



## DeviceNet Power Supply

Catalog Number 1787-DNPS

Use this document as a guide when you install a DeviceNet™ Power Supply (model number CP680).


### About the Power Supply

We designed the DeviceNet power supply specifically for DeviceNet networks. It conforms to all applicable national electric codes.

The power supply provides the following features:

- standard IEC 3-pin connector
- main power switch with a dual-voltage selection switch
- standard DeviceNet 5-pin open style connector
- stud for earth to ground connection
- green LED power indicator
- stud for earth-to-ground connection

### European Union Directive Compliance

If this product bears the  marking, it is approved for installation within the European Union and EEA regions. It has been designed and tested to meet the following directives.

#### EMC Directive

This product is tested to meet Council Directive 89/336/EEC Electromagnetic Compatibility (EMC) and the following standards, in whole or in part, documented in a technical construction file:

- EN 50081-2EMC - Generic Emission Standard, Part 2 - Industrial Environment
- EN 50082-2EMC - Generic Immunity Standard, Part 2 - Industrial Environment

This product is intended for use in an industrial environment.

#### Low Voltage Directive

This product is tested to meet Council Directive 73/23/EEC Low Voltage, by applying the safety requirements of EN 61131-2 Programmable Controllers, Part 2 - Equipment Requirements and Tests.

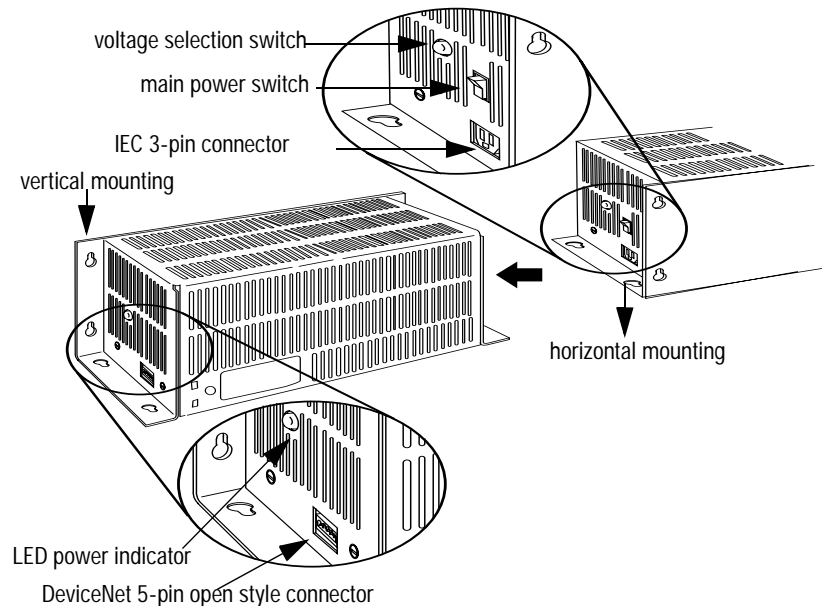
For specific information on the power supply requirements, see the appropriate sections in this manual as well as the following Allen-Bradley publications:

- Industrial Automation Wiring and Ground Guidelines, publication 1770-4.1
- Automation Systems Catalog, publication B111

This equipment is classified as open equipment and must be installed (mounted) in an enclosure during operation as a means of providing safety protection.

## Installing Your Power Supply

You can install your power supply on a vertical wall mount or a shelf by using the integral mounting brackets. For more information about where to mount your power supply, refer to the DeviceNet Cable System Planning and Installation Manual, publication DN-6.7.2.



1. Place the power supply where you would like to mount it (either on a shelf or vertically on a wall).



**ATTENTION:** Be certain that the power supply is protected from liquids and condensation that might occur through ventilation. Liquids or condensation could cause damage to the product.

2. Attach the power supply to the selected mounting position by attaching screws through the appropriate mounting flange.

- Secure all necessary cords from the DeviceNet network in their appropriate ports once the power supply is securely mounted.



