH, non-condensing				—	
4	Storage hu midity	5 ~ 95%RH, non-condensing				—	
5	Vibration R esistance	Occasional vibration				—	—
		Freque ncy	Acceleration				
		5≤f<8.4	—		3.5mm	10 tim es in each directi on for X, Y, Z	
		8.4≤f≤1 50	9.8 (1g)		—		
		Continuous vibration					
		Freque ncy	Freque ncy	Frequency			
		5≤f<8.4	—	1.75mm			
		8.4≤f≤1 50	4.9 (0.5 g)	—			

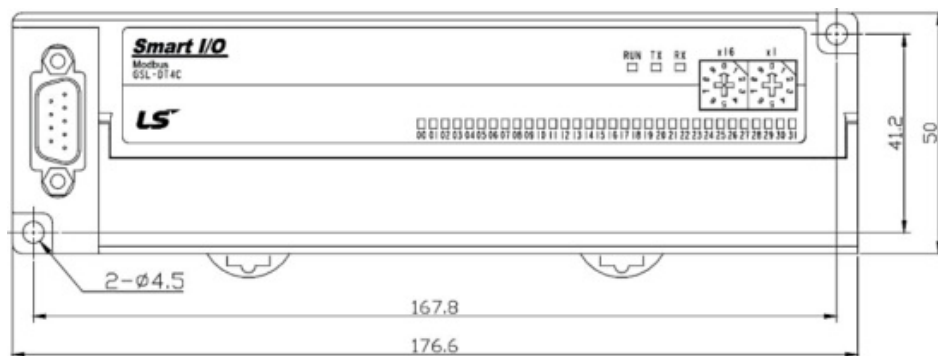
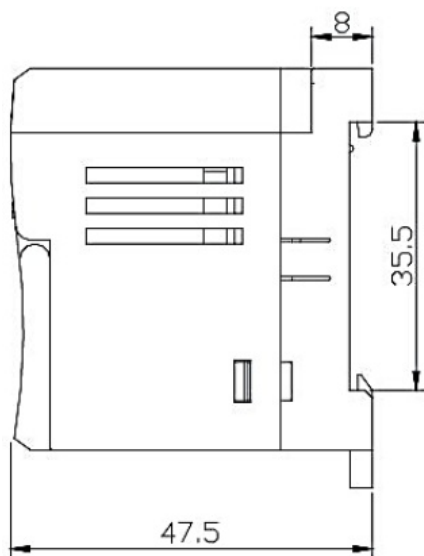
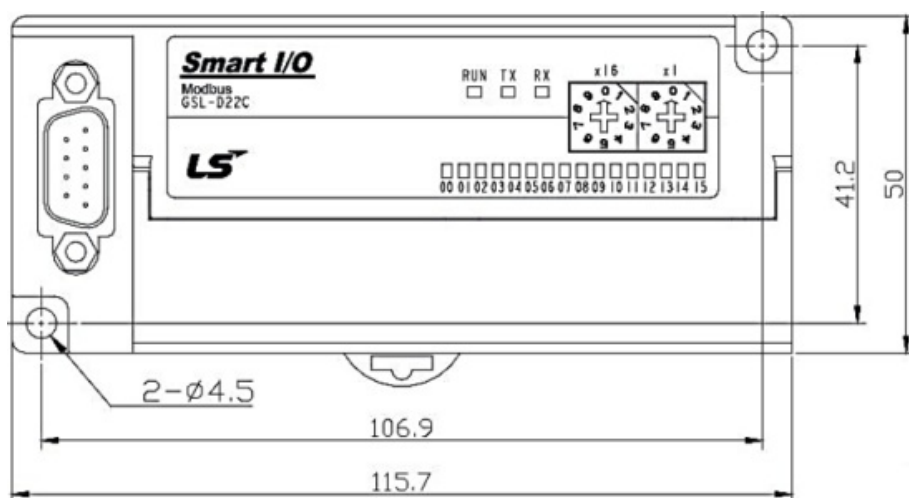
Accessories and Cable Specifications

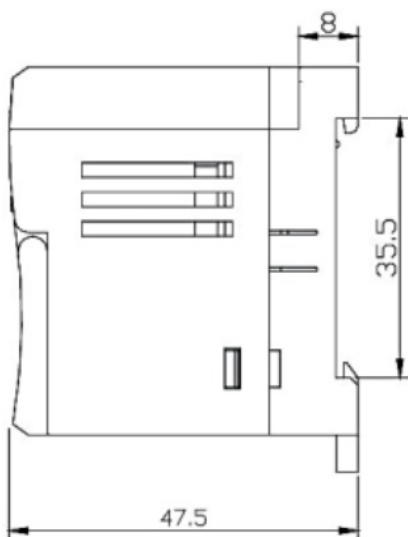
- Check Modbus connector contained in the box
 1. **Usage:** Modbus Communication Connector
 2. **Item:** GSL-CON
- When using RS-422 or RS-485 communication channel, twisted pair cable shall be used with consideration of communication distance and speed.
 1. **Item:** Low Capacitance LAN Interface Cable
 2. **Type:** LIREV-AMESB
 3. **Size:** 2P X 22AWG(D/0.254 TA)
 4. **Manufacturer:** LS Cable Co., Ltd
 5. Electrical characteristics

