

Electronic HID Ballast Specification-High Efficiency 250W-400W

Section I – Physical Characteristics

- 1.1 Ballast shall be furnished with integral color-coded leads.
- 1.2 Ballast shall be fully enclosed in an aluminum housing painted white with an integrated junction box for the input wires and the output wires on the opposite side of the ballast.

Section II – Performance Requirements

- 2.1 Ballast shall operate at 208 volts, or 277 volts, with +/- 10% variation tolerance, 50/60 Hz .
- 2.2 Ballast shall be multi wattage selectable and operate 250W, 300W, 320W, 350W and 400W pulse start and ceramic metal halide lamps.
- 2.3 Ballast shall be 90% efficient and use 10% or less of the total system power on the primary lamp application.
- 2.4 Ballast input current shall have Total Harmonic Distortion (THD) of less than 15%.
- 2.5 Ballast shall have a Power Factor 90%.
- 2.6 Ballast shall be Sound Rated A.
- 2.7 Ballast shall provide a Lamp Current Crest Factor of equal to or less than 1.4.
- 2.8 Ballast output frequency to the lamps shall less than 200 Hz to prevent acoustic resonance inside the lamp arc tube and to minimize visible flicker.
- 2.9 Ballast shall be thermally protected to shut off when operating temperatures reach UL maximum limits.
- 2.10 Ballast shall have a lamp end of life detection and shutdown circuit.

Section III – Regulatory

- 3.1 Ballast shall meet FCC Title 47 CFR part 18, non-consumer equipment standards, class A.
- 3.2 Ballast shall meet ANSI C62.41, Category A2 for Transient Voltage protection.
- 3.3 Ballast shall meet UL Class P.
- 3.4 Ballast shall meet US law and contain no Polychlorinated Byphenois (PCBs).
- 3.5 Ballast shall meet all US state and federal, and Canadian provincial and federal efficacy laws.
- 3.6 Ballast shall meet the RoHS Directive 2002/95EC on the restriction of hazardous substances such as lead, cadmium, mercury, hexavalent chromium, PBBs and PBDEs.

Section IV – Other

- 4.1 Ballast shall carry a five-year warranty from the date of manufacture at an ambient temperature of 55C or less.
- 4.2 Manufacturer must have a 15-year history of designing and manufacturing electronic ballast.
- 4.3 Ballast must be manufactured in an ISO 9002 Certified Facility.