

OFFICIAL MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

2711P-K10C4D8

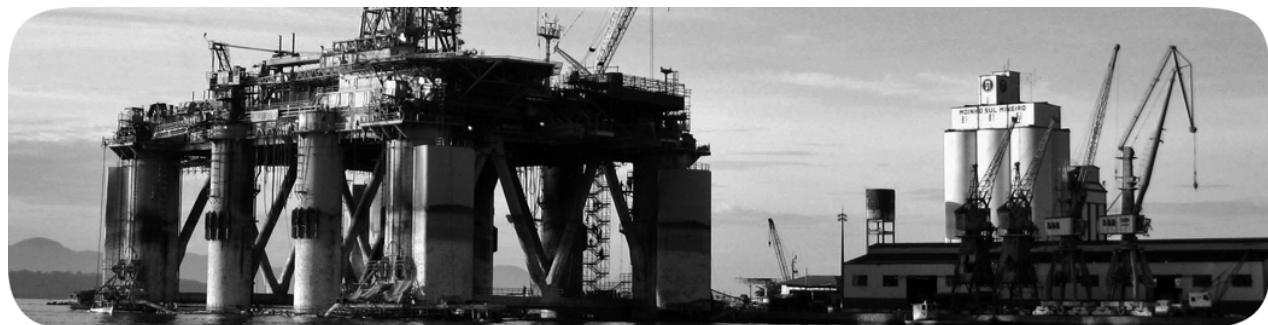
Rockwell Automation official documentation applicable to this exact model

Source file: 2711P-K10C4D8.pdf

Applicable official manufacturer pages follow this Amikon cover without alteration.

PanelView Plus 6 Terminals

Catalog Numbers 2711P-K4M5A8, 2711P-K4M5D8, 2711P-K4M20A8, 2711P-K4M20D8, 2711P-K4C5A8, 2711P-B4C5A8, 2711P-K4C5D8, 2711P-B4C5D8, 2711P-K4C20A8, 2711P-B4C20A8, 2711P-K4C20D8, 2711P-B4C20D8, 2711P-K6M5A8, 2711P-T6M5A8, 2711P-B6M5A8, 2711P-K6M5D8, 2711P-T6M5D8, 2711P-B6M5D8, 2711P-K6M20A8, 2711P-T6M20A8, 2711P-B6M20A8, 2711P-K6M20D8, 2711P-T6M20D8, 2711P-B6M20D8, 2711P-K6C5A8, 2711P-T6C5A8, 2711P-B6C5A8, 2711P-K6C5D8, 2711P-T6C5D8, 2711P-B6C5D8, 2711P-K6C20A8, 2711P-T6C20A8, 2711P-B6C20A8, 2711P-K6C20D8, 2711P-T6C20D8, 2711P-B6C20D8, 2711P-K6C5A9, 2711P-T6C5A9, 2711P-B6C5A9, 2711P-K6C5D9, 2711P-T6C5D9, 2711P-B6C5D9, 2711P-K6C20A9, 2711P-T6C20A9, 2711P-B6C20A9, 2711P-K6C20D9, 2711P-T6C20D9, 2711P-B6C20D9, 2711P-K7C4D8, 2711P-T7C4D8, 2711P-B7C4D8, 2711P-T7C4D8K, 2711P-K7C4A8, 2711P-T7C4A8, 2711P-B7C4A8, 2711P-K10C4D8, 2711P-T10C4D8, 2711P-B10C4D8, 2711P-K10C4A8, 2711P-T10C4A8, 2711P-B10C4A8, 2711P-K12C4D8, 2711P-T12C4D8, 2711P-B12C4D8, 2711P-T12C4D8K, 2711P-K12C4A8, 2711P-T12C4A8, 2711P-B12C4A8, 2711P-K15C4D8, 2711P-T15C4D8, 2711P-B15C4D8, 2711P-K15C4A8, 2711P-T15C4A8, 2711P-B15C4A8, 2711P-K7C4D9, 2711P-T7C4D9, 2711P-B7C4D9, 2711P-K7C4A9, 2711P-T7C4A9, 2711P-B7C4A9, 2711P-K10C4D9, 2711P-T10C4D9, 2711P-B10C4D9, 2711P-K10C4A9, 2711P-T10C4A9, 2711P-B10C4A9, 2711P-K12C4D9, 2711P-T12C4D9, 2711P-B12C4D9, 2711P-K12C4A9, 2711P-T12C4A9, 2711P-B12C4A9, 2711P-K15C4D9, 2711P-T15C4D9, 2711P-B15C4D9, 2711P-K15C4A9, 2711P-T15C4A9, 2711P-B15C4A9



