

# QUICKTRONIC® T8 Instant Start Universal Voltage Systems

## High Efficiency Series

QHE T8 ISL

### Lamp / Ballast Guide

#### 32W T8 - OCTRON® lamps

- 1-lamp QHE1x32T8/UNV ISL-SC
- 2-lamp QHE2x32T8/UNV ISL-SC
- 3-lamp QHE3x32T8/UNV ISL-SC
- 4-lamp QHE4x32T8/UNV ISL-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
- Lamp Striation Control (LSC)
- Over 100 LPW (lumens/watt) with OCTRON SUPERSAVER® lamps
- Lowest power T8 I.S. Systems
- Universal voltage (120-277)
- 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

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

### 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**  
**Low Ballast Factor**



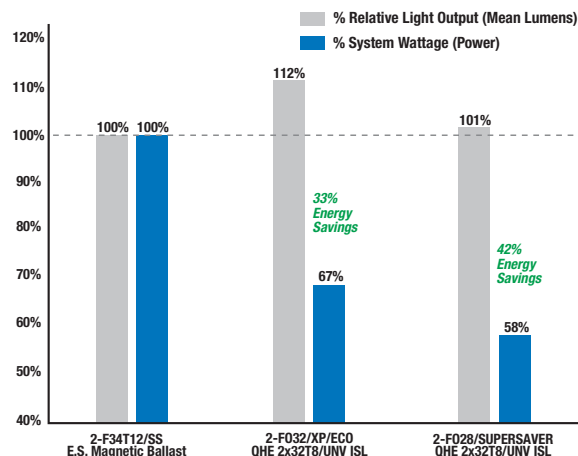
#### 4. New Banded Packaging

- 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 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 |
|--------------------------------|-----------------|-----------------------|---------------------|--------------------|----------------------------|----------------|
| F34T12 - E.S. Magnetic Ballast | 72              | 4660                  | 65                  | 3960               | Baseline                   | Baseline       |
| F032/XP - QHE2x32T8/UNV ISL-SC | 48              | 4680                  | 98                  | 4440               | 112%                       | 33%            |
| F028/SS - QHE2x32T8/UNV ISL-SC | 42              | 4250                  | 101                 | 3995               | 101%                       | 42%            |



SEE THE WORLD IN A NEW LIGHT

**SYLVANIA**


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:** 0.78  
**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 F40T8  
**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>  
 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](http://www.sylvania.com)

## SPECIFICATION DATA

Catalog # Date Type

Project Prepared by

Comments

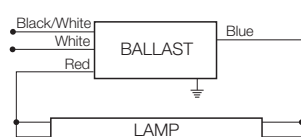
## High Efficiency Universal Voltage (120-277V), Lamp Striation Control



