

Model 2510 125 VDC/110 VAC Power Supply

LIMITED PRODUCT WARRANTY

CTI warrants that this CTI Industrial Product shall be free from defects in material and workmanship for a period of one (1) year after purchase from CTI or from an authorized CTI Industrial Distributor. This CTI Industrial Product will be newly manufactured from new and/or serviceable used parts which are equal to new in the Product.

Should this CTI Industrial Product fail to be free from defects in material and workmanship at any time during this one (1) year warranty period, CTI will repair or replace (at its option) parts or Products found to be defective and shipped prepaid by the customer to a designated CTI service location along with proof of purchase date and associated serial number. Repair parts and replacement Product furnished under this warranty will be on an exchange basis and will be either reconditioned or new. All exchanged parts or Products become the property of CTI. Should any Product or part returned to CTI hereunder be found by CTI to be without defect, CTI will return such Product or part to the customer.

This warranty does not include repair of damage to a part or the Product resulting from: failure to provide a suitable environment as specified in applicable Product specifications, or damage caused by an accident, disaster, acts of God, neglect, abuse, misuse, transportation, alterations, attachments, accessories, supplies, non-CTI parts, non-CTI repairs or activities, or to any damage whose proximate cause was utilities or utility like services, or faulty installation or maintenance done by someone other than CTI. Control Technology Inc. reserves the right to make changes to the Product in order to improve reliability, function, or design in the pursuit of providing the best possible Product. CTI assumes no responsibility for indirect or consequential damages resulting from the use or application of this equipment.

THE WARRANTY SET FORTH ABOVE IN THIS ARTICLE IS THE ONLY WARRANTY CTI GRANTS AND IT IS IN LIEU OF ANY OTHER IMPLIED OR EXPRESSED GUARANTY OR WARRANTY ON CTI PRODUCTS, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND IS IN LIEU OF ALL OBLIGATIONS OR LIABILITY OF CTI FOR DAMAGES IN CONNECTION WITH LOSS, DELIVERY, USE OR PERFORMANCE OF CTI PRODUCTS OR INTERRUPTION OF BUSINESS, LOSS OF USE, REVENUE OR PROFIT, IN NO EVENT WILL CTI BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

REPAIR POLICY

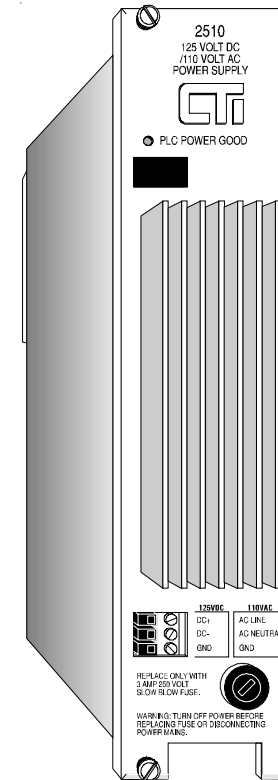
In the event that the Product should fail during or after the warranty period, a Return Material Authorization (RMA) number can be requested verbally or in writing from CTI main offices. Whether this equipment is in or out of warranty, a Purchase Order number provided to CTI when requesting the RMA number will aid in expediting the repair process. The RMA number that is issued and your Purchase Order number should be referenced on the returning equipment's shipping documentation. Additionally, if under warranty, proof of purchase date and serial number must accompany the returned equipment. The current repair and/or exchange rates can be obtained by contacting CTI at 1-800-537-8398.

When returning any module to CTI, follow proper static control precautions. Keep this module away from polyethylene products, polystyrene products and all other static producing materials. Packing the module in its original conductive bag is the preferred way to control static problems during shipment. **Failure to observe static control precautions may void the warranty.** For additional information on static control precautions, contact CTI at 1-800-537-8398.



PRODUCT BULLETIN

Model 2510 125 VDC/110 VAC Power Supply



Features

- 125 VDC input power for utility applications
- Also accepts 110 VAC input power
- 55 Watts @ +5 VDC to PLC to backplane
- 3.75 Watts @ -5 VDC to PLC backplane

Specifications

General

Field Connections:

One three-pin 125 VDC/110 VAC input terminal strip
Input Voltage Operating Range: 90 to 146 VDC or 90-132 VAC

Total Wattage Rating: 82.75 Watts maximum output
Steady State Input Current:

1.5 Amps DC (max.) 2.5 Amps AC (max.)

Peak Inrush Current: 50 Amps (max.)

