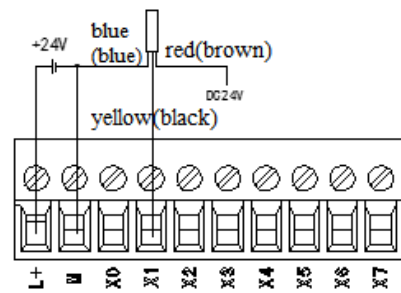
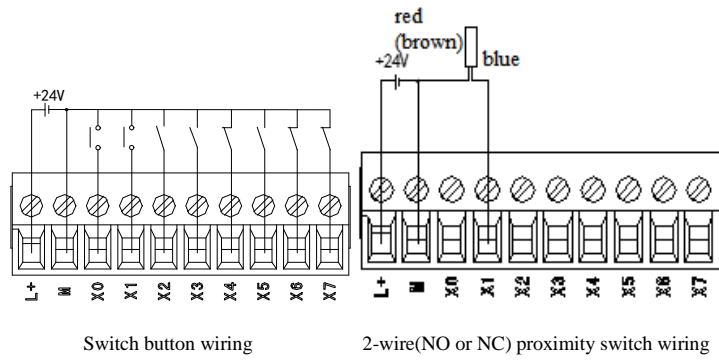


Input signal mode	Contact input or NPN open collector transistor
Circuit insulation	Photocoupling insulation
Input action display	LED lights when the input is ON

● NPN wiring example

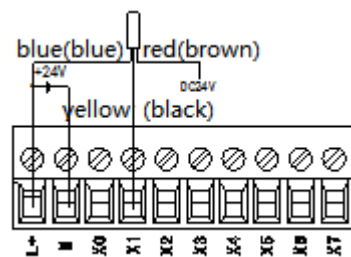
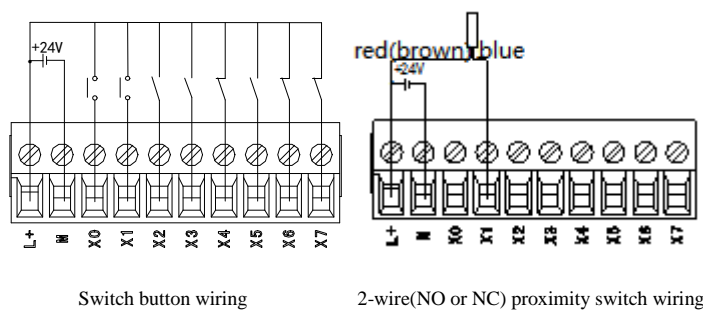


3-wire(NPN) proximity switch wiring

● PNP mode specification

Item	Contents
Input signal voltage	DC24V ±10%
Input signal current	7mA/DC24V
Input ON current	Below 4.5mA
Input OFF current	Below 1.5mA
Input response time	About 10ms
Input signal mode	Contact input or PNP open collector transistor
Circuit insulation	Photocoupling insulation
Input action display	LED lights when the input is ON

● PNP wiring example



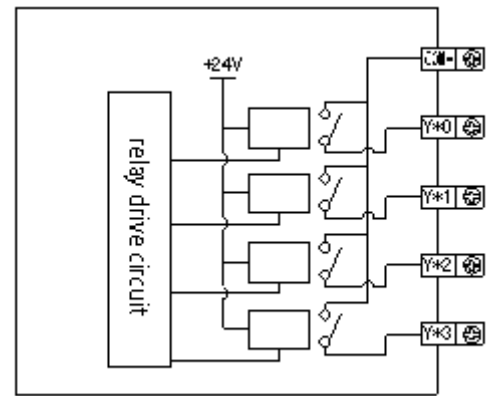
3-wire(PNP) proximity switch wiring

■ Output specification and wiring

The output specification includes transistor and relay. Below will introduce the internal structure and wiring method of the two modes.

