

**PHILIPS
ADVANCE**

eHID Ballasts

e-Vision Mini for 20W,
22W, 39W and 50W Ceramic
Metal Halide Lamps



Mini eHID ballast **solutions**

With a low-profile design, Philips Advance e-Vision Mini Intellivolt (120–277V) 20W, 22W, 39W and 50W electronic ballasts for ceramic metal halide lamps offer users all of the benefits of electronic HID technology in a compact housing. They are among the smallest ballasts in the industry and are ideal for downlighting, track lighting and accent lighting.

Features

- Operates the latest generation of Philips MasterColor CDM Elite lamps
- Enhanced features include automatic lamp power control and lamp monitoring
- End-of-life (EOL) detection with an automatic ballast shutdown feature
- Compact and lightweight housing
- 90°C maximum case temperature rating

Benefits



- Minimizes re-lamping requirements while optimizing total cost of system ownership
- Reduces lamp overpowering/thermal stress by shutting down should the lamp fail to ignite or behave erratically
- Removes power from lamps when they reach end-of-life
- Smallest form factor available for 50W ceramic metal halide
- Promotes enhanced versatility and design flexibility

Applications

- Retail, Office, Institutional

Mini eHID Electronic Ballasts

Ordering, Electrical and Technical Data (Subject to change without notice)

| Lamp Data | | Input Volts | Catalog Number | Certifications | | Line Current (Amps) | Input Power ANSI (Watts) | Max. Case Temp. | Wiring Diag. | Fig. | Weight (lb.) | Max. Distance to Lamp (ft.) |
|---|-------|----------------|-------------------|---|---|---------------------------|-----------------------------------|-----------------------|-----------------|------|-----------------|--------------------------------------|
| Number | Watts | | |  |  | | | | | | | |
| 20W Lamp, ANSI Code C156 Minimum Starting Temp. -20°C/-4°F | | | | | | | | | | | | |
| 1 | 20 | 120 - 277 | IMH-G20-K-LF | ✓ | ✓ | 0.20/0.10 | 24 | 90°C | 3 | K | 0.5 | 4 |
| | 20 | 120 - 277 | IMH-G20-K-LFS | ✓ | ✓ | 0.20/0.10 | 24 | 90°C | 3 | K | 0.5 | 4 |
| | 22 | 120 - 277 | IMH-G20-K-BLS | ✓ | ✓ | 0.20/0.10 | 24 | 90°C | 3 | K | 0.5 | 4 |
| 22W Mini MasterColor Lamp, CDM-Tm 20W/830, ANSI Code C175, Minimum Starting Temp. -20°C/-4°F | | | | | | | | | | | | |
| 1 | 22 | 120 | RMH-20-K-LF | ✓ | ✓ | 0.23 | 26 | 90°C | 4 | K | 0.5 | 6 |
| | 22 | 120 | RMH-20-K-LFS | ✓ | ✓ | 0.23 | 26 | 90°C | 4 | K | 0.5 | 6 |
| | 22 | 120 | RMH-20-K-BLS | ✓ | ✓ | 0.23 | 26 | 90°C | 4 | K | 0.5 | 6 |
| 39W Mini MasterColor Lamp, CDM-Tm 35W/930, ANSI Code C179, Minimum Starting Temp. -20°C/-4°F | | | | | | | | | | | | |
| 1 | 39 | 120 | RMH-39-K-LF | ✓ | ✓ | 0.40 | 45 | 90°C | 4 | K | 0.5 | 6 |
| | 39 | 120 | RMH-39-K-LFS | ✓ | ✓ | 0.40 | 45 | 90°C | 4 | K | 0.5 | 6 |
| | 39 | 120 | RMH-39-K-BLS | ✓ | ✓ | 0.40 | 45 | 90°C | 4 | K | 0.5 | 6 |
| 39W Lamp, ANSI Code C130 Minimum Starting Temp. -20°C/-4°F | | | | | | | | | | | | |
| 1 | 39 | 120 - 277 | IMH-39-K-LF | ✓ | ✓ | 0.39/0.18 | 46 | 90°C | 3 | K | 0.5 | 4 |
| | 39 | 120 - 277 | IMH-39-K-LFS | ✓ | ✓ | 0.39/0.18 | 46 | 90°C | 3 | K | 0.5 | 4 |
| | 39 | 120 - 277 | IMH-39-K-BLS | ✓ | ✓ | 0.39/0.18 | 46 | 90°C | 3 | K | 0.5 | 4 |
| 50W Lamp, Philips CDM Elite, ANSI C193, Minimum Starting Temp. -20°C/-4°F | | | | | | | | | | | | |
| 1 | 50 | 120 - 277 | IMH-50-K-LF | ✓ | ✓ | 0.48/0.21 | 57 | 90°C | 3 | K | 0.5 | 4 |
| | 50 | 120 - 277 | IMH-50-K-LFS | ✓ | ✓ | 0.48/0.21 | 57 | 90°C | 3 | K | 0.5 | 4 |
| | 50 | 120 - 277 | IMH-50-K-BLS | ✓ | ✓ | 0.48/0.21 | 57 | 90°C | 3 | K | 0.5 | 4 |

