



AC Power Supply for PanelView Plus/PanelView Plus CE Terminals

Catalog Number 2711P-RSACDIN

Topic	Page
Important User Information	2
Environment and Enclosure	3
Hazardous Locations	4
Overview	5
Install the Power Supply	6
Wire the Power Supply	7
Mounting Dimensions	8
Diagnostic Indicator	9
Specifications	9
Additional Resources	11

Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (publication SGI-1.1 available from your local Rockwell Automation sales office or online at <http://literature.rockwellautomation.com>) describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.





In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

Reproduction of the contents of this manual, in whole or in part, without written permission of Rockwell Automation, Inc., is prohibited.

Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

<p>WARNING</p> 	<p>Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.</p>
<p>IMPORTANT</p>	<p>Identifies information that is critical for successful application and understanding of the product.</p>
<p>ATTENTION</p> 	<p>Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you to identify a hazard, avoid a hazard, and recognize the consequences.</p>
<p>SHOCK HAZARD</p> 	<p>Labels may be located on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.</p>
<p>BURN HAZARD</p> 	<p>Labels may be located on or inside the equipment, for example, a drive or motor, to alert people that surfaces may be dangerous temperatures.</p>

Environment and Enclosure

ATTENTION**Environment and Enclosure**

This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC publication 60664-1), at altitudes up to 2000 meters without derating.

This equipment is considered Group 1, Class A industrial equipment according to IEC/CISPR Publication 11. Without appropriate precautions, there may be potential difficulties ensuring electromagnetic compatibility in other environments due to conducted as well as radiated disturbance.

This equipment is supplied as open type equipment. It must be mounted within an enclosure that is suitably designed for those specific environmental conditions that will be present, and appropriately designed to prevent personal injury resulting from accessibility to live parts. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain additional information regarding specific enclosure type ratings that are required to comply with certain product safety certifications.

See NEMA Standards publication 250 and IEC publication 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosures. Also, see the appropriate sections in this publication, as well as the Allen-Bradley publication 1770-4.1, Industrial Automation Wiring and Grounding Guidelines, for additional installation requirements pertaining to this equipment.

Hazardous Locations

The following information applies when operating this equipment in hazardous locations:

Products are suitable for use in Class 1, Div 2 Groups A, B, C, and D Hazardous Locations and nonhazardous location only. Each product is supplied with markings on the rating nameplate indicating the hazardous location temperature code. When combining products within a system, the most adverse temperature code (lowest "T" number) may be used to help determine the overall temperature code of the system. Combinations of equipment in your system are subject to investigation by the local authority having jurisdiction at the time of installation.

WARNING



EXPLOSION HAZARD

- Substitution of components may impair suitability for Class I, Division 2.
 - Do not replace components or disconnect equipment unless power has been switched off or the area is known to be nonhazardous.
 - Do not connect or disconnect components unless power has been switched off or the area is known to be nonhazardous.
 - This product must be installed in an enclosure.
 - All wiring must comply with N.E.C. article 501-4(b).
-

Les informations suivantes concernent l'utilisation de cet équipement en environnement dangereux :

Cet équipement est conçu pour être utilisé dans des environnements de Classe I, Division 2, Groupes A, B, C et D dangereux et non dangereux. Chaque produit est livré avec des marquages sur sa plaque d'identification qui indiquent le code de température pour les environnements dangereux. Lorsque plusieurs produits sont combinés dans un système, utiliser le code de température le plus défavorable (code de température le plus faible) pour déterminer le code de température global du système. Les combinaisons d'équipements dans votre système sont sujettes à inspection par les autorités locales compétentes au moment de l'installation.

