Architectural Dimmers

Versa-Pak Automatic Dimmer

Features

- U.L. listed
- Maintained inputs
- Space-saving design
- Individual thermal sensor
- Economical load control center
- Convection cooled, requires no fans
- 120V, 240V and 277V models available
- Flicker-flame mode for candle or fire effects
- Front panel control for levels and fade rates
- Remote enable, test, and dimmer fade inputs
- Single 20 amp and/or Dual 10 amp capacity per module
- Dims standard and low-voltage incandescent, quartz, fluorescent, neon and cold-cathode sources

Dual 10A Automatic Dimmer with hand-held test unit

Description

The Versa-Pak automatic dimmer, designed for automatic fading between two preset levels, can also generate a flicker-action, resembling candle light. The compact, self-contained dimmer operates from a remote signal.

The dual dimmer model contains two separate control systems for individual operation. When a signal is received, the dimmer automatically fades from one preset to the other. The fade rates for the presets are individually adjustable.

Although designed for architectural dimming, the Versa-Pak wall-mount dimmer is engineered with the same quality standards demanded in performance industry dimming systems.

Each module includes a backbox, heatsink, temperature sensor to monitor operating temperature, a reliable 40 Amp SSR package, toroidal filter and control electronics.

Dimming Modules:

All Versa-Pak modules are U.L. listed and labeled for load operation.

Incandescent:

Model Number	Description
VP-2/I-120-AD	Single 20A 120VAC dimmer
VP-2/I-240-AD	Single 20A 240VAC dimmer
VP-D1/I-120-AD	Dual 10A 120VAC dimmer
VP-D1/I-240-AD	Dual 10A 240VAC dimmer

Neon/Cold-Cathode:

Model Number	Description
VP-2/NC-120-AD	Single 20A 120VAC neon or cold-cathode dimmer
VP-2/NC-240-AD	Single 20A 240VAC neon or cold-cathode dimmer
VP-2/NC-277-AD	Single 20A 277VAC neon or cold-cathode dimmer

Fluorescent Ballast

Model Number	Description
Mark VII CICB	Consult factory for specific ballast information.
VP-2/ADV-120	Single 20 Amp 120VAC fluorescent dimmer
VP-2/ADV-277	Single 20 Amp 277VAC fluorescent dimmer

Programmer/Test Unit

Model Number	Description
VP-TU	Hand-held progammer/test unit.

Order Infomation:

Incandescent Modules:

- ❒ VP-2/I-120-AD
- ❒ VP-D1/I-120-AD
- ❒ VP-2/I-240-AD
- ❒ VP-D1/I-240-AD

Neon/Cold-Cathode:

- ❒ VP-2/NC-120-AD
- ❒ VP-2/NC-240-AD
- ❒ VP-2/NC-277-AD

Fluorescent, MarkVII

- ❒ VP-2/ADV-120
- ❒ VP-2/ADV-277

Programmer/Test Unit:

- ❒ VP-TU

JOB NUMBER:

JOB NAME:

CUSTOMER:

P. O. #

APPROVAL STAMP

Electronics Diversified, Inc.

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Versa-Pak Automatic Dimmer

Electrical Characteristics

Input Power: Single phase, 120/240 VAC, 50/60 Hz

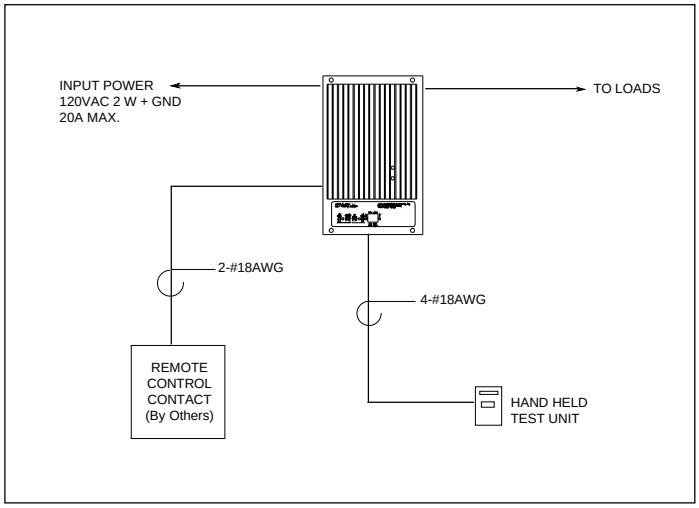
Operating Environment: Temperature range: 32° F. (0° C) to 104° F.(40° C). Humidity range: 0% - 90% non-condensing.

