

TECHNICAL SUMMARY SHEET HAV60 Series Automatic Load Bank

Issue: 5 (July 2016) Pages: 3

HAV60 Varicon Series 3 Automatic Constant Current Load Bank

Features

- Automatic range selection
- Lead Acid or Ni-cad battery testing
- Automatic constant current control
- Wide battery voltage up to 60V DC
- Simple operation
- Auto stop on time & battery voltage
- Hand held controller with OLED display
- Safety isolation contactors
- Fan fail protection
- High power up to 18KW
- Compact design
- Cables included
- Portable
- Computer interface option



The Hillstone HAV60 series3 load bank is designed for automatic constant current DC battery discharge testing for a wide range of lead acid and ni-cad batteries and incorporates the unique Hillstone VARICON remote hand held controller which provides a cost effective solution to fully automatic load banks. All units incorporate light weight, force cooled high power resistor elements and several safety features including reverse polarity connection, high battery volts, fan fail, auto shut-down, emergency stop push button and battery isolation of each load circuit via continuously rated DC contactors. The unit also includes automatic battery voltage selection, thereby eliminating incorrect operator use.

Load bank operation - The unit should be connected to a 240V (110V optional) single phase auxiliary mains supply and also to the battery. On power up, the load bank will carry out a self-diagnostic check to ensure the equipment is functioning correctly and also check the battery is connected correctly and the battery voltage is within the operating limits of the load bank design. The load bank will then automatically select the appropriate internal circuits which are compatible with the connected battery. The operator then enters the required stop voltage and discharge time period, followed by the discharge current before commences the test by pressing the START push button.

The battery voltage, load current and elapse time will be displayed on the hand held OLED display during the test. The load bank will automatically maintain the load current constant at the pre-set value, as the battery voltage falls. When the battery voltage falls to the pre-set end of discharge voltage (or pre-set time period) the test will stop by automatic disconnection via internal contactors.

The display of elapse time and ampere hours discharged will be frozen on the OLED screen. The test can be terminated at any time by pressing the manual STOP push button. The load bank also incorporates a PAUSE button which allows the test to be stopped and then restarted without re-setting all the test parameters. The elapse time and ampere hours readings will also re-start without resetting to zero. This feature enables operators to remove faulty cells during the test if required.





TECHNICAL SUMMARY SHEET HAV60 Series Automatic Load Bank

Issue: 5 (July 2016) Pages: 3

HAV60 Specification:							
	Type Ref	HAV60-12 Series 3					
	Nominal DC Voltage	12V	24V	48V			
	Maximum DC Voltage	15V	30V	60V			
	Maximum DC Currents	200A	200A	200A			
	Maximum Power Rating	3KW	6KW	12KW			
	Maximum No Of Lead Acid Cells	7	15	30			
	Maximum No Of NiCad Cells	11	21	42			
	Nominal Constant Current	133A at 10V	140A at 21V	143A at 43V			
	Performance		120A at 18V	113A at 30V			
	Type Ref	HAV60-18 Series 3					
	Nominal DC Voltage	12V	24V	48V			
	Maximum DC Voltage	15V	30V	60V			
	Maximum DC Currents	300A	300A	300A			
	Maximum Power Rating	4.5KW	9KW	18KW			
	Maximum No Of Lead Acid Cells	7	15	30			
	Maximum No Of NiCad Cells	11	21	42			
	Nominal Constant Current	200A at 10V	210A at 21V	215A at 43V			
	Performance		180A at 18V	150A at 30V			
	Load Current Range	1A to Maximum					
	Digital Display	4 Line OLED Display					
	Display Information	Battery Volts, Battery Current, Elapsed Time, Discharged					
		Ampere Hours, Test Status / Faults					
	Auxiliary Mains Supply	240V single phase 50Hz					
	Mains Cable Set	2 Meter IEC socket with UK 13A Plug					
	DC Cable Set	3 Meter twin flexible cable set with industrial plug and socket					
	Hand Held Controller	5 Meter (longer available on request)					
	Finish	Light Grey RAL7032 textured finish					
	Environmental Protection Rating	IP21					
	Movement	Swivel Castors and Top Handles					
	Operating Temperature	0 – 40 Degs C					
	Storage Temperature	0 – 80 Degs C					

HAV60 Case Sizes:

Load Bank Type	Length (mm)	Width (mm)	Height (mm)	Weight (Kgs)
HAV60-12	1000mm	500mm	750mm	50Kgs
HAV60-18	1000mm	550mm	750mm	55Kgs

Notes

- Units are designed for indoor use only in a clean, dry and well ventilated environment.
- The available constant current and ratings are proportional to the end of test voltage.
- Information in technical literature, quotations or data sheets are intended to be correct at the time of publication.
- Hillstone Products Ltd bears no responsibility for the accuracy of any information given.
- We reserve the right to make detail changes to specification, components, dimensions or weights at the time of design or manufacture without prior notice.
- All information in this data sheet is the copyright of Hillstone Products Ltd.
- All designs and software is the intellectual property of Hillstone Products Ltd