

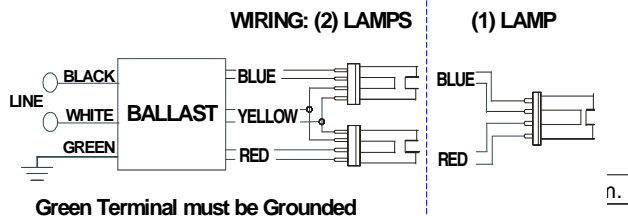
# PHILIPS ADVANCE

## Electrical Specifications

| ICF2S4290CM2BS@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. |
|--------------------------|---------------|------------------|-------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|--------|
| * (1) FC9T5 & (1) FC12T5 | 2             | 62               | 0/-18                   | 0.51                 | 61                       | 0.85           | 10        | 0.98         | 1.5                           | 1.39   |
| CFM26W/GX24Q             | 2             | 26               | 0/-18                   | 0.46                 | 55                       | 1.00           | 10        | 0.98         | 1.5                           | 1.82   |
| CFM32W/GX24Q             | 2             | 32               | 0/-18                   | 0.57                 | 68                       | 0.98           | 10        | 0.98         | 1.5                           | 1.44   |
| CFM42W/GX24Q             | 1             | 42               | 0/-18                   | 0.39                 | 47                       | 1.05           | 15        | 0.98         | 1.5                           | 2.23   |
| CFM42W/GX24Q             | 2             | 42               | 0/-18                   | 0.78                 | 93                       | 0.97           | 10        | 0.97         | 1.5                           | 1.04   |
| CFM57W/GX24Q             | 1             | 57               | 14/-10                  | 0.50                 | 59                       | 0.94           | 10        | 0.98         | 1.5                           | 1.59   |
| CFM70W/GX24Q             | 1             | 70               | 14/-10                  | 0.63                 | 75                       | 0.96           | 10        | 0.98         | 1.5                           | 1.28   |
| CFQ26W/G24Q              | 2             | 26               | 0/-18                   | 0.44                 | 52                       | 1.00           | 10        | 0.98         | 1.5                           | 1.92   |
| CFS28W/GR10Q             | 2             | 28               | 0/-18                   | 0.48                 | 57                       | 1.00           | 10        | 0.98         | 1.5                           | 1.75   |
| CFS38W/GR10Q             | 2             | 38               | 0/-18                   | 0.55                 | 62                       | 0.80           | 10        | 0.98         | 1.5                           | 1.29   |
| CFTR57W/GX24Q            | 1             | 57               | 14/-10                  | 0.80                 | 59                       | 0.94           | 10        | 0.98         | 1.5                           | 1.59   |
| FT24W/2G11               | 2             | 24               | 0/-18                   | 0.40                 | 48                       | 0.93           | 10        | 0.98         | 1.5                           | 1.94   |
| FT40W/2G11/RS            | 2             | 40               | 0/-18                   | 0.66                 | 78                       | 0.95           | 10        | 0.99         | 1.5                           | 1.22   |

## Wiring Diagram

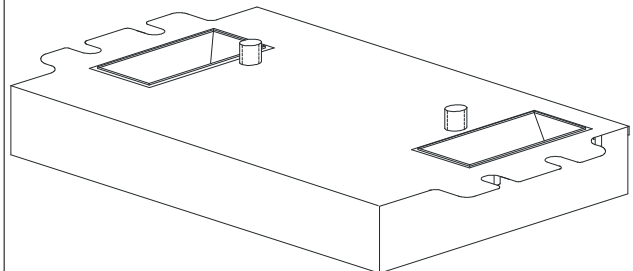


The wiring diagram that appears above is for the lamp type denoted by the asterisk (\*)

## Standard Lead Length (inches)

|  |     |     |
|--|-----|-----|
|  | in. | cm. |
|--|-----|-----|

## Enclosure



## Enclosure Dimensions

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 4.98 "      | 3.00 "    | 1.29 "     | 2.00 "       |
| 4 49/50     | 3         | 1 29/100   | 2            |
| 12.6 cm     | 7.6 cm    | 3.3 cm     | 5.1 cm       |



Revised 03/27/13

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

## ICF2S4290CM2BS @ 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.



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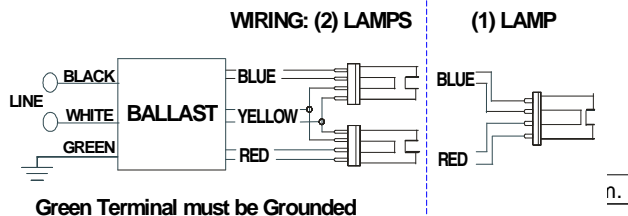
# PHILIPS ADVANCE

## Electrical Specifications

| ICF2S4290CM2BS@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. |
|--------------------------|---------------|------------------|-------------------------|----------------------|--------------------------|----------------|-----------|--------------|-------------------------------|--------|
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| CFQ26W/G24Q              | 2             | 26               | 0/-18                   | 0.43                 | 52                       | 1.00           | 10        | 0.98         | 1.5                           | 1.92   |
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| CFTR57W/GX24Q            | 1             | 57               | 0/-18                   | 0.21                 | 59                       | 0.94           | 10        | 0.98         | 1.5                           | 1.59   |
| FT24W/2G11               | 2             | 24               | 0/-18                   | 0.40                 | 48                       | 0.93           | 10        | 0.98         | 1.5                           | 1.94   |
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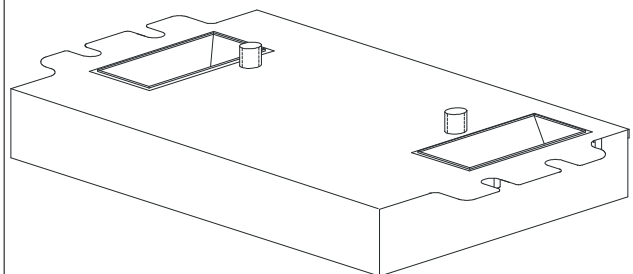


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# PHILIPS ADVANCE

## ICF2S4290CM2BS@277

|                 |                         |
|-----------------|-------------------------|
| 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>          |
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