

### ELECTRONIC DIMMING BALLASTS WITH ANALOG DIMMING CONTROL (0-10V) FOR TWO (2) 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 and T8 lamps. These two-lamp ballasts cover a range of lamp types and lengths installed in Cooper Lighting fluorescent lighting fixtures. All of the ballasts have 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	Control inputs protected against mis-wiring with built-in line voltage protection
Dimming Range: 3% for T5 or T8	Starts at any dimmed level without flashing

### STANDARDS AND LISTINGS

cULus Listed (Class P, Type 1 Outdoor, Type CC)	Meets FCC CFR 47 Part 18 for EMI and RFI Non-consumer limits
Meets ANSI Standard C82.11	No PCBs
Meets ANSI Standard C62.41	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

### PERFORMANCE AND ELECTRICAL CHARACTERISTICS FOR ALL TWO-LAMP BALLASTS

Minimum Dimming Temperature: 50°F (10°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%

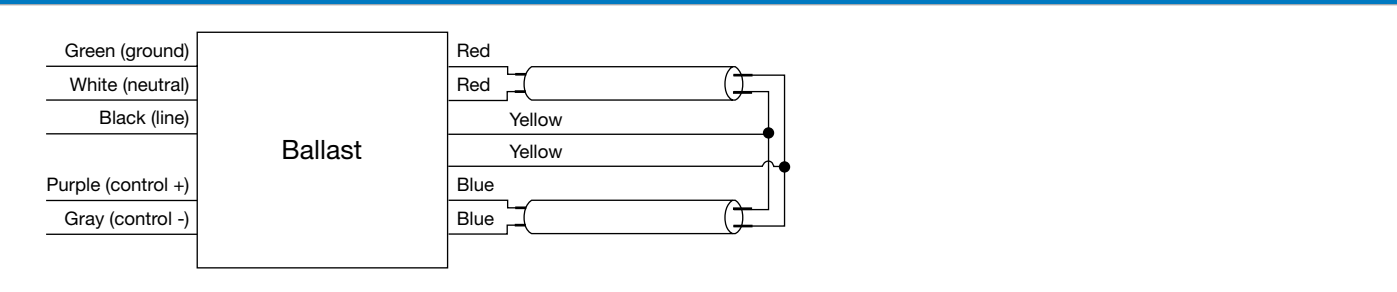
### PERFORMANCE AND ELECTRICAL CHARACTERISTICS BY LAMP TYPE

Cooper Part Number	Lamp Type	Lamp Type	Lamp Watt	Lamp Length	Lamp Operation	Voltage	Input Amps -120V	Input Amps -277V	BEF - 120V	BEF - 277V	Dimming Performance
FLT-232PSUNV010-R1-C	T8	T8	32	4	Series	120-277	0.489	0.21	1.54	1.54	3%
		T8	28	4			0.425	0.183	1.89	1.89	
		T8	25	3			0.369	0.16	1.89	1.89	
		T8	17	2			0.253	0.105	2.66	2.66	
		T8U	32	U			0.484	0.206	1.54	1.54	
		T8U	31	U			0.465	0.2	1.54	1.54	
		T8U	24	U			0.348	0.152	1.89	1.89	
		T8U	16	U			0.253	0.105	2.66	2.66	
		T8ES	32 (30)	4			0.455	0.194	1.54	1.54	
		T8ES	32 (25)	4			0.392	0.183	1.89	1.89	
FLT-228PSUNV010-R1-C	T5	T5	28	4	Series	120-277	0.52	0.22	1.59	1.64	3%
		T5	28	4			0.52	0.22	1.59	1.64	
		T5	21	3			0.4	0.17	2.13	2.17	
		T5ES	25	4			0.48	0.21	1.75	1.80	
FLT-214PSUNV010-R1-C	T5	T5	14	2	Series	120-277	0.27	0.12	3.13	3.13	3%
		T5	14	2			0.27	0.12	3.13	3.13	

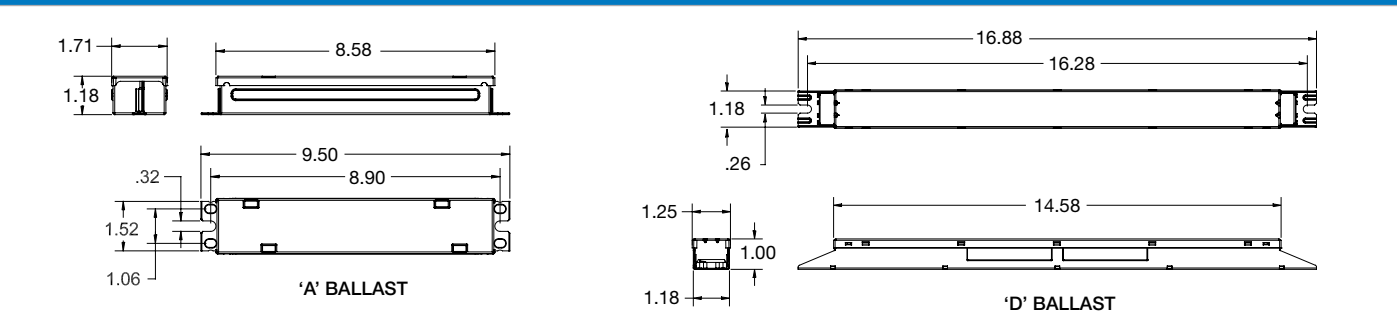
### DIMMING CONTROL APPLICATIONS AND SPECIFICATIONS

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	

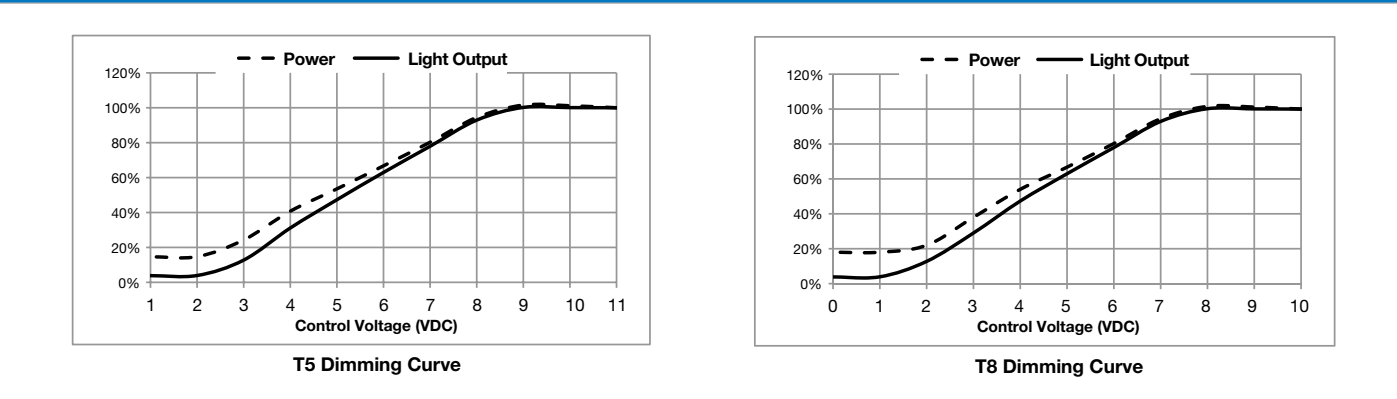
### WIRING DIAGRAM



### 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](mailto:ballast@cooperindustries.com) for warranty information and support.