

# QUICKTRONIC® T8 Instant Start Universal Voltage Systems

## High Efficiency Series

QHE T8 ISN

### Lamp / Ballast Guide

32W T8 – OCTRON® lamps

1-lamp QHE1x32T8/UNV ISN-SC

2-lamp QHE2x32T8/UNV ISN-SC

3-lamp QHE3x32T8/UNV ISN-SC

4-lamp QHE4x32T8/UNV ISN-SC

Also operates:

FB032, FB031, F025, FB024, F017, FB016, F030/SS (30W), FB030/SS (30W), FB029/SS (29W), F028/SS (28W) & F025/SS (25W)

F040T8 operation:

1 lamp on 2L ballast; 2 lamps on 3L ballast; 3 lamps on 4L ballast

### Key System Features

- High Efficiency Systems over 90% efficient
- NEMA Premium Electronic Ballast Program compliant
- Lamp Striation Control (LSC)
- Over 100 LPW (lumens/watt) with OCTRON SUPERSAVER® lamps
- Lowest power T8 I.S. Systems
- Universal voltage (120-277V)
- Small Can enclosure size
- 30-50% Energy savings
- Min. Starting Temp:
  - -20°F (-29°C) for T8 lamps
  - 60°F (16°C) for Energy Saving T8 lamps
  - 0°F (-18°C) for F040T8 lamps
- <10% THD
- Virtually eliminates lamp flicker
- RoHS compliant
- Lead-free solder and manufacturing process

### Application Information

#### SYLVANIA QUICKTRONIC High Efficiency ballasts

are ideally suited for:

- Any applications where the lowest power T8 systems are needed for maximum energy savings
- Energy Retrofits
- Commercial & Retail
- Hospitality & Institutional
- New Construction

#### Lamp Striation Control (LSC)

- General lighting applications where energy saving T8 lamps may striate, particularly for the F25 energy saving T8 lamps.

SYLVANIA QUICKTRONIC High Efficiency, (QHE) energy-saving electronic T8 ballasts offer several advantages:

1. Same Light, Less Power!
  - Up to 6% in energy savings compared to standard T8 low power electronic ballasts without compromising light output
  - Maximum energy savings when compared to F40T12 magnetically ballasted systems
2. Parallel Circuitry: keeps remaining lamps lit if one or more go out.
3. Lamp Striation Control (LSC): T8 energy saving lamps should be operated above 60°F, but under certain conditions the lamps may striate. LSC circuitry may minimize or eliminate this condition; however there are limited applications where LSC circuitry may not entirely mitigate lamp striations
4. NEMA Premium Electronic Ballast Program compliant. The program promotes the use of high efficiency T8 electronic ballasts by meeting or exceeding the Ballast Efficiency

### System Information

SYLVANIA QUICKTRONIC High Efficiency (QHE) System advantages:

- Operate from 120V through 277V
  - Eliminates “wrong voltage” errors
  - Reduces inventory by 50%
- Utilizes Instant Start operation for
  - Highest System Efficacy
  - Low temperature starting capability
- Very low harmonic distortion (<10%)THD
- Operate at >42 kHz to reduce potential interference with infrared control systems



**Lamp Striation Control**  
**Normal Ballast Factor**



Factors, (BEF) established by the CEE, (Consortium for Energy Efficiency). For additional information on this program go to: [www.cee1.org](http://www.cee1.org) or [www.nema.org](http://www.nema.org)

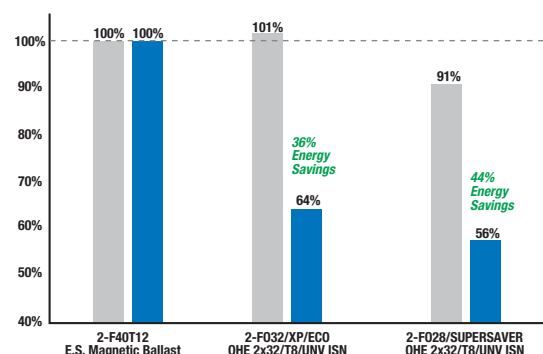
#### 5. New Banded Packaging

- Distributor-friendly for easy stocking and individual ballast sales
- Reduced waste
- Easy removable bands
- No tangled wires

These ballasts are also RoHS compliant and feature lead-free solder and manufacturing process.

