QUICKTRONIC® PROStart® T8

Parallel Operation Systems
High Efficiency Series

Type CC, Lamp Striation Control
Parallel Operation
Normal Ballast Factor

✓ RoHS compliant

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, 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** 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

Recommended for use with Occupancy Sensors

Application Information

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

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

- **High Efficiency:** Operate 32W linear and 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.
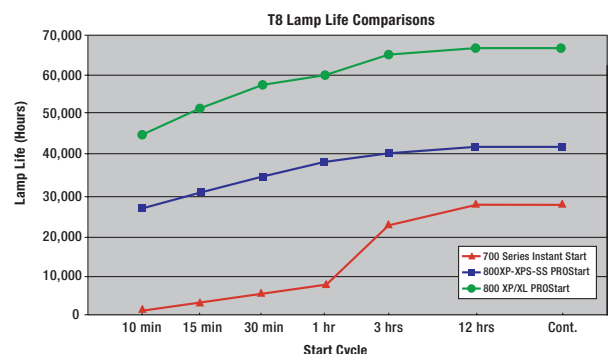
System Information

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	6865	80	6310	100%	0%
3-FO32/800/XP® QHE3x32T8/UNV PSN-SC	82	7920	97	7445	118%	5%
3-FO28/SS QHE3x32T8/UNV PSN-SC	72	7195	100	6760	107%	16%
3-FO25/SS QHE3x32T8/UNV PSN-SC	66	6535	99	6140	97%	23%

T8 Lamp Life Comparisons

Legend:
- 700 Series Instant Start
- 800XP-XPS-SS PROStart
- 800 XP/XL PROStart

X-axis (Start Cycle): 10 min, 15 min, 30 min, 1 hr, 3 hrs, 12 hrs, Cont.
Y-axis: Lamp Life (Hours) 0 to 70,000

OSRAM

SPECIFICATION DATA

Catalog #		Date	Type
Project		Prepared by	
Comments			

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

RoHS compliant

Item Number	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	277V	System Efficacy[1] (lm/W)	BEF[2]
51397 ✪	QHE1x32T8/UNV PSN-MC	0.26/0.11	F032/700	2600	1	0.88	2290	2105	30	29	79	3.03
51398 ✪	*Banded 10-Pack*	0.26/0.11	F032XPS®	3100	1	0.88	2730	2565	30	29	94	3.03
	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
51408 ✪	QHE2x32T8/UNV PSN-MC	0.48/0.21	F032/700	2600	2	0.88	4575	4205	57	55	83	1.60
51409 ✪	*Banded 10-Pack*	0.48/0.21	F032XPS	3100	2	0.88	5455	5130	57	55	99	1.60
	Pallet Pack	0.48/0.21	F032XP/XL	2950	2	0.88	5190	4980	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
51413 ✪	QHE3x32T8/UNV PSN-SC	0.69/0.29	F032/700	2600	3	0.88	6865	6310	83	82	84	1.07
51414 ✪	*Banded 10-Pack*	0.69/0.29	F032XPS	3100	3	0.88	8185	7695	83	82	100	1.07
	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
51418 ✪	QHE4x32T8/UNV PSN-SC	0.93/0.39	F032/700	2600	4	0.88	9150	8415	111	108	85	0.81
51419 ✪	*Banded 10-Pack*	0.93/0.39	F032XPS	3100	4	0.88	10,910	10,255	111	108	101	0.81
	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

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.

2 lamp

Note: For 1L application, individually cap both RED 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 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.

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. ting" definition.

4 Complies with European Union Restriction of Star 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.

Products distributed by LEDVANCE LLC.

For Customer Service contact 1-800-LIGHTBULB

Specifications subject to change without notice.