

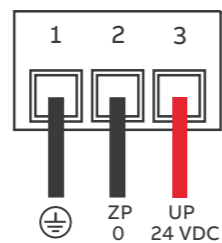
PM3012-R-TP Quick start guide



3AXD50001195724 Rev A EN
2025-03-13
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Original instructions.
3AXD50001195724A



Separate the PLC earthing from other high-power systems. Refer to the earthing terminals (shown below) marked on the unit. Do not use an earth that has an unstable impedance, such as painted screws or earth subject to vibration.



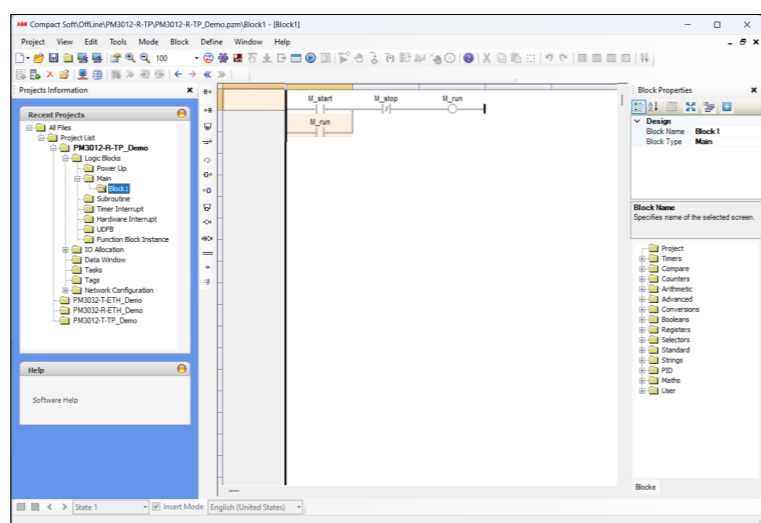
5. Configure the PLC

- Launch the Compact Soft software. The software is available offline. For information on how to install the software, contact your local ABB representative.
- In Compact Soft software, go to **Project** → **New**, to create a new application.
- In the Select Product window,
 - Select Product series, Product, and Model from the drop-down list. For PLC, always select AC300.
 - Click **OK**.

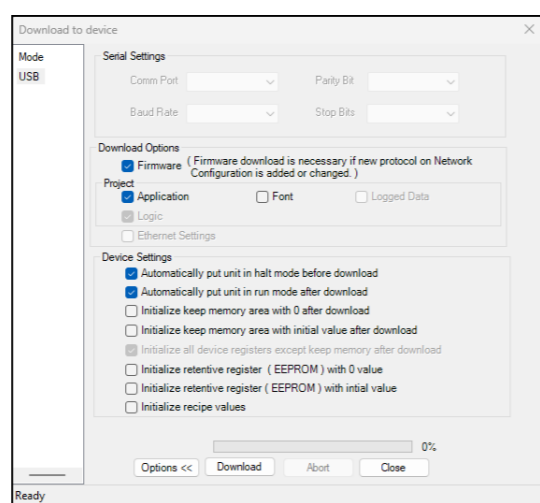


The Project Configuration dialog box opens.

- Optional:** In the Project Configuration dialog box, you can modify the Project title and add the Description. The PLC is configured and appears in the Project List.
- Develop the logic in any programming language by navigating to the **Project list** → **«Project name»** → **Logic Blocks** → **Main** → **Block1**.



- Connect one end of the programming cable to the PLC's USB Type-C port. Connect the other end to the PC.
- Go to, **Mode** → **Go Online** → **With Download** to download the application into the PLC.
- Enable the download options: Firmware and Application. Click **Download**.



The PLC is configured and ready to use in the system.

6. Prepare the communication ports

Connect the required communication ports based on the product code. For pin configuration, refer section [Communications ports](#).

PLC specifications

Power supply	24 VDC (± 15%), 110 mA, 2.64 W (without expansion) 24 VDC (± 15%), 300 mA, 7.2 W (with 8 expansions)
Isolation	Non-Isolated
Memory	
Application	80 KB
Ladder	160 KB
IEC retain Variable	2000 bytes
Communication Ports	
COM1	RS232, for programming & communication
COM2	2-wire RS485 for communication
USB	1 x USB Type-C, for programming and monitoring
Expansions	
Expansion IO capacity	8 expansions modules
Local IO Specification	
Number of Inputs	8 inputs (Bi-directional type)
Input Design	According to the EN 61131-2 type 1
ON Voltage	Minimum: 15 VDC, Maximum: 30 VDC
OFF Voltage	Minimum: -3 VDC, Maximum: 5 VDC
Nominal Input	24 VDC, 5 mA typical
Isolation	Optically isolated from internal circuit High isolation voltage (BV= 3.7 KV)

Input Response Time	ON: 10 msec, OFF: 10 msec
Input Impedance	4.4 Kohm
High Speed Channels	High Frequency 25 kHz: 2 pairs (X0-X1, X2-X3) or Low Frequency 10 kHz: 8 (X0 to X7)
Single Phase Counter	
Quadrature Channels	Frequency 10kHz: 2 pairs (X0-X1, X2-X3) or 4 pairs 5 KHz (X0-X1, X2-X3, X4-X5, X6-X7)
Max. Input Count	4294967295 (32 Bit)
Number of Outputs	6 relay type
ON Output Voltage	Min ON: 22 VDC (Voltage across load) Max. ON: 30 VDC (Voltage across load)
Nominal Output Voltage	24 VDC
Nominal Output Current	2 A typical per channel
Isolation	Isolated
Environment & Approvals	
Operating Temperature	0 to 55°C
Humidity	10 to 90% (Non-Condensing)
Shock	25 g, 11ms, Half Sine wave, 3 mutually perpendicular axes
Vibration	5 to 150 Hz, displacement of 0.3 mm (peak to peak), 3G, 3 mutually perpendicular axes
Approvals	CE and RoHS

LED status

The below table describes the LED status for the different actions of the PLC.

	Actions in PLC			LED		LED state
	Application	Switch state	Error state	Green	Red	
Download	Download	x	x	OFF	ON	Red ON
Not Present	x	x	x	Blink	Blink	Red & Green alternate
Present	Not Present	x	x	OFF	Blink	Red 1s ON 1s OFF
Present	Present	RUN	No Error	ON	OFF	Green ON
Present	Present	RUN	Error	OFF	Blink	Red 0.25s ON 0.25s OFF
Present	Present	STOP	No Error	Blink	OFF	Green 1s ON 1s OFF
Present	Present	STOP	Error	Blink	OFF	Green 0.25s ON 0.25s OFF

Note: x indicates no action.

Communications ports

The PLC module supports the following serial communication ports. Each port information in the below sections include the pin description.

COM1

Physical port: RS232

The PLC module has one terminal block port which is used for programming or communication.

