SINCE 1945

KEYSTONE

LIGHT MADE EASY

LIGHTING PRODUCTS
QUICK REFERENCE GUIDE

FEBRUARY 2018

3 GENERATIONS OF FAMILY OWNERSHIP
Left: Ira Greenberg, CEO **I Center:** Marvin Spielman, Founder **I Right:** Fred Greenberg, President and CFO

Since our founding more than 70 years ago by a veteran returning home from World War II, Keystone has grown into North America's leading independently owned driver, ballast, and lighting manufacturer.

We serve the largest lighting fixture manufacturers in North America as well as thousands of local, regional, and national wholesale distributors.

Now in our third generation of family ownership, we are proud of our manufacturing heritage and our unique ability to meet the changing needs of our OEM and distributor customers. Since 1945, our dedication to product innovation and exceptional service has earned our customers' trust. No wonder why many of our customers have been loyal to us since day one!

HERE FOR YOU
SINCE
1945
CELEBRATING 70 YEARS

ONE STOP SHOP

Keystone is the one stop shop for all your lighting needs: LED solutions, LED tubes and lamps, ballasts and retrofit kits.

100%
SATISFACTION
GUARANTEED

Customer satisfaction is our top priority. Our phones are always answered by an educated, caring team member. Should you need it, our products are backed with an industry-leading warranty.

Proudly standing behind more than
100 MILLION
KEYSTONE LIGHTING PRODUCTS in use today.

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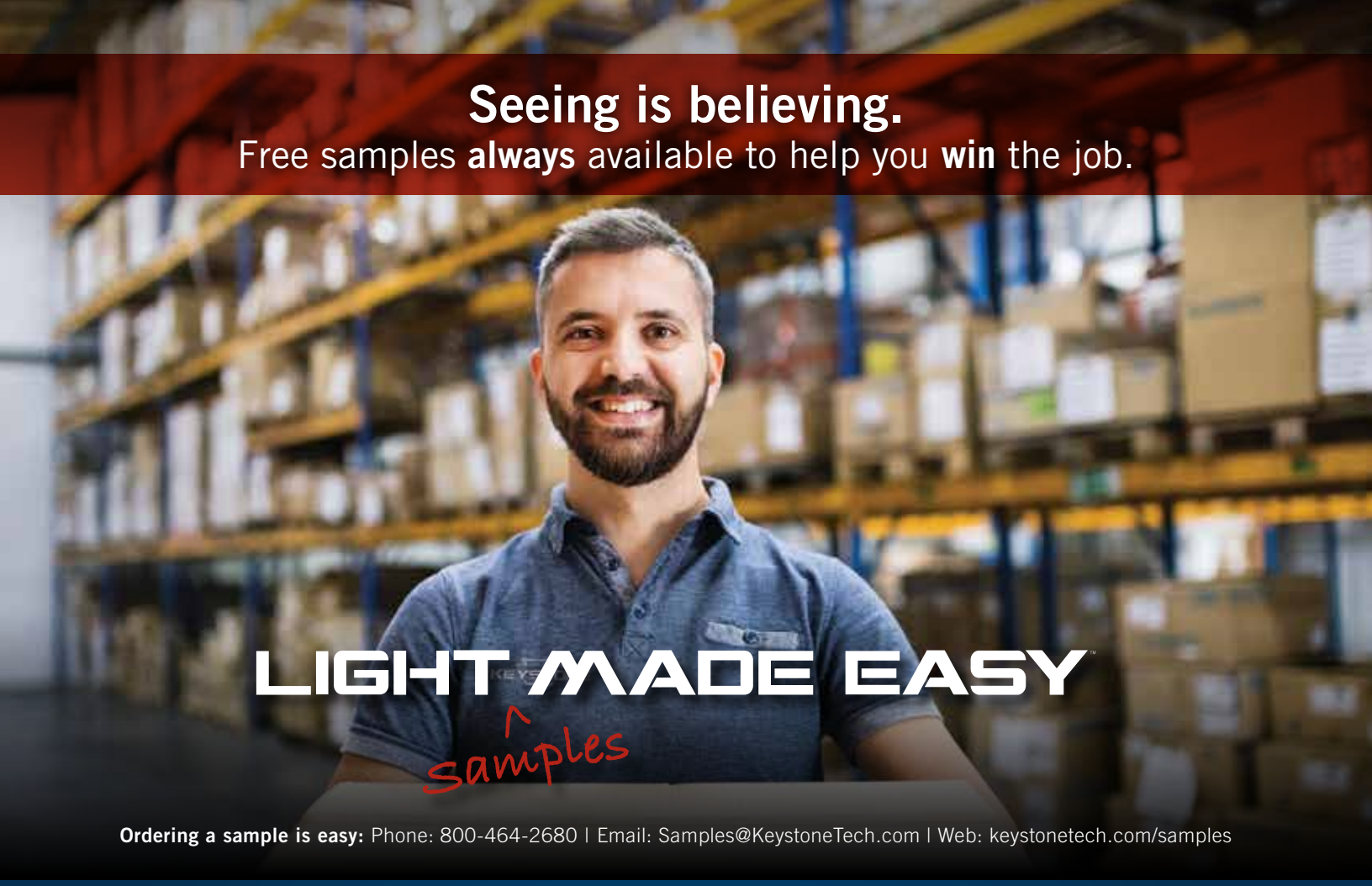
FREE PRODUCT SAMPLES AVAILABLE UPON REQUEST.
Call 800.464.2680 or email us at samples@keystonetech.com

Seeing is believing.

Free samples **always** available to help you **win** the job.



Ordering a sample is easy: Phone: 800-464-2680 | Email: Samples@KeystoneTech.com | Web: keystonetech.com/samples

QUICK SHIP PROGRAM

Keystone's got you covered from Florida to Oregon and everywhere in between.

Time is money when it comes to servicing your customers. That's why we pledge to ship most items the very same day you place your order. In fact, most orders are **DELIVERED NEXT DAY** thanks to Keystone's strategically located, nationwide fulfillment centers.

Our network of **22 FULFILLMENT CENTERS** across the country enables industry-leading service with next day delivery to most points in the United States. **Need it even faster?** Same day pickup is available. **Have questions?** Our personal customer service will get you the answers you need right away.

Headquarters: Philadelphia, PA

Additional Fulfillment Center Locations:

Atlanta, GA
Boston, MA
Charlotte, NC
Chicago, IL
Cincinnati, OH
Dallas, TX
Denver, CO
Detroit, MI
Fort Lauderdale, FL
Houston, TX
Indianapolis, IN
Kansas City, MO
Los Angeles, CA
Louisville, KY
Memphis, TN
Minneapolis, MN
Nashville, TN
New Orleans, LA
Portland, OR
San Francisco, CA
Syracuse, NY

LINEAR LED TUBES

Sign Hero LED Sign Tubes

2018 AWARD WINNER NAILD Best Lamp

SIGN HERO 360° LED SIGN TUBE

2018 AWARD WINNER NAILD Best Overall Product

Introducing Keystone's 360° LED Sign Tube: The Easiest LED Installation

A perfect solution for retrofits or new sign installations, as well as single or double sided sign needs. With revolutionary DirectDrive technology there's no need for an external driver or ballast, saving precious labor time and costs. Maintenance professionals can install our 360° LED Sign Tube in five minutes or less!

Available for all size sign cabinets

The 360˚ LED Sign Tube is available in all of the lamp lengths typically used to replace T8HO and T12HO fluorescent lamps, including:

Catalog Number	Nominal Length	CRI	Wattage	Socket Type	Total Lumens	Efficacy	Lumens Per Side	Lumens/Ft, Per Side
KT-LED7T8-18P2S-8xx-D	18"	>80	7W	R17d	900	129 lm/W	450	300
KT-LED10T8-24P2S-8xx-D	24"	>80	10W	R17d	1,200	120 lm/W	600	300
KT-LED13T8-30P2S-8xx-D	30"	>80	13W	R17d	1,600	123 lm/W	800	320
KT-LED16T8-36P2S-8xx-D	36"	>80	16W	R17d	2,000	125 lm/W	1,000	333
KT-LED18T8-42P2S-8xx-D	42"	>80	18W	R17d	2,250	125 lm/W	1,125	321
KT-LED21T8-48P2S-8xx-D	48"	>80	21W	R17d	2,600	124 lm/W	1,300	325
KT-LED26T8-60P2S-8xx-D	60"	>80	26W	R17d	3,250	125 lm/W	1,625	325
KT-LED28T8-64P2S-8xx-D	64"	>80	28W	R17d	3,450	123 lm/W	1,725	325
KT-LED31T8-72P2S-8xx-D	72"	>80	31W	R17d	4,000	129 lm/W	2,000	333
KT-LED37T8-84P2S-8xx-D	84"	>80	37W	R17d	4,700	127 lm/W	2,350	336
KT-LED42T8-96P2S-8xx-D	96"	>80	42W	R17d	5,300	126 lm/W	2,650	331
KT-LED47T8-108P2S-8xx-D	108"	>80	47W	R17d	5,800	123 lm/W	2,900	322
KT-LED52T8-120P2S-8xx-D	120"	>80	52W	R17d	6,400	123 lm/W	3,200	320

*_8xx_ denotes several color temperatures available:

840	800 Series, 4000K	**865**	800 Series, 6500K

PRODUCT FEATURES

- Plastic/aluminum construction
- Operating temperature: -20ºC/-4ºF to 55ºC/131ºF
- For installation video, visit keystonetech.com/video

ACCESSORIES

Catalog Number	Description
KTSP-10kV	External surge protector; input voltage: 120-277V; maximum peak current: 10kV; IP65 Rated
KT-SH-4L-CABLE-KIT	Cable mounting accessory for SignHero LED lamps; 1-4 lamp applications; designed to prevent lamp sagging for horizontal applications over 8' long; includes options for mounting via magnets or tek screws
KT-SH-6L-CABLE-KIT	Cable mounting accessory for SignHero LED lamps; 1-6 lamp applications; designed to prevent lamp sagging for horizontal applications over 8' long; includes options for mounting via magnets or tek screws

LINEAR LED TUBES

T5 DirectDrive

Intertek · Classified UL US · RoHS Compliant · 5 YEAR WARRANTY · 50,000 HOUR LIFETIME

DLC LISTED

NEW! DIRECTDRIVE LED
LINE VOLTAGE T5 TUBES

BYPASS THE BALLAST

PRODUCT FEATURES

- **Replacement for conventional T5HE and T5HO fluorescent lamps**
- Shatterproof coated glass construction
- Easy installation: Single-ending wiring; re-wire existing unshunted sockets in the fixture
- Peak performance: Up to 3,400 lumens
- Over 50% energy savings compared to fluorescent T5HE and T5HO lamps
- Eliminates the need for multiple expensive ballasts in 6-lamp high bay fixtures
- Environmentally friendly: No mercury used
- Instant startup
- Frosted lens eliminates pixelation
- Operating temperature: -20ºC/-4ºF to 45ºC/113ºF
- Integral driver (isolated), eliminates the need for external driver or ballast

Catalog Number	Nominal Length	Input Voltage	CRI	Lamp Wattage	Lumens	Beam Angle	Safety Coating	Efficacy	Meets DLC
T5HE GLASS CONSTRUCTION									
KT-LED9T5HE-24GC-8xx-D	2'	120-277V	>80	9W	1,200	240º	Yes	133 lm/W	N/A
KT-LED12T5HE-36GC-8xx-D	3'	120-277V	>80	12W	1,400	240º	Yes	116 lm/W	N/A
KT-LED13T5HE-48GC-8xx-D	4'	120-277V	>80	13W	1,800	240º	Yes	139 lm/W	Yes
T5HO GLASS CONSTRUCTION									
KT-LED12T5HO-24GC-8xx-D	2'	120-277V	>80	12W	1,500	240º	Yes	125 lm/W	N/A
KT-LED16T5HO-36GC-8xx-D	3'	120-277V	>80	16W	1,900	240º	Yes	119 lm/W	N/A
KT-LED25T5HO-48GC-8xx-D /G2	4'	120-277V	>80	25W	3,400	240º	Yes	136 lm/W	Yes

*_**8xx**_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

NEW! DIRECTDRIVE DX2
SINGLE OR DOUBLE ENDED LINE VOLTAGE LED TUBES

Catalog Number	Nominal Length	Input Voltage	CRI	Lamp Wattage	Lumens	Safety Coating	Light Spread	Efficacy	Meets DLC
T8 GLASS CONSTRUCTION									
KT-LED7T8-24GC-8xx-DX2	2'	120-277V	>83	7W	950	Yes	325°	136 lm/W	Yes
KT-LED12T8-36GC-8xx-DX2	3'	120-277V	>83	12W	1,450	Yes	325°	121 lm/W	Yes
KT-LED10.5T8-48G-8xx-DX2	4'	120-277V	>83	10.5W	1,720	No	325°	164 lm/W	Yes
KT-LED15T8-48GC-8xx-DX2	4'	120-277V	>83	15W	1,900	Yes	325°	127 lm/W	Yes

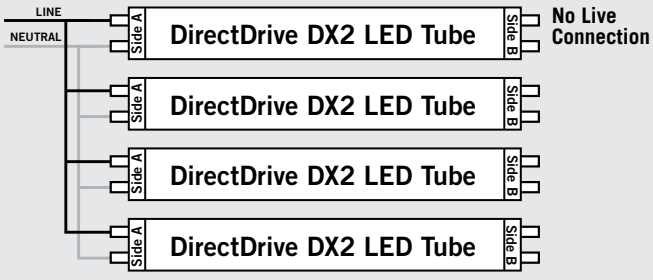
*_**8xx**_ denotes several color temperatures available:

830	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K	**865**	800 Series, 6500K