* Ordering information:

—LF Side exit leads with mounting feet (leads out opposite ends of the ballast)

—LFS Side exit leads with mounting feet (leads out same side of ballast)

—BLS Bottom exit leads with mounting studs

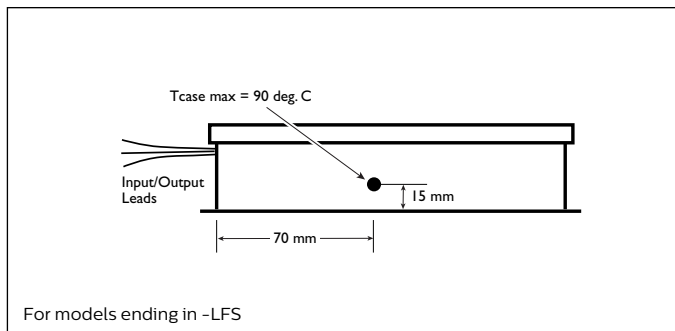
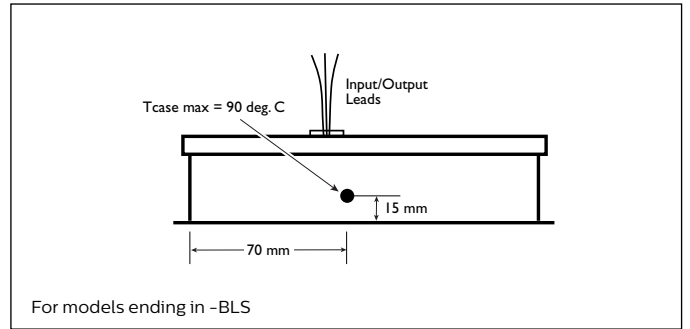
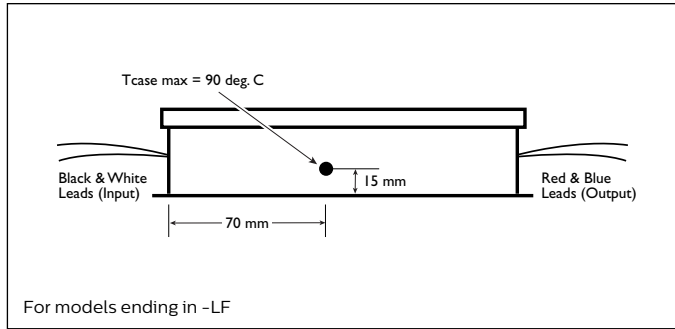
Installation Notes

1. Red lead must be connected to center terminal of lamp (for Edison screw base lamps).
Do not connect red or blue lead to neutral or ground.
2. Use an appropriately rated lamp holder.
3. Maximum ballast-to-lamp distance is 4 ft (IMH) or 6 ft (2m) (RMH) using typical wiring methods and materials.
4. Power mains must be cycled off and then on to reset ballast after end-of-life lamps are replaced.

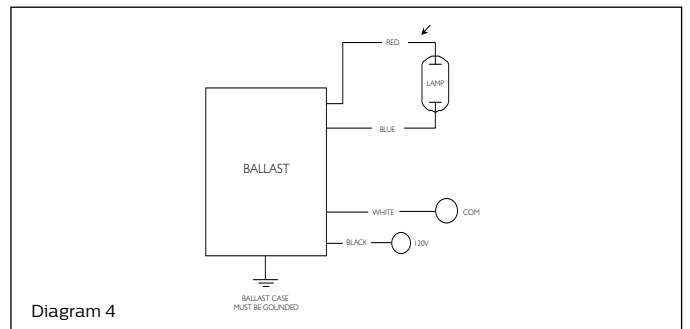
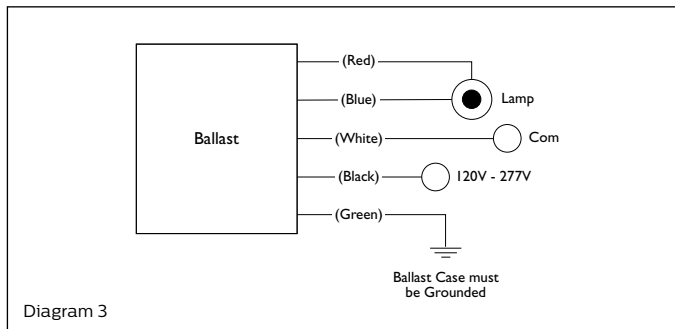
Mini eHID Electronic Ballasts

