



# LED Lamps - HID



## Application Considerations for LED HID Replacements

When replacing High Intensity Discharge (HID) lamps, it is important to review the application & environment to ensure long-term satisfaction. Use this guide to make sure LED replacement lamps are suitable for your specific application.

<b>Key Considerations</b>			
<b>Ballast Bypass</b>	Follow installation instructions - LED HID Type B lamps are operated <b>ONLY</b> on mains voltage, not from a ballast. <i>Current provides installation instructions, a misapplication fuse, and a retrofit fixture label with every lamp.</i>	Mains voltage to socket, bypass ballast according to instructions.	Socket connected to ballast.
<b>Input Voltage</b>	Check that input voltage matches lamp ratings. <i>Current offers lamps in 120-277V and 277-480V ranges.</i>	Lamp voltage range matches input voltage.	Input voltage outside of lamp voltage range.
<b>Fixture Enclosure &amp; Lamp Size</b>	Ensure lamp will fit inside enclosure and minimum volume specifications are met. LED replacement lamp shape designation (ED17, ED28, etc.) will typically match the HID lamp being replaced. Scrutinize exceptions. <i>Current lamps with active cooling conform to ANSI maximum lengths and diameters for HID lamps. Minimum lamp compartment requirements are in the table below.</i>	Fixture enclosure is large enough to accommodate lamp & minimum volume requirements are met.	Fixture enclosure is too small for lamp.
<b>Socket Condition</b>	Inspect socket condition. <i>A recommended best practice for any lamp replacement. Damaged or corroded sockets should be replaced.</i>	Socket is free of defects.	Socket is damaged or corroded.
<b>Ambient Temperature &amp; Fixture Thermals</b>	Confirm temperature of application environment. <i>Current lamps are rated for -40°C to +50°C.</i>	Temperature is within lamp acceptable range.	Temperature is beyond lamp acceptable range.
<b>Light Output</b>	Check that replacement lamp provides adequate lumens. <i>Current uses NEMA Standard LL 10-2020 for HID wattage equivalency claims. See table below. Beware wattage equivalency claims that do not follow NEMA guidelines.</i>	LED replacement lumens have been evaluated & deemed sufficient.	LED replacement lumens are insufficient.
LED Replacement Lamps for HID Hazardous Locations have special considerations related to the luminaire and application. Visit <a href="http://www.LED.com/products/lamps/led-type-b-hid-hazardous">www.LED.com/products/lamps/led-type-b-hid-hazardous</a> or contact a Current sales representative for more details.			

Current LED HID Replacement Lamp	Equivalent HID Wattage		Lamp Compartment Size		
	Metal Halide	High Pressure Sodium	Minimum Volume (in <sup>3</sup> )	Approximate Rectangular Dimensions	
21W ED17	70W	50W	78	3.5 x 3.5 x 6.5 in	9 x 9 x 17 cm
35W ED17	100W	70W	78	3.5 x 3.5 x 6.5 in	9 x 9 x 17 cm
45W ED17	175W	100W	78	3.5 x 3.5 x 6.5 in	9 x 9 x 17 cm
50W ED23.5	150W	100W	367	9 x 6 x 7 in	23 x 16 x 18 cm
80W ED23.5	250W	150W	367	9 x 6 x 7 in	23 x 16 x 18 cm
115W ED28	350W	250W	552	10 x 8 x 7 in	26 x 21 x 18 cm
150W ED28	400W	310W	552	10 x 8 x 7 in	26 x 21 x 18 cm
200W ED37	400W	400W	1102	10 x 10 x 11 in	26 x 26 x 28 cm
270W BT56	400W	400W	1813	11 x 11 x 15 in	28 x 28 x 38 cm
360W ED37	750W	600W	1102	10 x 10 x 11 in	26 x 26 x 28 cm
450W BT56	1000W	750W	1813	11 x 11 x 15 in	28 x 28 x 38 cm