

# Compact efficiency in a familiar footprint

# Philips Advance reduced-profile electronic ballasts for 70W and 100W metal halide lamps

Philips Advance e-Vision reduced-profile electronic ballasts for 70W and 100W metal halide lamps are ideal for a variety of down and accent lighting applications in retail, institutional and office settings.

Delivering superior lamp wattage regulation, e-Vision ballasts reduce lamp to lamp variation and optimize lamp color over life. Their electronic circuitry also outperforms traditional HID alternatives — enabling ballasts to run cooler, quieter and more efficiently, maximizing lamp life and minimizing relamping requirements. Enhanced safety features include automatic lamp power control, lamp monitoring and end-of-life protection which help protect from lamp overpowering and thermal stress.

Compact and efficient, Philips Advance reducedprofile electronic ballasts for 70W and 100W metal halide lamps provide significant energy savings over incandescent and magnetic HID alternatives. Compact and lightweight housing, and a common footprint with Philips Advance SmartMate ballasts for compact fluorescent lamps

 Offers fixture manufacturers, specifiers and end users design flexibility

Energy efficient eHID technology lasts up to three times longer than halogen and up to five times longer than incandescent alternatives

• Minimizes re-lamping requirements, reducing product and maintenance costs and optimizing total cost of system ownership

### IntelliVolt multiple-voltage technology (operates 120 to 277 volts, 50/60 Hz)

 Enhances accuracy and ease of ordering and reduces stocking/SKU requirements

#### 85°C maximum case temperature rating

· Ensures long life in demanding applications

# PHILIPS ADVANCE

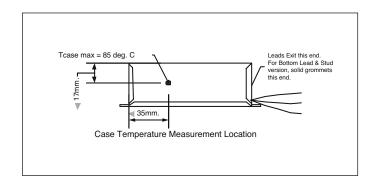
Lamp Data				Certifi	cations	- Line	Input Power	Max.				Max Distance
Number	Watts	Input Volts	Catalog Number		F	Current (Amps)	ANSI (Watts)	Case Temp.	Wiring Diag.	Fig.	Weight (Ib)	to Lamp (ft.)
70W Lamp, ANSI Code C98/M98 or M143 or C139, Minimum Starting Temp20° C/-4° F												
I	70	120	IMH-70-D-LF	~	~	0.67	80	85°C	3	D	1.6	5
	70	120	IMH-70-D-BLS	~	~	0.67	80	85°C	3	D	1.6	5
	70	277	IMH-70-D-LF	~	~	0.29	79	85°C	3	D	1.6	5
	70	277	IMH-70-D-BLS	~	~	0.29	79	85°C	3	D	1.6	5
100W Lamp, ANSI Code C90/M90 or M140, Minimum Starting Temp20° C/-4° F												
I	100	120	MH-100-D-LF	~	~	0.92	110	85°C	3	D	1.6	5
	100	120	IMH-100-D-BLS	~	~	0.92	110	85°C	3	D	1.6	5
	100	277	MH-100-D-LF	~	~	0.40	109	85°C	3	D	1.6	5
	100	277	IMH-100-D-BLS	~	~	0.40	109	85°C	3	D	1.6	5

### **Installation Notes**

I. 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.

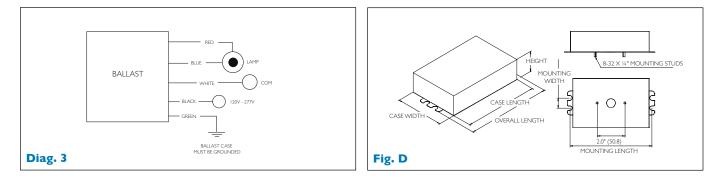
- 2. Use an appropriately rated lamp holder.
- 3. Maximum ballast-to-lamp distance is 5ft (2m) using typical wiring methods and materials.
- 4. Power to ballast must be cycled off and then on to reset ballast after end-of-life lamps are replaced.

## **Ballast Case Measurement Location**



# Wiring Diagram

Dimension



Case Figure	<b>Overall Length</b>	Case Length	Case Width	Case Height	Mounting Length	Mounting Width
D	5.0"	4.3"	3.0"	1.5"	4.6"	0.7"

# **Ballast Specification for e-Vision**

#### 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.
- 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.



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