

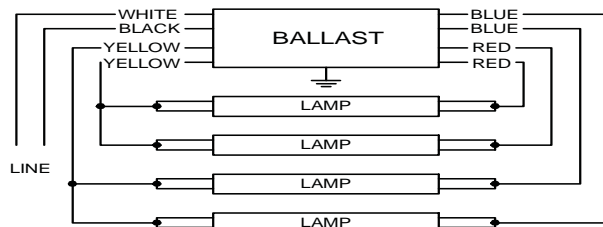
# PHILIPS ADVANCE

## Electrical Specifications

| ICN-4P32-N@120V |               |
|-----------------|---------------|
| Brand Name      | CENTIUM       |
| Ballast Type    | Electronic    |
| Starting Method | Instant Start |
| Lamp Connection | Parallel      |
| Input Voltage   | 120-277       |
| Input Frequency | 50/60 HZ      |
| Status          | Active        |

| 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                   | 0.93                 | 112                      | 0.90           | 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                   | 0.76                 | 91                       | 0.90           | 10        | 0.99         | 1.7                           | 0.99   |
| 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                   | 0.84                 | 100                      | 0.89           | 10        | 0.99         | 1.7                           | 0.89   |
| 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. 66

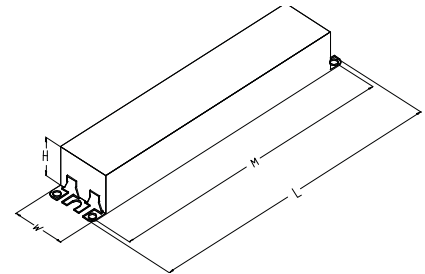
The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

### 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 "        |
| 9 1/2       | 1 3/10    | 1          | 8 9/10       |
| 24.1 cm     | 3.3 cm    | 2.5 cm     | 22.6 cm      |



Revised 04/18/13

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 ADVANCE

|                        |                      |
|------------------------|----------------------|
| <b>ICN-4P32-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>        |

## 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.



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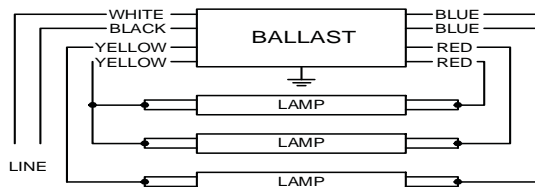
# PHILIPS ADVANCE

## Electrical Specifications

| ICN-4P32-N@277V |               |
|-----------------|---------------|
| Brand Name      | CENTIUM       |
| Ballast Type    | Electronic    |
| Starting Method | Instant Start |
| Lamp Connection | Parallel      |
| Input Voltage   | 120-277       |
| Input Frequency | 50/60 HZ      |
| Status          | Active        |

| 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                   | 0.40                 | 110                      | 0.90           | 10        | 0.98         | 1.7                           | 0.82   |
| 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                 | 90                       | 0.90           | 10        | 0.98         | 1.7                           | 1.00   |
| 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                 | 98                       | 0.90           | 10        | 0.98         | 1.7                           | 0.92   |
| 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

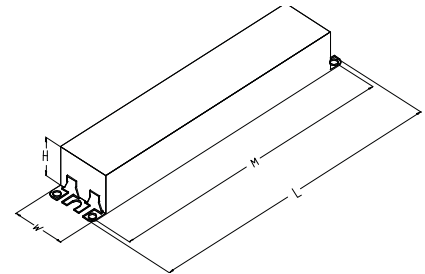
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### Standard Lead Length (inches)

|        | 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) |
|-------------|-----------|------------|--------------|
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| ICN-4P32-N@277V |               |
|-----------------|---------------|
| Brand Name      | CENTIUM       |
| Ballast Type    | Electronic    |
| Starting Method | Instant Start |
| Lamp Connection | Parallel      |
| Input Voltage   | 120-277       |
| Input Frequency | 50/60 HZ      |
| Status          | Active        |

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### Notes:

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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.
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