ONE TUBE. TWO WAYS TO INSTALL.
SINGLE OR DOUBLE ENDED WIRING

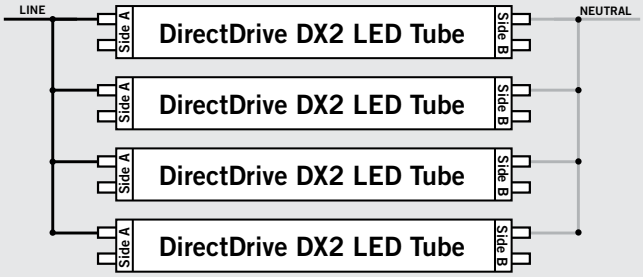
SINGLE-ENDED WIRING

Non-Shunted Lampholders

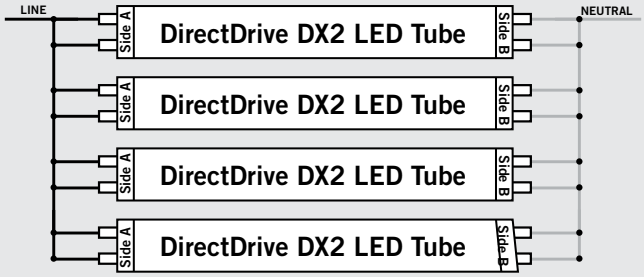


DOUBLE-ENDED WIRING

Shunted Lampholders



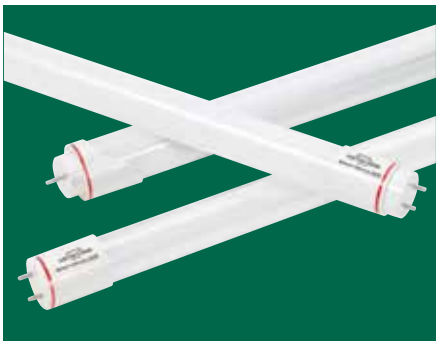
Non-Shunted Lampholders



LINEAR LED TUBES

T8 DirectDrive

RoHS Compliant | 5 YEAR WARRANTY | 50,000 HOUR LIFETIME



DIRECTDRIVE LED

LINE VOLTAGE T8 TUBES

BYPASS THE BALLAST

Catalog Number	Nominal Length	Input Voltage	CRI	Lamp Wattage	Lumens	Safety Coating	Light Spread	Efficacy	Meets DLC	Additional Approvals
T8 GLASS CONSTRUCTION										
KT-LED7T8-24GC-8xx-D	2'	120-277V	>80	7W	950	Yes	325°	136 lm/W	Yes	ETL Intertek
KT-LED12T8-36GC-8xx-D	3'	120-277V	>80	12W	1,300	Yes	325°	108 lm/W	N/A	
KT-LED10.5T8-48G-8xx-D	4'	120-277V	>83	10.5W	1,750	No	325°	162 lm/W	Yes	N/A
KT-LED12.5T8-48GC-8xx-D	4'	120-277V	>80	12.5W	1,850	Yes	325°	148 lm/W	Yes	
KT-LED15T8-48GC-8xx-D /G3	4'	120-277V	>83	15W	1,900	Yes	325°	127 lm/W	Yes	ETL Intertek
KT-LED18.5T8-48GC-8xx-D	4'	120-277V	>83	18.5W	2,500	Yes	325°	135 lm/W	Yes	
KT-LED24T8-60GC-8xx-D	5'	120-277V	>83	24W	2,500	Yes	325°	104 lm/W	N/A	
KT-LED32T8-72GC-8xx-D	6'	120-277V	>80	32W	3,400	Yes	325°	106 lm/W	N/A	
KT-LED43T8-96GC-8xx-D	8' Single Pin	120-277V	>80	43W	5,500	Yes	325°	128 lm/W	N/A	NSF
KT-LED43T8HO-96GC-8xx-D	8' HO	120-277V	>80	43W	5,550	Yes	325°	129 lm/W	N/A	
T8 PLASTIC/ALUMINUM CONSTRUCTION										
KT-LED36T8-96P-8xx-D	8' Single Pin	120-277V	>80	36W	4,000	N/A	180°	111 lm/W	N/A	N/A
KT-LED54T8-96P-8xx-D /G2	8' HO	120-277V	>80	54W	5,900	N/A	180°	110 lm/W	N/A	

Catalog Number	Nominal Length	Input Voltage	CRI	Lamp Wattage	Lumens	Safety Coating	Light Spread	Efficacy	Meets DLC	Additional Approvals
HiCRI T8 GLASS CONSTRUCTION										
KT-LED15T8-48GC-9xx-D	4'	120-277V	>90	15W	1,675	Yes	325°	112 lm/W	No	ETL Intertek

Catalog Number	Nominal Length	Input Voltage	CRI	Lamp Wattage	Lumens	Safety Coating	Light Spread	Efficacy	Meets DLC	Additional Approvals
U-BEND T8 GLASS CONSTRUCTION										
KT-LED18T8-U6GC-8xx-D	6" U-Bend	120-277V	>80	18W	2,150	Yes	325°	119 lm/W	Yes	NSF

DirectDrive Tubes listed meet DLC 4.0+ requirements, unless otherwise noted. DLC 3.0 tubes are available by special request.

**8xx* and *9xx* denote several color temperatures available. HiCRI T8 available in 4000K and 5000K only. 10.5W T8 glass lamps not available in 6500K.

830	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K	**865**	800 Series, 6500K, Not DLC Listed

LINEAR LED TUBES

Dimmable DirectDrive T8

BYPASS THE BALLAST

DIRECTDRIVE LED
LINE VOLTAGE T8 TUBES

DLC DLC LISTED

PRODUCT FEATURES

- Replacement for conventional fluorescent lamp
- Approximately 40% more energy efficient than standard F32T8 lamps
- Environmentally friendly: no mercury used
- Instant startup
- Frosted lens eliminates pixelation
- Isolated integral driver eliminates the need for external driver or ballast

Catalog Number	Construction	Nominal Length	Input Voltage	Dimming Type	CRI	Lamp Wattage	Lumens	Light Spread	Efficacy	Meets DLC	Additional Approvals
DIMMABLE T8											
KT-LED14.5T8-48GC-8xx-D-FDIM	Shatterproof Coated Glass	4'	120V	TRIAC	>80	14.5W	1,950	325°	111 lm/W	Yes	ETL Intertek
EXCLUSIVE TO KEYSTONE KT-LED18T8-48P-8xx-D-VDIM	Plastic Aluminum	4'	120-277V	0-10V	>80	18W	2,100	180°	117 lm/W	Yes	N/A

*_8xx_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

LINEAR LED TUBES
ComboDrive T8

UL LISTED · NSF · Classified cULus · RoHS Compliant · 5 YEAR WARRANTY · 50,000 HOUR LIFETIME

COMBODRIVE LED
PLUG & PLAY OR LINE VOLTAGE COMPATIBLE

PRODUCT FEATURES
- **Plug & play application: Compatible with most instant start electronic T8 ballasts** (contact Keystone for ballast compatibility list)
- **Bypass ballast application: Runs on 120-277 line voltage**
- Single-ended wiring for bypass application

				Instant Start Ballast Compatible Application						Line Voltage Application			
				System Wattage			Initial Lumens						
Catalog Number	Nominal Length	Lamp Wattage	Lumens	.78 BF	.88 BF	1.18 BF	.78 BF	.88 BF	1.18 BF	Input Voltage	Lamp Wattage	Initial Lumens	Meets DLC
T8 SHATTERPROOF COATED GLASS CONSTRUCTION													
KT-LED9T8-24GC-8xx-X	2'	9W	1,150	11.2W	11.5W	12.1W	1,100	1,170	1,210	120-277V	9W	1,170	No
KT-LED15T8-48GC-8xx-X	4'	15W	1,800	16.2W	17.4W	18.5W	1,620	1,750	1,880	120-277V	15W	1,710	Yes*

**Type B-Mode only*

For all Keystone ComboDrive linear LED lamps, input voltage is ballast dependent and beam angle is 220°.

**8xx* denotes several color temperatures available:

830	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

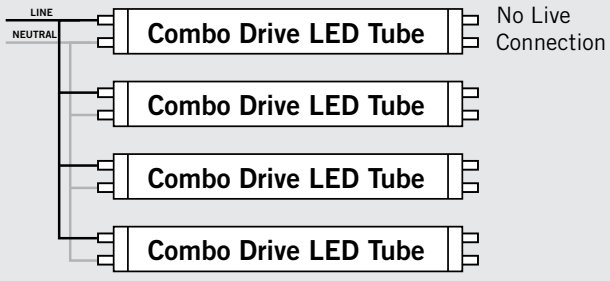
ONE TUBE. TWO WAYS TO INSTALL.
PLUG & PLAY **OR** BALLAST BYPASS

WIRING DIAGRAMS (Single-Ended Wiring Only)

PLUG & PLAY WITH BALLAST

Simply replace the existing fluorescent lamp with a Keystone ComboDrive LED lamp. No additional wiring is required. For ballast compatibility questions, please contact Keystone.

BYPASS THE BALLAST (Non-Shunted Lampholders Only)



NEW! ComboDrive 2
PLUG & PLAY OR DOUBLE-ENDED LINE VOLTAGE COMPATIBLE

PRODUCT FEATURES
- **Plug & play application: Compatible with most instant start electronic T8 ballasts** (contact Keystone for ballast compatibility list)
- **Bypass ballast application: Runs on 120-277 line voltage**
- Double-ended wiring for bypass application

							Ballast Compatible Application				Line Voltage Application			
Catalog Number	Nominal Length	CRI	Bare Lamp Wattage	Initial Lamp Lumens	Max. THD	Power Factor	Input Voltage	System Wattage			Input Voltage	Lamp Wattage	Safety Coating	Beam Angle
								.78 BF	.88 BF	1.18 BF				
T8 GLASS CONSTRUCTION														
KT-LED14T8-48G-8xx-X2	4'	≥80	14W	1,700	20%	>0.90	120-277V	16.5W	17W	18.5W	120-277V	9W	No	220°

*_**8xx**_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

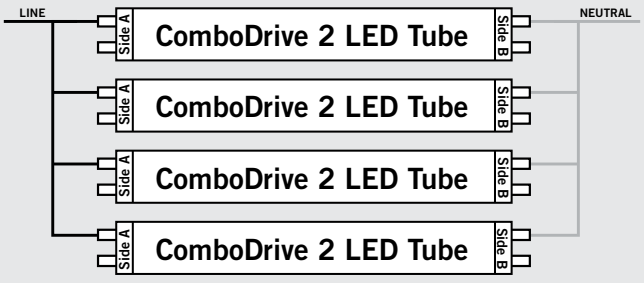
ONE TUBE. TWO WAYS TO INSTALL.
PLUG & PLAY **OR** BALLAST BYPASS

WIRING DIAGRAMS (Double-Ended Wiring Only)

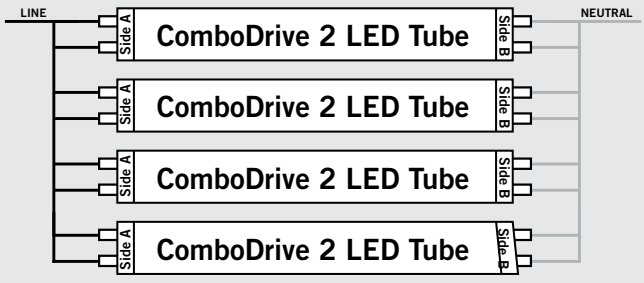
PLUG & PLAY WITH BALLAST

Simply replace the existing fluorescent lamp with a Keystone ComboDrive LED lamp. No additional wiring is required. For ballast compatibility questions, please contact Keystone.

BYPASS THE BALLAST (Shunted Lampholders)



BYPASS THE BALLAST (Non-Shunted Lampholders)



LINEAR LED TUBES

SmartDrive

c UL us LISTED | RoHS Compliant | 5 YEAR WARRANTY | 50,000 HOUR LIFETIME

DLC QPL LISTED

SMARTDRIVE LED

PLUG & PLAY WITH BALLAST

BALLAST COMPATIBLE

Catalog Number	Nominal Length	Bare Lamp Wattage	Nominal Lumens	Bare Lamp Efficacy	System Wattage			Initial Lumens			Safety Coating	Light Spread	Meets DLC	Additional Approvals
					.78 BF	.88 BF	1.18 BF	.78 BF	.88 BF	1.18 BF				
T8 GLASS CONSTRUCTION														
KT-LED8T8-24GC-8xx-S	2'	8W	1,100	138 lm/W	10.2W	11.8W	15.2W	945	1,080	1,370	Yes	325°	Yes	NSF
KT-LED11T8-36GC-8xx-S	3'	11W	1,450	132 lm/W	11.7W	13.7W	17.8W	1,210	1,400	1,780	Yes	325°	N/A	
KT-LED11.5T8-48GC-8xx-S	4'	11.5W	1,800	157 lm/W	12.6W	14.9W	19.4W	1,470	1,710	2,090	Yes	325°	Yes	
KT-LED12T8-48G-8xx-S /G2	4'	12W	1,800	150 lm/W	13.3W	15.0W	20.1W	1,584	1,800	2,382	No	325°	Yes	N/A
KT-LED14T8-48GC-8xx-S	4'	14W	1,800	129 lm/W	14.2W	16.4W	22.1W	1,620	1,870	2,490	Yes	325°	No	NSF
KT-LED15T8-48GC-8xx-S	4'	15W	2,200	147 lm/W	17.2W	20.2W	27.8W	1,930	2,200	2,800	Yes	325°	Yes	

Catalog Number	Nominal Length	Bare Lamp Wattage	Initial Lumens	Bare Lamp Efficacy	System Wattage	Safety Coating	Light Spread	Meets DLC	Additional Approvals
T5 AND T5HO GLASS CONSTRUCTION									
KT-LED13T5HE-48GC-8xx-S	4'	13W	1,800	130 lm/W	17W	Yes	325°	No	ETL Intertek
KT-LED25.5T5HO-48GC-8xx-S	4'	25.5W	3,200	125 lm/W	30W	Yes	325°	Yes	

Catalog Number	Nominal Length	Bare Lamp Wattage	Nominal Lumens	Bare Lamp Efficacy	System Wattage			Initial Lumens			Safety Coating	Light Spread	Meets DLC	Additional Approvals
					.78 BF	.88 BF	1.18 BF	.78 BF	.88 BF	1.18 BF				
U-BEND GLASS CONSTRUCTION														
KT-LED15T8-U6GC-8xx-S	6" U-Bend	15W	2,200	147 lm/W	17.7W	20.2W	26.7W	1,930	2,200	2,800	Yes	325°	Yes	NSF

For all Keystone SmartDrive linear LED tubes, input voltage is ballast dependent and CRI >80.

Tubes listed above meet DLC 4.0+ requirements, unless otherwise noted. DLC 3.0 tubes are available by special request.

**8xx* denotes several color temperatures available:

830	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

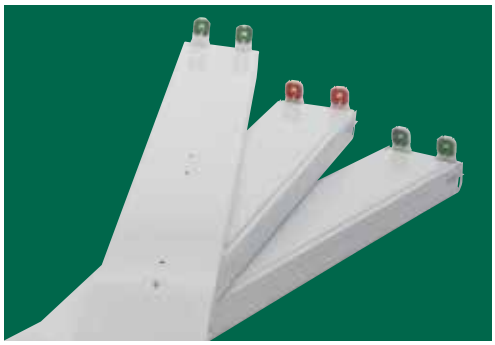
OPTIONAL 0-10V DIMMING DRIVER FOR 11.5-15W SmartDrive T8 TUBES

Catalog Number	No. of Lamps	Input Volts	Line Current	Min. Power Factor	Output Current	Dimming Method
KTLD-2LEDT8-UV-IS-VDIM	1-2	120-277V	0.40-0.06A	0.9	190-210mA	0-10V

8' STRIP READY KIT

Catalog Number	Description
KT-RKIT-SP-W-82-C4-432I-N-W	4-lamp 8' strip ready kit; pre-wired 4.25" ballast cover kit for SmartDrive LED tubes or fluorescent lamps; includes (1) pre-wired ballast with sockets, (2) 4' ballast covers, and (8) tek screws

Consult Keystone for other custom options, such as alternate ballast types and additional reflectors.



