





# ELC-100B Aircraft Single Electrical Training Set

## **Description**

The Aircraft Single Electrical System Trainer is a comprehensive system that is ideal for trainings on an aircraft multiengine electrical system. By using this trainer, students both learn the functionality of each component, and develop logical and systematic approach to perform troubleshooting tasks. The system is designed to depict atypical aircraft electrical system, and contains standard aircraft components and wiring.

Model ELC 100 B is a complete functional simulation of a one-engine 28V DC electrical system of a typical turbine aircraft. Single Electrical Training set is laid out to teach the students both parallel generator bus configuration and split bus configuration (like as Boeing 767, Airbus A320, etc.). It gives instructor the opportunity to switch the main bus configuration simply by flicking a switch.

### **Features**

- Electromechanical Loads
- Landing Gear Motor
- Cabin Air Blower
- Electromechanical Actuator

### **External Lights**

- Navigation Lights
- Strobes
- Rotating Beacon
- Landing/Taxi Light

### **Internal Lights**

- Cabin Light
- Reading Light



### **Instruments**

- Digital Instrument Panel (Like ECAM)
- No.1 Generator Voltmeter
- No.2 Generator Voltmeter
- Battery Ammeter
- Fuel Press Gauge

### Wiring

- Aircraft wires, with clear identification labels for each wire.
- All wires are coded and labeled for troubleshooting.

### **Battery**

Aircraft 24V battery

### Generator

- Aircraft DC generator rated 28VDC
- @30A/50A at 3600 RPM, driven by 230 VAC/50 Hz Motor.

### **Generator Controls**

- Electronic Controlled Generator
- Electronic Field

### Controller/Switching

- Current Limiter
- Reverse Current Protection
- Paralleling / Equalizing
- GCU induced Over Voltage Protected
- Voltage Regulation: 28.4V + 0.4V
- Max Field Current: 3A.

### **AC Power**

- One Static Inverters
- No.1 Generator Bus-bar 28VDC
- No.2 Generator Bus-bar 28VDC
- Two Auxiliary Bus-bars 28VDC
- Battery Bus-bar
- Ground Bus-bar

### **Power Distribution**

- One bus-bars 115VAC @ 400 Hz.
- One bus-bars 26VAC @ 400 Hz.
- One AC Neutral Bus-bars
- Avionics Bus-Bar

# **Specifications**

- Delivered fully assembled tested and ready to operate.
- AC power 220/110 Volt required.
- Dimensions(L x W x H): 200 x 120 x 130 cm
- User's manual
- Students' study guide
- CBT (Computer Base Training)



- Wiring diagrams
- Flow schematics
- Components diagrams
- Instructors' training resources

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