LED Replacement Lamps

For HID-Ballast Bypass (Type B)



Project Name	
Date	- Type
Notes	

LED replacement for HID lamps leverage the low energy and long life of LED. The existing fixture is wired to bypass the ballast, which reduces energy use and eliminates the need to check ballast compatibility. Additional maintenance savings are realized by removing costs associated with purchasing and installing ballasts.

PERFORMANCE HIGHLIGHTS:

Light Output Range: 3,000-65,000 Lumens **CRI:** 70 **CCT:** 2450K, 3000K, 3500K, 4000K & 5000K Input Voltage: 120-277V; 208-277V; 277-480V Efficiency: Up to 157 LPW Wattage: 21W-450W Life: 50,000 hours L70 Standard LED HID -40°C to +50°C **Temperature Rating:** Hazardous Rated LED HID -20°C to +65°C Rating: Damp Fixtures: Open or Enclosed GE Lighting Filtr-Gard[®] H2 Series Crouse-Hinds Champ[®] VMV **Fixtures UL Certified** Appleton™ Mercmaster™ II Series for Hazardous Appleton™ Mercmaster™ III Series **Locations:** Hubbell Killark® VM Series Holophane Petrolux P3M®

LIMITED WARRANTY

Thomas & Betts Hazlux® 3 Series

5 Years

FEATURES

- 3.3X Longer Life (50,000 hr (B50) LED vs 15,000 hr (B50) Metal Halide)
- Uses 60-75% less energy, providing similar light output
- · Tether Kit and in-line fuse included
- Horizontal support kit with ED37 & BT56

BENEFITS

Energy + Cost Savings

For example, an LED lamp using 450 watts, saves \$3,437 in energy costs over the rated life of the lamp vs. a standard 1,075 watt Metal Halide lamp system (1000W lamp and 75W ballast) based on \$0.11 per kWh

- Ballast bypass (Type B) wiring eliminates costs and hassle associated with replacing ballasts
- Type B eliminates the need to check ballast compatibility

Energy Savings switching from HID to LED Type B

Lamp Replacement Wattage	HID System Wattage	LED System Wattage	System Energy Savings (W)	System Energy Cost Savings Over Life of Lamp*
1000W MH	1075	450	625	\$3,437
750W HID	825	360	465	\$2,395
400W MH	460	150	310	\$1,705
250W HID	290	115	175	\$962
175W MH	210	80	130	\$715
100W HID	120	50	70	\$385

*Based on energy rates at 0.11 per kWh over the life of the lamp









LED Replacement Lamps HID-Ballast Bypass (Type B)