Items	Unit	Characteristics	Condition
Conductor Resistance	Ω/km	59 or less	25°C
Withstanding Voltage (DC)	V/1min	500V, 1Min.	In air
Insulation Resistance	$\text{M}\Omega\text{-km}$	1,000 or more	25°C
Capacity	Pf/M	45 or less	1kHz
Characteristic Impedance	Ω	120 \pm 12	10MHz

Dimension (mm)

- This is front part of the product. For more information, refer to user's manual.





Performance Specifications

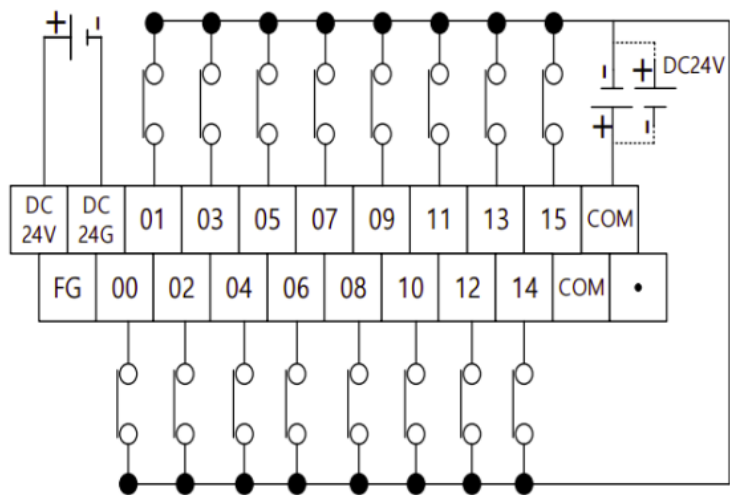
- This is performance specifications of the product. For more information, refer to user manual.

Item	GSL-D2xC	GSL-DT4C/C1	GSL- TRxC/C1	GSL-RY2C
Baud rate	2,400 ~ 38,400 bps			
Protocol	Modbus RTU			
Rated Input C urrent	5mA		—	—
Rated load voltage	—	DC24V		DC24V/AC220V,2A/Point, 5A/COM
Max load	—	0.5A/Point, 3A/COM		DC 110V, AC 250V1,200ti mes/hour
ON Voltage	DC 19V or above			Minimum load voltage/current DC 5V/1m A
OFF Voltage	DC 6V or less			

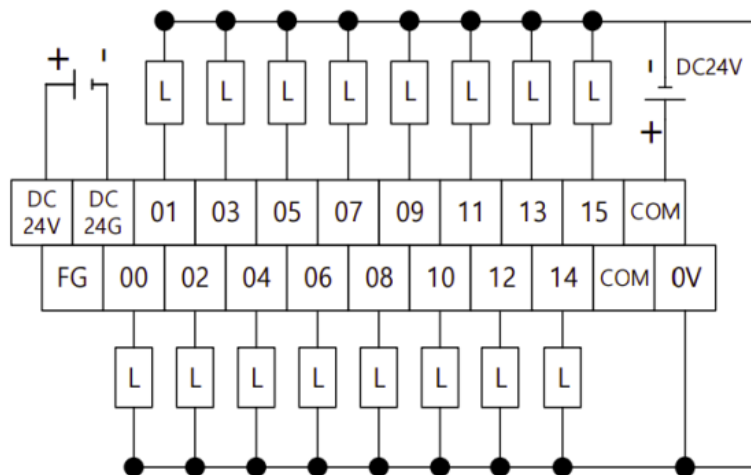
Terminal Block Layout for I/O Wiring

- This is terminal block layout for I/O wiring. Refer to each name when driving the system.
For more information, refer to user manual.

