

SPECIFICATION
FOR
BATTERY, DRY (LECLANCHÉ), 67.5 V, NO 1, NATO STOCK NO 6135-99-910-1123
(NATO TYPE DESIGNATION  VDBA 051)

This Supplement supersedes SUPPLEMENT NO 23 to
DEF STAN 61 - 3 (PART 1), dated 19 March 1968

1. This Supplement is to be read in conjunction with the General Specification for primary batteries (Leclanché, mercury, and manganese alkaline types) contained in DEF STAN 61 - 3 (PART 1).

2. NOMINAL VOLTAGE

a. Cell.

1.5

b. Battery.

67.5

3. DIMENSIONS

Dimensions shall be in accordance with the requirements of the attached drawing.

4. MASS

Mass shall not exceed 14 ounces (397 grams).

5. MARKINGS

Marking shall be in accordance with the requirements of the General Specification contained in DEF STAN 61 - 3 (PART 1), clause 11. and the attached drawing.

6. CONSTRUCTION

a. Assembly.

- (1) Normally 45 layer-type cells (three 15 cell stacks) connected in series and enclosed in an insulating container.
- (2) All internal connections shall be soldered, using insulated stranded wire.
- (3) The insulating container shall be coated externally with a smooth and continuous protective film of micro-crystalline wax.
- (4) The terminations shall be sealed in such a manner that the seal may be removed and replaced effectively to permit testing of the battery during storage.

6. b. Cell details.

Size: F40 (BS 397)

c. Terminations.

Snap-on type in accordance with the requirements of the attached drawing.

7. STORAGE AND PERFORMANCE TESTS

a. Allocation of sample batteries.

(1) For Qualification Approval testing.

Shall be in accordance with the requirements of the General Specification contained in DEF STAN 61 - 3 (PART 1), clause 6.b.

(2) For Quality Assurance testing.

Number of sample batteries supplied shall be in accordance with the requirements of the General Specification contained in DEF STAN 61 - 3 (PART 1), clause 14.b. and shall be divided between the tests shown in the table below as follows:

10% Jungle with the balance divided equally between the other four types of storage.

b. Storage conditions and performance requirements.

TYPE OF STORAGE	GENERAL SPECIFICATION CLAUSE	STORAGE PERIOD (WEEKS)	MINIMUM DISCHARGE LIFE AFTER STORAGE (HOURS)
Temperate (Short term)	17.a.	4	8
Temperate (Long term)	17.a.	52	7
\neq Jungle	17.c.	8	7.5
\emptyset Desert	17.b.	26	6.5
Temperate (Spare)	18.d.	-	-

Notes:

- \neq indicates insulation resistance after Jungle storage (General Specification DEF STAN 61 - 3 (PART 1), clause 19.) to be not less than 2 megohms.
- \emptyset indicates batteries stored singly.

7. c. Discharge test conditions.

(1) Resistance loads.

R1: 2000 ohms.

