

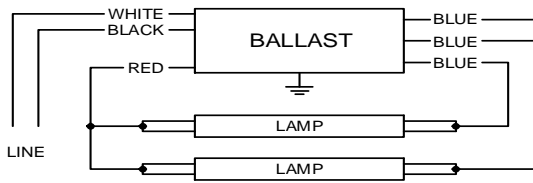


**Electrical Specifications**

<b>ICN-3P32-N@ 120V</b>	
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>

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	0/-18	0.32	38	1.07	15	0.96	1.7	2.82
F17T8	3	17	0/-18	0.39	48	0.92	15	0.97	1.7	1.92
F25T8	2	25	0/-18	0.43	51	1.03	15	0.97	1.7	2.02
F25T8	3	25	0/-18	0.56	67	0.90	10	0.98	1.7	1.34
F32T8	2	32	0/-18	0.54	65	1.01	10	0.98	1.7	1.55
F32T8	3	32	0/-18	0.71	85	0.88	10	0.99	1.7	1.04
F32T8/ES (25W)	2	25	60/16	0.42	51	1.00	10	0.99	1.7	1.96
F32T8/ES (25W)	3	25	60/16	0.58	68	0.89	10	0.99	1.7	1.31
F32T8/ES (28W)	2	28	60/16	0.46	55	1.00	10	0.99	1.7	1.82
F32T8/ES (28W)	3	28	60/16	0.61	73	0.89	10	0.99	1.7	1.22
F32T8/ES (30W)	2	30	60/16	0.51	61	1.01	10	0.98	1.7	1.66
F32T8/ES (30W)	3	30	60/16	0.66	79	0.88	10	0.88	1.7	1.11
F40T8	2	40	32/00	0.65	77	1.00	10	0.98	1.7	1.30

**Wiring Diagram**



**Diag. 70**

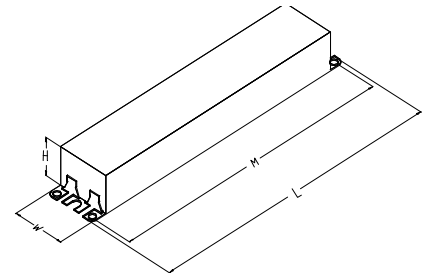
Insulate unused blue lead for 1000V

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

**Standard Lead Length (inches)**

	in.	cm.		in.	cm.
Black	25	63.5	Yellow/Blue		0
White	25	63.5	Blue/White		0
Blue	31	78.7	Brown		0
Red	37	94	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

Data is based upon tests performed by Advance Transformer 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.

**ADVANCE TRANSFORMER CO.**

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018  
 Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 847-768-7768  
 Corporate Offices: Phone: 800-322-2086



## Electrical Specifications

<b>ICN-3P32-N@120V</b>	
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>

### 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

Data is based upon tests performed by Advance Transformer 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.

### **ADVANCE TRANSFORMER CO.**

O'HARE INTERNATIONAL CENTER - 10275 WEST HIGGINS ROAD - ROSEMONT, ILLINOIS 60018  
 TELEPHONE: (847)390-5000 FAX: (847)768-7768

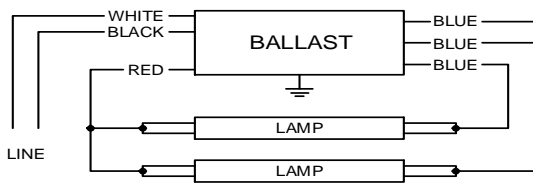


## Electrical Specifications

ICN-3P32-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>

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	0/-18	0.14	38	1.07	15	0.96	1.7	2.82
F17T8	3	17	0/-18	0.17	48	0.92	10	0.97	1.7	1.92
F25T8	2	25	0/-18	0.19	51	1.03	15	0.97	1.7	2.02
F25T8	3	25	0/-18	0.24	67	0.90	10	0.98	1.7	1.34
F32T8	2	32	0/-18	0.24	65	1.01	10	0.98	1.7	1.55
F32T8	3	32	0/-18	0.31	86	0.91	10	0.99	1.7	1.06
F32T8/ES (25W)	2	25	60/16	0.19	50	1.00	10	0.98	1.7	2.00
F32T8/ES (25W)	3	25	60/16	0.25	66	0.89	10	0.98	1.7	1.35
F32T8/ES (28W)	2	28	60/16	0.20	55	1.00	10	0.98	1.7	1.82
F32T8/ES (28W)	3	28	60/16	0.27	70	0.88	10	0.98	1.7	1.26
F32T8/ES (30W)	2	30	60/16	0.22	61	1.01	10	0.98	1.7	1.66
F32T8/ES (30W)	3	30	60/16	0.29	79	0.88	10	0.99	1.7	1.11
F40T8	2	40	32/00	0.28	77	1.00	10	0.98	1.7	1.30

### Wiring Diagram



Diag. 70

Insulate unused blue lead for 1000V

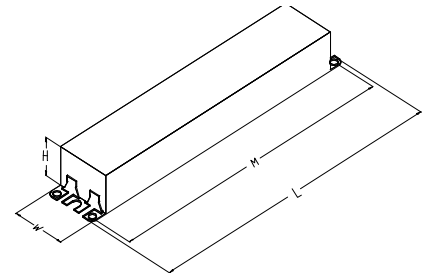
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### Standard Lead Length (inches)

	in.	cm.
Black	25	63.5
White	25	63.5
Blue	31	78.7
Red	37	94
Yellow		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 06/01/12

Data is based upon tests performed by Advance Transformer 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.

## ADVANCE TRANSFORMER CO.

O'HARE INTERNATIONAL CENTER · 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Customer Support/Technical Service: Phone: 800-372-3331 · Fax: 847-768-7768

Corporate Offices: Phone: 800-322-2086



## Electrical Specifications

<b>ICN-3P32-N@277V</b>	
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>

### 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 06/01/12

Data is based upon tests performed by Advance Transformer 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.

### **ADVANCE TRANSFORMER CO.**

O'HARE INTERNATIONAL CENTER - 10275 WEST HIGGINS ROAD - ROSEMONT, ILLINOIS 60018  
 TELEPHONE: (847)390-5000 FAX: (847)768-7768