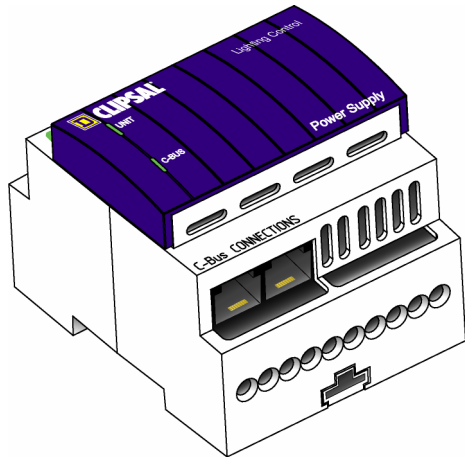


Square D® Clipsal® DIN Rail Mounted Power Supply, 350mA

SLC5500HPS 277V and
SLC5500TPS 110-120V

For Use with Wired C-Bus™ Networks



HAZARD CATEGORIES AND SPECIAL SYMBOLS

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

Danger indicates an immediately hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Warning indicates a potentially hazardous situation which, if not avoided, can result in death or serious injury.

CAUTION

Caution indicates a potentially hazardous situation which, if not avoided, can result in minor or moderate injury.

CAUTION

Caution, used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, can result in property damage or improper operation.

NOTE: Provides additional information to clarify or simplify a procedure.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. This document is not intended as an instruction manual for untrained persons. No responsibility is assumed by Square D for any consequences arising out of the use of this manual.

Class B FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INTRODUCTION

The 5500PS series Power Supply provides operating power for units on the C-Bus™ network. It is DIN rail mounted for easy installation. The C-Bus network connection is conveniently achieved through the use of RJ45 connectors, allowing C-Bus units to be quickly added to the network.

The 5500PS series Power Supply is available in these configurations:

- SLC5500HPS 350mA (277V*, 50/60Hz)
- SLC5500TPS 350mA (110-120V*, 50/60Hz)

* Nominal Supply Voltage $\pm 10\%$.

Before You Begin

Before installing the Power Supply, inspect it carefully. Verify the catalog number on the box label.

Table 1: Contents of the Box

Part Number	Description	Quantity
SLC5500HPS or SLC5500TPS	350mA (277V, 50/60Hz) 350mA (110-120V, 50/60Hz)	1
	Rubber RJ45 terminal plugs	3
RJ5CB300PL	C-bus network cable, 15.7 in. (400 mm)	1

SAFETY PRECAUTIONS

This section contains important safety precautions that must be followed before attempting to install or maintain electrical equipment. Carefully read and follow the safety precautions below.

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- This equipment must be installed and serviced by qualified electrical personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- Turn off all electrical power supplying this equipment before working on or inside the equipment.
- Always use a properly rated voltage sensing device to confirm that power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

INSTALLATION

Follow the steps in the sections below to properly install the Power Supply.

Network Considerations

- Plan your C-Bus network installation carefully. It is recommended that power supplies be distributed evenly along the C-Bus network.
- Each Power Supply provides 350mA of isolated 36Vdc class 2 voltage to the C-Bus network. Each Power Supply can support up to 15 C-Bus devices at approximately 22mA per unit (PC Interface draws 32mA).
- The installer should verify that an adequate number of C-Bus network Power Supplies are installed to support the connected devices. The total number of units connected to the C-Bus network must not exceed 350mA. Consult the C-Bus™ Calculator – Network Design Verification Software Utility to determine the total network current load.
- A maximum of five (5) 5500PS series Power Supply units may be connected on a single C-Bus network. Other units incorporating a C-Bus Power Supply may be used in conjunction with this Power Supply provided that the total available current supplied to the network does not exceed 2000mA (2A).

CAUTION

HAZARD OF IMPROPER OPERATION OR SYSTEM DAMAGE.

Use only C-Bus Power Supplies with units connected to a C-Bus network.

Failure to follow this instruction can result in improper operation or system damage.

Mounting the Power Supply onto the DIN Rail

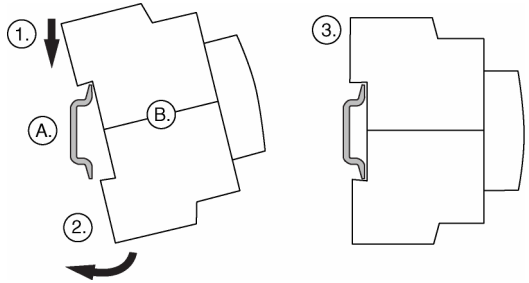
The DIN-rail units are designed to be installed onto a standard 1.38 in. (35 mm) DIN rail. To mount (i.e., attach) the DIN unit, hook it onto the top of the DIN rail. Swing the bottom of the unit down until it clicks into place.