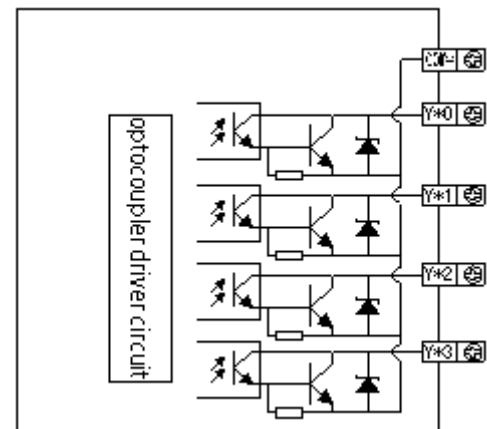
◆ Output specification

Relay output		
External power		Below AC250V, DC30V
Circuit insulation		Mechanical insulation
Action indicator		LED light
Max load	Resistant load	3A
	Inductive load	80VA
	Lamp load	100W
Mini load		DC5V 2mA
Response time	OFF→ON	10ms
	ON→OFF	10ms



Transistor output

Transistor output		
External power		Below DC5~30V
Circuit insulation		Light coupling insulation
Action indicator		LED
Max load	Resistant load	0.3A
	Inductive load	8W/DC24V
	Lamp load	1.5W/DC24V
Mini load		DC5V 2mA
Response time	OFF→ON	Below 0.2ms
	ON→OFF	Below 0.2ms



High speed pulse output

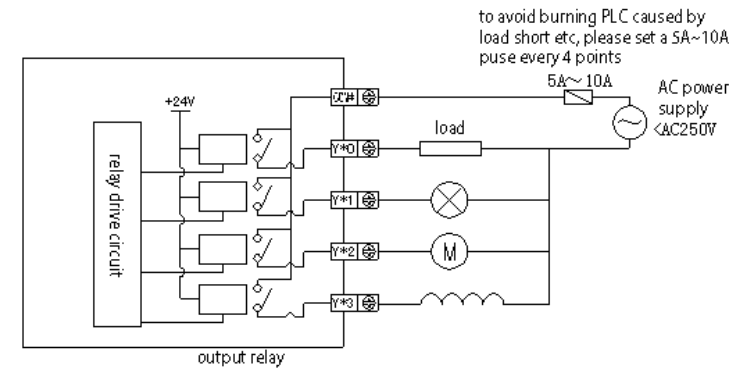
Model	T
Output terminal	Y0, Y1 (XL5-32T4 is Y0~Y3)
External power supply	Below DC5~30V
Action display	LED light
Max current	50mA
Max output pulse frequency	100KHz

Note: when the output pulse frequency is 100KHz to 200KHz, it cannot ensure all the servo can work well, please connect 500Ω resistor between output terminal and 24V power supply.

◆ Relay output

- Relay output type has 2 public terminals. So each public-terminal unit can drive power system with different voltages (E.g.: AC200V, AC100V, DC24V etc.) load.
- Between the relay output coils and contacts, PLC's interior circuits and exterior load circuits are electrical insulating. Besides, each public terminal and block are separate from each other.
- LED lamp lights when output relays' coils energize, output contacts are ON.
- From the output relay energize (or cut off) to output contact ON (or OFF), the response time is about 10ms.
- The output current below AC250V can drive the load made up of resistance is 3A per point, inductive load below 80VA (AC100V or AC200V) and lamp load below 100W (AC100V or AC200V).
- When output contact is OFF, there will be no leak current and can directly drive Ne lamp etc.
- Standard life of AC inductive load such as contactor, electromagnetic valve: according to company's useful life test, about 500 thousand times for 20VA load; about 300 thousand times for 35VA; about 100 thousand for 80VA. But if the load parallel connect with surge absorber, the useful life will greatly improve.