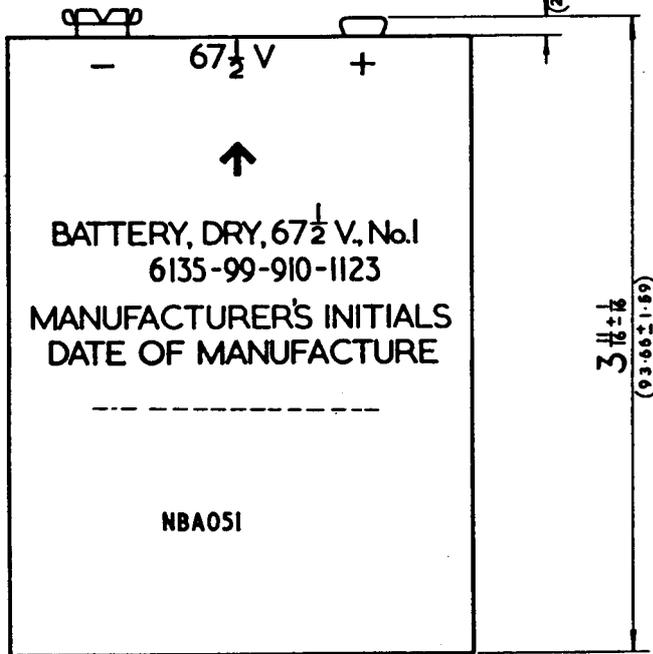
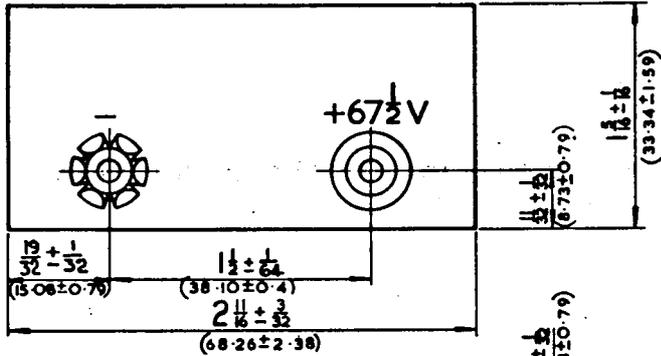
R2: 5200 ohms.

(2) Discharge cycle.

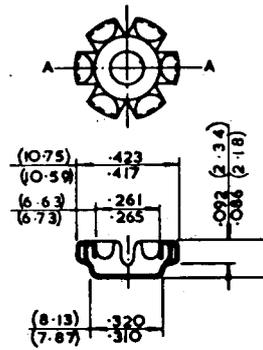
Two minutes through R1 followed by four minutes through R2. This cycle will be repeated continuously.

(3) On-load voltage end-point.

42 volts.



NOTE:- ALL DIMENSIONS ARE IN INCHES WITH mm EQUIVALENTS & SHALL INCLUDE THICKNESS OF MICRO-CRYSTALLINE WAX COATING

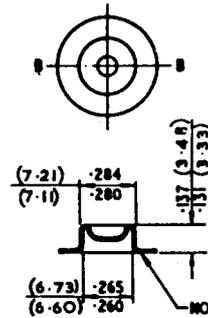


SECTION A-A

NOTES:-

1. MATERIAL PHOSPHOR BRONZE TO B.S.407-PB103-1/2 H, THICKNESS NOT LESS THAN .014 (0.36)
2. MUST MAKE GOOD ELECTRICAL CONTACT WITH STUD

SOCKET



NOT LESS THAN .015 (0.38) NICKEL PLATED BRASS.

SECTION B-B

STUD

THIRD ANGLE PROJECTION



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Our Reference : D/DStan/11/2

Date : 9 November 1998

Removal of Product Qualification Approval

IMPORTANT ANNOUNCEMENT

1. This Standard contains a Product Qualification Approval (PQA) scheme. ⁱMOD policy requires that all PQA schemes are removed from Defence Standards called up in contracts placed after 1st January 1998.
2. Users of this Standard are to contact the Project Manager (PM), Equipment Support Manager (ESM) or Technical Service Authority (TSA) named in the contract or order, to identify whether there is a continuing need for an approvals scheme.
3. ⁱⁱProduct Conformity Certification (PCC) is a risk based process that replaces PQA. Once a risk has been identified PCC can be included as a contract clause. In exceptional circumstances agreement can be sought from AD/Stan for PCC to be included in a Defence Standard.
4. At the next revision of this Standard the PQA scheme will be removed.

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ⁱ Defence Council Instruction (General) 197/97; Quality Temporary Memorandum 5/98; Chief of Defence Procurement Instruction CDPI/TECH/250 (draft)

ⁱⁱ PCC is certification that a product meets its specification. When PC is required by the contract, the contractor is responsible for obtaining the necessary PCC. Certification shall be provided from a NAMAS accredited laboratory when appropriate. PCC shall apply where a Risk Assessment has been identified by the PM; ESM or TSA.