

BP Main Block

- CM2-BP32M□□□

CIMON-PLC
PROGRAMMABLE LOGIC CONTROLLER



GENERAL SPECIFICATIONS

Items	Specifications	Standards				
Op. Temp.	-10°C ~ 60°C					
St. Temp.	-25°C ~ 80°C					
Op. Hum.	5~95% RH, Not Condensed					
St. Hum.	5~95% RH, Not Condensed					
Vibration	In case of intermittent vibration			10 times each X,Y,Z axis	IEC 1131-2	
	Freq.	Accel.	Amplitude			Sweep
	10≤f<57Hz	-	0.075mm			
	57≤f≤150Hz	9.8%{1G}	-			
	In case of continuous vibration					
	Freq. (Hz)	Accel.	Amplitude			
10≤f<57Hz	-	0.035mm				
57≤f≤150Hz	4.9%{0.5G}	-				
Shock	· Max. shock Accel. : 147% (15G)			IEC 1131-2		
	· Time : 11ms					
	· Pulse : Half sine wave pulse (3 times each X, Y, Z axis)					
Noise	Sq. wave impulse	±2,000V		KDT Standard		
	ESD	4kV (Contact discharge)		IEC 1131-2 IEC 801-2		
	Radiated EMF	27 ~ 500MHz, 10V/m		IEC 1131-2 IEC 801-2		
	Fast transient / burst	Power	Digital I/O (24V or more)	Digital I/O (Less than 24V) Analog I/O Communication	IEC 1131-2 IEC 801-2	
2kV			2kV	0.25kV		
Env.	No corrosive gas and no dust					
Altitude	2,000m or less					
Pollution	2 or less					
Cooling	Natural air cooling					

MODULE SPECIFICATIONS

Items	Specifications
Power Supply	AC 220V / DC 24V (Max. 20W)
Input	DC 24V
Output	Relay / TR Sink / TR Source
Expansion	Max. 3 Unit (Max. 2 Analog, Max 3 I/O units)
Main Block I/O	16 Inputs / 16 Outputs
Program Control	Stored Program, Cyclic Processing, Time Driven Interrupt
I/O Processing	Indirect (or direct by instruction)
Language	IL(Instruction List), LD(Ladder Diagram)
Basic Inst.	55 Instructions
Application Inst.	289 Instructions
Speed	200ns / Step (Basic Instruction)
Program Capacity	8K Steps

► I/O and Data Memory

X	Y	M	L	K	F
128	128	4,096	1,024	1,024	2,048
T	C	S	D	Z	
256	256	100 set	5,000	1,024	

INPUT SPECIFICATIONS

Items	Specifications
Input Voltage	DC 24V
Nominal Input Current	4mA
On Voltage/Current	DC19V/4mA
Off Voltage/Current	DC11V/1mA
Resp. Time	5ms or faster
Time	5ms or faster
Common Type	4 Points Common
Operation Display	LED
Insulation Type	Photocoupler
Input Type	SINK/SRC
Wiring Diagram	<p>The diagram shows four input points labeled 0, 1, 2, and 3. Each point is connected to a common terminal labeled COM through a switch. A DC24V 4mA source is connected to the common terminal.</p>

OUTPUT SPECIFICATIONS

Items	Relay	Transistor
Nominal Output Voltage	AC220V/DC24V	DC12/24V
Max. Output Current	2A for 1 Point (5A for common)	0.2A for 1 Point (2A for common)
Resp. Time	10ms or faster	1ms or faster
Time	5ms or faster	1ms or faster
Common Type	4 Points	8 Points
Operation Display	LED	LED
Insulation Type	Relay	Photocoupler
Wiring Diagram	<p>The diagram shows four output points labeled 0, 1, 2, and 3. Each point is connected to a common terminal labeled COM through a relay. An AC220V 2A source is connected to the common terminal.</p>	<p>The diagram shows four output points labeled 0, 1, 2, and 3. Each point is connected to a common terminal labeled COM through a transistor. A DC24V 0.5A SINK source is connected to the common terminal.</p>

