

CIMON - PLC

PROGRAMMABLE LOGIC CONTROLLER

Digital Input

- CM1-XD16A
- CM1-XD16B
- CM1-XD16W
- CM1-XD32B
- CM1-XD32C
- CM1-XD64C





Caution

To use this product safely please read the following instructions

1. The power must be off whenever you are in contact with the product.
2. Read and understand the following technical information about the product.
3. For your safety only a qualified electrician should work on this product.

MEMO

General Specifications

Items	Specification				Standards
Ambient Temp.	-10°C~70°C				-
Storage Temp.	-25°C~80°C				-
Ambient Humidity	5~95%RH, (Non-condensing)				-
Storage Humidity	5~95%RH, (Non-condensing)				-
Vibration	For discontinuous vibration				IEC 61131-2
	Frequency	Acceleration	Amplitude	Times	
	10≤f<57Hz	-	0.075mm	X,Y,Z Each direction, 10 times	
	57≤f≤150Hz	9.8m/s ² {1G}	-		
	Contionuous vibration				
	Frequency	Acceleration	Amplitude		
	10≤f<57Hz	-	0.035mm		
57≤f≤150Hz	4.9m/s ² {1G}	-			
Shocks	· Max. impact acceleration: 147m/S ² (15G)				IEC 61131-2
	· Authorized time : 11ms				
	· Pulse wave : Sign half-wave pulse (3 times each in X, Y, Z)				
Noise	Square wave impulse noise	± 2,000V			CIMON standard
	Electrostatic discharge	Voltage : 4kV (contact discharging)			IEC 61131-2 IEC 1000-2
	Radiated electromagnetic field noise	27~500 MHz,10V/m			IEC 61131-2 IEC 1000-4-3
	Fast Transient Burst noise	Power module	Digital I/O (24V or more)	Digital I/O(less than 24V) Analog I/O Comm. interface	IEC 61131-2 IEC 1000-4-4
		2 kV	2 kV	0.25 kV	
	Voltage	2 kV/1min		0.5 kV/1min	
Ambient conditions	No corrosive gas or dust				
Cooling type	Natural air cooling				

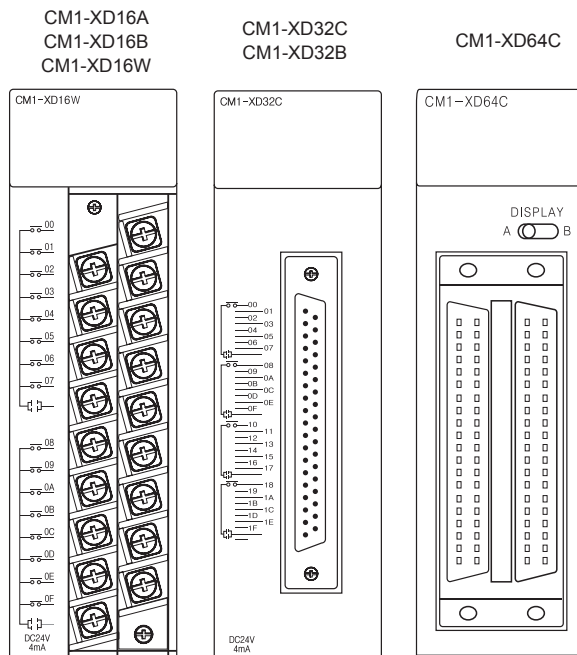
Performance Specifications

Items	DC Input		
	CM1-XD16A	CM1-XD32C	CM1-XD64C
Input type	SINK and SOURCE		
Rated Input Voltage	DC24V		
Rated Input Current	4mA		
On Voltage/Current	DC19V / 4mA		
Off Voltage/Current	DC11V / 1mA		
Response time	Off → On	5ms or less	
	On → Off	5ms or less	
No.of Occupied Points	16 points	32 points	64 points
Common type	8 points / 1COM		32 points / 1COM
Internal current consumption	60mA	100mA	220mA
Action Indication	LED is on when input is set		
Insulation Type	Photo-Coupler		

