

# QUICKTRONIC® High Efficiency PROStart® T8 Parallel Systems

Universal voltage (120-277V) models

SYLVANIA QUICKTRONIC High Efficiency PROStart PSX programmed rapid start electronic T8 ballast family is the lowest power T8 OCTRON® system available when combined with OCTRON SUPERSAVER® high performance T8 lamps. The **Parallel Circuitry** operates to keep remaining lamps lit if one or more go out.



\*Compared to T12 magnetic systems

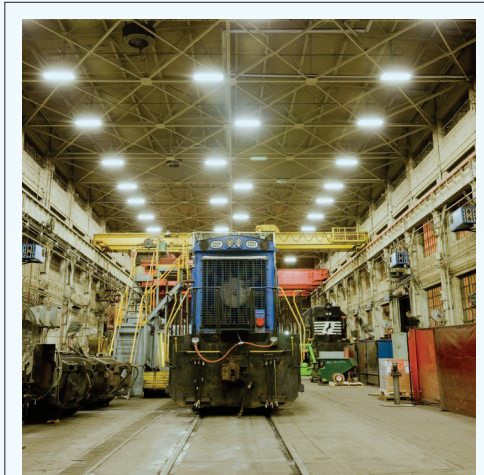
HIGH EFFICIENCY PROStart® T8 "PARALLEL SYSTEMS"

## Features

- Available ballast factors:
  - Xtreme low (0.71 - 0.72)
  - Normal (0.88)
  - High (1.15 - 1.18)
- **Parallel operation**
- Meets UL Type CC requirements
- LSC (Lamp Striation Control) ideal for energy-saving T8 lamps
- Operates OCTRON® F032, F025, F017 and SUPERSAVER® lamps
- -20°F (-29°C) minimum start temperature for OCTRON lamps
- 60°F (16°C) minimum start temperature for SUPERSAVER lamps
- Industry Exclusive – two, three and four-lamp models PSH (90°C maximum case temperature)
- One, two, three and four-lamp PSN (70°C maximum case temperature)

## Applications

- High Ballast Factor (PSH)
- Gymnasiums
- High bay
- Signs
- Warehouses
- Normal & Xtreme Low Ballast Factor (PSN, PSX)
- Office
- Retrofits
- Schools



# QUICKTRONIC® PROStart® T8 Parallel Operation Systems

Type CC, Lamp Striation Control  
Parallel Operation  
Xtreme Low Ballast Factor



## High Efficiency Series

QHE T8 PSX

### Lamp / Ballast Guide

#### Primary Systems

- 32W T8 - OCTRON®
- 1-lamp QHE 1x32T8/UNV PSX-MC
- 2-lamp QHE 2x32T8/UNV PSX-MC
- 3-lamp QHE 3x32T8/UNV PSX-SC
- 4-lamp QHE 4x32T8/UNV PSX-SC

#### Also operates:

- F030/SS, F028/SS, F025/SS, FB032, FB031, FB030/SS, FB029/SS, F025, F017, FB024 & FB016

#### F40T8 operation:

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

### Key System Features

- High Efficiency Systems
- PROstart programmed rapid start
- Parallel operation (one lamp out, remaining lamps stay lit)
- Xtreme Low Ballast Factor: 0.71 - 0.72
- 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 Ballast is ideally suited for:

- Any applications where the lowest power systems are needed for maximum energy savings
- Energy retrofits
- Occupancy sensors
- Building control systems

SYLVANIA QUICKTRONIC High Efficiency PROStart PSX programmed rapid start electronic T8 ballast family offers several advantages:

- **Lowest Power T8 OCTRON system** available when combined with OCTRON SUPERSAVER high performance T8 lamps.
- **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 will minimize or eliminate this condition in most applications. (Please consult lamp manufacturers for additional details.)
- **Micro-Can Enclosure:** the 1 & 2-lamp models are in the micro-can enclosure. This allows the ballast to fit in very small profile fixtures where standard can T8 ballasts are too large.

