

Standard Power 1-Lamp-T8

STANDARD ELECTRONIC

INSTANT START

FEB 2001

E1/32IS-347

One Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8
Lamp Length (inches)	24	16.5	36	48	22.5	48
Lamp Watts	17	24	25	25	31	32
Line Current (amps)	0.06	0.07	0.08	0.08	0.09	0.09
Input Watts (ANSI)	19	24	25	27	29	30
Power Factor	>90%	>95%	>96%	>97%	>98%	>98%
Total Harmonic Distortion Rating	<25%	<20%	<20%	<20%	<20%	<20%
Ballast Factor	96%	93%	92%	89%	87%	87%
Ballast Efficacy Factor	5.05	3.88	3.68	3.30	3.00	2.90
System Lumens Per Watt	68	79	76	74	83	87
Initial System Lumens (1)	1300	1900	1900	2000	2400	2600

(1) Based on premium 4', T8 lamp initial lumen ratings, produced by the GE, OSRAM/SYLVANIA, or PHILIPS lamp divisions. Shaded area indicates primary lamp design. Actual Initial Lumens produced will be determined by the specific lamp manufacturer and the rated initial lumens for the lamp selected.

**HOWARD
INDUSTRIES, INC.**



**BALLAST
PRODUCTS
DIVISION**

P.O. Box 1590
Laurel, MS 39441
(601) 422-0033 or
1-800-956-3456
Fax (601) 422-1652
[http://www.
howard-ballast.com](http://www.howard-ballast.com)

Standard Power 2-Lamp-T8

STANDARD ELECTRONIC

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E2/32IS-347

Two Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8
Lamp Length (inches)	24	16.5	36	48	22.5	48
Lamp Watts	17	24	25	25	31	32
Line Current (amps)	0.11	0.14	0.14	0.15	0.16	0.17
Input Watts (ANSI)	36	47	48	51	57	58
Power Factor	>90%	>96%	>97%	>98%	>98%	>98%
Total Harmonic Distortion Rating	<25%	<22%	<20%	<20%	<20%	<20%
Ballast Factor	94%	92%	92%	89%	88%	87%
Ballast Efficacy Factor	2.61	1.96	1.92	1.75	1.54	1.50
System Lumens Per Watt	72	79	81	80	86	90
Initial System Lumens (1)	2600	3700	3900	4100	4900	5200

E2/32IS-347

One Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8	F40T8
Lamp Length (inches)	24	16.5	36	48	22.5	48	60
Lamp Watts	17	24	25	25	31	32	40
Line Current (amps)	0.09	0.10	0.10	0.11	0.12	0.12	0.14
Input Watts (ANSI)	25	31	32	35	38	39	47
Power Factor	>78%	>86%	>88%	>90%	>92%	>93%	>96%
Total Harmonic Distortion Rating	<32%	<30%	<30%	<25%	<25%	<25%	<23%
Ballast Factor	114%	112%	111%	109%	110%	109%	105%
Ballast Efficacy Factor	4.56	3.61	3.47	3.11	2.89	2.79	2.23
System Lumens Per Watt	64	71	72	71	82	85	83
Initial System Lumens (1)	1600	2200	2300	2500	3100	3300	3900

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Standard Power 3-Lamp-T8

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E3/32IS-347

Three Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8
Lamp Length (inches)	24	16.5	36	48	22.5	48
Lamp Watts	17	24	25	25	31	32
Line Current (amps)	0.16	0.20	0.21	0.22	0.24	0.25
Input Watts (ANSI)	51	69	70	75	84	85
Power Factor	>95%	>96%	>96%	>97%	>98%	>98%
Total Harmonic Distortion Rating	<25%	<20%	<20%	<20%	<20%	<20%
Ballast Factor	96%	93%	92%	89%	88%	87%
Ballast Efficacy Factor	1.88	1.35	1.31	1.19	1.05	1.02
System Lumens Per Watt	78	81	83	81	88	92
Initial System Lumens (1)	4000	5600	5800	6100	7400	7800

E3/32IS-347

Two Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8	F40T8
Lamp Length (inches)	24	16.5	36	48	22.5	48	60
Lamp Watts	17	24	25	25	31	32	40
Line Current (amps)	0.14	0.16	0.17	0.18	0.19	0.20	0.24
Input Watts (ANSI)	42	56	57	60	67	68	82
Power Factor	>90%	>94%	>95%	>97%	>98%	>98%	>98%
Total Harmonic Distortion Rating	<30%	<25%	<25%	<25%	<20%	<20%	<20%
Ballast Factor	107%	104%	103%	102%	101%	100%	95%
Ballast Efficacy Factor	2.55	1.86	1.81	1.70	1.51	1.47	1.16
System Lumens Per Watt	71	75	75	78	85	88	85
Initial System Lumens (1)	3000	4200	4300	4700	5700	6000	7000

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Standard Power 4-Lamp-T8

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E4/32IS-347

Four Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8	
Lamp Length (inches)	24	16.5	36	48	22.5	48	
Lamp Watts	17	24	25	25	31	32	
Line Current (amps)	0.21	0.26	0.27	0.28	0.32	0.33	
Input Watts (ANSI)	65	90	91	94	111	112	
Power Factor	>90%	>95%	>95%	>97%	>98%	>98%	
Total Harmonic Distortion Rating	<30%	<25%	<25%	<20%	<20%	<20%	
Ballast Factor	94%	92%	91%	89%	88%	87%	
Ballast Efficacy Factor	1.45	1.02	1.00	0.95	0.79	0.78	
System Lumens Per Watt	82	82	84	87	89	93	
Initial System Lumens (1)	5300	7400	7600	8200	9900	10400	

