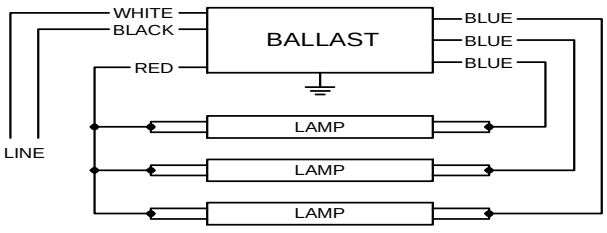
PHILIPS
ADVANCE

IOPA3P32N@120V	
Brand Name	**OPTANIUM**
Ballast Type	**Electronic**
Starting Method	**Instant Start**
Lamp Connection	**Parallel**
Input Voltage	**120-277**
Input Frequency	**50/60 HZ**
Status	**Active**

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
F17T8	2	17	-20/-29	0.30	35	1.01	15	0.98	1.6	2.89
F17T8	3	17	-20/-29	0.38	45	0.90	10	0.98	1.6	2.00
F25T8	2	25	-20/-29	0.42	49	1.00	10	0.98	1.6	2.04
F25T8	3	25	-20/-29	0.54	64	0.88	10	0.98	1.6	1.38
F32T8	2	32	-20/-29	0.53	63	1.00	10	0.98	1.6	1.59
* F32T8	3	32	-20/-29	0.69	82	0.86	10	0.99	1.6	1.05
F32T8/ES (25W)	2	25	60/16	0.42	49	1.00	10	0.98	1.6	2.04
F32T8/ES (25W)	3	25	60/16	0.57	68	0.89	10	0.99	1.6	1.31
F32T8/ES (28W)	2	28	60/16	0.46	55	1.00	10	0.98	1.6	1.82
F32T8/ES (28W)	3	28	60/16	0.62	74	0.87	10	0.99	1.6	1.18
F32T8/ES (30W)	2	30	60/16	0.50	59	1.00	10	0.98	1.6	1.69
F32T8/ES (30W)	3	30	60/16	0.65	77	0.87	10	0.98	1.6	1.13
F40T8	2	40	32/00	0.64	74	0.97	10	0.98	1.6	1.31

Wiring Diagram



Diag. 65

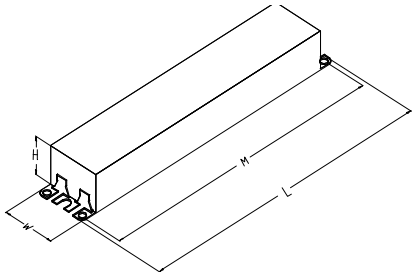
The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.
Black	24	61
White	24	61
Blue	28	71.1
Red	43	109.2
Yellow		0
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black		0
Black/White		0
Red/White		0

Enclosure



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
9.5 "	1.3 "	1.0 "	8.9 "
9 1/2	1 3/10	1	8 9/10
24.1 cm	3.3 cm	2.5 cm	22.6 cm

RoHS COMPLIANT

Revised 07/19/13

Data is based upon tests performed by Philips Lighting N.A in a controlled environment and representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

Philips Lighting Electronic N.A
10275 West Higgins Road Rosemont, IL 60018 Tel.: 800-322-2086 Fax: 888-432-1882
Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

PHILIPS
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IOPA3P32N@120V	
Brand Name	**OPTANIUM**
Ballast Type	**Electronic**
Starting Method	**Instant Start**
Lamp Connection	**Parallel**
Input Voltage	**120-277**
Input Frequency	**50/60 HZ**
Status	**Active**

Electrical Specifications

Notes:

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 provided with integral leads color-coded per ANSI C82.11.

Section II - Performance

2.1 Ballast shall be _____ (Instant or Programmed) Start.

2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start or Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.

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

2.4 Ballast shall operate from 50/60 Hz input source of _____ (120V through 277V or 347V) with sustained variations of +/- 10% (voltage and frequency).

2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 kHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance System, such as anti-theft devices.

2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.

2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.77 for Low Watt, 0.87 for Normal Light Output, and 1.18 for High Light for Instant Start ballasts or 0.71 for Low Watt and 0.88 for Normal Light Output for Programmed Start ballasts.

