SPECIFICATION
FOR
BATTERY, DRY (LECLANCHÉ), 12 V, NO 1, TO STOCK NO 6135-99-910-1147

This Supplement supersedes SUPPLEMENT NO 54 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.

12 with tapping at 6

3. DIMENSIONS

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

4. MASS

Mass shall not exceed 14 ounces (396.9 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 eight cylindrical cells connected in series and enclosed in an insulating container.

(2) Inter-cell connections between cylindrical cells shall be soldered, using wire not thinner than 0.028 in (22 s.w.g.) (0.71 mm).

(3) The whole assembly shall be blocked securely to prevent internal movement.

(4) The insulating container shall be coated externally with a smooth and continuous protective film of micro-crystalline wax.

6. b. Cell details.

(1) Size.

R12 (BS 397).

(2) Zinc thickness.

Shall be not less than 0.010 in (0.25 mm).

c. Terminations.

(1) Positive and 6 V tapping.

Brass terminals in accordance with the requirements of the attached drawing.

(2) Negative.

Insulated flexible wire lead 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.

7. 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	24
Temperate (Long term)	17.a.	52	18
≠ Jungle	17.c.	8	22
ø Desert	17.b.	26	16
Temperate (Spare)	18.d.	-	-

Notes:

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

2. ø indicates batteries stored singly.

c. Discharge test conditions.

(1) Resistance loads.

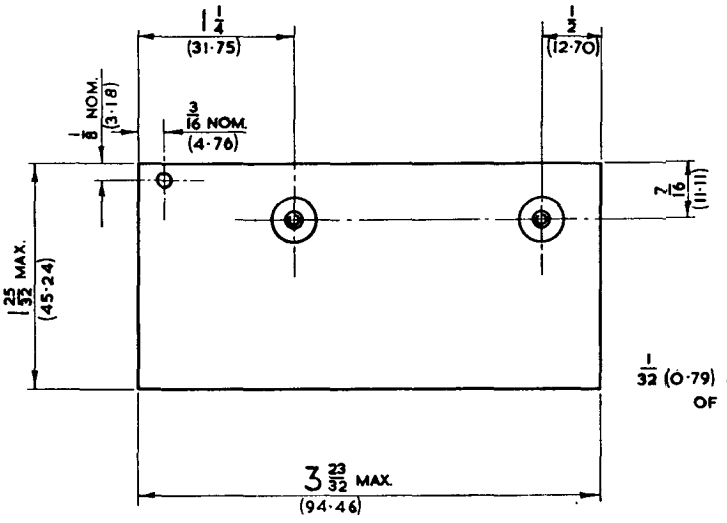
R1: 160 ohms.
R2: 373 ohms.

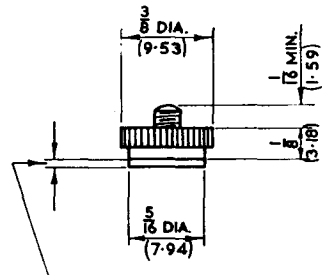
(2) Discharge cycle.

Two minutes discharge through R1 followed by 18 minutes discharge through R2, repeated continuously for four hours; followed by 20 hours off-load. This cycle to be repeated on five consecutive days per week.

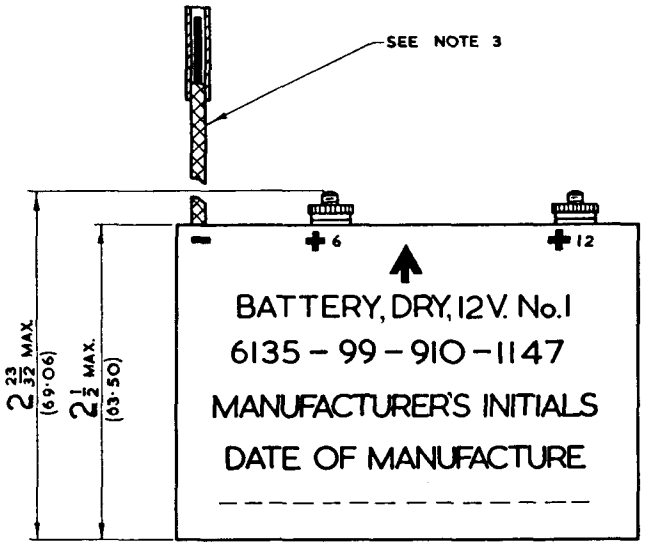
(3) On-load voltage end-point.

8.8 volts.





DETAIL OF TERMINALS (6 BA.)



NOTES

1 ALL DIMENSIONS ARE IN INCHES WITH mm EQUIVALENTS, AND SHALL INCLUDE THICKNESS OF MICRO-CHRYSTALLINE IN WAX COATING.

2. UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: FRACTIONS ± 1/16(1.59)

3. INSULATED FLEXIBLE LEAD 7½ (190.5) ± ½ (12.70) LONG OF 16/0.2 TYPE 3 EQUIPMENT WIRE TO DEF STAN 61-12 (PART 6) COLOUR: BLACK THE FREE END OF THE LEAD SHALL BE BARED FOR A DISTANCE OF ½ (12.70)±1/8(3.18) AND DIP SOLDERED TO PREVENT FRAYING. THE BARED STRANDS SHALL BE COVERED WITH CLOSE FITTING INSULATING SLEEVING OR BY OTHER APPROVED MEANS TO PREVENT SHORT CIRCUITS DURING STORAGE AND HANDLING

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. [i]MOD 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. [ii]Product 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.