

ELECTRONIC DIMMING BALLASTS WITH ANALOG DIMMING CONTROL (0-10V) FOR SINGLE (1) LAMP FIXTURES OPERATING AT 347V

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

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| 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 |
| 347V input for easy ordering in Canadian applications | Control inputs protected against mis-wiring with built-in line voltage protection |
| Dimming Range: 3% for T5/T5HO and T8 | Starts at any dimmed level without flashing |

STANDARDS AND LISTINGS

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| cULus Listed (Class P, Type 1 Outdoor, Type CC) | National Electrical Manufacturers Association (NEMA) Premium Rated |
| Meets ANSI Standard C82.11 | Meets FCC CFR 47 Part 18 for EMI and RFI Non-consumer limits |
| Meets ANSI Standard C62.41 | No PCBs |
| Restriction of Hazardous Substances Directive (RoHS) Compliant | Sound Rated, Class A |
| 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

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| Minimum Dimming Temperature: 50°F (10°C). Energy Saving Lamps: 60°F (16°C) | Minimum Starting Temp: 0°F (-18°C) |
| Maximum Ambient Temperature: 104°F (40°C) | Maximum Case Temperature: 167°F (75°C) |
| Ballast Factor: 1.0 | Power Factor: > .98 |
| Crest Factor: < 1.7 | Total Harmonic Distortion (THD): < 10% |
| Start time: less than 700ms | |

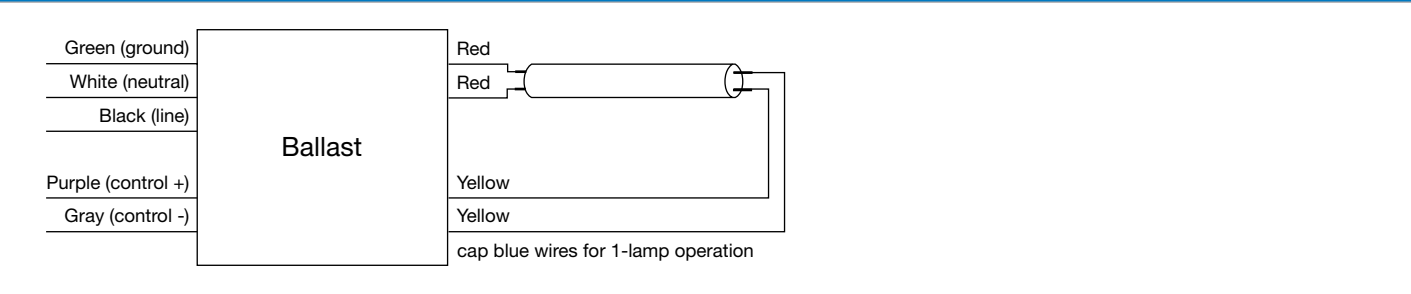
PERFORMANCE AND ELECTRICAL CHARACTERISTICS BY LAMP TYPE

| Cooper Part Number | Lamp Type | Lamp Type | Lamp Watt | Lamp Length | Lamp Operation | Voltage | Input Amps -347V | BEF - 347V | Dimming Performance |
|-----------------------|-----------|-----------|-----------|-------------|----------------|---------|------------------|------------|---------------------|
| FLT-232PS347S010-R1-C | T8 347V | T8 | 40 | 4 | Parallel | 347 | 0.1 | 1.24 | 3% |
| | | T8 | 32 | 4 | | | 0.09 | 2.90 | |
| | | T8 | 28 | 4 | | | 0.08 | 3.35 | |
| | | T8 | 25 | 3 | | | 0.07 | 3.78 | |
| | | T8 | 17 | 2 | | | 0.06 | 5.12 | |
| | | T8U | 32 | U | | | 0.09 | 2.81 | |
| | | T8ES | 32 (30) | 4 | | | 0.08 | 3.00 | |
| | | T8ES | 32 (25) | 4 | | | 0.07 | 3.78 | |
| FLT-228PS347S010-R1-C | T5 347V | T5 | 28 | 4 | Parallel | 347 | 0.1 | 3.03 | 3% |
| | | T5 | 21 | 2 | | | 0.08 | 3.85 | |
| | | T5 | 14 | 2 | | | 0.06 | 2.94 | |
| | | T5ES | 28 (26) | 4 | | | 0.09 | 3.33 | |
| | | T5ES | 28 (25) | 4 | | | 0.09 | 3.33 | |
| FLT-254PS347S010-R1-C | T5HO 347V | T5HO | 54 | 4 | Parallel | 347 | 0.18 | 1.72 | 3% |
| | | FT55W | 55 | 4 | | | 0.17 | 1.58 | |
| | | FC55T5HO | 55 | 4 | | | 0.16 | 1.61 | |
| | | T5HOES | 54 (49) | 4 | | | 0.16 | 1.85 | |