Spec Tables

Project Name	
Date	Type
Notes	





Base Type	Watts	Order Code	Description	Volts	Case Qty ²	MOL (ln)	MOD (In)	Lumens Initial	Initial Color Temp	CRI	Wattage Replacement	Rated Life L70 (Hrs) ¹	DLC® Listed ^{3,4}	Location Rating ^{5,6}
	LED Replacement Lamps for HID													
E26	21	27729	LED21ED17/740	120-277	3	5.4	2.6	3,000	4000K	>70	50W HPS/70W MH	50,000	N/A	Damp
E26	21	27732	LED21ED17/750	120-277	3	5.4	2.6	3,000	5000K	>70	50W HPS/70W MH	50,000	N/A	Damp
E26	35	93112114	LED35ED17/730	120-277	3	5.4	2.6	5,000	3000K	>70	70W HPS/100W MH	50000	N/A	Damp
E26	35	27602	LED35ED17/740	120-277	3	5.4	2.6	5,000	4000K	>70	70W HPS/100W MH	50,000	N/A	Damp
E26	35	27724	LED35ED17/750	120-277	3	5.4	2.6	5,000	5000K	>70	70W HPS/100W MH	50,000	N/A	Damp
E26	45	93116975	LED45ED17/835	120-277	3	5.4	2.6	6,000	3500K	>70	100W HPS/100W MH	50,000	N/A	Damp
E26	45	93148082	LED45ED17/740	120-277	3	5.4	2.6	7,000	4000K	>70	100W HPS/175W MH	50,000	N/A	Damp
E26	45	93148081	LED45ED17/750	120-277	3	5.4	2.6	7,000	5000K	>70	100W HPS/175W MH	50,000	N/A	Damp
E26	50	93125012	LED50ED23.5M/730	120-277	3	7.8	3.7	7,500	3000K	>70	100W HPS/150W MH	50,000	N/A	Damp
E26	50	22779	LED50ED23.5M/740	120-277	3	7.8	3.7	7,500	4000K	>70	100W HPS/150W MH	50,000	N/A	Damp
E26	50	93125011	LED50ED23.5M/750	120-277	3	7.8	3.7	7,500	5000K	>70	100W HPS/150W MH	50,000	N/A	Damp
E26	80	22768	LED80ED23.5M/740	120-277	3	7.8	3.7	12,000	4000K	>70	150W HPS/250W MH	50,000	N/A	Damp
E26	80	93125008	LED80ED23.5M/750	120-277	3	7.8	3.7	12,000	5000K	>70	150W HPS/250W MH	50,000	N/A	Damp
EX39	50	27572	LED50ED23.5/725	120-277	3	7.8	3.7	7,150	2450K	>70	100W HPS/175W MH	50,000	-	Damp
EX39	50	93112115	LED50ED23.5/730	120-277	3	7.8	3.7	7,500	3000K	>70	100W HPS/150W MH	50,000	Yes	Damp
EX39	50	22679	LED50ED23.5/740	120-277	3	7.8	3.7	7,500	4000K	>70	100W HPS/150W MH	50,000	Yes	Damp
EX39	50	22739	LED50ED23.5/750	120-277	3	7.8	3.7	7,500	5000K	>70	100W HPS/150W MH	50,000	Yes	Damp
EX39	50	93154637	LED50ED23.5/740/277/480	277-480	3	7.8	3.7	7,500	4000K	>70	100W HPS/150W MH	50,000	-	Damp
EX39	50	93154639	LED50ED23.5/750/277/480	277-480	3	7.8	3.7	7,500	5000K	>70	100W HPS/150W MH	50,000	-	Damp
EX39	80	93112196	LED80ED23.5/730	120-277	3	7.8	3.7	12,000	3000K	>70	150W HPS/250W MH	50,000	Yes	Damp
EX39	80	22635	LED80ED23.5/740	120-277	3	7.8	3.7	12,000	4000K	>70	150W HPS/250W MH	50,000	Yes	Damp
EX39	80	22676	LED80ED23.5/750	120-277	3	7.8	3.7	12,000	5000K	>70	150W HPS/250W MH	50,000	Yes	Damp
EX39	80	93154642	LED80ED23.5/740/277/480	277-480	3	7.8	3.7	12,000	4000K	>70	150W HPS/250W MH	50,000	-	Damp
EX39	80	93154640	LED80ED23.5/750/277/480	277-480	3	7.8	3.7	12,000	5000K	>70	150W HPS/250W MH	50,000	-	Damp
			Additional Information for L	FD Penlace	ment	Lamne	for HII	D. Onen a	and Close	d Rated	Rallact hypacs required			

Additional Information for LED Replacement Lamps for HID: Open and Closed Rated. Ballast bypass required. These products are covered by U.S. Patents 10788163 and 10508776. These products may also be covered by other U.S. patents or pending applications.



LED Replacement Lamps

HID-Ballast Bypass (Type B)