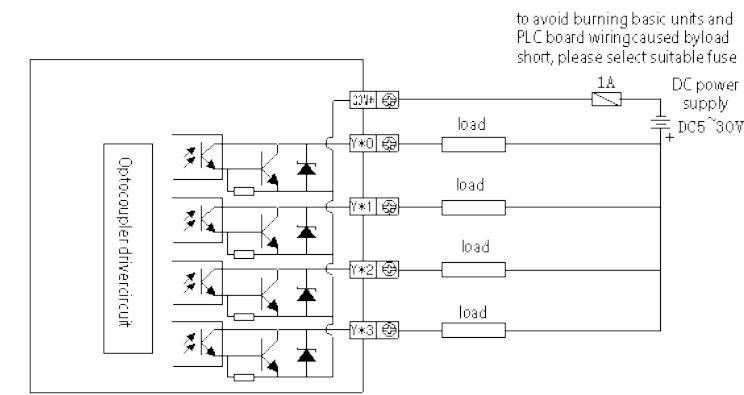
Relay output wiring:



◆ Transistor output

- There are 2 com outputs of CPU unit transistor outputs.
- Please use DC5~30V power supply to drive the load.
- Inside PLC, it uses photoelectric couplers to isolate between internal circuits and output transistors; besides, the COM terminal is separated from each other.
- When photoelectric coupler is driven, LED will be ON and the output transistors will be ON.
- The time interval from PLC photoelectric couplers energizing (or cutting) to transistor ON (or OFF) is below 0.2ms.
- The current output is 0.3A per point. But limited by the temperature rising, every 4 points current is 0.8A.
- Open circuit current is below 0.1mA.

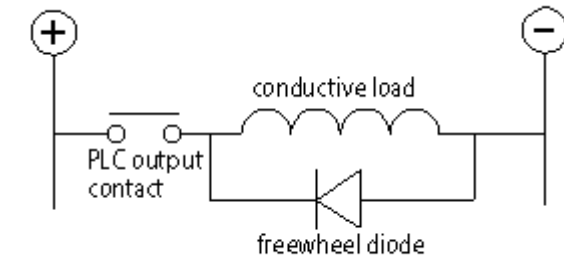
Transistor output wiring:



◆ Output circuit protection

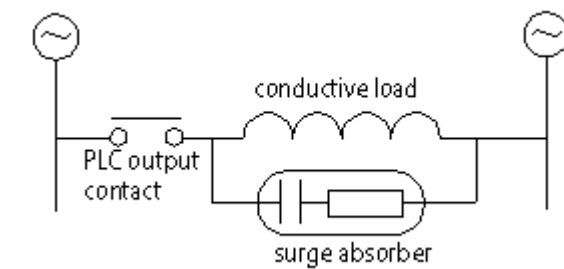
For the inductive load of AC circuit, please use RC instantaneous voltage absorption circuit. For the inductive load of DC circuit, please use freewheeling diode

● DC load



Note: freewheeling diode IN4007.

● AC load



Note: surge absorber R=200Ω 2W, C=0.022μF 250V AC.

■ Connection head specification of terminal

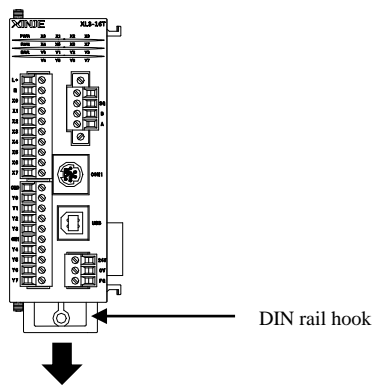
When wiring XL series PLC, its wiring head should meet the following requirements:

- The stripping length is 9 mm;
- Flexible conductors with bare tubular ends are 0.25-1.5 square.
- Flexible conductor with tubular pre-insulated end is 0.25-0.5 square.

Product dimensions and installation

■ Installation

The rail can be used to install the basic unit and extension module. Please use the rail DIN46277.

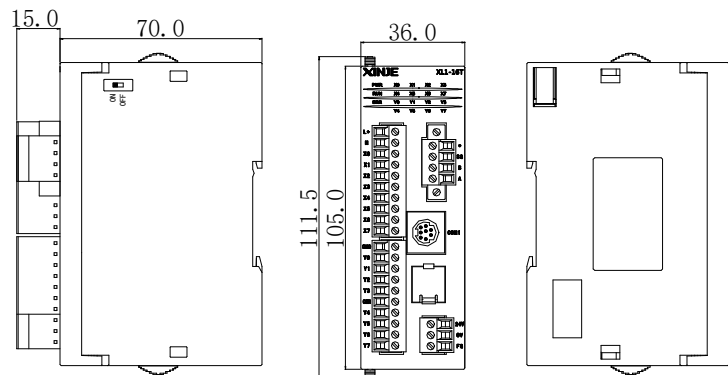


The main unit and extension module can be installed on the DIN46277 rail (width is 35mm).
for removing the product, it needs to pull the hook then move right the product.