LED TUBE STRIP FIXTURES

Catalog Number*	Description	Application
KT-DDSLEDT8-4-2L	2-lamp 4' LED tube ready strip fixture (lamps sold separately)	High bay, low bay, warehouse, and general lighting
KT-DDSLEDT8-8-4L	4-lamp 8' LED tube ready strip fixture (lamps sold separately)	High bay, low bay, warehouse, and general lighting

If full safety certification is required on fixtures, lamps must ship with the fixtures. Add* **-U *at the end of the catalog numbers to select this option.*

LED TUBE HIGH BAY FIXTURES

Catalog Number*	Description
KT-DDHBLEDT8-4-4L	4-lamp 4' LED tube ready high bay fixture (lamps sold separately)
KT-DDHBLEDT8-4-6L	6-lamp 4' LED tube ready high bay fixture (lamps sold separately)

If full safety certification is required on fixtures, lamps must ship pre-installed in fixtures. Add* **-U *at the end of the catalog numbers to select this option.*

8' STRIP READY KIT

Catalog Number	Description
KT-RKIT-SP-W-82-C4-4LED	4-lamp 8' strip LED tube ready kit; pre-wired 4.25" ballast cover kit for DirectDrive LED tubes; includes (2) 4' ballast covers, (1) wiring harness, (4) additional sockets, and (8) tek screws

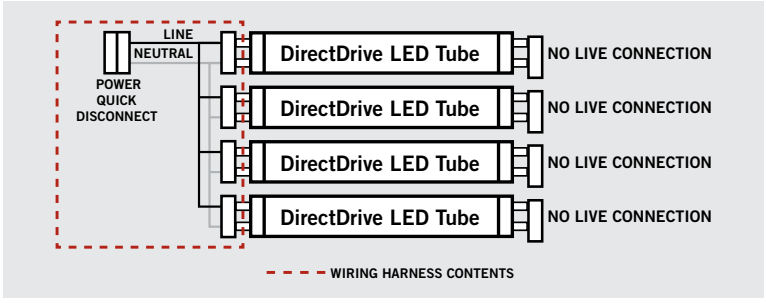
NOTE: The products listed above are specifically designed for use with Keystone's Single Ended Wiring (Type B) DirectDrive LED tubes: 22W max per lamp

DirectDrive WIRING HARNESSES

Catalog Number	Description
KT-SOCKET-T8-U-T-2-W	2-lamp wiring harness for LED tubes; includes (2) pre-wired tall, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-T-3-W	3-lamp wiring harness for LED tubes; includes (3) pre-wired tall, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-T-4-W	4-lamp wiring harness for LED tubes; includes (4) pre-wired tall, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-T-6-W	6-lamp wiring harness for LED tubes; includes (6) pre-wired tall, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-S-2-W	2-lamp wiring harness for LED tubes; includes (2) pre-wired standard, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-S-3-W	3-lamp wiring harness for LED tubes; includes (3) pre-wired standard, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-S-4-W	4-lamp wiring harness for LED tubes; includes (4) pre-wired standard, non-shunted sockets with Power Quick Disconnect
KT-SOCKET-T8-U-S-6-W	6-lamp wiring harness for LED tubes; includes (6) pre-wired standard, non-shunted sockets with Power Quick Disconnect
KT-WH-FA8-2L	Wiring harness for 8' DirectDrive LED tubes; no sockets included

DirectDrive Wiring Harness with Power Quick Disconnect

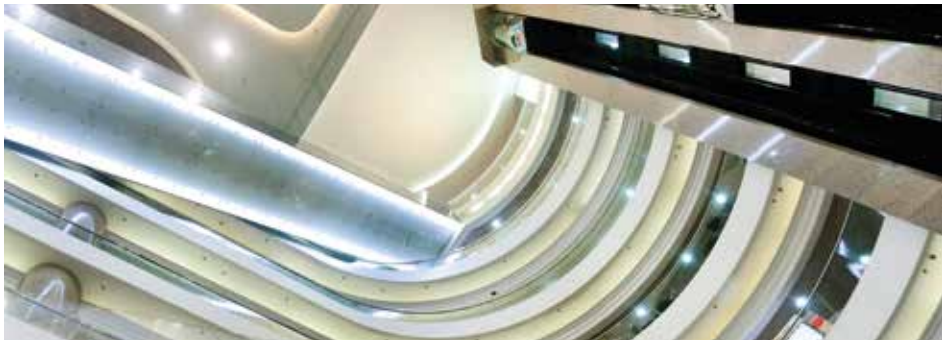
DirectDrive Wiring Diagram



Individual sockets are available upon request.

COMPACT LED LAMPS

RoHS Compliant | 5 YEAR WARRANTY | 50,000 HOUR LIFETIME



SMARTDRIVE LED
PLUG & PLAY WITH CFL BALLASTS

Catalog Number	Input Voltage	Base	Orientation	CRI	Lamp Wattage	System Wattage	Lumens	Meets DLC	Additional Approvals
4-PIN 26W, 32W, OR 42W CFL LAMP REPLACEMENT									
KT-LED94P-H-8xx-S	Ballast Dependent	G24q	Horizontal	>80	9W	12W	950	Yes	DLC, cULus
KT-LED94P-V-8xx-S	Ballast Dependent	G24q	Vertical	>80	9W	12W	950	Yes	

DIRECTDRIVE LED
CONNECT TO LINE VOLTAGE

Catalog Number	Input Voltage	Base	Orientation	CRI	Lamp Wattage	Lumens	Meets DLC	Additional Approvals
2-PIN 13W CFL LAMP REPLACEMENT								
KT-LED62P-H-8xx-D	120-277V	GX23	Horizontal	>80	6W	500	No	N/A
2-PIN 26W, 32W, OR 42W CFL LAMP REPLACEMENT								
KT-LED82P-H-8xx-D	120-277V	G24d	Horizontal	≥83	8W	900	No	cULus
KT-LED82P-V-8xx-D	120-277V	G24d	Vertical	≥83	8W	900	No	
KT-LED82P-EV-8xx-D	120-277V	G24d	Extended Vertical	≥83	8W	900	No	

DIRECTDRIVE LED
LINE VOLTAGE PLL LAMPS

Catalog Number	Input Voltage	CRI	Bare Lamp Wattage	Nominal Lamp Lumens	Beam Angle	Nominal Bare Lamp Efficacy	Power Factor	Max. THD	Meets DLC	Additional Approvals
2G11 PLL LAMP REPLACEMENT										
KT-LED17PLL-22G-8xx-D	120-277V	>80	17W	2,200	220°	129 lm/W	>0.9	20%	No	cULus

*_**8xx**_ denotes several color temperatures available. PLL lamps available in 3500K, 4000K, and 5000K only.

827	800 Series, 2700K	**830**	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

c UL us LISTED RoHS Compliant 5YEAR WARRANTY 50,000 HOUR LIFETIME

HID REPLACEMENT LED LAMPS

DirectDrive 360° Vertical Lamps

BUILT-IN SURGE PROTECTION

BYPASS THE BALLAST

DIRECT DRIVE HID LED

Catalog Number	Rated Lamp Wattage	Metal Halide Equivalent Wattage	Input Voltage	Base Type	Lumens	CRI	IP Rating	Efficacy	Meets DLC
KT-LED15HID-E26-8xx-D	15W	50-70W	120-277V	Medium E26	2,000	>85	IP64	133 lm/W	N/A
KT-LED19HID-E26-8xx-D	19W	50-70W	120-277V	Medium E26	2,400	>85	IP64	126 lm/W	N/A
KT-LED27HID-E26-8xx-D	27W	100W	120-277V	Medium E26	3,830	>85	IP64	142 lm/W	N/A
KT-LED27HID-EX39-8xx-D	27W	100W	120-277V	Mogul EX39	3,830	>85	IP64	142 lm/W	Yes
KT-LED36HID-E26-8xx-D	36W	150W	120-277V	Medium E26	5,100	>85	IP64	142 lm/W	N/A
KT-LED36HID-EX39-8xx-D	36W	150W	120-277V	Mogul EX39	5,100	>85	IP64	142 lm/W	Yes
KT-LED45HID-E26-8xx-D	45W	175W	120-277V	Medium E26	6,350	>85	IP64	141 lm/W	N/A
KT-LED45HID-EX39-8xx-D	45W	175W	120-277V	Mogul EX39	6,350	>85	IP64	141 lm/W	Yes
KT-LED54HID-EX39-8xx-D	54W	250W	120-277V	Mogul EX39	7,660	>85	IP64	142 lm/W	Yes
KT-LED80HID-EX39-8xx-D	80W	320W	120-277V	Mogul EX39	11,300	>85	IP64	141 lm/W	Yes
KT-LED100HID-EX39-8xx-D	100W	400W	120-277V	Mogul EX39	14,100	>85	IP64	141 lm/W	Yes

*_8xx_ denotes several color temperatures available. 80W and 100W lamps are not available in 3000K.

830	800 Series, 3000K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

SMARTCOOL

With SmartCool technology, a thermal sensor in the lamp activates during extreme high temperature conditions. Power to the lamp is reduced by up to 20% to cool the lamp and maintain lamp life. Once the sensor reaches an acceptable temperature, the lamp gradually returns to full light output. Included in 54W, 80W, 100W and 110W DirectDrive HID LED lamps.

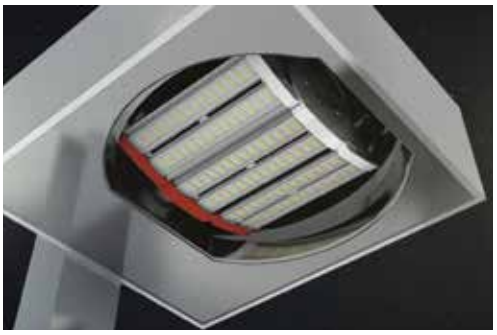
ACCESSORIES

Catalog Number	Description
KTSP-10kV	External surge protector; input voltage: 120-277V; maximum peak current: 10kV; IP65 Rated
KT-ADAPTER-E39-E26	Socket base adapter allowing an E26 base lamp to be used in an E39 socket
KTAT-70-480-277	480V to 277V step-down auto-transformer
KTAT-250-480-277	480V to 277V step-down auto-transformer

HID REPLACEMENT LED LAMPS

DirectDrive Xpander 180° Horizontal Lamps

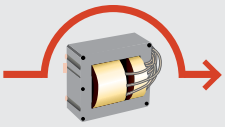
c UL us LISTED | RoHS Compliant | 5 YEAR WARRANTY | 50,000 HOUR LIFETIME



DLC PREMIUM LISTED

XPANDER

BUILT-IN SURGE PROTECTION



BYPASS THE BALLAST

PRODUCT FEATURES

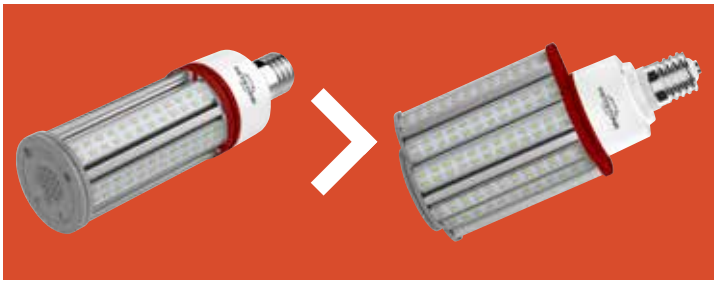
- **Replacement for conventional metal halide lamps in canopy, wall pack, and shoebox fixtures**
- **Optimized for horizontal applications with directional light output**
- Environmentally friendly: no mercury used
- Instant startup
- Operating temperature: -40ºC/-40ºF to 45ºC/113ºF in enclosed fixture
- Integral driver, eliminates the need for external driver or ballast; includes 4kV surge protection
- Integrated heat sink quickly dissipates heat and guides water intrusion out of the lamp

Catalog Number	Rated Lamp Wattage	Metal Halide Equivalent Wattage	Input Voltage	Base Type	Lumens	CRI	IP Rating	Efficacy	Meets DLC
KT-LED27HID-H-EX39-8xx-D	27W	100/150W	120-277V	EX39 Rotatable	4,100	85	IP64	152 lm/W	Yes
KT-LED45HID-H-EX39-8xx-D	45W	175W	120-277V	EX39 Rotatable	6,400	85	IP64	142 lm/W	Yes
KT-LED63HID-H-EX39-8xx-D	63W	250W	120-277V	EX39 Rotatable	9,200	85	IP64	146 lm/W	Yes
KT-LED80HID-H-EX39-8xx-D*	80W	250/320W	120-277V	EX39 Rotatable	10,000	85	IP64	125 lm/W	Yes
KT-LED110HID-H-EX39-8xx-D*	110W	400W	120-277V	EX39 Rotatable	14,000	85	IP64	127 lm/W	Yes

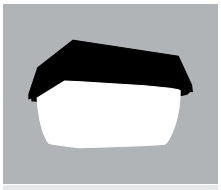
*not for use in wall pack fixtures

*__8xx__ denotes several color temperatures available. 80W and 100W lamps are not available in 3000K.

