

QUICKTRONIC® PROStart® T8 Parallel Operation Systems

High Efficiency Series

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



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

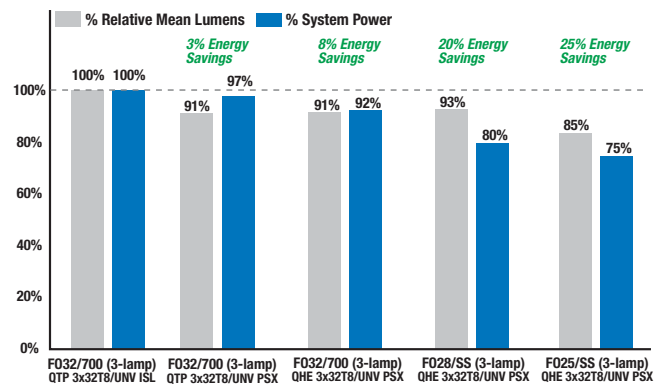
SYLVANIA QUICKTRONIC High Efficiency (QHE) PROStart System advantages:

- 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		

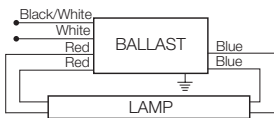
SUPERSAVER Xtreme Systems Universal Voltage (120-277V)



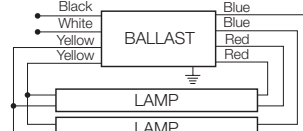
Item Number	OSRAM SYLVANIA Description	Input Current (AMPS)	Lamp ¹ Type	Rated ¹ Lumens (lm)	No. of Lamps	Ballast ¹ Factor (BF)	System ¹ Lumens	Mean ¹ Lumens	Input ¹ Power (W) 120 277	System ¹ Efficacy (lm/W)	BEF ²
51423	QHE1x32T8/UNV PSX-MC Banded 10-Pack	0.21/0.09	F032/700	2800	1	0.72	2000	1800	25 24	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
		0.18/0.08	F028/SS	2725	1	0.72	1960	1845	21 21	93	3.41
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
		0.34/0.15	F028/SS	2725	2	0.72	3925	3690	41 40	98	1.80
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
		0.50/0.22	F028/SS	2725	3	0.71	5805	5455	60 59	98	1.20
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
		0.66/0.28	F028/SS	2725	4	0.71	7745	7280	79 77	100	0.92
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



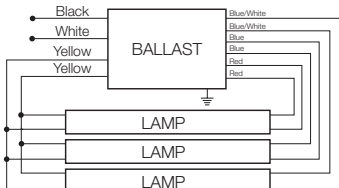
2 lamp



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

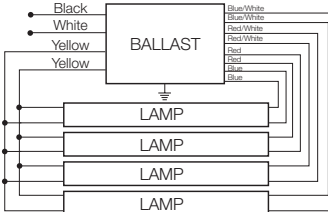
Installation Notes Lamp wiring for 3 & 4 lamp QHE PSX “parallel” models vary from QTP series models. Be sure to wire ballasts per label/schematics shown on this bulletin.

3 lamp



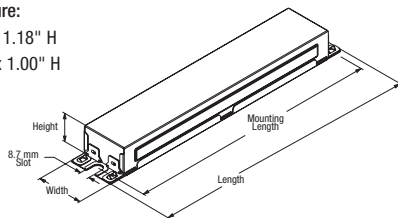
Note: For 2L application, individually cap both RED leads. For 1L operation, individually cap both RED and BLUE leads. Insulate to 600 volts.

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		