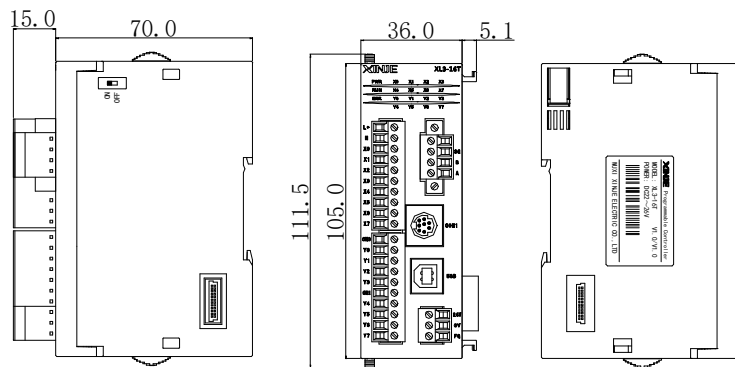
■ Dimensions

(unit: mm)

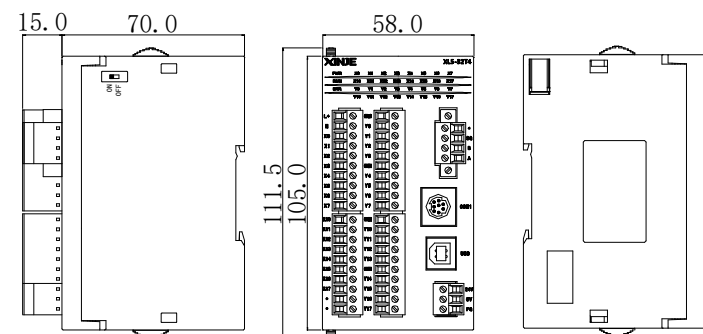
XL1-16T:



XL3-16R, XL3-16T, XL3-16PR:



XL5-32T4:



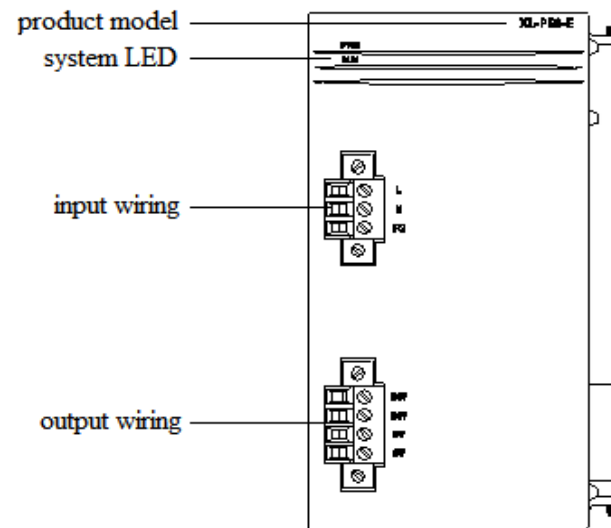
XL-P50-E power adapter

The power supply of XL series PLC can be external switching power supply or power module XL-P50-E.

■ Basic specification

Item	Specification
Power supply	AC85-265V
Output voltage	DC24V
Output current	2A
Air	No corrosive and flammable gas
Environment temperature	0°C~60°C
Environment humidity	5%RH~95%RH (no condensation)
Installation	Install on the rail directly
Ground	The third ground(cannot ground together with high voltage system)

■ Structure



Structure name	Function
Product model	The detailed model of the product
System LED	PWR: power supply light, it is green and always ON when the power is on. RUN: run light, it is green and always ON when the module works well.
Input wiring	L, N: power supply input for the module FG: ground terminal
Output wiring	It can output two groups of DC24V, 0V power supply, and supply the power to the XL3 series PLC.

■ Dimension

(unit: mm)

