

DC90 Dimmer Modules

- ◀ DC output minimizes electrical noise
- ◀ Built-in boost capability
- ◀ Individual output adjustment for voltage compensation
- ◀ Dimmer status indicators
- ◀ AC modules available

Specifications:

Dimmer module shall be fully factory-wired plug-in unit designed to slide into the DC90 dimmer rack. Modules shall be of heavy-duty construction. An aluminum extrusion serves as a housing and as a heatsink for the entire length of the module. Power and signal connectors shall be mounted in a valox housing and recessed in the module to avoid handling and insertion damage. A contoured handle shall be provided for ease of insertion and withdrawal. Finish shall be black anodized housing and semi-gloss black with epoxy splatter face. Dimmer modules shall be U.L.-recognized devices.

A. The dimmer shall provide acoustical noise-free dimming by the elimination of filament, lamp fixture and wireway noise normally associated with solid state AC dimmers. This shall be accomplished by providing DC output to the load.

B. The dimmer shall have built-in boost capability to 120-volts DC output with line voltage as low as 108 volts.

C. Each dimmer shall operate on three-phase power. The dimmer shall automatically balance power across three phases. In the event that a phase is lost, the dimmers will function with reduced maximum output.

D. Compensation shall be available for voltage drop to the load due to wire size and length by means of an output adjustment control on each dimmer. At nominal input conditions (120VAC) adjustment can be provided within a +10% to -20% range.

E. The output RMS voltage versus control position shall follow the "square law dimming curve" as published by the I.E.S.

F. Dimmer output shall remain at the last command setting from the console in the event that the data stream is interrupted.

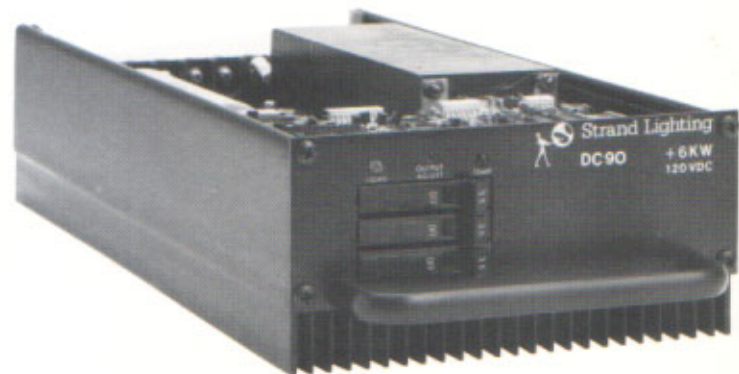
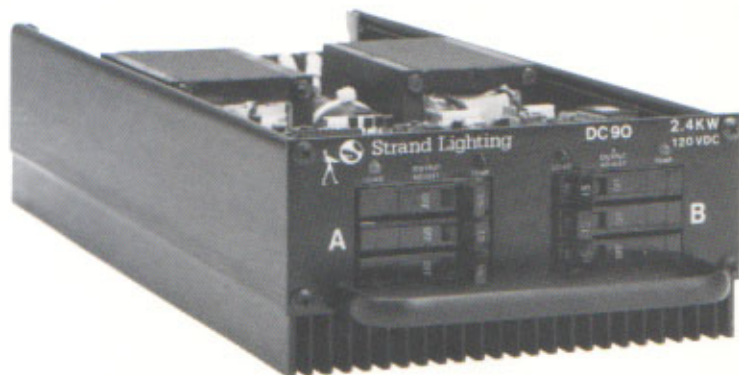
G. Adequate heat sinking shall be provided so that all components remain at a safe operating temperature with the dimmer properly installed in the dimmer bank. Heat dissipation shall be no more than 5% of dimmer capacity.

H. Two status LED indicators shall be located on the front panel for each dimmer. The status of the LEDs shall reflect the following conditions:

1. Dimmer control signal at zero
2. Dimmer output present, circuit functioning
3. Dimmer output present, no load
4. Normal operating temperature
5. Dimmer overtemperature
6. Dimmer fault and/or open circuit breaker

I. Plug-in dimmer modules shall be available in single-height dual 2.4kw and single 6kw design and dual-height, dual 12kw design.

J. Conventional dual 2.4kw dimmer modules with AC output shall be interchangeable with dual 2.4kw DC modules (by changing polarization pins and load connectors). AC non-dim operation shall be obtained by a jumper selection in the AC module.



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Specifications: (cont.)

K. Each DC dimmer shall have an arc suppression circuit that shall minimize DC arcs when disconnecting "hot" loads.

L. Each dimmer shall contain three appropriately rated single-pole thermal-magnetic breakers, one per phase. The AIC rating of the circuit breakers shall be 10,000 amps.

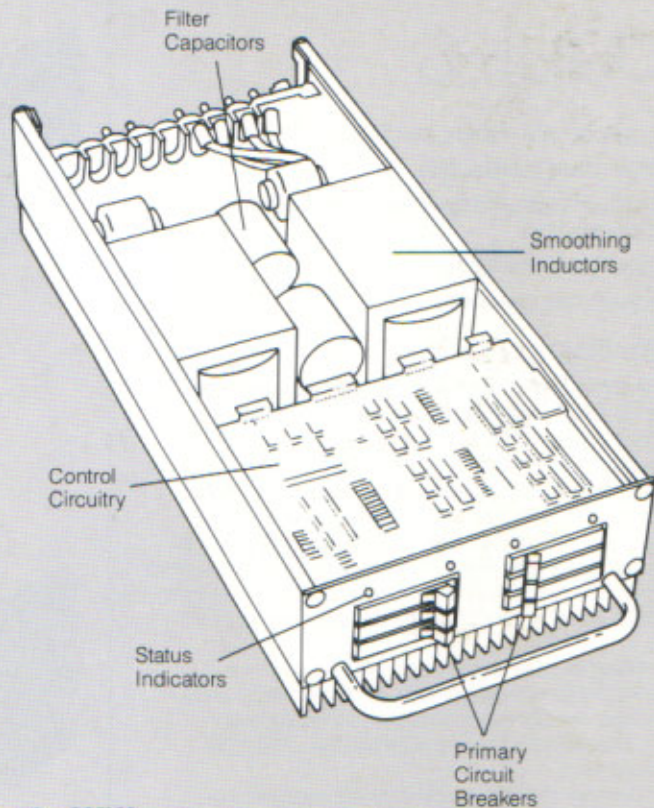
M. An optional hand-held test and diagnostic module shall plug into each dimmer rack and be used for system testing.

N. Dimmer modules of the same capacity shall be interchangeable. Connectors and receptacles of modules of different capacities shall be interlocked so that no circuit can be activated by a dimmer higher than the rating of the load wires.

O. Individual dimmer module size and weights shall not exceed the following:

	<u>Dimensions</u>	<u>Weight</u>
2.4kw dual DC dimmer module	3.62"H x 7.62"W x 16.5"D	25 lbs.
6kw DC dimmer module	3.62"H x 7.62"W x 16.5"D	25 lbs.
12kw dual DC dimmer module	6.4"H x 7.62"H x 16.5"D	55 lbs.
2.4kw dual AC dimmer/non-dim module	3.62"H x 7.62"W x 16.5"D	25 lbs.

Dual 2.4KW



Single 6KW

