

## HLD120-240 Series 13KW to 78KW Dual Voltage DC/AC Load Banks

### Features

- Manual constant current control
- Lead Acid or Ni-cad battery testing
- Battery charger / rectifier and single phase testing
- AC testing of UPS and generators
- Simple operation via panel switches
- Dual voltage feature
- Test sockets for voltage and current readings
- Adjustable load current
- Voltage operation up to 260V
- Safety isolation contactors
- Fan fail protection
- High power
- Portable



Case Size A HLD120-240

The Hillstone HLD120-240 series load banks are designed to perform a manually controlled constant current discharge on lead acid or ni-cad batteries up to 130 volts. Fine control is provided from approximately 1A to max current via panel mounted switches. The unit has 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.

### HLD120-240 Performance Table:

| Load Bank Type | Max Watts | Range 1<br>Amps At 130V | Range 2<br>Amps At 260V | Range 1<br>Minimum<br>Ohms | Range 2<br>Minimum<br>Ohms |
|----------------|-----------|-------------------------|-------------------------|----------------------------|----------------------------|
| HLD120-240-13  | 13KW      | 50A                     | 50A                     | 2.60 Ω                     | 5.20 Ω                     |
| HLD120-240-20  | 20KW      | 75A                     | 75A                     | 1.73 Ω                     | 3.47 Ω                     |
| HLD120-240-26  | 26KW      | 100A                    | 100A                    | 1.30 Ω                     | 2.60 Ω                     |
| HLD120-240-32  | 32KW      | 125A                    | 125A                    | 1.04 Ω                     | 2.08 Ω                     |
| HLD120-240-40  | 40KW      | 150A                    | 150A                    | 0.87 Ω                     | 1.73 Ω                     |
| HLD120-240-45  | 45KW      | 175A                    | 175A                    | 0.74 Ω                     | 1.49 Ω                     |
| HLD120-240-52  | 52KW      | 200A                    | 200A                    | 0.65 Ω                     | 1.30 Ω                     |
| HLD120-24-58   | 58KW      | 225A                    | 225A                    | 0.58 Ω                     | 1.16 Ω                     |
| HLD120-240-65  | 65KW      | 250A                    | 250A                    | 0.52 Ω                     | 1.04 Ω                     |
| HLD120-240-72  | 72KW      | 275A                    | 275A                    | 0.47 Ω                     | 0.94 Ω                     |
| HLD120-240-78  | 78KW      | 300A                    | 300A                    | 0.43 Ω                     | 0.87 Ω                     |



### HLD120-240 Specification:

|                                   |  |                     |
|-----------------------------------|--|---------------------|
| Type Ref                          | HLD120-240 Series  |                     |
| Nominal Voltage                   | Range 1 : 120V   | Range 2 : 240V      |
| Maximum Voltage                   | Range 1 : 130V   | Range 2 : 260V      |
| Test Voltage                      | DC or single phase 50-60 hz  |                     |
| Maximum Available Current         | Refer to rating table and easy calculator  |                     |
| Rating                            | Continuous rating at full load, max voltage  |                     |
| Maximum Number Of Lead Acid Cells | Range 1 : 60 Cells   | Range 2 : 120 Cells |
| Maximum Number Of Ni-cad Cells    | Range 1 : 92 Cells   | Range 2 : 184 Cells |
| Test Sockets                      | 4 mm shrouded test sockets are provided to allow the test engineer to measure amps and volts using his multimeter. |                     |
| Auxiliary Mains Supply            | 230/240V Single phase 50Hz (110V optional, 60Hz optional)  |                     |
| Mains Cable Set                   | 2 metre mains cable set with IEC & UK 13A plugs  |                     |
| DC Cable Set                      | Refer to optional extras   |                     |
| Construction                      | 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 (Case size A+B), swivel castors and suitable for fork lift   |                     |
| Operating Temperature             | 0 – 40 deg C   |                     |
| Storage Temperature               | 0 – 80 deg C   |                     |

### HLD120-240 Case Sizes:

| Load Bank Type | Case Size | Length (mm) | Width (mm) | Height 9mm) | Approx. Weight (Kgs) |
|----------------|-----------|-------------|------------|-------------|----------------------|
| HLD120-240-13  | A         | 805mm       | 350mm      | 560mm       | 37Kgs                |
| HLD120-240-20  | A         | 805mm       | 350mm      | 560mm       | 39Kgs                |
| HLD120-240-26  | B         | 1050mm      | 590mm      | 950mm       | 107Kgs               |
| HLD120-240-32  | B         | 1050mm      | 590mm      | 950mm       | 109Kgs               |
| HLD120-240-40  | B         | 1050mm      | 590mm      | 950mm       | 110Kgs               |
| HLD120-240-45  | C         | 1010mm      | 575mm      | 1125mm      | 120Kgs               |
| HLD120-240-52  | C         | 1010mm      | 575mm      | 1125mm      | 132Kgs               |
| HLD120-24-58   | C         | 1010mm      | 575mm      | 1125mm      | 140Kgs               |
| HLD120-240-65  | C         | 1010mm      | 575mm      | 1125mm      | 145Kgs               |
| HLD120-240-72  | C         | 1010mm      | 575mm      | 1125mm      | 150Kgs               |
| HLD120-240-78  | C         | 1010mm      | 575mm      | 1125mm      | 155Kgs               |

### Optional extras

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

### 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 130V
- Use Range 2 for max test voltages below 260V

#### STEP 2

- Calculate required minimum ohms = Min volts / test Amps
- Example: 99 volts / 155 amps = 0.64 ohms

#### STEP 3

- Select minimum ohms from the appropriate Range on the rating table
- Note: always select a lower ohmic value from the result in step 2
- Example: HLD120-240-32 = 0.52 ohms on Range 1 and will provide 190A at 99V

#### Notes

- Units are designed for indoor use in a clean, dry and well ventilated environment.
- The available current and ratings are proportional to the end of test voltage.
- Information in technical literature, quotations or datasheets 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 designs, software & information is the copyright and intellectual property of Hillstone Products Ltd.



Typical Case Size C Unit Illustrated

