

# BASIC ELECTRONICS

## Mod. C20-E3/EV

### DESCRIPTION

Testing Module mod. C20-E3/EV is the ideal support for developing the tests of Basic Electronics Laboratory. It enables to carry out a wide range of experiments on topics classified into eight main sections:

- electric resistance
- semiconductor diodes
- transistors
- capacitors
- rectifiers
- multivibrators
- oscillating circuits
- logic circuits

The system consists of a basic circuit drilled with a proper pitch and of a wide set of components welded on boards with standard pinout for the connection with the basic circuit. Thus, inserting the desired components will enable to assemble any type of circuit. Some leads connect the various components, besides powering the equipment.

### TRAINING PROGRAM

#### ELECTRIC RESISTANCE

Resistors, PTC, NTC, LDR, VDR,

#### SEMICONDUCTOR DIODES

LEDs, Zener diode, use of the various types of diode

#### TRANSISTORS

PNP and NPN transistors, static and dynamic characteristics, Q-point; voltage amplifier, current amplifier; using transistors in control circuit; alarm control

#### CAPACITORS

series and parallel resistance; capacitor resistance; using capacitors to level rectified currents, in filters, in memories; various circuits with capacitors and coils.

#### RECTIFIERS

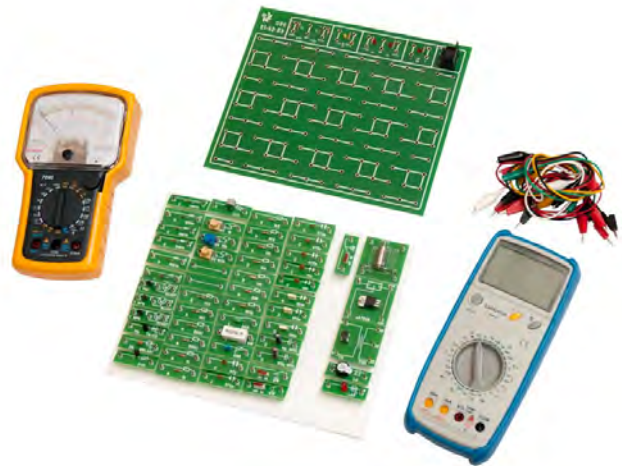
Half-wave and full-wave rectifiers, bridge rectifiers, regulated circuits

#### MULTIVIBRATORS

monostable, bistable, astable multivibrators, sound synthesizer, trigger circuits controlled by light and by temperature

#### OSCILLATING CIRCUITS

series and parallel resonance, continuous oscillators persistants, audiofrequency oscillators



### APPLICATION EXERCISES

#### LOGIC CIRCUITS

Main and derivative logic blocks, with switches, diodes and transistors.

#### TECHNICAL SPECIFICATIONS

- Availability of jacks connected variously for the quick assembly of circuits
- Panel with silk-screen-printed representation of the connections between jacks
- Components on support with metallic terminals and silk-screen-printed identification of the component

**Dimensions of the basic circuit:** 220 x 180 x 40 mm

#### COMPONENTS:

- Set of necessary components for carrying out all the exercises described in the handbook
- Case for the components
- Set of connecting leads
- 2 multimeters

#### REQUIRED (NOT INCLUDED)

**POWER SUPPLY UNIT mod. PSLC/EV**

#### OPTIONAL (RECOMMENDED)

- FUNCTION GENERATOR 0,06 Hz ~ 6 MHz mod. FG-39B
- 20 MHz DUAL-TRACE OSCILLOSCOPE mod. OS-20

#### SUPPLIED WITH

**THEORETICAL - EXPERIMENTAL HANDBOOK OF THE MODULE WITH EXERCISES**  
**HANDBOOK OF INSTALLATION, USE AND SERVICE**

