2513-A 75 Watt 24 VDC Power Supply with Redundancy Support





Description

The 2513-A is a 24VDC Power Supply designed for CTI 2500 Series and SIMATIC® 505® PLCs. The triple-wide module provides up to 75 watts at +5VDC for use by the PLC CPU and I/O modules. When operated in a dual configuration in a 2500-R11 base, it provides support for power supply redundancy.

Features

- Works in all CTI 2500 Series[®] or Simatic[®] 505 base formats
- 20-30VDC, ripple<%5
- Up to 75 watts @ +5VDC to PLC CPU and I/O modules
- Works in CTI 2500-R11-A and Siemens[®] 505-6511 bases as well 2500P-R4, 2500P-R8 and the 2500P-R16

Specifications

Field Connections:

One 3-pin 24VDC input terminal strip

Input Voltage Operating Range:

20-30 VDC (Crowbar Circuit trips @33VDC)

Total Wattage Rating:

75 Watts maximum output @ 0° C to 50° C (derating 1.75W/° C above 50° C)

Steady State Input Current at full load:

75 Watt Full Load Ratings	
VDC	Amps
20	5.4
24	4.26
30	3.36

Peak Inrush Current:

41 Amps max. @ 24VDC input

↑ Fusing:

8.0 Amp 250V, 3 AG front panel accessible

Little Fuse#0217008.MXP

Hold Up Time:

10mSec @ 75W load

Isolation:

2000VAC: 24VDC-to-Backplane 500VDC: Chassis-to-Backplane 500VAC: 24VDC-to-Chassis

Module Size: Triple-wide

Shipping Weight: 5.0 lbs (2.3 kg)

Additional Product Information:

On CTI's Website you will find links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance .

Note: Currently agency approval is pending.



Control Technology Inc. 5734 Middlebrook Pike, Knoxville, TN 37921-5962

5734 Middlebrook Pike, Knoxville, TN 37921-5962 Phone: +1.865.584.0440 Fax: +1.865.584.5720 www.controltechnology.com

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Power Supply Location in Base

The 2513-A Power Supply can be installed in single configurations in standard bases (2500-R4, 2500-R8, 2500-R16-A, 2500P-R4, 2500P-R8, 2500P-R16). For redundancy, 2513-A must be installed in a dual configuration in a 2500-R11-A or 505-6511 base. The two power supplies are installed in the leftmost two slots as shown below. The Power Supply may be installed in either of the 2 left-most slots of the system base, as shown in the figure below.



WARNING

Disable all power to power supply 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 2513-A out of the input voltage range of 20 to 30VDC. Damage to the Power Supply could occur is out of range input is applied.



Installing and Removing the Power Supply

Use the following steps for installing and removing the 2513-A Power Supply from the system base. Steps for removing the power supply:

- 1. Remove power from the power supply. NOTE: In single-supply systems this will shut down the PLC.
- 2. Loosen the top and bottom bezel screws.
- 3. Grasp the top and bottom of the power supply.
- 4. Carefully unplug and remove the power supply from the base.

Additional step for installing the power supply:

1. Tighten top and bottom bezel screws into the base chassis.

To install a new power supply, reverse procedures 1 through 4 used for removal and then tighten top and bottom bezel screws.

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CAUTION – Non-Hazardous Areas/Hazardous Areas

WARNING – EXPLOSION HAZARD. DO NOT REMOVE OR REPLACE WHILE CIRCUIT IS LIVE UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS.	AVERTISSEMENT – RISQUE D'EXPLOSION. NE PAS RETIRER NI REMPLACER PENDANT QUE LE CIRCUIT EST SOUS TENSION À MOINS QUE L'EMPLACEMENT NE SOIT EXEMPT DE
WARNING – EXPLOSION HAZARD. DO NOT REMOVE OR REPLACE FUSE WHEN ENER- GIZED.	CONCENTRATIONS INFLAMMABLES. AVERTISSEMENT – RISQUE D'EXPLOSION. NE PAS RETIRER NI REMPLACER UN FUSIBLE SI L'APPAREILLAGE EST SOUS TENSION.

Turn off power to the system before replacing fuses either in power supplies or IO modules. Refer to Product Bulletin or Installation and Operation Guide for specific information on the correct fuse for replacement. If there are any questions please contact CTI support. Fuses should only be replaced by qualified technicians.