


For use with: I-T-E® MD Frame Types SMD6, SHMD6, SCMD6. ND Frame Types SND6, SHND6, SCND6, equipped with Ground Fault Protection for 3 phase, 4 wire, 208Y/120, 480Y/277 or 600Y/347 Volt AC systems.

Siemens Energy & Automation, Inc.  
Bellefontaine, Ohio 43311 U.S.A.

## Installation Instructions



**⚠ DANGER**

**Hazardous voltage. Will cause death or severe injury.**

Turn off and lock out all power before working on the circuit breaker.

Replace the covers and shields before power supplying the circuit breaker is restored.

**⚠ SAFETY INSTRUCTIONS**

1. Turn off power feeding this device before starting the installation.
2. Also turn off any line power within the immediate vicinity to prevent the incidental or accidental contact of tools by the installer.

Note: This instruction sheet outlines the recommended installation procedure for the following Neutral Sensors:

Neutral Sensor <u>Cat. No.</u>	Neutral Sensor <u>Ampere Rating</u>	<u>Color</u>
N06SMDA	600 Amps	Green
N07SMDA	700 Amps	Green
N08SMDA	800 Amps	Green
N10SNDA	1000 Amps	Green
N12SNDA	1200 Amps	Green

**⚠ CAUTION**

Incorrect neutral sensor could cause nuisance tripping or improper operation of the ground fault function.

Use only the above series of neutral sensors.

The Ampere Rating of the neutral sensor must match the Maximum Continuous Current rating (In) of the Circuit Breaker.

Use neutral sensors with the following breaker catalog numbers.

<p><b>N06SMDA</b> SMD69600AG SMD69600AGH SMD69600ANGT SMD69600ANGTH</p>	<p><b>N08SMDA (Cont.)</b> SND69800AG SND69800AGH SND69800ANGT SND69800ANGTH</p>
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<p>SCMD69600AG SCMD69600AGH SCMD69600ANGT SCMD69600ANGTH</p>	<p>SCND69800AG SCND69800AGH SCND69800ANGT SCND69800ANGTH</p>
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<p>SHMD69600AG SHMD69600AGH SHMD69600ANGT SHMD69600ANGTH</p>	<p>SHND69800AG SHND69800AGH SHND69800ANGT SHND69800ANGTH</p>
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<p><b>N07SMDA</b> SMD69700AG SMD69700AGH SMD69700ANGT SMD69700ANGTH</p>	<p><b>N10SNDA</b> SND69100AG SND69100AGH SND69100ANGT SND69100ANGTH</p>
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<p>SCMD69700AG SCMD69700AGH SCMD69700ANGT SCMD69700ANGTH</p>	<p>SCND69100AG SCND69100AGH SCND69100ANGT SCND69100ANGTH</p>
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<p>SHMD69700AG SHMD69700AGH SHMD69700ANGT SHMD69700ANGTH</p>	<p>SHND69100AG SHND69100AGH SHND69100ANGT SHND69100ANGTH</p>
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<p><b>N08SMDA</b> SMD69800AG SMD69800AGH SMD69800ANGT SMD69800ANGTH</p>	<p><b>N12SNDA</b> SND69120AG SND69120AGH SND69120ANGT SND69120ANGTH</p>
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<p>SCMD69800AG SCMD69800AGH SCMD69800ANGT SCMD69800ANGTH</p>	<p>SCND69120AG SCND69120AGH SCND69120ANGT SCND69120ANGTH</p>
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<p>SHMD69800AG SHMD69800AGH SHMD69800ANGT SHMD69800ANGTH</p>	<p>SHND69120AG SHND69120AGH SHND69120ANGT SHND69120ANGTH</p>
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# Installation Instructions

**INTRODUCTION:**

This neutral sensor is designed to be mounted on one 4.00" x .75" bus bar or with neutral kit, catalog number N2000, it can be adapted for cable applications. See instructions supplied with the neutral kit for assembly procedure.

**Mounting:**

Position the neutral sensor within easy wiring range of the associated circuit breaker and fabricate four .312 diameter holes 1.50 x 4.47 inches apart in bus or panel, as shown in Figure 1. Orient L-Mounting brackets as necessary for the mounting configuration being used and secure to the neutral sensor with the hardware provided. Mount the neutral sensor in bus or panel, with 1/4-20 hardware (not provided).