700 to 1500 Terminal Selections

The table shows the catalog number breakdown for the 700 to 1500 terminals.

Bulletin	Input Type	Display Size	Display Type	Communication ⁽¹⁾	Power	Operating System	Special Option
2711P-	K = Keypad T = Touch B = Keypad/Touch	7 = 6.5 in. 10 = 10.4 in. 12 = 12.1 in. 15 = 15 in.	C = Color	4 = Ethernet, RS-232 & (2) USB	A = AC D = DC	8 = Windows CE 6.0 9 = Windows CE 6.0 with extended features	K = Conformal-Coated

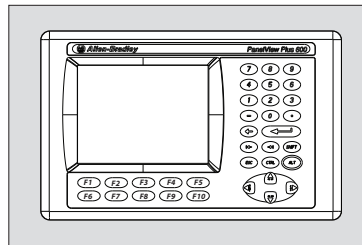
(1) Optional communication modules are available as separate catalog numbers.

Table 13 - PanelView Plus 6 - 700 to 1500 Terminals without Extended Features

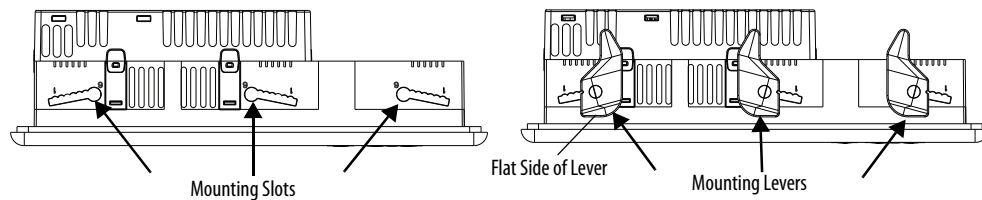
Cat. No.			Display		Communication		Input Power	Memory (MB) ⁽¹⁾	
Keypad	Touch	Keypad/Touch	Size	Type	RS-232	Ethernet		RAM	Nonvolatile
700 Model									
2711P-K7C4D8	2711P-T7C4D8	2711P-B7C4D8	6.5-in.	Color	•	•	DC	512	512 (approx. 79 MB free user memory)
–	2711P-T7C4D8K	–			•	•	DC		
2711P-K7C4A8	2711P-T7C4A8	2711P-B7C4A8			•	•	AC		
1000 Model									
2711P-K10C4D8	2711P-T10C4D8	2711P-B10C4D8	10.4-in.	Color	•	•	DC	512	512 (approx. 79 MB free user memory)
2711P-K10C4A8	2711P-T10C4A8	2711P-B10C4A8			•	•	AC		
1250 Model									
2711P-K12C4D8	2711P-T12C4D8	2711P-B12C4D8	12.1-in.	Color	•	•	DC	512	512 (approx. 79 MB free user memory)
–	2711P-T12C4D8K	–			•	•	DC		
2711P-K12C4A8	2711P-T12C4A8	2711P-B12C4A8			•	•	AC		
1500 Model									
2711P-K15C4D8	2711P-T15C4D8	2711P-B15C4D8	15-in.	Color	•	•	DC	512	512 (approx. 79 MB free user memory)
2711P-K15C4A8	2711P-T15C4A8	2711P-B15C4A8			•	•	AC		

(1) The logic module supports FactoryTalk View Machine Edition software, version 6.0 or later, FactoryTalk ViewPoint software version 1.2 or later, and the Windows CE 6.0 operating system.

3. Place the terminal in the panel cutout.



4. Insert all mounting levers into the mounting slots on the terminal.
Slide each lever until the flat side of the lever touches the panel surface.