COMMUNICATION OPTIONS

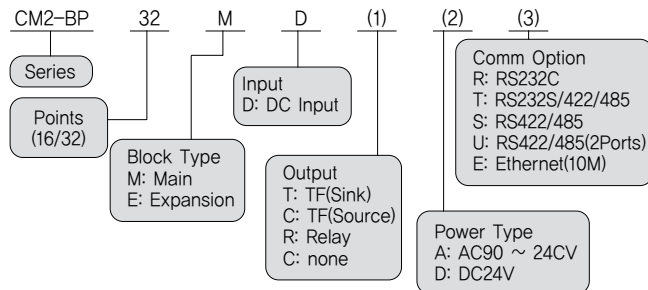
► RS232/422/485

Option (BPnnMxxx-)		-T	-U	-R	-S
Channel Type		RS232C RS422/485	RS422/485 (2 ports)	RS232C	RS422/485
Mode	HMI	Multi-Drop (max. 32 stations)			
	Loader	Support	Support	X	X
	Program	Support	Support	X	X
Param	Data Bits	7 or 8 bits			
	Stop Bits	1 or 2 bits			
	Parity	Even / Odd / None			
Synchronize		Asynchronous			
Speed (bps)		300/600/1200/2400/9600/19200/38400			
Modem Supp.		Supports Dial-Up MODEM			

► Ethernet

Option (BPnnMxxx-)	-E
Cable Type	10BASE -T
Comm. Speed.	10Mbps
Max. Distance	100m (Node to HUB)
Max. HUB	Max. 4 cascaded HUB
Max. Frame Size	1500 bytes
Protocol	TCP/IP, UDP/IP

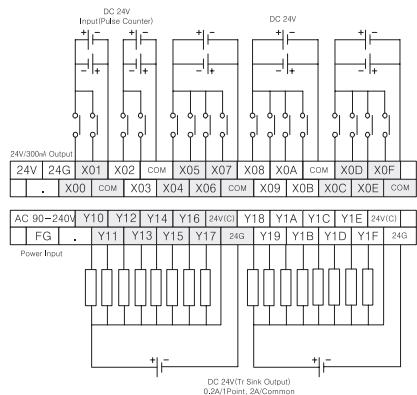
Main Block Line-Up



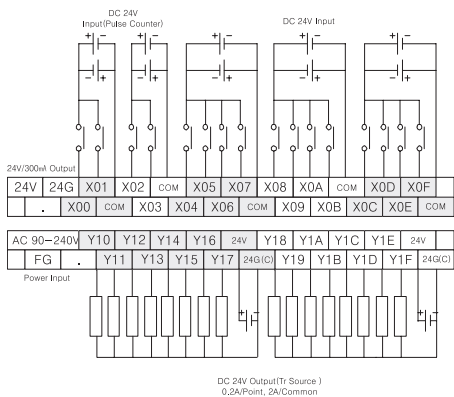
Model Name	Power	Input	Output	Option
CM2-BP32MDTA□	AC 90	DC 24V	TR(SINK)	R : RS232C T : RS232C S : RS422/485 U : RS422/485 E : Ethernet
CM2-BP32MDCA□	~		TR(SRC)	
CM2-BP32MDRA□	240V		RELAY	
CM2-BP32MDTD□	DC 24V		TR(SINK)	
CM2-BP32MDCD□			TR(SRC)	
CM2-BP32MDRD□			RELAY	
CM2-BP16MDTA□			AC 90	
CM2-BP16MDCA□	~		TR(SRC)	
CM2-BP16MDRA□	240V		RELAY	
CM2-BP16MDTD□	DC 24V		TR(SINK)	
CM2-BP16MDCD□		TR(SRC)		
CM2-BP16MDRD□		RELAY		