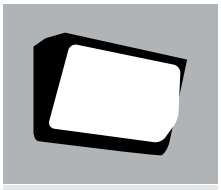
830	800 Series, 3000K	**840**	800 Series, 4000K	**850**	800 Series, 5000K



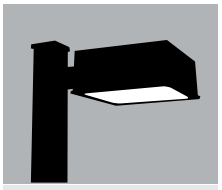
Typical Applications



CANOPY



WALL PACK



SHOEBOX

RoHS Compliant | 5 YEAR WARRANTY | 50,000 HOUR LIFETIME

HID REPLACEMENT LED LAMPS

High Bay Replacement Lamps

BUILT-IN SURGE PROTECTION

BYPASS THE BALLAST

DIRECTDRIVE HID LED

Catalog Number	Rated Lamp Wattage	Metal Halide Equivalent Wattage	Input Voltage	Base Type	Lumens	CRI	IP Rating	Efficacy	Meets DLC
KT-LED115HID-V-EX39-8xx-D	115W	400W	120-277V	EX39 Mogul	15,700	>80	IP20	137 lm/W	Yes

SMARTDRIVE HID LED

BUILT-IN SURGE PROTECTION

MAGNETIC HID BALLAST COMPATIBLE

400W METAL HALIDE REPLACEMENT

Catalog Number	Supported Ballast Types	Lamp Wattage	Base Type	Orientation	Input Voltage	Driven by 400W (M59) Ballast: Lumens	Driven by 400W (M59) Ballast: System Wattage	Driven by 320W (M154) Ballast: Lumens	Driven by 320W (M154) Ballast: System Wattage
KT-LED130HID-V-EX39-8xx-S	400W (M59, M135), 320W (M154, M155)	130W	EX39	Vertical	Ballast Dependent	13,000	166W	11,000	138W

175W METAL HALIDE REPLACEMENT

Catalog Number	Supported Ballast Types	Lamp Wattage	Base Type	Orientation	Input Voltage	Driven by 175W (M57) Ballast: Lumens	Driven by 175W (M57) Ballast: System Wattage
KT-LED48HID-V-E26-8xx-S	175W (M57, M137, M152)	48W	E26	Vertical	Ballast Dependent	5,600	79W

*_8xx_ denotes several color temperatures available:

840	800 Series, 4000K	**850**	800 Series, 5000K

COMPLETE LED FIXTURES

7 YEAR WARRANTY | 60,000 HOUR LIFETIME

PANEL EDGE
LED PANEL LIGHTS

PRODUCT FEATURES

- **7 year warranty, 60,000 hour lifetime**
- Low profile architectural grade design; fits standard T-grid ceilings
- Suitable for surface or suspension mount with optional accessories
- High quality laser etched PMMA resin light guide plate offers optimal light diffusion with no risk of yellowing over product lifetime
- Powered by Keystone 0-10V dimming LED driver with built-in junction box
- Over 50% energy savings compared to traditional fluorescent troffers
- LED color binning within 4 SDCM ensures exceptional color consistency between all panels

Catalog Number	Power	Lumens	Efficacy	CRI	Input Voltage	Dimmable	Lifetime	DLC Category
2'x2' LED PANEL LIGHTS								
KT-PLED20-22-8xx-VDIM-P	20W	2,600	130 lm/W	82	120-277V	Yes	60,000 Hours	Premium
KT-PLED30-22-8xx-VDIM-P	30W	3,900	130 lm/W	82	120-277V	Yes	60,000 Hours	
KT-PLED40-22-8xx-VDIM	40W	4,150	104 lm/W	82	120-277V	Yes	60,000 Hours	Standard
2'x4' LED PANEL LIGHTS								
KT-PLED30-24-8xx-VDIM-P	30W	3,900	130 lm/W	82	120-277V	Yes	60,000 Hours	Premium
KT-PLED40-24-8xx-VDIM-P	40W	5,100	128 lm/W	82	120-277V	Yes	60,000 Hours	
KT-PLED50-24-8xx-VDIM	50W	5,300	106 lm/W	82	120-277V	Yes	60,000 Hours	Standard
1'x4' LED PANEL LIGHTS								
KT-PLED40-14-8xx-VDIM-P	40W	5,050	126 lm/W	82	120-277V	Yes	60,000 Hours	Premium
KT-PLED40-14-8xx-VDIM	40W	4,150	104 lm/W	82	120-277V	Yes	60,000 Hours	Standard

*_**8xx**_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

ACCESSORIES

Catalog Number	Description
KT-PLED-CABLE-KIT	Cable hanging kit for LED panel lights (includes 3 cable sets)
KT-PLED-SM-22-KIT	Surface mount kit for (1) 2x2 LED panel light
KT-PLED-SM-14-KIT	Surface mount kit for (1) 1x4 LED panel light
KT-PLED-SM-24-KIT	Surface mount kit for (1) 2x4 LED panel light
KT-PLED-EM-BR-KIT	Bracket kit for mounting emergency LED backup to LED panel light

EMERGENCY LED DRIVERS
for PanelEdge

		INPUT CHARACTERISTICS			OUTPUT CHARACTERISTICS			
Catalog Number	Wire Type	Input Voltage	Power Factor	Max. Current	Output Power	Rated Output Current	Output Voltage	LED Module Included
KT-EMRG-LED-5-500-EN /DF	Dual Flex Cable	120-277Vac	≥0.5	0.051A @ 120V	5W	250mA-100mA	20~54Vdc	No
KT-EMRG-LED-12-1200-EN /DF	Dual Flex Cable	120-277Vac	≥0.5	0.051A @ 120V	12W	550mA-245mA	20~54Vdc	No

5 YEAR WARRANTY 100,000 HOUR LIFETIME

COMPLETE LED FIXTURES

NEW! HIGH BAY FIXTURES

PRODUCT FEATURES

- Architectural grade compact design
- Powered by Keystone 0-10V dimming LED drivers
- Frosted lens eliminates glare
- V-hook and chain mounting accessories included
- 0-10V dimming, 10% minimum
- Compatible with Keystone SmartSafe emergency LED drivers
- Compatible with Keystone 480-277V step down transformers
- Compatible with Keystone occupancy sensors
- Ambient operating temperature: -20ºC/-4ºF to 50ºC/122ºF
- UL Listed 1598: Suitable for dry and damp locations
- THD:<20%
- Power factor > 0.95
- LED chip lifetime, L70 >100,000 hours @ 25ºC/77ºF ambient fixture temperature

Catalog Number	Nominal Length	CRI	Input Voltage	Wattage	Lumen Output	Efficacy
KT-HBLED90-2F-8xx-VDIM-P	2'	>82	120-277V	90W	11,800	131 lm/W
KT-HBLED105-2F-8xx-VDIM-P	2'	>82	120-277V	105W	13,650	130 lm/W
KT-HBLED135-2F-8xx-VDIM-P	2'	>82	120-277V	135W	17,700	131 lm/W
KT-HBLED175-2F-8xx-VDIM-P	2'	>82	120-277V	175W	23,100	132 lm/W
KT-HBLED215-2F-8xx-VDIM-P	2'	>82	120-277V	215W	28,160	131 lm/W

*_8xx_ denotes several color temperatures available:

840	800 Series, 4000K	**850**	800 Series, 5000K

ACCESSORIES

Catalog Number	Description
KT-HBLED-SM-1-KIT	Surface mount kit for LED high bay fixtures; fits all Keystone 2F high bay fixtures
KT-HBLED-PM-1-KIT	Pendant mount kit for LED high bay fixtures; fits all Keystone 2F high bay fixtures
KT-HBLED-WG-1-KIT	Wire guard for LED high bay fixtures; fits 90W, 105W, 135W, and 175W Keystone 2F high bay fixtures
KT-HBLED-WG-2-KIT	Wire guard for LED high bay fixtures; fits 215W Keystone 2F high bay fixtures

COMPLETE LED FIXTURES

RoHS Compliant | 5 YEAR WARRANTY | 50,000 HOUR LIFETIME

ARMOR LIGHT

PRODUCT FEATURES

- **50,000 hour lifetime**
- **Frosted lens to reduce glare**
- **Includes a 3' cord and clip for maximum versatility when hanging the fixture**
- Omni-directional light distribution
- 6kV surge protection
- Strong, durable, lightweight construction suitable for construction areas, outdoor activity lighting
- Isolated driver for better heat dissipation
- Driver with heat sink silicone is waterproof, dust-proof, and anti-mosquito
- Operating temperature: -40ºC/-40ºF to 60ºC/140ºF

Catalog Number	Power Consumption	CRI	Input Voltage	Color Temperature	Total Lumens	Efficacy	IP Rating	Metal Halide HID Equivalent
KT-TFLED60-850	60W	≥80	120V	5000K	7,000	117 lm/W	IP64	175W
KT-TFLED100-850	100W	≥80	120V	5000K	11,500	115 lm/W	IP64	400W

SHOP LIGHTS

PRODUCT FEATURES

- Linkable
- Ideal for indoor applications in place of fluorescent shop lights, surface-mount, and/or strip fixtures
- Installs in minutes (mounting hardware included)
- 60” power cord
- 48” white plastic body with metal backing
- Fully assembled

Catalog Number	Nominal Length	Input Voltage	Power Consumption	Color Temperature	Lumen Output	CRI
KT-SHLED23-48-840	4’	120V	23W	4000K	2,600	>80
KT-SHLED40-48-840 /G2	4’	120V	40W	4000K	4,200	>80

EMERGENCY BACK-UP SOLUTIONS

LED Emergency Back-Up

RoHS Compliant 5 YEAR WARRANTY

SMART//SAFE

LED EMERGENCY BACK-UP

LED EMERGENCY BACK-UP KIT (INCLUDES EMERGENCY LED DRIVER, BATTERY, AND LED MODULE)

	INPUT CHARACTERISTICS			OUTPUT CHARACTERISTICS				
Catalog Number	Input Voltage	Power Factor	Maximum Current	Maximum Output Power	Rated Output Current	Output Voltage	LED Module Included	Additional Approvals
KT-EMRG-LED-5-500-K1	120-277Vac	≥0.5	0.051A @ 120V	5W	400mA-100mA	12~41Vdc	Yes	
KT-EMRG-LED-12-1200-K1	120-277Vac	≥0.5	0.051A @ 120V	12W	1000mA-200mA	12~41Vdc	Yes	

1 PIECE ENCLOSED LED EMERGENCY BACK-UP

		INPUT CHARACTERISTICS			OUTPUT CHARACTERISTICS				
Catalog Number	Wire Type	Input Voltage	Power Factor	Max. Current	Output Power	Rated Output Current	Output Voltage	LED Module Included	Additional Approvals
KT-EMRG-LED-5-500-EN /DF	Dual Flex Cable	120-277Vac	≥0.5	0.051A @ 120V	5W	250mA-100mA	20~54Vdc	No	
KT-EMRG-LED-12-1200-EN /DF	Dual Flex Cable	120-277Vac	≥0.5	0.051A @ 120V	12W	550mA-245mA	20~54Vdc	No	

FEATURES AND BENEFITS

- Adds emergency lighting capability to multiple fixture types
- Remote mounting means no interference with the sleek design of LED architectural fixtures
- 2-in-1 LED test switch and indicator light provides instant reassurance that the system is working
- Evaluated to UL 924 requirements; UL Classified for field installation
- Reliable operation with minimum 90 minute duration

LED EMERGENCY BACK-UP FOR INTEGRATED LED PRODUCTS (Coming Q2 2018)

Enables emergency lighting solutions to be incorporated into a variety of lighting fixtures using integrated LED lighting components where only the input wires of the LED load are accessible.

	INPUT CHARACTERISTICS			OUTPUT CHARACTERISTICS				
Catalog Number	Input Voltage	Power Factor	Maximum Current	Maximum Output Power	Rated Output Current	Output Voltage	LED Module Included	Additional Approvals
KT-EMRG-LED-5-500-AC	120-277V	≥0.35	100mA @ 120V	5W	Load Dependant	40~300V	No	

FEATURES AND BENEFITS

- Optimized for Keystone single-ended DirectDrive LED tubes (Contact Keystone for details on functioning with other Type B LED tubes.)
- Illuminates entire LED load at reduced output under emergency mode
- One-piece design with metal housing
- 2-in-1 LED test switch and indicator light provides instant reassurance that the system is working
- Evaluated to UL 924 requirements
- Reliable operation with minimum 90 minute duration

EMERGENCY BACK-UP SOLUTIONS

Fluorescent Emergency Back-Up

LINEAR FLUORESCENT EMERGENCY BALLASTS

No. of Lamps in Fixture	Catalog Number	Input Voltage	Light Output	Illumination Time	Battery
T8 & T12 Linear					
1-4	KT-EMRG-500	120/277V, 60 Hz	500 Lumens	90 Minutes	NiCd
	KT-EMRG-700	120/277V, 60 Hz	700 Lumens	90 Minutes	NiCd
	KT-EMRG-1400	120/277V, 60 Hz	1,400 Lumens	90 Minutes	NiCd
T8 & T12 Linear Slim Can					
1-4	KT-EMRG-500-SL	120/277V, 60 Hz	500 Lumens	90 Minutes	NiCd
	KT-EMRG-700-SL	120/277V, 60 Hz	700 Lumens	90 Minutes	NiCd
	KT-EMRG-1400-SL	120/277V, 60 Hz	1,400 Lumens	90 Minutes	NiCd
T5 Linear					
1-4	KT-EMRG-500-T5	120/277V, 60 Hz	500 Lumens	90 Minutes	NiCd
	KT-EMRG-800-T5	120/277V, 60 Hz	800 Lumens	90 Minutes	NiCd
	KT-EMRG-1300-T5*	120/277V, 60 Hz	1,300 Lumens	90 Minutes	NiCd

**Compatible for use with Keystone 11.5W, 14W, or 15W SmartDrive LED tubes*

COMPACT FLUORESCENT EMERGENCY BALLASTS

No. of Lamps in Fixture	Catalog Number	Lamp Type	Input Voltage	Light Output	Illumination Time	Battery
1-4	KT-EMRG-650-CFL2	2-Pin CFL	120/277V, 60Hz	650 Lumens	90 Minutes	NiCd
	KT-EMRG-750-CFL4	4-Pin CFL	120/277V, 60Hz	750 Lumens	90 Minutes	NiCd

FUTURE FIT
Troffer Fixture Retrofit Kits

5 YEAR WARRANTY | 50,000 HOUR LIFETIME

Each kit includes (1) fixture assembly body with pre-wired LED driver, (2) end plates, (2) side plates, and (4) self-tapping screws

2x2 LED DOORFRAME RETROFIT KIT, 23W (0-10V Dimming)

Input Voltage	Catalog Number	Dimming Type	Wattage	Lumen Output	CRI	THD	Power Factor	Efficacy	Meets DLC
120-277V	KT-RKIT23-22D-8xx-VDIM	0-10V	23W	3,070	>80	<20%	>0.9	134 lm/W	Yes

2x4 LED DOORFRAME RETROFIT KIT, 30W (0-10V Dimming)

Input Voltage	Catalog Number	Dimming Type	Wattage	Lumen Output	CRI	THD	Power Factor	Efficacy	Meets DLC
120-277V	KT-RKIT30-24D-8xx-VDIM	0-10V	30W	3,910	>80	<20%	>0.9	130 lm/W	Yes

2x4 LED DOORFRAME RETROFIT KIT, 36W (0-10V Dimming)

Input Voltage	Catalog Number	Dimming Type	Wattage	Lumen Output	CRI	THD	Power Factor	Efficacy	Meets DLC
120-277V	KT-RKIT36-24D-8xx-VDIM	0-10V	36W	4,890	>80	<20%	>0.9	136 lm/W	Yes

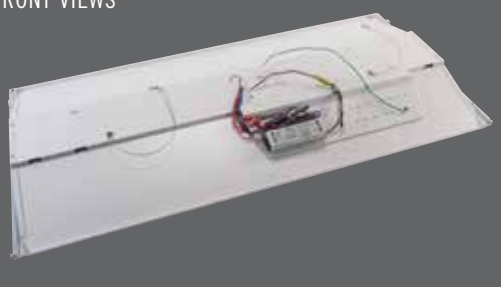
*_8xx_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

PRODUCT FEATURES

- Used to upgrade existing 2x2' or 2x4' fluorescent recessed troffer without modifying existing fixture mounting
- Architectural grade design
- Powered by a Keystone 0-10V dimming LED driver
- Compatible with Keystone SmartSafe LED emergency drivers
- Suitable for damp locations
- Operating temperature range: -20°C/-4°F to 50°C/122°F
- Over 50% energy savings as compared to traditional fluorescent troffers

BACK AND FRONT VIEWS



STEP 1: Shut off power to the fixture. Open the fixture lens and remove the existing fluorescent lamps, ballast cover, and lens. Disconnect the ballast from the building's line voltage.

