What are the different operating modes in PLC? - PLC (Programmable Logic Controllers) - Industrial Automation, PLC Programming, scada & Pid Control System

Published: 2017-10-21 · Archived: 2026-04-29 07:10:32 UTC

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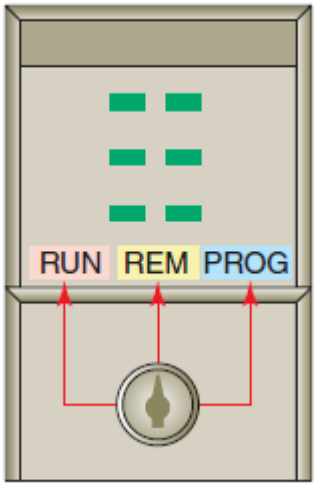
There are basically two modes of operation for plc processors program mode and variations of run mode. Number of modes changes with the manufacturer.



There are key switches shown above that allow selecting the modes.

Program Mode:

The mode in which new programs are entered. The program mode also used to edit or update existing program and used to upload, download files, document program (print out). When the PLC is switched into the program mode, all outputs from the PLC are forced off regardless of their rung logic status, and the ladder I/O scan sequence is halted.

Run Mode:

The run mode is used to execute the user program. Input devices are monitored and output devices are energized accordingly. After entering all instruction to a PLC program, the processor is put into run mode.

Test Mode:

This feature is often used after developing or editing a program to test the program execution before allowing the PLC to operate real-world outputs. Without energizing any output a new or modified program is tested with the inputs. There are different types of the test mode can include the single-step test mode, which directs the processor to execute a selected single rung or group of rungs; the single-scan test mode. which executes a single processor operating scan or cycle; and the continuous-scan test mode, which directs the processor to continuously run the program for checking or troubleshooting.

Remote Mode:

The Remote position gives remote access to a PLC to select the program and run mode by a personal computer connected to the PLC processor. The remote mode may be benefi cial when the controller is in a location that is not easily accessible.

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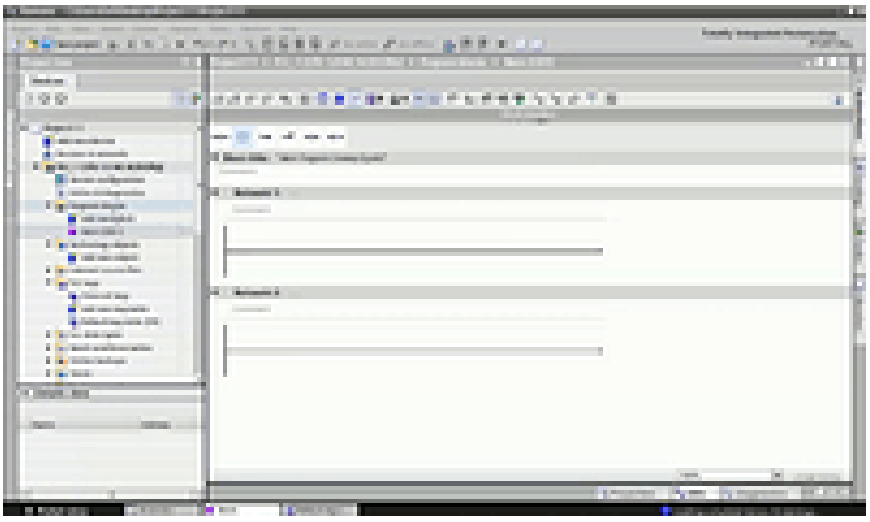 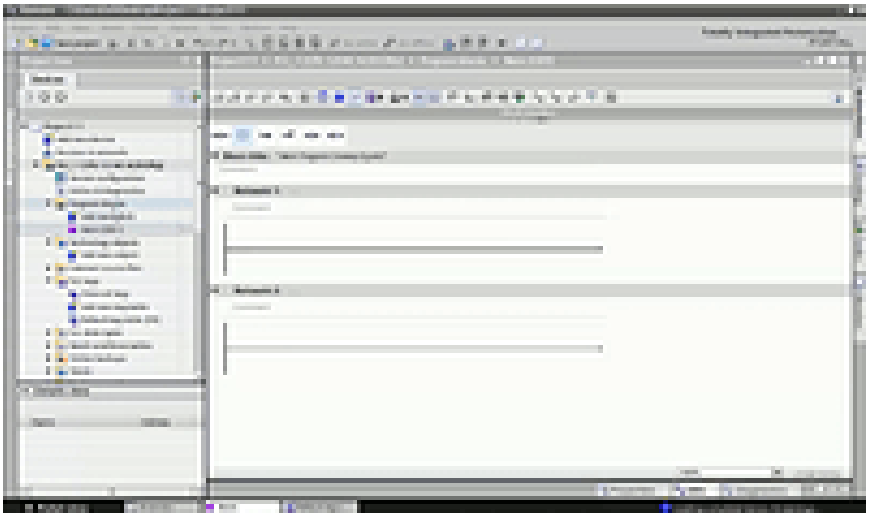 How to configure PID controller in Siemens PLC? PLC (Programmable Logic Controllers) pid		19.0k	Feb 2018