### System Information

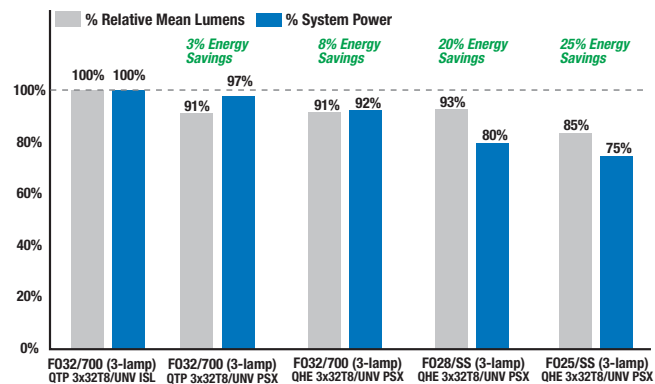
SYLVANIA QUICKTRONIC High Efficiency (QHE) PROStart System advantages:

- Operate from 120V through 277V
  - Eliminates “wrong voltage” errors
  - Reduces inventory by 50%
- Utilizes Programmed Rapid Start operation for:
  - High System Efficacy
  - Longer Life
  - Over 100,000 switching cycles for occupancy sensor and building control systems applications with OCTRON SUPERSAVER lamps.
- Operate at >42 kHz to reduce potential interference with infrared control systems
- 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
- These ballasts are also RoHS compliant and feature lead-free solder, printed circuit boards and manufacturing process



System Type	Input System Power (W)	Initial System Lumens	Mean System Lumens	Initial System Efficacy (lm/W)	Mean Relative Lumens (%)	Energy Savings (%)
F032/700 (3-lamps) - QTP3x32T8/UNV ISL	75	6550	5895	87	Baseline	Baseline
F032/700 (3-lamps) - QTP3x32T8/UNV PSX	73	5965	5370	82	91%	3%
F032/700 (3-lamps) - QHE3x32T8/UNV PSX	69	5965	5370	86	91%	8%
F028/SS (3-lamps) - QHE3x32T8/UNV PSX	60	5805	5455	97	93%	20%
F025/SS (3-lamps) - QHE3x32T8/UNV PSX	56	5345	5025	95	85%	25%

\*Fixture efficiency not considered. \*120V input voltage.



**T8 PROStart®**

**High Efficiency**

**Performance Guide**

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 F017 & F025, 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:** Programmed Rapid Start  
**Ballast Factor:** 0.71 - 0.72  
**Circuit Type:** Parallel  
**Lamp Frequency:** >42 kHz  
**Lamp CCF:** Less than 1.7  
**Starting Temp:†**  
 -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  
 Lamp Striation Control (LSC)  
 CSA Certified (where applicable)  
 70°C Max. Case Temperature  
 FCC 47 CFR Part 18 Non-Consumer  
 Class A Sound Rating  
 RoHS compliant†  
 ANSI C62.41 Cat. A Transient Protection  
 GFCI & 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

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

**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		

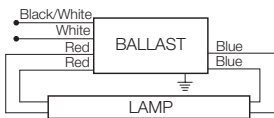
**SUPERSAVER Xtreme Systems Universal Voltage (120-277V)**



