ELECTRONIC DIMMING BALLASTS WITH ANALOG DIMMING CONTROL (0-10V) FOR SINGLE (1) LAMP FIXTURES

Cooper Controls Electronic Dimming Ballasts, powered by Fifth Light Technology, offer cost-effective, reliable dimming control for linear fluorescent lamps, down to 3% for T5/T5HO and T8 lamps. These multi-lamp ballasts cover one-lamp fixtures over a range of lamp types and lengths installed in Cooper Lighting fluorescent lighting fixtures. All of the ballasts have tightly regulated current control to the lamp, quick programmed rapid start circuits, active power factor correction and lamp end-of-life protection. The ballasts are ideal for direct integration with Cooper Controls solutions and compatible with a wide variety of analog controls and photocells.

FEATURES

- Ideal for use with 0-10V energy-management systems, daylight harvesting and local controls
- Programmed Rapid Start maximizes lamp life
- Helps meet energy codes, including ASHRAE 90.1 and California Title 24, when applied properly
- End-of-lamp-life Shutdown circuit with Auto-reset for safe, long-term operation
- Compatible with Energy-Saving and Low-Mercury Lamps
- Active Power-factor Correction for maximum energy savings
- 120-277V input for easy ordering and universal application
- Dimming Range: 3% for T5/T5HO or T8; Starts at any dimmed level without flashing

STANDARDS AND LISTINGS

- cULus Listed (Class P, Type 1 Outdoor, Type CC)
- National Electrical Manufacturers Association (NEMA) Premium Rated
- Meets ANSI Standard C82.11
- Meets ANSI Standard C62.41
- Restriction of Hazardous Substances Directive (RoHS) Compliant
- Ballast must be grounded in accordance with national and local electrical codes
- Control can be wired as Class I or Class II
- Complies with Consortium for Energy Efficiency (CEE) standards

PERFORMANCE AND ELECTRICAL CHARACTERISTICS FOR ALL SINGLE-LAMP BALLASTS

- Minimum Dimming Temperature: 50°F (10°C), Energy Saving Lamps: 60°F (16°C)
- Maximum Ambient Temperature: 104°F (40°C)
- Ballast Factor: 1.0
- Power Factor: > .98
- Crest Factor: < 1.7
- Total Harmonic Distortion (THD): < 10%
- Start time: less than 700ms

PERFORMANCE AND ELECTRICAL CHARACTERISTICS BY LAMP TYPE

<table>
<thead>
<tr>
<th>Cooper Part Number</th>
<th>Lamp Type</th>
<th>Specific Lamp</th>
<th>Watt</th>
<th>Length</th>
<th>Voltage</th>
<th>Input Amps @120V</th>
<th>Input Amps @277V</th>
<th>BEF @120V</th>
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<th>Dimming Performance</th>
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DIMMING CONTROL APPLICATIONS AND SPECIFICATIONS

Use Purple (+) and Gray (-) for connection to 0-10VDC

0V = Minimum Light Output

Wiring Purple and Gray together provides 3% light output

Can be wired Class I or Class II

Capping Purple and Gray separately provides 100% light output

Ballast will source a maximum of 250µA for control needs

Built-in line voltage protection: Minimum Light Output level will occur if line voltage is applied

Control must be capable of sinking current supplied by ballast

10VDC = Maximum Light Output

WIRING DIAGRAM

- Green (ground)
- White (neutral)
- Black (line)
- Purple (control +)
- Gray (control -)
- Yellow (cap blue wires for 1-lamp operation)

WIRING DIAGRAM

BALLAST DRAWINGS

1.71
1.18
8.58

1.18
8.90

9.50

1.52
1.06

'A' BALLAST

1.18
1.00

1.25

1.18

0.28

16.88

16.28

14.58

'D' BALLAST

DIMMING CURVES

T5 Dimming Curve

T5HO Dimming Curve

T8 Dimming Curve

WARRANTY AND SUPPORT INFORMATION

Cooper Lighting warrants to the purchaser that each factory-installed electronic ballast will be free from defects in material or workmanship for a period of five (5) years from the date of manufacture when properly installed and under normal conditions of use.

Call (800) 955-4946 or email ballast@cooperindustries.com for warranty information and support.