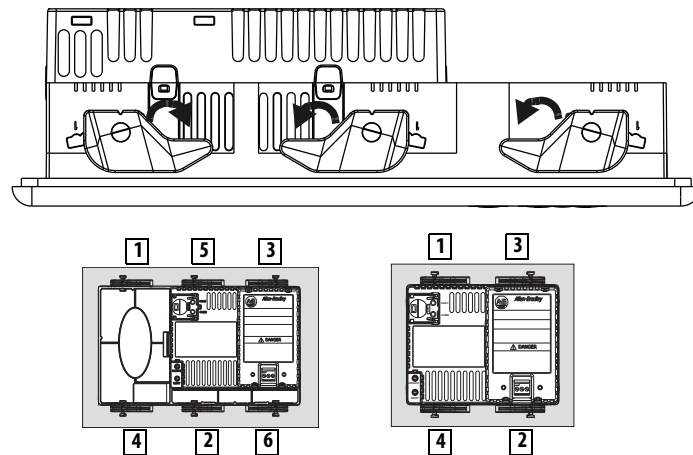
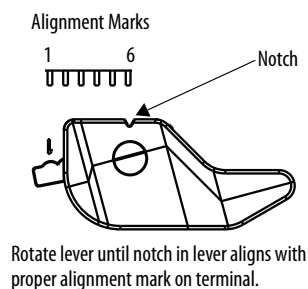
5. When all levers are in place, slide each lever an additional notch or two until you hear a click.

Refer to [Table 35 on page 31](#) as a guide to determine the locking positions for your panel thickness.

6. Rotate each lever in direction indicated until it is in the final position.

TIP Levers rotate in same direction on top and bottom of terminal.

Follow the appropriate locking sequence for the optimal terminal fit.



7. Inspect all levers to verify they are in the correct and same locked position.



ATTENTION: All levers must be locked to provide an adequate gasket seal between the terminal and the panel. Rockwell Automation assumes no responsibility for water or chemical damage to the terminal or other equipment within the enclosure because of improper installation.

Mount the 700 to 1500 Terminal in a Panel

Mounting clips secure the 700 to 1500 terminals in a panel. The number of clips varies by terminal size. Tools required for installation include panel cutout tools, a small, slotted screwdriver, and a torque wrench for tightening the mounting clips.

**ATTENTION:**

Disconnect all electrical power from the panel before making the panel cutout.

Make sure the area around the panel cutout is clear and that the panel is clean of any debris, oil, or other chemicals.

Make sure metal cuttings do not enter any components already installed in the panel and that the edges of the cutout have no burrs or sharp edges.

Failure to follow these warnings can result in personal injury or damage to panel components.

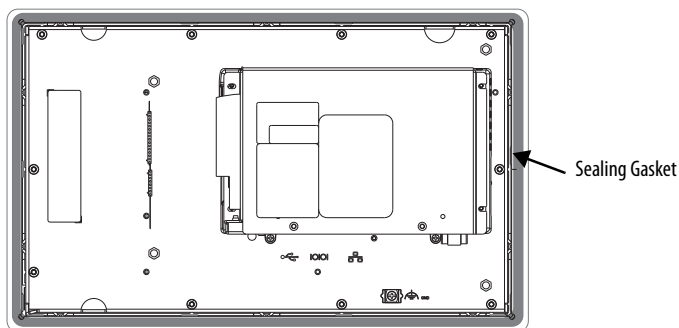
IMPORTANT

For outdoor installations using a high-bright display module, catalog number 2711P-RDT12H, refer to Appendix B on [page 177](#) for important installation considerations.

Follow these steps to mount the terminal in a panel.