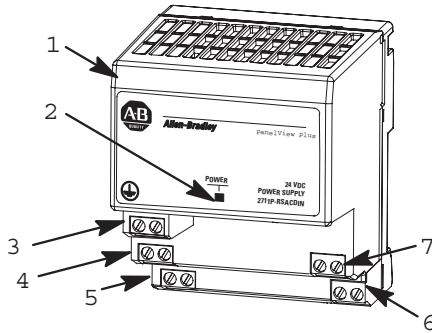
AVERTISSEMENT



DANGER D'EXPLOSION

- La substitution de composants peut rendre cet équipement impropre à une utilisation en environnement de Classe 1, Division 2.
 - Ne pas remplacer de composants ou déconnecter l'équipement sans s'être assuré que l'alimentation est coupée et que l'environnement est classé non dangereux.
 - Ne pas connecter ou déconnecter des composants sans s'être assuré que l'alimentation est coupée ou que l'environnement est classé non dangereux.
 - Ce produit doit être installé dans une armoire.
-

Overview



Item	Description
1	Power Supply module 2711P-RSACDIN
2	Indicator
3	120/230V ac ground
4	120/230V ac common L2/N connections
5	120/230V ac power L1 connections
6	+24V dc connections
7	24V common connections

ATTENTION



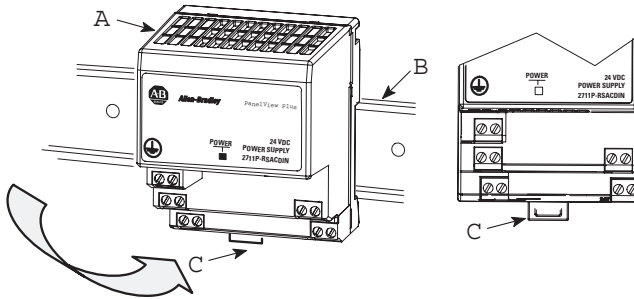
The 2711P-RSACDIN power supply provides sufficient 24V dc power to a single PanelView Plus or PanelView Plus CE.

Install the Power Supply

WARNING

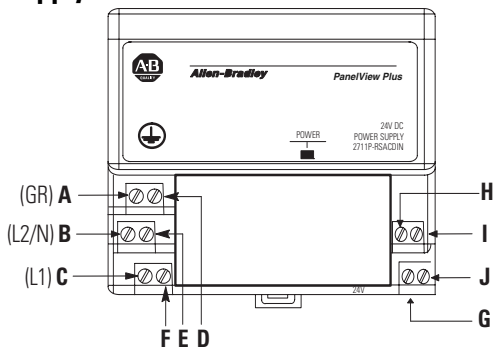


If you connect or disconnect wiring while the field side power is on, an electrical arc can occur. This could cause an explosion in hazardous installations. Be sure that power is removed or the area is nonhazardous before proceeding.



1. Position the power supply module A on a 35 x 7.5 mm DIN rail B (A-B pt. no. 199-DR1) at 30° angle.
The power supply must be mounted horizontally as shown.
2. Rotate the power supply module onto the DIN rail with the top of the rail hooked under the lip on the rear of the power supply.
3. Press the power supply module down onto the DIN rail until flush. Locking tab (C) will snap into position and lock the power supply to the DIN rail.
4. If the power supply module does not lock in place, use a screwdriver or similar device to move the locking tab down while pressing the power supply flush onto the DIN rail and release the locking tab to lock the power supply in place.
If necessary, push up on the locking tab to lock.
5. Connect the power supply wiring as shown under Wire the Power Supply.

Wire the Power Supply



IMPORTANT

Input and output wiring must be in accordance with Class I, Division 2 wiring methods per Article 501-4(b) of the National Electrical Code and in accordance with the authority having jurisdiction.

Terminals A, B and C are 120/230V supply terminals. Terminals D, E and F are available to daisychain this 120/230V power to other 2711P-RSACDIN power supplies.

Torque screw terminals to 5-7 lb-in (0.5 - 0.6 Nm) when making connections.