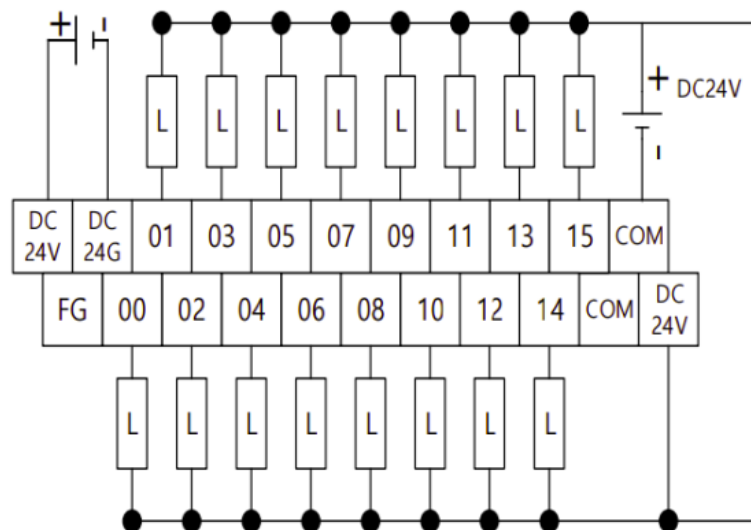
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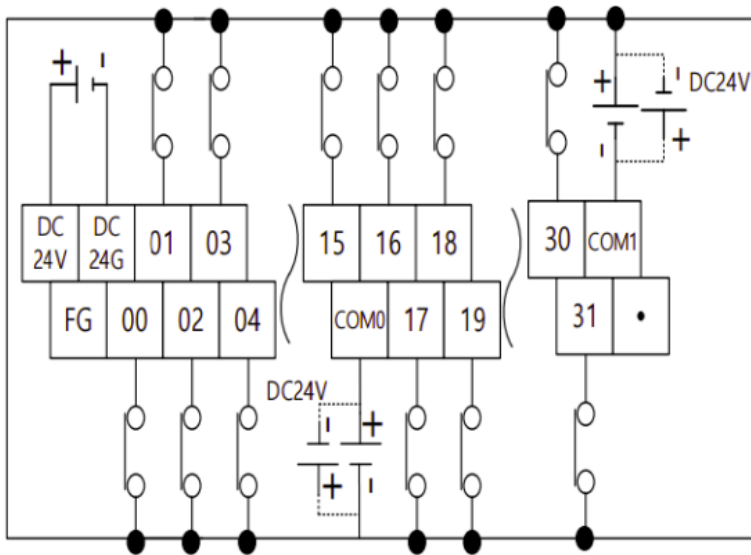
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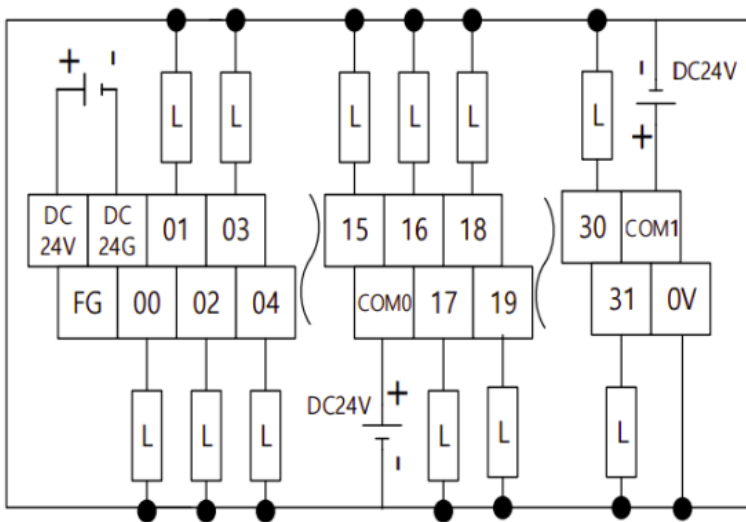
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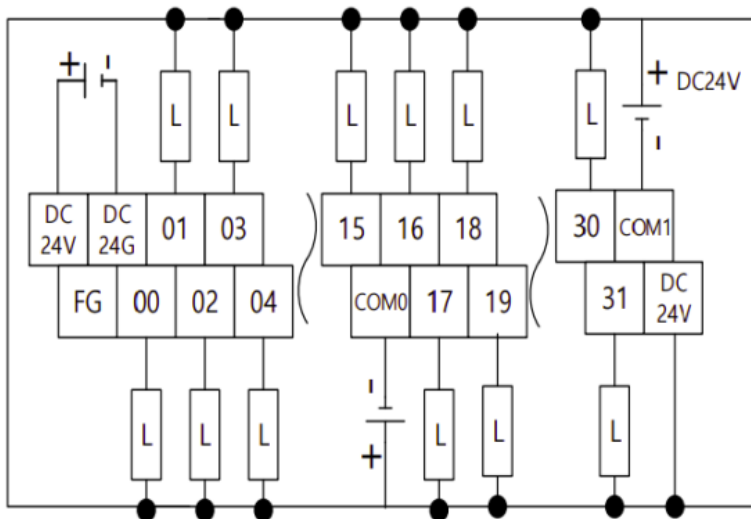
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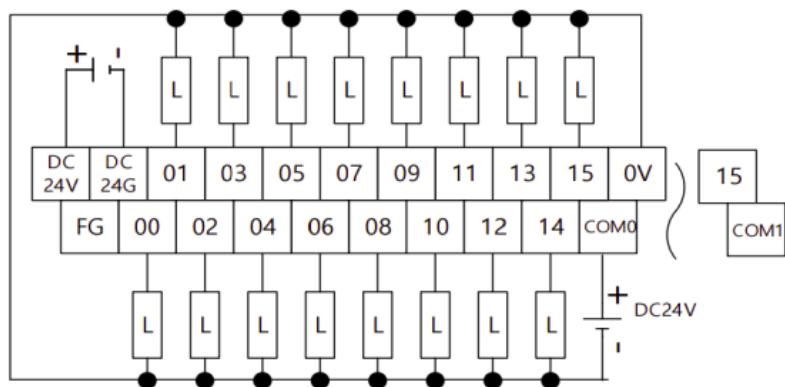
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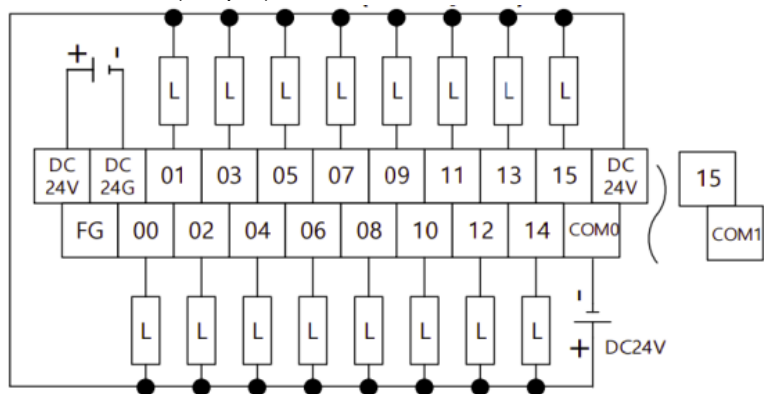
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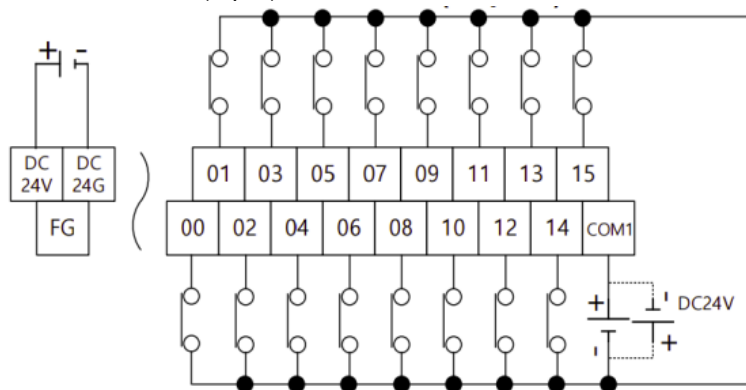
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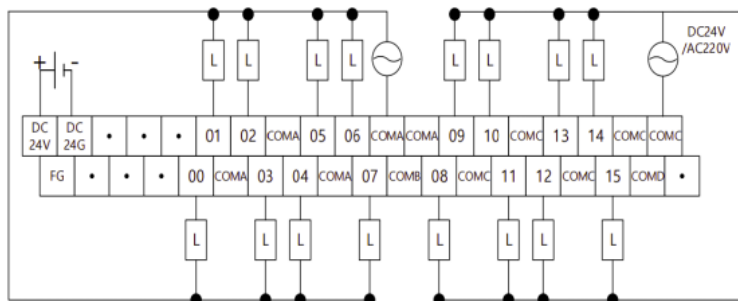
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<GSL-DT4C/C1 (Input)>






<GSL-RY2C>

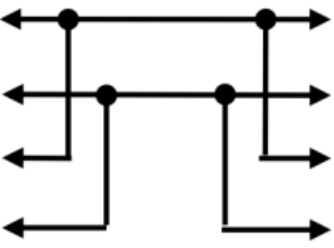



Wiring

- Wiring for Communication
<RS-422 Connection>

Master	Direction	Smart I/O
TX+		RX+
TX-		RX-
RX+		TX+
RX-		TX-
SG		SG

<RS-485 Connection>

Master	Direction	Smart I/O
TX+		RX+
TX-		RX-
RX+		TX+
RX-		TX-
SG		SG

1. For more information about wiring, refer to user manual.

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.

Symbols



QR Code



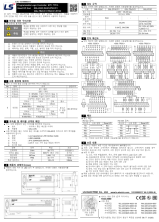
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GSL-D22C Programmable Logic Controller, GSL-D22C, Programmable Logic Controller, Logic Controller, Controller

References

- [User Manual](#)

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