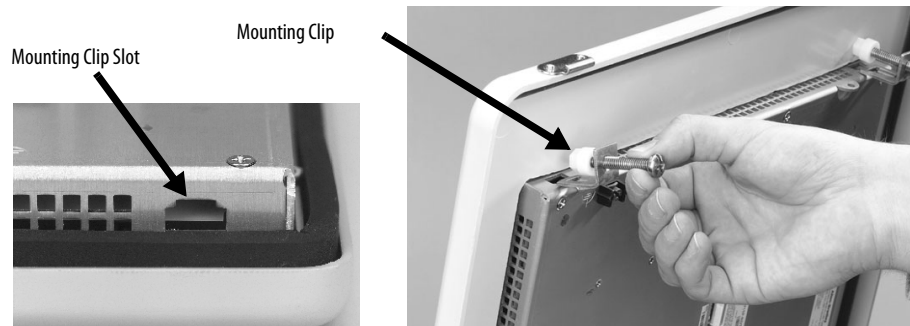
1. Cut an opening in the panel by using the panel cutout template shipped with the terminal or the cutout dimensions on [page 28](#).
2. Verify the terminal sealing gasket is properly positioned on the terminal.

This gasket forms a compression type seal. Do not use sealing compounds.



Be careful not to pinch the legend strip during installation.

3. Place the terminal in the panel cutout.



4. Slide the ends of the mounting clips into the slots on the terminal.
5. Tighten the mounting clip screws by hand until the gasket seal contacts the mounting surface uniformly.



6. Tighten the mounting clips screws to a torque of 0.90...1.1 N•m (8...10 lb•in) by using the specified sequence, making sure not to overtighten.

1	4
Torque Sequence 4 Clips	
3	2

1	5	3
Torque Sequence 6 Clips		
4	2	6

1	6
3	8
Torque Sequence 8 Clips	
7	4
5	2



ATTENTION: Tighten the mounting clips to the specified torque to provide a proper seal and to prevent damage to the product. Allen-Bradley assumes no responsibility for water or chemical damage to the product or other equipment within the enclosure because of improper installation. Any contamination of the product caused by improper installation is not warranted.

Remove and Install the Power Terminal Block

The terminals are shipped with a power terminal block installed. You can remove the terminal block for ease of installation, wiring, and maintenance.



WARNING: Explosion Hazard

If you connect or disconnect wiring while the power is on, an electrical arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed and the area is nonhazardous before proceeding.

Failure to remove power can result in electrical shock or damage to the terminal.

The terminal blocks have different colors and markings for AC and DC power connections. Always match the terminal block color to its mating connector. The power terminal blocks are not intended for daisy chaining power.

Use a 0.6 x 3.5 mm flat blade screwdriver for terminal block wiring.

Table 36 - Wire Specifications for Power Input Terminal Block

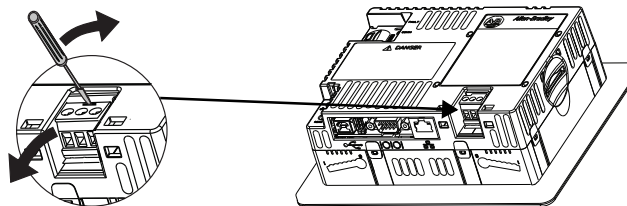
Terminal	Wire Type	Dual-wire Size ⁽¹⁾	Single-wire Size	Strip Length	Screw Torque
400, 600	Stranded or solid Cu 90 °C (194 °F)	0.3...1.3 mm ² 22...16 AWG	0.3...2.1 mm ² (22...14 AWG)	7 mm (0.28 in.)	0.45...0.56 N·m (4...5 lb·in)
700 to 1500					0.56...0.90 N·m (5...8 lb·in)

(1) Two-wire max per terminal.

400 and 600 Terminals

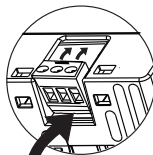
Follow these steps to remove the terminal block from a 400 or 600 terminal.

1. Insert the tip of a small, flat-blade screwdriver into the terminal block access slot.
2. Gently pry the terminal block to rotate it away from the terminal; this releases the locking mechanism.



Follow these steps to replace the terminal block.