1. Connect the 120/230V ac power to the left side terminals on the connectors on the left side of the module as follows:

Connect		To
ac Ground	GR	A
120/230V ac common	L2/N	B
120/230V ac power	L1	C

ATTENTION

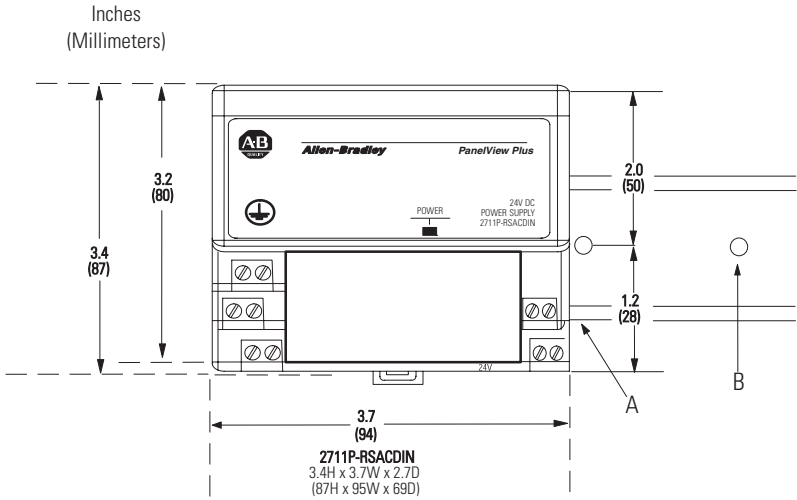


The total length of wire for terminals H, I, J and G must not exceed 3 m. Exceeding the 3 m length can reduce noise immunity.

2. Connect terminal G or J (+24V dc) to the +24V dc terminal on the PanelView Plus/PanelView Plus CE.
3. Connect terminal H or I (+24V dc common) to the +24V dc common terminal on the PanelView Plus/PanelView Plus CE.

The remaining two 24V terminals should remain unconnected.

Mounting Dimensions

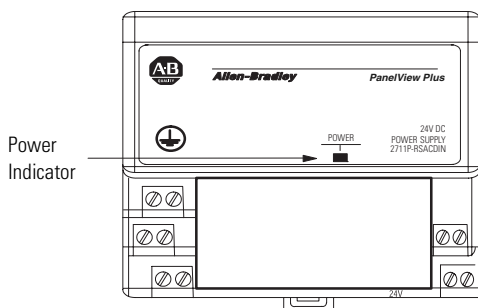


A = DIN rail

B = Secure DIN rail approximately every 200mm

Diagnostic Indicator

The power supply has one indicator.



The power indicator is on (green) when voltage at the output is between 20.4 V dc and 28V dc.

Indicator	Description
ON (green)	Output voltage is greater than 20.4V dc, but less than 28V dc
OFF	No power applied to power supply.
	Output voltage exceeded 35V dc, and overvoltage protection shut down unit.
	Output current is above 3 A.

Specifications

Input Specifications	
Nominal Supply Voltage	120V ac, 47...63Hz; 1.7 A maximum 230V ac, 47...63 Hz; 1.1 A maximum
Voltage Range	85...265V ac
Inrush Current	40 A typical, 1 ac cycle @ V_{in} , 265V ac, 55°C
Interruption	Output voltage will stay within specification when input drops out for 1/2 cycle @ 47 Hz, 85V ac with maximum load
Output Specifications	
Nominal Output Voltage	+24V dc SELV
Voltage Range	20.4...27.6V dc (includes noise and 5% ac ripple)

10 AC Power Supply for PanelView Plus/PanelView Plus CE Terminals

Output Current	3 A maximum horizontal mount
Minimum Load	50 mA
Overvoltage Protection	Output internally limited to 35V dc. Cycle power to reenergize.
Overcurrent Protection	Current limit 3.2 A minimum (107% minimum)
Leakage Current	0.5 mA rms maximum @ rated input and output
Isolation Voltage	2830V dc for 1 second

