QUICKTRONIC® T8 Instant Start

Universal Voltage Systems

High Efficiency Series

Lamp Striation Control
Normal Ballast Factor

QHE T8 ISN

Lamp / Ballast Guide

32W T8 – fluorescent lamps
1-lamp QHE 1x32T8 UNV ISN SC EB
2-lamp QHE 2x32T8 UNV ISN SC EB
3-lamp QHE 3x32T8 UNV ISN SC EB
4-lamp QHE 4x32T8 UNV ISN SC EB

Also operates:
FB32, FB31, F25, FB24, F17, FB16, F30/ES (30W), FB30/ES (30W), FB29/ES (29W), F28/ES (28W) & F25/ES (25W)

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
- Lamp Striation Control (LSC)
- Over 100 LPW (lumens/watt) with energy-saving T8 lamps
- Lowest power T8 I.S. Systems
- Universal voltage (120-277)
- Small Can enclosure size
- 30-50% energy savings
- Min. Starting Temp:
  - -20°F (-29°C) for T8 lamps
  - 60°F (16°C) for energy-saving T8 lamps
  - 0°F (-18°C) for F40T8 lamps
- <10% THD
- Virtually eliminates lamp flicker
- RoHS compliant
- Lead-free solder and manufacturing process

Application Information

QUICKTRONIC High Efficiency ballasts

are ideally suited for:

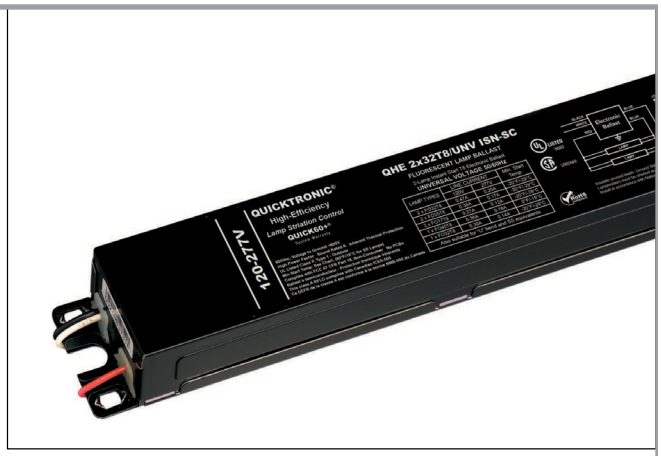
- Any applications where the lowest power T8 systems are needed for maximum energy savings
- Energy Retrofit
- Commercial & Retail
- Hospitality & Institutional
- New Construction

Lamp Striation Control (LSC)

- General lighting applications where energy saving T8 lamps may striate, particularly for the F25 energy saving T8 lamps.

QUICKTRONIC High Efficiency (QHE) energy-saving electronic T8 ballasts offer several advantages:

1. **Same Light, Less Power!**
   - **Up to 6% in energy savings** compared to standard T8 low power electronic ballasts without compromising light output
   - **Maximum energy savings** when compared to F40T12 magnetically ballasted systems
2. **Parallel Circuitry:** keeps remaining lamps lit if one or more go out.
3. **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
4. New Banded Packaging
   - Distributor-friendly for easy stocking and individual ballast sales
   - Reduced waste
   - Easy removable bands
   - No tangled wires



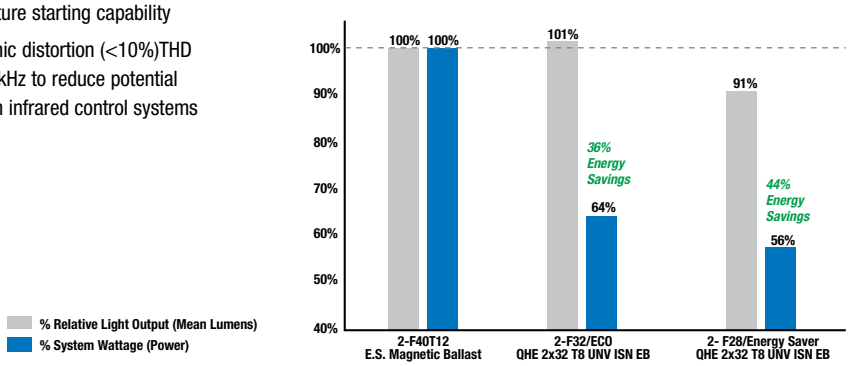
These ballasts are also RoHS compliant and feature lead-free solder and manufacturing process.

System Information

QUICKTRONIC High Efficiency (QHE)
System advantages:

- Operate from 120V through 277V
  - Eliminates "wrong voltage" errors
  - Reduces inventory by 50%
- Utilizes Instant Start operation for
  - Highest System Efficacy
  - Low temperature starting capability
- Very low harmonic distortion (<10%)THD
- Operate at >42 kHz to reduce potential interference with infrared control systems

System Type (2-lamp)	Input Power (W)	Initial System Lumens	System Efficacy LPW	Mean System Lumens	Relative Mean Light Output	Energy Savings
F40T12 – E.S. Magnetic Ballast	86	5795	67	4930	Baseline	Baseline
F34T12 – E.S. Magnetic Ballast	72	4660	65	3960	80%	16%
F32 - QHE 2X32T8 UNV ISN SC EB	**55**	**5280**	**96**	**4965**	**101%**	**36%**
F28/ES - QHE 2X32T8 UNV ISN SC EB	**48**	**4800**	**100**	**4510**	**91%**	**44%**



SPECIFICATION DATA

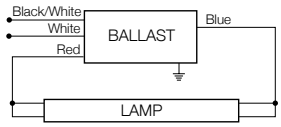
Catalog #	Date	Type
Project	Prepared by	
Comments		