1. Press terminal block base in first with block leaning outward.

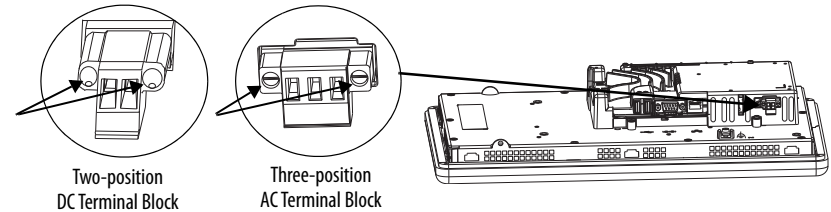


2. Gently push the top of the terminal block to rotate it into place; it snaps when seated.

700 to 1500 Terminals

Follow these steps to remove the terminal block from a 700 to 1500 terminal.

1. Loosen the two screws that secure the terminal block.
2. Gently pull the terminal block away from the connector.



Follow these steps to install the terminal block.

1. Reattach the terminal block to the connector until seated.
2. Tighten the two screws that secure the terminal block to a torque of 0.40...0.51 N•m (3.5...4.5 lb•in).

DC Power Connections

Terminals with an integrated 24V DC power supply have these power ratings.

Table 37 - DC Power Ratings

Terminal	Power Supply	Input Voltage	Power Consumption
400, 600	Nonisolated	24V DC nom (18...30V DC)	15 W max (0.6 A at 24V DC)
700 to 1500	Isolated	24V DC nom (18...32V DC)	70 W max (2.9 A at 24V DC)

The power supply is internally protected against reverse polarity. Connecting DC+ or DC- to the earth/ground terminal can damage the device.



ATTENTION: Applying an AC power source to a terminal with a DC power input can damage the device.



ATTENTION: Proper Input Voltage must be applied at all times. Voltage Spikes or power quality issues that cause the voltage to go outside of the proper input range may cause damage to the device; this condition is not warranted by Rockwell Automation.

External Power Supply

The 400 and 600 terminals require a dedicated 24V DC Class 2 power supply or a safety extra-low voltage (SELV) or protective extra-low voltage (PELV) power supply to power each PanelView Plus 6 400 and 600 device.

For the 700 - 1500 terminals, it is recommended that a dedicated 24V DC safety extra-low voltage (SELV) or protective extra-low voltage (PELV) power supply is used to power each PanelView Plus 6 700 - 1500 device.



ATTENTION: Use a SELV or PELV power supply as required by local wiring codes for your installation. These power supplies provide protection so that under normal and single fault conditions, the voltage between conductors and earth ground does not exceed a safe value.

TIP

Terminals with an isolated DC power supply can be powered by the same power source as other equipment, such as a DC power bus.

PanelView Plus 6 devices were tested to operate with the catalog number 1606-XLE120E power supply. To use another power supply, review the criteria in the table.

Table 38 - Power Supply Criteria

If the PanelView Plus 6 Device	Use a	Description
Connects to equipment with isolated communication ports	SELV or PELV power supply	Other equipment can share this power supply with the PanelView Plus 6 device provided that no ground loops are created. A PELV source internally connects the negative power terminal to chassis ground.
Does not connect to other equipment		
Connects to equipment with non-isolated communication ports	Dedicated, isolated, and ungrounded SELV source to power each terminal	This prevents ground loops from damaging the device.

IMPORTANT

All of the communication ports on the terminals and supported communication modules are isolated, with the exception of the USB ports.

Earth/Ground Connection

PanelView Plus 6 devices with a DC power input have an earth/ground terminal that you must connect to a low-impedance earth/ground.

- On 400 and 600 terminals, the earth/ground connection is on the power terminal block.
- On 700 to 1500 terminals, the earth/ground connection is on the rear of the display module.

IMPORTANT

The earth/ground connection to ground is mandatory. This connection is required for the following:

- Noise immunity, reliability, and Electromagnetic Compliance (EMC) with the European Union (EU) EMC directive for CE-mark conformance
- Safety by Underwriters Laboratory

Table 39 - Earth Wire Specifications for DC Power

Terminal	Symbol	Wire Type	Wire Gauge	Terminal Screw Torque
400, 600	 GND	Stranded or solid Cu 90 °C (194 °F)	2.1...3.3 mm ² (14...12 AWG)	0.45...0.56 N·m (4...5 lb·in)
700 to 1500	 GND	Stranded or solid Cu 90 °C (194 °F)	2.1...5.3 mm ² (14...10 AWG)	1.13...1.36 N·m (10...12 lb·in)



ATTENTION: Damage or malfunction can occur when a voltage potential exists between two separate ground points. Make sure the terminal does not serve as a conductive path between ground points at different potentials.