2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.

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 for all 4-foot lamps and smaller.

2.11 Ballast shall have a minimum starting temperature of -29C (-20F) on Instant Start ballasts or -18C (0F) on Programmed Start ballasts for standard T8 lamps and 16C (60F) for energy-saving T8 lamps. Consult lamp manufacturer for temperature versus light output characteristics.

2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.

2.13 Ballast shall have lamp striation-reduction circuitry.

2.14 Programmed Start ballast shall provide lamp EOL protection circuitry.

2.15 Maximum distance for Energy Saving Lamps in Remote/Tandem wiring applications shall be 6 feet for Instant Start and Programmed Start models.

Section III - Regulatory

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 applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.

3.6 Ballast shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.

3.7 IOP or GOP ballast shall comply with UL Type CC rating.

3.8 Ballast shall comply with NEMA 410 for in-rush current limits.

3.9 Ballast shall meet RoHS Compliance Standards

Section IV - Other

4.1 Ballast shall be manufactured in an ISO 9001 Qualified factory.

4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at maximum case temperature of 90C.

4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

4.4 Energy-saving T8 lamps (25W, 28W or 30W) may experience lamp striations if operated on ballasts not rated for their use.

RoHS COMPLIANT

Revised 07/19/13

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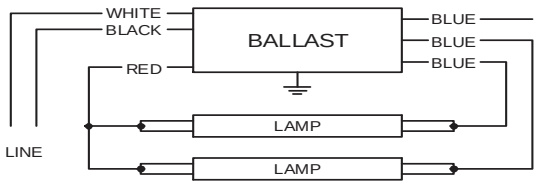
Brand Name	**OPTANIUM**
Ballast Type	**Electronic**
Starting Method	**Instant Start**
Lamp Connection	**Parallel**
Input Voltage	**120-277**
Input Frequency	**50/60 HZ**
Status	**Active**

Electrical Specifications

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
F17T8	2	17	-20/-29	0.14	35	1.01	15	0.98	1.6	2.89
F17T8	3	17	-20/-29	0.17	45	0.90	10	0.98	1.6	2.00
F25T8	2	25	-20/-29	0.18	49	1.00	10	0.98	1.6	2.04
F25T8	3	25	-20/-29	0.24	63	0.88	10	0.98	1.6	1.40
* F32T8	2	32	-20/-29	0.23	62	1.00	10	0.98	1.6	1.61
F32T8	3	32	-20/-29	0.29	80	0.86	10	0.98	1.6	1.08
F32T8/ES (25W)	2	25	60/16	0.18	49	1.00	10	0.98	1.6	2.04
F32T8/ES (25W)	3	25	60/16	0.24	66	0.88	10	0.98	1.6	1.33
F32T8/ES (28W)	2	28	60/16	0.20	54	1.00	10	0.98	1.6	1.85
F32T8/ES (28W)	3	28	60/16	0.26	72	0.87	10	0.98	1.6	1.21
F32T8/ES (30W)	2	30	60/16	0.21	58	1.00	10	0.98	1.6	1.72
F32T8/ES (30W)	3	30	60/16	0.28	76	0.87	10	0.98	1.6	1.14
F40T8	2	40	32/00	0.27	72	0.97	10	0.98	1.6	1.35

Wiring Diagram



Diag. 70

Insulate unused blue lead for 1000V

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	in.	cm.
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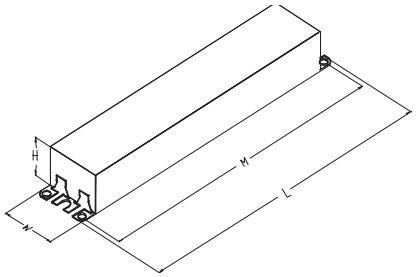
Red	43	109.2
Yellow		0
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black		0
Black/White		0
Red/White		0

Enclosure



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Revised 08/06/13

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Lamp Connection	**Parallel**
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Input Frequency	**50/60 HZ**
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Section III - Regulatory

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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 applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.

3.6 Ballast shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.

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