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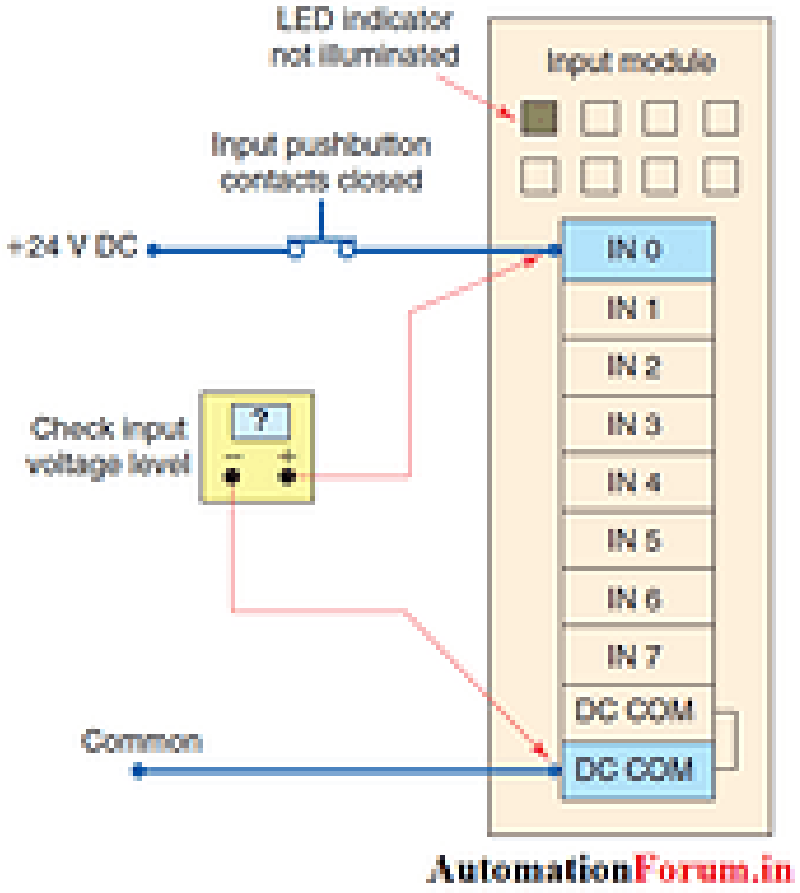		15.0k	May 2018