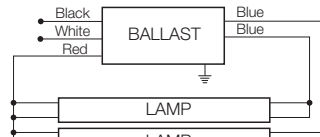
| Item Number    | OSRAM SYLVANIA Description                     | Input Current (AMPS) | Lamp Type      | Rated Lumens (lm) | No. of Lamps | Ballast Factor (BF) | System Lumens | Mean Lumens | Input Power (W) | System Efficacy (lm/W) | BEF <sup>1</sup> |
|----------------|------------------------------------------------|----------------------|----------------|-------------------|--------------|---------------------|---------------|-------------|-----------------|------------------------|------------------|
| 49837<br>49861 | QHE1X32T8/UNV ISL-SC<br>Banded Pack<br>10-Pack | 0.21/0.09            | F032/700       | 2800              | 1            | 0.78                | 2185          | 1965        | 25              | 87                     | 3.12             |
|                |                                                | 0.21/0.09            | F032/XP        | 3000              | 1            | 0.78                | 2340          | 2200        | 25              | 94                     | 3.12             |
|                |                                                | 0.20/0.09            | F030/SS        | 2850              | 1            | 0.78                | 2225          | 2090        | 24              | 93                     | 3.25             |
|                |                                                | <b>0.19/0.08</b>     | <b>F028/SS</b> | <b>2725</b>       | <b>1</b>     | <b>0.78</b>         | <b>2125</b>   | <b>2000</b> | <b>22</b>       | <b>97</b>              | <b>3.55</b>      |
| 49838<br>49863 | QHE2X32T8/UNV ISL-SC<br>Banded Pack<br>10-Pack | 0.17/0.08            | F025/SS        | 2475              | 1            | 0.78                | 1930          | 1815        | 20              | 97                     | 3.90             |
|                |                                                | 0.41/0.18            | F032/700       | 2800              | 2            | 0.78                | 4370          | 3930        | 48              | 91                     | 1.63             |
|                |                                                | 0.41/0.18            | F032/XP        | 3000              | 2            | 0.78                | 4680          | 4400        | 48              | 98                     | 1.63             |
|                |                                                | 0.38/0.16            | F030/SS        | 2850              | 2            | 0.78                | 4445          | 4180        | 45              | 99                     | 1.73             |
| 49839<br>49865 | QHE3X32T8/UNV ISL-SC<br>Banded Pack<br>10-Pack | <b>0.35/0.15</b>     | <b>F028/SS</b> | <b>2725</b>       | <b>2</b>     | <b>0.78</b>         | <b>4250</b>   | <b>3995</b> | <b>42</b>       | <b>101</b>             | <b>1.86</b>      |
|                |                                                | 0.32/0.14            | F025/SS        | 2475              | 2            | 0.78                | 3860          | 3630        | 38              | 102                    | 2.05             |
|                |                                                | 0.61/0.27            | F032/700       | 2800              | 3            | 0.78                | 6550          | 5895        | 73/72           | 90/91                  | 1.08             |
|                |                                                | 0.61/0.27            | F032/XP        | 3000              | 3            | 0.78                | 7020          | 6600        | 73/72           | 96/98                  | 1.08             |
| 49840<br>49867 | QHE4X32T8/UNV ISL-SC<br>Banded Pack<br>10-Pack | 0.58/0.25            | F030/SS        | 2850              | 3            | 0.78                | 6670          | 6270        | 68              | 98                     | 1.15             |
|                |                                                | <b>0.53/0.23</b>     | <b>F028/SS</b> | <b>2725</b>       | <b>3</b>     | <b>0.78</b>         | <b>6380</b>   | <b>5995</b> | <b>63</b>       | <b>101</b>             | <b>1.24</b>      |
|                |                                                | 0.48/0.21            | F025/SS        | 2475              | 3            | 0.78                | 5790          | 5445        | 57              | 102                    | 1.37             |
|                |                                                | 0.80/0.35            | F032/700       | 2800              | 4            | 0.78                | 8735          | 7860        | 95              | 92                     | 0.82             |
|                |                                                | 0.80/0.35            | F032/XP        | 3000              | 4            | 0.78                | 9360          | 8800        | 95              | 99                     | 0.82             |
|                |                                                | 0.75/0.32            | F030/SS        | 2850              | 4            | 0.78                | 8890          | 8360        | 89              | 100                    | 0.88             |
|                |                                                | <b>0.71/0.31</b>     | <b>F028/SS</b> | <b>2725</b>       | <b>4</b>     | <b>0.78</b>         | <b>8500</b>   | <b>7990</b> | <b>84</b>       | <b>101</b>             | <b>0.93</b>      |
|                |                                                | 0.62/0.27            | F025/SS        | 2475              | 4            | 0.78                | 7720          | 7260        | 76/75           | 102/103                | 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).

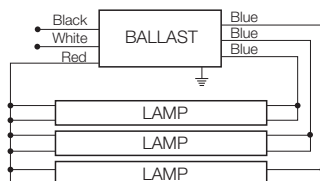


QUICKTRONIC 1x32



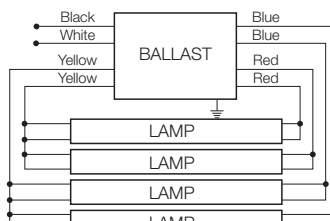
Note: For one lamp application, cap any blue lead. Insulate to 600 volts.

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:

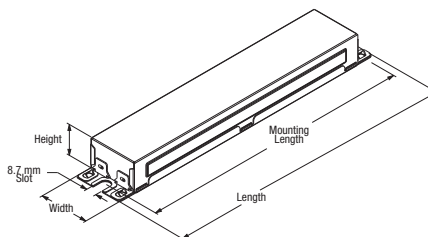
Overall: 9.5" L x 1.68" W x 1.18" H  
 Mounting: 8.90"

## Product Weight:

1.6 lbs each (approx.)

## Wiring:

Leads only  
 (no connectors provided)



Item Number — 49838 QHE 2 x 32T8 / UNV ISL - SC — Case Size  
 QUICKTRONIC High Efficiency — Starting/Ballast Factor  
 Number of Lamps — Line Voltage (120-277V)  
 Primary Lamp Wattage