EXTERNAL WIRING

▶ CM2-BP32MDTA □

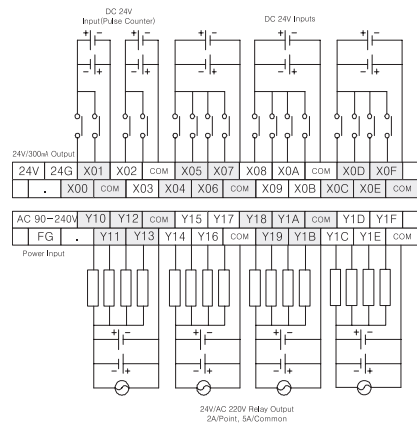


▶ CM2-BP32MDCA □



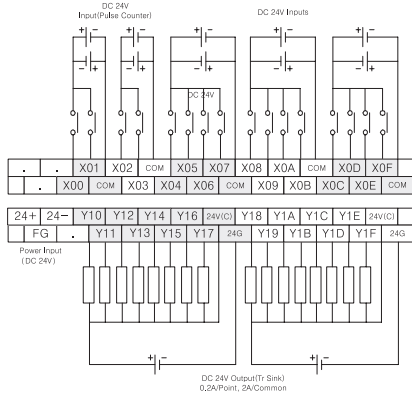
EXTERNAL WIRING

▶ CM2-BP32MDRA □

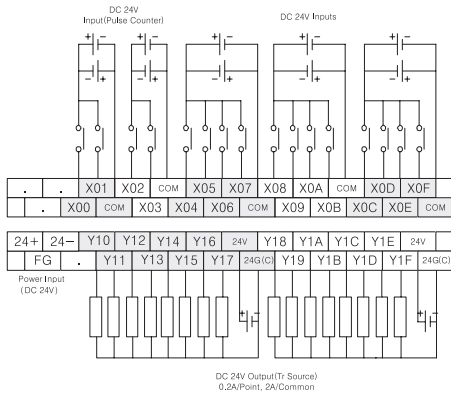


EXTERNAL WIRING

▶ CM2-BP32MDTD □

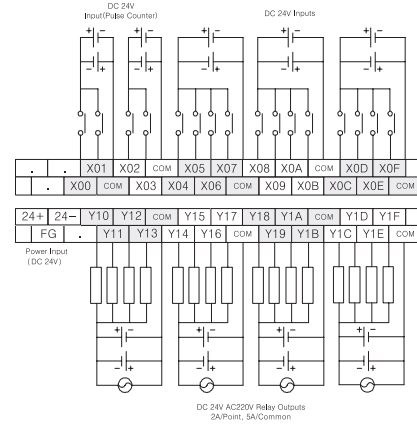


▶ CM2-BP32MDCD □

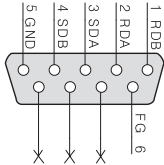


EXTERNAL WIRING

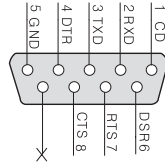
▶ CM2-BP32MDRD □



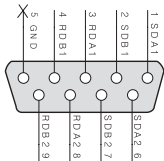
COMMUNICATION CABLE WIRING



RS422/485(Option S)



RS232(Option R)



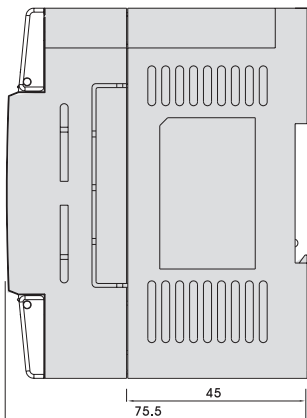
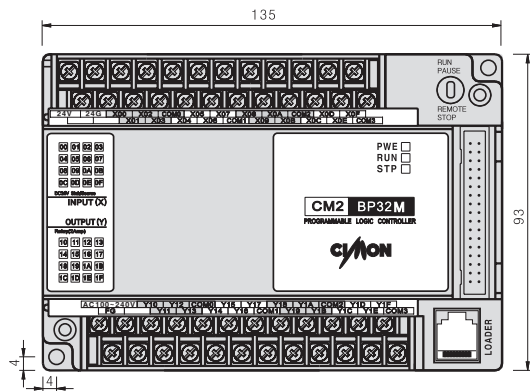
RS422/485 2Ch(Option U)

WIRING PRECAUTIONS

- ▶ Always ground the FG terminal for the PLC. There is a risk of electric shock or malfunction.
- ▶ When turning on the power and operating the module after wiring is completed, always attach the terminal cover that comes with the product.
- ▶ Tighten the terminal screws within the range of specified torque.
If the terminal screws are loose, it may result in short circuits or malfunction.
- ▶ Be careful not to let foreign matters such as sawdust or wire chips get inside the module. These may cause fires, failure or malfunction.

DIMENSIONS

(Unit:mm)



INSTALLATION PRECAUTIONS

- ▶ Use the PLC in an environment that meets the general specifications given in the User's Manual of the CPU module being used.
- ▶ Do not bunch the control wires or communication cables with the main circuit or power wires, or install them close to each other. They should be installed 100mm (3.94 inch) or more from each other. Not doing so could result in noise that may cause malfunction.
- ▶ Switch all phases of the external power supply off when mounting or removing the module. Not doing so may cause damage to the module.
- ▶ Do not directly touch the conductive area or electronic components of the module. Doing so may cause malfunction or failure in the module.

 **SAFETY PRECAUTIONS**

When using CIMON PLC, thoroughly read this manual and the associated manuals introduced in the manual. Also pay careful attention to safety and handle the module properly.

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