

# Intelligent Control



## ROVR (DALI) DIMMABLE BALLASTS FOR T8 LAMPS



**Philips Advance ROVR Ballasts** provide intelligent control through the DALI Protocol. They reflect the latest approach to controlling fluorescent lighting. Rather than simply responding to instructions from control components, ROVR ballasts enable two-way communication, and have the ability to dim and switch individual ballasts through the control signal. These features allow for virtually unlimited design flexibility while creating sustainable lighting systems. This two-way communication is made possible through the industry-standard digital communication protocol known as DALI (Digital Addressable Lighting Interface).

### Features

- Digital control protocol
- Full range continuous dimming (100% light output down to 3%)
- Programmed start operation

### Benefits

- Ideal for frequent switching applications such as occupancy sensors and daylight harvesting
- Compatible with controls from numerous manufacturers offering standard DALI controls

### Applications

- Ideal for conference rooms, auditoriums, educational facilities, hotels, restaurants, and department stores as well as other new construction or retrofit installations where dimming is desired.

(¥, ‡ See page 2 for footnote)

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## ROVR Ballasts For 17-32W T8 Lamps

## Programmed Start

No. of Lamps	Input Volts	Catalog Number	Max/Min		Full Light Output		Minimum Starting Temp (°F/°C)	Dim.	Wiring Diagram
			Input Power ANSI (Watts)	Ballast Factor	THD %	Line Current (Amps)			
<b>F17T8, FBO16T8 (17W)</b>									
1	120-277	IDA-132-SC	20/7	1.00/0.03	10	0.16-0.07	50/10	B	55B
2	120-277	IDA-2S32-SC	36/11	1.00/0.03	10	0.30-0.13	50/10	B	56B
<b>F25T8, FBO24T8 (25W)</b>									
1	120-277	IDA-132-SC	28/8	1.00/0.03	10	0.24-0.11	50/10	B	55B
2	120-277	IDA-2S32-SC	52/12	1.00/0.03	10	0.43-0.19	50/10	B	56B
3	120-277	IDA-3S32-G	79/19	1.00/0.03	10	0.65-0.28	50/10	G	57B
4	120-277	IDA-4S32	96/22	0.88/0.03	10	0.77-0.35	50/10	D	167
<b>F32T8, FBO31T8, F32T8/U6 (32W)</b>									
1	120-277	IDA-132-SC	35/8	1.00/0.03	10	0.30-0.13	50/10	B	55B
2	120-277	IDA-2S32-SC	68/14	1.00/0.03	10	0.57-0.24	50/10	B	56B
3	120-277	IDA-3S32-G	99/20	1.00/0.03	10	0.87-0.37	50/10	G	57B
4	120-277	IDA-4S32	116/25	0.88/0.03	10	0.98-0.42	50/10	D	167

Ballasts utilizing poke-in connectors can accept wire gauges from AWG 16 - 20.

Some lamp manufacturers recommend burning in new lamps 100 hours at full light output prior to dimming. Consult lamp manufacturer.

¥ As a licensee in the NEMA Premium Ballast Program, Philips Lighting Electronics N.A. has determined that these products meet the NEMA Premium specification for premium energy efficiency.

‡ Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products used in North America compliance to RoHS is voluntary and self-certified.

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## Dimensions

Figure	A	B	C	D
B	1.18"	1.70"	8.90"	9.50"
D	1.00"	1.18"	16.34"	16.70"
G	1.18"	1.70"	16.34"	16.70"

Figure B

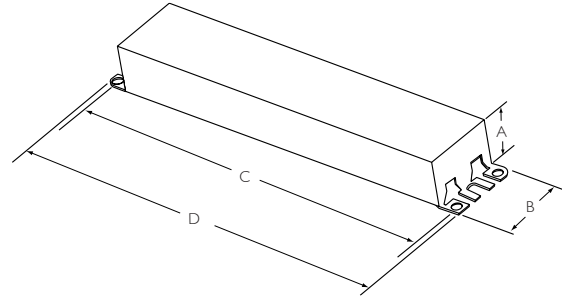


Figure D - Includes connectors with no leads

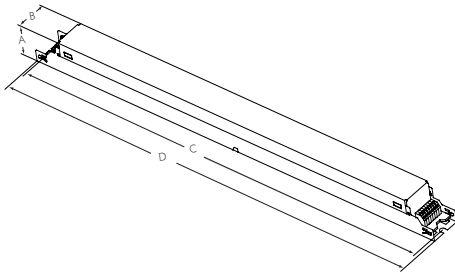
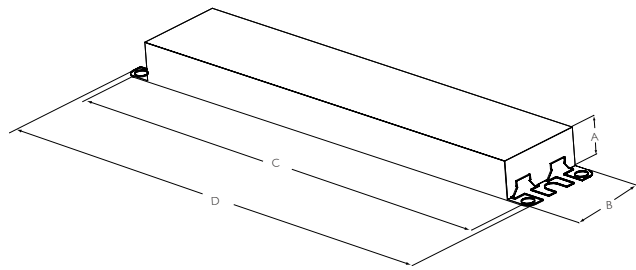