Spec Tables



Base Type	Watts	Order Code	Description	Volts	Case Qty ²	MOL (ln)	MOD (In)	Lumens Initial	Initial Color Temp	CRI	Wattage Replacement	Rated Life L70 (Hrs) ¹	DLC® Listed ^{3,4}	Location Rating ^{5,6}
	LED Replacement Lamps for HID													
EX39	115	93112197	LED115ED28/730	120-277	3	8.3	4.1	18,000	3000K	>70	250W HPS/350W MH	50,000	Yes	Damp
EX39	115	22622	LED115ED28/740	120-277	3	8.3	4.1	18,000	4000K	>70	250W HPS/350W MH	50,000	Yes	Damp
EX39	115	22623	LED115ED28/750	120-277	3	8.3	41	18,000	5000K	>70	250W HPS/350W MH	50,000	Yes	Damp
EX39	115	93139853	LED115ED28/740/277/480	277-480	3	8.3	4.1	18,000	4000K	>70	250W HPS/350W MH	50,000	Yes	Damp
EX39	115	93139854	LED115ED28/750/277/480	277-480	3	8.3	4.1	18,000	5000K	>70	250W HPS/350W MH	50,000	Yes	Damp
EX39	150	93112198	LED150ED28/730	120-277	3	8.3	4.1	23,500	3000K	>70	310W HPS/400W MH	50,000	Yes	Damp
EX39	150	22611	LED150ED28/740	120-277	3	8.3	4.1	23,500	4000K	>70	310W HPS/400W MH	50,000	Yes	Damp
EX39	150	22613	LED150ED28/750	120-277	3	8.3	41	23,500	5000K	>70	310W HPS/400W MH	50,000	Yes	Damp
EX39	150	93139849	LED150ED28/740/277/480	277-480	3	8.3	4.1	23,500	4000K	>70	310W HPS/400W MH	50,000	Yes	Damp
EX39	150	93139850	LED150ED28/750/277/480	277-480	3	8.3	4.1	23,500	5000K	>70	310W HPS/400W MH	50,000	Yes	Damp
EX39	200	93122140	LED200ED37/740	277-480	3	10.6	5.6	30,000	4000K	>70	400W HPS/400W MH	50,000	Yes	Damp
EX39	200	93122142	LED200ED37/750	277-480	3	10.6	5.6	30,000	5000K	>70	400W HPS/400W MH	50,000	Yes	Damp
EX39	270	93153080	LED270BT56/740/120/277	120-277	3	12.3	5.6	40,000	4000K	>70	400W HPS/400W MH	50,000	Yes	Damp
EX39	270	93153121	LED270BT56/750/120/277	120-277	3	12.3	5.6	40,000	5000K	>70	400W HPS/400W MH	50,000	Yes	Damp
EX39	270	93095547	LED270BT56/740	277-480	3	12.3	5.6	40,000	4000K	>70	400W HPS/400W MH	50,000	Yes	Damp
EX39	270	93095553	LED270BT56/750	277-480	3	12.3	5.6	40,000	5000K	>70	400W HPS/400W MH	50,000	Yes	Damp
EX39	360	93122144	LED360ED37/740	277-480	3	10.6	5.6	53,000	4000K	>70	600W HPS/750W MH	50,000	Yes	Damp
EX39	360	93122166	LED360ED37/750	277-480	3	10.6	5.6	53,000	5000K	>70	600W HPS/750W MH	50,000	Yes	Damp
EX39	450	93153122	LED450BT56/740/208/277	208-277	3	12.3	5.6	65,000	4000K	>70	750W HPS/1000W MH	50,000	Yes	Damp
EX39	450	93153123	LED450BT56/750/208/277	208-277	3	12.3	5.6	65,000	5000K	>70	750W HPS/1000W MH	50,000	Yes	Damp
EX39	450	93096445	LED450BT56/740	277-480	3	12.3	5.6	65,000	4000K	>70	750W HPS/1000W MH	50,000	Yes	Damp
EX39	450	93096547	LED450BT56/750	277-480	3	12.3	5.6	65,000	5000K	>70	750W HPS/1000W MH	50,000	Yes	Damp

Additional Information for LED Replacement Lamps for HID: Open and Closed Rated. Ballast bypass required. These products are covered by U.S. Patents 10788163 and 10508776. These products may also be covered by other U.S. patents or pending applications.



