

Battery discharger BDC

Battery maintenance and testing



Capacity testing of any industrial battery, from 48 to 600 V and up to 200 A

BDC

Constant-current battery discharger

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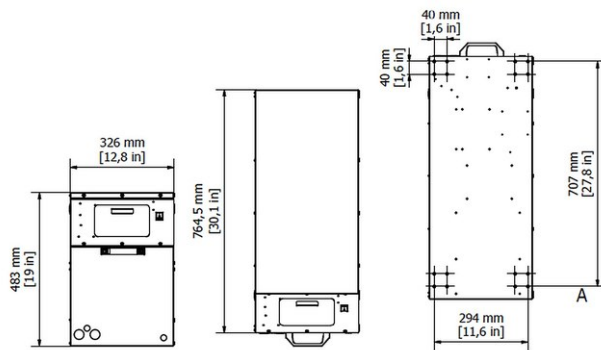
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Automatic discharge at a precisely controlled constant current, with the whole curve recorded.

Product overview



B1 cabinet: 326 x 765 x 483 mm, on castors

Constant current from an IGBT regulator

The high-frequency IGBT regulator holds the discharge current constant, adjustable from zero to the maximum of each model, while the battery voltage is monitored throughout. The unit works with any battery type — lead-acid, Ni-Cd or lithium — and covers nominal voltages from 48 to 600 V.

It stops on its own

The test ends automatically when the battery reaches the programmed minimum voltage or the maximum test time, and the measured values stay on screen for the operator. Programming a test takes under two minutes and needs no specific training.

Main features

- Digital display: battery voltage and current, elapsed time, discharged capacity and programmed values.
- Built-in datalogger and PC interface (miniUSB) for downloading the complete curve.
- Units can be paralleled for unlimited total discharge current.
- Intelligent protection: soft start, reverse polarity and over-temperature.
- Rugged double enclosure and heavy-duty castors for industrial use.
- Air cooled; IP21 as standard, IP54 on request.

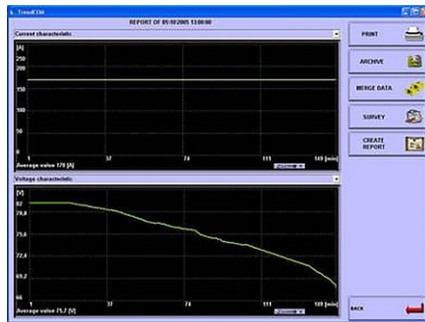


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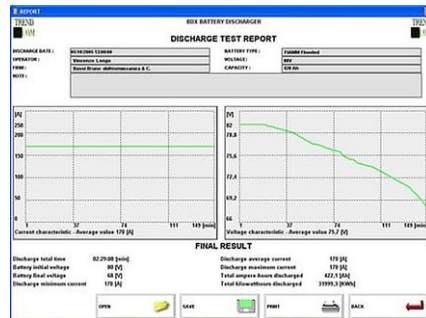
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Software, applications and models



Discharge curve on the analysis software



Automatic test report

From the curve to the report

The recorded test is downloaded to a PC and plotted as battery voltage, discharge current, power, discharged capacity and energy. Reports with graphs and comments are produced automatically, and the data exports to spreadsheets. When several units run in parallel their files are merged into a single report.

Applications

- Capacity testing of stationary battery banks in substations and power plants.
- Acceptance and periodic tests to IEEE 450, IEEE 1188 and IEC 60896.
- Battery recovery and characterisation in workshops.
- Quality control in battery manufacturing.

BDC RANGE – MODELS

Battery voltage and maximum discharge current. All models in the B1 cabinet.

BDC-048-200	48 V · 200 A
BDC-096-200	96 V · 200 A
BDC-135-150	135 V · 150 A
BDC-240-075	240 V · 75 A
BDC-400-040	400 V · 40 A
BDC-500-025	500 V · 25 A
BDC-600-015	600 V · 15 A



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BATTERY DISCHARGER BDC – TECHNICAL SPECIFICATIONS

Discharge principle	High-frequency IGBT regulator, constant current adjustable from zero to the model maximum
Battery types	All types (lead-acid, Ni-Cd, lithium)
Battery voltage	48, 96, 135, 240, 400, 500 and 600 V depending on model
Discharge current	Up to 200 A depending on model; unlimited by paralleling units
Automatic stop	On programmed minimum voltage or maximum test time
Display	Battery voltage and current, elapsed time, discharged capacity (Ah) and programmed values
Data	Built-in datalogger; PC interface (miniUSB); analysis software with automatic reports
Protections	Soft start, reverse polarity, over-temperature
Line voltage	Single phase 120 or 230 V AC $\pm 10\%$
Cooling	Air cooled
Protection degree	IP21 standard; IP54 optional
Operating temperature	$-10\text{ }^{\circ}\text{C}$ to $+45\text{ }^{\circ}\text{C}$
Storage temperature	$-20\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$
Humidity	$< 75\%$
Altitude	$> 2000\text{ m}$ according to EN 62040-3
Cabinet B1 dimensions	326 mm (front) x 765 mm (side) x 483 mm (height)
Quality	ISO 9001:2008
Marking	CE
EMC	IEC EN 61000-6-2, IEC EN 61000-6-4
Safety	IEC EN 50178, IEC EN 62040-1



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