

# QUICKTRONIC® PROStart® T8 High Ambient Temp. Systems

## High Efficiency Series

QHE T8 PSH HT

### Lamp / Ballast Guide

**Primary Systems**  
 32W T8 - OCTRON® lamps  
 2-lamp QHE2x32T8/UNV PSH-HT  
 3-lamp QHE3x32T8/UNV PSH-HT-SC  
 4-lamp QHE4x32T8/UNV PSH-HT

**Also operates:**

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

### Key System Features

- **High Efficiency Systems** are over 90% efficient
- PROStart Programmed Rapid Start for extended lamp life
- High ballast factor: 1.15 - 1.18
- **Parallel operation** - one lamp out others stay lit
- 90°C maximum case temperature
- UL Type CC
- LSC (Lamp Striation Control)
- Universal input voltage (120-277V)
- Minimum starting temperature:
  - -20°F (-29°C) for T8 lamps
  - 60°F (16°C) for Energy Saving T8 lamps
- RoHS compliant
- Lead-free solder and manufacturing process



### Application Information

#### SYLVANIA QUICKTRONIC PROStart T8 ballasts

are ideally suited for:

- High bay
- Warehouses
- Applications where extended lamp life is required to reduce maintenance costs
- Areas where frequent switching is desired
- Occupancy sensor usage
- Building control systems
- Areas that are underlit

#### SYLVANIA QUICKTRONIC PROStart

programmed rapid start electronic T8 ballasts offer eight major advantages:

1. **Operate 32W linear and U-bend equivalent T8 lamps at High Efficiency and high ballast factor** which increases light levels while optimizing system performance.
2. **Longer Lamp Life:** System PSH, (Programmed Start High Ballast Factor) is the first SYLVANIA high ballast factor model to extend lamp life which is ideal for applications where long lamp life is desired to reduce maintenance costs.
3. **High Ambient Temperature:** specifically designed for those applications where the ballast is subjected to higher ambient temperatures, such as high bays in industrial installations.
4. **Parallel Circuitry:** keeps remaining lamps lit if one or more go out. First SYLVANIA PROStart ballast to offer parallel lamp operation.

### System Information

#### SYLVANIA QUICKTRONIC High Efficiency (QHE) System advantages:

- Operate from 120V through 277V
  - Eliminates “wrong voltage” errors
  - Reduces inventory by 50%
- Utilizes Programmed Rapid Start operation for:
  - Highest system efficacy
  - Longer life
  - Over 100,000 switching cycles for occupancy sensor and building control systems applications.
- Operate at >42 kHz to reduce potential interference with infrared control systems



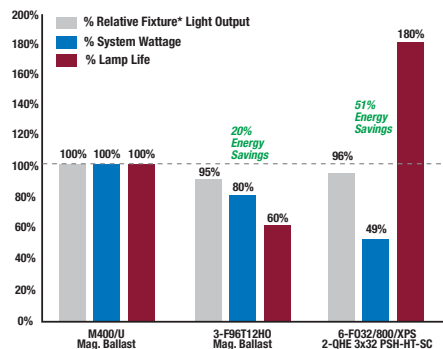
**Type CC, Lamp Striation Control  
 Parallel Operation  
 High Ballast Factor**



5. Available in 2, 3 & 4-lamp models which allow great flexibility for various light levels in high bay applications to replace HID or T12HO lighting systems.
6. **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.
7. **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.)

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 2-QHE3x32 PSH-HT-SC	220	97	17,090	96%	51%	180%

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



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

QHE PROStart ballasts will also operate F17 & F25, SUPERSAVER & U-Bend equivalent T8 lamps.

Specifications

Data based on F32T8

Starting Method: Programmed Rapid Start  
 Ballast Factor: 1.15 - 1.18  
 Circuit Type: Parallel  
 Lamp Frequency: >42 kHz  
 Lamp CGF: 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  
 Input Frequency: 50/60 Hz  
 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  
 Lamp Striation Control (LSC)  
 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 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

