SMART TRAFFIC LIGHTS SIMULATOR

DL 2121

DESCRIPTION

The DL 2121 represents a crossroads between two one-way streets, each controlled by a traffic light and with three pedestrian crossings also with traffic lights.

The automatic control of the traffic light system is carried out by means of a PLC, not with the usual cyclic timing: only the presence of at least one car determines the free signal of the corresponding traffic light, which allows the transit of all the cars between the two detection sensors.

The dialogue between the traffic lights of the two streets allows the alternation of the free signal according to the intensity of the traffic, while the pedestrian crossing takes place on request via buttons.

The cars are displayed by means of LEDs, and their control is entrusted by means of buttons to an electronic circuit independent on the PLC.

The light signals are ensured by groups of LEDs of various colors.

Flexibility, reliability and safety are its main advantages.

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

All sections (power supply, digital I/O terminals, traffic lights, LEDs and pushbuttons) are identified through clear blocks that show their types and symbols.

DE LORENZO S.p.A. V.le Romagna 20 – 20089 ROZZANO (MI) Italy – Tel. + 39 02 8254551 - Fax +39 02 8255181
E-mail: info@delorenzo.it- sales@delorenzo.it

TECHNICAL FEATURES

The DL 2121 configuration includes the following components:

- 1 power supply, 24Vdc/1A,
- 4 pushbuttons for presence and cancellation of cars,
- 3 pushbuttons with relevant LEDs for pedestrian booking,
- 2 traffic lights with three LEDs for the streets and 3 traffic lights with two LEDs for pedestrian crossing,
- 1 RESET pushbuttons.

The front panel also features the input/output terminals, suitably duplicated on the back, to facilitate connections between the DL 2121 module and the PLC modules in the automation laboratory, in particular the DL 2210A and the DL 2210B.

Complete with didactic manual and software.

Power supply: single-phase from mains.

EXPERIMENTS:

- Crossroads controlled by “smart” traffic lights.

DE LORENZO S.p.A. V.le Romagna 20 – 20089 ROZZANO (MI) Italy – Tel. + 39 02 8254551 - Fax +39 02 8255181
E-mail: info@delorenzo.it- sales@delorenzo.it