Connect DC Power



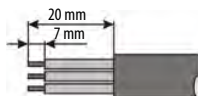
WARNING: Explosion Hazard

Do not disconnect equipment unless power has been switched off and area is known to be nonhazardous.

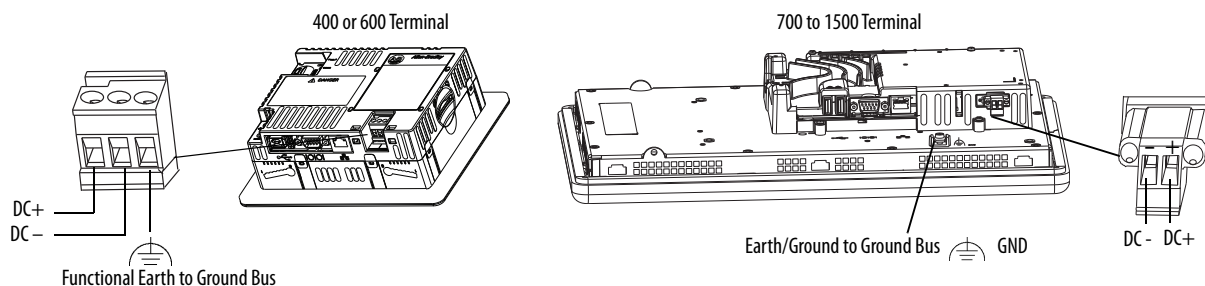
Disconnect all power before installing or replacing components. Failure to disconnect power can result in electrical shock or damage to the terminal.

Follow these steps to connect the terminal to DC power.

1. Verify that the terminal is not connected to a power source.
2. Strip 7 mm (0.28 in.) of insulation from the ends of the wires.



3. Secure the DC power wires to the marked terminals (+ and -) on the power terminal block.
4. Secure the earth/ground wire.
 - On 400 and 600 terminals, secure the earth/ground wire to the functional earth/ground terminal on the power terminal block.
 - On 700 to 1500 terminals, secure the earth/ground wire to the functional earth screw on the back of the display.



5. Apply power to the terminal.

AC Power Connections

Terminals with an integrated AC power supply have these power ratings.

Table 40 - AC Power Ratings

Terminal	Input Voltage	Power Consumption
400, 600	100...240V AC (50...60 Hz)	35VA max
700, 1000, 1250, 1500	100...240V AC (50...60 Hz)	160VA max

Protective Earth and Functional Earth Connections

PanelView Plus 6 devices with an AC power input have a protective earth terminal you must connect to a low-impedance earth ground. The protective earth terminal is on the power input terminal block.

IMPORTANT In addition to the protective earth connection, the 700 and 1500 terminals also have a functional earth terminal that you must connect to a low-impedance earth ground. The functional earth connection is on the back of the display.



ATTENTION: The protective earth and functional earth connections to ground are mandatory.

- The functional earth is required for Electromagnetic compliance (EMC) with the European Union (EU) EMC directive for CE-mark conformance.
- The protective earth is required for both safety and regulatory compliance.

Table 41 - Protective Earth/Functional Earth Wire Specifications for AC Power

Earth Connections		Wire Type		Wire Gauge	Terminal Screw Torque
Protective earth 400, 600		Stranded or solid	Cu 90 °C (194 °F)	2.1...3.3 mm ² (14...12 AWG)	0.45...0.56 N·m (4...5 lb·in)
Protective earth 700 to 1500		Stranded or solid	Cu 90 °C (194 °F)	2.1...3.3 mm ² (14...12 AWG)	0.56...0.90 N·m (5...8 lb·in)
Functional earth 700 to 1500 only	GND	Stranded or solid	Cu 90 °C (194 °F)	2.1...5.3 mm ² (14...10 AWG)	1.13...1.36 N·m (10...12 lb·in)

Connect AC Power



WARNING: Explosion Hazard

Do not disconnect equipment unless power has been switched off and area is known to be nonhazardous.