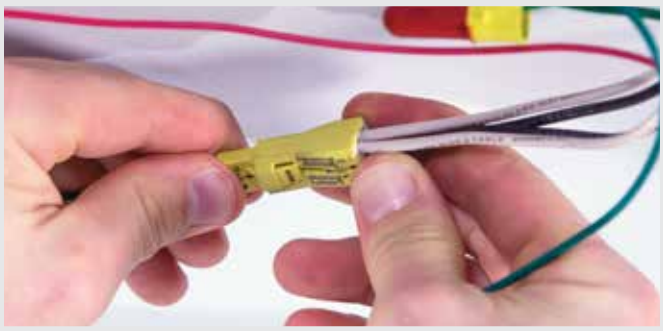
STEP 2: Install the support brackets (x2) and secure with tek screws.

STEP 3 (Optional): Install side plates (x2). This step is dependent on whether or not there are gaps between the fixture and the existing ceiling grid.

STEP 4: Insert the doorframe of the retrofit into the keyholes of the support brackets and slide the unit into place.

STEP 5: Hook the safety cables into the existing lances/holes of the fixture.

STEP 6: Make electrical connection for input power via the included Power Quick Disconnect. 0-10V connections are optional.



STEP 7: Swing the doorframe assembly up and secure it by locking the latches. Restore power to the fixture.

For more information, watch the video at keystonetech.com/video

FUTURE FIT
Strip Fixture Retrofit Kits

5 YEAR WARRANTY | 50,000 HOUR LIFETIME

Each 8' kit includes (2) retrofit housings with pre-wired LED drivers, (3) installation brackets, (2) lenses, (1) label, and installation instructions
Each 4' kit includes (1) retrofit housing with pre-wired LED driver, (2) installation brackets, (1) lens, (1) label, and installation instructions

4' LED RETROFIT STRIP KIT (0-10V Dimming)

Input Voltage	Catalog Number	Dimming Type	Wattage	Lumen Output	CRI	THD	Power Factor	Efficacy	Meets DLC
120-277V	KT-RKIT32-4S-8xx-VDIM	0-10V	32W	4,350	>80	<20%	>0.9	136 lm/W	Yes

8' LED RETROFIT STRIP KITS (0-10V Dimming)

Input Voltage	Catalog Number	Dimming Type	Wattage	Lumen Output	CRI	THD	Power Factor	Efficacy	Meets DLC
120-277V	KT-RKIT46-8S-8xx-VDIM	0-10V	46W	6,200	>80	<20%	>0.9	134 lm/W	Yes
120-277V	KT-RKIT55-8S-8xx-VDIM	0-10V	55W	7,360	>80	<20%	>0.9	133 lm/W	Yes

*_**8xx**_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

PRODUCT FEATURES

- Used to upgrade existing 4"-5.25" wide strip fixtures without modifying the existing fixture mounting
- Architectural grade design
- Powered by a Keystone 0-10V dimming LED driver
- Compatible with Keystone SmartSafe LED emergency drivers
- Suitable for damp locations
- Operating temperature range: -20°C/-4°F to 50°C/122°F
- 8' kits are (2) 4' channels linked together
- Over 50% energy savings as compared to traditional fluorescent troffers

TYPICAL INSTALLATION APPLICATION

STEP 1: **Shut off power to the fixture.** Remove the existing fluorescent lamps and the ballast cover. Disconnect the ballast from the building’s line voltage.

STEP 2: Cut the wire leads coming from the sockets and remove the sockets and socket bars on both ends of the fixture.

STEP 3: Break apart the 1-piece mounting bracket kit into 3 individual pieces. Install a small bracket at each end of the fixture and the large bracket at the center of fixture (for 8’ fixtures only). Bend the brackets over the fixture to fit the exact width and fasten them to the fixture with the provided tek screws.

STEP 4: Fasten the safety cables (x2) from the retrofit pan(s) to the fixture housing using existing lances/holes of the fixture.

STEP 5: Make electrical connections for input power (via the included Power Quick Disconnect) and fixture ground. 0-10V connections optional.
For 8’ kits only: connect the LED module wiring between the 2 strip pans via the pre-wired linking connector.

STEP 6: Fasten the pans to the strip fixture with a quarter turn (provided) on each end.

STEP 7: Install the lens by gently squeezing it into the grooved edge of the pan. Restore power to the fixture.

For more information, watch the video at keystonetech.com/video

FUTURE FIT›
Linear LED Module and Driver Kits

RoHS Compliant 10 YEAR WARRANTY

Each kit includes (1) 0-10V dimmable LED driver, (2) LED modules, mounting hardware, and accessories

2x2, 4000 LUMEN LINEAR LED MODULE AND DRIVER KIT

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120-277V	KT-RKIT-22-4000-8xx-VDIM	1,100mA	550mA	4,000	30W	135 lm/W	82%	36W	111 lm/W

2x4, 4000 LUMEN LINEAR LED MODULE AND DRIVER KIT

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120-277V	KT-RKIT-24-4000-8xx-VDIM	1,100mA	550mA	4,000	30W	135 lm/W	82%	36W	111 lm/W

2x4, 5000 LUMEN LINEAR LED MODULE AND DRIVER KIT

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120-277V	KT-RKIT-24-5000-8xx-VDIM	1,100mA	550mA	5,000	36W	138 lm/W	82%	44W	113 lm/W

*_8xx_ denotes several color temperatures available:

835	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

LINEAR TROFFER PAN LED KITS

All of the items above are also available pre-installed in a metal troffer pan.
To order, add -TP to the part number. Example: KT-RKIT-**TP**-22-4000-835-VDIM

TYPICAL INSTALLATION APPLICATION

Each pre-assembled kit includes (1) phase control dimmable LED driver, (1) LED module, (1) metal pan, mounting hardware, and accessories

8", 650 LUMEN WALL SCONCE (Phase Control Dimming)

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total Lumens per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120V	KT-RKIT-HCP-8-650-8xx-FDIM	350mA	350mA	720	720	5.5W	130 lm/W	80%	6.9W	104 lm/W

8", 1150 LUMEN WALL SCONCE (Phase Control Dimming)

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total Lumens per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120V	KT-RKIT-HCP-8-1150-8xx-FDIM	350mA	350mA	1,180	1,180	8.5W	138 lm/W	80%	10.6W	111 lm/W

*_**8xx**_ denotes several color temperatures available:

830	800 Series, 3000K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

GENERATION 2 UPGRADES: All sconce items in this catalog will be upgraded to Generation 2 (/G2) starting Q1 2018. G2 models feature upgraded LED chip sets. Part numbers will be updated with a /G2 suffix to reflect this change.

TYPICAL INSTALLATION APPLICATION

FUTURE FIT›

Circular LED Kits

RoHS Compliant 10 YEAR WARRANTY

Each pre-assembled kit includes (1) dimmable LED driver, (1) LED module, (1) metal pan, mounting hardware, and accessories

8", 1600 LUMEN CIRCULAR

Input Voltage	LED Retrofit Kit Catalog Number	Dimming Type	Total System Drive Current	Drive Current per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120V	KT-RKIT-CP-8-1600-8xx-FDIM	Phase Control	560mA	560mA	1,800	13W	138 lm/W	80%	16.2W	111 lm/W
120-277V	KT-RKIT-CP-8-1600-8xx-VDIM	0-10V	560mA	560mA	1,800	13W	138 lm/W	80%	16.2W	111 lm/W

8", 2200 LUMEN CIRCULAR

Input Voltage	LED Retrofit Kit Catalog Number	Dimming Type	Total System Drive Current	Drive Current per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120V	KT-RKIT-CP-8-2200-8xx-FDIM	Phase Control	560mA	560mA	2,240	16.3W	137 lm/W	80%	20.4W	109 lm/W
120-277V	KT-RKIT-CP-8-2200-8xx-VDIM	0-10V	560mA	560mA	2,240	16.3W	137 lm/W	80%	20.4W	109 lm/W

8", 2750 LUMEN CIRCULAR (0-10V Dimming)

Input Voltage	LED Retrofit Kit Catalog Number	Dimming Type	Total System Drive Current	Drive Current per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120-277V	KT-RKIT-CP-8-2750-8xx-VDIM	0-10V	700mA	700mA	2,845	21W	136 lm/W	80%	25.2W	113 lm/W

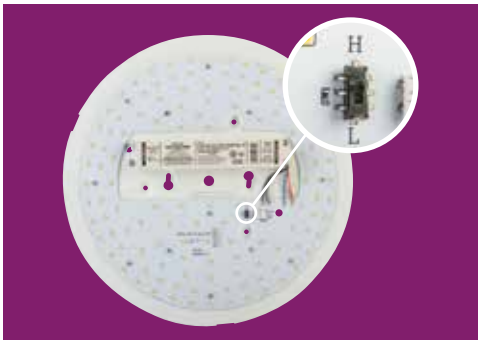
*Also available in 2700K and 3500K color temperatures

*__8xx__ denotes several color temperatures available:

830	800 Series, 3000K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

GENERATION 2 UPGRADES: All 8" circular items in this catalog will be upgraded to Generation 2 (/G2) starting Q1 2018. G2 models feature upgraded LED chip sets. Part numbers will be updated with a /G2 suffix to reflect this change.

TYPICAL INSTALLATION APPLICATION



Each pre-assembled kit includes (1) dimmable LED driver, (1) LED module, (1) metal pan, mounting hardware, and accessories

13", Set at 3000 LUMENS

Input Voltage	LED Retrofit Kit Catalog Number	No. of Modules	Total System Drive Current	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120-277V	KT-RKIT-CP-13-4000-8xx-VDIM	1	760mA	3,220	24W	133 lm/W	85%	27W	119 lm/W

13", Set at 4000 LUMENS

Input Voltage	LED Retrofit Kit Catalog Number	No. of Modules	Total System Drive Current	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120-277V	KT-RKIT-CP-13-4000-8xx-VDIM	1	1,000mA	4,150	31W	134 lm/W	85%	36W	116 lm/W

**8xx* denotes several color temperatures available:

830	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

TYPICAL INSTALLATION APPLICATION

FUTURE FIT
Rectangular LED Kits

RoHS Compliant 10 YEAR WARRANTY

Each pre-assembled kit includes (1) LED driver, (2) LED modules, (1) metal pan, mounting hardware, and accessories

3”x6”, 800 LUMEN RECTANGULAR

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total Lumens per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120V	KT-RKIT-RP-6-800-8xx	560mA	560mA	435	870	7W	124 lm/W	82%	8.5W	102 lm/W
120-277V	KT-RKIT-RP-6-800-8xx-UV	560mA	560mA	435	870	7W	124 lm/W	82%	8.5W	102 lm/W

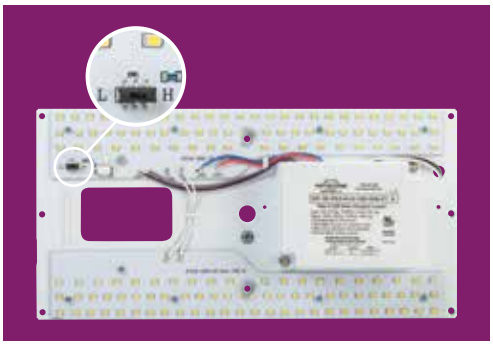
3”x6”, 1600 LUMEN RECTANGULAR

Input Voltage	LED Retrofit Kit Catalog Number	Total System Drive Current	Drive Current per Module	Total Lumens per Module	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
120V	KT-RKIT-RP-6-1600-8xx	560mA	560mA	825	1,650	14W	118 lm/W	82%	17W	97 lm/W
120-277V	KT-RKIT-RP-6-1600-8xx-UV	560mA	560mA	825	1,650	14W	118 lm/W	82%	17W	97 lm/W

*_8xx_ denotes several color temperatures available:

830	800 Series, 3000K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

TYPICAL INSTALLATION APPLICATION



Each pre-assembled kit includes (1) LED driver, (2) LED modules, (1) metal pan, mounting hardware, and accessories

5.5"x11", Set at 3000 LUMENS

LED Retrofit Kit Catalog Number	Input Voltage	No. of Modules	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
KT-RKIT-RP-11-4000-8xx-VDIM	120-277V	2	3,300	23.5W	140 lm/W	85%	26W	127 lm/W

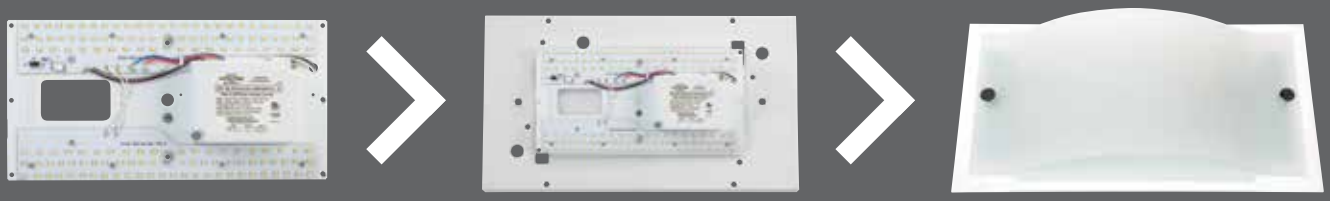
5.5"x11", Set at 4000 LUMENS

LED Retrofit Kit Catalog Number	Input Voltage	No. of Modules	Total System Lumens	Total Module Power	Module Efficacy	Driver Efficiency	Total System Power	Total System Efficacy
KT-RKIT-RP-11-4000-8xx-VDIM	120-277V	2	4,200	31W	136 lm/W	85%	34.5W	122 lm/W

*_**8xx**_ denotes several color temperatures available:

830	800 Series, 3000K	**835**	800 Series, 3500K	**840**	800 Series, 4000K	**850**	800 Series, 5000K

TYPICAL INSTALLATION APPLICATION



LED DRIVERS

SMART CURRENT
PROGRAMMABLE LED DRIVERS

PRODUCT FEATURES
- Meets FCC Part 15 (Class B) consumer limits
- Short circuit overload and open load protection
- Dimmable with 0-10V dimmer (down to 1% at max. output current)
- Auxiliary Power: 12Vdc; 200mA max.
- THD: < 20%
- 20ºC/-4ºF to 50ºC/122ºF operating temperature
- 90ºC/194ºF maximum case temperature
- Input frequency: 50/60 Hz
- Programmable output current via the Keystone SmartCurrent Cradle (KTLD-SC-PGMR-1)

PROGRAMMING FEATURES
- Drive current (10 mA increments)
- Dim-to-off voltage (0.8V, 1V, 1.2V, or N/A)

SOFTWARE
- Software for the SmartCurrent Cradle can be downloaded at: **keystonetech.com/programmable-driver-software**

WHAT'S NEEDED? A SmartCurrent Programmable LED Driver, the SmartCurrent Cradle, and a computer.

