New design means flexibility

Philips Advance programmed start Centium® ballasts for T5 lamps are now available in a smaller can.

Philips Advance Centium ballasts for T5 lamps are now available in a smaller can — measuring only 9.5"L x 1.3"W x 1"H (original versions are still available at 16.7"L x 1.18"W x 1"H). Both of these low-profile ballasts feature a 1" high enclosure which provides fixture manufacturers increased versatility in their newer generation fixture designs.

These ballasts are compatible with all major energy-saving T5 linear lamps and have a variety of other features which makes them ideal for a variety of applications. The ballasts' programmed start ignition provides extended lamp life in frequent switching applications such as those where occupancy sensors are being used. They also feature lamp End-Of-Life (EOL) protection circuitry which safely removes power from the lamp at the end of lamp life.

The original ICN-2S28 is available with or without leads while the new version ICN-2S28-N is only available with leads. See our e-catalog online at www.philips.com/advance for full details.

These ballasts are an ideal choice for a broad range of new construction and retrofit applications within the commercial sector including general office lighting, board rooms, meeting rooms and executive offices.

IntelliVolt® Technology (120-277V)

- Enhances accuracy and ease of ordering while reducing stocking requirements

Auto-restrike capability

- Eliminates the need to reset power mains after failed lamps are replaced

UL Type CC rated

- Anti-arcing circuitry provides greater flexibility to meet end-user application requirements

0°F starting capability

- Suitable for cold temperature applications

PHILIPS
ADVANCE

Number	Input Volts	Starting Method	Ballast Family	Catalog Number	Input Power ANSI (Watts)	Ballast Factor	Max. THD %	Line Current (Amps)	Min. Starting Temp. (°F /°C)	Dim.	Wiring Diag.
F14T5 (14W)											
1	120-277	PS	Centium	ICN-2S28	19	1.07	20	0.16 - 0.07	0/-18	E	1
				ICN-2S28-N	17	1.07	10	0.14 - 0.07		D	
2	120-277	PS	Centium	ICN-2S28	34	1.06	10	0.29 - 0.13	0/-18	E	2
				ICN-2S28-N	33	1.04	10	0.28 - 0.13		D	
F21T5 (21W)											
1	120-277	PS	Centium	ICN-2S28	26	1.03	15	0.21 - 0.10	0/-18	E	1
				ICN-2S28-N	25	1.06	10	0.22 - 0.10		D	
2	120-277	PS	Centium	ICN-2S28	48	1.02	10	0.40 - 0.17	0/-18	E	2
				ICN-2S28-N	49	1.02	10	0.43 - 0.19		D	
F28T5 (28W)											
1	120-277	PS	Centium	ICN-2S28	33	1.04	10	0.28 - 0.12	0/-18	E	1
				ICN-2S28-N	31	1.05	10	0.29 - 0.12		D	
2	120-277	PS	Centium	ICN-2S28	64 - 63	1.03	10	0.55 - 0.23	0/-18	E	2
				ICN-2S28-N	61 - 60	1.00	10	0.59 - 0.23		D	
F35T5 (35W)											
1	120-277	PS	Centium	ICN-2S28	41	1.01	10	0.34 - 0.15	0/-18	E	1
2	120-277	PS	Centium	ICN-2S28	80 - 77	1.00	10	0.67 - 0.28	0/-18	E	2

