QUICKTRONIC® PROStart® Xtreme Systems

Ideal for occupancy sensor applications

EXCLUSIVE

PROStart (PS): A programmed rapid start method of starting fluorescent lamps where cathode heat is applied prior to lamp ignition, then removed or reduced once the lamp has ignited (except dimming models which optimize cathode heat). PROStart ballasts maximize the number of lamp starting cycles while maintaining energy efficiency. This is the preferred mode of lamp starting for applications with occupancy sensors and several on/off cycles per day. Additionally, the lamps have the capability to start at temperatures down to -20°F (starting temperatures may vary depending on ballast/lamp types and applications, see actual specifications for details).

Features

- Custom integrated chip (IC) technology
  - Matched with SYLVANIA XPS®, XP®/XL or SUPERSAVER® T8 lamps
- PROStart programmed rapid start
  - For frequent switching
  - Longest lamp life
- Available ballast factors:
  - **Xtreme low (0.71 - 0.72)**
  - **Normal (0.88)**
  - **High (1.15 - 1.18)**

Applications

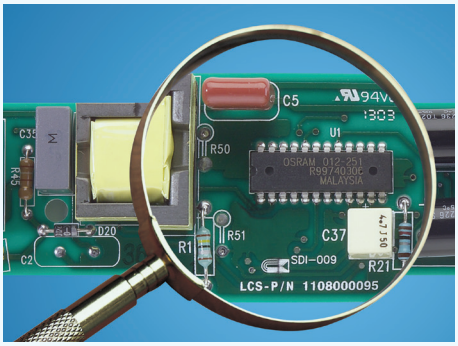
- Ideal for occupancy sensors
- Recessed troffers
- Suspended indirect luminaires

Benefits

- Delivers maximum energy savings, longer lamp life
  - Up to 100,000 lamp starts
  - Minimizes maintenance costs
- Exclusive lamp warranty for occupancy sensor applications
- Facilitates energy code (W/ft^2) compliance

Market Segments

- Education
- Healthcare
- Industrial
- Institutional
- Office
- Retail

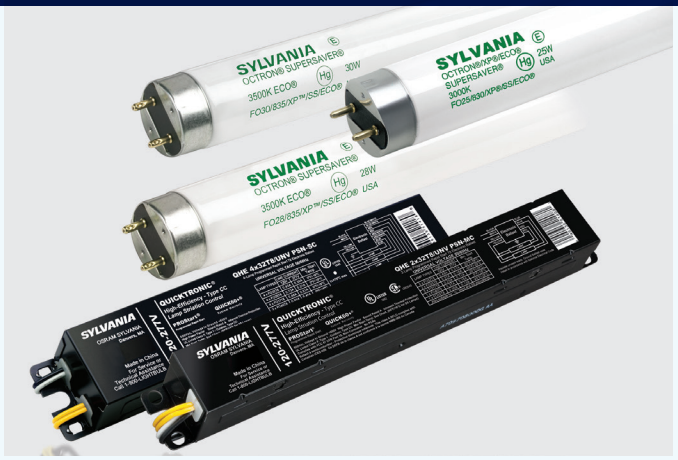


the system solution®

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 SUPER-SAVER® 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® FO32, FO25, FO17 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 (70ºC maximum case temperature)

Applications

High Ballast Factor (PSH)

- Gymnasiums
- High bay
- Signs
- Warehouses

Normal & Xtreme Low Ballast Factor (PSN, PSX)

- Office
- Retrofits
- Schools

the system solution®

QUICKTRONIC® PROStart® T8 Parallel Operation Systems

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

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
- 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.

