


Battery Simulator - Charger Tester ACBC Series



ACBC series

amperis

www.amperis.com

 AMPERIS PRODUCTS S.L
Agricultura,34
27003, Lugo, España

 **Contacto**

+T [+34] 982 20 99 20 | F [+34] 982 20 99 11
info@amperis.com | www.amperis.com

- **High frequency IGBT electronic load**, featuring constant current / constant voltage operation.
- **Rugged construction** for maximum reliability in heavy duty industrial applications.
- **Compact and portable design**. Wheels for easy moving.
- **Intelligent electronic protection system** (includes soft start, overtemperature, overload protection).
- **Programmable digital board**, controlled by microprocessor.
- **Can be used to test chargers of any type, voltage and current.**
- **Can be used to discharge batteries of any type, voltage and capacity.**
- **Digital voltmeter display + Analog ammeter**
- **CE** certified
- **cCSAus** Listed

Description

Testing the functionality and performance of forklift battery chargers has always been a problematic task for service technicians.

In order to test the basic functionality of a charger, at least one real battery must be available. This may be a problem if the technician has to test chargers while all the forklifts are in service.

Moreover, using a battery it's impossible to test the complete charging curve of the charger rapidly, and it's problematic to adjust the charger settings and verify all the functionalities under different operating conditions.

The CDX is an electronic load, designed to test battery chargers of any type, voltage and power. This unique equipment simulates the behaviour of a battery during the charge process, and it gives to the technician the opportunity to perform complete tests safely, rapidly and accurately.

The ACBC eliminates the need of connecting a battery to the charger to be tested; it's very simple and flexible. Moreover, it can be used discharge batteries and for other purposes.

ACBC-series

The front panel of the ACBC contains these devices:

- Digital voltmeter
- Analog ammeter
- Voltage selection knob (12-24-36-48-72-80 V)
- Voltage fine adjustment potentiometer
- Current limit potentiometer (0-200A)

This is the typical sequence of operation, when using the ACBC to test a charger.

- 1)** The user sets the voltage of the battery to be simulated, using the apposite knob and potentiometer, while the digital display shows the actual value. A separate potentiometer is available to set the maximum current that the ACBC will absorb.
- 2)** The user connects the charger to be tested to the input of the ACBC The charger control board will detect that a battery has been connected and will start the charge process;
- 3)** The CBX keeps the voltage constant to the selected value, while the analog ammeter measures the current given by the charger. If the current tends to exceed the maximum programmed value, the ACBC will increase the voltage in order to limit it.
- 4)** The user can modify the voltage and current freely, in order to simulate the behaviour of a battery under charge. It's possible to trace the real charging curve of the charger in one minute.

Special features, for maximum reliability and flexibility:

- Autotest of the power electronic circuits at power-on, with automatic safety stop in case of component failures.
- Temperature protection of all the power electronic components and resistor bank: in case of internal overtemperature (e.g.: blocked fans, air passages obstructed) the ACBC is set automatically in stand-by mode.
- Double cabinet, for maximum thermal insulation: during the operation, the external part of the cabinet remains cold (max temperature rise <10°C).
- Heavy duty wheels, with ball bearings, metal frame, covered with rubber.

Product specifications:

AC INPUT	
Standard voltage	Voltage range: 85-135 or 180-250 Vac Singlephase Max power: 250 Watts 50/60 Hz
POWER	
Standard version	Battery voltage: 12-80 V Maximum current: 200 A
MECHANICAL	
External dimensions	325 x 630 x 570(h) mm
Enclosure	2 mm steel. Four wheels kit for easy moving. RAL7032.
Cooling	Forced ventilation