Dimensions

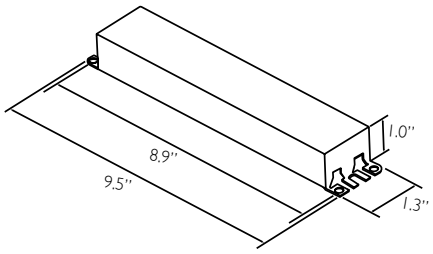


Fig. D

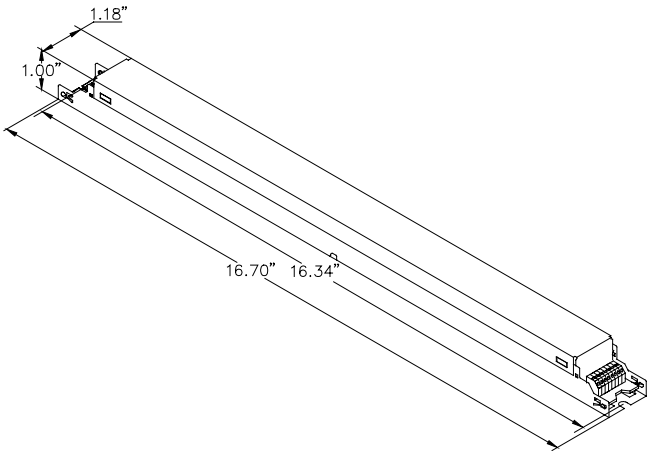


Fig. E

Ballast Specifications

Section I - Physical Characteristics

1.1 The electronic ballast shall be physically interchangeable with standard electromagnetic and standard electronic ballasts.

1.2 The electronic ballast shall have a maximum height of 1.0 in. and maximum weight of 1.8 lbs.

Section II - Performance Requirements

2.1 Ballast shall be Programmed Start.

2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.

2.3 Ballast shall operate from 50/60 Hz input source of 120 through 277V with sustained variations of +/- 10% (voltage and frequency with no damage to the ballast).

2.4 Ballast shall be high frequency electronic type and operate at a frequency above 40 kHz to minimize interference with infrared control systems and eliminate visible flicker.

2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamps.

2.6 Ballast shall have a minimum ballast factor 1.00 for primary lamps.

2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less in accordance with lamp manufacturer recommendations.

2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.

2.9 Ballast shall have a Class A sound rating.

2.10 Ballast shall have a minimum starting temperature of -18°C (0°F) for primary lamp.

2.11 Ballast shall provide Lamp EOL Protection Circuit.

2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions without damage.

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 1 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).

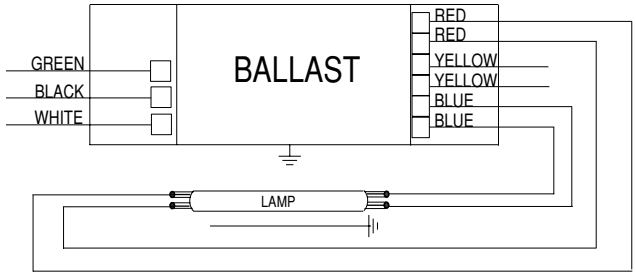
Section IV - Other

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

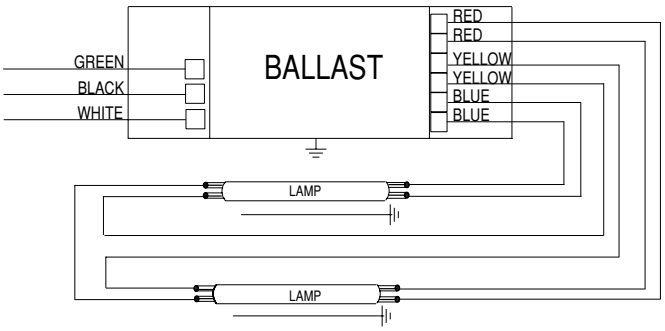
4.2 Ballast shall carry a _____warranty from date of manufacture against defects in material or workmanship for operation at a maximum case temperature of _____
(Go to our web site for up-to-date warranty information: www.philips.com/advancewarranty).

4.3 The manufacturer shall have a fifteen-year history of producing electronic ballasts for the North American market.

Wiring Diagrams



Diag. 1*+



Diag. 2+

* For 1 lamp operation, use red and blue leads, insulate yellow leads for 600V

+ No green leed for ICN-2S28-N

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