



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.

Key Considerations			
Ballast Bypass	Follow installation instructions - LED HID Type B lamps are operated ONLY 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.
Input Voltage	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.
Fixture Enclosure & Lamp Size	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.
Socket Condition	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.
Ambient Temperature & Fixture Thermals	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.
Light Output	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 www.LED.com/products/lamps/led-type-b-hid-hazardous 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 ³)	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