

## **AUTOMATION AND CONTROL**



# PROGRAMMABLE LOGIC CONTROLLER – 12 IN/8 OUT DL 2110AH



### **DESCRIPTION**

The DL 2110AH is a programmable controller that combines high performance and ease of use for those who are entering the world of PLCs for the first time.

It allows controlling machines and plants using the sequential logic that replaces traditional electromechanical panels, saving relays, timers and counters.

Flexibility, as it can be reprogrammed, the possibility of its use in environments with harsh working conditions, reliability and safety are its main advantages.

With this module, students can perform experiments commonly used in the industrial automation environment.

All sections (power supply, digital I/O, switches and interface) are identified through clear blocks that show their types and symbols.



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## **TECHNICAL FEATURES**

The DL 2110AH configuration includes the following components:

- 1 power supply LOGO!Power of Siemens, 24Vdc,
- 12 switches, three-position each (off, on stable/unstable) for the internal simulation of the digital inputs,
- 1 PLC LOGO! (model 12/24RCE of Siemens) with display and LAN interface, with 8 digital inputs (4 can be used as analog inputs), 4 relay outputs and interface for micro-SD standard card,
- 1 digital expansion module (model DM8 24R) with 4 digital inputs and 4 relay outputs,
- 1 Ethernet LAN port for programming.

The front panel also features input/output terminals to facilitate connections between the **DL 2110AH** module and the hardware applications in the automation laboratory.

It is complete with LOGO! Soft Comfort software for programming, Ethernet cable, power cable, and 2mm cables.

Power supply: single-phase from mains.

#### **EXPERIMENTS:**

- How to create a simple latch circuit,
- How to create a simple latch circuit (with timer),
- Countdown experiment,
- Simulation and control of a conveyor belt,
- Simulation with detection of the direction of a conveyor belt,
- Simulation of a traffic light,
- How to implement an equation,
- Simulation of starting and stopping a motor.