Pin number	Signal
1	232 TXD
2	232 RXD
3	GND
4	NC
5	NC
6	NC
7	NC
8	NC

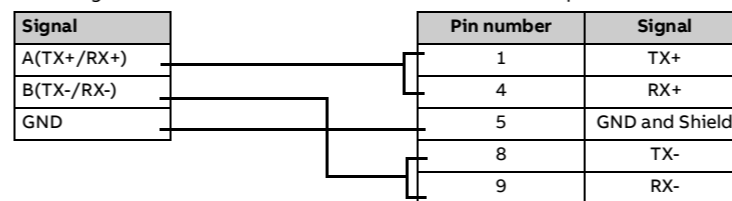
COM2

Physical port: 2-wire RS485

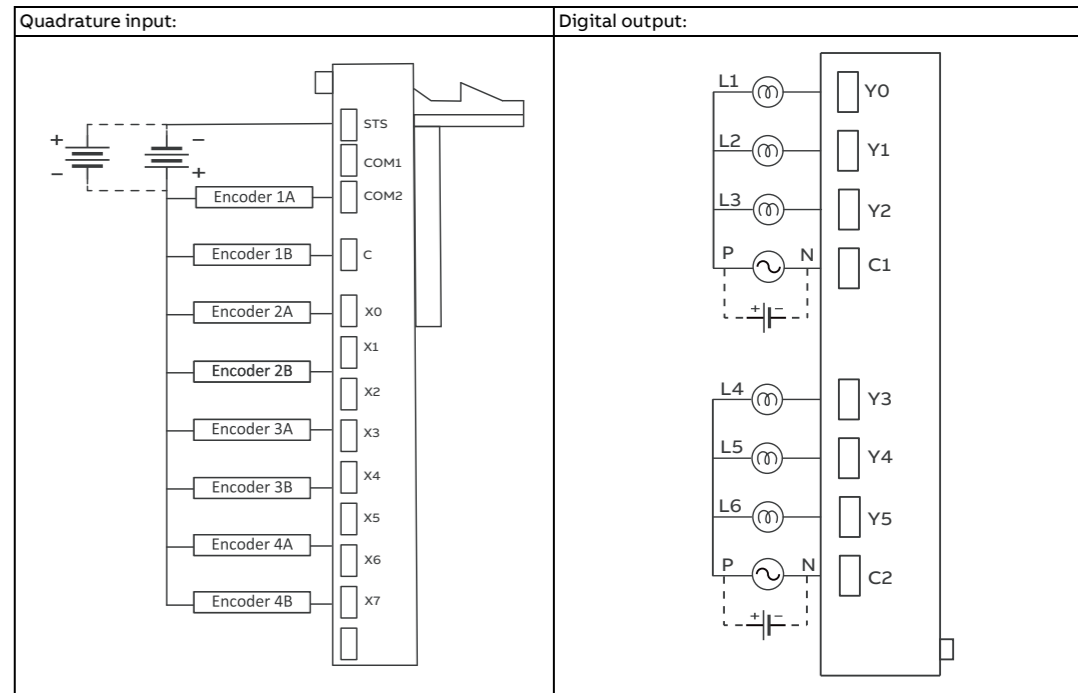
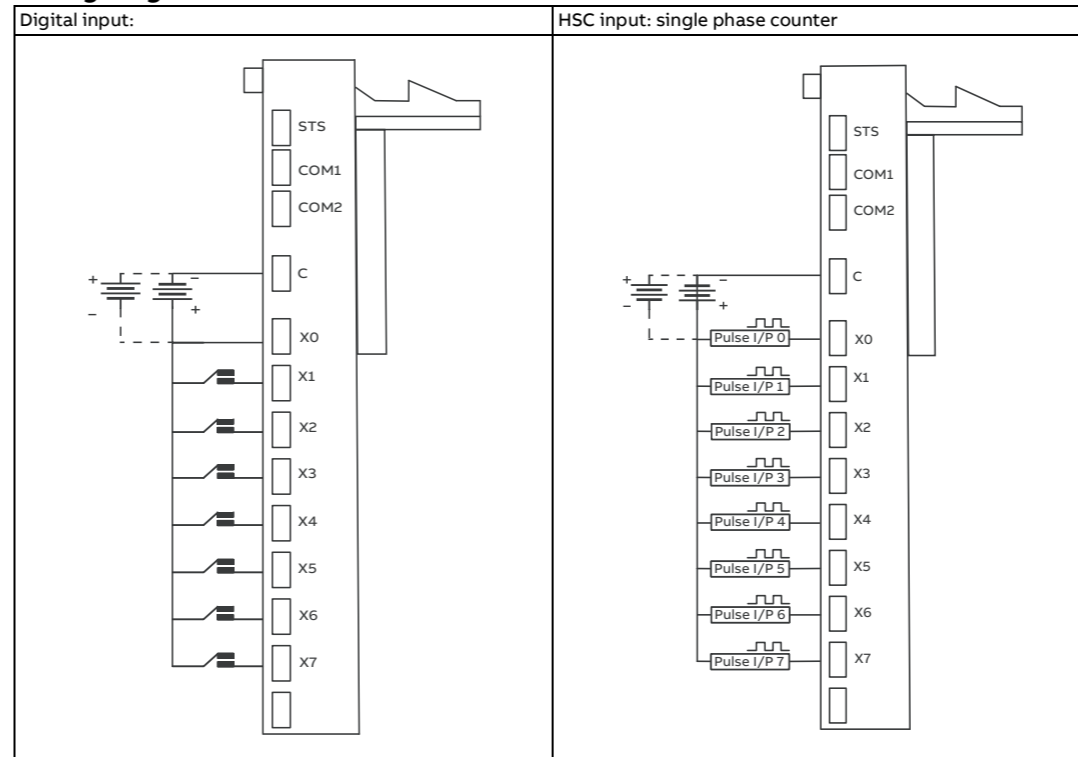
The PLC module has one open terminal block port for communication.

Pin number	Signal
1	TX+ /RX+
2	TX- /RX-
3	GND

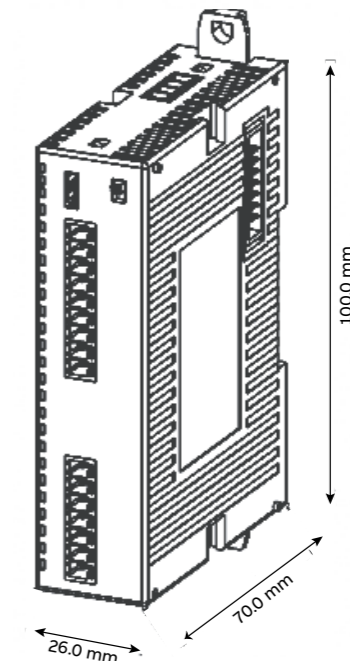
Pin configuration for communication between PLC and control panel on COM Port 2.



Wiring diagram



PLC module dimensions



The PM3012-R-TP is a PLC module that supports the following features:

- 8 inbuilt digital inputs
- 6 inbuilt relay type outputs
- 2 serial ports (RS232 and RS485)
- Expandable up to 8 I/O modules
- 1 USB Type-C port.

Safety instructions

WARNING! Obey these instructions. If you ignore them, injury or death, or damage to the equipment can occur. If you are not a qualified electrical professional, do not do electrical installation or maintenance work.

- Do not remove or replace while be free of ignitable concentrations of flammable substances.
- Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.
- Inspect all sealed devices and replace if any degradation is found.

1. Unpack the delivery

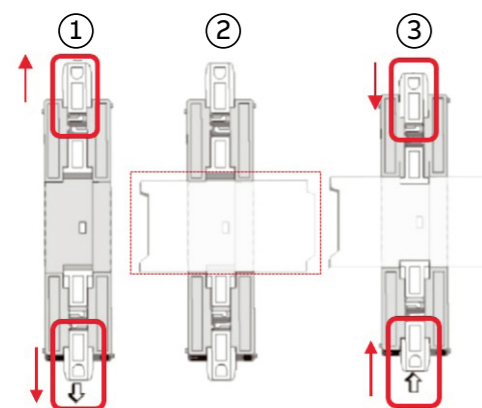
Keep the PLC module in its package until you are ready to install it. After unpacking, protect it from dust, debris, and moisture. Make sure the package includes the below items:

- PLC module
- Terminal connectors
- Quick start guide.

Make sure that there are no signs of damage to the items.

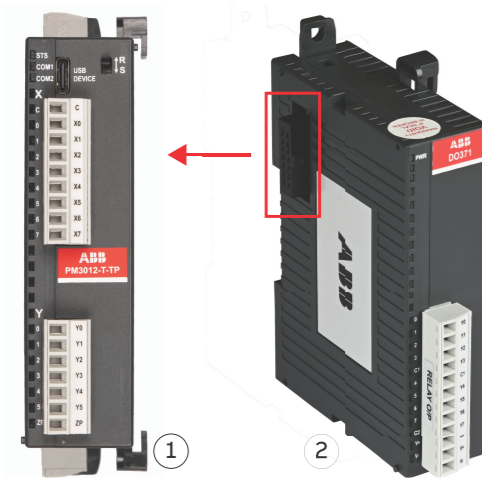
2. Mount the PLC module on the DIN rail

- Pull up the sliders provided with the unit towards outward direction.
- Mount the PLC module on the DIN rail plate.
- Lock the PLC module on the DIN rail plate by pushing the sliders inwards such that the sliders grip the DIN plate.

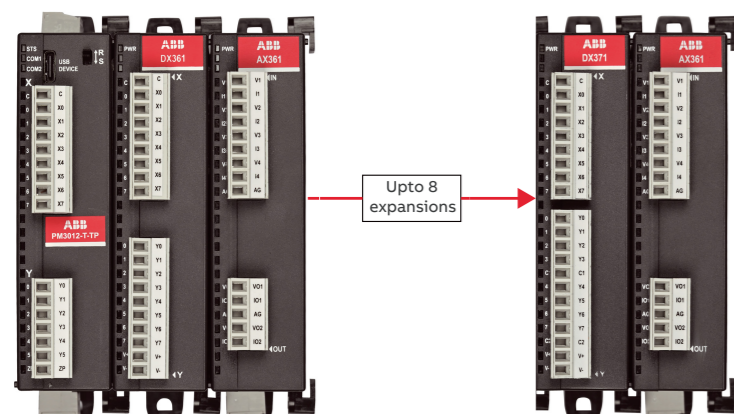


3. Connect the PLC expansion modules to the PLC module

- Align the PLC expansion module [2] to the designated slot onto the PLC module [1].



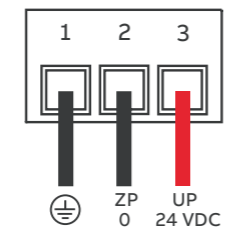
- Make sure that the lock connector is fully seated onto the PLC expansion module preventing any loose connections. **Note:** You can connect up to 8 PLC expansion modules to the PLC.





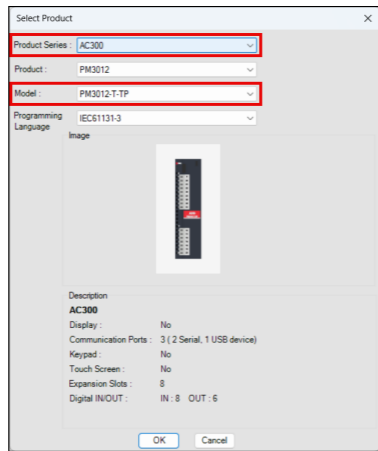
Separate the PLC earthing from other high-power systems. Refer to the earthing terminals (shown below) marked on the unit.

Do not use an earth that has an unstable impedance, such as painted screws or earth subject to vibration.