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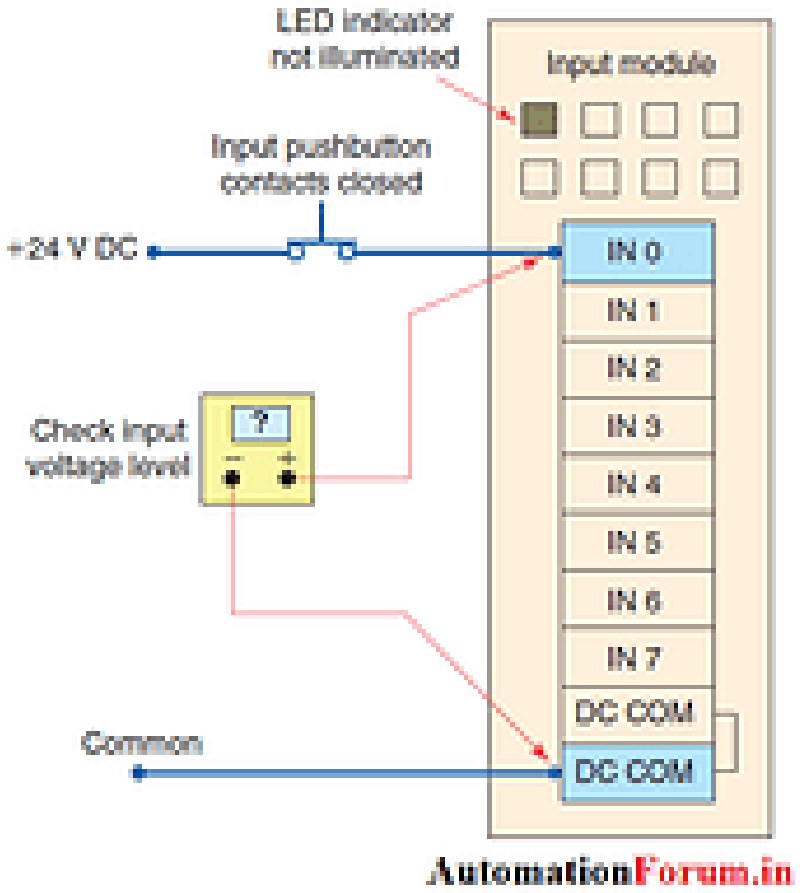 Troubleshooting PLCs PLC (Programmable Logic Controllers)			

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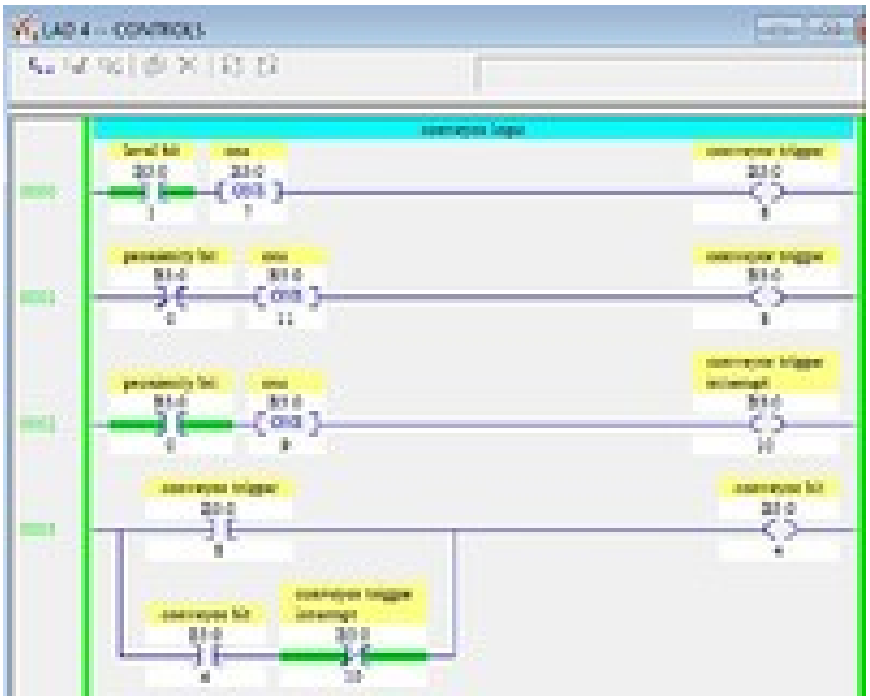 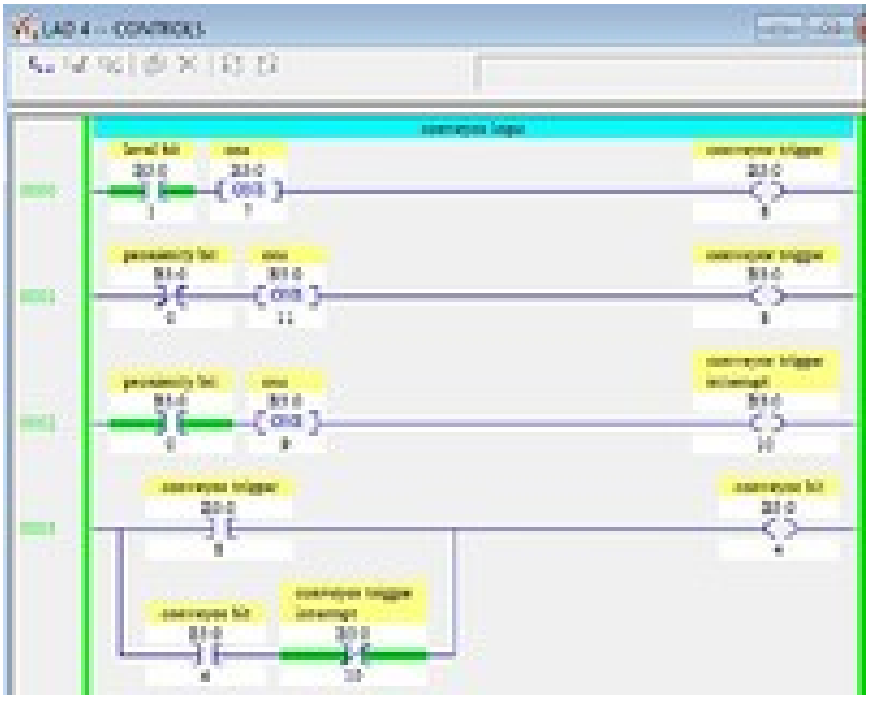 Issue with Conveyor Bit and One Shot in RSLogix Emulate PLC (Programmable Logic Controllers) plc		1.2k	Jul 2024