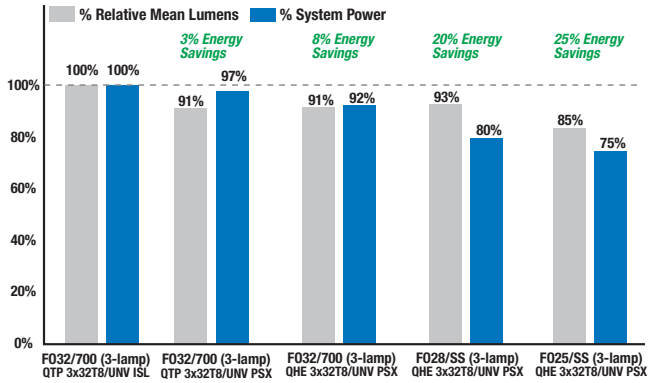
System Information

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 (%)
FO32/700 (3-lamps) - QTP3x32T8/UNV ISL	75	6550	5895	87	Baseline	Baseline
FO32/700 (3-lamps) - QTP3x32T8/UNV PSX	73	5965	5370	82	91%	3%
FO32/700 (3-lamps) - QHE3x32T8/UNV PSX	69	5965	5370	86	91%	8%
FO28/SS (3-lamps) - QHE3x32T8/UNV PSX	60	5805	5455	97	93%	20%
FO25/SS (3-lamps) - QHE3x32T8/UNV PSX	56	5345	5025	95	85%	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		

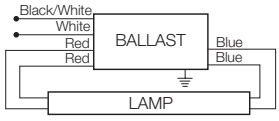
SUPERSAVER Xtreme Systems Universal Voltage (120-277V)

RoHS compliant

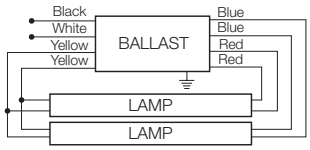
Item Number	OSRAM SYLVANIA Description	Input Current (AMPS)	Lamp[1] Type	Rated[1] Lumens (lm)	No. of Lamps	Ballast[1] Factor (BF)	System[1] Lumens	Mean[1] Lumens	Input[1] Power (W) 120	277	System[3] Efficacy (lm/W)	BEF[2]
51423 ❂	QHE1x32T8/UNV PSX-MC *Banded 10-Pack*	0.21/0.09	F032/700	2800	1	0.72	2000	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**
		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
		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 *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**
		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
		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



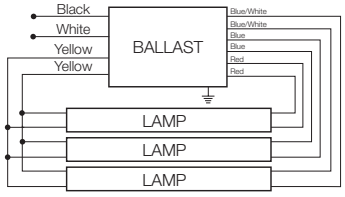
2 lamp



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

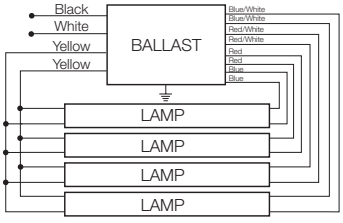
Installation Notes Lamp wiring for 3 & 4 lamp QHE PSX "parallel" models vary from QTP series models. Be sure to wire ballasts per label/ schematics shown on this bulletin.

3 lamp



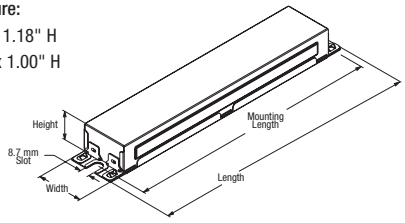
Note: For 2L application, individually cap both RED leads. For 1L operation, individually cap both RED and BLUE leads. Insulate to 600 volts.

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.

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**
QUICKTRONIC High Efficiency
Number of Lamps
Primary Lamp Wattage
Enclosure Type (MC or SC)
Starting Type/Ballast Factor - PROStart/Xtreme Low BF
Line Voltage (120-277V)

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
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

the system solution®

Specifications subject to change without notice.

QUICKTRONIC® PROStart® T8 Parallel Operation Systems

Type CC, Lamp Striation Control
Parallel Operation
Normal Ballast Factor

RoHS compliant

High Efficiency Series

QHE T8 PSN

Lamp / Ballast Guide

Primary Systems
32W T8 - OCTRON® lamps
1-lamp QHE 1x32T8/UNV PSN-MC
2-lamp QHE 2x32T8/UNV PSN-MC
3-lamp QHE 3x32T8/UNV PSN-SC
4-lamp QHE 4x32T8/UNV PSN-SC

Also operates:
FO30/SS, FO28/SS, FO25/SS, FB032, FB031, FB030/SS, FB029/SS, FO25, FO17, 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 over 90% efficient
- PROStart programmed rapid start
  - Extends lamp life
- Parallel operation (one lamp out, remaining lamps stay lit)
- Normal ballast factor: 0.88
- 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, printed circuit board and manufacturing process

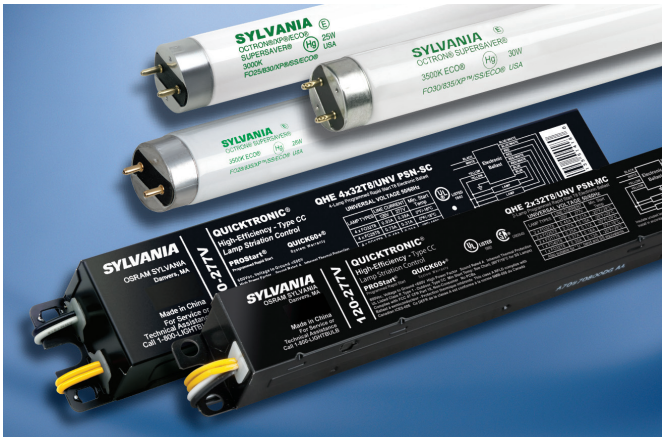
Application Information

SYLVANIA QUICKTRONIC PROStart T8 ballasts
are ideally suited for:

- Any application where extended lamp life is required to reduce maintenance costs
- Occupancy sensors
- Energy retrofits
- Building control systems

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

- **High Efficiency:** Operate 32W linear and U-bend equivalent T8 lamps, saving >2 watts as compared to standard T8 programmed rapid start ballasts.
- **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.



- **Longer lamp life:** PROStart technology extends lamp life compared to instant start models for long or short switching cycles, which is ideal for reducing maitenance costs or for saving energy when using occupancy sensors.
- **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.
- **QUICK 60+® System Warranty:** Setting the standard for quality the system is covered by the first and most comprehensive warranty in the industry.

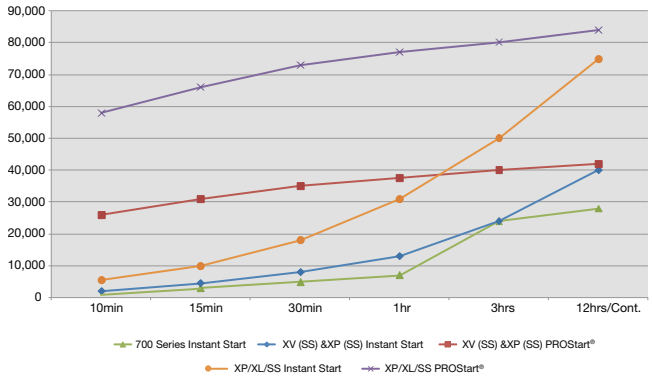
System Information

SYLVANIA QUICKTRONIC High Efficiency (QHE) System advantages:

- Operate from 120V through 277V
  - Eliminates "wrong voltage" errors
  - Reduces inventory by 50%
- Utilize Programmed Rapid Start operation for
  - Longer lamp life
  - Over 100,000 switching cycles for occupancy sensor and building control systems
- Operate at >42 kHz to reduce potential interference with infrared control systems

Lamp & Ballast Type	Input Power (W)	Initial Lumens	Initial LPW	Mean System Lumens	Relative Mean Light Output	% Energy Savings
3-FO32/700 QTP3x32T8/UNV ISN-SC	86	7390	86	6655	100%	0%
3-FO32/800/XP QHE3x32T8/UNV PSN-SC	82	7920	97	7445	112%	5%
3-FO28/SS QHE3x32T8/UNV PSN-SC	72	7195	100	6760	102%	16%
3-FO25/SS QHE3x32T8/UNV PSN-SC	66	6535	99	6140	92%	23%