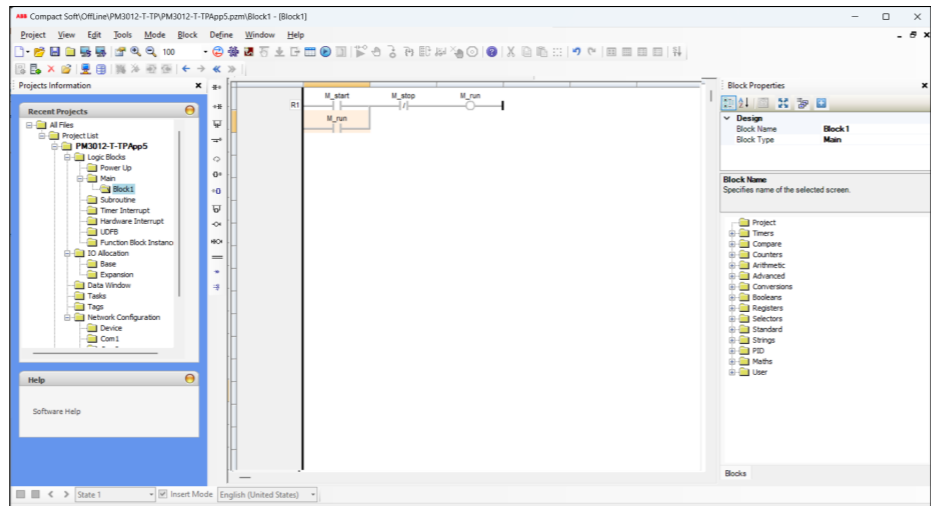
5. Configure the PLC

1. Launch the Compact Soft software. The software is available offline. For information on how to install the software, contact your local ABB representative.
2. In Compact Soft software, go to **Project** → **New**, to create a new application.
3. In the Select Product window,
 - Select Product series, Product, and Model from the drop-down list. For PLC, always select AC300.
 - Click **OK**.

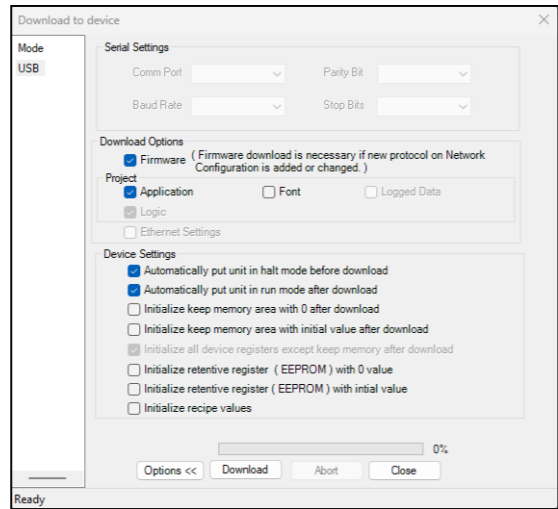


The Project Configuration dialog box opens.

4. **Optional:** In the Project Configuration dialog box, you can modify the Project title and add the Description. The PLC is configured and appears in the Project List.
5. Develop the logic in any programming language by navigating to the **Project list** → **<Project name>** → **Logic Blocks** → **Main** → **Block1**.



6. Connect one end of the programming cable to the PLC's USB Type-C port. Connect the other end to the PC.
7. Go to, **Mode** → **Go Online** → **With Download** to download the application into the PLC.
8. Enable the download options: Firmware and Application. Click **Download**.



The PLC is configured and ready to use in the system.

6. Prepare the communication ports

Connect the required communication ports based on the product code. For pin configuration, refer section [Communications ports](#).

PLC specifications

Power supply	24 VDC (± 15%), 110 mA, 2.64 W (without expansions) 24 VDC (± 15%), 300 mA, 7.2 W (with 8 expansions)
Isolation	Non-Isolated
Memory	
Application	80 KB
Ladder	160 KB
IEC Retain variables	2000 bytes
Communication Ports	
COM1	RS232 for Programming / Communication
COM2	2-wire RS485 for Communication
USB	1 x USB Type-C, for programming & monitoring
Expansions	
Expansion IO capacity	8 expansion modules
Local IO Specification	
Number of Inputs	8 Inputs (Bi-directional type)
Input Design	According to the EN 61131-2 type 1
ON Voltage	Minimum: 15 VDC, Maximum: 30 VDC
OFF Voltage	Minimum: -3 VDC, Maximum: 5 VDC
Nominal Input	24 VDC, 5 mA typical

Isolation	Optically isolated from internal circuit
Input Response Time	High isolation voltage (BV= Greater than 1.5 KV) ON: 10 msec, OFF: 10 msec
Input Impedance	4.8 Kohm
High Speed Channels	High Frequency 25 KHz: 2 pairs (X0-X1, X2-X3) or Low Frequency 10 KHz: 8 (X0 to X7)
Single Phase Counter	
Quadrature Channels	Frequency 10 KHz: 2 pairs (X0-X1, X2-X3) or 4 pair 5 KHz (X0-X1, X2-X3, X4-X5, X6-X7)
Max. Input Count	4294967295 (32 Bit)
Number of Outputs	6 (NPN Transistor type), within which 3 outputs are PWM type
3 PWM Output	Y0 (Pulse 10 kHz), Y1(for Direction of Y0), Y2 (Pulse 10 kHz), Y3(for Direction of Y2), Y4 (Pulse 10 kHz), Y5(for Direction of Y4)
ON Output Voltage	Min. ON: 22 VDC (Voltage across load) Max. ON: 30 VDC (Voltage across load)
Nominal Output Voltage	24 VDC
Nominal Output Current	2 A typical per channel
Output	Isolated
Environment & Approvals	
Operating Temperature	0 to 55°C
Humidity	10 to 90% (Non-Condensing)
Shock	25 g, 11 ms, Half Sine wave, 3 mutually perpendicular axes
Vibration	5 to 150 Hz, displacement of 0.3 mm (peak to peak), 3G, 3 mutually perpendicular axes
Approvals	CE and RoHS

LED status

The below table describes the LED status for the different actions of the PLC module.

Firmware	Actions in PLC			LED		LED state
	Application	Switch state	Error state	Green	Red	
Download	Download	x	x	OFF	ON	Red ON
Not Present	x	x	x	Blink	Blink	Red & Green alternate
Present	Not Present	x	x	OFF	Blink	Red 1s ON 1s OFF
Present	Present	RUN	No Error	ON	OFF	Green ON
Present	Present	RUN	Error	OFF	Blink	Red 0.25s ON 0.25s OFF
Present	Present	STOP	No Error	Blink	OFF	Green 1s ON 1s OFF
Present	Present	STOP	Error	Blink	OFF	Green 0.25s ON 0.25s OFF

Note: X indicates no action.

Communications ports

The PLC module supports the following serial communication ports. Each port information in the below sections include the pin description.

COM1

Physical port: RS232

The PLC module has one terminal block port which is used for programming or communication.