Catalog Number	Max. Output Power	Max. Input Current	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 240V	Typical Efficiency at 277V	Remote Mounting Distance (#18 AWG)	Class 2	
										US	CAN
KTLD-30-UV-SC1050-56-VDIM-U7	30W	0.31A @120V 0.17A @240V 0.15A @277V	350-1050mA	10-56V	60V	86%	86%	86%	35 ft.	Yes	No
KTLD-50-UV-SC1400-56-VDIM-U7	50W	0.52A @120V 0.28A @240V 0.24A @277V	470-1400mA	10-56V	60V	86%	86%	86%	26 ft.	Yes	No
KTLD-85-UV-SC2600-56-VDIM-U4	85W	0.89A @120V 0.44A @240V 0.38A @277V	860-2600mA	10-56V	60V	86%	86%	86%	24 ft.	Yes	No

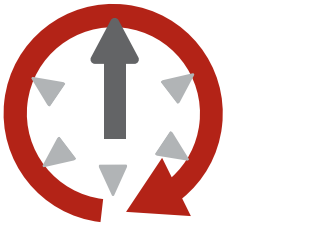
CONSTANT VOLTAGE

Wattage Family	Catalog Number	Rated Output Voltage	Max. Power	Max. Current	Input Voltage	SAM Qualified*
10W	KTLD-10-1N-12V-F3	12Vdc	10W	0.83A	120Vac	Yes
24W	KTLD-24-1-12V-AK1	12Vdc	24W	2.00A	120Vac	Yes
	KTLD-24-1-24V-AK1	24Vdc	24W	1.00A	120Vac	Yes
	KTLD-24-UV-12V-AK1	12Vdc	24W	2.00A	120-277Vac	Yes
	KTLD-24-UV-24V-AK1	24Vdc	24W	1.00A	120-277Vac	N/A
60W	KTLD-60-1-12V	12Vdc	60W	5.00A	120Vac	Yes
	KTLD-60-1N-12V-L2	12Vdc	60W	5.00A	120Vac	Yes
	KTLD-60-1-24V	24Vdc	60W	2.50A	120Vac	Yes
	KTLD-60-UV-12V	12Vdc	60W	5.00A	120-277Vac	Yes
	KTLD-60-UV-12V-67-AP4	12Vdc	60W	5.00A	120-277Vac	Yes
	KTLD-60-UV-12V-VDIM-L5	12Vdc	60W	5.00A	120-277Vac	Yes
	KTLD-60-UV-24V	24Vdc	60W	2.50A	120-277Vac	Yes
80W	KTLD-80-1-12V	12Vdc	80W	6.60A	120Vac	Yes
	KTLD-80-1-24V	24Vdc	80W	3.30A	120Vac	Yes
	KTLD-80-UV-12V	12Vdc	80W	6.70A	120-277Vac	N/A
	KTLD-80-UV-24V	24Vdc	80W	3.30A	120-277Vac	N/A
100W	KTLD-100-UV-12V	12Vdc	100W	8.00A	120-277Vac	Yes
	KTLD-100-UV-24V	24Vdc	100W	4.00A	120-277Vac	Yes
	KTLD-100-UV-24V-67-AP4	24Vdc	100W	4.00A	120-277Vac	N/A
120W	KTLD-120-UV-12V-L10	12Vdc	120W (2x60W Channels)	5.00A	120-277Vac	Yes

**Sign Component Manual (SAM)* - *SAM is a directory governed by UL that lists all components that have been tested and certified under the UL standard for electric signs. It is updated quarterly and contains all of the components associated with the manufacturing of electric signs, including LED power supplies. For more information, visit www.ul.com.*

SPEED DIAL PROGRAMMABLE CONSTANT CURRENT LED DRIVER

SPEEDDIAL
PROGRAMMABLE DRIVERS
NO COMPUTERS. NO MISTAKES. NO HASSLES.



Introducing the easiest programmable constant current LED driver on the market. With just the simple twist of Keystone's unique SpeedDial, the LED driver is programmed to your desired output current in less than a second. Reduce inventory SKUs, increase productivity, gain performance flexibility... all with Keystone's proprietary SpeedDial LED drivers.

FEATURES AND BENEFITS

- **Slim form factor:** Ideal for narrow channels and slender fixtures.
- **Incredibly easy adjustability:** Just twist the SpeedDial with a standard screwdriver to the desired setting. The SpeedDial clicks right into place.
- **Reduced inventory:** Utilize a single SKU for several output current settings
- **High efficiency:** Keystone's expertise in LED driver design targets maximum efficiencies at all current settings
- **0-10V dimming:** Uncompromised dimming performance for any 0-10V dimming system

	INPUT CHARACTERISTICS				OUTPUT CHARACTERISTICS			FEATURES
Catalog Number	Input Voltage	Input Power	Power Factor	Max. Current	Max. Output Power	Rated Output Current	Output Voltage	Efficiency
KTLD-44-UV-SD700-1200-VDIM-L20	120-277Vac	52W	>0.9	0.48A @ 120V 0.22A @ 277V	44W	700, 800, 900, 1000, 1100, or 1200 mA	18~36Vdc	84% (at 1200mA)

LED DRIVERS

RoHS Compliant 5 YEAR WARRANTY

CONSTANT CURRENT

Wattage Family	Catalog Number	Rated Output Current	Output Voltage	Output Power	Input Voltage	Dimming
10W	KTLD-10-1N-350-F3	350mA	7.5-30Vdc	10W	120Vac	N/A
	KTLD-10-1N-300-F3	300mA	6-33Vdc	10W	120Vac	N/A
	KTLD-10-1N-380-F3	380mA	6.5-28Vdc	10W	120Vac	N/A
	KTLD-10-1P-380-LDIM-AF1	380mA	13-27Vdc	10W	120Vac	Local
12W	KTLD-12-1-350-FDIM-F5	350mA	17-34Vdc	12W	120Vac	Phase Control
	KTLD-12-1-500-FDIM-F5	500mA	12-24Vdc	12W	120Vac	Phase Control
	KTLD-12-1-700-FDIM-F5	700mA	8-17Vdc	12W	120Vac	Phase Control
	KTLD-12-1-350-FDIM-AF1	350mA	6-32Vdc	12W	120Vac	Phase Control
	KTLD-12-1-380-FDIM-AF1	380mA	5-32Vdc	12W	120Vac	Phase Control
	KTLD-12-1-700-FDIM-AF1	700mA	5-17Vdc	12W	120Vac	Phase Control
14W	KTLD-14-1-350-FDIM-AF1	350mA	10-40Vdc	14W	120Vac	Phase Control
22W	KTLD-22-1-350-FDIM-AK1	350mA	21-63Vdc	22W	120Vac	Phase Control
	KTLD-22-1-700-FDIM-AK1	700mA	10-32Vdc	22W	120Vac	Phase Control
	KTLD-22-UV-500-VDIM-L7	500mA	22-44Vdc	22W	120-277Vac	0-10V
	KTLD-22-UV-600-VDIM-L7	600mA	18-36Vdc	22W	120-277Vac	0-10V
	KTLD-22-UV-700-AK1	700mA	10-32Vdc	22W	120-277Vac	N/A
23W	KTLD-23-UV-830-VDIM-L7	830mA	14-28Vdc	23W	120-277Vac	0-10V
25W	KTLD-25-UV-700-VDIM-L9	700mA	18-36Vdc	25W	120-277Vac	0-10V
36W	KTLD-36-UV-900-VDIM-L2	900mA	18-36Vdc	36W	120-277Vac	0-10V
	KTLD-36-UV-1500-VDIM-L2	1,500mA	12-24Vdc	36W	120-277Vac	0-10V
40W	KTLD-40-UV-1100-VDIM-L2	1,100mA	18-36Vdc	40W	120-277Vac	0-10V
	KTLD-40-UV-1100-VDIM-L9	1,100mA	18-36Vdc	40W	120-277Vac	0-10V
50W	KTLD-50-UV-2X500-VDIM-L5	2x 500mA (Dual Channel)	25-50Vdc	50W	120-277Vac	0-10V
	KTLD-50-UV-2X700-VDIM-L5	2x 700mA (Dual Channel)	18-36Vdc	50W	120-277Vac	0-10V
60W	KTLD-60-UV-1600-VDIM-W2	1,600mA	18-37.5Vdc	60W	120-277Vac	0-10V
72W	KTLD-72-UV-2X1000-VDIM-L5	2x 1,000mA (Dual Channel)	18-36Vdc	72W	120-277Vac	0-10V
75W	KTLD-75-UV-1450-VDIM-L5	1,450mA	27-51Vdc	75W	120-277Vac	0-10V
100W	KTLD-100-UV-1750-VDIM-L5	1,750mA	29-57Vdc	100W	120-277Vac	0-10V
	KTLD-100-UV-4X500-VDIM-L18	4x 500mA (4 Channel)	25-50Vdc	100W	120-277Vac	0-10V

We make LED easy. From simple explanations to special design requests, call us today for any LED questions.
For a complete listing of our LED drivers, contact Keystone or visit our website at KeystoneTech.com.

DUAL TECHNOLOGY HIGH BAY OCCUPANCY SENSORS

Catalog Number	Frequency	Maximum Load Rating	Power Consumption
HBE-PIR-120/277/347	50/60Hz	800VA @ 120VAC, 1200VA @ 277VAC, 1500VA @ 347VAC	0.2W @ 120VAC, 1.0W @ 277VAC, 2.0W @ 347VAC

ACCESSORIES FOR HIGH BAY OCCUPANCY SENSORS

Catalog Number	Description
HBE-EXBT	Extender bracket for high bay motion sensor; lowers sensor for optimum field of view
HBE-LENS-AISLE	Interchangeable lens - aisle way Fresnel pattern
HBE-LENS-360	Interchangeable lens - 360° view Fresnel pattern

WET LOCATION OCCUPANCY SENSORS FOR OUTDOOR USE

Catalog Number	Frequency	Maximum Load Rating	Power Consumption	Features
HBE-PIR-120-277-IP65	50/60Hz	800VA @ 120VAC, 1200VA @ 208/240/277VAC	0.07W @ 120VAC, 0.39W @ 277VAC	IP65 Rated
HBE-PIR-347/480-IP65	50/60Hz	1500VA @ 347VAC, 2000VA @ 480VAC	0.19W @ 347VAC, 0.37W @ 480VAC	IP65 Rated

FEATURES

- Simple adjustable controls for time delay and day lighting control
- Passive infrared (PIR) sensing technology
- Ideal for fluorescent or LED high bay fixtures in warehouses, manufacturing facilities, and other high ceiling applications
- LED indicator
- No minimum load requirements
- Interchangeable lenses including aisle pattern view
- Low bay lens included with wet location sensor only
- Embedded relay (no external box required)

PERFORMANCE

- Mounting height: Up to 40' maximum
- Operating temperature range: 14ºF-160ºF for standard high bay sensors; -4ºF-160ºF for wet location sensors
- Storage temperature range: 14ºF-160ºF for standard high bay sensors; -4ºF-160ºF for wet location sensors

SOCKETS

Catalog Number	Description
KT-SOCKET-RDC-PE	Recessed double contact socket with plunger end for high output lamps
KT-SOCKET-RDC-SE	Recessed double contact socket with stationary end for high output lamps
KT-SOCKET-SL-PE	Single pin slimline socket with plunger end
KT-SOCKET-SL-SE	Single pin slimline socket with stationary end
KT-SOCKET-T8-U-T	Non-shunted tall T8 socket with push-through with nub, approximately 30mm
KT-SOCKET-T8-U-S	Non-shunted standard T8 socket with push-through with nub, approximately 23mm
KT-SOCKET-T8-U-SI	Slide-on socket for DirectDrive U-bend lamps

FLUORESCENT LAMPS

RoHS Compliant 3 YEAR FLUORESCENT SYSTEM WARRANTY

T8 LINEAR

Nominal Wattage	Nominal Length	Catalog Number	Case Quantity	CRI	Initial Lumens	Mean Lumens	Rated Average Life		Lumen Maintenance	Additional Approvals
							3-hr/Start	12-hr/Start		
High Performance Linear T8 Lamps (Medium Bi-Pin, G13 Base)										
17W	24"	KTL-F17T8-8xx-HP	25	85	1,380	1,300	30,000 Hours	36,000 Hours	94%	N/A
25W	36"	KTL-F25T8-8xx-HP	25	85	2,275	2,140	30,000 Hours	36,000 Hours	94%	
25W	48"	KTL-F25T8ES-8xx-HP	25	85	2,500	2,350	30,000 Hours	36,000 Hours	94%	
28W	48"	KTL-F28T8ES-8xx-HP	25	85	2,725	2,560	30,000 Hours	36,000 Hours	94%	CEE Qualified
32W	48"	KTL-F32T8-8xx-HP	25	85	3,100	2,915	30,000 Hours	36,000 Hours	94%	
32W	48"	KTL-F32T8-8xx-XHP	25	85	3,200	3,010	30,000 Hours	36,000 Hours	94%	
32W	48"	KTL-F32T8-8xx-XL	25	85	3,100	2,915	42,000 Hours	48,000 Hours	94%	

T5 LINEAR

Nominal Wattage	Nominal Length	Catalog Number	Case Quantity	CRI	Initial Lumens	Mean Lumens	Rated Average Life		Lumen Maintenance
							3-hr/Start	12-hr/Start	
High Efficiency Linear T5 Lamps (Miniature Bi-Pin, G5 Base)									
14W	24"	KTL-F14T5-8xx-HE	25	85	1,350	1,265	24,000 Hours	30,000 Hours	94%
21W	36"	KTL-F21T5-8xx-HE	25	85	2,200	2,060	24,000 Hours	30,000 Hours	94%
28W	48"	KTL-F28T5-8xx-HE	25	85	2,900	2,725	24,000 Hours	30,000 Hours	94%
High Output Linear T5 Lamps (Miniature Bi-Pin, G5 Base)									
49W	48"	KTL-F49T5-8xx-HO	25	85	4,900	4,600	24,000 Hours	30,000 Hours	94%
54W	48"	KTL-F54T5-8xx-HO	25	85	5,000	4,700	24,000 Hours	30,000 Hours	94%

T12 LINEAR

Nominal Wattage	Nominal Length	Catalog Number	Case Quantity	Color Temperature	CRI	Initial Lumens	Mean Lumens	Rated Average Life		Lumen Maintenance
								3-hr/Start	12-hr/Start	
2012 DOE Compliant Linear T12 Lamps (Medium Bi-Pin, G13 Base)										
40W	48"	KTL-F40T12-841-CWX	30	4100K	89	2,500	2,250	24,000 Hours	30,000 Hours	90%