Physical Characteristics

Dimensions:
Versa-Pak: 9½" H x 6" W x 4" D (24.13cm x 15.24cm x 10.16cm)
Test Unit: 6" H x 3¾" W x 1" D (15.24cm x 9.52cm x 2.54cm)

Shipping Weight:
Versa-Pak: 10 lbs. (4.54kg)
Test Unit: 2 lbs. (0.90kg)

System Riser



Specifications

Dimmer Unit

1. The dimmer enclosure shall not exceed 6" W x 9½" H x 4" D. The enclosure shall surface mount.
2. The dimmer shall be a single 20 Amp or Dual 10 Amp model.
3. Standard and low-voltage incandescent, quartz, dimming ballast, fluorescent, neon, and cold-cathode models shall be available.
4. The dimmer shall be convection-cooled and shall include a thermal sensor to shut down the dimmer if the heatsink temperature exceeds 185° F. (85° C).
5. The dimmer shall use an encapsulated pair of silicon-controlled rectifiers to provide symmetrical alternating current output to the load at any output level from OFF to FULL intensity. The entire load of the dimmer shall be carried solely by the silicon-controlled rectifiers. The Silicon Controlled Rectifier shall inherently be designed in such a manner so that it is impossible for any spurious voltage to be transferred to the control wires and damage low-voltage electronics. In addition to the optical isolation provided internally in the power cube device, the protection design shall employ a combination of Metal Oxide Varistors (MOV's), pico fuses, and/or transzorbs to provide complete protection. Dimmer modules without an individual thermal sensor shall not be acceptable.
6. Each module shall have a toroidal, copper-wound, iron-core high performance choke. Performance rise time shall be no less than 325 µS. All measurements are from 10% to 90% at full load.
7. Filters shall not be required for fluorescent or neon/cold-cathode models.
8. The maximum heat loss for each 2.4Kw dimmer shall be no greater than 59 watts per dimmer or 100 BTU's per hour per connected Kw of load.
9. The dimmer shall respond to a 5 - 24-volt (max.) DC signal. All control inputs shall be electrically isolated from the incoming line and control electronics.
10. There shall be a dimmer enable input. When this input is activated, the dimmer outputs shall be enabled.
11. There shall be a dimmer work input. When this input is activated, the dimmer outputs shall be full on.
12. There shall be two control potentiometers on the front panel to set the two different preset levels. When the control signal is received, the dimmer shall smoothly fade from one preset to the other. Changing the level of one preset shall not affect the setting for the other preset. The fade rate shall be adjustable from 0.1 second to one minute via two 10-turn potentiometers. Adjusting one fade rate shall have no effect on the other fade rate.
13. There shall be a flicker-flame circuit. When activated, the selected dimmer will randomly change output levels to simulate a flickering flame. The presets and fade rate adjustments shall allow different flame effects.
14. There shall be a front panel jack to allow a hand-held programmer/test unit to be connected. The jack shall allow for all external inputs to be overridden, and allow for all settings to be displayed.
15. LED displays shall show dimmer enable, work mode, and the status of the two preset faders.
16. The dimmer shall be U.L. Listed.
17. The dimmer shall be the Versa-Pak AD series as manufactured by Electronics Diversified, Inc., Hillsboro, Oregon, 97124.

Hand-held Programmer/Test Unit

1. The programmer/test unit shall be entirely self contained and shall not exceed 3¾" W x 6" H x 1" D. The unit shall be designed for hand-held operation.
2. The unit shall have a two-line x 16-character LCD display. This display shall show the dimmer output levels, fade rate (in seconds and tenths of a second), and the status of the various control inputs.
3. There shall be four 3-position switches. Each switch shall be able to enable, disable, or have no effect on an external control, depending upon its setting.
   The switches shall override the external signals, allowing for easy setup of the dimmer unit.
4. The unit shall be the Versa-Pak series, as manufactured by Electronics Diversified, Inc., Hillsboro, Oregon, 97124.

Electronics Diversified, Inc.
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