High Efficiency Universal Voltage (120-277V), Lamp Striation Control

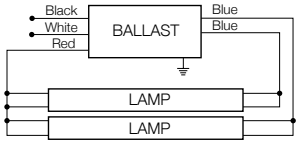
Item Number (NAED)	Description	Input Current (AMPS)	Lamp Type	Rated Lumens (lm)	No. of Lamps	Ballast Factor (BF)	System Lumens	Mean Lumens	Input Power (W)	System Efficacy (lm/W)	BEF[1]
*2828WA (49851)	QHE 1X32T8 UNV ISN SC EB J10	0.25/0.11	F32	3000	1	0.88	2640	2480	28	94	3.14
		0.22/0.09	F30/ES	2850	1	0.88	2510	2360	26	97	3.38
		0.21/0.09	**F28/ES**	**2725**	**1**	**0.88**	**2400**	**2255**	**25**	**96**	**3.52**
		0.19/0.09	F25/ES	2475	1	0.88	2175	2045	22	99	4.00
*2828WE (49853)	QHE 2X32T8 UNV ISN SC EB J10	0.47/0.20	F32	3000	2	0.88	5280	4965	55	96	1.60
		0.44/0.19	F30/ES	2850	2	0.88	5015	4715	52	96	1.69
		0.40/0.18	**F28/ES**	2725	**2**	**0.88**	**4800**	**4510**	**48**	**100**	**1.83**
		0.36/0.16	F25/ES	2475	2	0.88	4355	4095	43	101	2.05
*2828WH (49855)	QHE 3X32T8 UNV ISN SC EB J10	0.69/0.30	F32	3000	3	0.88	7920	7445	83/82	95/97	1.07
		0.66/0.28	F30/ES	2850	3	0.88	7525	7075	78/77	96/98	1.14
		0.61/0.26	**F28/ES**	**2725**	**3**	**0.88**	**7195**	**6760**	**72**	**100**	**1.22**
		0.55/0.23	F25/ES	2475	3	0.88	6530	6140	65/64	101/102	1.38
*2828X0 (49857)	QHE 4X32T8 UNV ISN SC EB J10	0.91/0.39	F32	3000	4	0.88	10560	9925	108/107	98/99	0.82
		0.86/0.37	F30/ES	2850	4	0.88	10030	9430	102/101	98/99	0.87
		0.80/0.35	**F28/ES**	**2725**	**4**	**0.88**	**9590**	**9015**	**95**	**101**	**0.93**
		0.71/0.30	F25/ES	2475	4	0.88	8710	8190	85	102	1.04

NAED in parentheses is provided as a cross reference for the new item number.

1 Ballast Efficiency Factor (BEF) shown = (Ballast Factor x 100) divided by Input Power (Note: calculation based on lowest wattage value).

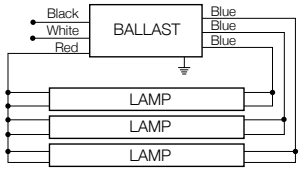


QUICKTRONIC 1x32



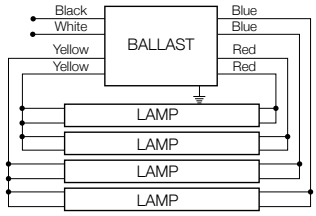
Note: For one lamp application, cap any blue lead. Insulate to 600 volts.

QUICKTRONIC 2x32



Note: For two lamp application, cap any blue lead. For one lamp application, cap any two blue leads. Insulate to 600 volts.

QUICKTRONIC 3x32



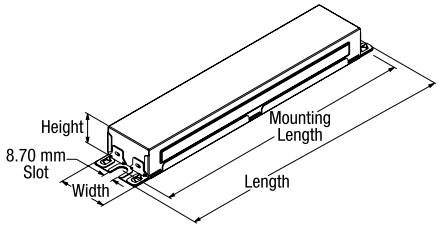
Note: For three lamp application, cap any unused blue lead. For two lamp application, cap two blue leads individually. For one lamp application, cap two blue leads, one red and one yellow lead individually. Insulate to 600 volts.

QUICKTRONIC 4x32

Dimensions:
Overall: 9.5" L x 1.68" W x 1.18" H
Mounting: 8.90"

Product Weight:
1.6 lbs each (approx)

Wiring:
Leads only (no connectors provided)



Item Number *2828WH QHE 3 x 32T8 UNV ISL SC EB

- QUICKTRONIC High Efficiency
- Number of Lamps
- Primary Lamp Wattage
- Electronic Ballast
- Starting/Ballast Factor
- Low Power System
- Line Voltage (120-277V)

Normal Ballast Factor

T8 Instant Start

High Efficiency

Performance Guide

QUICKTRONIC® QHE Instant Start ballasts are compatible with other lamp manufacturers equivalent lamp types that meet ANSI specifications.

QHE Instant Start ballasts will operate F17, F25 and F32 (and energy saving & U-Bend equivalent) T8 lamps.

QHE T8 ISN

Specification

Data based on F32T8

Starting Method: Instant Start
Ballast Factor: 0.88
Circuit Type: Parallel
Lamp Frequency: > 42 kHz
Lamp CCF: Less than 1.7
Starting Temp:[2]
-20°F (-29°C) for T8 lamps;
60°F (16°C) for energy-saving T8 lamps 0°F (-18°C) for F40T8
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
CSA Certified
70°C Max Case Temperature
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 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 (Directive EC 2002/95)

Warranty

QUICKTRONIC® Ballasts have a 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/support/warranty/terms-and-conditions