

# SIMULATOR OF A POWER TRANSMISSION LINE

## Mod. SEL-2/EV

### TECHNICAL CHARACTERISTICS:

- Desk-type box of chemically treated sheet steel, painted with epoxy coats.
- Side handles for easy transport.
- Fore panel of insulating material, with screen silk printed diagram of the components.
- All safety terminals  $\varnothing$  4 mm.

The simulator operates with  $U_n$ : 3 x 220 V and it reproduces a 130-km long power transmission line of 77 kV, with the following characteristics:

- Rated voltage: 77 kV
- Rated current: 100 A
- Rated power: 13 MW
- Equivalent resistance: 3.5  $\Omega$
- Concentrated equivalent capacitance: 10  $\mu$ F
- Loop earth impedance: 0.8  $\Omega$

**The transmission line is protected against overload and short circuit by quick blow fuses.**



### COMPONENTS INSTALLED ON THE PANEL:

- Model of line: concentrated parameters, PI cell
- Simulated  $U_n$ : 77 kV
- Operating  $U_n$ : 3 x 220 V, 50 Hz
- Simulated  $P_n$ : MVA
- Simulated  $I_n$ : 100 A
- Operating  $I_n$ : 0.5 A
- Distributed equivalent R: 3 x 1.5  $\Omega$  or 3 x 23  $\Omega$ , selectable.
- Distributed equivalent L: 3 x 10 mH or 180 mH, selectable.
- Capacitors of line start and end: 3 x 2  $\mu$ F or 3 x 0.22  $\mu$ F, selectable. They may be connected in star, delta configuration, or earthed.
- Earth loop impedance: 0.8  $\Omega$  selectable.
- Three-pole switch of connection of the line.
- Fuse-holder with fuses: 6 x 30 In: 1 A

Possibility of using the line separately, or more lines series/parallel connected.

**Dimensions:** 415 x 400 x 150 mm

**Net weight:** 8 kg

**SUPPLIED WITH**  
**OPERATIONAL HANDBOOK**  
**WITH EXERCISES**



**ACCESSORIES:**

- 12 jumpers and 6 cables with safety terminals ( $\varnothing$  4 mm)