SYLVANIA QUICKTRONIC High Efficiency (QHE) systems are also covered by the QUICK 60+® warranty, the first and most comprehensive lamp & ballast system warranty in the industry.

System Type (2-lamp)	Input Power (W)	Initial System Lumens	System Efficacy LPW	Mean System Lumens	Relative Mean Light Output	Energy Savings
F40T12 – E.S. Magnetic Ballast	86	5795	67	4930	Baseline	Baseline
F34T12 – E.S. Magnetic Ballast	72	4660	65	3960	80%	16%
F032/XP® – QHE2x32T8/UNV ISN-SC	55	5280	96	4965	101%	36%
F028/SS – QHE2x32T8/UNV ISN-SC	48	4800	100	4510	91%	44%



## SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

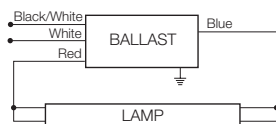
## High Efficiency Universal Voltage (120-277V), Lamp Striation Control



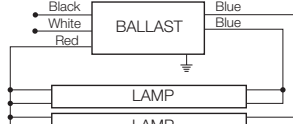
Item Number	OSRAM SYLVANIA Description	Input Current (AMPS)	Lamp Type	Rated Lumens (lm)	No. of Lamps	Ballast Factor (BF)	System Lumens	Mean Lumens	Input Power (W)	System Efficacy (lm/W)	BEF <sup>1</sup>
49968 49851	QHE1X32T8/UNV ISN-SC Banded Pack 10-Pack	0.25/0.11	F032/700	2600	1	0.88	2290	2105	28	82	3.14
		0.25/0.11	F032/XP®	3000	1	0.88	2640	2480	28	94	3.14
		0.22/0.09	F030/SS	2850	1	0.88	2510	2360	26	97	3.38
		0.21/0.09	F028/SS	2725	1	0.88	2400	2255	25	96	3.52
		0.19/0.09	F025/SS	2475	1	0.88	2175	2045	22	99	4.00
49969 49853	QHE2X32T8/UNV ISN-SC Banded Pack 10-Pack	0.47/0.20	F032/700	2600	2	0.88	4575	4205	55	83	1.60
		0.47/0.20	F032/XP	3000	2	0.88	5280	4965	55	96	1.60
		0.44/0.19	F030/SS	2850	2	0.88	5015	4715	52	96	1.69
		0.40/0.18	F028/SS	2725	2	0.88	4800	4510	48	100	1.83
		0.36/0.16	F025/SS	2475	2	0.88	4355	4095	43	101	2.05
49970 49855	QHE3X32T8/UNV ISN-SC Banded Pack 10-Pack	0.69/0.30	F032/700	2600	3	0.88	6865	6310	83/82	83/84	1.07
		0.69/0.30	F032/XP	3000	3	0.88	7920	7445	83/82	95/97	1.07
		0.66/0.28	F030/SS	2850	3	0.88	7525	7075	78/77	96/98	1.14
		0.61/0.26	F028/SS	2725	3	0.88	7195	6760	72	100	1.22
		0.55/0.23	F025/SS	2475	3	0.88	6530	6140	65/64	101/102	1.38
49971 49857	QHE4X32T8/UNV ISN-SC Banded Pack 10-Pack	0.91/0.39	F032/700	2600	4	0.88	9150	8415	108/107	85/86	0.82
		0.91/0.39	F032/XP	3000	4	0.88	10560	9925	108/107	98/99	0.82
		0.86/0.37	F030/SS	2850	4	0.88	10030	9430	102/101	98/99	0.87
		0.80/0.35	F028/SS	2725	4	0.88	9590	9015	95	101	0.93
		0.71/0.30	F025/SS	2475	4	0.88	8710	8190	85	102	1.04

Banded Pack, (add "-B" to Description). Banded Pack and 10-Pack contain 10 pieces each.

<sup>1</sup> Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value).

