



CDB-NV

Battery simulator and tester

◆ General Features

- ◆ Automatic system designed for simulating and testing batteries as well as attached components such as inverter, converter, loaders...
- ◆ Energy saving thanks to three phase reversible inverter connected to grid
- ◆ Fully programmable discharge-recharge profile load reproducing real working conditions,
- ◆ Assumed compatibility with customized "Battery Management System".
- ◆ Integrated standardized test protocol and metrology; DC output: up to 1000V, up to 1500 A,
- ◆ Hardware in the Loop (HIL) conception which authorizes to simulate a part of on board network in order to test the other part,
- ◆ Multiple control types: constant current, voltage and load; ramps, staircases, user defined profiles,
- ◆ Test cycling of batteries or modules to obtain charge and discharge capacity, energy, DC internal resistance, and other valuable information
- ◆ Test at ambient temperature as well as at any range from -50 °C to 150 °C

◆ Software Features

- ◆ Specific software to control the bench with a friendly Graphic User Interface,
- ◆ Manual mode, controls each bench actuator or respective selected measurement,
- ◆ Calibration mode via user interface,
- ◆ Automatic mode test: write very easily program test procedures,
- ◆ Digital and graphical displays measurements,
- ◆ Configurable system record measurements data.

◆ Safety Features

- ◆ Hardware emergency stop in case of failure (security chain opened, alternator belt broken, door open..),
- ◆ Configurable alarms and warnings or suspend tests,
- ◆ Suspend mode on alarm event during an automatic test sequence with a user resume command in order to safeguard all data from start of tests.



◆ General data

Input power supply

400 V, 3-phase, 50/60 Hz

Output voltage

From 200 V up to 1000 V

Output current

From 0 up to 1500 A

Resolution

+/- 10 mA

Accuracy

0,1% full scale

Data acquisition rate : 1 ms

Current rise time (10-90%)

≤ 10 ms (0,2 Ω resistive load)

DC current ripple

≤ 1% rms full scale

◆ Options

Operating Temperature

From -50°C to 200°C +/- 1°C

Extra auxiliary digital and analog I/O

Extra temperature measurements

Water cooling with Air-Water heat exchanger

www.controlsys.fr

info@controlsys.fr

ControlSys France

20, rue de Lattre de Tassigny
78990 Elancourt - France
Tel.: 33 (0)1 30 64 12 55
Fax: 33 (0)1 30 64 12 65

ControlSys China - Beijing Zhongli Heda Technology Co.Ltd

Room 420 Shuang Tian Office
Building, Jia No.30 West Road North
Third Ring, Haidian District,
Beijing, China
Tel.: (86) 13911036255

ControlSys China - Shanghai Environmental World Products - EWP

No.3, Lane 1015, South Boxue Road
Malu Town, Jiading District
Shanghai, China 201801
Tel.: (86) 21 5915 3070