



**READ AND FOLLOW ALL SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION**

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING

To reduce the risk of death, injury or property damage from fire, electric shock, cuts, abrasions, falling parts, and other hazards:

- Service of the equipment must be performed by qualified service personnel.
- Installation and maintenance must be performed by a person familiar with the construction and operation of this product and any hazards involved. All applicable codes and ordinances must be followed.
- Read this document before installing, servicing, or maintaining this equipment. These instructions do not cover all installation, service, and maintenance situations. If your situation is not covered, or if you do not understand these instructions or additional information is required, contact *Synergy Lighting Controls*.

⚠ WARNING

Before installing, servicing, or maintaining this equipment, follow these general precautions.

To reduce the risk of electrocution:

- Make sure the equipment is properly grounded.
- Always de-energize any equipment before connecting to, disconnecting from, or servicing the equipment.

To reduce the risk of fire:

- Use supply conductors with a minimum installation temperature rating as specified.

To reduce the risk of personal injury from cuts, abrasions:

- Wear gloves to prevent cuts or abrasions from sharp edges when removing from carton, handling and maintaining this equipment.
- Do not install a damaged equipment.

Synergy Lighting Controls, a division of *Acuity Brands Inc.*, assumes no responsibility for claims arising out of improper or careless installation or handling of this product.

SAVE THESE INSTRUCTIONS

Overview

The Synergy Light MLC System is a lighting control panel which allows control of switched or dimmed lighting circuits based on scheduled events and manual or automatic overrides.

The Synergy System consists of three main elements:

1. **Controller** - The controller provides for programming and automated operation of the system. Refer to the Synergy MLC Operation Manual for programming instructions. The SYSC MLC is compatible with all Synergy power modules.
2. **Power Modules** - Synergy power modules control the system outputs or lighting loads as required. Input and output wiring requirements vary between power module types. Refer to power module installation instructions for additional details.
3. **Enclosures** - The enclosure provides for rough-in wiring, and houses the controller and a quantity of power modules. Enclosures house up to the following quantity of power modules:

SYES - 2 Power Modules	SYESB - 1 Power Module w/breakers, 1 neutral bar module
SYEM - 4 Power Modules	SYEMB - 3 Power Modules w/breakers, 1 neutral bar module
SYEL - 6 Power Modules	SYELB - 5 Power Modules w/breakers, 1 neutral bar module

Before you begin installation, you should obtain information on the type of lighting loads being controlled and complete the load schedule found in the operation manual.