Performance Specifications

Items	DC Input		
	CM1-XD16B	CM1-XD32B	CM1-XD16W
Input type	SINK and SOURCE		
Rated Input Voltage	DC24V		DC100V
Rated Input Current	4mA		
On Voltage/Current	DC15V / 4mA		DC60V / 4mA
Off Voltage/Current	DC12V / 1mA		DC40V / 1mA
Response time	Off → On	5ms or less	
	On → Off	5ms or less	
No. of Occupied Points	16 points	32 points	16 points
Common type	8 points / 1COM		
Internal current consumption	60mA	100mA	
Action Indication	LED is on when input is set		
Insulation Type	Photo-Coupler		

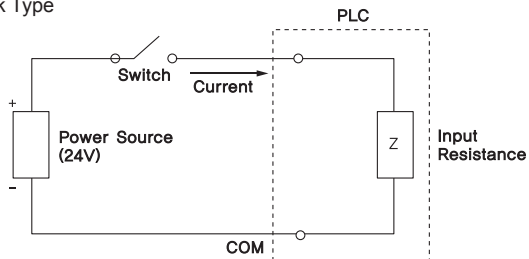
Digital Input Modules



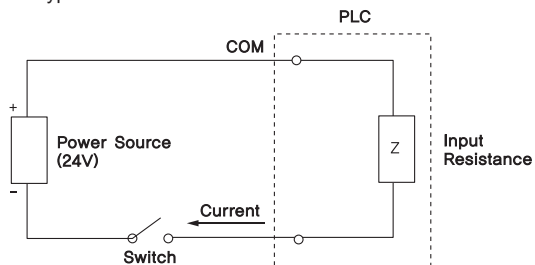
- ▶ The tightening torque is 6.99 in.lb
- ▶ USE COPPER OR COPPER-CLAD ALUMINUM CONDUCTORS
- ▶ "Class 2, adjacent to voltage rating(30V max.)"

Connection Type

• Sink Type



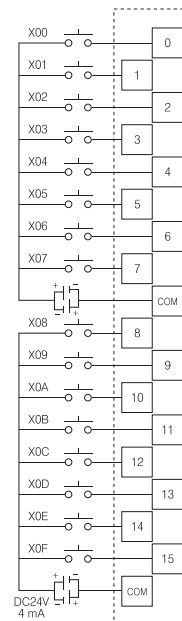
• Source Type



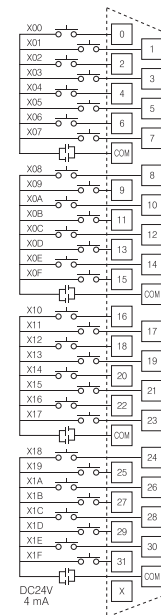
※ CM1-XD16A, CM1-XD16W, CM1-XD32C and CM1-XD64C are used for both Sink and Source.

Wiring Diagram

CM1-XD16A
CM1-XD16B
CM1-XD16W



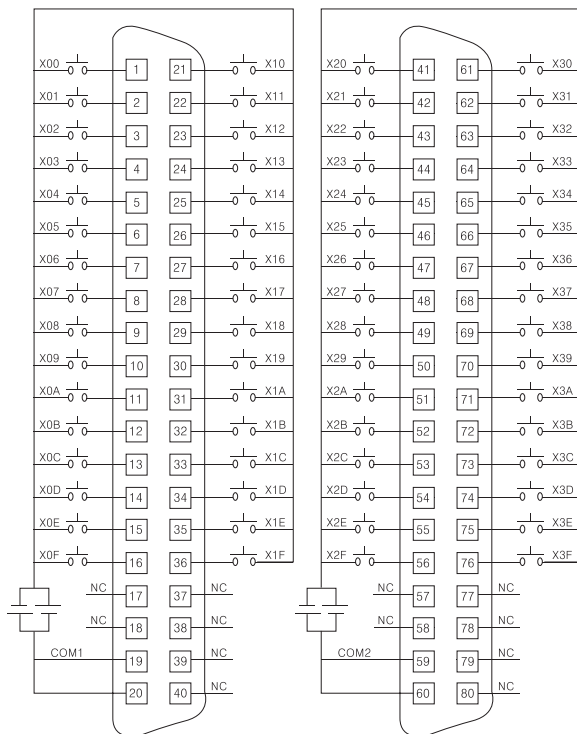
CM1-XD32C
CM1-XD32E



- DC24V 4mA (CM1-XD16A/E)
- AC100V 4mA (CM1-XD16W)

