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## TECHNICAL SUMMARY SHEET

### HAC415 series – 250KW to 600KW

### 3 PHASE AC LOAD BANKS

#### Features

- SIMPLE OPERATION
- INTELLIGENT HAND HELD CONTROLLER
- TWIST LOCK CABLE CONNECTORS
- ISOLATION CONTACTORS
- FAN FAIL PROTECTION
- LOW COST
- HIGH POWER
- NO AUX MAINS REQUIRED
- FUSE PROTECTION
- PARALLEL OPERATION
- PC DATA LOGGING OPTION



HAC415-500 illustrated with folk lift frame

The Hillstone HAC series load banks offer a low cost solution to on-site AC testing of generators and UPS systems. Units incorporate force cooled high powered resistor elements controlled via our intelligent hand held controller. Safety features including twist lock cable connectors, HRC fuse protection, fan failure shut down and emergency stop push button. Digital meter and PC interface with data logging facilities are also available. Load banks can also be supplied for both three phase and single phase testing.

#### Performance table

LOAD BANK type ref.	Max volts	Power at 415V	Amps at 415V	Power at 400V	Amps at 400V	Power at 380V	Amps at 380V	Case size	Approx weight
HAC415-250	415V	250KW	347A	230KW	333A	210KW	318A	D	230kgs
HAC415-300	415V	300KW	416A	275KW	398A	251KW	381A	D	250kgs
HAC415-400	415V	400KW	556A	367KW	532A	336KW	509A	E	480kgs
HAC415-500	415V	500KW	694A	459KW	666A	420KW	637A	E	650kgs
HAC415-600	415V	600KW	833A	550KW	798A	504KW	763A	E	600kgs

#### Specification

Max voltage	415 volts, three phase, 4 wire with neutral ( for delta use see note 7 )
Frequency	50 hz or 60Hz
Rating	see above table
Adjustment	from 1KW to max power, selected via hand held controller as description over leaf . ( see note 2 )
Controls	Control / fan control switch and emergency stop push button
Cable termination	Panel mounted, non interchangeable, fast connection, twist lock safety connectors for external cables to L1, L2, L3, N & earth ( see note 3 )
Cooling	3 phase, 50 Hz, or 60 Hz, horizontal force air cooling fan, powered from the test source
Element type	Insulated, air cooled, stainless steel, Incoly, finned sheathed resistor elements ( see note 4 )
Environmental protection	Designed for outdoor operation, electrical control chamber IP54, element chamber IP21
Construction	Robust Zintec steel frame and panels and drip lid
Finish	Powered coated, textured finish RAL 7032
Operating temperature	0-40 deg C ( see note 6 )
Storage temperature	0-80 deg C
Movement	Swivel castors or folk lift frame
Optional extras	Digital panel meter    Panel switch controls    Test cable sets    Road trailer    60 Hz operation PC interface and data logging software    Single phase testing    Delta connection option Separate auxiliary control/fan supply    480V / 277V designs available    Floor fixing kit Sun shield    Louvered inlet and outlets    Aluminised steel

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case size	case length	width	height
D	1800 mm	800 mm	1170 mm
E	2230 mm	940 mm	1170 mm

Note : when fitted, folk lift frame adds 100 mm to height and 100 mm to width

### HAND HELD CONTROLLER – *iHHC* operation

The iHHC ( intelligent hand held controller ) provides remote control and display of the load bank power level. Two modes of operation are provided : **Load adjust mode** allows the operator to pre-select the required load in KW's as displayed on the iHHC. Pressing the **ACCEPT** button on the iHHC will instruct the load bank to connect the requested power level and then automatically change the iHHC to **Running Load Mode**. During **Running Load Mode** the operator can make incremental adjustments of the power level by pressing the **LOADUP** or **LOADDOWN** buttons. Any changes to the load selection will be shown on the iHHC display.

Notes : During **Running Load Mode** an operator can pre-select and **ACCEPT** an alternative load setting to simulate load profiles. A single iHHC can also control and display the total power of multiple, parallel connected load banks. When a digital panel meter and iHHC is fitted to a load bank, the iHHC will automatically display the measured KW's during Running Load mode. A ten metre interconnection control cable is provided with the iHHC. Longer control cables are available on request



### Optional extras - additional information

#### DIGITAL POWER METER

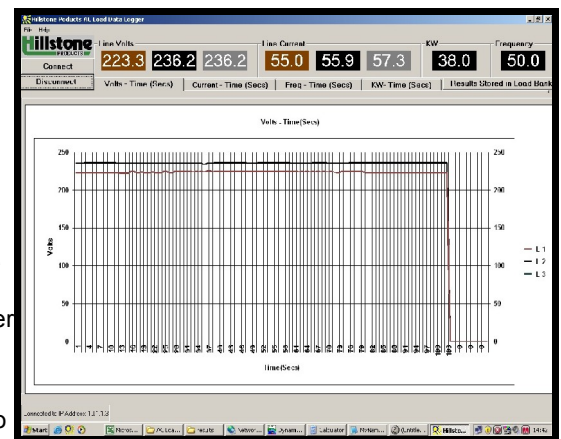
A panel mounted power meter can be provided to display, line volts, phase volts, line current, power and frequency.

#### PC INTERFACE & DATA LOGGING SOFTWARE

The PC interface and data logging software allows transfer and storage of test data to a laptop or PC using Hillstone software, ( see note 5 ) The computer display includes line volts, phase volts, line current, power and frequency plus a real time graphical display.

#### PANEL MOUNTED SWITCH CONTROLS

Where required, illuminated panel mounted switches can be provided to select the load steps. This reduced cost option is an alternative to the hand held controller.



typical PC display

#### Notes :

- Units are rated for continuous operation at max volts
- Panel mounted load switches are available as an alternative to the hand held controller
- Matching twist lock cable connectors are provided for you to fit to your external cables
- Standard resistance element tolerance +/- 5%
- Data logging software OS compatibility : Microsoft Windows XP
- Our HT range of load banks are available for use above 40 deg C
- Where delta connection testing is required with no neutral, a separate auxiliary supply is required.
- Changes to specification, components, dimensions or weights may vary without prior notice.
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