

## SECTION III – HID

### Ballast Specification for HID Ballasts

#### HID

INCLUDING: Metal Halide, High Pressure Sodium, Low Pressure Sodium & Mercury Vapor

#### Performance Requirements:

1. Ballasts shall be designed in accordance with all applicable ANSI specifications including ANSI C82.4.
2. The Core & Coil ballast shall be designed with class "H" (180°C) or higher insulation system and vacuum-pressure impregnated with a silica-filled polyester resin.
3. All coils shall be precision wound.
4. Core & Coil ballasts shall be designed to operate for 60,000 hours of continuous operation at their maximum rated temperature.
5. Core & Coil ballasts and starter combinations shall be designed to provide a reliable lamp starting down to -40°C for High Pressure Sodium and -30°C for Metal Halide at nominal line voltage of plus or minus 10%.
6. All HID ballast shall have a nominal ballast factor of 1.0
7. All HID ballasts shall contain no exposed live parts.

#### Regulatory and Other Requirements

1. Ballast shall be manufactured in an ISO 9002 and ISO 14001 Certified Facility.
2. Manufacturer shall provide written warranty against defects in workmanship, including replacement, for two years from date of manufacture.
3. Manufacturer shall have been manufacturing HID ballasts for at least ten years.
4. All HID ballasts shall be UL component recognized.
5. All HID ballasts shall be CSA certified.
6. Ballast must be Advance Transformer (or approved equal).

#### CAPACITORS for HID

1. All capacitors will be provided with a self-contained internal bleeder resistor where required according to UL1029.
2. Oil-filled capacitors will be housed in aluminum or corrosion-resistant steel cans and contain .25" quick disconnect terminals.
3. Oil filled capacitors shall have a 90°C max case temperature rating.
4. Dry film capacitors shall have a 105°C max. case temperature rating.
5. All dry film capacitors shall be manufactured by the ballast manufacturer.
6. All capacitors rated 400V or less shall be dry film type.
7. All dry film capacitors shall have no exposed live parts.

#### IGNITORS for HID

1. All ignitors will be polyester resin-filled with either a plastic or aluminum external housing.
2. The ignitor shall be so designed to provide six months of lamp open circuit operation without failure.
3. All ignitors shall have a case rating temperature of 105°C.
4. All ignitors shall be designed to withstand 10,000 hours of continuous pulsing.
5. All ignitors shall have no exposed live parts.

#### HID RETROFIT KITS

1. All HID kits shall be precision wound to insure proper insulation.
2. All HID kits shall be pre-wired with ignitors.
3. HID core and coil shall be interchangeable with prior ballast or include mounting bracket to adapt ballast to intended fixture.
4. All HID kits shall be supplied with pre-insulated input voltage leads.
5. All HID kits are to be UL and CSA recognized following the guidelines found in UL 1029 and CAN/CSA-22.2 No. 74-92 (part 2 and 3).
8. The core & coil shall be designed with class "H" (180°C) or higher insulation system and vacuum-pressure impregnated with a silica-filled polyester resin.
9. All capacitors rated 400V or less shall be dry film type rated 105°C.
10. There are to be no exposed live parts on the core & coil, ignitor, or dry capacitor.
11. Must meet all ANSI Specifications for the specified lamp.
12. Kit must include installation instructions and a 1-800# for field assistance.
13. Ballast must be Advance Transformer  
Part # \_\_\_\_\_ (or approved equal).

