

Product Group: SG2 Programmable Relay  
Number: AN-SG2-009

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Revision: A

### Title: Digital Inputs (AC/DC)

**Summary:** We will discuss the proper types of input sources for each type of digital input, and we will identify both AC and DC inputs.



To minimize the risk of potential safety problems, follow all applicable local and national codes that regulate the installation and operation of your equipment. It is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation is in compliance with these codes.



Do not connect or disconnect wires or connectors while power is applied to the circuit.



Refer to the instruction sheet that is included with the product for additional directions and circuit protection recommendations.

### 12VDC Models (SG2-XXXX-12D)

Input power voltage range: 10.4VDC- 14.4VDC

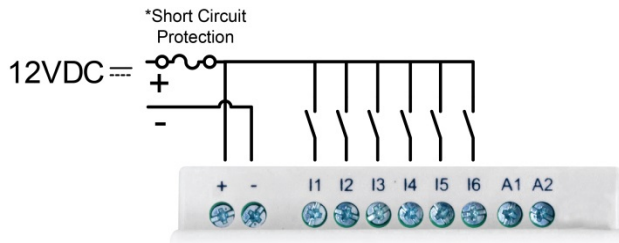


Figure 1

12VDC + connects to (+) terminal and input terminals (refer to Fig.1) on the SG2.

12VDC – connects to the (-) terminal on the SG2.

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### 24VDC Models (SG2-XXXX-D)

Input power voltage range: 20.4VDC – 28.8VDC

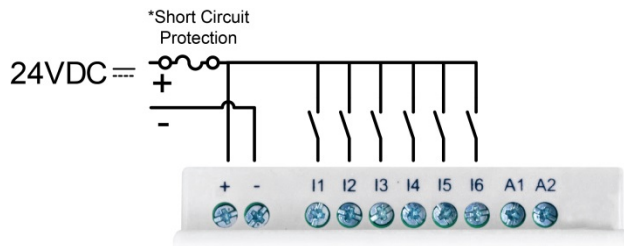


Figure 2

24VDC + connects to (+) terminal and input terminal (refer to Fig.2) on the SG2.

24VDC – connects to the (-) terminal on the SG2

### 100-240VAC Models (SG2-XXXX-A)

Input power voltage range: 85VAC – 265VAC

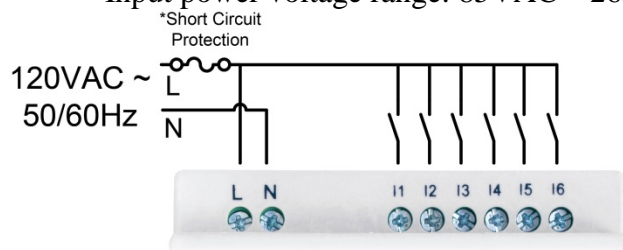


Figure 3

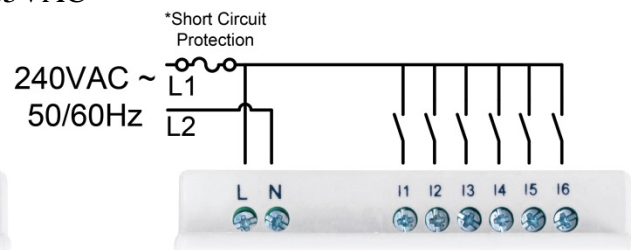


Figure 4

120VAC line connects to (L) terminal and input terminals (refer to Fig.3) on the SG2.

120VAC neutral connects to (N) terminal on the SG2.

240VAC line 1 connects to (L) terminal and input terminal (refer to Fig.4) on the SG2.

240VAC line 2 connects to (N) terminal on the SG2.

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