HUBBELL®
Wiring Device-Kellems

# HUBBELL

SURGE PROTECTIVE DEVICES

# HBL4SA40, HBL5SA40, HBL8SA40, HBL9SA40, HBL10SA40 and HBL11SA40
## Surge Protective Device (SPD)

## Introduction

The HBL4SA40, HBL5SA40, HBL8SA40, HBL9SA40, HBL10SA40 and HBL11SA40 Surge Protective Devices are designed and listed for indoor or outdoor installations and surge suppression of three-phase services.

## Precautions

**⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors and covers before turning on power to this equipment.
- This equipment must be effectively grounded per all applicable codes. Use an equipment-grounding conductor to connect this equipment to the power system ground.

**Failure to follow these instructions will result in death or serious injury.**

**⚠ CAUTION**

**LOSS OF SURGE PROTECTION**

- Turn off all power supplying the equipment and isolate the surge protective device before Megger® or hi-potential testing.
- Ungrounded power systems are inherently unstable and can produce excessively high line-to-ground voltages during certain fault conditions. During these fault conditions any electrical equipment, including an SPD, may be subjected to voltages which exceed their designed ratings. This information is being provided to the user so that an informed decision can be made before installing any electrical equipment on an ungrounded power system.

**Failure to follow these instructions can result in equipment damage.**

**Retain for future use.**

**8291-0101**
**Rev. 01, 03/2016**

# Installation

1. Turn off all power supplying this equipment before working on or inside equipment. For mounting, see Figure 1.

   **Note:** As this device is classified as a Type 1 SPD, it can be installed with or without a dedicated circuit breaker. For mounting, see Figure 1.

2. Confirm SPD is rated for the system by comparing voltage measurements to the Line Voltage (L-L, L-N) on the product label (see Figure 2).
3. Connect the black wires of the SPD to each of the incoming lines. Connect the neutral wire (white) of the SPD to the neutral bar. When no neutral is present, connect the white wire to the grounding bar (see Figure 2).

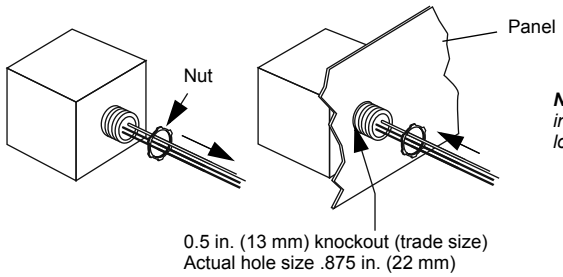
   **Note:** Delta models do not include or require a neutral (white) wire.

4. Twist conductors 1/2 turn or more for every 12 inches (30 cm) of length.
5. Keep conductor length as short as possible with no sharp bends.

   **Note:** Delta models do not include or require a neutral (white) wire.

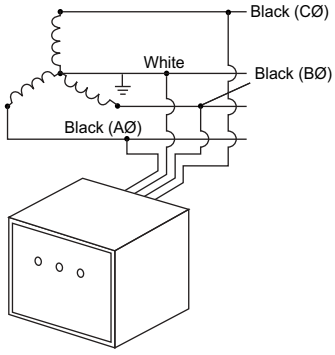
6. Install cover and/or close door on equipment.

**Figure 1: Mounting**



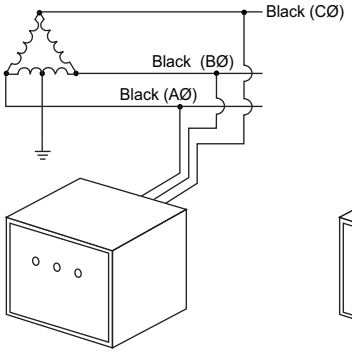

***Note:** The SPD must be installed in an accessible location (not within walls).*

**Figure 2: Wiring**



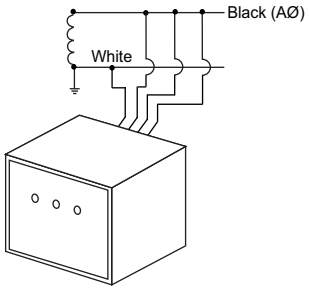

**3-Phase, 4-Wire WYE**

HBL4SA40 – 208Y/120 V ac
HBL8SA40 – 480Y/277 V ac
HBL10SA40 – 600Y/347 V ac



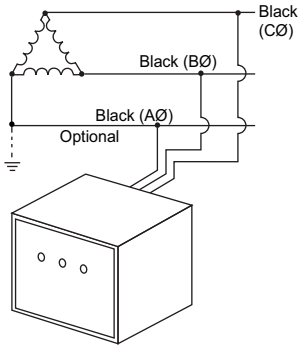

**3-Phase, 4-Wire High-Leg Delta**

HBL5SA40 – 240/120 V ac




**1-Phase, 2-Wire**

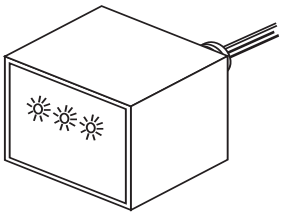
HBL4SA40 – 208Y/120 V ac
HBL8SA40 – 480Y/277 V ac
HBL10SA40 – 600Y/347 V ac



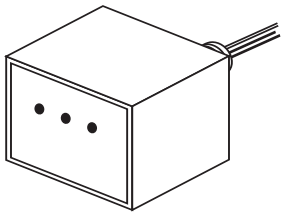

**3-Phase, 3-Wire Delta**

HBL5SA40 – 240 V ac
HBL9SA40 – 480 V ac
HBL11SA40 – 600Y V ac

**Figure 3: Diagnostic Operation**



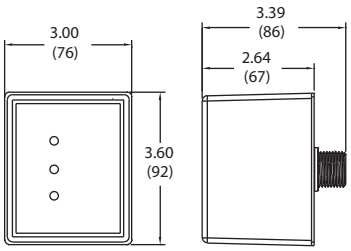
**Indicator light ON = OK**



**Indicator light OFF = Loss of Surge Suppression L1, L2 and/or L3**

- **Indicator light ON =** Normal operation.
- **Indicator light OFF =** Check circuit breakers and connections. Verify line voltage at point of connection; if all correct, replace SPD.

**Figure 4: Dimensions**




Note: Knockout trade size is 0.5 in. (13 mm). Actual hole size is 0.875 in. (22 mm).

Dimensions: in. (mm)

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Hubbell Wiring Devices
1-800-729-3406