Fusing: 3.0 Amp 250 V, 3AG for 125 VDC Input

Isolation:

2800 VDC: 125 VDC/110 VAC to backplane

1500 VDC: Chassis to backplane

1500 VDC: 125 VDC/110 VAC to chassis

Backplane Power: 58.75 Watts

Module Size: Triple-wide

Module Weight: 5.0 lbs (2.3 kg)

Environmental

Operating Temperature: 0° to 60°C (32° to 140°F)

Storage Temperature: -40° to 85°C (-40° to 185°F)

Humidity: 5% to 95% (non-condensing)

Agency Approvals Pending

UL, UL Canada, and FM

Description

The Model 2510 is a 125 VDC Power Supply which provides external and internal power for the SIMATIC® 505 PLCs. Systems that must operate from 125 VDC batteries may use the Model 2510 to provide power for the PLC.

The Model 2510 also accepts 110 VAC input power.

The triple-wide module provides up to 55 watts at +5 VDC and 3.75 watts at -5 VDC for use by the PLC and I/O modules.

Model 2510 125 VDC/110 VAC Power Supply

Applications

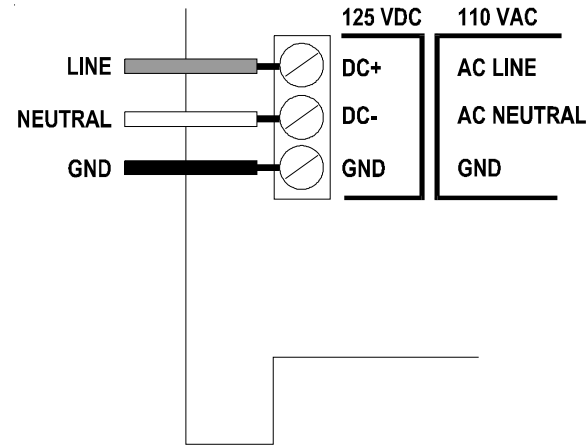
The Model 2510 is designed for control system applications that operate with 125 VDC. A typical application in the electric utility industry involves control of switchyards during power outages when the input power to the PLC is supplied from 125 VDC batteries.

With the Model 2510, the 505 series PLCs may be combined with Control Technology Inc. 125 VDC I/O modules,

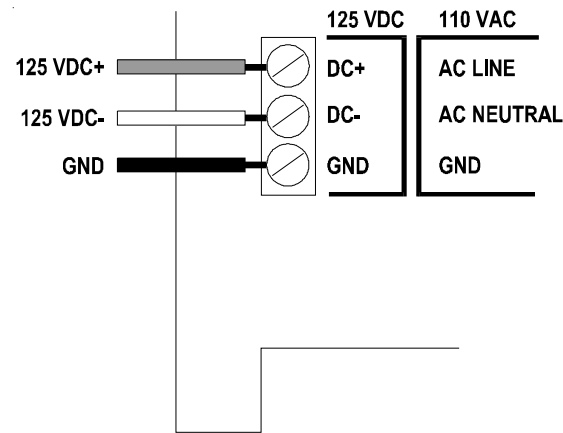
- 2530 Relay Contact Module
- 2582 Discrete Input Module
- 2591 Discrete Output Module

to produce control systems that operate exclusively at 125 VDC. Adding Control Technology's 2573-MOD, provides these control systems with remote Modbus, peer-to-peer and ASCII communications.

Call CTI for additional information on 125 VDC and communications products.



110 VAC Power Wiring Diagram

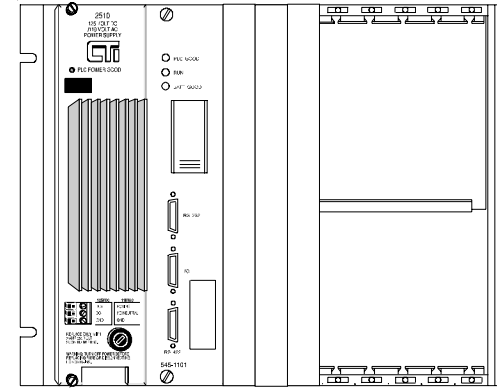


125 VDC Power Wiring Diagram

Model 2510 125 VDC/110 VAC Power Supply

Power Supply Location in Base

The Power Supply must always be installed in the left most slot of the 505 bases. See figure below.



Power Supply Placement in Base

WARNING:

Disable all power to the base before installing or removing the power supply. Failure to do so could cause damage to the equipment or injury to personnel.

CAUTION:

Do not attempt to operate the Model 2510 Power Supply out of the Input Voltage Operating Ranges of 90 to 146 VDC or 90 to 132 VAC. Damage to the Power Supply could occur if out of range input is applied.

Installing and Removing the Power Supply

Use the following steps for installing and removing the Model 2510 Power Supply from the 505 bases.

1. Position the power supply so that the bezel is facing you.
2. Grasp the top and bottom of the power supply.
3. Carefully slide the power supply into the left most slot in the base until it engages into the backplane connectors.
4. Tighten top and bottom bezel screws into the base chassis.

To remove power supply, reverse procedures 1 through 4 used for installation.