E4/32IS-347

Three Lamp Operation, 347 V

Lamp Type	F17T8	FB24T8	F25T8	F25T12	FB31T8	F32T8	F40T8
Lamp Length (inches)	24	16.5	36	48	22.5	48	60
Lamp Watts	17	24	25	25	31	32	40
Line Current (amps)	0.19	0.23	0.24	0.25	0.27	0.28	0.33
Input Watts (ANSI)	56	75	76	81	93	94	112
Power Factor	>85%	>92%	>92%	>95%	>96%	>96%	>98%
Total Harmonic Distortion Rating	<35%	<30%	<30%	<25%	<22%	<20%	<20%
Ballast Factor	104%	100%	99%	99%	98%	97%	93%
Ballast Efficacy Factor	1.86	1.33	1.30	1.22	1.05	1.03	0.83
System Lumens Per Watt	79	80	82	84	88	93	92
Initial System Lumens (1)	4400	6000	6200	6800	8200	8700	10300

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Standard Power 347 Volt T8

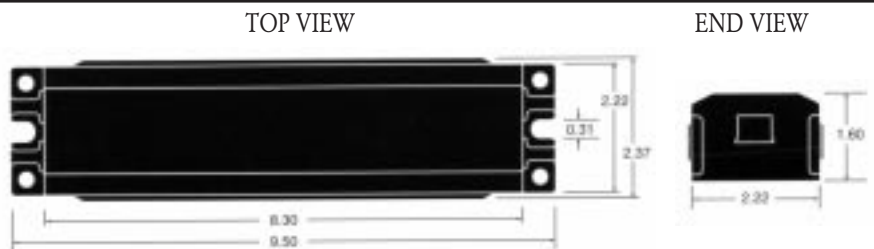
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SPECIFICATIONS

Current Crest Factor:	Ballast shall have a Lamp Current Crest Factor of <1.7 .
Transient Protection:	Ballast shall withstand line voltage transients and surges as specified in ANSI C62.41-1991. Ballast will withstand 6,000 volt Ring Wave standard for location category B3 and 6,000 volt Combination Wave standard for location category C1.
EMI and RFI Limits:	Ballast shall comply with the limits of FCC Part 18C for Non-Consumer equipment.
UL, Canadian UL, CSA:	Ballast shall be UL, Canadian UL and CSA Certified, Class P, Type 1, outdoor.
Operating Frequency:	Ballast shall have a frequency of 20-27kHz.
Starting Temperature:	Ballast shall have a 0°F minimum starting temperature.
Made in U.S.A.:	Ballast shall be manufactured in the U.S.A. by Howard Industries, Inc.
Potting:	Ballast shall contain potting compound for proper dissipation of heat, mechanical stability, and moisture protection.
Lamp Lead Orientation:	Ballast shall have lamp leads exiting both ends of housing.
Circuit Configuration:	Ballast shall be Instant Start with Parallel circuit configuration.
Sound Rating:	Ballast shall be sound rated Class A.
Power Factor:	Ballast shall have minimum Power Factor of 98% on primary lamp configuration.
Remote Mounting:	Ballast shall operate at a maximum of 20 feet at 0°C.
Voltage Range:	Ballast shall operate within an input voltage range of $\pm 10\%$.
Inrush Current:	Ballast shall have an inrush current not greater than 15 times operating current.
Warranty:	Ballast shall have a five-year warranty.

BALLAST DIMENSIONS



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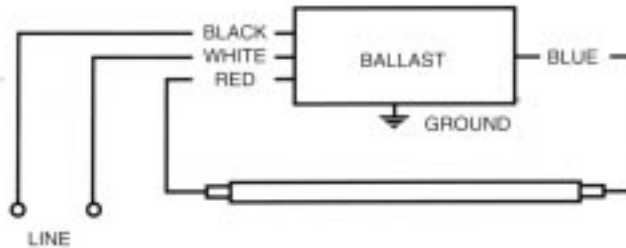
UL, Canadian UL and
CSA Certified

Standard Power 347 Volt T8

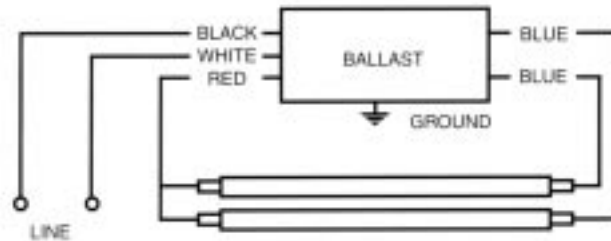
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1 Lamp Wiring Diagram

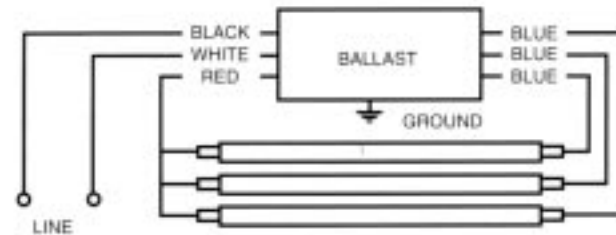


2 Lamp Wiring Diagram



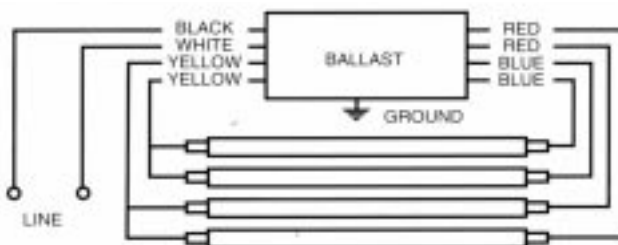
For 1-lamp operation cap one blue lead.

3 Lamp Wiring Diagram



For 2-lamp operation cap one blue lead.

4 Lamp Wiring Diagram



For 3-lamp operation cap one blue lead.

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