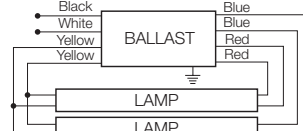
Item Number	OSRAM SYLVANIA Description	Input Current (AMPS)	Lamp <sup>1</sup> Type	Rated <sup>1</sup> Lumens (lm)	No. of Lamps	Ballast <sup>1</sup> Factor (BF)	System <sup>1</sup> Lumens	Mean <sup>1</sup> Lumens	Input <sup>1</sup> Power (W) 120 277	System <sup>1</sup> Efficacy (lm/W)	BEF <sup>2</sup>
51423	QHE1x32T8/UNV PSX-MC Banded 10-Pack	0.21/0.09	F032/700	2800	1	0.72	2000	1800	25 24	82	2.94
		0.21/0.09	F032XPS	3100	1	0.72	2230	2100	25 24	93	3.00
		0.21/0.09	F032XP/XL	2950	1	0.72	2110	1985	25 24	88	2.97
		0.20/0.09	F030/SS	2850	1	0.72	2050	1930	23 23	88	3.10
		<b>0.18/0.08</b>	<b>F028/SS</b>	<b>2725</b>	<b>1</b>	<b>0.72</b>	<b>1960</b>	<b>1845</b>	<b>21 21</b>	<b>93</b>	<b>3.41</b>
0.16/0.07	F025/SS	2475	1	0.72	1780	1675	20 19	92	3.71		
51428	QHE2x32T8/UNV PSX-MC Banded 10-Pack	0.40/0.17	F032/700	2800	2	0.72	4030	3630	48 47	86	1.53
		0.40/0.17	F032XPS	3100	2	0.72	4465	4195	48 47	94	1.53
		0.40/0.17	F032XP/XL	2950	2	0.72	4250	3995	48 47	90	1.53
		0.37/0.16	F030/SS	2850	2	0.72	4105	3860	45 43	95	1.66
		<b>0.34/0.15</b>	<b>F028/SS</b>	<b>2725</b>	<b>2</b>	<b>0.72</b>	<b>3925</b>	<b>3690</b>	<b>41 40</b>	<b>98</b>	<b>1.80</b>
0.31/0.14	F025/SS	2475	2	0.72	3565	3350	38 37	96	1.94		
51433	QHE3x32T8/UNV PSX-SC Banded 10-Pack	0.58/0.25	F032/700	2800	3	0.71	5965	5370	69 67	89	1.06
		0.58/0.25	F032XPS	3100	3	0.71	6605	6205	69 67	99	1.06
		0.58/0.25	F032XP/XL	2950	3	0.71	6285	5905	69 67	94	1.06
		0.54/0.23	F030/SS	2850	3	0.71	6070	5705	65 63	97	1.13
		<b>0.50/0.22</b>	<b>F028/SS</b>	<b>2725</b>	<b>3</b>	<b>0.71</b>	<b>5805</b>	<b>5455</b>	<b>60 59</b>	<b>98</b>	<b>1.20</b>
0.47/0.20	F025/SS	2475	3	0.71	5345	5025	56 55	96	1.28		
51438	QHE4x32T8/UNV PSX-SC Banded 10-Pack	0.76/0.32	F032/700	2800	4	0.71	7920	7125	90 89	89	0.79
		0.76/0.32	F032XPS	3100	4	0.71	8770	8240	90 89	99	0.79
		0.76/0.32	F032XP/XL	2950	4	0.71	8345	7845	90 89	94	0.79
		0.72/0.31	F030/SS	2850	4	0.71	8065	7580	86 84	96	0.84
		<b>0.66/0.28</b>	<b>F028/SS</b>	<b>2725</b>	<b>4</b>	<b>0.71</b>	<b>7745</b>	<b>7280</b>	<b>79 77</b>	<b>100</b>	<b>0.92</b>
0.61/0.26	F025/SS	2475	4	0.71	7060	6640	73 71	99	1.00		

1 See QUICKSYSTEMS for delamp data. 2 Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value). 3 System Efficacy calculation based on lowest input power value. \* Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.

**1 lamp**



**2 lamp**

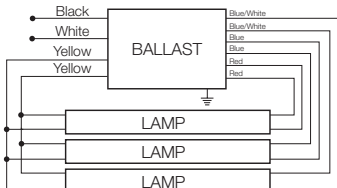


Note: For 1L application, individually cap both RED leads. Insulate to 600 volts.

**Installation Notes**

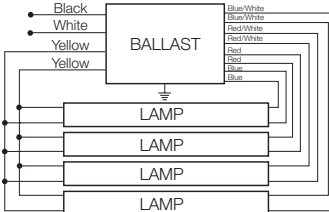
Lamp wiring for 3 & 4 lamp QHE PSX “parallel” models vary from QTP series models. Be sure to wire ballasts per label/schematics shown on this bulletin.

**3 lamp**



Note: For 2L application, individually cap both RED leads. For 1L operation, individually cap both RED and BLUE leads. Insulate to 600 volts.

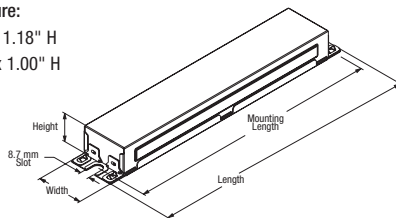
**4 lamp**



Note: For 3L application, individually cap both RED leads. For 2L application, individually cap both RED and BLUE leads. For 1L application, individually cap both RED, BLUE and Red/White leads. For lamps approved for 1L operation, see QUICKSYSTEMS. Insulate to 600 volts.

**Dimensions “MC & SC” Enclosure:**

“SC” Overall: 9.5" L x 1.68" W x 1.18" H  
 “MC” Overall: 9.5" L x 1.30" W x 1.00" H  
 Mounting: 8.90"



**Product Weight:**

QHE1xPSX & QHE2xPSX: 0.66lbs (approx.)  
 QHE2xPSX & QHE3xPSX: 1.27lbs each (approx.)

**Wiring:**

Leads only (no connectors provided)

Item Number	51428 QHE 2 x 32T8 / UNV PSX - MC	Enclosure Type (MC or SC)
QUICKTRONIC High Efficiency		Starting Type/Ballast Factor - PROStart/Xtreme Low BF
Number of Lamps		Line Voltage (120-277V)
Primary Lamp Wattage		