

Electronic Ballasts for (1) or (2) 13W, (1) or (2) 18W, (1) or (2) 26W,  
(1) 32W, or (1) 42W 4-pin Compact Fluorescent Lamps



## ELECTRONIC FLUORESCENT

### PRODUCT OVERVIEW :

Today's fluorescent fixtures offer greater flexibility and energy savings for both residential and hospitality settings than ever before. Advance's **Ambistar** quick start ballasts (formerly known as SmartMate® Quick Start) deliver warm, comfortable, cost-effective and energy saving lighting solutions. These ballasts are specially designed for applications where faster lamp ignition time is needed. These **Ambistar** models ignite CFL's in less than 1.0 second, compared to the 1.25 to 1.5- second starting ability offered by standard programmed start CFL ballasts.

These **Ambistar** quick start ballasts will operate 13 Watt, 18 Watt, 26 Watt, 32 Watt and 42 Watt Compact Fluorescent Lamps. Driving some of the most popular CFL options on the market, the ballasts are ideal for such applications as downlighting, ambient hallway, staircase lighting, foyers, bathrooms and offices where frequent switching is not required.



### DESIGN HIGHLIGHTS:

- Class B FCC EMI Rating
  - Requirement for EPA ENERGY STAR residential lighting fixtures.
- Title 24 Energy Efficiency Requirements
  - For use in high efficiency residential fixtures as stated in California's Title 24 requirements
- Electronic circuitry
  - Delivers energy savings of up to 25% over Advance's L1Q26TP magnetic fluorescent ballast\* and as much as 75% energy savings relative to Philips 100A incandescent bulb\*\*
  - Enables ballasts to run cooler and operate quieter than many magnetic ballast alternatives
- Operation above 40kHz
  - Avoids interference with infrared control systems
  - Delivers quiet, flicker-free performance
- Lamp ignition in less than 1.0 second
  - Provides flicker-free starting
- Auto restart circuit
  - Eliminates the need to reset power mains after failed lamps are replaced
- Lamp End-Of-Life (EOL) protection circuit
  - Removes power to the lamps upon lamp failure
- <10% THD (>0.98 Power Factor)
  - Meets most demanding power quality requirements
  - Perfect for applications, where harmonics are a concern

\* Based on input watts of Advance's REB126M6 (25 watts) and L1Q26TP (33 watts)

\*\* Based on input watts of Advance's REB126M6 operating a Philips PL-T 26W/4P/ALTO (25 watts) and Philips 100A (100 watts)

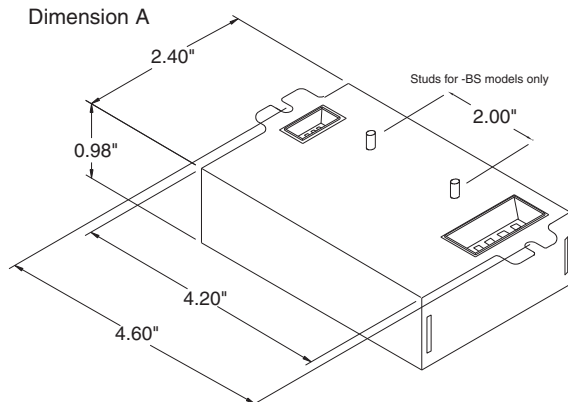
### APPLICATIONS:

■ Residential  
■ Hospitality

■ Commercial

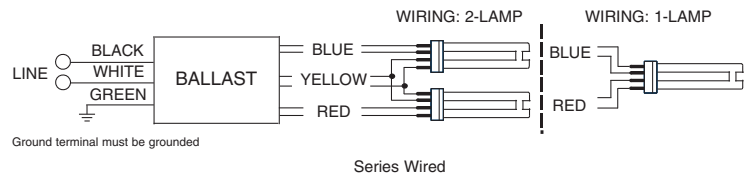


No. of Lamps	Input Volts	Lamp Starting Method	Ballast Family	Catalog Number	Input Power ANSI (Watts)	Ballast Factor	Max. THD %	Line Current (Amps)	Min. Starting Temp. (°F/°C)	Dim.	Wiring Dia.
<b>CFQ13W/G24q - 13W CFL Quad Tube Lamp (PL-C13W/4P, F13DBX/4P, CF13DD/E)</b>											
1	120	RS	AmbiStar	RCF-2S13-H1-LD-QS	16	1.00	10	0.13	0/-18	A	1
				RCF-2S13-M1-BS-QS							
				RCF-2S13-M1-LS-QS							
2	120	RS	AmbiStar	RCF-2S13-H1-LD-QS	29	1.00	10	0.25	0/-18	A	1
				RCF-2S13-M1-BS-QS							
				RCF-2S13-M1-LS-QS							
<b>CFQ18W/G24q - 18W CFL Quad Tube Lamp (PL-C18W/4P, F18DBX/4P, CF18DD/E)</b>											
1	120	RS	AmbiStar	RCF-2S18-H1-LD-QS	19	1.00	10	0.16	0/-18	A	1
				RCF-2S18-M1-BS-QS							
				RCF-2S18-M1-LS-QS							
2	120	RS	AmbiStar	RCF-2S18-H1-LD-QS	35	0.95	10	0.30	0/-18	A	1
				RCF-2S18-M1-BS-QS							
				RCF-2S18-M1-LS-QS							
<b>CFQ26W/G24q - 26W CFL Quad Tube Lamp (PL-C26W/4P, F26DBX/4P, CF26DD/E)</b>											
1	120	RS	AmbiStar	RCF-2S26-H1-LD-QS	27	1.00	10	0.23	0/-18	A	1
				RCF-2S26-M1-BS-QS							
				RCF-2S26-M1-LS-QS							
2	120	RS	AmbiStar	RCF-2S26-H1-LD-QS	51	1.00	10	0.43	0/-18	A	1
				RCF-2S26-M1-BS-QS							
				RCF-2S26-M1-LS-QS							
<b>CFTR13W/GX24q - 13W CFL Triple Tube Lamp (F13TBX/4P, CF13DT/E)</b>											
1	120	RS	AmbiStar	RCF-2S13-H1-LD-QS	16	1.00	10	0.13	0/-18	A	1
				RCF-2S13-M1-BS-QS							
				RCF-2S13-M1-LS-QS							
2	120	RS	AmbiStar	RCF-2S13-H1-LD-QS	29	1.00	10	0.25	0/-18	A	1
				RCF-2S13-M1-BS-QS							
				RCF-2S13-M1-LS-QS							
<b>CFTR18W/GX24q - 18W CFL Triple Tube Lamp (PL-T18W/4P, F18TBX/4P, CF18DT/E)</b>											
1	120	RS	AmbiStar	RCF-2S18-H1-LD-QS	20	1.05	10	0.17	0/-18	A	1
				RCF-2S18-M1-BS-QS							
				RCF-2S18-M1-LS-QS							
2	120	RS	AmbiStar	RCF-2S18-H1-LD-QS	39	1.05	10	0.33	0/-18	A	1
				RCF-2S18-M1-BS-QS							
				RCF-2S18-M1-LS-QS							
<b>CFTR26W/GX24q - 26W CFL Triple Tube Lamp (PL-T26W/4P, F26TBX/4P, CF26DT/E)</b>											
1	120	RS	AmbiStar	RCF-2S26-H1-LD-QS	29	1.10	10	0.24	0/-18	A	1
				RCF-2S26-M1-BS-QS							
				RCF-2S26-M1-LS-QS							
2	120	RS	AmbiStar	RCF-2S26-H1-LD-QS	54	1.00	10	0.45	0/-18	A	1
				RCF-2S26-M1-BS-QS							
				RCF-2S26-M1-LS-QS							
<b>CFTR32W/GX24q - 32W CFL Triple Tube Lamp (PL-T32W/4P, F32TBX/4P, CF32DT/E)</b>											
1	120	RS	AmbiStar	RCF-2S26-H1-LD-QS	36	0.98	10	0.31	0/-18	A	1
				RCF-2S26-M1-BS-QS							
				RCF-2S26-M1-LS-QS							
<b>CFTR42W/GX24q - 42W CFL Triple Tube Lamp (PL-T42W/4P, F42TBX/4P, CF42DT/E)</b>											
1	120	RS	AmbiStar	RCF-2S26-H1-LD-QS	46	0.98	10	0.38	0/-18	A	1
				RCF-2S26-M1-BS-QS							
				RCF-2S26-M1-LS-QS							



LD & LS models do not have mounting studs

Wiring Diagram 1



### Section I - Physical Characteristics

1.1 Ballast shall be provided with poke-in wire trap connectors color coded per ANSI C82.11.

### Section II - Performance Requirements

- 2.1 Ballast shall be Rapid Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power
- 2.3 Ballast shall operate from 60 Hz input source of 120V with sustained variations of +/- 10% (voltage and frequency).
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.00 for primary lamp.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less in accordance with lamp manufacturer recommendations.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of 0°F/-18°C for primary lamp.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.

### Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall be rated for use in air-handling spaces.
- 3.4 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.5 Ballast shall comply with ANSI C82.11 where applicable.
- 3.6 Ballast shall comply with the Federal Communications Commission (FCC), Title 47 CFR part 18, Consumer (Class B) for EMI/RFI (conducted and radiated).

### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9002 Quality System Standards.
- 4.2 Ballast shall carry a three-year limited warranty from date of manufacture to be free from defects in material and workmanship, under certain conditions, including, but not limited to, for operation at a maximum case temperature of 85°C.
- 4.3 Manufacturer has a fifteen-year history of producing electronic ballasts for the North American market.



Advance • 10275 W. Higgins Road • Rosemont, IL 60018  
Tel: 800-322-2086 • Fax: 888-423-1882  
Customer Support/Technical Service: 800-372-3331  
OEM Support: 866-915-5886

[www.advancetransformer.com](http://www.advancetransformer.com)



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