Pin number	Signal
1	232 TXD
2	232 RXD
3	GND
4	NC
5	NC
6	NC
7	NC
8	VCC

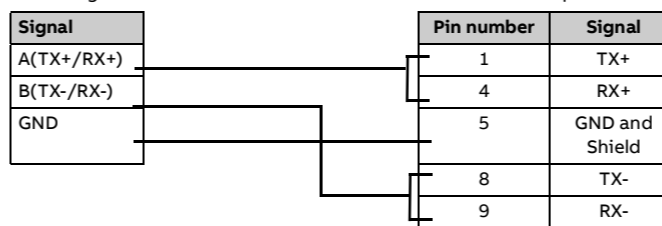
COM2

Physical port: 2-wire RS485

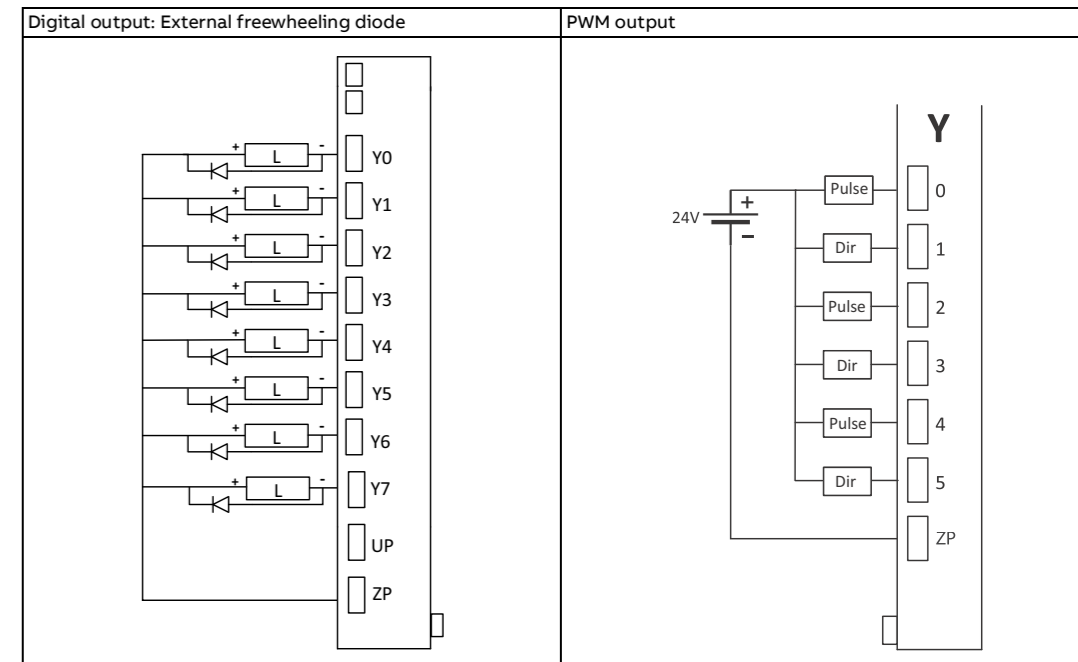
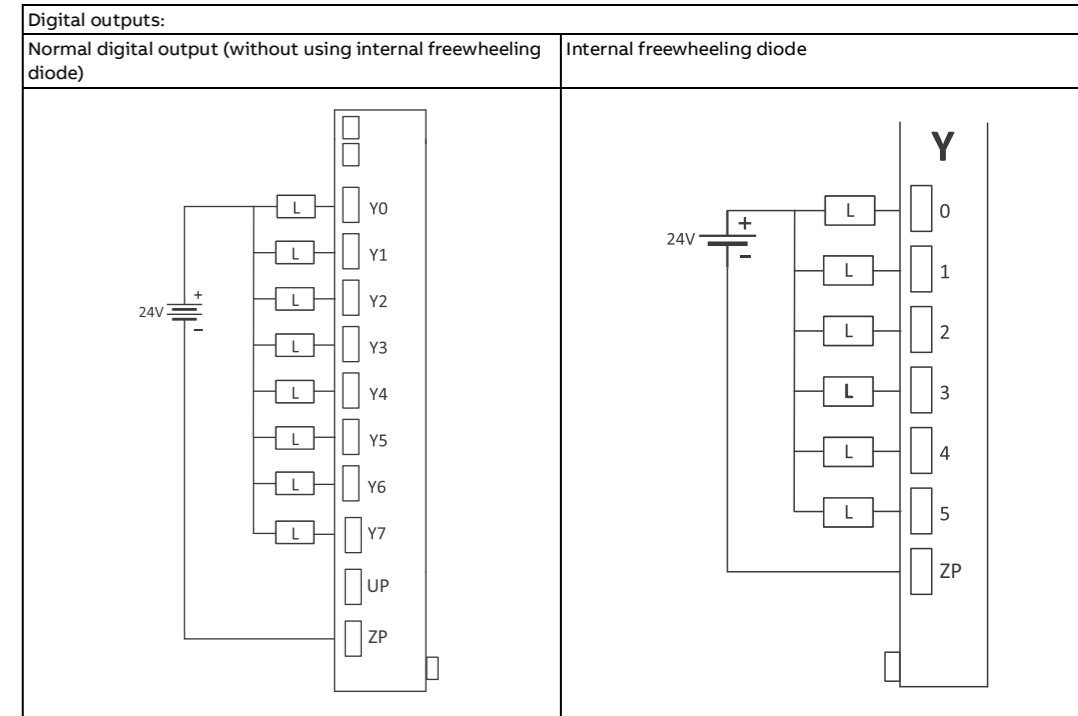
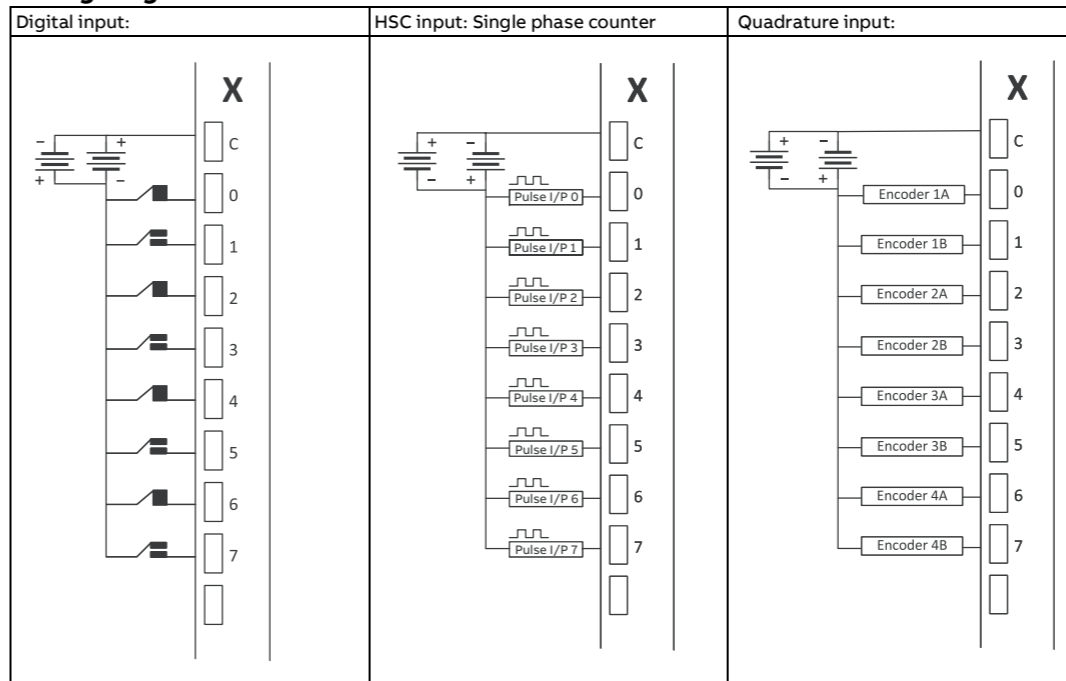
The PLC module has one open terminal block port for communication.

Pin number	Signal
1	TX+ /RX+
2	TX- /RX-
3	GND

Pin configuration for communication between PLC and control panel on COM Port 2.



Wiring diagram



PLC module dimensions

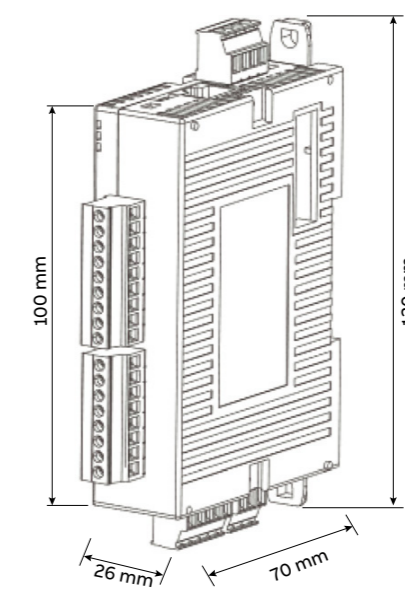


ABB PLC

PM3012-T-TP

Quick start guide



The PM3012-T-TP is a PLC module that supports the following features:

- 8 inbuilt digital inputs
- 6 inbuilt NPN-type digital outputs
- 2 serial ports (RS232 and RS485)
- Expandable upto 8 I/O modules
- 1 USB Type-C port.

Safety instructions

WARNING! Obey these instructions. If you ignore them, injury or death, or damage to the equipment can occur. If you are not a qualified electrical professional, do not do electrical installation or maintenance work.

- Do not remove or replace ignitable concentrations of flammable substances.
- Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.
- Inspect all sealed devices and replace if any degradation is found.

1. Unpack the delivery

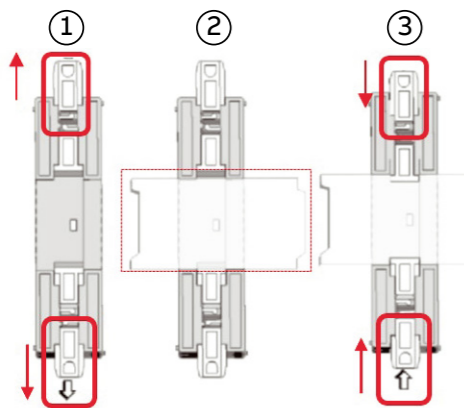
Keep the PLC module in its package until you are ready to install it. After unpacking, protect it from dust, debris, and moisture. Make sure the package includes the below items:

- PLC module
- Terminal connectors
- Quick start guide.

Make sure that there are no signs of damage to the items.

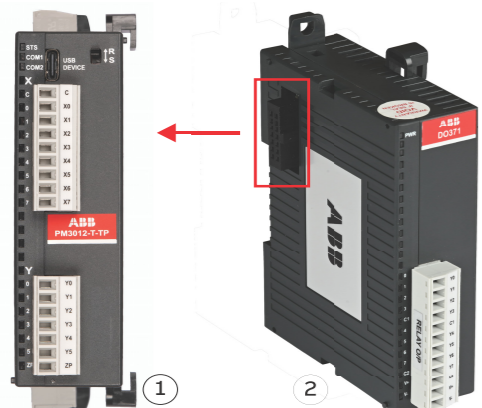
2. Mount the PLC module on the DIN rail

1. Pull up the sliders provided with the unit towards outward direction.
2. Mount the PLC module on the DIN rail plate.
3. Lock the PLC module on the DIN rail plate by pushing the sliders inwards such that the sliders grip the DIN plate.

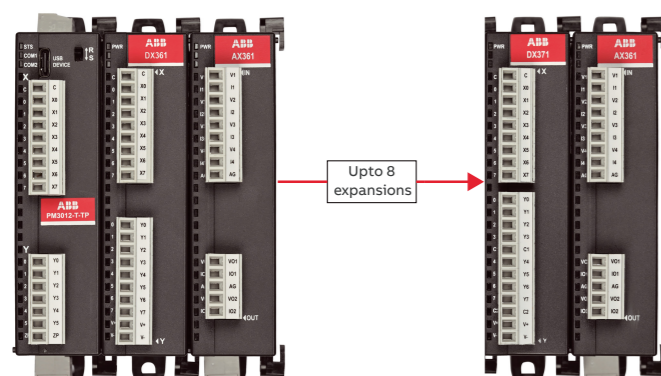


3. Connect the PLC expansion modules to the PLC module

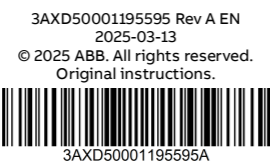
1. Align the PLC expansion module [2] to the designated slot onto the PLC module [1].



2. Make sure that the lock connector is fully seated onto the PLC expansion module preventing any loose connections. **Note:** You can connect up to 8 PLC expansion modules to the PLC.



PM3032-R-ETH Quick start guide



The PM3032-R-ETH is a PLC module that supports the following features:

- 8 inbuilt digital inputs
- 6 inbuilt relay type digital outputs
- 2 serial ports (RS232 and RS485)
- Expandable up to 16 I/O modules
- 1 USB Type-C port
- 1 Ethernet port.

