

High Power 1-Lamp-T8

STANDARD ELECTRONIC

INSTANT START

FEB 2001

EH1/32IS-120

One Lamp Operation, 120 V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	0.33	0.35
Input Watts (ANSI)	39	41
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<15%	<15%
Ballast Factor	114%	114%
Ballast Efficacy Factor	2.92	2.78
System Lumens Per Watt	82	83
Initial System Lumens (1)	3200	3400

EH1/32IS-277

One Lamp Operation, 277V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	0.14	0.15
Input Watts (ANSI)	39	41
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<15%	<15%
Ballast Factor	114%	114%
Ballast Efficacy Factor	2.92	2.78
System Lumens Per Watt	82	83
Initial System Lumens (1)	3200	3400

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

**HOWARD
INDUSTRIES, INC.**



**BALLAST
PRODUCTS
DIVISION**

P.O. Box 1590
Laurel, MS 39441
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[http://www.
howard-ballast.com](http://www.howard-ballast.com)

High Power 2-Lamp-T8

STANDARD ELECTRONIC

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EH2/32IS-120

Two Lamp Operation, 120 V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	0.62	0.65
Input Watts (ANSI)	73	76
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<20%	<20%
Ballast Factor	114%	114%
Ballast Efficacy Factor	1.56	1.50
System Lumens Per Watt	88	89
Initial System Lumens (1)	6400	6800

EH2/32IS-277

Two Lamp Operation, 277V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (Amps)	0.27	0.28
Input Watts (ANSI)	73	76
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<20%	<20%
Ballast Factor	114%	114%
Ballast Efficacy Factor	1.56	1.50
System Lumens Per Watt	88	89
Initial System Lumens (1)	6400	6800

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

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High Power 3-Lamp-T8

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EH3/32IS-120

Three Lamp Operation, 120 V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	0.94	0.97
Input Watts (ANSI)	110	114
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<15%	<15%
Ballast Factor	114%	114%
Ballast Efficacy Factor	1.04	1.00
System Lumens Per Watt	87	90
Initial System Lumens (1)	9600	10300

EH3/32IS-277

Three Lamp Operation, 277V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	0.40	0.41
Input Watts (ANSI)	110	114
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<15%	<15%
Ballast Factor	114%	114%
Ballast Efficacy Factor	1.04	1.00
System Lumens Per Watt	87	90
Initial System Lumens (1)	9600	10300

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

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High Power 4-Lamp-T8

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EH4/32IS-120

Four Lamp Operation, 120 V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	1.24	1.28
Input Watts (ANSI)	146	151
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<20%	<20%
Ballast Factor	114%	114%
Ballast Efficacy Factor	0.78	0.75
System Lumens Per Watt	94	91
Initial System Lumens (1)	13700	13700

EH4/32IS-277

Four Lamp Operation, 277V

Lamp Type	FB31T8	F32T8
Lamp Length (inches)	22.5	48
Lamp Watts	31	32
Line Current (amps)	0.54	0.55
Input Watts (ANSI)	146	151
Power Factor	>98%	>98%
Total Harmonic Distortion Rating	<20%	<20%
Ballast Factor	114%	114%
Ballast Efficacy Factor	0.78	0.75
System Lumens Per Watt	94	91
Initial System Lumens (1)	13700	13700

(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.

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High Power T8

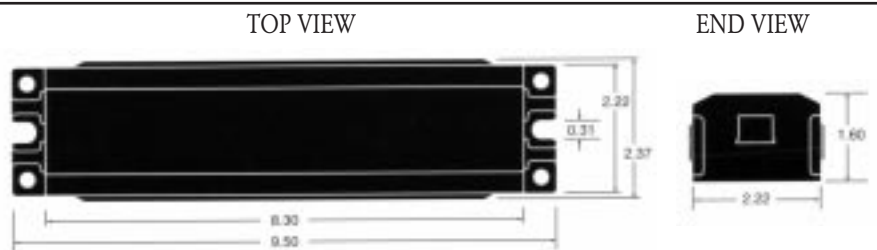
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SPECIFICATIONS

- Current Crest Factor:** Ballast shall have a Lamp Current Crest Factor of <1.7 .
- Transient Protection:** Ballast shall withstand line transients and surges as specified in ANSI C62.41-1991 (IEEE 587A for location category B, Level 3 (6,000 volts).
- 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 97% 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 +/- 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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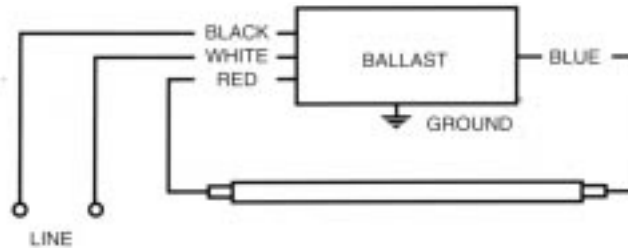
UL, Canadian UL and
CSA Certified

High Power T8

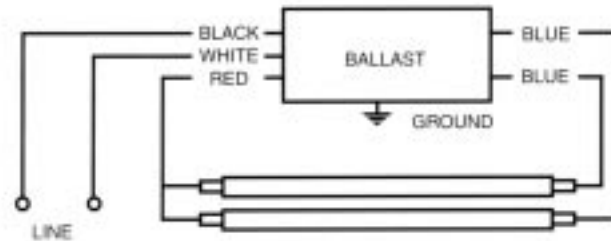
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1 Lamp Wiring Diagram

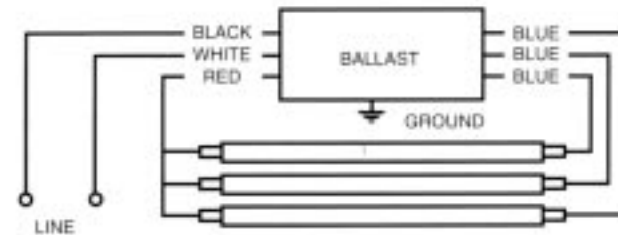


2 Lamp Wiring Diagram



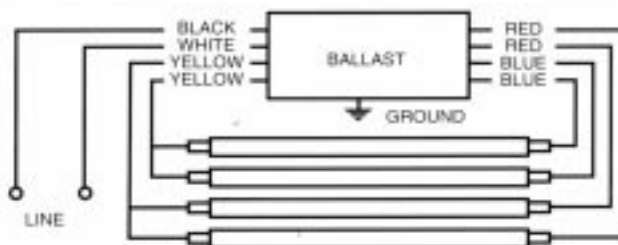
For 1-lamp operation cap one blue lead.

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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