

QUICKTRONIC® T8 Instant Start UNV High Ambient Temp. Systems

Type CC

Lamp Striation Control
High Ballast Factor



High Efficiency Series

QHE T8 ISH CC HT

Lamp / Ballast Guide

32W T8 - OCTRON® lamps
2-lamp QHE2x32T8/UNV-ISH-HT-SC-1
4-lamp QHE4x32T8/UNV-ISH-HT-1

Also operates:

FBO32, FBO31, F030/SS (30W), FBO30/SS (30W), FBO29/SS (29W), F028/SS (28W) & F025/SS (25W), F025, FBO24, F017 & FBO16 lamps

Key System Features

- High Efficiency Systems over 90% efficient
- NEMA Premium Electronic Ballast Program compliant
- UL Type CC Rated (Commercial Cabinet)
- Lamp Striation Control (LSC)
- Min. Starting Temp:
 - -20°F (-29°C) for T8 lamps
 - 60°F (16°C) for Energy Saving T8 lamps
- 90°C maximum case temperature
- QHE ballasts also meets the most demanding utility rebate standards
- RoHS compliant
- Lead-free solder and manufacturing process

Application Information

SYLVANIA QUICKTRONIC High Efficiency (QHE) ballasts are ideally suited for:

UL Type CC

- Refrigerated cases*
- Walk-in coolers*
- Commercial cabinets
- Display cases
- Applications that could expose lamp and sockets to vibration and potential movement

Lamp Striation Control, (LSC)

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

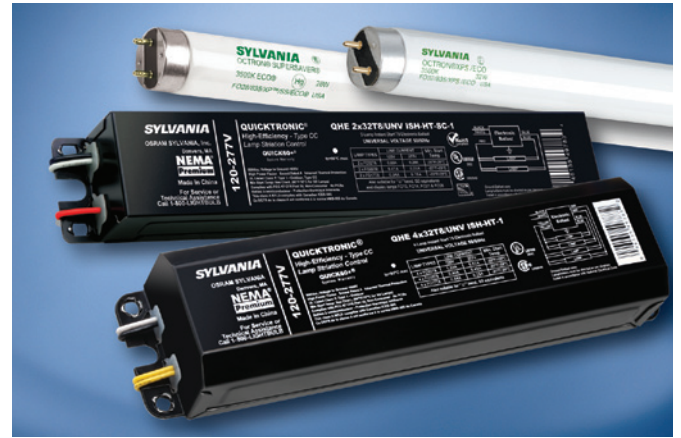
High bay

Warehouses

*T8 energy saving lamps should not be used in applications below 60°F lamp ambient.

SYLVANIA QUICKTRONIC High Efficiency, (QHE) Type CC energy saving electronic T8 ballasts offer seven major advantages:

1. Same Light, Less Power!
 - Up to 6% in energy savings compared to standard efficiency T8 electronic ballasts without compromising light output
 - 50% energy savings when compared to typical magnetically ballasts 400 metal halide systems
2. High Light Output:
 - Higher lumens per fixture
 - Fewer fixtures required for same light output
 - Ideal for high bays
3. UL Type CC compliant: ballasts utilize a micro-controller based circuit to reduce arcing caused by loose connections or improper lamp pin to socket connections.
4. 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.



(Please consult lamp manufacturers for additional details.)

5. NEMA Premium Electronic Ballast Program compliant. The program promotes the use of high efficiency T8 electronic ballasts by meeting or exceeding the Ballast Efficiency Factors, (BEF) established by the CEE, (Consortium for Energy Efficiency). For additional information on this program go to www.cee1.org or www.nema.org

6. High Ambient Temperature: specifically designed for those applications where the ballast is subject to higher ambient temperatures, such as high bays in industrial installations.
7. Available in 2 & 4-lamp models which allows great flexibility for various light levels in high bay applications to replace HID or T12HO lighting applications.

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

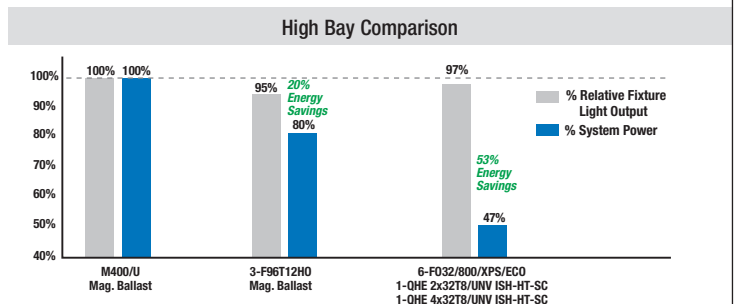
System Information

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
 - Parallel circuitry – keeps remaining lamps lit if one or more go out
- Very low harmonic distortion (<10% THD)
- Operate at >42 kHz to reduce potential interference with infrared control systems

Lamp & Ballast Type	Input Power (W)	Initial LPW	Mean Fixture* Lumens	Relative Fixture* Output	% Energy Savings	% Lamp Life @3hrs/ start
M400/U Magnetic Ballast	452	61	17,784	Baseline	Baseline	Baseline
3-F96T12HO Magnetic Ballast	360	58	16,875	95%	20%	60%
6-F032/800/XPS® 1-QHE2x32 ISH-HT-SC 1-QHE4x32 ISH-HT-SC	214	100	17,238	97%	53%	200%

*Based on Fixture Efficiency: 76% for M400/U and 85% for T12HO and F032T8 lamps.



SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

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



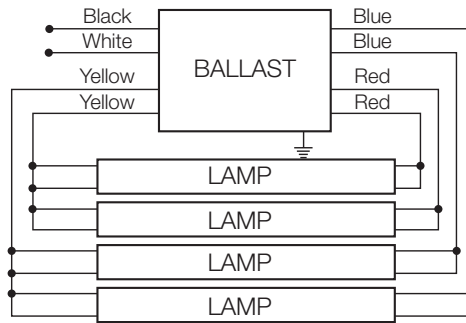
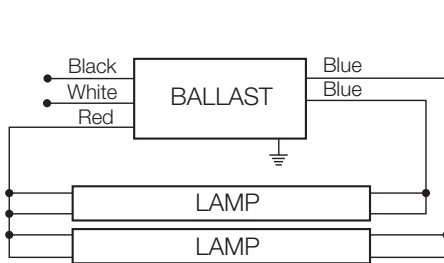
Item Number	OSRAM SYLVANIA Description	Input		Rated Lumens (lm)	No. of Lamps	Ballast Factor (BF)	System Lumens	Mean Lumens	Input Power		System ¹ Efficacy (lm/W)	BEF ²
		Current (AMPS)	Lamp Type						120V	277V		
49783	QHE2x32T8/UNV ISH-HT-SC-1 <i>Banded Pack</i>	0.63/0.28	F032/700	2600	2	1.18	6135	5640	74	73	84	1.62
		0.63/0.28	F032/XPS®	3100	2	1.18	7315	6875	74	73	100	1.62
		0.59/0.25	F030/SS	2850	2	1.18	6725	6320	70	69	97	1.71
		0.55/0.23	F028/SS	2725	2	1.18	6430	6045	65	64	100	1.84
		0.50/0.22	F025/SS	2475	2	1.18	5840	5490	58	57	102	2.07
		0.47/0.21	F025/XPS	2200	2	1.19	5235	4920	57	56	93	2.13
		0.34/0.15	F017/XPS	1400	2	1.20	3360	3160	40	40	84	3.00
49787	QHE4x32T8/UNV ISH-HT-1 <i>Banded Pack</i>	1.22/0.52	F032/700	2600	4	1.15	11,960	10,995	144	141	85	0.82
		1.22/0.52	F032/XPS	3100	4	1.15	14,260	13,405	144	141	101	0.82
		1.13/0.49	F030/SS	2850	4	1.15	13,110	12,325	135	133	99	0.86
		1.06/0.46	F028/SS	2725	4	1.15	12,535	11,785	127	124	101	0.93
		0.94/0.41	F025/SS	2475	4	1.15	11,385	10,700	112	111	103	1.04
		0.92/0.40	F025/XPS	2200	4	1.19	10,470	9845	109	109	96	1.09
		0.64/0.29	F017/XPS	1400	4	1.20	6720	6315	77	77	87	1.56

Banded Pack Item Numbers (add "-B" to Description). Banded Pack contains 10 pieces.

¹ System Efficacy calculation based on lowest input power value

² Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest power value).

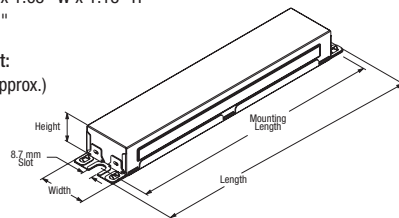
⊗ Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.



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.)

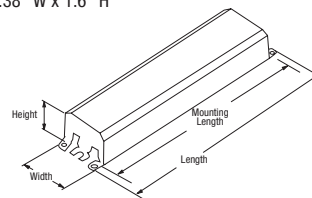
Wiring:
Leads only



Dimensions Standard Enclosure (4L):
Overall: 9.5" L x 2.38" W x 1.6" H
Mounting: 8.90"

Product Weight:
2.8 lbs each (approx.)

Wiring:
Leads only



Item Number	49783	QHE	2	x	32T8 / UNV	ISH - HT - SC - 1	UL Type CC
QUICKTRONIC High Efficiency							Case Size
Number of Lamps							High Case Temp. Rating
Primary Lamp Wattage							Starting/Ballast Factor
							Line Voltage (120-277V)

High 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 manufacturers equivalent lamp types that meet ANSI specifications.

QHE Instant Start ballasts will operate F32, F25, F17 and the U-bend & energy saving 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: 1.15-1.20
- Circuit Type: Parallel
- Lamp Frequency: >42 kHz
- Lamp CCF: Less than 1.7
- Starting Temp:³
 - 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
- UL Type CC Rated
- 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 47 CFR Part 18 Non-Consumer
- Class A Sound Rating
- RoHS Compliant⁴
- ANSI 62.41 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

³ Operation below 50°F (10°C) may affect light output or lamp operation – see "Low Temp. Starting" definition.

⁴ 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.