Safety instructions

WARNING! Obey these instructions. If you ignore them, injury or death, or damage to the equipment can occur. If you are not a qualified electrical professional, do not do electrical installation or maintenance work.

- Do not remove or replace while be free of ignitable concentrations of flammable substances.
- Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.
- Inspect all sealed devices and replace if any degradation is found.

1. Unpack the delivery

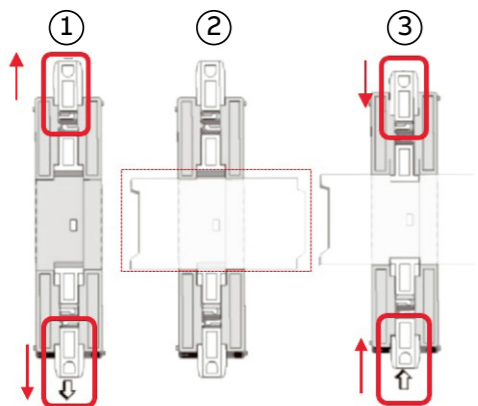
Keep the PLC module in its package until you are ready to install it. After unpacking, protect it from dust, debris, and moisture. Make sure the package includes the below items:

- PLC module
- Terminal connectors
- Quick start guide.

Make sure that there are no signs of damage to the items.

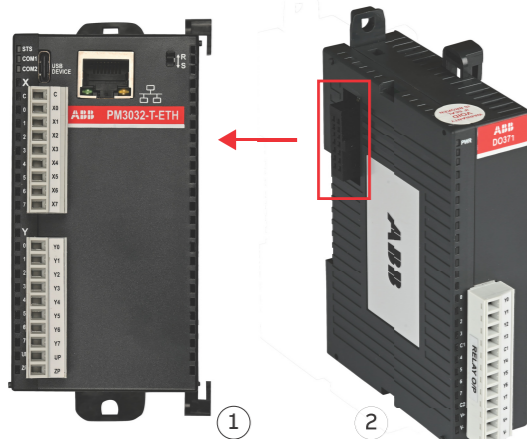
2. Mount the PLC module on the DIN rail

1. Pull up the sliders provided with the unit towards outward direction.
2. Mount the PLC module on the DIN rail plate.
3. Lock the PLC module on the DIN rail plate by pushing the sliders inwards such that the sliders grip the DIN plate.

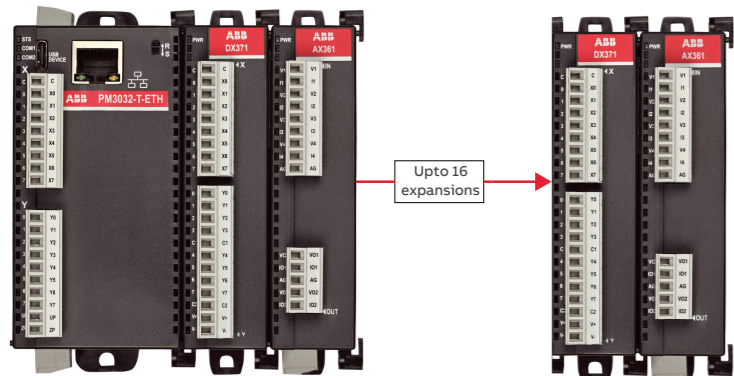


3. Connect the PLC expansion modules to the PLC module

1. Align the PLC expansion module [2] to the designated slot onto the PLC module [1].



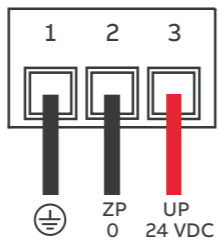
2. Make sure that the lock connector is fully seated onto the PLC expansion module preventing any loose connections. **Note:** You can connect up to 16 PLC expansion modules to the PLC.



4. Earthing

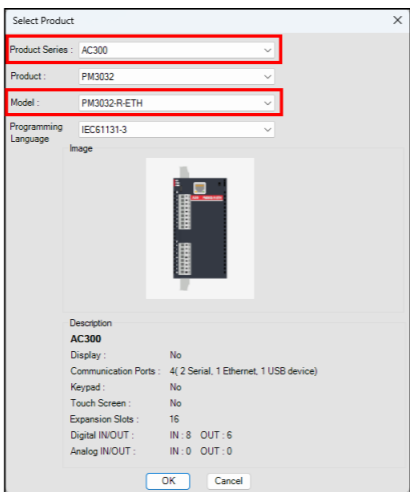
Separate the PLC earthing from other high-power systems. Refer to the earthing terminals (shown below) marked on the unit.

Do not use an earth that has an unstable impedance, such as painted screws or earth subject to vibration.



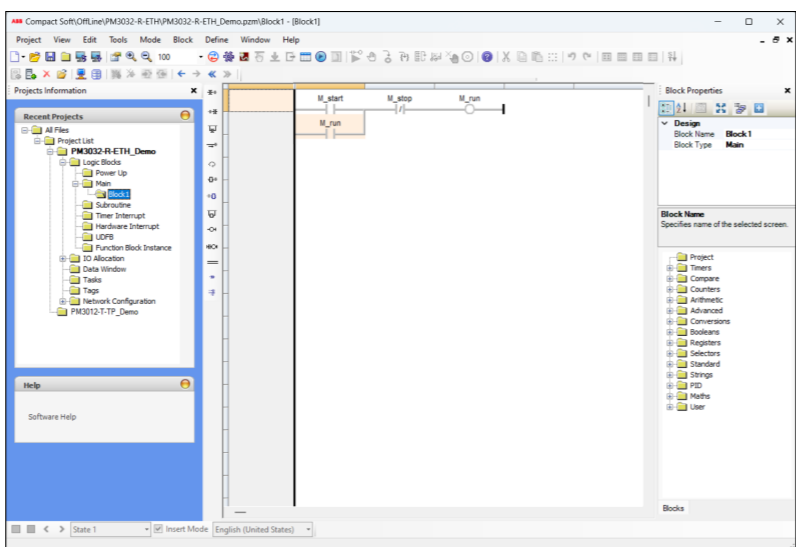
5. Configure the PLC

1. Launch the Compact Soft software. The software is available offline. For information on how to install the software, contact your local ABB representative.
2. In Compact Soft software, go to **Project** → **New**, to create a new application.
3. In the Select Product window,
 - Select Product series, Product, and Model from the drop-down list. For PLC, always select AC300. Click **OK**.

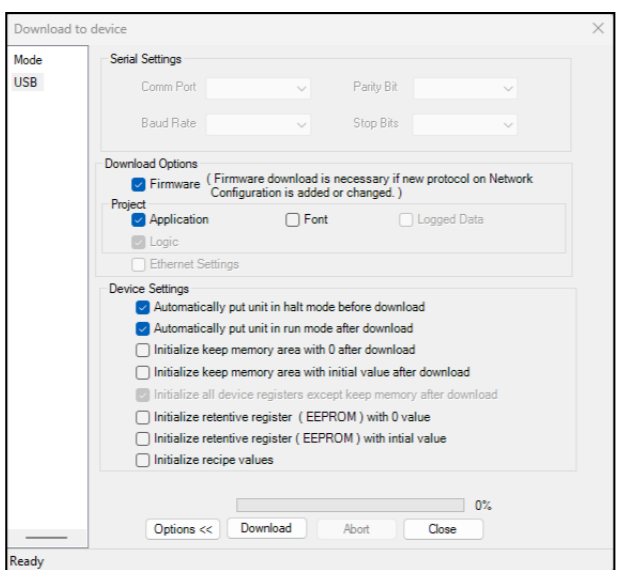


The Project Configuration dialog box opens.

4. **Optional:** In the Project Configuration dialog box, you can modify the Project title and add the Description. The PLC is configured and appears in the Project List.
5. Develop the logic in any programming language by navigating to the **Project list** → **<Project name>** → **Logic Blocks** → **Main** → **Block1**.



6. Connect one end of the programming cable to the PLC's Ethernet port or USB Type-C port. Connect the other end to the PC.
7. Go to, **Mode** → **Go Online** → **With Download** to download the application into the PLC.
8. Enable the download options: Firmware and Application. Click **Download**.



The PLC is configured and ready to use in the system.

6. Prepare the communication ports

Connect the required communication ports based on the product code. For pin configuration, refer section **Communications ports**.

PLC specifications

Power supply	24 VDC (± 15%), 110 mA
Isolation	Non-Isolated
Memory	
Total Program Memory	8 MB + 2 MB (Application+ Ladder/Logic)
Program Capacity	50K steps
Keep Memory Registers	10752 words (FRAM)
Communication Ports	
COM1	RS232, for programming & communication
COM2	2-wire RS485 for communication
Ethernet	10/100 Mbps, for Upload/Download/Communication
USB	1 x USB Type-C

Expansions	16 expansions modules, 256 I/O ports
Local IO Specification	
Number of Inputs	8 Inputs (Bi-directional type)
Input Design	According to the EN 61131-2 type 1
ON Voltage	Minimum: 15 VDC, Maximum: 30 VDC
OFF Voltage	Minimum: -3 VDC, Maximum: 5 VDC
Nominal Input	24 VDC, 5 mA typical
Isolation	Optically isolated from internal circuit High isolation voltage (BV= Greater than 1.5 KV)
Input Response Time	ON: 10 msec, OFF: 10 msec
Input Impedance	4.8 Kohm
High Speed Channels	High frequency 200 kHz: 4 Pairs (X0-X1, X2-X3, X4-X5 & X6-X7) or Low frequency 25 kHz: 8 (X0-X7)
Quadrature Channels	High frequency 200 kHz: 4 pairs (X0-X1, X2-X3, X4-X5 & X6-X7)
Max. Input Count	4294967295 (32 Bit)
Number of Outputs	6 (Relay type)
ON Output Voltage	Min ON: 22 VDC (Voltage across load) Max. ON: 30 VDC (Voltage across load)
Nominal Output Voltage	24 VDC
Nominal Output Current	2 A typical per channel
Output Response Time	ON: 10 msec, OFF: 10 msec
Nominal Load Max.	12 Ω/48 W (resistive) at 24 VDC 115 Ω/460 W (resistive) at 230 VAC 640 VA (inductive) at 24 VDC 360 VA (inductive) at 230 VAC
Environment & Approvals	
Operating Temperature	0 to 55°C
Humidity	10 to 90% (Non-Condensing)
Shock	25 g, 11 ms, Half Sine wave, 3 mutually perpendicular axes
Vibration	5 to 150 Hz, displacement of 0.3 mm (peak to peak), 3G, 3 mutually perpendicular axes
Approvals	CE and RoHS

LED status

The below table describes the LED status for the different actions of the PLC.