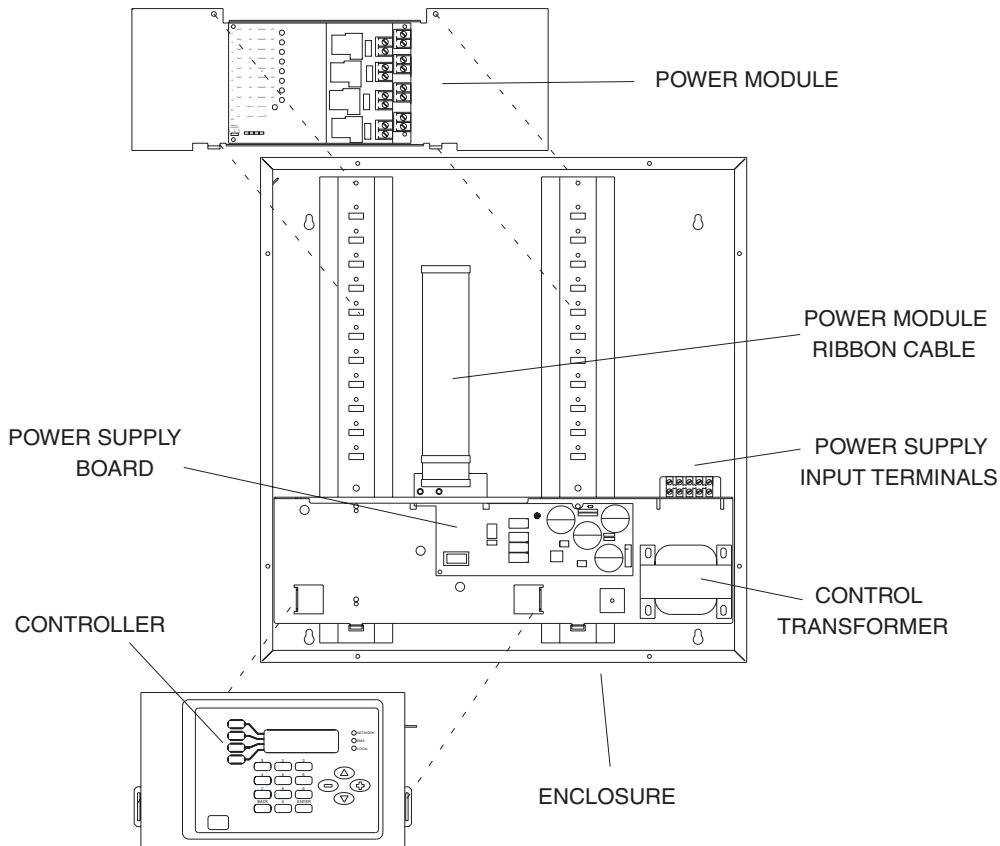


Figure 1 - Cabinet Details

Installation Instructions

Lighting Control System Controller - SYSC MLC



Before You Start

1. Controller switch should be in the "OFF" position. See figure 2.
2. Install in accordance with the National Electrical Code and any other codes which may apply.
3. Do not remove the controller with the controller ON/OFF switch in the "ON" position.
4. Use only accessories recommended by Lithonia Control Systems.
5. Use only at the voltage listed on product and component labels.

Controller Installation

1. Ambient Conditions:
Maximum Ambient Temperature: 104°F/40° C
Minimum Ambient Temperature: 32°F/0°C
Relative Humidity: 10-90% non condensing.
2. Slide controller into the enclosure using the bayonets on the power supply mounting brackets as guides. Stop when the controller has made electrical contact (keypad lights up) and tighten the two mounting screws on top of the power supply brackets to hold the controller firmly in place.
3. Make sure all power modules have been addressed properly and no duplicate addresses are present. Correct as required. Refer to power module installation instructions or optional Lithonia supplied As-Built drawings for additional addressing information.
4. Turn controller ON/OFF switch to the "ON" position. In about one minute, the keypad will display the top level Synergy screen pictured below, with correct date and time.

A screenshot of the Synergy MLC V XXX keypad display. The text on the screen reads: "SYNERGY MLC V XXX", "START... ..", "DISPLAY... ..", and "01/01/2000 12:00".

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SYNERGY MLC V XXX
START... ..
DISPLAY... ..
01/01/2000 12:00
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5. If this screen does not appear, go to the troubleshooting section of these instructions. If it does appear, press the "START" softkey, then "OVERRIDING", then use the +/- keys to turn the loads on and off. If you are unable to control the loads, refer to the troubleshooting section in these instructions.
6. Complete the configuration of your Synergy system. Use the programming information supplied in the Synergy MLC Operation Manual and the configuration details shown in the factory supplied or field created "As-Built" drawings to complete configuration.

Installation Instructions

Lighting Control System Controller - SYSC MLC

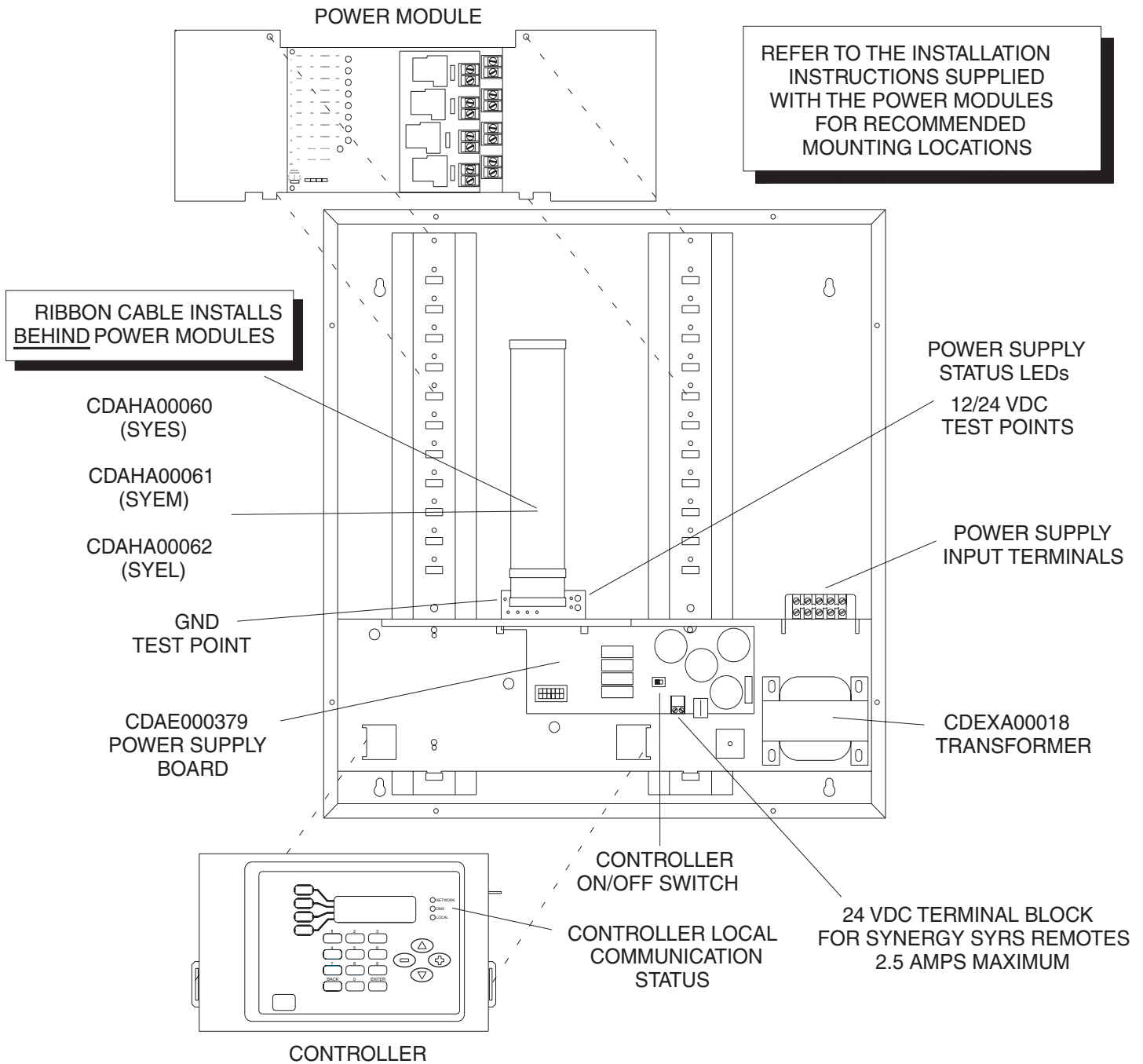


Figure 2 - Part Number and Voltage Test Point Reference Information

Installation Instructions

Lighting Control System Controller - SYSC MLC



Troubleshooting

SYMPTOM: SYNERGY TOP LEVEL SCREEN DOES NOT APPEAR ON THE DISPLAY.

Check the following:

1. Verify controller ON/OFF switch is in the "ON" position.
2. Verify both amber and green power supply status LEDs adjacent to the ribbon cable connector are on.
3. If the power supply LEDs are not on verify the proper input voltage (120, 230, 277) is present on the power supply input terminal block. If proper voltage is present, check the transformer output. Transformer secondary A voltage (between the 2 red wires) should be 12 VAC nominal and secondary B voltage (between the 2 blue wires) should be 24 VAC nominal. If secondary voltages A or B are not correct, contact Lithonia Controls Technical Service for additional information.
4. If both power supply LEDs are on, verify the controller is firmly seated in the cabinet. The controller must make complete contact against the power supply connector. Turn the input power OFF for 10 seconds, then back ON. If the controller is ON and properly seated, and you have waited more than one minute without seeing the "top level" screen, contact Lithonia Controls Technical Service for additional information.

SYMPTOM: CONTROLLER IS NOT TURNING LOADS ON OR OFF

Check the following:

1. Verify the ribbon cable is properly connected to the power supply and all modules.
2. Manual Override switch is in the "AUTO" position on all modules.
3. Each module must be set to a unique address, starting with "1".

Turn off the input power for 10 seconds, then back on. Note any changes in system performance. If loads still do not turn on or off, contact Synergy Lighting Controls Technical Service for additional information.

Contact Synergy Lighting Controls Technical Service at 800-533-2719. Synergy Lighting Controls Technical Service is available from 8:00 a.m. to 5:00 p.m. Monday - Friday EST for phone consultation.

Visit Synergy Lighting Controls on the internet at <http://www.synergylightingcontrols.com> for further information on products, technical data or installation instructions.

Warranty

Synergy Lighting Controls warrants all equipment to be free from defect in manufacturing under normal and proper storage, installation, and operation for a period of one (1) year. Our guarantee liability extends only to the repair or replacement of the defective part and no labor charges for correction of the defect by repair or replacement will be honored by Synergy Lighting Controls unless prior written authorization has been granted by our Customer Service Department.