

Studio/Production

Features

- Lightweight, Low-Profile Design
- Fully Magnetic Circuit Breaker
- Solid-State Relay with Saf-T-Qube[®]
- Soft-Start Circuit
- Forced-air Cooled with Thermal Sensor
- Power-On, Input Power, Overtemp Indicators
- Local or Remote Control

Description

Designed specifically for the Studio/Production market, the SCRimmer Location Dimmer incorporates soft-start features and exceptional noise suppression in a large Kw portable dimmer.

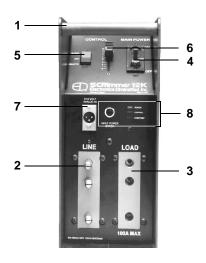
The LD offers compact design features along with simple controls for reliable service in a wide variety of applications.

The Status Indicator package advises the operator of current conditions at all times. A low-level adjustment is offered for fine tuning controls to site power conditions.

SCRimmer Location Dimmer



Component Information



- Integral Carrying Handle: Forms upper corner of housing.
- 2. Power Input Connection: 100A GSP male connector.
- 3. Power Output Receptacle: 100A GSP receptacle.
- 4. Primary Circuit Breaker: System Disconnect.
- Local/Remote Control Switch: Determines what source controls LD.
- 6. Local Slider Control: For direct control.

- Remote Control Input: For remote operation.
- Status Indicator Package: For assistance in set-up and operation.
 - Power-On Indicator: Illuminates when power is supplied to unit.
 - Power Error Indicator:
 Lights when input wiring erosion is detected.
 - Load Mimic Light: Lights on a scale with local slider control.
 - Overtemp Indicator: Illuminates when overtemp condition occurs.

| Information: | | Options: |
|--------------|---------------|-----------------------|
| ☐ LD- 6.0Kw | □ 50A | LD-2 2-Channel Remote |
| ☐ LD-12.0Kw | ☐ 100A | LD-3 3-Channel Remote |
| ☐ LD-24.0Kw | ☐ 100A/240VAC | ☐ LDChannel Remote |

JOB NUMBER: APPROVAL STAMP

JOB NAME: CUSTOMER:

P. O. #

Location Dimmer

Electrical Characteristics

Over-current: Protected by a fully magnetic circuit breaker. 10,000 AIC mini-

Overheat: Dimmer output turns off when heatsink temperature exceeds

185°F (85°C). Operation automatically resumes when the

24.0Kw: Heavy duty 125A rms, 1400V, Tungsten rated.

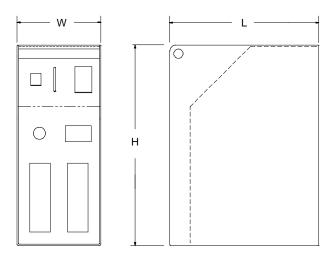
temperature returns to a normal level.

Operating

Environment: Temperature range: 32°F. (0°C) to 104°F. (40°C). Humidity

range: 0% - 90% non-condensing.

Load Ranges: 25 watts to rated capacity, black-out to full intensity. 2% from 100-130VAC over the entire load range. Load Regulation: SCR Rating: 6.0Kw: Heavy duty 80A rms, 600V, Tungsten rated. 12.0Kw: Heavy duty 125A rms, 1400V, Tungsten rated.



Mechanical Characteristics

Chassis: Heavy-gauge aluminum.

Front Panel: Heavy-gauge aluminum, finished

with polyurethane black paint and silk-screened nomenclature.

Physical Characteristics

Dimensions: 111/4" L x 53/8" W x 121/2" H

(28.58cm x 13.65cm x 31.75cm)

Weight: 6.0Kw: 20 lbs. (9.07kg)

12.0Kw: 22 lbs. (9.98kg)

Outputs

6.0Kw: 50A GSP 12.0Kw: 100A GSP 24.0Kw: 100A GSP

Specifications

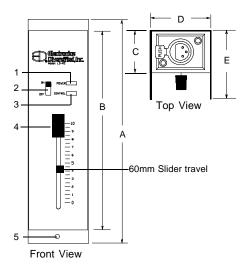
- 1. The LD shall be constructed of aluminum and aluminum extrusion and shall have a carryhandle. The unit shall be painted in polyurethane black paint, with permanent, white screened markings.
- The LD consists of a fully magnetic circuit breaker, filter choke, a heatsink with thermal sensor, and a solid-state switch. Except for the circuit breaker, the dimmer shall contain no moving parts.
- 3. The module shall have a fully magnetic circuit breaker rated at 100% capacity, listed at 10,000 AIC, with a "must trip" capacity of 125%.
- 4. The front panel shall be marked with the manufacturer's name, model number, capacity, power line voltage, and frequency.
- The solid-state switch device shall be mounted in a substrate material for maximum heat dissipation. The substrate shall be encapsulated in an epoxy-filled high-impact plastic case along with an optical isolator, a snubbing network and all required gating circuitry on the high voltage side of an integral opto-coupled control voltage isolator providing a minimum of 4000V RMS isolation between line and control in the switch device.

(See SCR Rating above).

6. In addition to the optical isolation provided internally in the power cube device, additional protection shall be available which employs a

- combination of Metal Oxide Varistors (MOV's), Pico fuses and/or transzorbs to provide the highest level of protection to control inputs.
- 7. The LD shall include a "soft-start" circuit which shall limit the inrush current on the output of the
- 8. The LD shall include a circuit which shall shut down the unit when the heatsink temperature exceeds 185°F. (85°C). When the temperature returns to a normal operating level, the LD shall restart automatically.
- 9. The LD shall have a low-noise fan to provide forced-air cooling to the heatsink.
- 10. The LD shall operate over an input voltage range of 90 to 140 VAC, 50/60 Hz., unless otherwise specified.
- 11. The maximum heat loss for each LD unit shall be no greater than:
 - a). 148 watts per 6 Kw dimmer.
 - b). 352 watts per 12 Kw dimmer.
 - c). 704 watts per 24 Kw dimmer.
- 12. The LD module shall function properly with any incandescent load from 25W to rated capacity.
- 13. The front panel shall have indicators for input power, overtemp, and incorrect input power wiring.
- 14. The dimmer module is the LD series, as manufactured by Electronics Diversified. Inc. Hillsboro, Oregon 97124 U.S.A.

LD Channel Remote



| Legend: | | Dimensions: |
|---------|-------------------|--|
| 1. | Power Indicator | A 6½" (16.5cm) |
| 2. | On-Off Switch | B 5¾" (14.6cm) |
| 3. | Control Indicator | C 1 ¹ / ₈ " (2.9cm) |
| 4. | Slider | D 1¾" (4.5cm) |
| 5. | Mounting Hole | E 2" (5.9cm) |

