



ELECTRONIC

PRODUCT OVERVIEW:

Today's fluorescent fixtures offer greater flexibility and energy savings for residential and hospitality settings than ever before. Advance's Ambistar miniature instant start ballasts (formerly known as Matchbox™) deliver warm, comfortable, cost-effective and energy saving lighting solutions. Whether you are using 4-pin compact fluorescent lamps or linear T5 lamps, these AmbiStar ballasts are specially designed for applications requiring instant flicker free ignition where smaller lighting fixtures are needed, they are perfect for for under cabinet, task, ambiance, orientation, outdoor residential, and sign lighting. These AmbiStar ballasts also meet EPA Energy Star® Residential and consumer EMI requirements for reliable operation in residential settings.

These **AmbiStar** instant start ballasts are available with a high or normal power factor model depending on the desired application. The high power factor models operate a variety of lamps including one or two 7 Watt or 9 Watt twin tube lamps, one or two 13 Watt quad or triple tube lamps, or one 18 Watt quad or triple tube lamp, in addition to operating one or two 8 Watt or 13 Watt linear T5 lamps. The normal power factor models will operate one 26 Watt quad or triple tube lamp. These **AmbiStar** miniature ballasts are ideal to meet the demands of a variety of residential and hospitality settings

AmbiStar™

Electroic Ballasts for 4-pin Compact Fluorescent (7-26W) and T5 Linear (8-14W) Lamps



DESIGN HIGHLIGHTS:

- Class B FCC EMI Rating
 - Requirement for the 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 guiet, flicker-free performance
- Lamp ignition in less than 1.0 second
- Provides flicker-free starting
- Auto restart circuit
 - O 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
- * 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

AmbiStar

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.
CFT7W	1/2G7 - 7	7W CFL	Twin Tube	Lamp (CF7DS/E)							
1	120	IS	AmbiStar	RMB-1P13-L2 RMB-1P13-S1	8	1.00	150	0.13	0/-18	L2 S1	160
				RMB-1P13-S2-H	8	1.00	25	0.07		S2	
2	120	IS	AmbiStar	RMB-2P13-L2 RMB-2P13-S2	16	1.10	150	0.24	0/-18	L2 S2	159
				RMB-2P13-S3-H	16	1.00	15	0.14		S3	
CFT9W	I/2G7 - 9	W CFL	Twin Tube	Lamp (CF9DS/E)							
,	120	IS	AmbiStar	RMB-1P13-L2	10	1.10	150	0.16	0/-18	L2	160
1				RMB-1P13-S1 RMB-1P13-S2-H	10	1.05	20	0.09		S1 S2	
2	120	IS	AmbiStar	RMB-2P13-L2 RMB-2P13-S2	20	1.10	125	0.29	0/-18	L2 S2	159
	120	10		RMB-2P13-S3-H	20	1.05	10	0.17	0/-10	S3	
				d Tube Lamp (PL-C1 iple Tube Lamp (F1				CF13DD/	(E)		
1	120	IS	AmbiStar	RMB-1P13-L2 RMB-1P13-S1	13	1.00	150	0.20	0/-18	L2 S1	160
			AmbiStar	RMB-1P13-S2-H RMB-2P13-L2	14	0.85	20 125	0.12	0/-18	S2 L2	
2	120	IS		RMB-2P13-S2 RMB-2P13-S3-H	27	0.90	10	0.33		S2 S3	159
CFTR1	8W/GX2	24q - 18	BW CFL Tr	d Tube Lamp (PL-C1 Tiple Tube Lamp (PL RMB-2P13-L2					E) [*]	А	
1	120	IS	AmbiStar	RMB-2P13-S2 RMB-2P13-S3-H	15	0.80	15	0.13	0/-18	B C	159
				d Tube Lamp (PL-C2 ube Lamp (PL-T26W/4P				CF26DD	/E)		I
1	120	IS	AmbiStar	RMB-1P26-S2	26	0.95	125	0.38	0/-18	Α	160
F8T5 (8	BW)										
,	120	IS	AmbiStar	RMB-1P13-L2	10	1.30	150	0.16	0/-18	L2	163
1				RMB-1P13-S1 RMB-1P13-S2-H	10	1.20	20	0.08		S1 S2	
2	120	IS	AmbiStar	RMB-2P13-L2 RMB-2P13-S2	19	1.30	125	0.27	0/-18	L2 S2	162
				RMB-2P13-S3-H	19	1.25	10	0.16		S3	
(1) F8T	5 & (1) F	13T5 {(1) 8W & (1)								
1	120	IS	AmbiStar	RMB-2P13-L2 RMB-2P13-S2	23	1.10	125 0.33	0.33	0/-18	L2 S1	162
				RMB-2P13-S3-H	23	1.10	10	0.20		S2	
F13T5	(13W)			DMD 451010		I					
1	120	IS	AmbiStar	RMB-1P13-L2 RMB-1P13-S1	14	1.00	150	0.21	0/-18	L2 S1	163
				RMB-1P13-S2-H RMB-2P13-L2	14	0.95	15	0.12		S2 L2	
2	120	IS	AmbiStar	RMB-2P13-S2	27	0.95	125	0.38	0/-18	S2	162
				RMB-2P13-S3-H	28	0.95	10	0.24		S3	

