

PORTAPOWER (HK) LIMITED

Flat 106-107, 1/F., Hopeful Factory Centre,
10-16 Wo Shing Street, Fotan, N.T. Hong Kong
Tel: (852) 2687 6323 Fax: (852) 2687 6312
e-mail: porta@portapower.com.hk

www.portapowerhk.com

SPEC. NO.	CBS36B.40H	ISSUE DATE	2007-7-11		
DESCRIPTION	Nickel-Metal Hydride Battery (model No. CBS36B.40H)	EDITION	0	PAGE	1/7

1. Applicability

The specification is applicable to PortaPower Nickel-Metal Hydride Rechargeable batteries AMH13133

2. Ratings

2.1 Cell

- 2.1.1 Type of Cell : Sealed Nickel-Metal Hydride cylindrical Recharge battery
- 2.1.2 Cell Model : Sanyo HR-4/3AU
- 2.1.3 Cell Size : 4/3AU
- 2.1.4 Cell Nominal capacity : 4000 mAh
- 2.2.5 Minimum capacity : 3500 mAh
- 2.1.6 Number of cell used : 10PCS

2.2 Pack

- 2.2.1 Nominal voltage : 12V
- 2.2.2 Nominal capacity : 4000 mAh
- 2.2.3 Minimum capacity : 3500 mAh
- 2.2.4 charge method : 2000mA X 130min
- 2.2.5 Discharge end voltage : 10V
- 2.2.6 Replack No. : Canon: DR36, DR36S
Duracell: DR36, DR-36S, EMC36, NJ1020, SL36, SMP36
Hitachi: DR36S
- 2.2.7 Battery Pack Color : Black
- 2.2.8 Operating temperature : 0 - 45°C (charge)
-20 - 50°C (discharge)
- 2.2.9 Storage temperature : -20 - 50°C (1 months)
-20 - 40°C (3 months)
-20 - 30°C (1 year)

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3. Configuration and dimensions

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4. Test conditions

Unless otherwise specified,
month of delivery under the
Ambient temperature
Relative humidity

5. Performance

Item	Criteria	Test conditions
Capacity	Above 3500mAh	Standard charge and standard discharge
Internal impedance	Less than 350mohm	Measure AC impedance at 1kHz
Cycle life**	Above 1900mAh	300 cycles charging/discharging is repeated in the below condition. <ul style="list-style-type: none">● Charging: 2000mA● Rest time: 1hrs● Discharging : 2000mA up to 10V● Temperature : 20±2°C
Leakage resistance	No leakage	Visually inspect battery pack after standard charge and storage at 25°C for 14 days.

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Drop test	No fire, no explosion, no leakage (max. weight loss 0.1%)	Drop battery pack after standard charged onto a bakelite floor from a height of 50 cm for 6 times.
Vibration test	No fire, no explosion, no leakage (max. weight loss 0.1%)	The battery pack is vibrated in triaxial direction with 4 mm amplitude of frequency 30 Hz (1 Hz per minute) for 1 minute in triaxial direction.
Short circuit test	No fire, no explosion, cell temperature shall not exceed 150 °C	External short circuit
Dimensions	Refer to drawing of CBS36	Measured by calipers
Battery weight	Approx. 609g	Measured by balance
Appearance	No crack, no leakage, no deformation	Visual inspection

Note: ** Data provided under "Cycle Life" in this document is our best estimate based on the

6. Material of Case

A non-inflammable material from GE injects the plastic casing,

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8. Charge state of cell before

Charge from 10% to 50%

9. Safety precaution

Please follow the safety
of Nickel-Metal Hydride
electrolyte leakage, heating

Never charge the battery

Never reverse charge the

Never heat or incinerate

Never pierce, crush or

Never charge a battery

or near a fire.

Never short circuit the

Never discharge a

Never allow the battery

For long period of

After long period of

to recover capacity.

10. SAFETY DEVICE AND ABUSE REQUIREMENT

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Circuitry protection as described below has been presented inside the battery pack to insure safety in case of misuse.

Over Current Protection
When battery load current exceeds 7A at 20°C, the Polyswitch (PTC) shall trip abruptly to a highly resistive state limiting current to milliamps. The device shall remain in the tripped state until the fault is corrected or removed.