QUICKTRONIC® PROStart® T8 Parallel Operation Systems

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

NEMA Premium

RoHS compliant

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:
FO30/SS, FO28/SS, FO25/SS, FBO32, FBO31, FBO30/SS, FBO29/SS, FO25, FO17, FBO24 & FBO16

F40T8 operation:
1 lamp on 2L ballast; 2 lamps on 3L ballast; 3 lamps on 4L ballast

Key System Features

- High Efficiency Systems
- NEMA Premium Electronic Ballast Program compliant
- 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.

- **NEMA Premium Electronic Ballast Program and RoHS compliant:** These ballasts feature lead-free solder and manufacturing. The NEMA Premium 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 details on this program go to: ***www.cee1.org or www.nema.org***

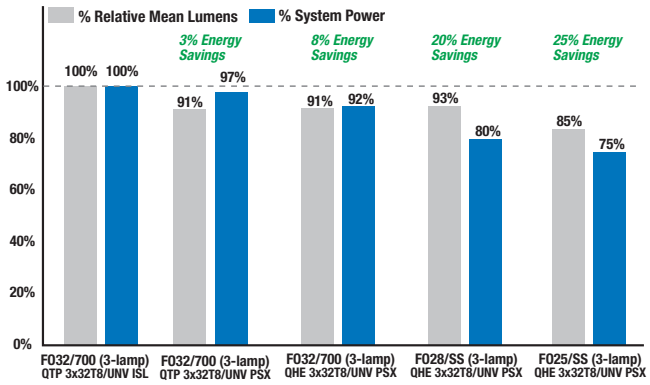
System Information

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 (%)
FO32/700 (3-lamps) - QTP3x32T8/UNV ISL	75	6085	5595	81	Baseline	Baseline
FO32/700 (3-lamps) - QTP3x32T8/UNV PSX	73	5540	5090	76	91%	3%
FO32/700 (3-lamps) - QHE3x32T8/UNV PSX	69	5540	5090	80	91%	8%
FO28/SS (3-lamps) - QHE3x32T8/UNV PSX	60	5805	5455	97	97%	20%
FO25/SS (3-lamps) - QHE3x32T8/UNV PSX	56	5345	5025	95	90%	25%

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



SEE THE WORLD IN A NEW LIGHT SYLVANIA

SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

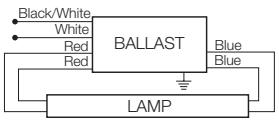
SUPERSAVER Xtreme Systems Universal Voltage (120-277V)

RoHS compliant · NEMA Premium

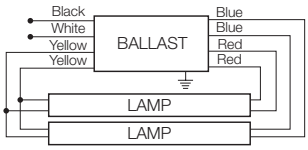
Item Number	OSRAM SYLVANIA Description	Input Current (AMPS)	Lamp[1] Type	Rated[1] Lumens (lm)	No. of Lamps	Ballast[1] Factor (BF)	System[1] Lumens	Mean[1] Lumens	Input[1] Power (W) 120	277	System[3] Efficacy (lm/W)	BEF[2]
51423 ✪	QHE1x32T8/UNV PSX-MC	0.21/0.09	F032/700	2600	1	0.72	1870	1720	25	24	78	2.94
	Banded 10-Pack	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**
		0.16/0.07	F025/SS	2475	1	0.72	1780	1675	20	19	92	3.71
51428 ✪	QHE2x32T8/UNV PSX-MC	0.40/0.17	F032/700	2600	2	0.72	3745	3440	48	47	80	1.53
	Banded 10-Pack	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**
		0.31/0.14	F025/SS	2475	2	0.72	3565	3350	38	37	96	1.94
51433 ✪	QHE3x32T8/UNV PSX-SC	0.58/0.25	F032/700	2600	3	0.71	5540	5090	69	67	83	1.06
	Banded 10-Pack	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**
		0.47/0.20	F025/SS	2475	3	0.71	5345	5025	56	55	96	1.28
51438 ✪	QHE4x32T8/UNV PSX-SC	0.76/0.32	F032/700	2600	4	0.71	7385	6790	90	89	83	0.79
	Banded 10-Pack	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 delamped 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



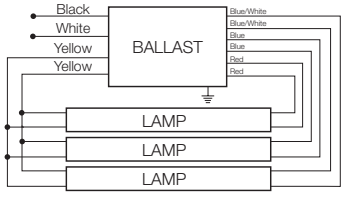
2 lamp



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

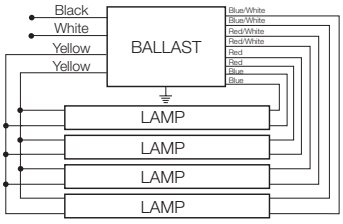
Installation Notes Lamp wiring for 3 & 4 lamp QHE PSX "parallel" models vary from QTP series models. Be sure to wire ballasts per label/ schematics shown on this bulletin.

3 lamp



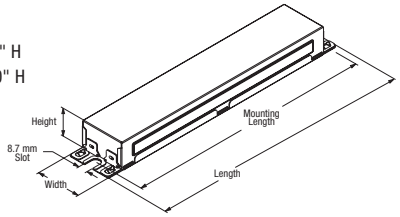
Note: For 2L application, individually cap both RED leads. For 1L operation, individually cap both RED and BLUE leads. Insulate to 600 volts.

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.

"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:
QHE1xPSN & QHE2xPSN: 0.66 lbs. each
QHE3xPSN & QHE4xPSN: 1.27 lbs. each

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

Xtreme Low Ballast Factor

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:[4]
-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
NEMA Premium Electronic Ballast
Program compliant
RoHS compliant[5]
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

Specifications subject to change without notice.

QHE T8 PSX

the system solution®