

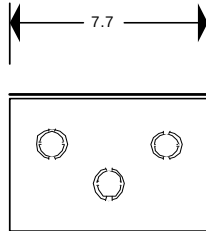
# PHILIPS ADVANCE

## High Pressure Sodium Lamp Ballast

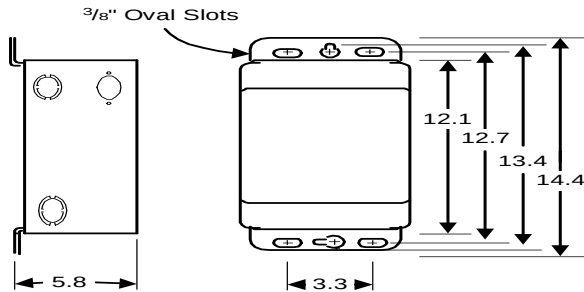
Catalog Number 78E8493  
For 400W S51  
60 Hz CWA  
Status: Active

### DIMENSIONS AND DATA

78E  
INDOOR  
ENCLOSED  
DIMENSIONS



Top view  
3 double  
7/8" and 1 1/8"  
knockouts



Capacitor:

The capacitor is included as part of the potted assembly.

Ignitor: IN CAN

The ignitor is included as part of the potted assembly.

Ballast to Lamp Distance  
(BTL) = 50 feet  
Temp Rating: 90°C

| INPUT VOLTS                                                                          | 120              | 208       | 240       | 277       |   |
|--------------------------------------------------------------------------------------|------------------|-----------|-----------|-----------|---|
| CIRCUIT TYPE                                                                         | CWA              |           |           |           |   |
| POWER FACTOR (min)                                                                   | 90%              |           |           |           |   |
| REGULATION                                                                           |                  |           |           |           |   |
| Line Volts                                                                           | ±10%             |           |           |           |   |
| Lamp Watts                                                                           | WITHIN TRAPEZOID |           |           |           |   |
| LINE CURRENT (Amps)                                                                  |                  |           |           |           |   |
| Operating.....                                                                       | 3.80             | 2.20      | 1.90      | 1.70      |   |
| Open Circuit.....                                                                    | 2.00             | 1.20      | 0.95      | 0.85      |   |
| Starting.....                                                                        | 3.30             | 1.80      | 1.50      | 1.40      |   |
| UL TEMPERATURE RATINGS                                                               |                  |           |           |           |   |
| Insulation Class                                                                     | H(180°C)         |           |           |           |   |
| Coil Temperature Code                                                                | 1029             |           |           |           |   |
| MIN. AMBIENT STARTING TEMP.                                                          | -40°F or -40°C   |           |           |           |   |
| NOM. OPEN CIRCUIT VOLTAGE                                                            | 190              |           |           |           |   |
| INPUT VOLTAGE AT LAMP DROPOUT.....                                                   | 90               | 156       | 180       | 208       |   |
| INPUT WATTS                                                                          | 464              |           |           |           |   |
| RECOMMENDED FUSE (Amps).....                                                         | 10               | 8         | 5         | 5         |   |
| CORE and COIL                                                                        |                  |           |           |           |   |
| Dimension (A)                                                                        |                  |           |           |           |   |
| Dimension (B)                                                                        |                  |           |           |           |   |
| Weight (lbs.)                                                                        | 38               |           |           |           |   |
| Lead Lengths                                                                         | 12"              |           |           |           |   |
| CAPACITOR REQUIREMENT                                                                |                  |           |           |           |   |
| Microfarads                                                                          |                  |           |           |           |   |
| Volts (min.)                                                                         |                  |           |           |           |   |
| Fault Current Withstand (amps)                                                       |                  |           |           |           |   |
| 60 Hz TEST PROCEDURES (Refer to Advance Test Procedure for HID Ballasts - Form 1270) |                  |           |           |           |   |
| High Potential Test (Volts)                                                          |                  |           |           |           |   |
| 1 minute                                                                             | 2000             |           |           |           |   |
| 2 seconds                                                                            | 2500             |           |           |           |   |
| Open Circuit Voltage Test (Volts)                                                    | 170-210          |           |           |           |   |
| Short-Circuit Current Test (Amps)                                                    |                  |           |           |           |   |
| Secondary Current                                                                    | 6.00-7.40        |           |           |           |   |
| Input Current.....                                                                   | 2.40-3.60        | 1.40-2.10 | 1.20-1.80 | 1.00-1.55 | - |



Wiring Diagram:

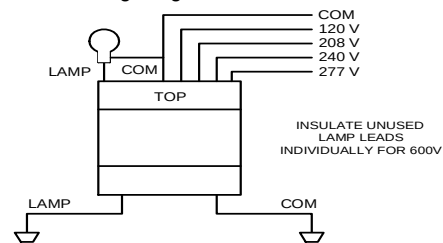


Fig. IE-2

### Ordering Information

| Order Suffix | Description                                 |
|--------------|---------------------------------------------|
| 001          | STANDARD IC PACK - OIL CAP - FLAG TERMINALS |

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.

Philips Lighting Electronic N.A.

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