Metal Halide 1000 Watt Lamp (Coated)

Ordering Information

Ordering Code  MH1000/C/U
ANSI Designation  M47/E
Product Number  415232
Description  Metal Halide
Package Quantity  6

Physical Characteristics

Bulb Size  BT-56
Bulb Finish  Coated
Base  E39 Mogul
Max. Overall Length (MOL)  15 3/8" (390.5mm)
Light Center Length (LCL)  –
Arc Length  4 3/32" (104mm)
Arc Tube Material  Quartz
Max. Permissible Bulb Temp.  430°C (806°F)
Max. Permissible Base Temp.  210°C (410°F)
Max. Bulb to Base Eccentricity  3°
Max. Arc Tube to Base Eccentricity  3°

Operating Characteristics (Photometric)

Rated Initial Lumens  110,000
Mean Lumens, Approx.  77,000
Rated Average Life, Hours  12,000
Correlated Color Temp. (CCT)  3500K
CIE Chromacity Approx.  x-.405, y-.400
Color Rendering Index (CRI)  65
Efficacy (lpw)  110

Operating Position

Universal—Enclosed Luminaires Only
Metal Halide 1000 Watt Lamp (Coated)

Electrical Data: (Subject to change without notice)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp Watts (Nominal)</td>
<td>1000</td>
</tr>
<tr>
<td>Lamp Operating Voltage (rms) (Nominal)</td>
<td>263</td>
</tr>
<tr>
<td>Initial Lamp Voltage Range (ms)</td>
<td>238-288</td>
</tr>
<tr>
<td>Lamp Operating Current (Amps) (Nominal)</td>
<td>4.1</td>
</tr>
<tr>
<td>Lamp Current Crest Factor (Maximum)</td>
<td>1.8</td>
</tr>
<tr>
<td>Warm-up Time to 90% of Output</td>
<td>5–10 Minutes</td>
</tr>
<tr>
<td>Re-strike Time for Hot Lamp</td>
<td>10–15 Minutes</td>
</tr>
<tr>
<td>Ballast Type</td>
<td>ANSI M47/E</td>
</tr>
<tr>
<td>Minimum Operating Temperature</td>
<td>-30°C (-22°F)</td>
</tr>
</tbody>
</table>

1) Measured at 100 hrs of life in vertical position.
2) Measured at rated lamp watts on a linear reactor. LPW does not include ballast losses.
3) Measured with the lamp operating at rated watts.

Warnings, Cautions and Operating Instructions

**WARNING:** These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21CFR 1040.30 Canada:SOR/DORS/80-381)

If the outer bulb is broken or punctured, turn off at once and replace the lamp to avoid possible injury from hazardous short wave ultraviolet radiation. Do not scratch the outer bulb or subject it to pressure as this could cause the outer bulb to crack or shatter. A partial vacuum in the outer bulb may cause glass to fly if the envelope is struck.

**WARNING:** The arc-tube of metal halide lamps are designed to operate under high pressure and at temperatures up to 1000º C and can unexpectedly rupture due to internal or external factors such as a ballast failure or misapplication. If the arc-tube ruptures for any reason, the outer bulb may break and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.

Certain lamps that will retain all the glass particles should inner arc-tube rupture occur are commercially available from Philips Lighting Company.

**RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.** Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

**CAUTION:** To reduce the risk of personal injury, property damage, burns and fire resulting from an arc-tube rupture the following lamp operating instructions must be followed:

**LAMP OPERATING INSTRUCTIONS:**

1. Turn off lamps at least once a week for at least 15 minutes in systems which are operating on a continuous basis (24 hours/day-7days/week). FAILURE TO TURN OFF LAMPS FOR THE MINIMUM RECOMMENDED TIME MAY INCREASE THE POSSIBILITY OF AN INNER ARC-TUBE RUPTURE.

2. **RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.** Allowing lamps to operate until they fail is not advised and may increase the possibility of inner arc tube rupture.

3. Use only in an enclosed fixture capable of withstanding particles of glass having temperatures up to 1000º C.

4. Before lamp installation/replacement, shut power off and allow lamp and fixture to cool to avoid electrical shock and potential burn hazards.

5. Use only auxiliary equipment meeting Philips and/or ANSI standards. Use within voltage limits recommended by ballast manufacturer.

   A. Operate lamp only within specified limits of operation.

   B. For total supply load refer to ballast manufacturers electrical data.

6. Periodically inspect the outer envelope. Replace any lamps that show scratches, cracks or damage.

7. If a lamp bulb support is used, be sure to insulate the support electrically to avoid possible decomposition of the bulb glass.

8. Protect lamp base, socket and wiring against moisture, corrosive atmospheres and excessive heat.

9. Time should be allowed for lamps to stabilize in color when turned on for the first time. This may require several hours of operation, with more than one start. Lamp color is also subject to change under conditions of excess vibration or shock and color appearance may vary between individual lamps.

10. Lamps may require 10 to 20 minutes to re-light if there is a power interruption.

11. Take care in handling and disposing of lamps. If an arc tube is broken, avoid skin contact with any of the contents or fragments.

12. Do not use this lamp:

   A. In a fixture that contains a Pulse Start metal halide ballast.

   B. In a fixture that is specifically designed for use with Pulse Start metal halide lamps. Operation of these lamps on Pulse Start Metal Halide systems may increase the chance of an outer bulb rupture and pieces of extremely hot glass might be discharged into the surrounding environment. If such a rupture were to happen, THERE IS A RISK OF PERSONAL INJURY, PROPERTY DAMAGE, BURNS AND FIRE.