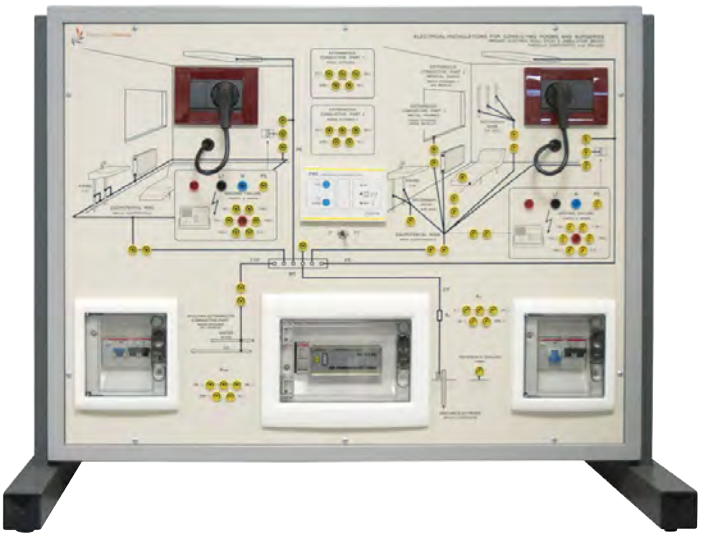
DEMONSTRATION PANEL OF INSTALLATIONS FOR MEDICAL CONSULTING ROOMS AND SURGERIES

Mod. PDG-9/EV

INTRODUCTION

This demonstration panel can be used by teachers for their lessons and by students for an easy learning and testing on electrical prevention systems supplying them with the means for verifying the rule of art and the relevant technical standards. Actual electrical devices installed, already connected with each other, enable to check the operation, besides carrying out the measurements of all the electric parameters with conventional instruments.

The panel is made of insulating material and it represents the support of the necessary devices for carrying out the testing programme. The apparatuses are represented on the panel with their standardized international symbols, electrical block diagram and lay-out, for an easy reference. Furthermore, when necessary, test points correspond to standardized educational terminals with high protection degree against accidental contacts.



TRAINING PROGRAM:

This panel shows an electrical installation that can be found in a building used as consulting room, with reference to the following topics:

- Rooms of group 0, 1, 2
- Patients' area
- Equipotential loop and branch point
- Protection with automatic power cutoff
- Protection by isolation transformer
- Isolation resistance of walls and of floors
- Protection by electric separation and SELV, PELV circuits
- Measurement of first-fault current

ELETTRONICA VENETA S.P.A. - 31045 Motta di Livenza (TV) Italy - Via Postumia 16 - Tel. +39 0422 765 802 - Fax +39 0422 861 901 - E-mail: export@elettronicaveneta.com

TECHNICAL SPECIFICATIONS:

Framework is made of sheet steel chemically treated and painted with several coats of epoxy varnish; its base is provided with rubber feet.

Main components installed:

- 1 single-phase isolation transformer of 230 V / 230 V 230 VA
- 1 switch for selecting TT, IT distribution system
- 1 monitor for checking the isolation of IT system
- 1 remote warning device for isolation monitor
- 1 simulator of earth plate with resistances of 2 Ω, 20 Ω, 200 Ω, 2 kΩ
- 3 simulations of extraneous conducting part with resistances of 200 Ω, 1000 Ω, 5000 Ω (pipes of water for radiator, metallic frame)
- 1 magnetothermal circuit breaker 2 x 0.5 A "C"
- 1 magnetothermal circuit breaker 2 x 1 A "C"
- 1 differential circuit breaker 2 x 25 A / 30 mA "A"; two 2-pin sockets – 10/16 A, 2P + Earth
- 2 simulators of isolation fault in a power consuming device (to earth) with resistances of 50 kΩ, 15 kΩ, 5 kΩ, 1500 Ω, 500 Ω and bolted fault

Dimensions of demonstration panel: 800 x 600 mm
Dimensions of framework: 840 x 450 x 680 mm
Net weight: 35 kg

SUPPLIED ACCESSORIES:

- 1 single-phase power cord with UNEL plug
- 8 jumpers with safety plugs (Ø 4 mm) for assembling the various installation conditions

RECOMMENDED ACCESSORIES:

- Multi-function microprocessor instrument for electric testing
- Digital current probe
- Digital autoranging multimeter
- Mod. SW-ELT/EV: Circuit design, simulation and animation software for electrical engineering projects

POWER SUPPLY:

230 V / PE 50-60 Hz
Max. absorption: 250 VA

THEORETICAL-EXPERIMENTAL HANDBOOKS

Application handbook with exercises.

 ELETTRONICA VENETA S.P.A. - 31045 Motta di Livenza (TV) Italy - Via Postumia 16 - Tel. +39 0422 765 802 - Fax +39 0422 861 901 - E-mail: export@elettronicaveneta.com