Figure G



## Wiring Diagrams

Diagram 55B

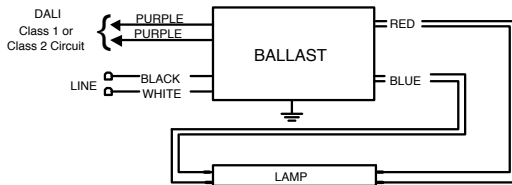


Diagram 56B

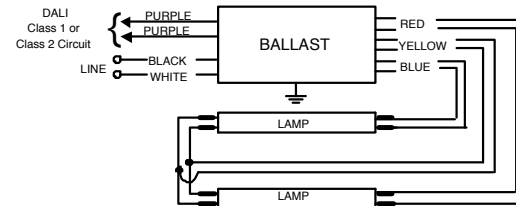


Diagram 57B

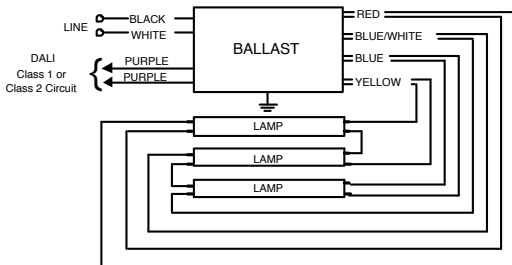
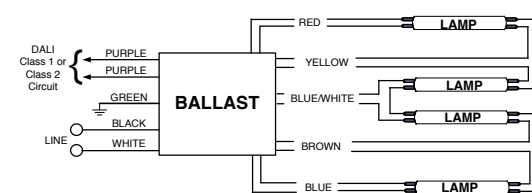


Diagram 167



# ROVR (DALI) DIMMABLE BALLASTS FOR T8 LAMPS

## Ballast Specification

### Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be available in a plastic/metal can or all metal can construction to meet all plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors or integral leads color coded per ANSI C82.11.

### Section II - Performance Requirements

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall be provided with integral protection circuitry to withstand connection of low voltage control leads to mains power supply. In this event, ballast shall default to maximum light output.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60Hz input source of 120V through 277V with sustained variations of +/-10% (voltage and frequency) with no damage to the ballast.
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.6 Ballast shall have a Power Factor greater than 0.98 at full light output and greater than 0.90 throughout the dimming range for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor of 1.00 (1-3 lamp) and 0.88 (4-lamp) at maximum light output and 0.03 at minimum light output for primary lamp.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less throughout the dimming range in accordance with lamp manufacturer recommendations.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.10 Ballast shall have a Class A sound rating.
- 2.11 Ballast shall have a minimum starting temperature of 10°C (50°F) for primary lamp.
- 2.12 Ballast shall control lamp light output from 100% - 3% relative light output for T8
- 2.13 Ballast shall ignite the lamps at any light output setting without first going to another output setting.
- 2.14 Ballast shall tolerate sustained open circuit and short circuit output conditions.

### Section III - Regulatory Requirements

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type I Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).
- 3.6 Ballast shall comply with NEMA 410 for in-rush current limits.

### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9002 Quality System Standards.
- 4.2 Ballast shall carry a \_\_\_\_\_ year limited warranty from date of manufacture against defects in material or workmanship for operation at a maximum case temperature of \_\_\_\_\_ (Go to our web site for upto- date warranty information: [www.philips.com/advancewarranty](http://www.philips.com/advancewarranty)).
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.
- 4.4 Ballast shall be controlled by a Class 1 or Class 2 low voltage DALI controller.
- 4.5 Ballast shall be Philips Advance part # \_\_\_\_\_ or approved equal.



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Philips Lighting Company  
10275 W. Higgins Road  
Rosemont, IL 60018  
Tel: 800-322-2086  
Fax: 888-423-1882  
Customer Support/Customer  
Care: 800-372-3331

Philips Lighting Company  
281 Hillmount Road  
Markham ON, Canada L6C 2S3  
Phone: 800-668-9008