Firmware	Application	Switch state	Error state	LED		LED state
				Green	Red	
Download	Download	x	x	OFF	ON	Red ON
Not Present	x	x	x	Blink	Blink	Red & Green alternate
Present	Not Present	x	x	OFF	Blink	Red 1s ON 1s OFF
Present	Present	RUN	No Error	ON	OFF	Green ON
Present	Present	RUN	Error	OFF	Blink	Red 0.25s ON 0.25s OFF
Present	Present	STOP	No Error	Blink	OFF	Green 1s ON 1s OFF
Present	Present	STOP	Error	Blink	OFF	Green 0.25s ON 0.25s OFF

Note: X indicates no action.

Communications ports

The PLC module supports the following serial communication ports. Each port information in the below sections include the pin description.

COM1

Physical port: RS232

The PLC module has one open terminal block port which is used for programming or communication.

Pin number	Signal
1	232 TXD
2	232 RXD
3	GND
4	NC
5	NC
6	NC
7	NC
8	NC

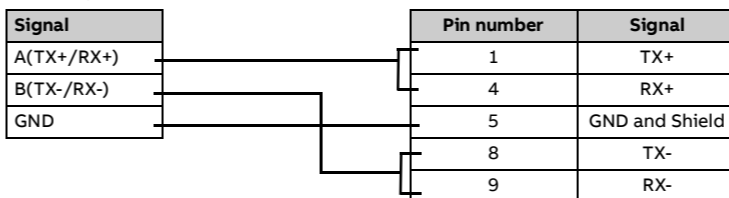
COM2

Physical port: 2-wire RS485

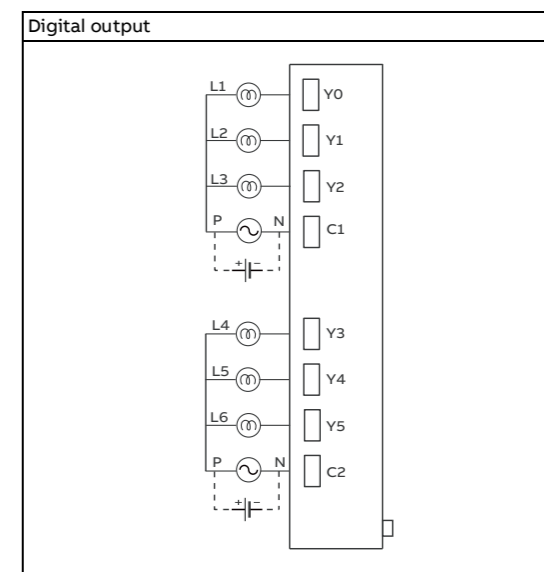
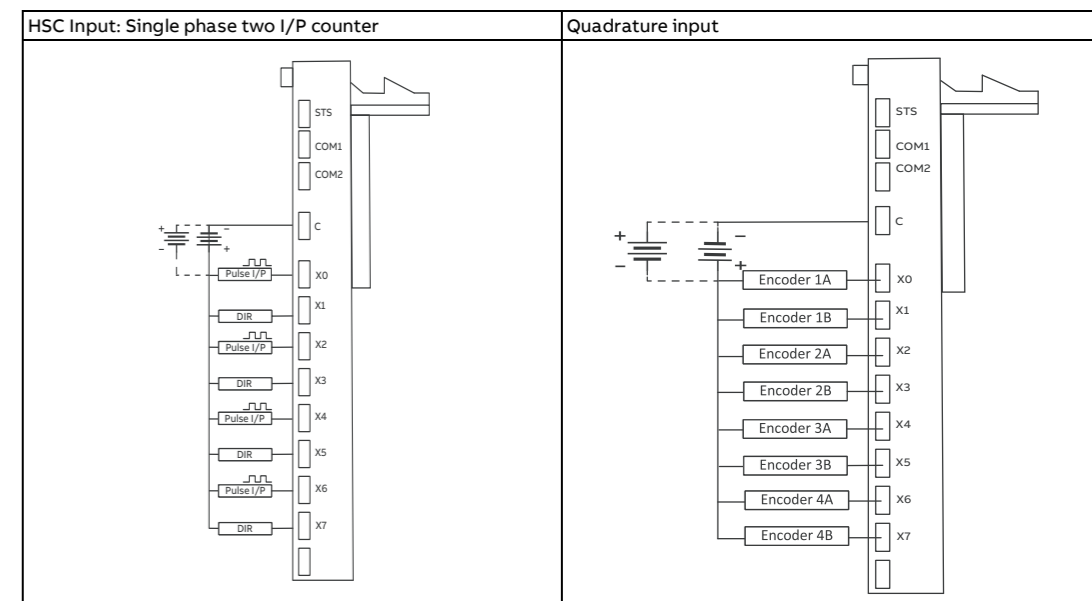
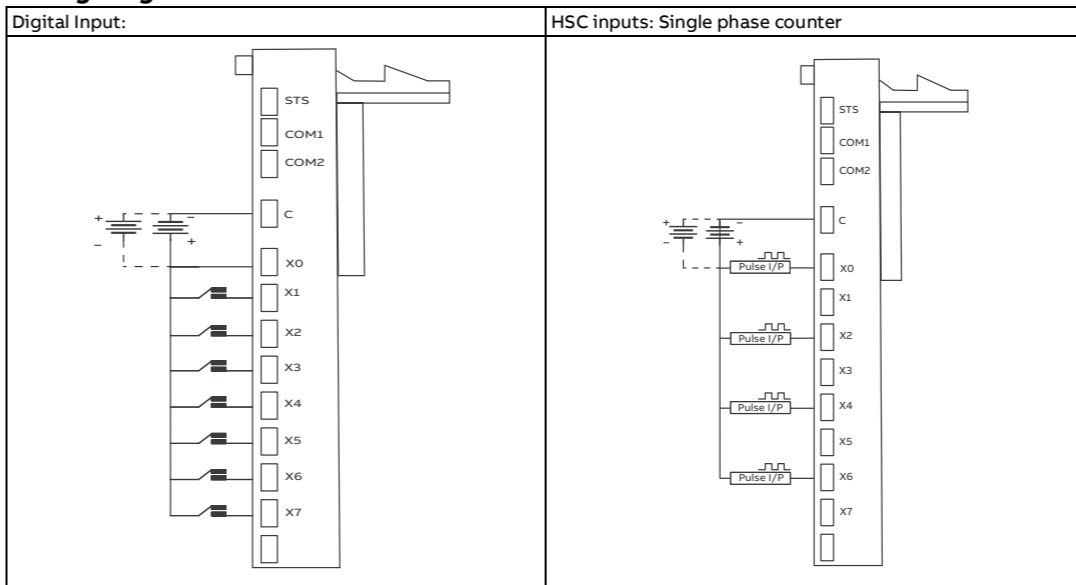
The PLC module has one terminal block port for communication.

Pin number	Signal
1	TX+/RX+
2	TX-/RX-
3	GND

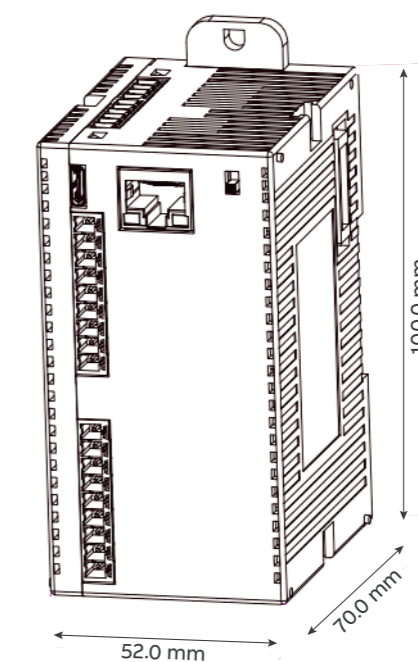
Pin configuration for communication between PLC and control panel on COM Port 2.



Wiring diagram



PLC module dimensions



Note: Factory set Static IP: 192.168.0.252
Subnet Mask: 255.255.255.0

PM3032-T-ETH

Quick start guide



The PM3032-T-ETH is a PLC module that supports the following features:

- 8 inbuilt digital inputs
- 8 digital NPN type outputs
- 2 serial ports (RS232 and RS485)
- Expandable up to 16 I/O modules
- 1 USB Type-C port
- 1 Ethernet port.

Safety instructions

WARNING! Obey these instructions. If you ignore them, injury or death, or damage to the equipment can occur. If you are not a qualified electrical professional, do not do electrical installation or maintenance work.

- Do not remove or replace while be free of ignitable concentrations of flammable substances.
- Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.
- Inspect all sealed devices and replace if any degradation is found.