Figure 1: Mounting the Unit onto the DIN Rail

KEY:

- A. DIN rail
- B. DIN-rail unit

1. Hook the unit onto the top of the DIN rail
2. Swing the bottom of the unit down
3. Mounted unit



Removing the Power Supply from the DIN Rail

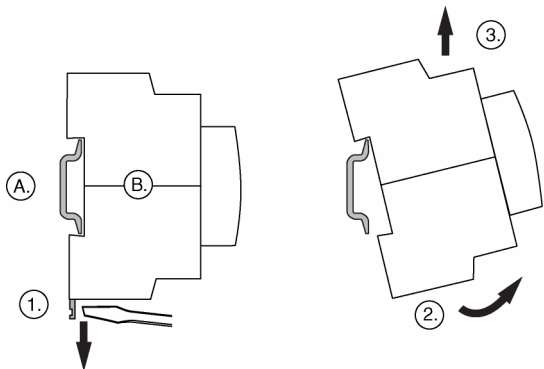
Use a small flat-blade screwdriver to pull either the upper or lower slide release out and disengage the unit from the DIN rail.

Figure 2: Removing the Unit from the DIN Rail

KEY:

- A. DIN rail
- B. Unit

1. Pull out the slide release
2. Pull the unit away from the DIN rail
3. Lift the unit away from the rail



CONNECTIONS

Follow the procedures in this section to properly make C-Bus network cable and electrical wiring connections.

Connecting the Power Supply to the C-Bus Network

Installation requires connection to the unshielded twisted pair C-Bus Network Cable. Use a Category 5 data cable.

NOTE: Install rubber plugs provided in any unused RJ45 cable terminals.

Figure 3: C-Bus Network Cable Terminals

KEY:

- A. Power supply (front view)
- B. RJ45 cable terminals (bottom view)

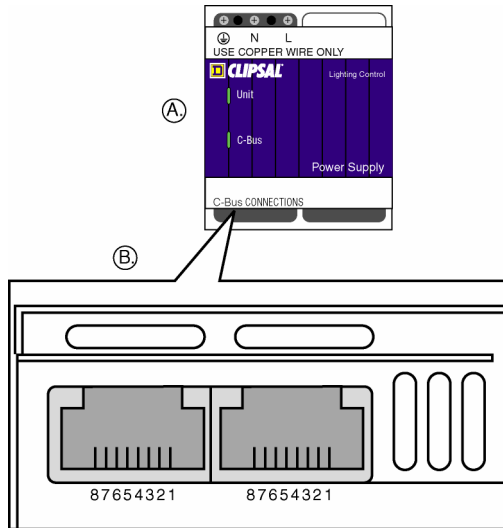


Table 2: RJ45 Pin Connections

RJ Pin	C-Bus Connection	Color
1	Remote ON*	Green/White
2	Remote ON*	Green
3	C-Bus Neg (-)	Orange/White
4	C-Bus Pos (+)	Blue
5	C-Bus Neg (-)	Blue/White
6	C-Bus Pos (+)	Orange
7	Remote OFF*	Brown/White
8	Remote OFF*	Brown

*Not used in 5500PS series units

Making Electrical Wiring Connections

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- This equipment must be installed and serviced by qualified electrical personnel.
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- Turn off all electrical power supplying this equipment before working on or inside the equipment.
- Always use a properly rated voltage sensing device to confirm that power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

Verify that the power supplying the system is turned OFF before handling electrical power conductors. Follow the guidelines listed in this section for making electrical connections.

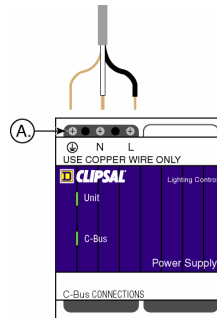
- Make electrical wiring connections to the line terminals as shown in the illustration below.
- Use #12 - 16 AWG (3.1mm² - 1.3mm²) copper wire only.
- Take care that wire cuttings or debris do not enter the unit.
- Do not exceed 1.0 ft-lb. (1.4 nM) maximum torque on power terminals.
- Electrical power conductors must be separated from the C-Bus network cable and all other class 2 conductors. Wiring must be routed to maintain minimum separation or be separated by barriers. Consult your electrical code for local requirements.
- Megger testing of electrical power terminals will not damage this unit. Since this unit contains electronic components, the installer should interpret Megger readings with due regards to the nature of the circuit connection.

Figure 4: Electrical Wiring Terminals

KEY:

A. Electrical wiring terminals

NOTE: Use #12 - 16 AWG (3.1mm² - 1.3mm²) copper wire only.



CAUTION

HAZARD OF EQUIPMENT DAMAGE

Do not Megger® test C-Bus data cabling or terminals. Megger testing can result in equipment damage.

