# OSRAM Quicktronic T8 Instant Start UNV High Ambient Temp Systems High Efficiency Series Instructions



Contents



OSRAM

**OSRAM Quicktronic T8 Instant Start UNV High Ambient Temp Systems High Efficiency Series**


UNV High Ambient Temp. Systems High Efficiency Series

## Lamp / Ballast Guide

**32W T8 – OCTRON® lamps**

1. lamp QHE1x32T8/UNV ISH-HT-SC
2. lamp QHE2x32T8/UNV ISH-HT-SC
3. lamp QHE3x32T8/UNV ISH-HT-SC

**Also operates:**
FBO32, FBO31, FO30/SS (30W), FBO30/ SS (30W), FBO29/SS (29W), FO28/SS (28W) & FO25/SS (25W)

## Key System Features

- High Efficiency Systems over 90%efficient
- 90°C maximum case temp.
- Lamp Striation Control (LSC)
- Over 100 LPW (lumens/watt) with OCTRON SUPERSAVER® lamps
- Lowest power T8 PLUS Systems
- Universal voltage (120-277V)
- 1.18-1.20 ballast factor

- 30-50% Energy savings
- Min. Starting Temp:
- -20°F(-29°C) for T8 lamps
- 60°F (16°C) for Energy Saving T8 lamps <10% THD
- Virtually eliminates lamp flicker
- RoHS compliant
- Lead-free solder and manufacturing process
- 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
- High Light Output:
    - Higher lumens per fixture
    - Fewer fixtures required for same light output
- Parallel Circuitry: keeps remaining lamps lit if one or more go out.
- 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. These ballasts are also RoHS compliant and feature lead-free solder and manufacturing process.
- High Ambient Temp: specifically designed for those applications where the ballast is subject to higher ambient temperatures, such as high bays in industrial installations.
- QUICKTRONIC High Efficiency (QHE) systems are covered by the QUICK 60+® warranty, the first and most comprehensive lamp & ballast system warranty in the industry.

## Application Information

**QUICKTRONIC High Efficiency ballasts**
are ideally suited for:

- Any applications where the highest light output for the lowest amount of power T8 systems are needed for maximum energy savings
- High bay lighting
- Energy Retrofits
- Commercial & Retail
- Hospitality & Institutional
- New Construction

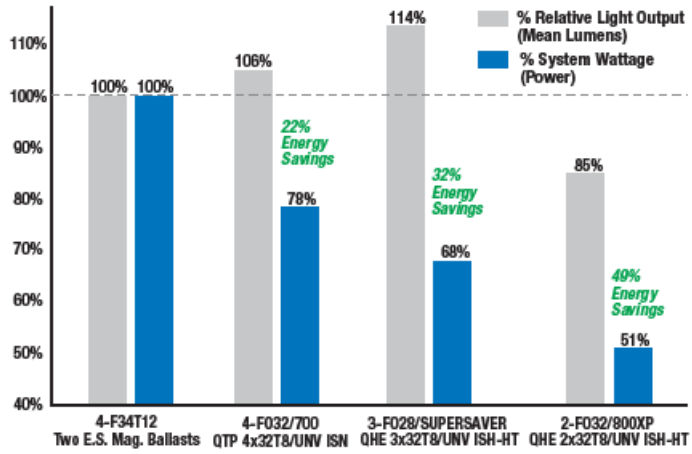
## System Information

**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

| System Type | Input Power (W) | Initial System Lumens | System Efficacy LPW | Mean System Lumens | Relative Mean Light Output | Energy Savings |
|---|---|---|---|---|---|---|
| 4:F34T12 - Two E.S. Magnetic Ballasts | 144 | 9330 | 65 | 7930 | Baseline | Baseline |
| 4:F032T8/700 - QTP4x32T8/UNV-ISN-SC | 112 | 9150 | 82 | 8415 | 106% | 22% |
| 3:F032/XP® - QHE3x32T8/UNV-ISH-HT-SC | 111/109 | 10620 | 96/97 | 9985 | 126% | 23% |
| 3:F028/SS - QHE3x32T8/UNV-ISH-HT-SC | 98/96 | 9650 | 98/101 | 9070 | 114% | 32% |
| 2:F032/XP - QHE2x32T8/UNV-ISH-HT-SC | 74/73 | 7200 | 97/99 | 6770 | 85% | 49% |
| 2:F028/SS - QHE2x32T8/UNV-ISH-HT-SC | 65/64 | 6540 | 101/102 | 6150 | 78% | 55% |




## SPECIFICATION DATA

| Catalog # | Date | Type |
|---|---|---|
| Project | Prepared by | |
| Comments | | |