Ballast Case Measurement Location

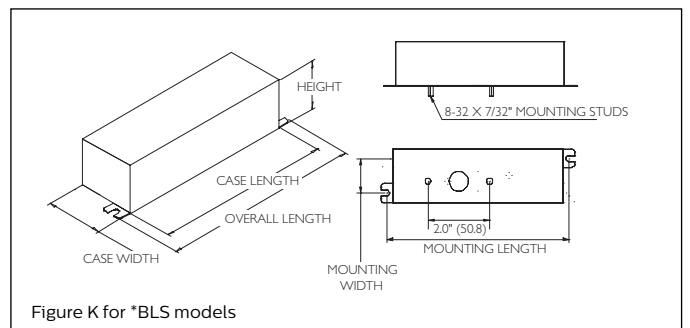
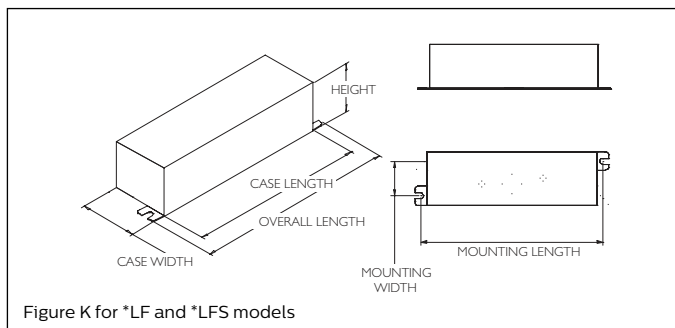
Case temperature measurement locations differ with each ballast model and are designated on the individual ballast labels. Consult ballast labels and ballast specification sheets for measurement locations.



Wiring Diagrams



Dimensions



| Case Figure | Overall Length | Case Length | Case Width | Case Height | Mounting Length | Mounting Width |
|-------------|----------------|--------------|-------------|-------------|-----------------|----------------|
| K | 119mm [4.7"] | 104mm [4.1"] | 33mm [1.3"] | 30mm [1.2"] | 114mm [4.5"] | 13.5mm [0.5"] |

Mini eHID Electronic Ballasts

Philips Advance Ballast Specifications

Section I - Physical Characteristics

1.0 The electronic ballast shall be furnished with integral, color-coded, stranded-wire leads.

Section II - Performance Requirements

2.0 The electronic ballast shall operate from a nominal line voltage range of 120-277V, +/-10%, 50/60 Hz.

2.1 The electronic ballast input current shall have Total Harmonic Distortion (THD) of less than 15%.

2.2 The electronic ballast shall have a Power Factor greater than 90%.

2.3 The electronic ballast shall have a lamp end-of-life detection and shutdown circuit.

2.4 The electronic ballast shall be Sound Rated A.

2.5 The electronic ballast output frequency to the lamps shall be less than 200 Hz to prevent acoustic resonance inside the lamp arc tube and to minimize visible flicker.

2.6 The electronic ballast shall provide a "Lamp Current Crest Factor" of less than 1.5.

2.7 The electronic ballast shall be thermally protected to shut off when operating temperatures reach unacceptable levels.

Section III - Regulatory Requirements

3.0 The electronic ballast shall meet the requirements of the Federal Communications Commission rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.

3.1 The electronic ballast shall be Underwriters Laboratories (UL) Listed and CSA Certified where applicable.

3.2 Ballast shall comply with ANSI C62.41 Category A for transient protection.

Section IV - Other

4.0 The electronic ballast shall not contain Polychlorinated Biphenyl (PCB's).

4.1 The electronic ballast shall carry a three-year limited warranty from the date of manufacture against defects in material or workmanship. This warranty is conditioned upon operation at the marked maximum case temperature or less among other items. View limited warranty at http://www.usa.lighting.philips.com/connect/tools_literature/warranties.wpd for details and restrictions.

4.2 The manufacturer shall have a twenty-five year history of producing HID lamp ballasts for the North American market.

4.3 The electronic ballast shall be produced in a factory certified to ISO 9002 Quality System Standards.

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