Wiring Diagram

CM1-XD64C



Safety Precautions

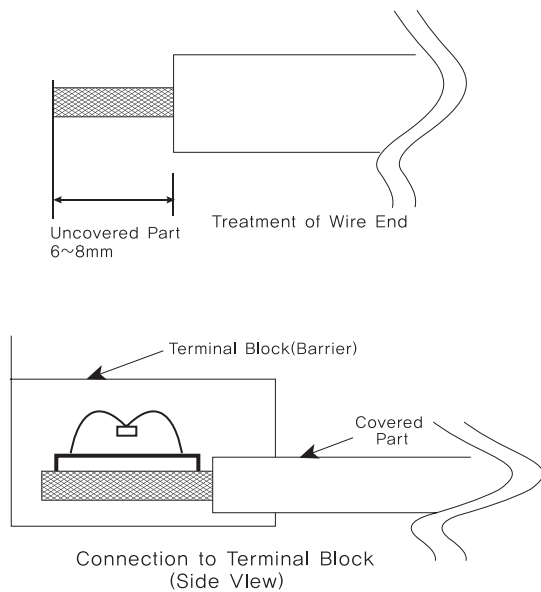
- 1) Use a cable for input signal of module differently from a cable for AC to prevent the influence of surge or induction noise occurring from AC.
- 2) Select a cable considering ambient temperature and allowable current AWG22(0.3mm²) or more is recommended.
- 3) The wiring close to heat-generating device or material and directly contacted with oil for long time may cause short circuit, breakdown or malfunction.
- 4) In case of wiring together with high-voltage cable or power line, it may cause malfunction or breakdown.
- 5) The tightening torque is 6.99 in.lb.
- 6) Use copper or copper-clad aluminum conductor.

Features and Operation

- 1) All modules are photo-coupler-insulated.
- 2) LED indication enables to make sure the operation of a module.
- 3) Terminal block type and one-touch module loading type lead easy maintenance.
- 4) CM1-XD16A, XD32C and XD64C are DC24V input module.
CM1-XD16W is DC 100V input module.

Safety Precautions

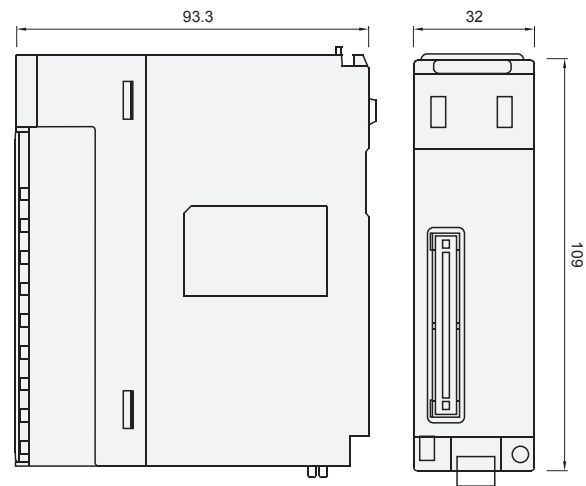
- 1) When connecting to a terminal block without contact connector, strip the insulation of the wire back 6mm to 8mm. And take care that the uncovered part of the wire is pushed all the way into the terminal block.



- 2) In case of a twisted wire, take care that it is not untwisted.

Dimension

(Unit:mm)



Revision History

Version	Date	Content	Page
V1.0	2013-04	New version	-

Product Warranty

January 2014

All Cimon products including hardware, software, and firmware (*collectively called "Products"*) carry a **one-year warranty** against defects in materials and workmanship beginning from the date of product receipt from seller or its appointed distributor. If a product proves defective in materials and workmanship within one year from the date of purchase, we will replace or repair it. **Products returned under warranty after 30 days may be replaced with refurbished or remanufactured goods at Cimon's discretion.** Cimon makes no representation or warranty, express or implied, that the operation of the Products will be uninterrupted or error free, or that the functions contained therein will meet or satisfy buyer's intended use or requirements. **Repaired or replaced Products provided as a result of this warranty are warranted for a period of six (6) months from the shipment to buyer or the remainder of the original warranty term for that particular product, whichever is longer.** Cimon's standard policy is that all customers are responsible for freight charges to Cimon when returning products under the warranty return policy.

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Product Warranty

To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and usually change with time. It is your responsibility to determine which codes should be followed, and to verify that the equipment, installation and operation is in compliance with the latest revision of these codes.

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Product Warranty

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