

# KNX HOME AUTOMATION MODULAR LABORATORY

## INTELLIGENT CONTROLLERS IN KNX SYSTEMS

### Mod. DO-K15/EV

#### INTRODUCTION

This module enables to equip a KNX system with control devices for building automation functions. A Touch Panel connected with the Bus line (TP cable) enables to send and receive group addresses (commands and operating states) which monitor the whole system on graphics in real time. Connecting the logic module will enable timed and/or clock controls, combinational logic functions, connection of analog signals. The scenario module enables to recall "typical scenes" with lighting control, opening/closing of rolling shutters, starting and putting the air conditioning on hold.

But this module must be used in combination with at least the Basic Module DO-K1 because it includes the basic devices of a KNX Bus Line.

Panel of light insulating material easy to handle, with a wide, colour printed front surface where the devices are represented by their international electric symbols. All the connections are carried out via safety terminals and jumpers with diameter of 4 mm for power circuits, and via terminals and jumpers of 2 mm for the Bus Line.

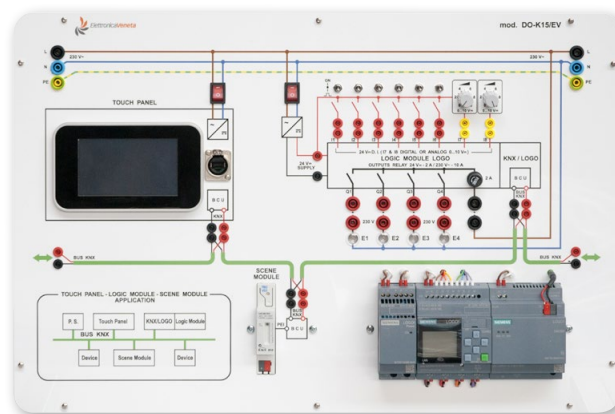
Module optimized to be used in combination with other modules either on table top, in horizontal/inclined position (with proper support), and/or on a wall (wall bracket).

#### TRAINING PROGRAM

- Applying a touch panel for the centralized control of the system
- Applying and programming a logic module with functions such as gate automation, garden watering systems, greenhouse control, switching lights on in sequence (illuminated signs), and other particular automation functions
- Applying and programming a scenario module
- Setting systems with centralized local control at work, and testing them

#### Practical exercises (in combination with other modules DO-K/EV):

- Studying and applying control devices with Touch Panel, configuring pages for : control of On/Off and Dimming lighting, control of rolling shutters, monitoring of temperatures, control of loads / energy monitoring, realization of home automation scenarios
- Studying and applying a logic module:
  - to write and test systems controlled by programmable logic, for instance, for gate automation, garden watering systems, greenhouse control, switching lights on in sequence
  - to make the KNX system interact with an industrial installation controlled by PLC; to manage the process controlled by programmable logic by commands connected to the KNX bus
- Applying scenario modules of home automation



#### TECHNICAL SPECIFICATIONS

- 2 bipolar switches of 230 V - 6 A for setting the Touch Panel / Logic module at work separately
- 1 four-inch LED touch panel of 480 x 272 pixels, with LED backlighting, provided with Bus coupler
- 1 logic module with 8 DI, 4 relay DO, powered by 24 V=, equipped with Ethernet Interface integrated for TCP/IP Modbus communication; maximum configuration: 24 DI, 20 DO, 8 AI, 8 AO
- 1 KNX Interface which communicates with LOGO via Ethernet; it transmits the data of KNX Bus and converts them for LOGO, transfers LOGO commands to KNC actuators in the form of telegrams, uses the maximum (I/O) hardware configuration of LOGO module; this interface is provided with Bus coupler
- 1 power supply of 230/24 V = - 1.3 A for logic module
- 1 controller of scenarios/events for storing and recalling up to 8 scenarios from 8 bit events; conversion of enabling 1-bit scenarios into control of 8-bit scenarios, and vice versa; this controller is provided with Bus coupler

**Power supply:** 230 V~ and Bus Line, coming from DO-K1/EV

**Dimensions:** 600 x 400 x 100 mm

**Net weight:** 5 kg

#### SUPPLIED ACCESSORIES

- 1 CD with LOGO SOFT Comfort V8 software
- 5 jumpers, 19 mm with Ø 4 mm safety plugs
- 14 jumpers, 10 mm with Ø 2 mm safety plugs
- 3 cables, 1 m with Ø 4 mm plugs
- 2 cables, 1 m with Ø 2 mm plugs (1 black and 1 red)

#### REQUIRED

**KNX LINE BASIC MODULE  
Mod. DO-K1/EV (NOT INCLUDED)**



#### SUPPLIED WITH

**APPLICATION HANDBOOK  
WITH PRACTICAL EXERCISES**