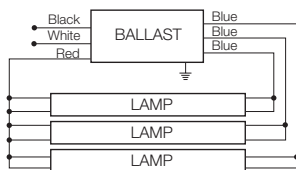


QUICKTRONIC 1x32



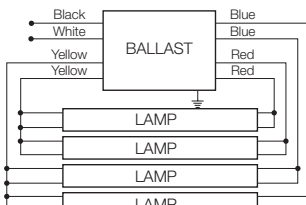
Note: For one lamp application, cap any blue lead. Insulate to 600 volts.

QUICKTRONIC 2x32



Note: For two lamp application, cap any blue lead. For one lamp application, cap any two blue leads. Insulate to 600 volts.

QUICKTRONIC 3x32



Note: For three lamp application, cap any unused blue lead. For two lamp application, cap two blue leads individually. For one lamp application, cap two blue leads, one red and one yellow lead individually. Insulate to 600 volts.

QUICKTRONIC 4x32

### Dimensions:

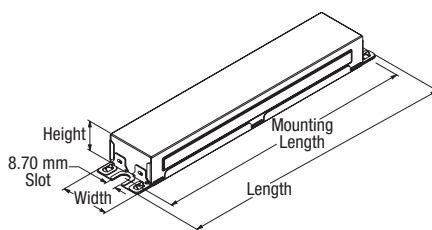
Overall: 9.5" L x 1.68" W x 1.18" H  
Mounting: 8.90"

### Product Weight:

1.6 lbs each (approx.)

### Wiring:

Leads only  
(no connectors provided)



Item Number	49970 QHE 3 x 32T8 / UNV ISN - SC	Case Size
QUICKTRONIC High Efficiency		Starting/Ballast Factor
Number of Lamps		Line Voltage (120-277V)
		Primary Lamp Wattage

## Normal Ballast Factor

# T8

Instant Start  
High Efficiency

## Performance Guide

Data based upon SYLVANIA OCTRON® lamps shown. QUICKTRONIC® QHE Instant Start ballasts are also compatible with other lamp manufacturers equivalent lamp types that meet ANSI specifications.

QHE Instant Start ballasts will operate F17, F25 and F32 (and the SUPERSAVER® & U-Bend equivalent) T8 lamps. Complete performance data is available in the QUICKSYSTEMS section of the SYLVANIA Ballast Technology & Specification Guide.

## Specifications

Data based on F32T8

Starting Method: Instant Start

Ballast Factor: 0.88

Circuit Type: Parallel

Lamp Frequency: >42 kHz

Lamp CCF: Less than 1.7

Starting Temp:<sup>2</sup>

-20°F (-29°C) for OCTRON T8 lamps;

60°F (16°C) for SUPERSAVER® T8 lamps

0°F (-18°C) for F040T8

Input Frequency: 50/60 Hz

Low THD: <10%

Power Factor: >98%

Voltage Range: ±10% of 120-277V  
rated line (108-305V)

UL Listed Class P, Type 1 Outdoor

CSA Certified

70°C Max Case Temperature

FCC 47CFR Part 18 Non-Consumer

Class A Sound Rating

RoHS Compliant<sup>3</sup>

NEMA Premium Electronic Ballast

Program compliant

ANSI C62.41 Cat. A Transient Protection

GFCI compatible

Emergency ballast compatible

Remote Mounting (Max. wire length from ballast case to lampholder):

- 20 ft: full wattage T8s
- 10 ft: energy saving T8s
- 4 ft: 25W energy saving T8s

<sup>2</sup> Operation below 50°F (10°C) may affect light output or lamp operation – see "Low Temp. Starting" definition.

<sup>3</sup> Complies with European Union Restriction of Hazardous Substances Directive (Directive EC 2002/95)

## System Life / Warranty

QUICKTRONIC products are covered by the QUICK 60+® warranty, a comprehensive lamp and ballast system warranty. For additional details, refer to the QUICK 60+ warranty bulletin.

**OSRAM SYLVANIA**  
**National Customer**  
**Service and Sales Center**  
1-800-LIGHTBULB  
(1-800-544-4828)  
www.sylvania.com

Specifications subject to change without notice.