# SIEMENS

# Instructions

July, 2000 Supersedes Issue of July, 1999

51-HPC5

Pilot Light

Cat No 51PC5

For Type 3, 4, 7, 9 Enclosures Class 14, 18, 22, 40 & 51 **Contact Block** (As required)

Figure 1

#### DESCRIPTION

Three types of Class 51 pilot lights are available; the transformer type (shown in Figure 1), the resistor type and the full voltage type (pigtail terminations). The pilot light is usually wired in a control circuit to indicate operational status of equipment.

The pilot light is available in two bushing lengths, short or long. The short bushing is for use on an enclosure cover with maximum thickness of 7/8 inch. The long bushing can be used on a standard enclosure with additional front panel or on a very thick enclosure (2<sup>1</sup>/8 inch maximum cover thickness). A sealing lock nut and lens assembly secure the bushing in position. For long bushing installation in an enclosure and panel, an additional lock nut secures the bushing behind the panel.

#### Use with Type 3, 4, 7, 9 enclosures. When used in a Type 3 or 4 enclosure, mount on a flat surface.

#### Rating:

Transformer pilot lights are available with a 120, 240, 480 or 600 volt primary (50/60 Hertz) and a separate secondary winding which supplies reduced voltage to a miniature bayonet base 6 volt lamp. These units are suitable for applications where vibration is present and long bulb life is desirable.

Full voltage pilot lights are available for 6, 24 and 120 volt AC and DC applications. The 120 volt pilot light is supplied with a 24 volt lamp and a voltage dropping resistor.

Contents of kits with catalog number beginning with 51PC5:

- **A** lens assembly, if applicable 1
- B trim washer 1
- 1 С sealing lock nut
- 1 D pilot light assembly with lamp
- 1 Е additional lock nut for long bushing pilot lights only





# INSTALLATION

Check the voltage rating of the pilot light. It must be equal to the control voltage used in the application. Using a pilot light with a higher voltage rating will result in ineffective performance.

(For Engineering Reference Only - Rev. C)

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A WARNING Hazardous voltage.

Can cause death, serious personal injury, or property damage. Maintain 1/2 inch minimum clearance through air between uninsulated live parts, such as contact block terminals. and enclosure.

#### **BUSHING INSTALLATION**

- 1. Mount pilot lights on 2<sup>1</sup>/4 inch minimum centers.
- On the enclosure panel or cover, drill and tap a <sup>3</sup>/<sub>4</sub> 14NPSM-2A hole for each pilot light. The thickness of the enclosure panel must allow a 5-thread minimum engagement with the bushing.
- 3. For pilot lights mounted near the edge of the enclosure panel, be sure to maintain <sup>1</sup>/<sub>2</sub> inch minimum air clearance between contact block terminals and enclosure wall.
- 4. Remove lens assembly **A** and trim washer **B** from pilot assembly **D**.
- 5. Move sealing lock nut C to the rear of the bushing.
- From inside the enclosure, install assembly D through a <sup>3</sup>/<sub>4</sub> inch 14NPSM tapped hole until the front of the bushing projects 6 or 7 threads from the front surface of the enclosure.
- 7. Place trim washer **B**, or the legend plate, on the projecting bushing. Tighten the lens assembly **A** finger-tight to the bushing. The legend plate or trim washer should still be loose.

Note: When the legend plate is used, discard trim washer B.

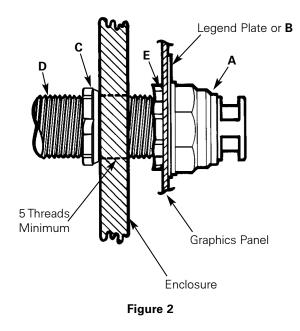
- Align the legend plate as desired and tighten lens assembly A securely to enclosure. If the terminals need to be oriented, the bushing may be unscrewed a maximum of 180° from the lens assembly before tightening.
- 9. To secure the pilot light in position, tighten the sealing lock nut **C** securely against the enclosure.

Using wrench catalog number 52MAWA or 52MAWB facilitates assembly and prevents scoring of the lens assembly **A**; however, neither tool is required for installation.

When the long bushing pilot light is used on a very thick enclosure, follow the instructions for short bushing installation, discarding additional lock nut  $\mathbf{E}$ .

For an enclosure with panel mounting, observe the following mounting dimensions:

- 1. On the graphics panel, drill a 1<sup>1</sup>/<sub>32</sub> inch diameter minimum clearance hole in line with the tapped hole for each pilot light.
- 2. When installing assembly **D**, include lock nut **E** and front panel as shown in Figure 2.



# LAMP REPLACEMENT

Replace the lamp with one of exactly the same type and rating. The lamp number. listed in Figure 3 are the lamps furnished with the pilot lights. The lamp is accessible by removing the lens assembly **A** from pilot light assembly **D**.

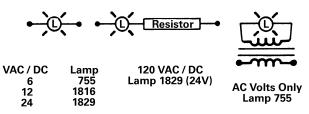


Figure 3