1. Unpack the delivery

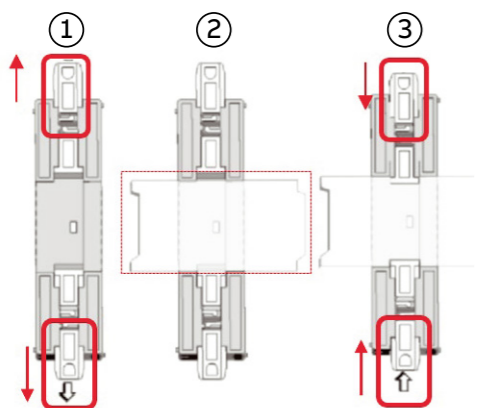
Keep the PLC module in its package until you are ready to install it. After unpacking, protect it from dust, debris, and moisture. Make sure the package includes the below items:

- PLC module
- Terminal connectors
- Quick start guide.

Make sure that there are no signs of damage to the items.

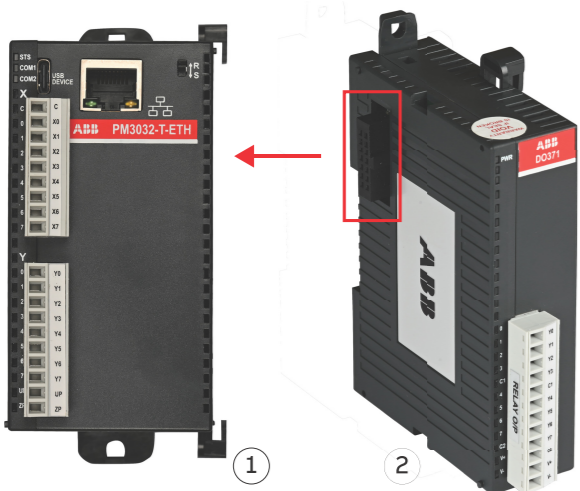
2. Mount the PLC module on the DIN rail

1. Pull up the sliders provided with the unit towards outward direction.
2. Mount the PLC module on the DIN rail plate.
3. Lock the PLC module on the DIN rail plate by pushing the sliders inwards such that the sliders grip the DIN plate.

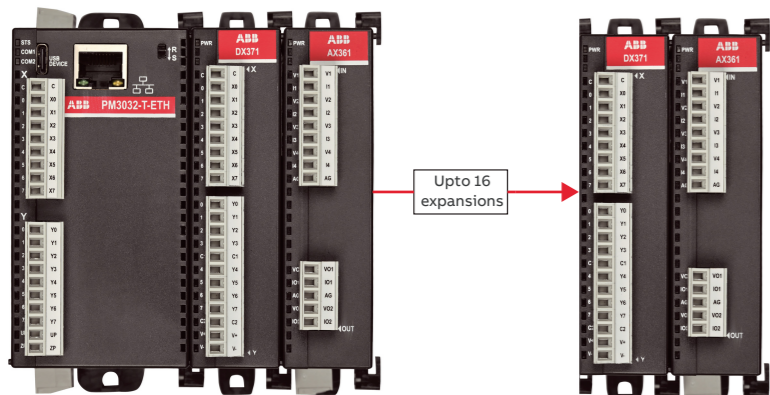


3. Connect the PLC expansion modules to the PLC module

1. Align the PLC expansion module [2] to the designated slot onto the PLC module [1].



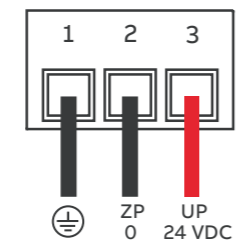
2. Make sure that the lock connector is fully seated onto the PLC expansion module preventing any loose connections. **Note:** You can connect up to 16 PLC expansion modules to the PLC.



4. Earthing

Separate the PLC earthing from other high-power systems. Refer to the earthing terminals (shown below) marked on the unit.

Do not use an earth that has an unstable impedance, such as painted screws or earth subject to vibration.



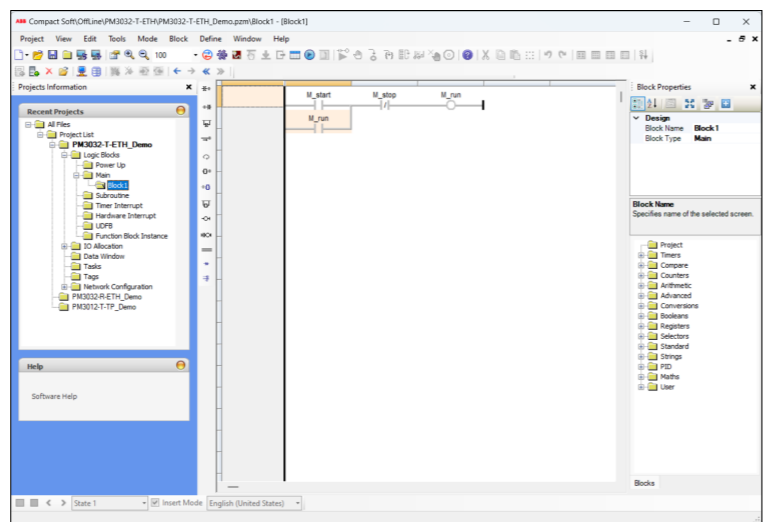
5. Configure the PLC

1. Launch the Compact Soft software. For information on how to install the software, contact your local ABB representative. The software is available offline. In Compact Soft software, go to **Project** → **New**, to create a new application.
2. In the Select Product window,

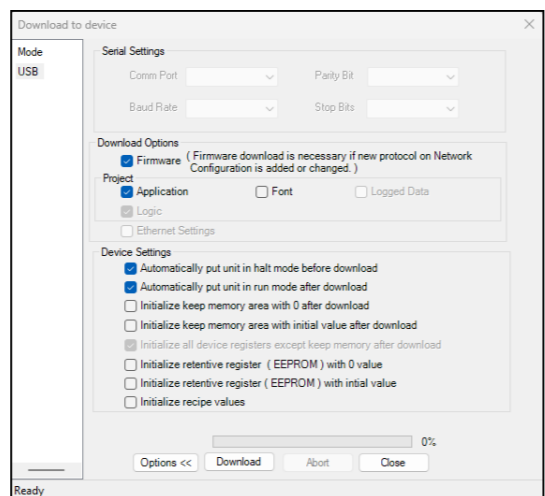


The Project Configuration dialog box opens.

4. **Optional:** In the Project Configuration dialog box, you can modify the Project title and add the Description. The PLC is configured and appears in the Project List.
5. Develop the logic in any programming language by navigating to the **Project list** → **<Project name>** → **Logic Blocks** → **Main** → **Block1**.



6. Connect one end of the programming cable to the PLC's Ethernet port or USB Type-C port. Connect the other end to the PC.
7. Go to, **Mode** → **Go Online** → **With Download** to download the application into the PLC.
8. Enable the download options: **Firmware and Application**. Click **Download**.



The PLC is configured and ready to use in the system.

6. Prepare the communication ports

Connect the required communication ports based on the product code. For pin configuration, refer section [Communications ports](#).

PLC specifications

Power supply	24 VDC (± 15%), 110 mA
Isolation	Non-Isolated
Memory	
Total Program Memory	8 MB + 2 MB (Application+ Ladder/Logic)
Program Capacity	50K steps
Keep Memory Registers	10752 words (FRAM)
Communication Ports	
COM1	RS232, for programming & communication
COM2	2-wire RS485 for communication
Ethernet	10/100 Mbps, for Upload/Download/Communication
USB	1 x USB Type-C
Expansions	
Expansion IO capacity	16 expansions modules, 256 I/O ports
Local IO Specification	
Number of Inputs	8 Inputs (Bi-directional type)
Input Design	According to the EN 61131-2 type 1
ON Voltage	Minimum: 15 VDC, Maximum: 30 VDC
OFF Voltage	Minimum: -3 VDC, Maximum: 5 VDC

Nominal Input	24 VDC, 5 mA typical
Isolation	Optically isolated from internal circuit High isolation voltage (BV= Greater than 1.5 KV)
Input Response Time	ON: 10 msec, OFF: 10 msec
Input Impedance	4.8 Kohm
High Speed Channels	High frequency 200 kHz: 4 Pairs (X0-X1, X2-X3, X4-X5 & X6-X7) or Single Phase Counter
Low frequency 25 kHz: 8 (X0-X7)	
Quadrature Channels	High frequency 200 kHz: 4 pairs (X0-X1, X2-X3, X4-X5 & X6-X7)
Max. Input Count	4294967295 (32 Bit)
Number of Outputs	8 (NPN Transistor type), within which 4 Outputs are PWM type
4 PWM Output	Y0 (Pulse 200 kHz), Y1 (for Direction of Y0), Y2 (Pulse 200 kHz), Y3 (for Direction of Y2), Y4 (Pulse 200 kHz), Y5 (for Direction of Y4), Y6 (Pulse 200 kHz), Y7 (for Direction of Y6)
ON Output Voltage	Min ON: 22 VDC (Voltage across load) Max. ON: 30 VDC (Voltage across load)
Nominal Output Voltage	24 VDC
Nominal Output Current	250 mA typical per channel
Output Response Time	ON: 10 µsec, OFF: 10 µsec
Nominal Load Max.	96 Ω/6 W (resistive) at 24 VDC; 5 VA (inductive)
Environment & Approvals	
Operating Temperature	0 to 55°C
Humidity	10 to 90% (Non-Condensing)
Shock	25 g, 11 ms, Half Sine wave, 3 mutually perpendicular axes
Vibration	5 to 150 Hz, displacement of 0.3 mm (peak to peak), 3G, 3 mutually perpendicular axes
Approvals	CE and RoHS

LED status

The below table describes the LED status for the different actions of the PLC.

