#### IMPORTANT PRODUCT INFORMATION

GFK-1516G Oct 2019

# PACSystems<sup>™</sup> VersaMax

120/240V, AC POWER SUPPLY (IC200PWR101 & IC200PWR102)



## Warning Notes as Used in this Publication



Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use.

In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

Notes: Notes merely call attention to information that is especially significant to understanding and operating the equipment.

These instructions do not purport to cover all details or variations in equipment, nor to provide for every possible contingency to be met during installation, operation, and maintenance. The information is supplied for informational purposes only, and Emerson makes no warranty as to the accuracy of the information included herein. Changes, modifications, and/or improvements to equipment and specifications are made periodically and these changes may or may not be reflected herein. It is understood that Emerson may make changes, modifications, or improvements to the equipment referenced herein or to the document itself at any time. This document is intended for trained personnel familiar with the Emerson products referenced herein.

Emerson may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not provide any license whatsoever to any of these patents.

Emerson provides the following document and the information included therein as-is and without warranty of any kind, expressed or implied, including but not limited to any implied statutory warranty of merchantability or fitness for particular purpose.

#### **Preinstallation Check**

Carefully inspect all shipping containers for damage. If any equipment is damaged, notify the delivery service immediately. Save the damaged shipping container for inspection by the delivery service. After unpacking the equipment, record all serial numbers. Save the shipping containers and packing material in case it is necessary to transport or ship any part of the system.

## **Specifications**

Specification	Description	
Input Voltage	85 to 132 VAC 176 to 264 VAC 120/240 VAC nominal	
Input Power	27VA	
Output Voltage	5VDC, 3.3VDC	
Frequency	47-63Hz	
Protection	Short circuit, overload	
Output Current	Standard Power Supply (model # n01)	Enhanced Power Supply (model # n02)
Total	1.5 A* maximum	1.5 A* maximum
3.3VDC Output	0.25 A maximum	1.0 A maximum
5VDC Output	(1.5A - I <sub>3.3V</sub> ) max.	(1.5A - I <sub>3.3V</sub> ) max.

<sup>\*</sup> The total output current should not exceed 1.5A. For example, if 3.3V at 0.25A is required, 1.25A is available on the 5V output. For product standards, general operating specifications, and installation requirements, refer to the VersaMax I/O Modules Manual, GFK-1504

## Installing a Power Supply Booster Carrier (optional)

The power supply can be installed on a CPU or NIU module, or on a Power Supply Booster Carrier. To install a booster carrier, follow the guidelines below.

### Installing the Carrier on a DIN Rail



Connecting carriers must be installed on the same section of 35mm x 7.5mm DIN rail. The rail must have a conductive (unpainted) finish for proper grounding. For best resistance to vibration, the DIN rail should be installed on a panel using screws spaced approximately 6 inches (5.24cm) apart.

The carrier snaps easily onto the DIN rail. No tools are required for mounting or grounding to the rail.

## Removing the Carrier from the DIN Rail

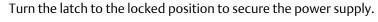
- 1. If the carrier is attached to the panel with a screw, remove the screw.
- 2. If the carrier is installed between other carriers, it will be necessary to move the other carriers along the DIN rail to disengage the mating connectors on both sides of the carrier being removed.
- 3. Slide the carrier along the DIN rail away from the other modules until the connector disengages.
- 4. With a small flathead screwdriver, pull the DIN rail latch tab outward while tilting the other end of the module down to disengage it from the DIN rail.

#### **Installing the Power Supply**

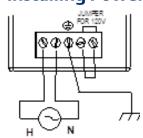


The power supply module installs on a CPU or NIU module or on a Power Supply Booster Carrier. The latch on the power supply must be in the unlocked position, as illustrated.

Align the connectors and the latch post and press the power supply module down firmly, until the two tabs on the bottom of the power supply click into place. Be sure the tabs are fully inserted in the slots.







Connect an appropriate source of AC power to the power supply. Terminals accommodate one AWG #14 (avg. 2.1mm² cross section) to AWG #22 (avg. 0.36mm² cross section) wire, or two wires up to AWG #18 (avg. 0.86mm² cross section). Use copper wire rated for 90 degrees C. When inserting two wires in the same position, the wires must be the same size and type (solid or stranded).

Connect the ground terminal to the conductive mounting panel with a 4-inch maximum length of AWG #14 (avg. 2.1mm²) or larger wire. Use hardware such as star washers to ensure ground integrity.

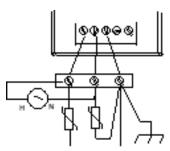
## **Using a Voltage-Selection Jumper**

For 120VAC nominal operation, install a jumper (14-22 AWG) as shown above. The power supply operates without a jumper; however, the hold-up specification is not met. If a jumper is not installed for 120VAC operation, the power supply will not cause hazardous conditions.

#### **A** WARNING

**DO NOT USE A JUMPER FOR 240VAC OPERATION.** If a jumper is used on the input connector for 240VAC nominal operation, the power supply will be damaged and may cause hazardous conditions.

#### **Installing Suppression at the Power Lines**



For agency compliance, external MOV suppression is required from both the positive and negative input to frame ground or at the power line input of a system enclosure. MOV protection across the inputs is provided on the supply and not necessary to add externally.

The following MOVs manufactured by Littelfuse® should handle most line transients:

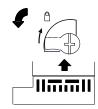
V130LA20AP (120 VAC applications)

V275LA40BP (240 VAC applications)

Measurement of actual transients may be required in extreme cases to decide what MOV to use.

## **Removing the Power Supply**

Exercise care when working around operating equipment. Devices may become very hot and could cause injury.



- 1. Remove power.
- 2. Turn the latch to the unlocked position as illustrated.
- Press in the tabs on the lower edge of the power supply
- 4. Pull the power supply straight off.

#### **Installation in Hazardous Areas**

Modules must be mounted within an ultimate enclosure that can only be accessed by the use of a tool.

The following information is for products bearing the UL and ATEX markings for Hazardous Areas.

• Power Supply Modules: Be sure to read the installation instructions provided with each Power Supply module. These instructions specify the use of copper conductors for the power supply, wire gauge and type.

#### **A** WARNING

- EXPLOSION HAZARD SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2;
- EXPLOSION HAZARD DO NOT CONNECT OR DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.
- Equipment labeled with reference to Class I, Div. 2, Groups A, B, C and D, Hazardous Locations is suitable for use in Class I, Div. 2, Groups A, B, C, D or non-hazardous locations only.

### **Product Revision History**

Revision	Date	Description
	Oct 2019	Following Emerson's acquisition of this product, changes have been made to apply appropriate branding and registration of the product with required certification agencies. No changes to material, process, form, fit or functionality.
IC200PWR102K	Oct 2016	EU RoHS compliant module per directive 2011/65/EU dated 8-June-2011. No changes to features, performance or compatibility.
IC200PWR101J IC200PWR102J	Jan 2012	Label change. No changes to features, performance or compatibility.

#### **Technical Support & Contact Information:**

Home link: http://www.Emerson.com/Industrial-Automation-Controls

Knowledge Base: <a href="https://www.emerson.com/Industrial-Automation-Controls/support">https://www.emerson.com/Industrial-Automation-Controls/support</a>

Note: If the product is purchased through an Authorized Channel Partner, please contact the seller directly for any support.

Emerson reserves the right to modify or improve the designs or specifications of the products mentioned in this manual at any time without notice. Emerson does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson product remains solely with the purchaser.

© 2019 Emerson. All rights reserved.

Emerson Terms and Conditions of Sale are available upon request. The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their respective owners.

