

# The residential replacement

Philips Advance AmbiStar<sup>™</sup> ballasts for T8 lamps are an easy-to-install energy efficient replacement solution for residential applications

Designed around the exact footprint of their magnetic ballast counterparts, Philips Advance AmbiStar electronic ballasts for T8 fluorescent lamps represent an easy-to-install, energy-efficient replacement solution which optimizes lighting applications in the residential and hospitality sectors.

Ideal for applications such as kitchens, bathrooms, basements, and garages, AmbiStar electronic ballasts are Class B FCC EMI rated and EPA ENERGY STAR<sup>®</sup> Residential Lighting Fixture Program listed for reliable operation in residential settings. Available in popular 17W, 25W, and 32W versions, the ballasts' electronic circuitry provides comfortable and quiet performance.

Low-maintenance and high-performing, AmbiStar electronic ballasts for T8 fluorescent lamps offer residential and hospitality users a versatile and high quality T8 lighting solution which drives reductions in energy consumption and costs while promoting environmental sustainability. All of the listed ballasts are normal power factor and labeled "For Residential Use only". They are also available in high power factor models, call you local sales representative for more information.

## 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

### Lamp ignition in less than 1.0 second

Provides flicker-free starting

# PHILIPS ADVANCE

# Ballast Specifications / Dimensions / Wiring Diagrams

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.
F17T8 (	(24")										
	120-277	IS	AmbiStar	REB-2P32-SC	19	1.02	150	0.30	0/-18	А	*64
2	120-277	IS	AmbiStar	REB-2P32-SC	31	0.91	140	0.45	0/-18	А	64
3	120-277	IS	AmbiStar	REB-4P32-SC	44	0.81	135	0.87	0/-18	А	*66
4	120-277	IS	AmbiStar	REB-4P32-SC	52	0.82	135	1.00	0/-18	A	66
F25T8 (	(36")			·			•				<u>~</u>
I	120-277	IS	AmbiStar	REB-2P32-SC	26	1.00	150	0.39	0/-18	A	*64
2	120-277	IS	AmbiStar	REB-2P32-SC	43	0.89	130	0.61	0/-18	A	64
3	120-277	IS	AmbiStar	REB-4P32-SC	63	0.86	125	1.14	0/-18	A	*66
4	120-277	IS	AmbiStar	REB-4P32-SC	77	0.81	125	1.31	0/-18	A	66
F32T8 (	(48")			·							<u>.</u>
	120-277	IS	AmbiStar	REB-2P32-SC	33	1.00	140	0.48	0/-18	А	*64
2	120-277	IS	AmbiStar	REB-2P32-SC	56	0.88	120	0.80	0/-18	A	64
3	120-277	IS	AmbiStar	REB-4P32-SC	80	0.84	125	1.36	0/-18	Α	*66
4	120-277	IS	AmbiStar	REB-4P32-SC	103	0.81	125	1.57	0/-18	A	66





Diag. 64

\* For single lamp operation, insulate unused blue lead for 600 volts



\* For three lamp operation, insulate unused blue lead for 600 volts

# **Ballast Specifications**

# 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 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 for primary lamp as follows: greater than 0.98 for RELB models or greater than 0.50 for REB models.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp as follows: greater than 0.98 for RELB models or greater than 0.50 for REB models.
- 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) less than 20% for RELB models or less than 150% for REB models when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating.
- Ballast shall have a minimum starting temperature of 0°F/-18°C for primary lamp.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.

# Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polyclorinated 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

- Ballast shall be manufactured in a factory certified to ISO 9001 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, 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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