QUICKTRONIC® PROStart® T8HO
UNV High Ambient Temp. Systems

✓RoHS compliant

Normal Ballast Factor

High Efficiency Series

QHE T8HO HT

Lamp / Ballast Guide

Primary Systems:
FO96 T8HO-OCTRON® lamps
2-lamp QHE 2x86T8HO/UNV PSN-HT

QHE 2x86T8HO/UNV PSN-HT operates 2 or 1 FO96T8HO, F72T8HO(65W), F60T8HO(55W) & F48T8HO(44W)

Key System Features

- High Efficiency Systems — over 90% efficient
- 90°C maximum case temperature
- Normal Ballast Factor: 0.95 - 0.96
- PROStart® Programmed Rapid Start
  - Extends lamp life
  - Ideal for Occupancy sensors
  - Reduces maintenance costs
- Universal input voltage (120-277V)
- Min. Starting Temp:
  - -20°F (-29°C) T8HO lamps
- RoHS compliant
- Lead-free solder and manufacturing process

Recommended for use with Occupancy Sensors

Application Information

SYLVANIA QUICKTRONIC High Efficiency T8HO ballasts
are ideally suited for:
- High Bay
- Energy retrofits
- Warehouse
- Industrial
- New Construction
- Refrigeration Coolers
- Occupancy Sensors Applications

SYLVANIA QUICKTRONIC High Efficiency QHE electronic T8HO PROStart® Normal Ballast Factor ballast operates the family of T8HO lamps at high efficiency which increases light levels while optimizing system performance.

This ballast system is the ideal replacement for existing T12HO applications and HID systems.

Programmed Rapid Start QHE T8HO PROStart® ballast extends lamp life which is ideal for applications where long lamp life is desired to reduce maintenance cost or for use with occupancy sensors.

This ballast design provides the flexibility to operate as 2-lamp or 1-lamp system, allowing for an additional 50% reduction in inventory.

The QUICKTRONIC High Efficiency T8HO PSN "High Ambient Temperature" systems are specifically designed for those applications where the ballast is subjected to higher ambient temperatures, such as high bays in industrial installations. New 90ºC case temperature and -20ºF (-29ºC) starting rating makes this ballast the ideal T8HO system for high bay applications.

This ballast is RoHS compliant and features lead-free solder and manufacturing process.
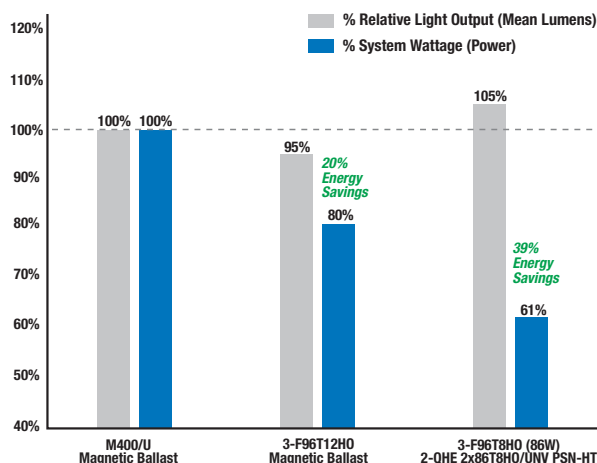
System Information

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 System LPW	Mean Fixture Lumens	Relative Fixture Lumens	% Energy Savings
M400/U Mag. Ballast	452	61	17,784	100%	Baseline
3-F96T12HO Mag. Ballast	360	58	16,875	95%	20%
3-F96T8HO (86W) 2-QHE2x86T8HO/UNV PSN-HT*	277	72	18,673	105%	39%

Fixture Efficiency: M400/U = 0.76, T12HO & T8 = 0.85
*3-lamp (F96T8HO) fixture data is based on operating two 2-lamp ballasts with the second ballast wired to operate as a one-lamp system.