Lamp Life on QUICKTRONIC® Ballasts



SEE THE WORLD IN A NEW LIGHT SYLVANIA

SPECIFICATION DATA

Catalog #	Date	Type
Project	Prepared by	
Comments		

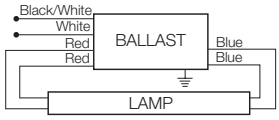
High Efficiency Parallel Wired, Type CC, Lamp Striation Control (120-277V)

RoHS compliant

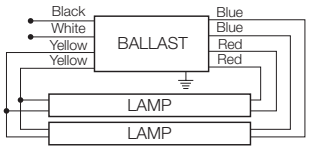
Item Number	OSRAM SYLVANIA Description	Input Current (AMPS)	Lamp Type	Rated Lumens (lm)	No. of Lamps	Ballast Factor (BF)	Initial System Lumens	Mean System Lumens	Input Power (W) 120V	Input Power (W) 277V	System Efficacy[1] (lm/W)	BEF[2]
	QHE1x32T8/UNV PSN-MC	0.26/0.11	F032/700	2800	1	0.88	2465	2220	30	29	85	3.03
51397 ✪	*Banded 10-Pack*	0.26/0.11	F032XPS	3100	1	0.88	2730	2565	30	29	94	3.03
51398 ✪	*Pallet Pack*	0.26/0.11	F032XP/XL	2950	1	0.88	2595	2440	30	29	90	3.03
		0.24/0.10	F030/SS	2850	1	0.88	2510	2360	28	26	97	3.38
		0.22/0.10	**F028/SS**	**2725**	**1**	**0.88**	**2400**	**2255**	**26**	**25**	**96**	**3.52**
		0.20/0.09	F025/SS	2475	1	0.88	2180	2045	23	23	95	3.83
	QHE2x32T8/UNV PSN-MC	0.48/0.21	F032/700	2800	2	0.88	4930	4435	57	55	90	1.60
51408 ✪	*Banded 10-Pack*	0.48/0.21	F032XPS	3100	2	0.88	5455	5130	57	55	99	1.60
51409 ✪	*Pallet Pack*	0.48/0.21	F032XP/XL	2950	2	0.88	5190	5523	57	55	94	3.03
		0.46/0.20	F030/SS	2850	2	0.88	5015	4715	55	53	95	1.66
		0.43/0.18	**F028/SS**	**2725**	**2**	**0.88**	**4795**	**4510**	**51**	**50**	**96**	**1.76**
		0.38/0.16	F025/SS	2475	2	0.88	4355	4095	45	44	99	2.00
	QHE3x32T8/UNV PSN-SC	0.69/0.29	F032/700	2800	3	0.88	7390	6655	83	82	90	1.07
51413 ✪	*Banded 10-Pack*	0.69/0.29	F032XPS	3100	3	0.88	8185	7695	83	82	100	1.07
51414 ✪	*Pallet Pack*	0.69/0.29	F032XP/XL	2950	3	0.88	7790	7320	83	82	95	3.03
		0.68/0.28	F030/SS	2850	3	0.88	7525	7075	80	78	96	1.13
		0.62/0.27	**F028/SS**	**2725**	**3**	**0.88**	**7195**	**6760**	**73**	**72**	**100**	**1.22**
		0.56/0.24	F025/SS	2475	3	0.88	6535	6140	67	66	99	1.33
	QHE4x32T8/UNV PSN-SC	0.93/0.39	F032/700	2800	4	0.88	9855	8870	111	108	91	0.81
51418 ✪	*Banded 10-Pack*	0.93/0.39	F032XPS	3100	4	0.88	10,910	10,255	111	108	101	0.81
51419 ✪	*Pallet Pack*	0.93/0.39	F032XP/XL	2950	4	0.88	10,385	9760	111	108	94	3.03
		0.89/0.38	F030/SS	2850	4	0.88	10,030	9430	105	103	97	0.85
		0.83/0.35	**F028/SS**	**2725**	**4**	**0.88**	**9590**	**9015**	**98**	**95**	**101**	**0.93**
		0.77/0.33	F025/SS	2475	4	0.88	8710	8190	91	89	98	0.99

