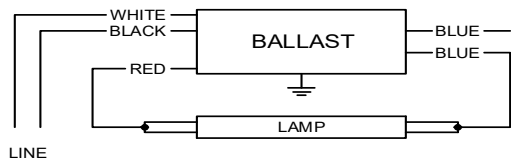


### Electrical Specifications at 120V

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	1	17	0/-18	0.17	21	1.08	10	0.99	1.6	5.14
F17T8	2	17	0/-18	0.26	32	0.90	10	0.99	1.6	2.81
F25T8	1	25	0/-18	0.24	29	1.05	10	0.99	1.6	3.62
F25T8	2	25	0/-18	0.38	45	0.89	10	0.99	1.6	1.98
F32T8	1	32	0/-18	0.31	37	1.05	10	0.99	1.6	2.84
F32T8	2	32	0/-18	0.49	56	0.89	10	0.99	1.6	1.59
F32T8/ES (25W)	1	25	60/16	0.24	28	1.05	10	0.99	1.6	3.75
F32T8/ES (25W)	2	25	60/16	0.38	45	0.92	10	0.99	1.6	2.04
F32T8/ES (28W)	1	28	60/16	0.24	31	1.03	10	0.99	1.6	3.32
F32T8/ES (28W)	2	28	60/16	0.41	48	0.89	10	0.99	1.6	1.85
F32T8/ES (30W)	1	30	60/16	0.28	33	1.03	10	0.98	1.6	3.12
F32T8/ES (30W)	2	30	60/16	0.45	54	0.89	10	0.99	1.6	1.65
F40T8	1	40	32/00	0.35	42	1.00	10	0.98	1.6	2.38

### Wiring Diagram



Diag. 68

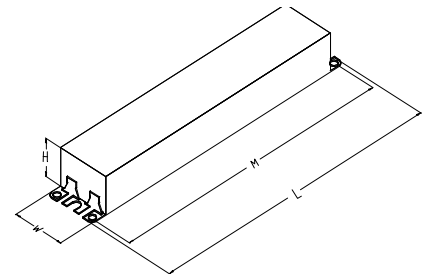
Insulate unused blue lead for 1000V

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

### Standard Lead Length (inches)

	in.	cm.		in.	cm.
Black	24	61	Yellow/Blue		0
White	24	61	Blue/White		0
Blue	28	71.1	Brown		0
Red	45	114.3	Orange		0
Yellow		0	Orange/Black		0
Gray		0	Black/White		0
Violet		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



Revised 01/30/12

ICN-2P32-N @ 120V	
Brand Name	<b>CENTIUM</b>
Ballast Type	<b>Electronic</b>
Starting Method	<b>Instant Start</b>
Lamp Connection	<b>Parallel</b>
Input Voltage	<b>120-277</b>
Input Frequency	<b>50/60 HZ</b>
Status	<b>Active</b>

## 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, Rapid or Programmed) Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Instant Start 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 (except T8/HO ballast).
- 2.4 Ballast shall operate from 50/60 Hz input source of \_\_\_\_\_ (120V through 277V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 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 for primary lamp.
- 2.7 Ballast shall have a minimum ballast factor for primary lamp application as follows: 0.75 for Low Watt, 0.85 for Normal Light Output and 1.20 for High Light.
- 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 \_\_\_\_\_ [-18C (0F) for standard T8 and Long Twin Tube lamps, 10C (50F) for standard T12 lamps, 0C (32F) for Slimline T8 lamps, -29C (-20F) for HO lamps.] for primary lamp application. Ballast shall have a minimum starting temperature of 16C (60F) for energy-saving lamps.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast for T8 lamps shall provide lamp striation-reduction circuitry.
- 2.14 Ballast for FT5 lamps shall provide lamp EOL protection circuitry.

#### 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 comply with NEMA 410 for in-rush current limits.
- 3.7 Ballast for T8 lamps shall meet NEMA Premium/CEE High Performance T8 Lighting System Specifications.
- 3.8 Ballast shall meet RoHS Compliance Standards

#### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 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.
- 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.

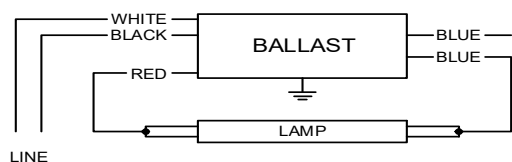


Revised 01/30/12

## Electrical Specifications at 277V

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	1	17	0/-18	0.08	21	1.07	10	0.97	1.6	5.10
F17T8	2	17	0/-18	0.11	31	0.90	10	0.99	1.6	2.90
F25T8	1	25	0/-18	0.11	29	1.05	10	0.98	1.6	3.62
F25T8	2	25	0/-18	0.16	45	0.89	10	0.99	1.6	1.98
F32T8	1	32	0/-18	0.13	36	1.05	10	0.99	1.6	2.92
F32T8	2	32	0/-18	0.22	56	0.89	10	0.99	1.6	1.59
F32T8/ES (25W)	1	25	60/16	0.10	27	1.05	10	0.99	1.6	3.89
F32T8/ES (25W)	2	25	60/16	0.16	46	0.92	10	0.99	1.6	2.00
F32T8/ES (28W)	1	28	60/16	0.12	30	1.03	10	0.99	1.6	3.43
F32T8/ES (28W)	2	28	60/16	0.17	47	0.90	10	0.99	1.6	1.92
F32T8/ES (30W)	1	30	60/16	0.12	33	1.03	10	0.98	1.6	3.12
F32T8/ES (30W)	2	30	60/16	0.19	52	0.89	10	0.99	1.6	1.71
F40T8	1	40	32/00	0.15	42	1.00	10	0.98	1.6	2.38

### Wiring Diagram



Diag. 68

Insulate unused blue lead for 1000V

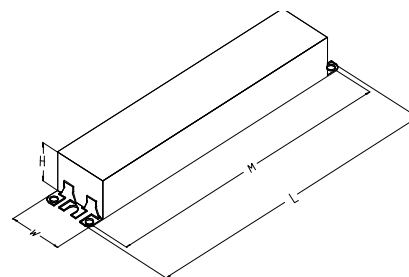
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### Standard Lead Length (inches)

	in.	cm.
Black	28	71.1
White	45	114.3
Blue	24	61
Red	24	61
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



Revised 03/07/12

ICN-2P32-N @ 277V	
Brand Name	<b>CENTIUM</b>
Ballast Type	<b>Electronic</b>
Starting Method	<b>Instant Start</b>
Lamp Connection	<b>Parallel</b>
Input Voltage	<b>120-277</b>
Input Frequency	<b>50/60 HZ</b>
Status	<b>Active</b>

## Electrical Specifications

### Notes:

#### Section I - Physical Characteristics

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- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

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- 2.4 Ballast shall operate from 50/60 Hz input source of \_\_\_\_\_ (120V through 277V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 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.
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- 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.
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- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast for T8 lamps shall provide lamp striation-reduction circuitry.
- 2.14 Ballast for FT5 lamps shall provide lamp EOL protection circuitry.

#### 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 comply with NEMA 410 for in-rush current limits.
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- 3.8 Ballast shall meet RoHS Compliance Standards

#### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 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.
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Revised 03/07/12

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