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.
F14T5 (14W)											
	120	IS	AmbiStar	RMB-1P13-L2	14	0.95	150	0.21	0/-18	L2	
1				RMB-1P13-S1						S1	163
				RMB-1P13-S2-H	14	0.90	15	0.12		S2	
	120	IS	AmbiStar	RMB-2P13-L2	27	0.90	125	0.40	0/-18	L2	
2				RMB-2P13-S2						S2	162
				RMB-2P13-S3-H	28	0.90	10	0.24		S3	
FC9T5 (22W Circline)											
1	120	IS	AmbiStar	RMB-1P26-S2	25	1.00	150	0.39	0/-18	S2	163
FC8T9 (22W Circline)											
1	120	IS	AmbiStar	RMB-1P26-S2	22	0.95	150	0.35	0/-18	S2	163
FT18W/2G11/RS - 18W (F18BX/RS, FT18DL/RS)											
1	120	IS	AmbiStar	RMB-1P26-S2	23	1.00	150	0.37	0/-18	S2	160
FT24W/2G11 - 24/27W (PL-L24W, F27BX/RS, FT24DL)											
1	120	IS	AmbiStar	RMB-1P26-S2	26	0.95	150	0.40	0/-18	S2	160

BALLAST SPECIFICATIONS

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 Instant Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power
- 2.4 Ballast shall operate from 60 Hz input source of 120V with sustained variations of +/- 10% (voltage and frequency).
- 2.5 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.
- 2.6 Ballast shall have a Power Factor greater than 0.50 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor of 0.95 for primary lamp.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less in accordance with lamp manufacturer recommendations.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 150% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating.
- 2.11 Ballast shall have a minimum starting temperature of 0°F/-18°C for primary lamp.
- 2.12 Ballast shall provide Lamp EOL Protection Circuit.
- 2.13 Ballast shall tolerate sustained open circuit and short circuit output conditions.

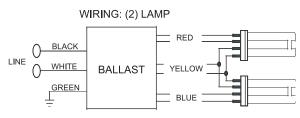
Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P, Type CC, 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 A3 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

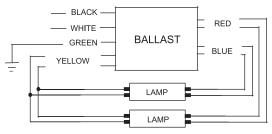
- 4.1 Ballast shall be manufactured in a factory certified to ISO 9002 Quality System Standards.
- 4.2 Ballast shall carry a two-year limited warranty from date of manufacture to be free from defects in material and workmanship, under certain conditions, including but not limited to, for operation at a maximum case temperature of 65°C.
- 4.3 Manufacturer has a fifteen-year history of producing electronic ballasts for the North American market.

WIRING DIAGRAMS / BALLAST DIMENSIONS



Green Terminal must be Grounded Diag. 159

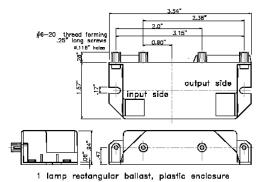
WIRING: (2) LAMP



Green Terminal must be Grounded Diag. 162

Note: For 1-lamp operation on 2-lamp ballast, use red and yellow connectors

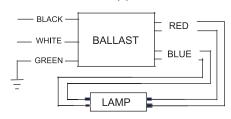
S1 Model





WIRING: (1) LAMP BLACK WHITE BALLAST GREEN BI UF Green Terminal must be Grounded Diag. 160

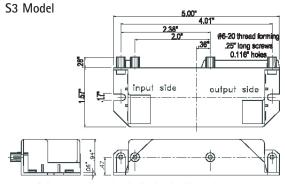
WIRING: (1) LAMP



Green Terminal must be Grounded Diag. 163

S2 Model 4.01 input side output side ⊚

2 lamp rectangular ballast, plastic enclosure



2 lamp rectangular ballast, plastic enclosure

L2 Model