**Important:**

The SMD and SND series of electronic trip circuit breakers equipped with ground fault protection may be used in the Residual or Ground Return modes. When used in the Residual mode the orientation of the neutral sensor is important for proper operation. See Figures 2

and 3 for proper orientation of the neutral sensor for Residual mode Ground Fault. Special orientation of the neutral sensor is not required when used in the Ground Return mode of Ground Fault. See Figure 4 for installation of neutral sensor.

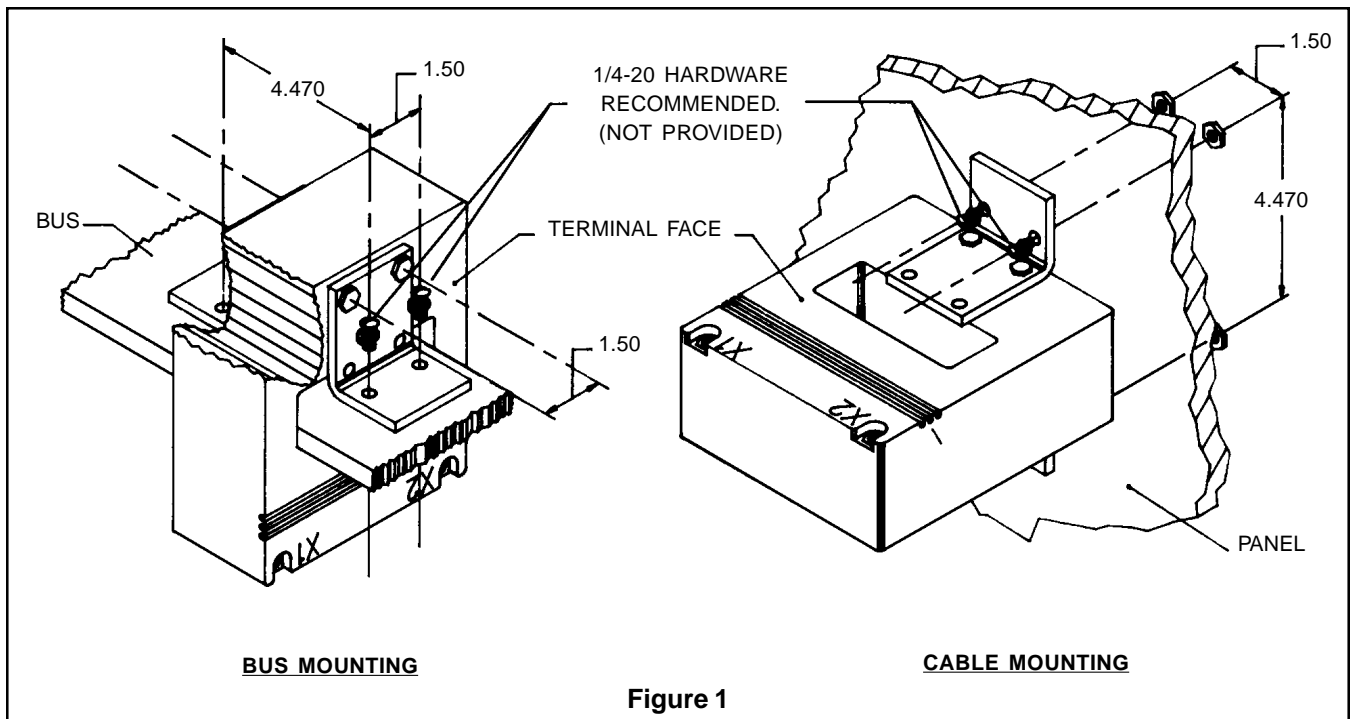
**Terminal Connections:**

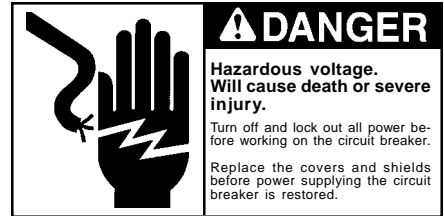
After properly orienting and mounting the neutral sensor, maintain the correct polarity by connecting terminal X1 on the circuit breaker to terminal X1 on the neutral sensor, and terminal X2 on circuit breaker to terminal X2 on the neutral sensor.