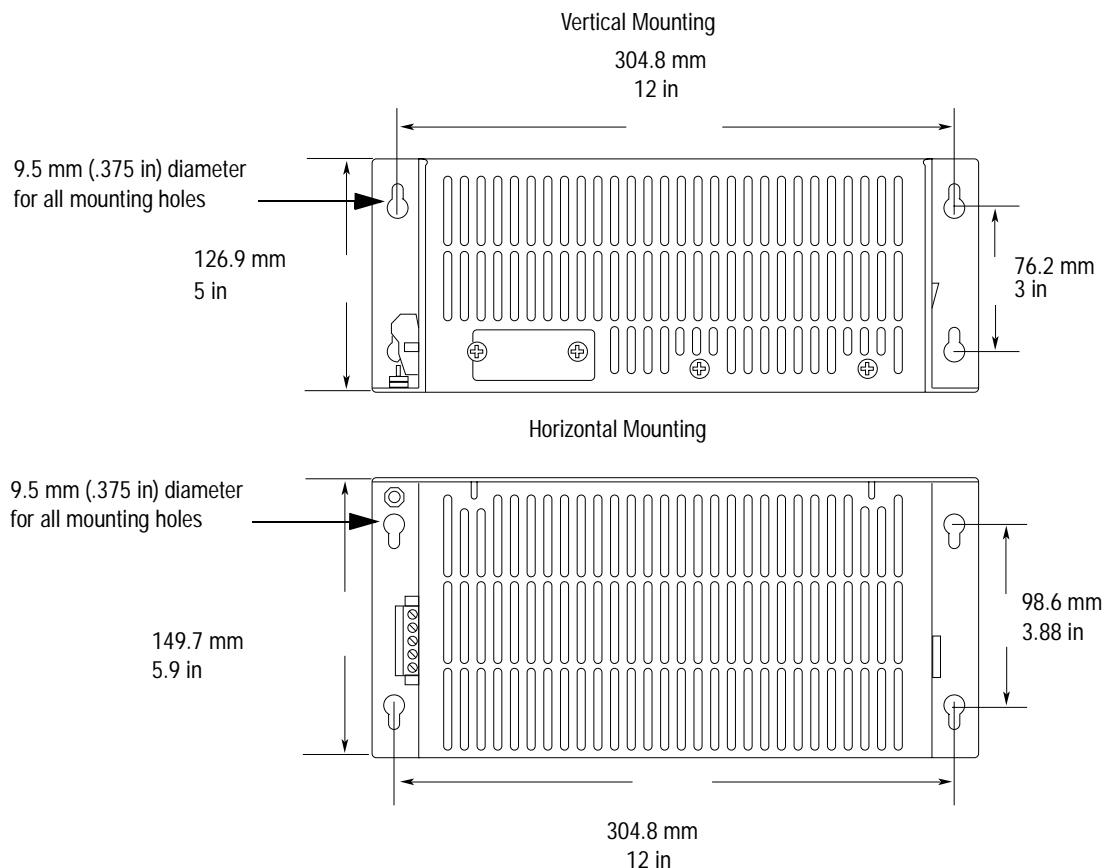
**ATTENTION:** For alternate usage at an input of 230V ac operation, the cord must be “SVT” type or equivalent with an IEC320-C13 connector and appropriate grounded plug. Cord must be 1.8m to 3.0m in length and rated for 2500W (250V/10A).

Be certain that the voltage selection switch is set for proper input voltage before application of main power.

- Switch the main power switch to the on position to supply power to the DeviceNet network.

## Mounting Dimensions


This figure illustrates the correct mounting dimensions:






## Specifications

Table 1 lists specifications for the DeviceNet power supply.



**ATTENTION:** This product may, under certain circumstances, develop hot surfaces  during operation. Make sure that proper precautions are taken to avoid damage to either equipment or human operators.

**Table 1: Specifications**

Power Connector	3-pin IEC	Line Frequency	48-62 Hz
Fuse	Class 2 type accepted <sup>1</sup>	Turn-on Time (with full load)	250msec max 95% of final value
Size	5" x 6.5" x 11"	Isolation	output isolated from AC and chassis ground
DC Connector	Phoenix Combicon style 5-pin 5.08mm pitch female and mating connector	Operating Temperature	0 - 60° C min 0 - 75° C with 30% derating at 75° C 32 - 140° F min 32 - 167° F with 30% derating at 167° F
DC Connector Pins	Pin 1, 24V+; Pin 3, Chassis ground; Pin 5, 24V-	Storage Temperature	-40 - 85° C -40- 185° F
Indicators	LED power good indicator	Humidity	95% non-condensing
Mounting	Flange	Electrostatic Discharge	4KV contact 8KV air
Enclosure	Vented enclosure (indoor use)	Vibration	2g, 10-500hz
Input Voltage	115V±10% 230V±10% selectable	Shock	30g, 11ms half cycle
Output Voltage	24V dc ± 1%	Surge	4KV common mode, 2KV differential mode
Output Current	Nameplate rating of 100VA to be consistent with NEC Class 2 Peak output currents 5.25 A	Electrical Fast Transient	2KV
Ripple	250mV	Radiated Immunity	10V/M 80 MHZ- 1GHZ
Load Capacitance Capability	7000uF load	Agency Certification (when product or packaging is marked)	 223 - M91 with T.I.L. No. CA 2A.  1310 class 2 power limited circuits  marked for all applicable directives
<sup>1</sup> Contact the manufacturer for information on replacing fuses for your power supply.			

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