



# Compact efficiency in a familiar footprint

Philips Advance e-Vision reduced profile electronic ballasts for 70W and 100W metal halide lamps provide significant energy savings over magnetic HID alternatives. They deliver superior lamp wattage regulation and optimize lamp color over life. Enhanced safety features include automatic lamp power control, lamp monitoring and end-of-life protection.

#### **Features**

- IntelliVolt multiple-voltage technology (operates 120 to 277V, 50/60 Hz)
- Compact and lightweight housing and a common footprint with Philips Advance SmartMate ballasts for compact fluorescent lamps
- Energy efficient eHID technology lasts up to three times longer than halogen alternatives\*
- 85°C maximum case temperature rating

#### **Benefits**

- Enhances accuracy and ease of ordering and reduces stocking/SKU requirements
- · Offers fixture manufacturers and specifiers design flexibility
- Minimizes re-lamping requirements optimizing total cost of system ownership
- · Ensures long life in demanding applications

#### **Applications**

· Retail, Office, Institutional

# e-Vision 70W and 100W Electronic Ballasts

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

Lamp Data				Certifi	cations							
Number	Watts	Input Volts	Catalog Number	(UL)		Line Current (Amps)	Input Power ANSI (Watts)	Max. Case Temp.	Wiring Diag.	Fig.	Weight (lb.)	Max. Distance to Lamp (ft.)
70W Lamp, ANSI Code C98/M98 or M143 or C139, Minimum Starting Temp20°C/-4°F												
1	70	120	IMH-70-D-LF	V	~	0.66	79	85°C	3	D	1.6	3
	70	120	IMH-70-D-BLS	V	~	0.66	79	85°C	3	D	1.6	3
	70	277	IMH-70-D-LF	~	V	0.28	76	85°C	3	D	1.6	3
	70	277	IMH-70-D-BLS	~	V	0.28	76	85°C	3	D	1.6	3
100W Lamp, ANSI Code C90/M90 or M140, or C139, Minimum Starting Temp20°C/-4°F												
1	100	120	IMH-100-D-LF	~	V	0.92	110	85°C	3	D	1.6	5
	100	120	IMH-100-D-BLS	~	V	0.92	110	85°C	3	D	1.6	5
	100	277	IMH-100-D-LF	~	V	0.40	109	85°C	3	D	1.6	5
	100	277	IMH-100-D-BLS	V	V	0.40	109	85°C	3	D	1.6	5

# **Installation Notes**

- 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 as shown in table above using typical wiring methods and materials.
- 4. Power to ballast must be cycled off and then on to reset ballast after end-of-life lamps are replaced.

<sup>\*</sup> Published average life of low wattage metal halide lamps ranges from 9,000-20,000 hrs depending on lamp chosen. Halogen lamp lifetimes are published in the 3,000 to 6,000 hour range.

# e-Vision 70W and 100W Electronic Ballasts

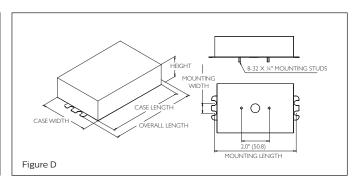
# **Ballast Case Measurement Location**

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 Diagram

# BALLAST BLUE BLAMP COM BLACK 120V - 277V GREEN BALLAST CASE MUST BE GROUNDED

# **Dimensions**



Case Figure	Overall Length	Case Length	Case Width	Case Height	Mounting Length	Mounting Width	
D	128mm [5.0"]	108mm [4.3"]	77mm [3.0"]	38mm [1.5"]	118mm [4.6"]	19mm [0.7"]	

# e-Vision 70W and 100W Electronic Ballasts

# Philips Advance Ballast Specifications

# Section I - Physical Characteristics

1.0 The electronic ballast shall be furnished with integral, color-coded 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 warranty from the date of manufacture for operation at marked maximum case temperature or less. 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 9001 Quality System Standards.