<u>Hardware List:</u>	<u>Quantity</u>
10-32 Terminal Screw	2
#10 Lockwasher	2
Cupped Washer	2
L Mounting Bracket	2
1/4-20 x 5/8" machine screw	4
1/4" lockwasher	4
Breaker Label	1

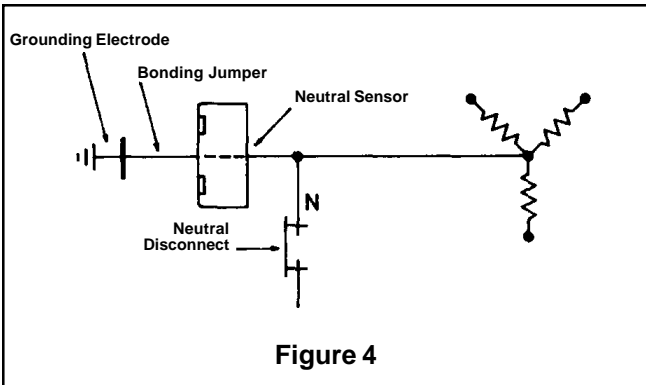
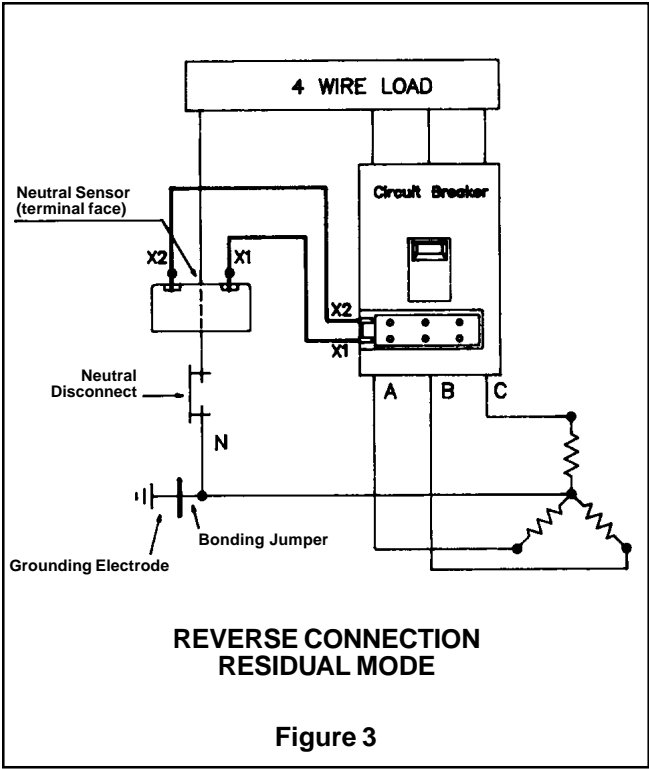
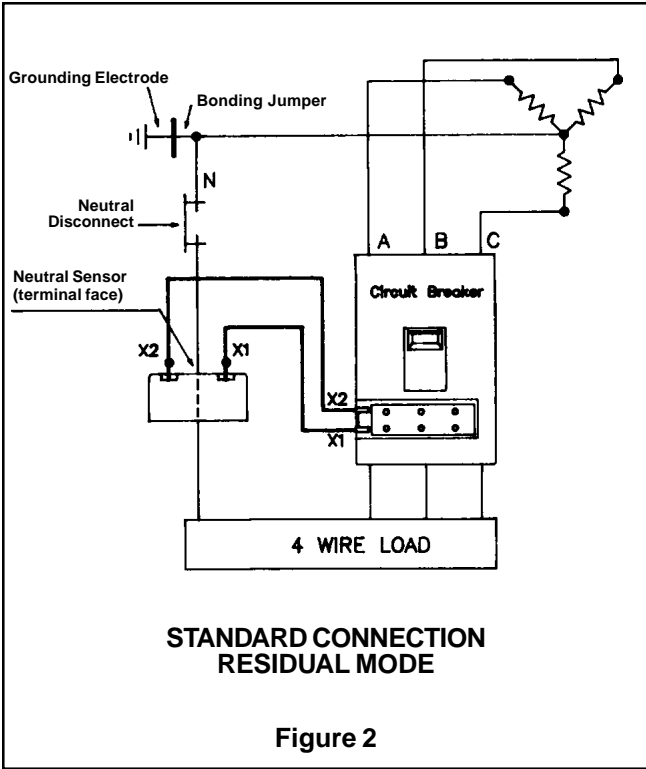
Breaker Label (Figure 5):

This label is to be attached to the associated circuit breaker at installation.





# Installation Instructions



**BREAKER IS EQUIPPED  
WITH A NEUTRAL SENSING  
TRANSFORMER.**

**720219-A00**

**Figure 5**