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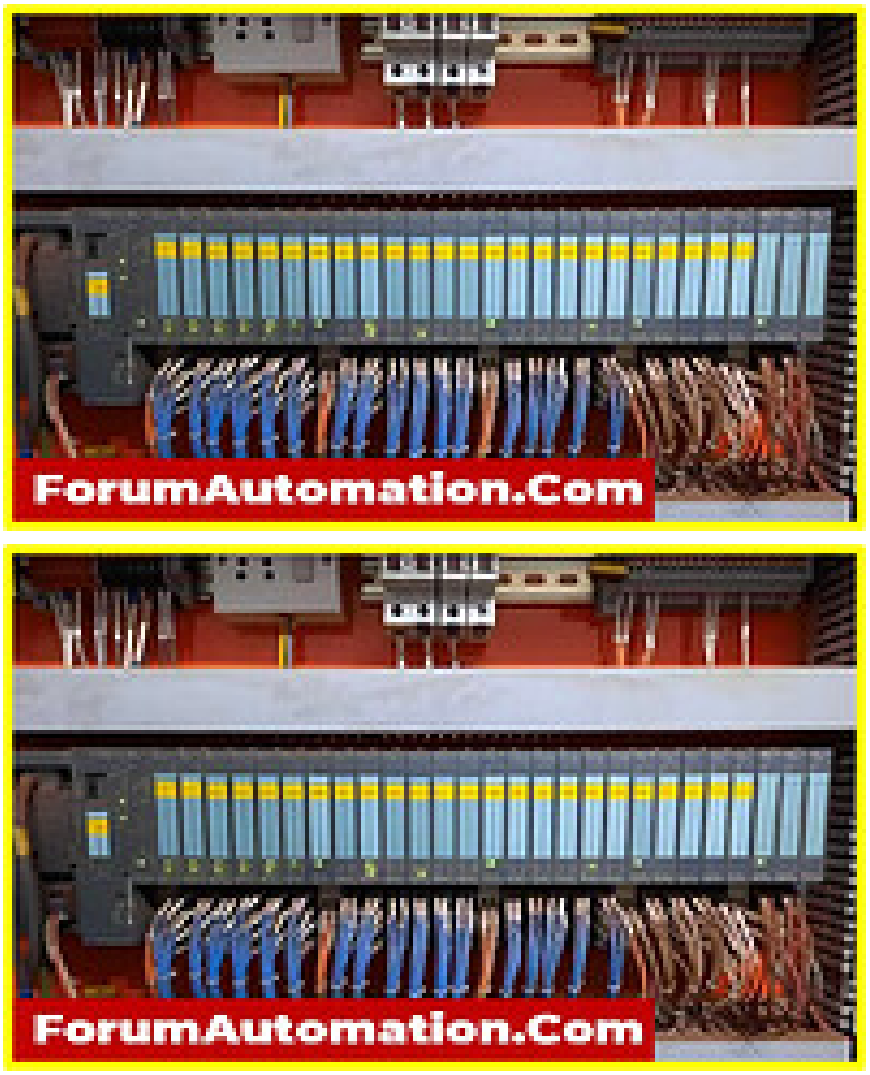 What is a Modular PLC? PLC (Programmable Logic Controllers) plc		3.9k	Mar 2023
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