LED Replacement Lamps

HID-Ballast Bypass (Type B) For Hazardous Locations Spec Tables

Project Name	
Date	Туре
Notes	



Base Type*	Watts	Order Code	Description	Volts	Case Qty ²	MOL (In)	MOD (In)	Lumens Initial	Initial Color Temp	CRI	Wattage Replacement	Rated Life L70 (Hrs) ¹		Location Rating ^{5,7}
			LED Rep	laceme	nt La	amps	for H	ID - Haz	ardous Loc	ation	s			
E26/EX39	21	93134832	LED21ED17/730/HAZ	120-277	3	5.4	2.6	3,000	3000K	>70	50W HPS/70W MH	50,000	-	Damp
E26/EX39	21	93134833	LED21ED17/740/HAZ	120-277	3	5.4	2.6	3,000	4000K	>70	50W HPS/70W MH	50,000	-	Damp
E26/EX39	21	93134834	LED21ED17/750/HAZ	120-277	3	5.4	2.6	3,000	5000K	>70	50W HPS/70W MH	50,000	-	Damp
E26/EX39	35	93134829	LED35ED17/730/HAZ	120-277	3	5.4	2.6	5,000	3000K	>70	70W HPS/100W MH	50,000	-	Damp
E26/EX39	35	93134830	LED35ED17/740/HAZ	120-277	3	5.4	2.6	5,000	4000K	>70	70W HPS/100W MH	50,000	-	Damp
E26/EX39	35	93134831	LED35ED17/750/HAZ	120-277	3	5.4	2.6	5,000	5000K	>70	70W HPS/100W MH	50,000	-	Damp
E26/EX39	45	93134846	LED45ED17/730/HAZ	120-277	3	5.4	2.6	6,000	3000K	>70	100W HPS/100W MH	50,000	-	Damp
E26/EX39	45	93134847	LED45ED17/740/HAZ	120-277	3	5.4	2.6	6,000	4000K	>70	100W HPS/100W MH	50,000	-	Damp
E26/EX39	45	93134848	LED45ED17/750/HAZ	120-277	3	5.4	2.6	6,000	5000K	>70	100W HPS/100W MH	50,000	-	Damp
E26/EX39	80	93141934	LED80ED23.5/740/HAZ	120-277	3	7.8	3.7	12,000	4000K	>70	150W HPS/250W MH	50,000	-	Damp
E26/EX39	80	93141935	LED80ED23.5/750/HAZ	120-277	3	7.8	3.7	12,000	5000K	>70	150W HPS/250W MH	50,000	-	Damp
EX39	80	93148146	LED80ED23.5/740/277/480/HAZ	277-480	3	7.8	3.7	12,000	4000K	>70	150W HPS/250W MH	50,000	-	Damp
EX39	80	93148147	LED80ED23.5/750/277/480/HAZ	277-480	3	7.8	3.7	12,000	5000K	>70	150W HPS/250W MH	50,000	-	Damp
	T1		Additional Information for LE	•							* *			

These products are covered by U.S. Patents 10788163 and 10508776. These products may also be covered by other U.S. patents or pending applications.

* EX39 socket adapter is included with HAZ E26 based lamps for mogul base applications.
Information provided is subject to change without notice. Please verify all details with Current. All values are design or typical values when measured under laboratory conditions, and Current makes no warranty or guarantee, expressed or implied, that such performance will be obtained under end-use conditions.

- ¹ The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)
- ² Minimum order quantity = 1
- ³ E26 based products are not eligible for DLC. Not all product variations on this page are DLC qualified. Visit qpl.designlights.org/solid-state-lighting to confirm qualification.
- ⁴ Do not use with phase-cut dimmers. Dimming functions only with external Variac control devices.
- ⁵ UL 1993 Environmental Requirements for LED LAMPS
 - Location, damp Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to, electrical equipment, and includes partially protected locations.
 - Location, dry Location not normally subject to dampness, may include a location subject to temporary dampness, i.e., building under construction, provided ventilation is adequate to prevent an accumulation of moisture.
- Location, wet Location in which water or other liquid can drip, splash, or flow on or against electrical equipment.
- ⁶ Not suitable for air-tight explosive or hazardous fixtures.
- ⁷ See Installation Guide for applicable Hazardous Location luminaire fittings..