% Relative Light Output (Mean Lumens)
% System Wattage (Power)

- M400/U Magnetic Ballast: 100% / 100%
- 3-F96T12HO Magnetic Ballast: 95% / 80% (20% Energy Savings)
- 3-F96T8HO (86W) 2-QHE 2x86T8HO/UNV PSN-HT: 105% / 61% (39% Energy Savings)

SEE THE WORLD IN A NEW LIGHT

SYLVANIA

SPECIFICATION DATA

Catalog #		Date		Type	
Project			Prepared by		
Comments					

High Efficiency PROStart® T8HO (120-277V) High Ambient Temperature
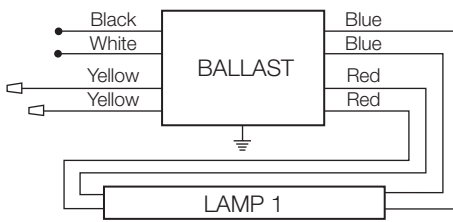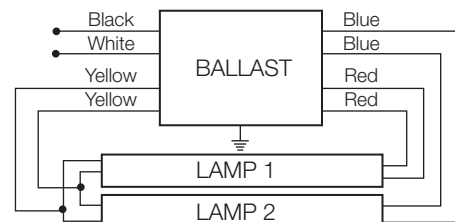
RoHS compliant

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]
50304 ✿	QHE2x86T8HO/ UNV-PSN-HT	**1.54/0.67**	**F96T8HO (86W)**	**8200**	**2**	**0.95**	**15,580**	**14,645**	**182/178**	**86/88**	**0.53**
	Banded Pack	1.13/0.50	F72T8HO (65W)	6100	2	0.96	11,710	10,540	136/133	86/88	0.72
		0.97/0.44	F60T8HO (55W)	5050	2	0.96	9695	8725	115	84	0.83
		0.72/0.34	F48T8HO (44W)	4000	2	0.96	7680	6910	86/85	89/90	1.13
		0.78/0.36	**F96T8HO (86W)**	**8200**	**1**	**0.96**	**7870**	**7400**	**95**	**83**	**1.01**
		0.62/0.30	F72T8HO (65W)	6100	1	0.96	5855	5270	73	80	1.32
		0.50/0.26	F60T8HO (55W)	5050	1	0.96	4850	4365	60	81	1.60
		0.43/0.24	F48T8HO (44W)	4000	1	0.96	3840	3455	51	75	1.88

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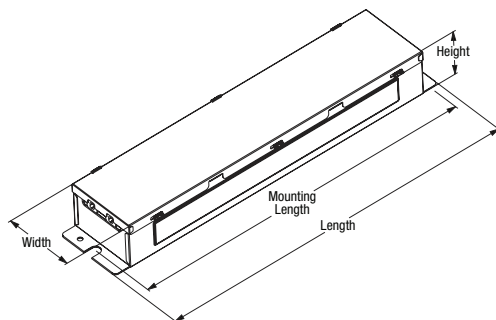✿ Preliminary specifications. Please contact OSRAM SYLVANIA for additional information.

BALLACK wiring diagrams:

Black — Blue
White — Blue
Yellow — Red
Yellow — Red
BALLAST
LAMP 1
LAMP 2

Black — Blue
White — Blue
Yellow — Red
Yellow — Red
BALLAST
LAMP 1

Note: For one lamp application, cap two yellow leads. Insulate to 600 volts.

Dimensions:
Overall: 11.75" L x 2.38" W x 1.6" H
Mounting: 8.90"

Product Weight:
3.5 lbs each (approx.)

Wiring:
Leads only
(no connectors provided)

Height
Mounting Length
Length
Width

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 F48T8HO, F60T8HO and F72T8HO, 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: 0.95 - 0.96
Circuit Type: Series
Lamp Frequency: >42 kHz
Lamp CCF: Less than 1.7
Starting Temp:[2] -20°F (-29°C) for OCTRON T8HO lamps
Input Frequency: 50/60 Hz
THD: <10%
Power Factor: >98%
Voltage Range: ±10%

UL Listed Class P, Type 1 Outdoor
CSA Certified
High Ambient (3 yr. warranty):
90°C Max. Case Temp.
Standard (5 yr. warranty):
70°C Max. Case Temp.
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): up to 8 ft.

2 Operation below 50°F (10°C) may affect light output or lamp operation – see "Low Temp. Starting" definition.

3 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.

©2013 OSRAM SYLVANIA

Item Number — 50304 QHE 2 x 86T8HO UNV PSN-HT — High Case Temp. Rating
QUICKTRONIC High Efficiency — Starting Type/Ballast Factor
Number of Lamps (2) — Line Voltage (120-277V)
Primary Lamp Wattage

∿ **the system solution**®