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

| Item Number | 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[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | QHE1X32T8/UNV ISH-HT-SC | 0.32/0.14 | F032/700 | 2600 | 1 | 1.20 | 3120 | 2870 | 38 | 82 | 3.16 |
| 49496 | *Banded Pack* | 0.32/0.14 | F032/XP® | 3000 | 1 | 1.20 | 3600 | 3385 | 38 | 95 | 3.16 |
| *49495* | *10-Pack* | 0.30/0.13 | F030SS | 2850 | 1 | 1.20 | 3420 | 3215 | 36 | 95 | 3.33 |
| | | **0.27/0.12** | **F028SS** | **2725** | **1** | **1.20** | **3270** | **3075** | **33** | **99** | **3.64** |
| | | 0.26/0.12 | F025/SS | 2475 | 1 | 1.20 | 2970 | 2790 | 30 | 99 | 4.00 |
| | QHE2X32T8/UNV ISH-HT-SC | 0.65/0.28 | F032/700 | 2600 | 2 | 1.20 | 6240 | 5735 | 74/73 | 84/86 | 1.64 |
| 49498 | *Banded Pack* | 0.65/0.28 | F032/XP | 3000 | 2 | 1.20 | 7200 | 6770 | 74/73 | 97/99 | 1.64 |
| *49497* | *10-Pack* | 0.59/0.25 | F030SS | 2850 | 2 | 1.20 | 6840 | 6430 | 70/69 | 98/99 | 1.74 |
| | | **0.55/0.23** | **F028SS** | **2725** | **2** | **1.20** | **6540** | **6150** | **65/64** | **101/102** | **1.88** |
| | | 0.50/0.22 | F025/SS | 2475 | 2 | 1.20 | 5940 | 5585 | 58/57 | 102/104 | 2.11 |
| | QHE3X32T8/UNV ISH-HT-SC | 0.93/0.40 | F032/700 | 2600 | 3 | 1.18 | 9205 | 8460 | 111/109 | 83/84 | 1.08 |
| 49500 | *Banded Pack* | 0.93/0.40 | F032/XP | 3000 | 3 | 1.18 | 10,620 | 9985 | 111/109 | 96/97 | 1.08 |
| *49499* | *10-Pack* | 0.87/0.38 | F030SS | 2850 | 3 | 1.18 | 10,090 | 9485 | 104/103 | 97/98 | 1.15 |
| | | **0.82/0.35** | **F028SS** | **2725** | **3** | **1.18** | **9650** | **9070** | **98/96** | **98/101** | **1.23** |
| | | 0.72/0.31 | F025/SS | 2475 | 3 | 1.18 | 8760 | 8235 | 87/86 | 101/102 | 1.37 |

Banded Pack Item Numbers, (add “-B” to Description). Banded Pack and 10-Pack contain 10 pieces each. Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value). Preliminary specifications. Please contact OSRAM for additional information.

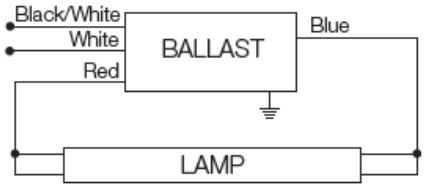
**Specifications**

- **Starting Method**: Instant Start
- **Ballast Factor**: 1.18-1.20
- **Circuit Type**: Parallel
- **Lamp Frequency**: >42 kHz
- **Lamp CCF**: Less than 1.7
- **Starting Temp**:2 -20°F (-29°C) for OCTRON T8 lamps; 60°F (16°C) for SUPERSAVER® T8 lamps
- **Input Frequency**: 50/60 Hz
- **Low THD**: <10%
- **Power Factor**: >98%
- **Voltage Range**: ±10% of 120-277V  rated line (108-305V)

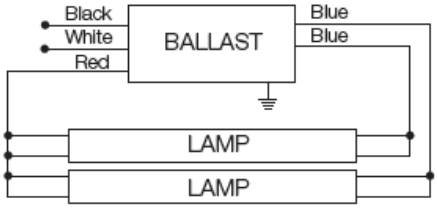
UL Listed Class P, Type 1 Outdoor CSA Certified High Ambient Applications: 90°C Max. Case Temp. (3 yr. warranty) Standard Ambient Applications: 70°C Max. Case Temp. (5 yr. warranty) FCC 47CFR Part 18 Non-Consumer Class A Sound Rating RoHS Compliant3 ANSI C62.41 Cat. A Transient Protection GFCI compatible 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 T8

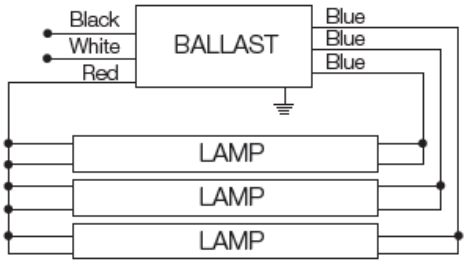
1. Operation below 50°F (10°C) may affect light output or lamp operation – see “Low Temp. Starting” definition.
2. Complies with European Union Restriction of Hazardous Substances Directive (Directive EC 2002/95)




QUICKTRONIC 1x32




QUICKTRONIC 2x32




QUICKTRONIC 3x32

**Dimensions “-SC” Small Enclosure**:

- **Overall**: 9.5″ L x 1.68″ W x 1.18″ H
- **Mounting**: 8.90″

**Product Weight:**
1.6 lbs each (approx.)

**Wiring:**
CKTRO

## 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.



## Documents / Resources

| | |
|---|---|
|  | **OSRAM Quicktronic T8 Instant Start UNV High Ambient Temp Systems High Efficiency Series** [pdf] Instructions<br>Quicktronic T8 Instant Start UNV High Ambient Temp Systems High Efficiency Series, Quicktronic T8, Instant Start UNV High Ambient Temp Systems High Efficiency Series, Instant Start UNV High Ambient Temp Systems, UNV High Ambient Temp Systems, Ambient Temp Systems, Temp Systems, Systems |

## References

- OSRAM - Inventronics