Banded Pack contains 10 pieces each, (add "-B" to description). Pallet Pack contains 840 pieces, (add "-PAL" to description).
1 System Efficacy is based on the lowest Input Power
2 BEF (Ballast Efficiency Factor) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest input power)
✪ *Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.*

1 lamp



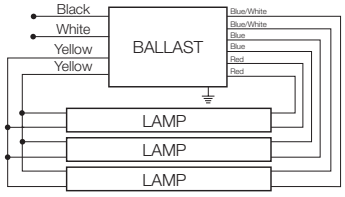
2 lamp



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

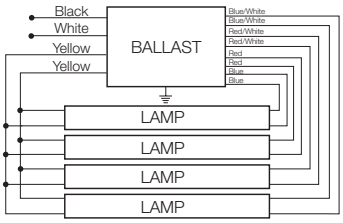
Installation Notes Lamp wiring for 3 & 4 lamp QHE PSN "parallel" models vary from QTP series models. Be sure to wire ballasts per label/schematics shown on this bulletin.

3 lamp



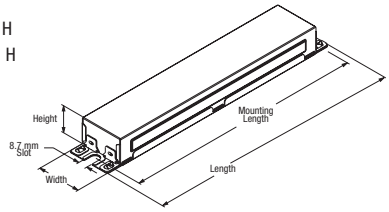
Note: For 2L application, individually cap both RED leads.
For 1L operation, individually cap both RED and BLUE leads.
Insulate to 600 volts.

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 — **51408 QHE 2 x 32T8 / UNV PSN - MC** — Case Size
QUICKTRONIC High Efficiency — Starting/Ballast Factor
Number of Lamps — Line Voltage (120-277V)
Primary Lamp Wattage

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 operate F32 (and the 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: 0.88
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
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[4]
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

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.

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.

QUICKTRONIC® PROStart® T8 High Ambient Temp. Systems

High Efficiency Series

Type CC, Lamp Striation Control
Parallel Operation
High Ballast Factor

RoHS compliant

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, FO30/SS (30W), FO28/SS (28W), FO25/SS (25W), FBO30/SS (30W), FBO29/SS (29W), FO25, FBO24, FO17 & 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

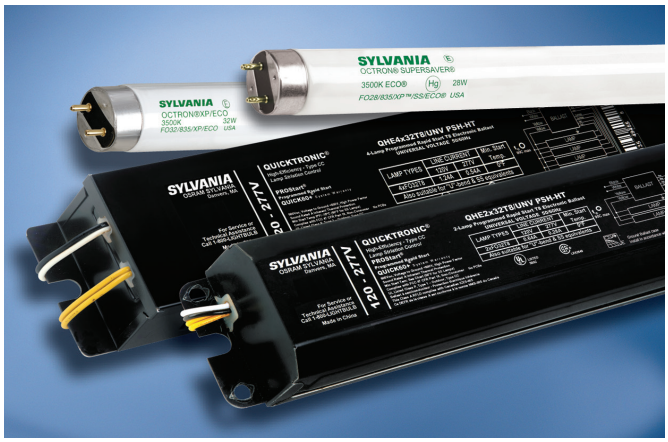
Application Information

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.



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.)

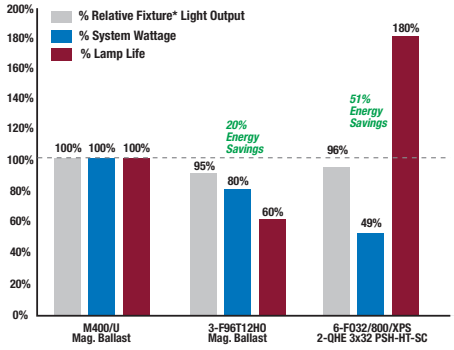
System Information

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

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-FO32/800/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 FO32T8 lamps.