Failure to follow this instruction will result in damage to the C-Bus network.

STATUS INDICATORS

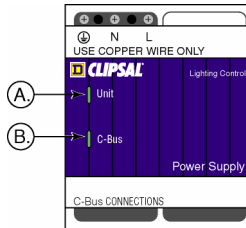
The Power Supply has 2 green indicator lights on the front.

- Unit Status Indicator - shows the status of the individual unit.
- C-Bus Network Status Indicator - shows the status of the C-Bus network at this unit.

Figure 5: Status Indicators

KEY:

- A. Unit Status Indicator
- B. C-Bus Network Status Indicator



Unit Status Indicator

This indicator shows the status of the individual unit. When the unit is connected to a properly operating C-Bus network, the unit status indicator will display a continuous green light (ON).

Table 3: Unit Status Indicator Definitions

Indicator Status	Meaning
On	Normal operation
Off	No C-Bus connected

C-Bus Status Indicator

This indicator shows the status of the C-Bus network at the unit. If sufficient network voltage and a valid C-Bus clock signal are present then the C-Bus status indicator will display a continuous light (ON). If a network is connected that has more current load than the power supplies can support, then this indicator will flash to show a marginal network voltage. If there is no C-Bus clock then this indicator will not light.

NOTE: The C-Bus indicator does not function when standalone programming is being performed on a unit powered by the C-Bus network.




Table 4: C-Bus Status Indicator Definitions

State	Definition
ON	Power on and functional
Flashing	Insufficient power to support network
OFF	No external electrical power source. Indicator does not function if unit is powered only by C-Bus network, e.g., during configuration No C-Bus clock signal present

STANDARDS

The Power Supply complies with the following Standards:

Table 5: U.S. and Canadian Product Safety Standards and U.S. FCC Regulations

Standards/Regulations	Title
 CSA C22.2 No. 205	Signal Equipment
 UL916	Energy Management Equipment
 FCC Part 15	Class B Digital Device for Home or Office Use

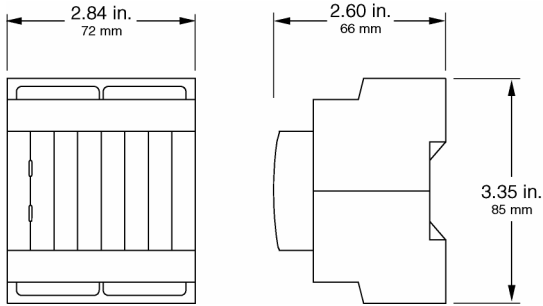
SPECIFICATIONS

Table 6: Specifications

Catalog Number	SLC5500HPS	SLC5500TPS
Nominal Supply Voltage	277Vac ± 10%	110-120Vac ± 10%
Frequency Range(s)	50/60Hz	
C-Bus Supply Voltage	15-36V DC @ 350mA	
C-Bus Current Output	Sources 350mA to the C-Bus network with load-side power connected	
DC Output Resistance (approximate)	22 Ohms	
AC Input Impedance	>60k Ohms @1kHz	
Electrical Isolation	3.75kV RMS from C-Bus to Line voltage	
Status Indicators		
C-Bus Network Status		
On	Voltage \geq 20V DC	
Flashing	Voltage < 20V DC	
Off	Voltage < 15V DC or no clock signal	
Unit:		
On	Normal	
Off	No C-bus connected	
Max. Number of Units on a Single C-Bus Network	5	
Load Rating	350mA (Can support up to 15 units @ 22mA each on the C-Bus Network.	
Power Supply Type	High Impedance Switch Mode Power Supply	
Quiescent Power	15 Watts Max.	
Warm Up Time	3 sec	
Dimensions	2.84 x 3.35 x 2.6 in. (72 x 85 x 65 mm)	
Line-side Terminals	Accommodates #12 - 16 AWG (3.1mm ² - 1.3mm ²) copper wire only.	
Weight	7oz (200g)	
C-Bus Connections	2 x RJ45 sockets	
Operating Temperature Range	32 - 104° F (0 - 40° C)	
Operating Humidity Range	95% RH, Non-condensing	

Dimensions

Figure 6: Dimensions - DIN Rail Power Supply



SUPPORT AND SERVICE


Contact the Square D Customer Information Center for technical support by phone at 1-888-Square D (1-888-778-2733) or e-mail at lightingcontrol.support@us.schneider-electric.com.

Contact your local Square D service representative or Square D® Clipsal® certified installer for repairs or service to your network.

You may also find helpful information on our web site at www.squaredlightingcontrol.com.

Schneider Electric, USA
295 Tech Park Drive
La Vergne, TN, 37086
1-888-SquareD (1-888-778-2733)
www.squaredlightingcontrol.com

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