

Ref.	HLB30-60 series
Issue	6
Date	01/06/11

Hillstone - Dual Voltage DC / AC load banks

Type ref **HLB30-60 series**

- Portable
- Manual constant current control
- Lead Acid or Ni-cad battery testing
- Single phase AC testing of UPS and Generators
- Simple operation via panel switches
- Operation up to 60V
- Dual voltage feature
- Test sockets for voltage and current readings
- Fully adjustable
- Safety isolation contactors



Typical unit illustrated case size C

The Hillstone **HLB30-60 series** load banks are designed to perform a manually controlled constant current discharge on lead acid or ni-cad batteries up to 60 volts. Fine control is provided from approximately 1A to max current via panel mounted switches.

The unit a force cooled high power resistor elements and several safety features including fan fail auto shut-down, emergency stop push button and battery isolation of each load circuit via continuously rated DC contactors.

All designs incorporate the Hillstone dual voltage feature which allows double the available load current at half voltage

Rating Table

Type ref.	Peak Watts	Range 1 amps @ 30V	Range 2 amps @ 60V	Range 1 Minimum Ohms	Range 2 Minimum Ohms	Case size	Approx weight Kgs
HLB30-60-3	3KW	100A	50A	0.3 Ω	1.2 Ω	A	20kgs
HLB30-60-4	4.5KW	150A	75A	0.2 Ω	0.8 Ω	A	22kgs
HLB30-60-6	6KW	200A	100A	0.15 Ω	0.6 Ω	A	25kgs
HLB30-60-7	7.5KW	250A	125A	0.12 Ω	0.5 Ω	A	28kgs
HLB30-60-9	9KW	300A	150A	0.1 Ω	0.4 Ω	B	30kgs
HLB30-60-10	10.5KW	350A	175A	0.09 Ω	0.35 Ω	B	34kgs
HLB30-60-12	12KW	400A	200A	0.08 Ω	0.3 Ω	B	37kgs
HLB30-60-13	13.5KW	450A	225A	0.07 Ω	0.27 Ω	C	42kgs
HLB30-60-15	15KW	500A	250A	0.06 Ω	0.24 Ω	C	48kgs
HLB30-60-16	16.5KW	550A	275A	0.055 Ω	0.22 Ω	C	55kgs
HLB30-60-18	18KW	600A	300A	0.05 Ω	0.2 Ω	C	60kgs

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HLB30-60 series cont.

Specification

Type ref	HLB30-60 Series
Nominal voltage	Range 1 : 24V Range 2 : 48V
Max voltage	Range 1 : 30V Range 2 : 60V
Test voltage	DC or single phase 50-60 hz
Max available current	Refer to rating table and easy calculator (see note 2)
Rating	Continuous rating at full load, max voltage
Max number of lead acid cells	Range 1 : 13 Range 2 : 26
Max number of ni-cad cells	Range 1 : 22 Range 2 : 44
Test sockets	4 mm shrouded test sockets are provide to allow the test engineer to measure amps and volts using his multimeter.
Auxiliary mains supply	230/240V single phase 50/60 hz (110V optional)
Mains cable set	2 metre mains cable set with IEC & UK 13A plugs
DC cable set	Refer to optional extras
Case sizes A, B & C	Aluminium with swivel castors and carrying handles
Finish	Light grey RAL7032 textured finish
Cooling	Force air cooling, horizontal fans
Environmental protection rating	IP21
Movement	Top Handles, swivel castors and suitable for folk lift
Operating temperature range	0 – 40 deg C
Storage temperature range	0 – 80 deg C

Case Sizes

Case ref	Length	Width	Height
A	800 mm	350 mm	525 mm
B	900 mm	480 mm	625 mm
C	1000 mm	550 mm	725 mm

Optional extras

- 1) DC cable sets : 3 , 5 or 10 metre lengths
- 2) 110V auxiliary mains input
- 3) Elapse discharge time indicator

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Easy load bank selector and max load calculator for different test voltages

STEP 1

Determine the max test voltage

Use Range 1 for max test voltages below 30V

Use Range 2 for max test voltages below 60V

STEP 2

Calculate required minimum ohms = Min volts / test Amps

Example : 43 volts / 150 amps = 0.286 ohms

STEP 3

Select minimum ohms from the appropriate Range on the rating table

note : always select a lower ohmic value that the result in step 2

Example : HLB30-60-13 = 0.27 ohms on Range 2

and will provide 159A at 43V

Notes

- 1) Units are designed for indoor use in a clean, dry and well ventilated environment.
- 2) The available current and ratings are proportional to the end of test voltage.
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