Disconnect all power before installing or replacing components. Failure to disconnect power can result in electrical shock or damage to the terminal.

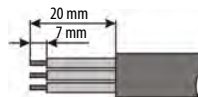


ATTENTION: Improper wiring of the power terminals can result in voltage at the communication connector shells.

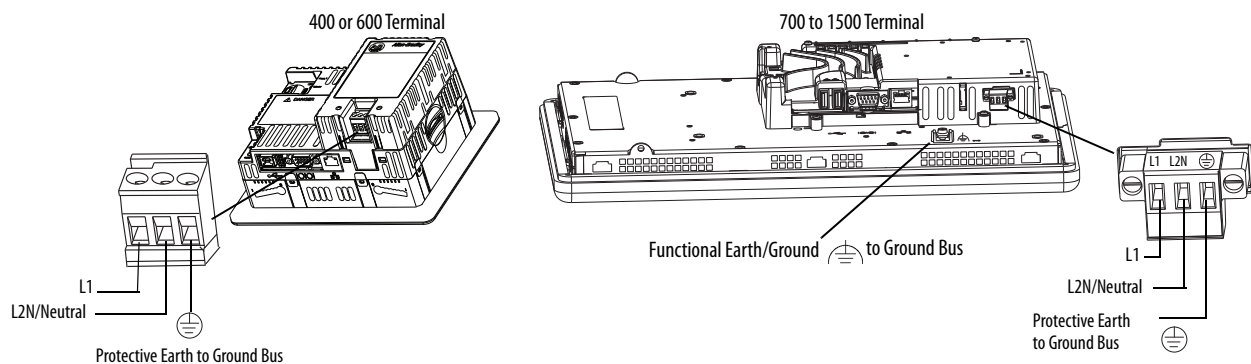
Do not apply power to the terminal until all wiring is connected. Failure to do so can result in electrical shock.

Follow these steps to connect the terminal to AC power.

1. Verify that the terminal is not connected to a power source.
2. Strip 7 mm (0.28 in.) of insulation from the ends of the wires.



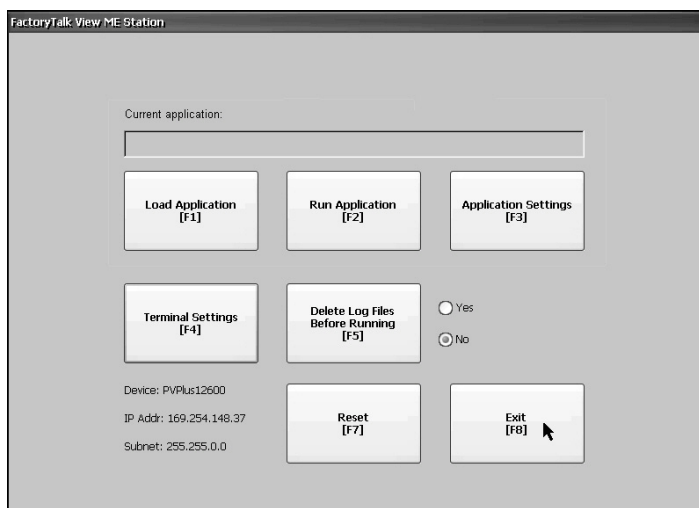
3. Secure the AC power wires to the marked terminals (L1 and L2N) on the power terminal block.
4. Secure the protective earth/ground wire to the marked position on the power terminal block.
5. On 700 to 1500 terminals, also secure the functional earth/ground wire to the functional earth screw on the back of display to ground bus.



6. Apply power to the terminal.

Initial Startup

The first time you start the system, the terminal goes through its power-up sequence and launches FactoryTalk® View ME Station Configuration mode.



You can change the action the terminal takes on startup by pressing Terminal Settings then choosing Startup Options. You can configure one of these options:

- Launch a FactoryTalk Machine Edition HMI application that is configured to run at startup.
- Launch FactoryTalk View Machine Station Configuration mode and run the configuration options for the terminal (default).
- Launch the Windows Explorer desktop.