General Specifications

Mounting	Horizontal on a DIN rail. Wall or panel mount with 1794-NM1 panel mounting kit
Terminal Screw Torque	5-7 lb-in (0.5...0.6 Nm)
Dimensions, HxWxD	3.4 x 2.7 x 2.7 in. 87 x 68 x 69 mm

Environmental Specifications

Operating Temperature	IEC 60068-2-1 (Test Ad, Operating Cold) IEC 60068-2-2 (Test Bd, Operating Dry Heat) IEC 60068-2-14 (Test Nb, Operating Thermal Shock) 32...131 °F (0...55°C)
Storage Temperature	IEC 60068-2-1 (Test Ab, Unpackaged, Nonoperating Cold) IEC 60068-2-2 (Test Bb, Unpackaged, Nonoperating Dry Heat) IEC 60068-2-14 (Test Na, Unpackaged, Nonoperating Thermal Shock) -40...185°F (-40...85 °C)
Relative Humidity	IEC 60068-2-30 (Test Db, Unpackaged, Nonoperating Damp Heat) 5...95%, noncondensing
Shock	IEC 60068-2-27 (Test Ea, Unpackaged Shock) 30g 50g
Vibration	IEC 60068-2-6 (Test Fc, Operating) 5g @ 10...500 Hz
ESD Immunity	IEC 61000-4-2 4 kV contact discharges 8 kV air discharges
Radiated RF Immunity	IEC 61000-4-3 10V/m with 1 kHz sine-wave 80% AM from 30...1000 MHz
EFT/B Immunity	IEC 61000-4-4 ±2 kV @ 5 kHz on power ports
Surge Transient Immunity	IEC 61000-4-5 ±1 kV line-line (DM) and ±2 kV line-earth (CM) on ac power ports

Conducted RF Immunity	IEC 61000-4-6 10V rms with 1kHz sine wave 80% AM from 150 kHz to 80 MHz
Emissions	CISPR 11 Group 1, Class A (with appropriate enclosure)
Enclosure Type Rating	None (open-style)
Power Conductors Wire Size	12 gauge (4 mm ²) maximum solid or stranded copper wire rated at 75 °C or greater
Category	3/64 in. (1.2 mm) insulation max. 1 ⁽¹⁾
Certifications (when product is marked)	C-UL-US UL Listed Industrial Control Equipment for U.S. and Canada C-UL-US UL Listed for Class I, Division 2 Groups A, B, C and D for U.S. and Canada CE ⁽²⁾ European Union 89/336/EEC EMC Directive, compliant with: EN 61000-6-4, Industrial Emissions EN 61326, Meas./Control/Lab., Industrial Requirements EN 61000-6-2, Industrial Immunity CE ⁽²⁾ European Union 73/23/EEC LVD Directive, compliant with: EN 61131-2, Programmable Controllers C-Tick ⁽²⁾ Australian Radiocommunications Act, compliant with: AS/NZS 2064, Industrial Emissions

⁽¹⁾ Use this conductor capacity information for planning conductor routing. Refer to publication 1770-4.1, Industrial Automation Wiring and Grounding Guidelines.

⁽²⁾ See the Product Certification link at www.ab.com for Declarations of Conformity, Certificates and other certification details.

Additional Resources

You can view or download publications including translated versions of this publication at <http://literature.rockwellautomation.com>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.

Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect Support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://support.rockwellautomation.com>.

Installation Assistance

If you experience a problem with a hardware module within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your module up and running.

United States	1.440.646.3223 Monday – Friday, 8am – 5pm EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

New Product Satisfaction Return

Rockwell tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning, it may need to be returned.

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor in order to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

Allen-Bradley, Rockwell Automation, TechConnect, and PanelView Plus are trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 2711P-IN005C-EN-P - March 2007

PN 41061-260-01(3)

Supersedes Publication 2711P-IN005B-MU-P - March 2003

Copyright © 2007 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.