T9 CIRCULAR

Nominal Wattage	Diameter	Catalog Number	Case Quantity	Color Temperature	CRI	Initial Lumens	Mean Lumens	Rated Average Life (3-hr/Start)	Lumen Maintenance
Circular T9 Lamps (4-Pin, G10q Base)									
22W	8"	KTL-FC8T9-CW	12	4100K	60	1,120	920	10,000 Hours	82%
22W	8"	KTL-FC8T9-DL	12	6500K	76	980	805	10,000 Hours	82%
32W	12"	KTL-FC12T9-CW	12	4100K	60	1,930	1,582	10,000 Hours	82%
32W	12"	KTL-FC12T9-DL	12	6500K	76	1,675	1,373	10,000 Hours	82%
40W	16"	KTL-FC16T9-CW	12	4100K	60	2,950	2,420	10,000 Hours	82%
40W	16"	KTL-FC16T9-DL	12	6500K	76	2,450	2,010	10,000 Hours	82%

*_**8xx**_ denotes several color temperatures available:

835	800 Series, 3500K	**841**	800 Series, 4100K	**850**	800 Series, 5000K	**865**	800 Series, 6500K

FLUORESCENT BALLASTS

T12

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Description
F20T12	1	120V	KTEB-120-1-TP-EMI	3 Years	1 lamp F20T12, FCC Class B, normal power factor
	2	120V	KTEB-220-1-TP-EMI	3 Years	2 lamp F20T12, FCC Class B, normal power factor
F40T12	1	120V	KTEB-140-1-TP-EMI	3 Years	1 lamp F40T12, FCC Class B, normal power factor
	2	120V	KTEB-240-1-TP-PIC	3 Years	2 lamp F40T12, F40T12ES, and F34T12, high power factor
		120-277V	KTEB-240-UV-TP-PIC	3 Years	2 lamp F40T12, F40T12ES, and F34T12, high power factor
F96T12	2	120V	KTEB-275-1-TP-PIC-SL	3 Years	1 or 2 lamp F96T12 and F96T12ES, 9" case
		120-277V	KTEB-275-UV-TP-PIC	3 Years	1 or 2 lamp F96T12 and F96T12ES
			KTEB-275-UV-TP-PIC-SL	3 Years	1 or 2 lamp F96T12 and F96T12ES, 9" case
F96T12HO	2	120V	KTEB-2110-1-TP-PIC	3 Years	1 or 2 lamp F96T12HO and F96T12HOES
		120-277V	KTEB-2110-UV-TP-PIC	3 Years	1 or 2 lamp F96T12HO and F96T12HOES

T8 INSTANT START

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Light Output	Description
F17T8 F25T8 F32T8*	2	120-277V	KTEB-232-UV-IS-L-P	5 Years	Low	1 or 2 lamp F17/25/32 T8, reduced output
			KTEB-232-UV-IS-N-P	5 Years	Normal	1 or 2 lamp F17/25/32 T8, standard output
			KTEB-232-UV-IS-H-P	5 Years	High	1 or 2 lamp F17/25/32 T8, high output
		347V	KTEB-232-3-IS-N-P	5 Years	Normal	1 or 2 lamp F17/25/32 T8, standard output
	3	120-277V	KTEB-332-UV-IS-L-P	5 Years	Low	2 or 3 lamp F17/25/32 T8, reduced output
			KTEB-332-UV-IS-N-P	5 Years	Normal	2 or 3 lamp F17/25/32 T8, standard output
			KTEB-332-UV-IS-H-P	5 Years	High	2 or 3 lamp F17/25/32 T8, high output
	4	120-277V	KTEB-432-UV-IS-L-P	5 Years	Low	3 or 4 lamp F17/25/32 T8, reduced output
			KTEB-432-UV-IS-N-P	5 Years	Normal	3 or 4 lamp F17/25/32 T8, standard output
			KTEB-432-UV-IS-H-P	5 Years	High	3 or 4 lamp F17/25/32 T8, high output
		347V	KTEB-432-3-IS-N-P	5 Years	High	3 or 4 lamp F17/25/32/40 T8, high output
F96T8	2	120-277V	KTEB-259-UV-IS-N	5 Years	Normal	1 or 2 lamp F96T8, standard output
F96T8HO	2	120-277V	KTEB-286HO-UV-IS-N	5 Years	Normal	1 or 2 lamp F96T8HO, standard output

**F32T8 lamps including F32T8 (25W), F32T8 (28W), F32T8 (30W) and F32T8 (32W)*

T8 PROGRAM START

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Light Output	Description
F17T8 F25T8 F32T8*	1	120-277V	KTEB-132-UV-PS-N-P	5 Years	Normal	1 lamp F17/25/32 T8, standard output
	2	120-277V	KTEB-232-UV-PS-VDIM	5 Years	Normal	2 lamp F17/25/32 T8, 0-10V dimming
			KTEB-232-UV-PS-L-P	5 Years	Low	1 or 2 lamp 17/25/32 T8, reduced output
			KTEB-232-UV-PS-N-P	5 Years	Normal	1 or 2 lamp F17/25/32 T8, standard output
			KTEB-232-UV-PS-H-P	5 Years	High	1 or 2 lamp F17/25/32 T8, high output
	3	120-277V	KTEB-332-UV-PS-L-P	5 Years	Low	2 or 3 lamp F17/25/32 T8, reduced output
			KTEB-332-UV-PS-N-P	5 Years	Normal	2 or 3 lamp F17/25/32 T8, standard output
			KTEB-332-UV-PS-H-P	5 Years	High	2 or 3 lamp F17/25/32 T8, high output
	4	120-277V	KTEB-432-UV-PS-L-P	5 Years	Low	3 or 4 lamp F17/25/32 T8, reduced output
			KTEB-432-UV-PS-N-P	5 Years	Normal	3 or 4 lamp F17/25/32 T8, standard output
F58T8, F70T8	2	120-277V	KTEB-270-UV-PS-N /C1	5 Years	Normal	1 or 2 lamp F58/70 T8 freezer ballast with Molex connectors
F96T8HO	2	120-277V	KTEB-286HO-UV-PS-N	5 Years	Normal	1 or 2 lamp F96T8HO, standard output

**F32T8 lamps including F32T8 (25W), F32T8 (28W), F32T8 (30W) and F32T8 (32W) except KTEB-232-UV-PS-VDIM*

FLUORESCENT BALLASTS

T5

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Description
F14T5, F21T5, F28T5	1 or 2	120-277V	KTEB-228HE-UV-PS	5 Years	1 or 2 lamp F14/21/28 T5 program start, 90°C rated
			KTEB-228HE-UV-PS-SL	5 Years	1 or 2 lamp F14/21/28 T5 program Start, 90°C rated, 9" case

T5HO

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Description
F24T5HO	1 or 2	120-277V	KTEB-224HO-UV-PS	5 Years	1 or 2 lamp F24T5HO program start, 90°C rated
			KTEB-224HO-UV-PS-SL	5 Years	1 or 2 lamp F24T5HO program start, 90°C rated, 9" case
			KTEB-239HO-UV-PS	5 Years	1 or 2 lamp F24T5HO or F39T5HO program start, 90°C rated
			KTEB-239HO-UV-PS-SL	5 Years	1 or 2 lamp F24T5HO or F39T5HO program start, 90°C rated, 9" case
F39T5HO	1 or 2	120-277V	KTEB-239HO-UV-PS	5 Years	1 or 2 lamp F24T5HO or F39T5HO program start, 90°C rated
			KTEB-239HO-UV-PS-SL	5 Years	1 or 2 lamp F24T5HO or F39T5HO program start, 90°C rated, 9" case
F54T5HO	1 or 2	120-277V	KTEB-254HO-UV-PS	5 Years	1 or 2 lamp F54T5HO program start, 90°C rated
			KTEB-254HO-UV-PS-SL	5 Years	1 or 2 lamp F54T5HO program start, 90°C rated, 9" case
	3 or 4	120-277V	KTEB-454HO-UV-PS	5 Years	3 or 4 lamp F54T5HO program start, 90°C rated

COMPACT FLUORESCENT

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Description
9W CFL	1	120V	CC579TP	3 Years	5, 7, 9W, 2-pin CFL, magnetic
13W CFL	1	120V	CC1322TP	3 Years	13W, 2-pin CFL, magnetic
			113SHPTP	3 Years	1 lamp 13W 2-pin CFL, high power factor, magnetic
	1 or 2	120-277V	KTEB-213-UV-PS-DW	5 Years	1 or 2 lamp 13W 4-pin CFL, program start
			KTEB-213-UV-RS-DW	5 Years	1 or 2 lamp 13W 4-pin CFL, rapid start
			KTEB-213-UV-RS-DW-KIT	5 Years	1 or 2 lamp 13W 4-pin CFL, kit includes wires/stud plate
18W CFL	1 or 2	120-277V	KTEB-218-UV-PS-DW	5 Years	1 or 2 lamp 18W 4-pin CFL, program start
			KTEB-218-UV-RS-DW	5 Years	1 or 2 lamp 18W 4-pin CFL, rapid start
			KTEB-218-UV-RS-DW-KIT	5 Years	1 or 2 lamp 18W 4-pin CFL, kit includes wires/stud plate
26W CFL	1 or 2	120-277V	KTEB-226-UV-PS-DW	5 Years	1 or 2 lamp 26W 4-pin CFL, program start
			KTEB-226-UV-RS-DW	5 Years	1 or 2 lamp 26W 4-pin CFL, rapid start
			KTEB-226-UV-RS-DW-KIT	5 Years	1 or 2 lamp 26W 4-pin CFL, kit includes wires/stud plate
42W CFL	1 or 2	120-277V	KTEB-242-UV-PS-DW	5 Years	1 or 2 lamp 42W 4-pin CFL, program start
			KTEB-242-UV-RS-DW	5 Years	1 or 2 lamp 42W 4-pin CFL, rapid start
			KTEB-242-UV-RS-DW-KIT	5 Years	1 or 2 lamp 42W 4-pin CFL, kit includes wires/stud plate

CIRCLINE

Primary Lamp Type	No. of Lamps	Input Voltage	Catalog Number	Warranty	Description
FC8T9	1	120V	SS22WSTP	3 Years	22W circline, small case, self-start, magnetic with sockets
FC22T9	1	120V	KTEB-1C22-1-TP-WS	3 Years	1 lamp 22W, small case, with sockets
FC32T9 or FC40T9	1	120V	KTEB-140-1-TP-EMI-WS	3 Years	1 lamp 32 or 40W, with sockets
	1	120V	KTEB-140-1-TP-EMI-WS	3 Years	1 lamp 32 or 40W, with sockets
FC22T9 & FC32T9 or FC32T9 & FC40T9	2	120V	KTEB-2C72-1-TP-WS	3 Years	2 lamp 22W & 32W or 32 & 40W, with sockets

SIGN BALLASTS

EC&M Product of the Year 14 Category Winner

SMARTWIRE™
ELECTRONIC SIGN BALLASTS

SmartWire Technology: Wires exactly the same as traditional magnetic ballasts for seamless compatibility and installation

Lightweight: Using solid-state technology, SmartWire electronic sign ballasts weigh ***up to 50% less*** than heavy magnetic ballasts, making transporting and handling significantly easier

2014 DOE Compliant: All SmartWire electronic sign ballasts exceed the energy efficiency levels mandated by the DOE and are at least 10% more energy efficient than traditional magnetic sign ballasts

Versatile: Just 5 SmartWire ballasts operate both T8HO and T12HO lamps, reducing inventory without sacrificing application options

Additional Features: Series Wiring • Minimum Starting Temperature of -30ºC/-20ºF • 120V Input

Total T8HO Lamp Footage Permitted (in Feet)

Lamps Per Ballast	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1	KTSB-E-0208-11-1-S																							
1-2		KTSB-E-0416-12-1-S																						
2-3				KTSB-E-0824-23-1-S																				
2-4				KTSB-E-0832-24-1-S																				
4-6									KTSB-E-2448-46-1-S															

Total T12HO Lamp Footage Permitted (in Feet)

Lamps Per Ballast	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1	KTSB-E-0208-11-1-S																							
1-2		KTSB-E-0416-12-1-S																						
2-3				KTSB-E-0824-23-1-S																				
2-4				KTSB-E-0832-24-1-S																				
4-6												KTSB-E-2448-46-1-S												

Input Voltage	No. of Lamps	Combined Lamp Length	Catalog Number	Description
T12HO				
120V	1	2-8 Feet	KTSB-E-0208-11-1-S	1 T12HO lamp with a combined length of 2-8 feet
	1-2	4-16 Feet	KTSB-E-0416-12-1-S	1-2 T12HO lamps with a combined length of 4-16 feet
	2-3	8-24 Feet	KTSB-E-0824-23-1-S	2-3 T12HO lamps with a combined length of 8-24 feet
	2-4	8-32 Feet	KTSB-E-0832-24-1-S	2-4 T12HO lamps with a combined length of 8-32 feet
	4- 6	24-48 Feet	KTSB-E-2448-46-1-S	4-6 T12HO lamps with a combined length of 24-48 feet
T8HO				
120V	1	2-8 Feet	KTSB-E-0208-11-1-S	1 T8HO lamp with combined length of 2-8 feet
	1- 2	4-12 Feet	KTSB-E-0416-12-1-S	1-2 T8HO lamps with a combined length of 4-12 feet
	2-3	8-18 Feet	KTSB-E-0824-23-1-S	2-3 T8HO lamps with a combined length of 8-18 feet
	2- 4	8-24 Feet	KTSB-E-0832-24-1-S	2 or 4 T8HO lamps with a combined length of 8-24 feet
	4-6	18-36 Feet	KTSB-E-2448-46-1-S	4 or 6 T8HO lamps with a combined length of 18-36 feet

SIGN BALLASTS

UL LISTED RoHS Compliant 4 YEAR WARRANTY

ParallelWire
ELECTRONIC SIGN BALLASTS

Total T8HO Lamp Footage Permitted (in Feet)

Lamps Per Ballast	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1-2		KTSB-E-0216-12-UV																						
1-4		KTSB-E-0432-14-UV																						
				KTSB-E-1040-14-UV																				
4-6								KTSB-E-0848-46-UV																

Total T12HO Lamp Footage Permitted (in Feet)

Lamps Per Ballast	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
1-2	KTSB-E-0216-12-UV																							
1-4		KTSB-E-0432-14-UV																						
					KTSB-E-1040-14-UV																			
4-6									KTSB-E-0848-46-UV															

Input Voltage	No. of Lamps	Combined Lamp Length	Catalog Number	Description
T12HO				
120-277	1-2	2-16 Feet	KTSB-E-0216-12-UV	1-2 T12HO lamps with a combined length of 2-16 feet*
	1-4	4-32 Feet	KTSB-E-0432-14-UV	1-4 T12HO lamps with a combined length of 4-32 feet*
		10-40 Feet	KTSB-E-1040-14-UV	1-4 T12HO lamps with a combined length of 10-40 feet
	4-6	8-48 Feet	KTSB-E-0848-46-UV	4-6 T12HO lamps with a combined length of 8-48 feet*
T8HO				
120-277	1-2	4-12 Feet	KTSB-E-0216-12-UV	1-2 T8HO lamps with a combined length of 4-12 feet*
	1-4	4-24 Feet	KTSB-E-0432-14-UV	1-4 T8HO lamps with a combined length of 4-24 feet*
		8-32 Feet	KTSB-E-1040-14-UV	1-4 T8HO lamps with a combined length of 8-32 feet*
	4-6	16-36 Feet	KTSB-E-0848-46-UV	4-6 T8HO lamps with a combined length of 16-36 feet*

**For use only with lamps 8' and shorter*

METAL HALIDE BALLAST KITS

Each kit includes the ballast pre-wired to a properly rated capacitor and ignitor (if required), mounting hardware, and pictorial installation guide.

