

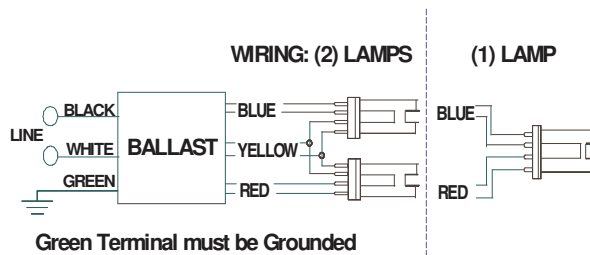
# PHILIPS ADVANCE

## Electrical Specifications

| ICF-2S26-H1-LD@120 |                  |
|--------------------|------------------|
| Brand Name         | SMARTMATE        |
| Ballast Type       | Electronic       |
| Starting Method    | Programmed Start |
| Lamp Connection    | Series           |
| 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. |
|----------------|---------------|------------------|-------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|--------|
| CFM26W/GX24Q   | 1             | 26               | 0/-18                   | 0.24                 | 29                       | 1.10           | 10        | 0.98         | 1.5                           | 3.79   |
| * CFM26W/GX24q | 2             | 26               | 0/-18                   | 0.45                 | 54                       | 1.00           | 10        | 0.99         | 1.5                           | 1.85   |
| CFM32W/GX24q   | 1             | 32               | 0/-18                   | 0.31                 | 36                       | 0.98           | 10        | 0.98         | 1.5                           | 2.72   |
| CFM42W/GX24q   | 1             | 42               | 0/-18                   | 0.38                 | 46                       | 0.98           | 10        | 0.98         | 1.5                           | 2.13   |
| CFQ26W/G24q    | 1             | 26               | 0/-18                   | 0.23                 | 27                       | 1.00           | 10        | 0.98         | 1.5                           | 3.70   |
| CFQ26W/G24q    | 2             | 26               | 0/-18                   | 0.43                 | 51                       | 1.00           | 10        | 0.99         | 1.5                           | 1.96   |
| CFS21W/GR10q   | 2             | 21               | 0/-18                   | 0.42                 | 51                       | 1.12           | 10        | 0.99         | 1.5                           | 2.20   |
| FT24W/2G11     | 2             | 24               | 0/-18                   | 0.41                 | 48                       | 0.93           | 10        | 0.99         | 1.5                           | 1.94   |

## Wiring Diagram

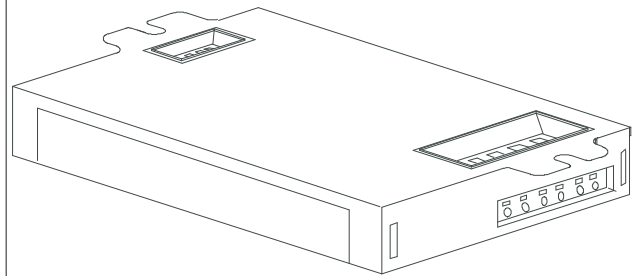


The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

## Standard Lead Length (inches)

|        | in. | cm. |              | in. | cm. |
|--------|-----|-----|--------------|-----|-----|
| Black  | 0.0 |     | Yellow/Blue  |     |     |
| White  | 0.0 |     | Blue/White   |     |     |
| Blue   | 0.0 |     | Brown        |     |     |
| Red    | 0.0 |     | Orange       |     |     |
| Yellow | 0   |     | Orange/Black |     |     |
| Gray   |     |     | Black/White  |     |     |
| Violet |     |     | Red/White    |     |     |

## Enclosure



## Enclosure Dimensions

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 4.98 "      | 2.4 "     | 1.0 "      | 4.6 "        |
| 4 49/50     | 2 2/5     | 1          | 4 3/5        |
| 12.6 cm     | 6.1 cm    | 2.5 cm     | 11.7 cm      |



Revised 09/02/04

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

## ICF-2S26-H1-LD@120

|                 |                         |
|-----------------|-------------------------|
| Brand Name      | <b>SMARTMATE</b>        |
| Ballast Type    | <b>Electronic</b>       |
| Starting Method | <b>Programmed Start</b> |
| Lamp Connection | <b>Series</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 available in a plastic/metal can or all metal can construction to meet plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors color coded per ANSI C82.11.

#### Section II - Performance

- 2.1 Ballast shall be Programmed Start except for ballasts with -QS suffix, which shall be Rapid Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency).
- 2.4 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.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of -18C (0F) for primary lamp. Ballasts for PL-H lamps shall have a minimum starting temperature of -30C (-20F) for primary lamp.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.