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

3 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

SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

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



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>
49450 49459	QHE2x32T8/UNV-PSH-HT Banded Pack Pallet Pack	0.60/0.27	F032/700	2800	2	1.15	6440	5795	72/70	89/92	1.64
		0.60/0.27	F032/XP	3000	2	1.15	6900	6485	72/70	96/99	1.64
		0.57/0.25	F030/SS	2850	2	1.15	6555	6160	69/67	95/98	1.72
		<b>0.53/0.23</b>	<b>F028/SS</b>	<b>2725</b>	<b>2</b>	<b>1.15</b>	<b>6270</b>	<b>5890</b>	<b>63/62</b>	<b>100/101</b>	<b>1.85</b>
		0.47/0.20	F025/SS	2475	2	1.15	5695	5350	56/55	102/104	2.09
		0.46/0.20	F025/XP	2175	2	1.16	5045	4740	55	92	2.11
49520	QHE3x32T8/UNV-PSH-HT-SC Banded Pack	0.94/0.40	F032/700	2800	3	1.15	9660	8695	110/108	88/89	1.06
		0.94/0.40	F032/XP	3000	3	1.15	10,350	9730	110/108	94/96	1.06
		0.88/0.37	F030/SS	2850	3	1.15	9835	9245	104/101	95/97	1.14
		<b>0.81/0.34</b>	<b>F028/SS</b>	<b>2725</b>	<b>3</b>	<b>1.15</b>	<b>9400</b>	<b>8835</b>	<b>95/93</b>	<b>99/101</b>	<b>1.24</b>
		0.72/0.31	F025/SS	2475	3	1.15	8540	8025	85/84	100/102	1.37
		0.70/0.30	F025/XP	2175	3	1.17	7635	7175	83/82	92/93	1.43
49455 49470	QHE4x32T8/UNV-PSH-HT Banded Pack Pallet Pack	1.22/0.53	F032/700	2800	4	1.15	12,880	11,590	143/141	90/91	0.82
		1.22/0.53	F032/XP	3000	4	1.15	13,800	12,970	143/141	97/98	0.82
		1.13/0.49	F030/SS	2850	4	1.15	13,110	12,325	132/130	99/101	0.88
		<b>1.06/0.46</b>	<b>F028/SS</b>	<b>2725</b>	<b>4</b>	<b>1.15</b>	<b>12,535</b>	<b>11,785</b>	<b>124/123</b>	<b>101/102</b>	<b>0.93</b>
		0.95/0.41	F025/SS	2475	4	1.15	11,385	10,700	112/110	102/104	1.05
		0.91/0.40	F025/XP	2175	4	1.17	10,180	9570	107/106	95/96	1.10
		0.63/0.28	F017/XP	1375	4	1.18	6490	6100	73	89	1.62

Banded pack contains 10 pieces, (add "-B" to Description). Pallet Pack contains 500 pieces, (add "-PAL" to Description).

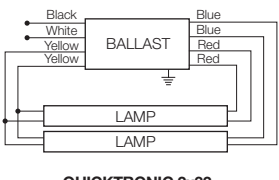
<sup>1</sup> Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value).

<sup>2</sup> Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.

QHE T8 PSH HT

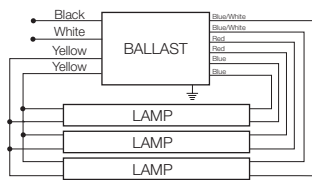


2 lamp



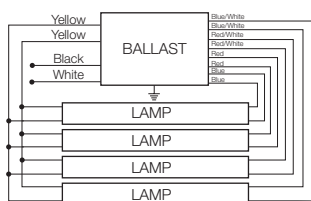
QUICKTRONIC 2x32

3 lamp



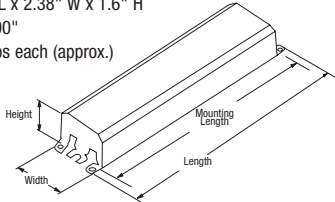
QUICKTRONIC 3x32

4 lamp

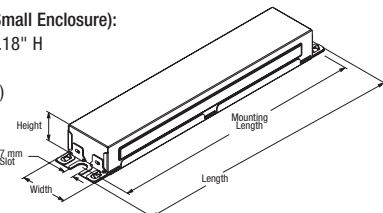


QUICKTRONIC 4x32

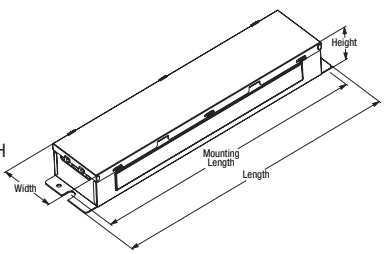
Dimensions 2-lamp:  
 Overall: 9.5" L x 2.38" W x 1.6" H  
 Mounting: 8.90"  
 Weight: 1.6 lbs each (approx.)



Dimensions 3-lamp ("SC" Small Enclosure):  
 Overall: 9.5" L x 1.68" W x 1.18" H  
 Mounting: 8.90"  
 Weight: 1.6 lbs each (approx.)  
 Wiring: Leads only  
 (no connectors provided)



Dimensions 4-lamp:  
 Overall: 11.75" L x 2.38" W x 1.6" H  
 Mounting: 11.13"  
 Weight: 2.9 lbs each (approx.)



Item Number	49450 QHE 2 x 32T8 / UNV PSH HT	High Case Temp. Rating
QUICKTRONIC High Efficiency		Starting Type/Ballast Factor
Number of Lamps (2, 3, 4)		Line Voltage (120-277V)
Primary Lamp Wattage		

Specifications subject to change without notice.