Lamp Wattage	No. of Taps	Input Voltage	Catalog Number	Description
50W	Quad	120/208/240/277V	MH-50X-Q-KIT	50W (M110) Metal Halide Ballast Kit
70W	Quad	120/208/240/277V	MH-70X-Q-KIT	70W (M98) Metal Halide Ballast Kit
100W	Quad	120/208/240/277V	MH-100X-Q-KIT	100W (M90) Metal Halide Ballast Kit
150W	Quad	120/208/240/277V	MH-150X-Q-KIT	150W (M102) Metal Halide Ballast Kit
175W	Quad	120/208/240/277V	MH-175A-Q-KIT	175W (M57) Metal Halide Ballast Kit
	5-Tap	120/208/240/277/480V	MH-175A-P-KIT	175W (M57) Metal Halide Ballast Kit
250W	Single	480V	MH-250A-480-KIT	250W (M58) Metal Halide Ballast Kit
	Quad	120/208/240/277V	MH-250A-Q-KIT	250W (M58) Metal Halide Ballast Kit
	5-Tap	120/208/240/277/480V	MH-250A-P-KIT	250W (M58) Metal Halide Ballast Kit
400W	Single	480V	MH-400A-480-KIT	400W (M59) Metal Halide Ballast Kit
	Quad	120/208/240/277V	MH-400A-Q-KIT	400W (M59) Metal Halide Ballast Kit
	5-Tap	120/208/240/277/480V	MH-400A-P-KIT	400W (M59) Metal Halide Ballast Kit
1000W	Single	480V	MH-1000A-480-KIT	1000W (M47) Metal Halide Ballast Kit
	Quad	120/208/240/277V	MH-1000A-Q-KIT	1000W (M47) Metal Halide Ballast Kit
	5-Tap	120/208/240/277/480V	MH-1000A-P-KIT	1000W (M47) Metal Halide Ballast Kit
1500W	Quad	120/208/240/277V	MH-1500A-Q-KIT	1500W (M48) Metal Halide Ballast Kit
	5-Tap	120/208/240/277/480V	MH-1500A-P-KIT	1500W (M48) Metal Halide Ballast Kit

IGNITORS

Catalog Number	Lamp Type	Wattage	Type
IGN-XG-04	Probe Start Metal Halide	50-150W	HX

CAPACITORS

Catalog Number	Lamp Type	Wattage	Microfarad	Voltage	Type
CAP-50MH	Metal Halide	50W	6µF	280V	Dry Film
CAP-70MH	Metal Halide	70W	8µF	280V	Dry Film
CAP-100MH	Metal Halide	100W	12µF	280V	Dry Film
CAP-150MH	Metal Halide	150W	16µF	280V	Dry Film
CAP-175MH	Metal Halide	175W	10µF	400V	Dry Film
CAP-250MH	Metal Halide	250W	15µF	400V	Dry Film
CAP-400MH	Metal Halide	400W	24µF	400V	Dry Film
CAP-1000MH	Metal Halide	1000W	24µF	480V	Oil Filled
CAP-1500MH	Metal Halide	1500W	32µF	525V	Oil Filled

METAL HALIDE F-CAN BALLASTS

Lamp Wattage	No. of Taps	Input Voltage	Catalog Number	Description
50W	Dual	120/277V	MH-50X-D-FCAN	50W (M110) Metal Halide F-Can
70W	Dual	120/277V	MH-70X-D-FCAN	70W (M98) Metal Halide F-Can
100W	Dual	120/277V	MH-100X-D-FCAN	100W (M90) Metal Halide F-Can
150W	Dual	120/277V	MH-150X-D-FCAN	150W (M102) Metal Halide F-Can
175W	Dual	120/277V	MH-175A-D-FCAN	175W (M57/H39) Metal Halide F-Can
250W	Dual	120/277V	MH-250A-D-FCAN	250W (M58/H37) Metal Halide F-Can
400W	Dual	120/277V	MH-400A-D-FCAN	400W (M59/H33) Metal Halide F-Can

HID
Pulse Start Metal Halide

RoHS Compliant 2YEAR WARRANTY

PULSE START METAL HALIDE BALLAST KITS

Each kit includes the ballast pre-wired to a properly rated capacitor and ignitor (if required), mounting hardware, and pictorial installation guide.

Lamp Wattage	No. of Taps	Input Voltage	Catalog Number	Description
175W	Quad	120/208/240/277V	MPS-175A-Q-KIT	175W Pulse Start (M137) Metal Halide Ballast Kit, EISA Compliant
	5 Tap	120/208/240/277/480V	MPS-175A-P-KIT	175W Pulse Start (M137) Metal Halide Ballast Kit, EISA Compliant
200W	5 Tap	120/208/240/277/480V	MPS-200A-P-KIT	200W Pulse Start (M136) Metal Halide Ballast Kit, EISA Compliant
250W	Quad	120/208/240/277V	MPS-250A-Q-KIT	250W Pulse Start (M138) Metal Halide Ballast Kit, EISA Compliant
	5 Tap	120/208/240/277/480V	MPS-250A-P-KIT	250W Pulse Start (M138) Metal Halide Ballast Kit, EISA Compliant
320W	Quad	120/208/240/277V	MPS-320A-Q-KIT	320W Pulse Start (M132) Metal Halide Ballast Kit, EISA Compliant
	5 Tap	120/208/240/277/480V	MPS-320A-P-KIT	320W Pulse Start (M132) Metal Halide Ballast Kit, EISA Compliant
350W	Quad	120/208/240/277V	MPS-350A-Q-KIT	350W Pulse Start (M131) Metal Halide Ballast Kit, EISA Compliant
	5 Tap	120/208/240/277/480V	MPS-350A-P-KIT	350W Pulse Start (M131) Metal Halide Ballast Kit, EISA Compliant
400W	Single	480V	MPS-400A-480-KIT	400W Pulse Start (M135) Metal Halide Ballast Kit, EISA Compliant
	Quad	120/208/240/277V	MPS-400A-Q-KIT	400W Pulse Start (M135) Metal Halide Ballast Kit, EISA Compliant
	5 Tap	120/208/240/277/480V	MPS-400A-P-KIT	400W Pulse Start (M135) Metal Halide Ballast Kit, EISA Compliant
450W	Quad	120/208/240/277V	MPS-450A-Q-KIT	450W Pulse Start (M144) Metal Halide Ballast Kit, EISA Compliant
	5 Tap	120/208/240/277/480V	MPS-450A-P-KIT	450W Pulse Start (M144) Metal Halide Ballast Kit, EISA Compliant
750W	Quad	120/208/240/277V	MPS-750A-Q-KIT	750W Pulse Start (M149) Metal Halide Ballast Kit
	5 Tap	120/208/240/277/480V	MPS-750A-P-KIT	750W Pulse Start (M149) Metal Halide Ballast Kit
1000W	Quad	120/208/240/277V	MPS-1000A-Q-KIT	1000W Pulse Start (M141) Metal Halide Ballast Kit
	5 Tap	120/208/240/277/480V	MPS-1000A-P-KIT	1000W Pulse Start (M141) Metal Halide Ballast Kit

IGNITORS

Catalog Number	Lamp Type	Wattage	Type
IGN-XG-03	Pulse Start Metal Halide	1000W	CWA
IGN-XG-03/A	Pulse Start Metal Halide	750W	CWA
IGN-XG-04	Pulse Start Metal Halide	50-450W	HX

CAPACITORS

Catalog Number	Lamp Type	Wattage	Microfarad	Voltage	Type
CAP-70MH	Metal Halide	70W	8µF	280V	Dry Film
CAP-100MH	Metal Halide	100W	12µF	280V	Dry Film
CAP-150MH	Metal Halide	150W	16µF	280V	Dry Film
CAP-175MPS	Pulse Start Metal Halide	175W	11µF	400V	Dry Film
CAP-200MPS	Pulse Start Metal Halide	200W	15µF	330V	Dry Film
CAP-250MPS	Pulse Start Metal Halide	250W	17µF	400V	Dry Film
CAP-320MPS	Pulse Start Metal Halide	320W	21µF	345V	Dry Film
CAP-350MPS	Pulse Start Metal Halide	350W	22.5µF	345V	Dry Film
CAP-400MPS	Pulse Start Metal Halide	400W	26µF	330V	Dry Film
CAP-450MPS	Pulse Start Metal Halide	450W	26.5µF	400V	Dry Film
CAP-750MPS	Pulse Start Metal Halide	750W	28µF	400V	Oil Filled
CAP-1000MPS	Pulse Start Metal Halide	1000W	24µF	480V	Oil Filled

HIGH PRESSURE SODIUM BALLAST KITS

Each kit includes the ballast pre-wired to a properly rated capacitor and ignitor (if required), mounting hardware, and pictorial installation guide.

Lamp Wattage	No. of Taps	Input Voltage	Catalog Number	Description
35W	Single	120V	HPS-35R-1-KIT	35W (S76) High Pressure Sodium Ballast Kit
50W	Single	120V	HPS-50R-1-KIT	50W (S68) High Pressure Sodium Ballast Kit
70W	Single	120V	HPS-70R-1-KIT	70W (S62) High Pressure Sodium Ballast Kit
	Quad	120/208/240/277V	HPS-70X-Q-KIT	70W (S62) High Pressure Sodium Ballast Kit
100W	Single	120V	HPS-100R-1-KIT	100W (S54) High Pressure Sodium Ballast Kit
	Quad	120/208/240/277V	HPS-100X-Q-KIT	100W (S54) High Pressure Sodium Ballast Kit
150W	Single	120V	HPS-150R-1-KIT	150W (S55) High Pressure Sodium Ballast Kit
	Quad	120/208/240/277V	HPS-150X-Q-KIT	150W (S55) High Pressure Sodium Ballast Kit
250W	Quad	120/208/240/277V	HPS-250A-Q-KIT	250W (S50) High Pressure Sodium Ballast Kit
	5-Tap	120/208/240/277/480V	HPS-250A-P-KIT	250W (S50) High Pressure Sodium Ballast Kit
400W	Single	480V	HPS-400A-480-KIT	400W (S51) High Pressure Sodium Ballast Kit
	Quad	120/208/240/277V	HPS-400A-Q-KIT	400W (S51) High Pressure Sodium Ballast Kit
	5-Tap	120/208/240/277/480V	HPS-400A-P-KIT	400W (S51) High Pressure Sodium Ballast Kit
600W	Quad	120/208/240/277V	HPS-600A-Q-KIT	600W (S106) High Pressure Sodium Ballast Kit
1000W	Quad	120/208/240/277V	HPS-1000A-Q-KIT	1000W (S52) High Pressure Sodium Ballast Kit
	5-Tap	120/208/240/277/480V	HPS-1000A-P-KIT	1000W (S52) High Pressure Sodium Ballast Kit

IGNITORS

Catalog Number	Lamp Type	Wattage	Type
IGN-XG-01	High Pressure Sodium	35-150W	Reactor, HX
IGN-XG-02	High Pressure Sodium	250-400W	CWA
IGN-XG-03	High Pressure Sodium	1000W	CWA
IGN-XG-06	High Pressure Sodium	600W	CWA

CAPACITORS

Catalog Number	Lamp Type	Wattage	Microfarad	Voltage	Type
CAP-70HPS	High Pressure Sodium	70W	7µF	280V	Dry Film
CAP-100HPS	High Pressure Sodium	100W	10µF	280V	Dry Film
CAP-150HPS	High Pressure Sodium	150W	14µF	280V	Dry Film
CAP-250HPS	High Pressure Sodium	250W	35µF	240V	Dry Film
CAP-400HPS	High Pressure Sodium	400W	55µF	300V	Dry Film
CAP-1000HPS	High Pressure Sodium	1000W	26µF	525V	Oil Filled

TRANSFORMERS

RoHS Compliant 3YEAR WARRANTY

12V HALOGEN TRANSFORMERS

Max. Input Power	Input Voltage	Catalog Number	Input Current	Output Voltage	Dimmable	Remarks	Additional Approvals
60W	120V	KTET-60-1-WC-F	0.50A	11V	No	With cord and fuse	
		KTET-60-1-SCP-DIM-AL	0.50A	12V	Yes	Class 2, short circuit protected, aluminum case	
75W	120V	KTET-75-1-SCP-EMI	0.63A	11V	No	Short circuit protected, EMI filter	
		KTET-75-1-SCP-DIM-RJS	0.62A	11V	Yes	With rear mount studs and leads for J-box application	
		KTET-75-1-SCP-DIM-HV-AL	0.59A	12V	Yes	With aluminum case, side leads	
	277V	KTET-75-2-SCP-RJS	0.26A	11V	No	With rear mount studs and leads for J-box application	
150W	120V	KTET-150-1-SCP-DIM	1.27A	11.4V	Yes	Short circuit protected, aluminum case	

STEP DOWN TRANSFORMERS

	INPUT CHARACTERISTICS			OUTPUT CHARACTERISTICS			
Catalog Number	Input Voltage	Input Current at Max. Load	Input Current at No Load	Output Voltage	Max. Load	Max Output Current	Additional Approvals
KTAT-375-480-277 /A	480V	0.86A	0.21A	277V	375VA	1.35A	
	347V	0.86A	0.11A	200V	270VA	1.35A	
KTAT-250-480-277 /A	480V	0.57A	0.16A	277V	250VA	0.90A	
	347V	0.57A	0.11A	200V	180VA	0.90A	
KTAT-70-347-277	347V	0.23A	0.07A	277V	70VA	0.27A	
KTAT-70-347-277-RJS	347V	0.23A	0.07A	277V	70VA	0.27A	
KTAT-70-480-277	480V	0.16A	0.06A	277V	70VA	0.25A	
	347V	0.22A	0.08A	277V	70VA	0.25A	
KTAT-70-480-277-RJS	480V	0.16A	0.06A	277V	70VA	0.25A	
	347V	0.22A	0.08A	277V	70VA	0.25A	
KTAT-30-347-277	347V	0.11A	0.05A	277V	30VA	0.13A	
KTAT-30-347-277-RJS	347V	0.11A	0.05A	277V	30VA	0.13A	

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