You can also configure a terminal to allow desktop access. Terminals are initially shipped with desktop access disabled. To allow or restrict desktop access, press Terminal Settings then choose Desktop Access.

For more information on changing the start-up option and restricting or allowing desktop access, refer to [Chapter 3 - Configuration Mode](#).

Reset the Terminal

You have several options for restarting the terminal without having to disconnect and reapply power:

- Use the Reset switch on the back of the terminal.
- From the terminal desktop Start menu, choose Restart System.
- On the FactoryTalk View ME Station configuration dialog box, press Reset.

After a restart, the terminal performs a series of start-up tests then takes one of these actions:

- Launches an HMI application that is configured to run at startup.
- Launches FactoryTalk Machine Edition Configuration mode.
- Launches the Windows Explorer desktop.

The action that occurs depends on the start-up options configured for your terminal. Refer to [Start-up Options on page 49](#) for details.

Refer to [Start-up Messages and Codes on page 164](#) for a list of start-up information and error messages.

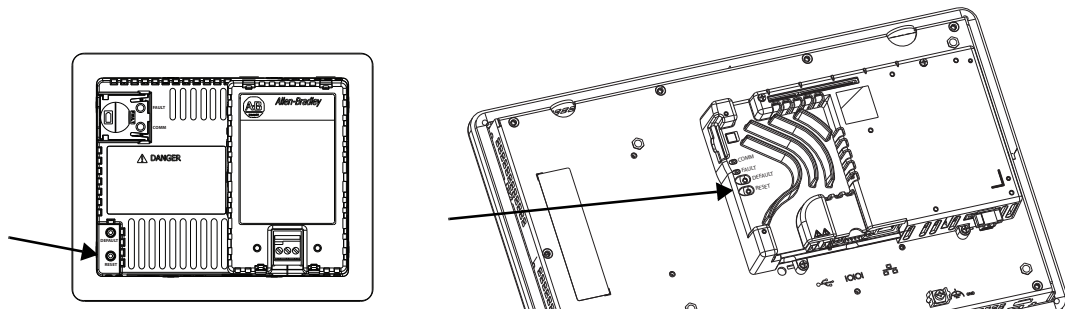
Follow these steps to restart the system by using the Reset switch.

1. Insert a thin, nonconductive probe into the Reset area.
2. Press the switch.



ATTENTION: Use a nonconductive object to press the reset switch. Don't use a conducting object such as a paper clip or the tip of a pencil. Either of these can damage the terminal.

Figure 9 - Reset Switch



Follow these steps to restart the system from the Windows desktop.

1. From the Start menu, choose Programs>Restart System.
You are asked to confirm the restart.
2. Click Yes to restart the terminal or No to cancel.

Follow these steps to restart the system from FactoryTalk View ME Station software.

1. Access Configuration Mode.

Refer to [Access Configuration Mode on page 43](#) for ways to launch FactoryTalk View ME Station Configuration mode.

2. Press Reset [F7].

Configuration Mode

Topic	Page	Topic	Page
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Terminal Settings	46	Check Integrity of Application Files	72
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Access Configuration Mode

The terminal uses built-in software, FactoryTalk® View ME Station, to configure start-up options, load and run applications, access the Windows desktop, and perform other terminal operations. When you reset the terminal, one of these actions occurs, depending on the configured start-up option:

- FactoryTalk View ME Station Configuration mode is launched (closed system). This is the initial default.
- FactoryTalk View Machine Edition HMI .mer application is set to run (closed system).
- Windows Explorer desktop is launched (open system).



You can access the Configuration mode of the terminal from the Windows Explorer desktop by double-clicking the FactoryTalk View ME Station icon.

IMPORTANT

- To access Configuration mode from a running application, press Goto Configuration Mode. This button is added to application screens in FactoryTalk View Studio software during application development. The application stops running but is still loaded.
- Refer to [Configuration Mode Access on page 168](#) for details on how to access Configuration mode if the application does not contain a Goto Configuration Mode button.