Firmware	Actions in PLC				LED		LED state
	Application	Switch state	Error state	Green	Red		
Download	Download	x	x	OFF	ON	Red ON	
Not Present	x	x	x	Blink	Blink	Red & Green alternate	
Present	Not Present	x	x	OFF	Blink	Red 1s ON 1s OFF	
Present	Present	RUN	No Error	ON	OFF	Green ON	
Present	Present	RUN	Error	OFF	Blink	Red 0.25s ON 0.25s OFF	
Present	Present	STOP	No Error	Blink	OFF	Green 1s ON 1s OFF	
Present	Present	STOP	Error	Blink	OFF	Green 0.25s ON 0.25s OFF	

Note: x indicates no action.

Communications ports

The PLC module supports the following serial communication ports. Each port information in the below sections include the pin description.

COM1

Physical port: RS232

The PLC module has one open terminal block port which is used for programming or communication.

Pin number	Signal
1	232 TXD
2	232 RXD
3	GND
4	NC
5	NC
6	NC
7	NC
8	NC

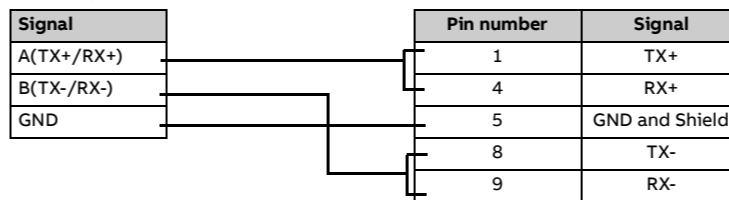
COM2

Physical port: 2-wire RS485

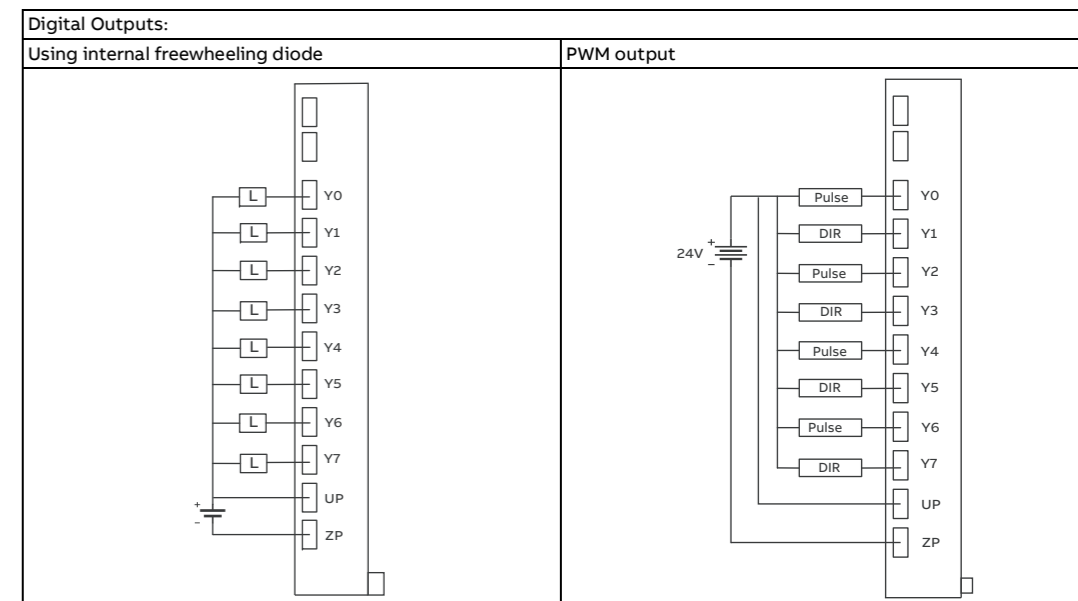
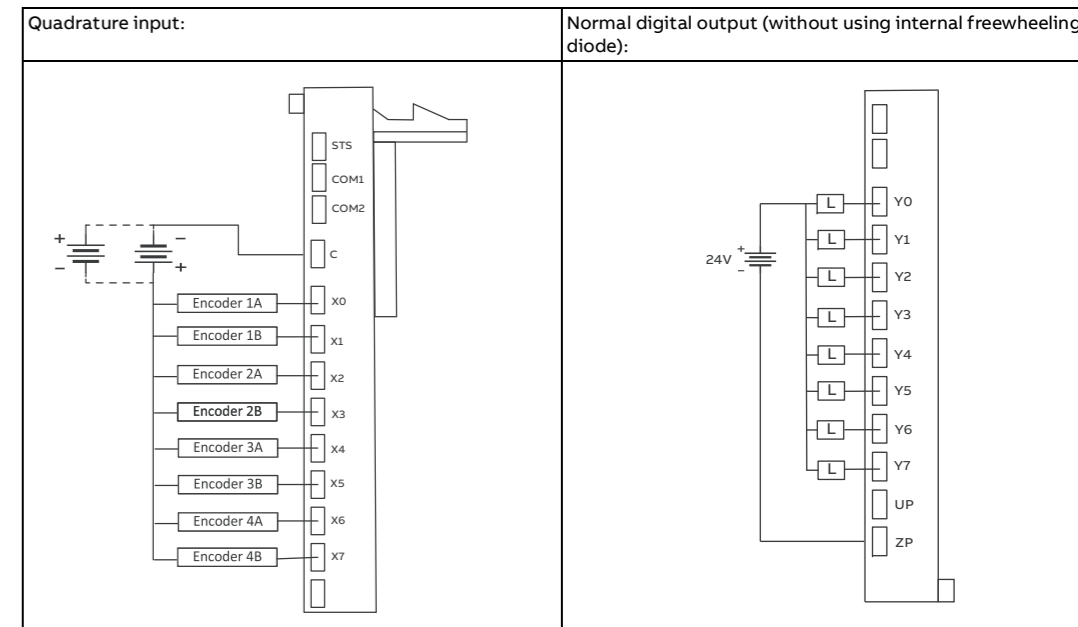
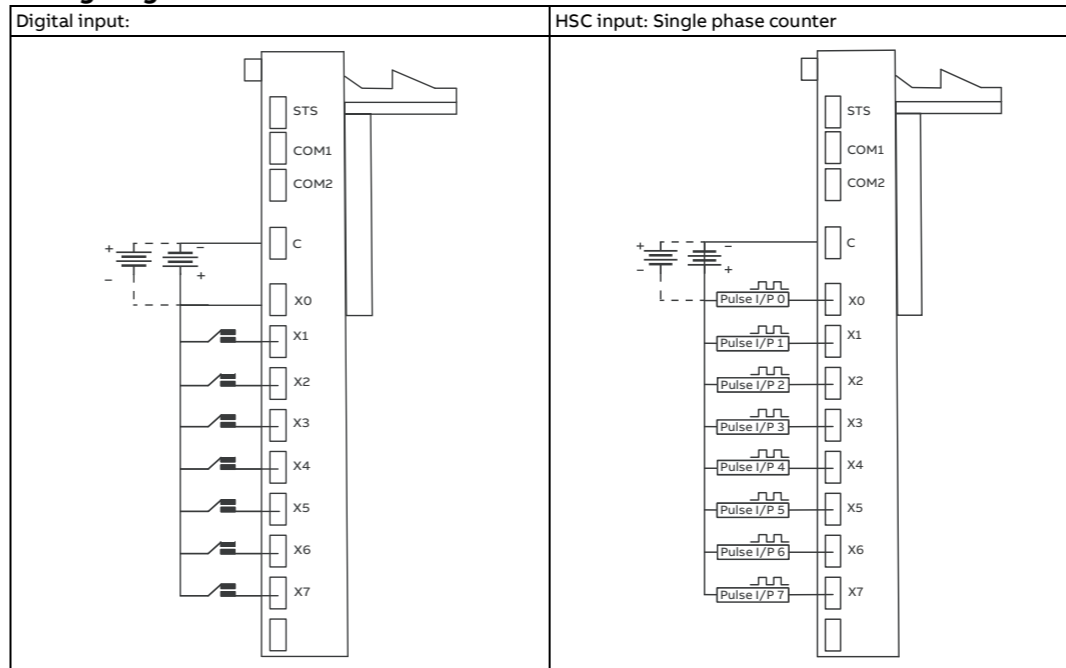
The PLC module has one terminal block port for communication.

Pin number	Signal
1	TX+ /RX+
2	TX- /RX-
3	GND

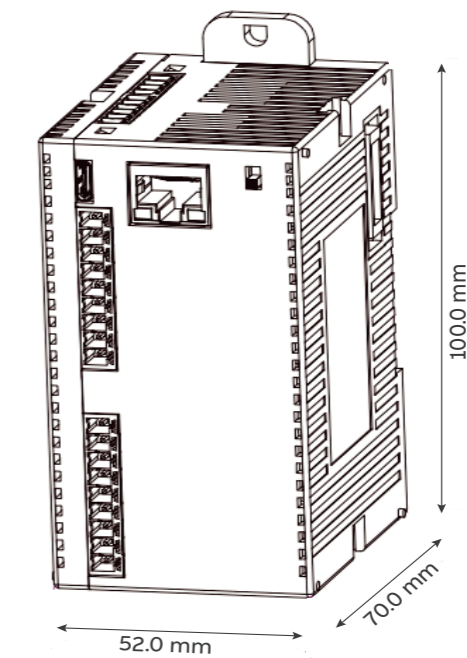
Pin configuration for communication between PLC and control panel on COM Port 2.



Wiring diagram



PLC module dimensions



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Subnet Mask: 255.255.255.0