#### 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 be rated for use in air-handling spaces.
- 3.4 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.5 Ballast shall comply with ANSI C82.11 where applicable.
- 3.6 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.
- 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 75C and three-years for a maximum case temperature of 85C (90C three-year warranty for ICF-1H120-M4-XX, ICF-2S42-90C-M2-XX and ICF-2S70-M4-XX models).
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



Revised 09/02/04

Data is based upon tests performed by Philips Lighting Electronic 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

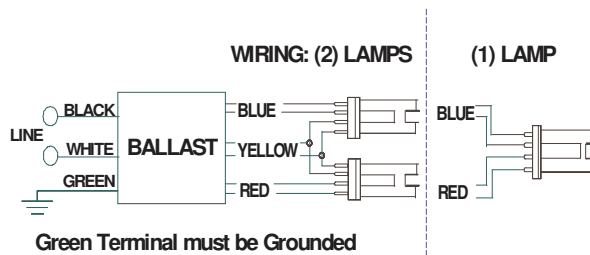
# PHILIPS ADVANCE

## Electrical Specifications

| ICF-2S26-H1-LD@277 |                  |
|--------------------|------------------|
| Brand Name         | SMARTMATE        |
| Ballast Type       | Electronic       |
| Starting Method    | Programmed Start |
| Lamp Connection    | Series           |
| 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. |
|----------------|---------------|------------------|-------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|--------|
| * CFM26W/GX24Q | 1             | 26               | 0/-18                   | 0.11                 | 29                       | 1.10           | 10        | 0.98         | 1.5                           | 3.79   |
| CFM26W/GX24q   | 2             | 26               | 0/-18                   | 0.20                 | 54                       | 1.00           | 10        | 0.99         | 1.5                           | 1.85   |
| CFM32W/GX24q   | 1             | 32               | 0/-18                   | 0.13                 | 36                       | 0.98           | 10        | 0.98         | 1.5                           | 2.72   |
| CFM42W/GX24q   | 1             | 42               | 0/-18                   | 0.17                 | 46                       | 0.98           | 10        | 0.98         | 1.5                           | 2.13   |
| CFQ26W/G24q    | 1             | 26               | 0/-18                   | 0.10                 | 27                       | 1.00           | 10        | 0.98         | 1.5                           | 3.70   |
| CFQ26W/G24q    | 2             | 26               | 0/-18                   | 0.19                 | 51                       | 1.00           | 10        | 0.99         | 1.5                           | 1.96   |
| CFS21W/GR10q   | 2             | 21               | 0/-18                   | 0.18                 | 51                       | 1.12           | 10        | 0.99         | 1.5                           | 2.20   |
| FT24W/2G11     | 2             | 24               | 0/-18                   | 0.18                 | 48                       | 0.93           | 10        | 0.99         | 1.5                           | 1.94   |

## Wiring Diagram

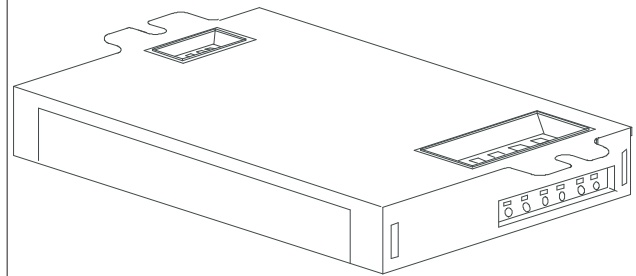


The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

## Standard Lead Length (inches)

|        | in. | cm. |              | in. | cm. |
|--------|-----|-----|--------------|-----|-----|
| Black  | 0.0 |     | Yellow/Blue  |     |     |
| White  | 0.0 |     | Blue/White   |     |     |
| Blue   | 0.0 |     | Brown        |     |     |
| Red    | 0.0 |     | Orange       |     |     |
| Yellow | 0   |     | Orange/Black |     |     |
| Gray   |     |     | Black/White  |     |     |
| Violet |     |     | Red/White    |     |     |

## Enclosure



## Enclosure Dimensions

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 4.98 "      | 2.4 "     | 1.0 "      | 4.6 "        |
| 4 49/50     | 2 2/5     | 1          | 4 3/5        |
| 12.6 cm     | 6.1 cm    | 2.5 cm     | 11.7 cm      |



Revised 09/02/04

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

|                 |                         |
|-----------------|-------------------------|
| Brand Name      | <b>SMARTMATE</b>        |
| Ballast Type    | <b>Electronic</b>       |
| Starting Method | <b>Programmed Start</b> |
| Lamp Connection | <b>Series</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 available in a plastic/metal can or all metal can construction to meet plenum requirements.
- 1.3 Ballast shall be provided with poke-in wire trap connectors color coded per ANSI C82.11.

#### Section II - Performance

- 2.1 Ballast shall be Programmed Start except for ballasts with -QS suffix, which shall be Rapid Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency).
- 2.4 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.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of -18C (0F) for primary lamp. Ballasts for PL-H lamps shall have a minimum starting temperature of -30C (-20F) for primary lamp.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.

#### 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 be rated for use in air-handling spaces.
- 3.4 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.5 Ballast shall comply with ANSI C82.11 where applicable.
- 3.6 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.
- 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 75C and three-years for a maximum case temperature of 85C (90C three-year warranty for ICF-1H120-M4-XX, ICF-2S42-90C-M2-XX and ICF-2S70-M4-XX models).
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



Revised 09/02/04

Data is based upon tests performed by Philips Lighting Electronic 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