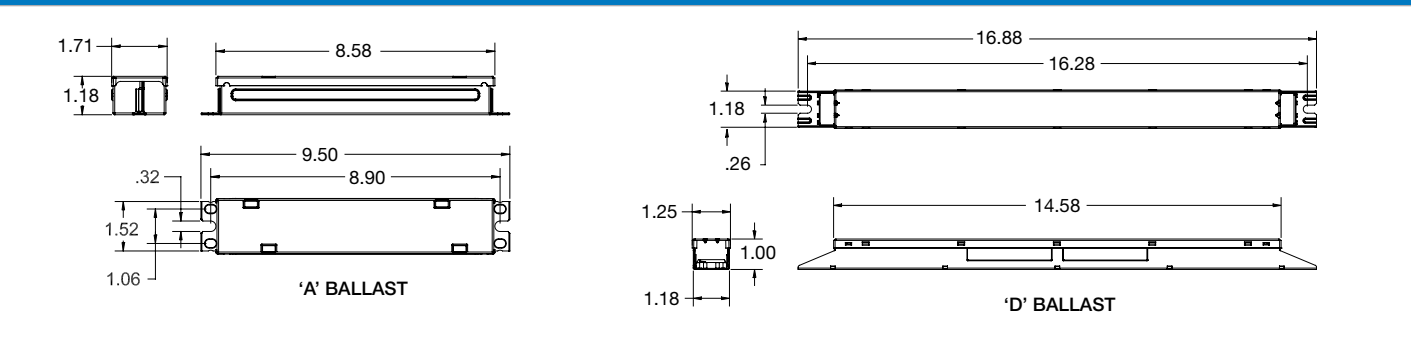
DIMMING CONTROL APPLICATIONS AND SPECIFICATIONS

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| 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 | |

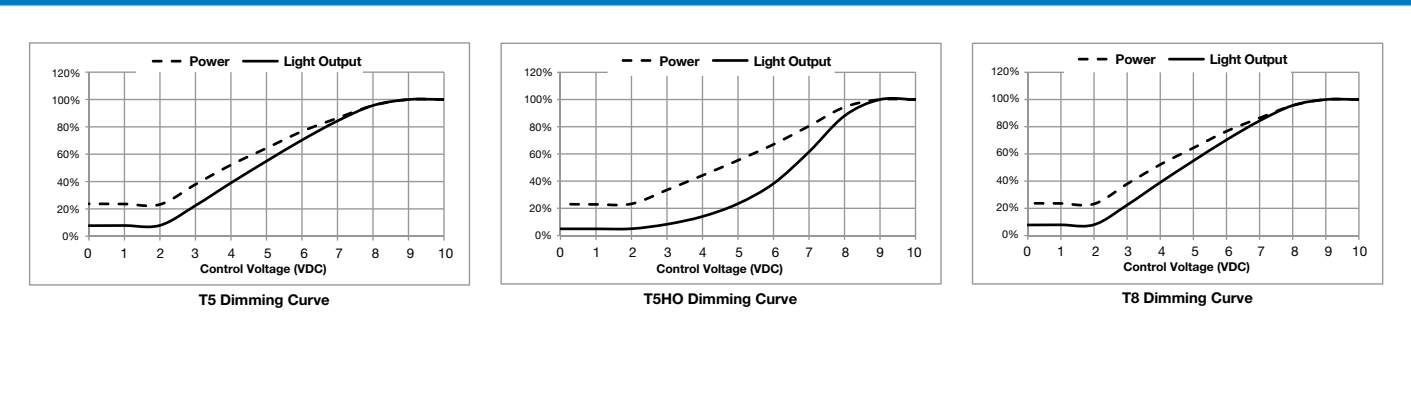
WIRING DIAGRAM



BALLAST DRAWINGS



DIMMING CURVES



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.