

## Compact Florescent Program Start Series Lamp Operation

## EP2/13CF/MV/K

| Lamp Type | No. of Lamps | Lamp Watts | Line Voltage | Ballast Factor | Input Watts | Input Current (amps) | Power Factor | THD  | Ballast Efficacy Factor |
|-----------|--------------|------------|--------------|----------------|-------------|----------------------|--------------|------|-------------------------|
| CF7SE     | 1            | 7          | 120          | 0.88           | 9           | 0.08                 | 0.99         | <10% | 9.53                    |
| CF7SE     | 1            | 7          | 277          | 0.93           | 10          | 0.04                 | 0.86         | <20% | 9.42                    |
| CF7SE     | 2            | 7          | 120          | 0.91           | 16          | 0.14                 | 0.99         | <10% | 5.59                    |
| CF7SE     | 2            | 7          | 277          | 0.91           | 17          | 0.06                 | 0.93         | <20% | 5.48                    |
| CF9SE     | 1            | 9          | 120          | 0.92           | 11          | 0.09                 | 0.99         | <10% | 8.37                    |
| CF9SE     | 1            | 9          | 277          | 1.00           | 12          | 0.05                 | 0.89         | <20% | 8.42                    |
| CF9SE     | 2            | 9          | 120          | 0.92           | 19          | 0.16                 | 0.99         | <10% | 4.70                    |
| CF9SE     | 2            | 9          | 277          | 0.98           | 21          | 0.08                 | 0.95         | <15% | 4.77                    |
| 2D10W     | 1            | 10         | 120          | 0.92           | 13          | 0.11                 | 0.99         | <10% | 7.09                    |
| 2D10W     | 1            | 10         | 277          | 0.93           | 13          | 0.05                 | 0.90         | <20% | 6.93                    |
| 2D10W     | 2            | 10         | 120          | 0.94           | 24          | 0.20                 | 0.99         | <10% | 3.90                    |
| 2D10W     | 2            | 10         | 277          | 0.97           | 24          | 0.09                 | 0.96         | <15% | 4.01                    |
| CF13DE    | 1            | 13         | 120          | 1.04           | 17          | 0.15                 | 0.99         | <10% | 6.02                    |
| CF13DE    | 1            | 13         | 277          | 1.05           | 18          | 0.07                 | 0.94         | <20% | 5.93                    |
| CF13DE*   | 2            | 13         | 120          | 1.03           | 33          | 0.27                 | 0.99         | <10% | 3.17                    |
| CF13DE*   | 2            | 13         | 277          | 1.04           | 32          | 0.12                 | 0.98         | <10% | 3.23                    |
| CF13TE    | 1            | 13         | 120          | 0.97           | 16          | 0.14                 | 0.99         | <10% | 6.04                    |
| CF13TE    | 1            | 13         | 277          | 0.96           | 16          | 0.06                 | 0.93         | <20% | 5.90                    |
| CF13TE*   | 2            | 13         | 120          | 0.92           | 30          | 0.25                 | 0.99         | <10% | 3.10                    |
| CF13TE*   | 2            | 13         | 277          | 0.93           | 29          | 0.11                 | 0.97         | <10% | 3.17                    |
| 2D16W     | 1            | 16         | 120          | 0.90           | 18          | 0.15                 | 0.99         | <10% | 5.08                    |
| 2D16W     | 1            | 16         | 277          | 0.90           | 18          | 0.07                 | 0.94         | <20% | 5.04                    |

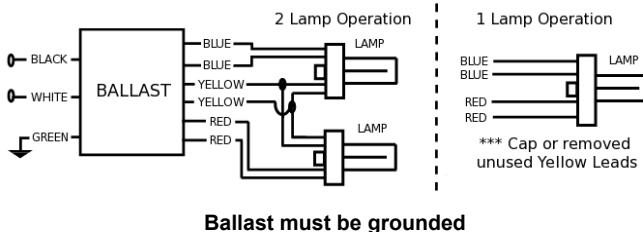
\*Primary lamp design

## Ballast Specifications

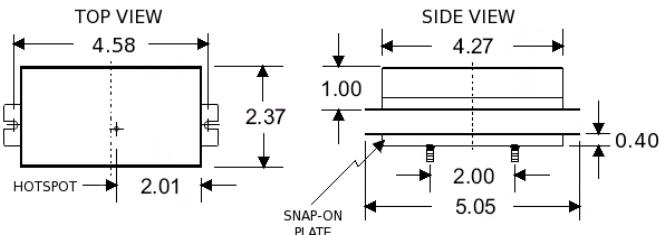
- Ballast shall have a five year warranty with maximum case temperature of 70°C or three year warranty with maximum case temperature of 90°C.
- Ballast shall be UL certified.
- Ballast shall be sound rated Class A.
- Ballast shall be Class P Type 1 Outdoor.
- Ballast shall have a Lamp Current Crest Factor of <1.7.
- Ballast shall withstand line transients as specified in ANSI C62.41.
- Ballast shall comply with the limits of FCC Part 18C Class B (Consumer).
- Ballast shall have a lamp operating frequency greater than 40KHz.
- Ballast shall have color coded, dual entry poke-in connectors.
- Ballast shall ignite lamps within 900ms .

- Ballast shall have a 0°F minimum lamp starting temperature for primary lamp(s).
- Ballast shall be Program Start.
- Ballast shall be Series Lamp Operation.
- Ballast shall have a minimum Power Factor of 97% for primary lamp operation.
- Ballast shall operate within a +/- 10% of the ballast specified line voltage at an input frequency of 50Hz or 60Hz.
- Ballast shall have a maximum case hot spot temperature of 90°C.
- Ballast shall have end of lamp life protection.
- Ballast shall have auto restart.

## Wiring Diagram



## Ballast Dimensions



## Retail packaged kit contains:

- Dual entry poke-in connector ballast
- Snap-on plate
- Wire set
- Wire removing tool
- Mounting hardware – Nuts & washers

## This ballast will operate the following lamps:

