



Energy efficient residential replacement

Philips Advance AmbiStar™ ballasts for T12 lamps are an excellent residential replacement for their magnetic counterparts

Designed around the exact footprint of their magnetic ballast counterparts, our AmbiStar electronic ballasts for T12 fluorescent lamps represent an easy-to-install, energy-efficient replacement solution which optimizes lighting applications in the residential and hospitality sectors. Additionally, in the commercial sector, the ballasts are appropriate replacements for federally-outlawed magnetic ballasts in new construction and serve as energy-efficient alternatives in retrofit and upgrade applications as well.

These ballasts are Class B FCC EMI rated and fully compliant with the EPA's ENERGY STAR® Residential Lighting Fixture Program as well as California's Title 24 Residential Lighting Energy Efficiency standards. Operating both 34W and 40W lamps the ballast's electronic circuitry provides comfortable and quiet performance while delivering significant energy savings.

Low-maintenance and high-performing, AmbiStar electronic ballasts for T12 fluorescent lamps offer residential, hospitality, and commercial users a versatile and high quality lighting solution.

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

- Enables ballasts to run cooler and operate quieter than many magnetic ballast alternatives

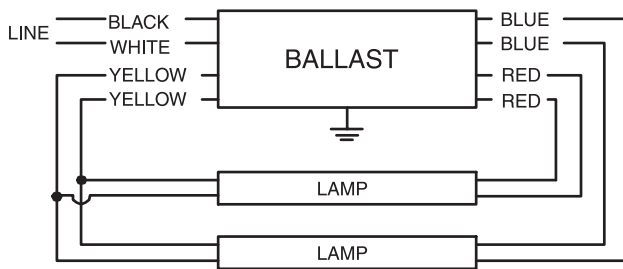
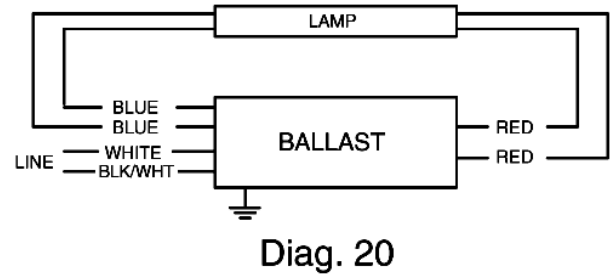
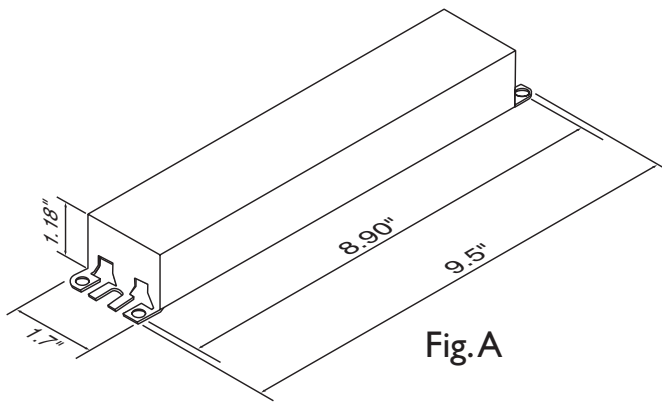
Identical mounting to standard magnetic ballast design

- Enhances ease of installation in retrofit applications

**PHILIPS
ADVANCE**

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.
F34T12, F34T12/U (34W)											
1	120	RS	AmbiStar	RELB-1S40-SC	35	0.92	20	0.29	60/16	A	20
2	120	RS	AmbiStar	RELB-2S40-SC	62	0.85	20	0.63	60/16	A	21
F40T12, F40T12/U (40W)											
1	120	RS	AmbiStar	RELB-1S40-SC	38	0.88	20	0.31	50/10	A	20
2	120	RS	AmbiStar	RELB-2S40-SC	72	0.85	20	0.63	50/10	A	21

Wiring Diagrams and Dimensions



Ballast Specification

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 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 0.85 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 20% 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 50°F/10°C for standard T12 lamps and 60°F/16°C for energy-saving T12 lamps.
- 2.11 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 I Outdoor; and Canadian Standards Association (CSA) certified, where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, 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 9001 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, operation at a maximum case temperature of 70°C.
- 4.3 Manufacturer shall have a fifteen year history of producing electronic ballasts for the North American market.



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