

Product Group: SG2 Programmable Relay
 Number: AN-SG2-008

Date Issued: 08/15/2017
 Revision: B

Title: SG2 Ladder Structure for 3 contact program

Summary: We will define the basic structure of a Ladder Logic program. For this example, we will be using the SG2 Client version 3.4 software in conjunction with the Windows 7 operating system.

Columns and Rungs

- The 3 contact Ladder Logic programming screen area consists of 7 columns and up to 300 rungs.

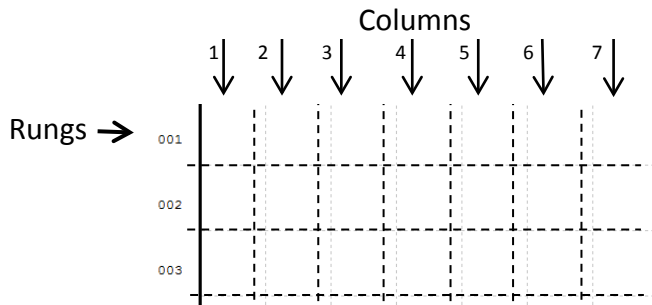



Figure 1

Contacts

- Contact functions can be programmed in either a Normally Open or Normally Closed state.

 STR (Normally Open) contact- Contact state is open until the corresponding input signal is given or the corresponding element coil becomes active.

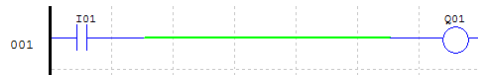


Figure 2


 STR NOT (Normally Closed) contact – Contact state is closed until the corresponding input signal is given or the corresponding element coil becomes active.



Figure 3

Information herein is provided by FactoryMation Technical Support "as is" with no guarantee of any kind. Customer is solely responsible for validating application, operation, maintenance, and code compliance and other information and data relating to the installation, operation, safety and maintenance of all components. FactoryMation does not guarantee that this information is suitable for your application, nor does FactoryMation assume any responsibility for your product design, installation, testing, or operation.

- Each rung can have up to 3 contacts.
- Contacts can be inserted into columns 1, 3, and/or 5.

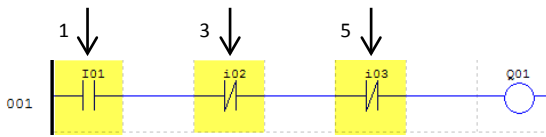


Figure 4

Horizontal Connecting Lines

- Horizontal connecting lines are used to connect the components within a rung. These lines can be inserted in columns 1, 3, and/or 5.

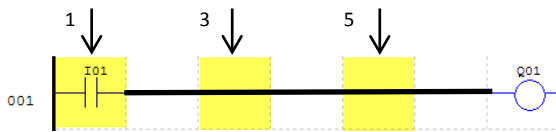


Figure 5

Vertical Connecting Lines

- Vertical connecting lines are used to connect 2 or more rungs of the Ladder Program. These lines can be inserted in columns 2, 4, and/or 6.

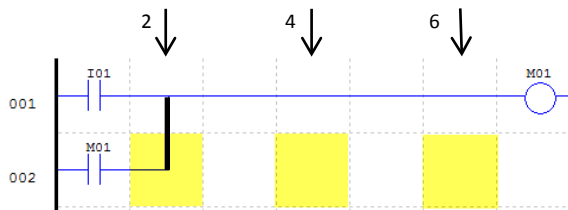


Figure 6

Coils

- A coil can be related to a physical output (hardware) or an internal auxiliary instruction. The coil is inserted in column 7 only as seen in Figure 7. Each coil can be used once within a program.



Figure 7

Information herein is provided by FactoryMation Technical Support "as is" with no guarantee of any kind. Customer is solely responsible for validating application, operation, maintenance, and code compliance and other information and data relating to the installation, operation, safety and maintenance of all components. FactoryMation does not guarantee that this information is suitable for your application, nor does FactoryMation assume any responsibility for your product design, installation, testing, or operation.