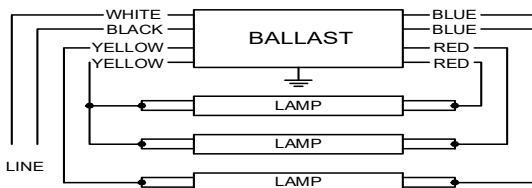


### Electrical Specifications at 120V

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	3	17	0/-18	0.45	53	1.04	15	0.97	1.7	1.96
F17T8	4	17	0/-18	0.54	64	0.93	10	0.98	1.7	1.45
F25T8	3	25	0/-18	0.62	74	1.01	10	0.99	1.7	1.36
F25T8	4	25	0/-18	0.74	89	0.91	10	0.99	1.7	1.02
F32T8	3	32	0/-18	0.78	93	1.00	10	0.99	1.7	1.08
F32T8	4	32	0/-18	0.94	111	0.89	10	0.99	1.7	0.80
F32T8/ES (25W)	3	25	60/16	0.62	75	1.00	10	0.99	1.7	1.33
F32T8/ES (25W)	4	25	60/16	0.77	90	0.91	10	0.99	1.7	1.01
F32T8/ES (28W)	3	28	60/16	0.68	82	1.00	10	0.99	1.7	1.22
F32T8/ES (28W)	4	28	60/16	0.82	94	0.89	10	0.99	1.7	0.95
F32T8/ES (30W)	3	30	60/16	0.73	87	1.00	10	0.99	1.7	1.15
F32T8/ES (30W)	4	30	60/16	0.88	105	0.89	10	0.99	1.7	0.85
F40T8	3	40	32/00	0.94	112	0.97	10	0.99	1.7	0.87

### Wiring Diagram



Diag. 71

Insulate unused blue lead for 1000V

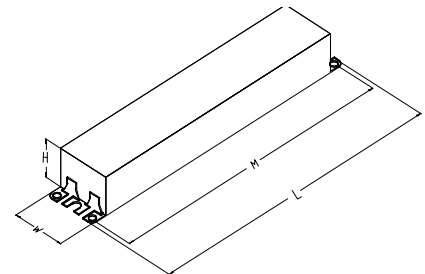
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### Standard Lead Length (inches)

	in.	cm.
Black	25	63.5
White	25	63.5
Blue	31	78.7
Red	31	78.7
Yellow	39	99.1
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 "
24.1 cm	3.3 cm	2.5 cm	22.6 cm



Revised 07/28/11

ICN-4P32-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.

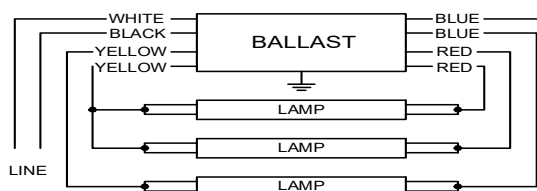


Revised 07/28/11

## 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	3	17	0/-18	0.20	53	1.04	15	0.97	1.7	1.96
F17T8	4	17	0/-18	0.23	64	0.93	10	0.98	1.7	1.45
F25T8	3	25	0/-18	0.27	74	1.01	10	0.99	1.7	1.36
F25T8	4	25	0/-18	0.32	89	0.91	10	0.99	1.7	1.02
F32T8	3	32	0/-18	0.33	93	1.00	10	0.99	1.7	1.08
F32T8	4	32	0/-18	0.41	111	0.89	10	0.99	1.7	0.80
F32T8/ES (25W)	3	25	60/16	0.27	73	1.00	10	0.98	1.7	1.37
F32T8/ES (25W)	4	25	60/16	0.33	87	0.89	10	0.98	1.7	1.02
F32T8/ES (28W)	3	28	60/16	0.68	80	1.00	10	0.99	1.7	1.25
F32T8/ES (28W)	4	28	60/16	0.36	91	0.89	10	0.99	1.7	0.98
F32T8/ES (30W)	3	30	60/16	0.32	87	1.00	10	0.99	1.7	1.15
F32T8/ES (30W)	4	30	60/16	0.38	105	0.89	10	0.99	1.7	0.85
F40T8	3	40	32/00	0.40	112	0.97	10	0.99	1.7	0.87

### Wiring Diagram



Diag. 71

Insulate unused blue lead for 1000V

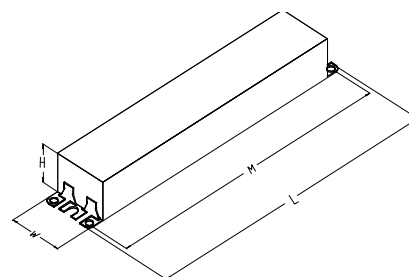
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### Standard Lead Length (inches)

	in.	cm.
Black	25	63.5
White	25	63.5
Blue	31	78.7
Red	37	94
Yellow	39	99.1
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 07/28/11

ICN-4P32-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

- 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.
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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).
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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.
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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 07/28/11

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