SEE THE WORLD IN A NEW LIGHT SYLVANIA

SPECIFICATION DATA

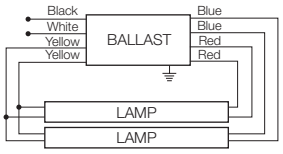
Catalog #	Date	Type
Project	Prepared by	
Comments		

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[1]
	QHE2x32T8/UNV-PSH-HT	0.60/0.27	F032/700	2800	2	1.15	6440	5795	72/70	89/92	1.64
49450	*Banded Pack*	0.60/0.27	F032/XP	3000	2	1.15	6900	6485	72/70	96/99	1.64
49459	*Pallet Pack*	0.57/0.25	F030/SS	2850	2	1.15	6555	6160	69/67	95/98	1.72
		0.53/0.23	**F028/SS**	**2725**	**2**	**1.15**	**6270**	**5890**	**63/62**	**100/101**	**1.85**
		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
		0.32/0.14	F017/XP	1375	2	1.17	3220	3025	38	85	3.08
	QHE3x32T8/UNV-PSH-HT-SC	0.94/0.40	F032/700	2800	3	1.15	9660	8695	110/108	88/89	1.06
49520 ✪	*Banded Pack*	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
		0.81/0.34	**F028/SS**	**2725**	**3**	**1.15**	**9400**	**8835**	**95/93**	**99/101**	**1.24**
		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
		0.48/0.21	F017/XP	1375	3	1.18	4870	4575	56	87	2.11
	QHE4x32T8/UNV-PSH-HT	1.22/0.53	F032/700	2800	4	1.15	12,880	11,590	143/141	90/91	0.82
49455	*Banded Pack*	1.22/0.53	F032/XP	3000	4	1.15	13,800	12,970	143/141	97/98	0.82
49470	*Pallet Pack*	1.13/0.49	F030/SS	2850	4	1.15	13,110	12,325	132/130	99/101	0.88
		1.06/0.46	**F028/SS**	**2725**	**4**	**1.15**	**12,535**	**11,785**	**124/123**	**101/102**	**0.93**
		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

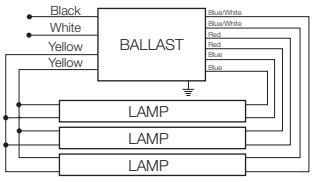
Banded pack contains 10 pieces, (add "-B" to Description). Pallet Pack contains 500 pieces, (add "-PAL" to Description).
1 Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value).
✪ *Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.*

2 lamp



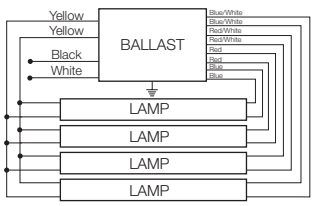
QUICKTRONIC 2x32

3 lamp



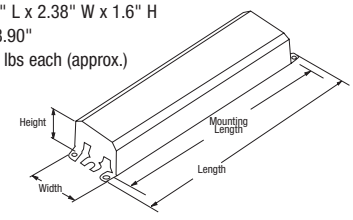
QUICKTRONIC 3x32

4 lamp

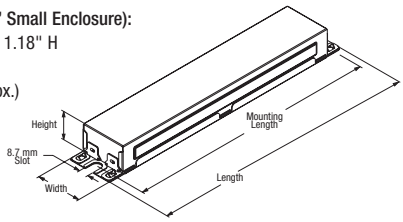


QUICKTRONIC 4x32

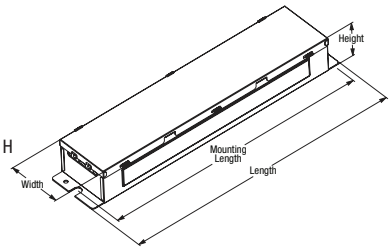
Dimensions 2-lamp:
Overall: 9.5" L x 2.38" W x 1.6" H
Mounting: 8.90"
Weight: 1.6 lbs each (approx.)



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.

NEW

High 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 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 CCF: Less than 1.7
Starting Temp:[2]
-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[3]
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 50ºF (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.

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QHE T8 PSH HT