

SPECIFICATION
FOR
BATTERY, DRY (LECLANCHÉ), 4½ V, NO 5, NATO STOCK NO 6135-99-910-1144

This Supplement supersedes SUPPLEMENT NO 62 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.

4.5

3. DIMENSIONS

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

4. MASS

Mass shall not exceed 1 pound (453.59 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) Three cylindrical cells connected in series and enclosed in an insulating container.
- (2) Inter-cell connections shall be soldered, using wire not thinner than 0.028 in (22 s.w.g.) (0.71 mm).
- (3) Soldered joints shall be used for cell-terminal connections.
- (4) The whole assembly shall be blocked securely to prevent internal movement.
- (5) The external surface of the insulating container shall be coated with a protective film of micro-crystalline wax or other approved material. The method employed and material used shall be stated by the manufacturer when submitting samples for Qualification Approval.

DEF STAN 61 - 3 (PART 1)
SUPPLEMENT NO 62/2

6. a. (6) Terminals shall be separated by suitably shaped waxed cardboard, held securely in position to prevent short-circuits during storage and handling.
- b. Cell details.
- (1) Size.
R22 (BS 397).
- (2) Zinc thickness.
Shall be not less than 0.014 in (0.36 mm).
- c. Terminations.
Strip brass terminals 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 (MINUTES)
Temperate (Short term)	17.a.	4	1350
Temperate (Long term)	17.a.	78	1050
∕ Jungle	17.c.	8	1260
∅ Desert	17.b.	26	960
Temperate (Spare)	18.d.	-	-

Notes:

- ∕ indicates insulation resistance after Jungle storage (General Specification DEF STAN 61 - 3 (PART 1), clause 19.) to be not less than 250 000 ohms.
- ∅ indicates batteries stored singly.

7. c. Discharge test conditions.

(1) Resistance load.

15 ohms.

(2) Discharge cycle.

30 minutes per day on five consecutive days per week.

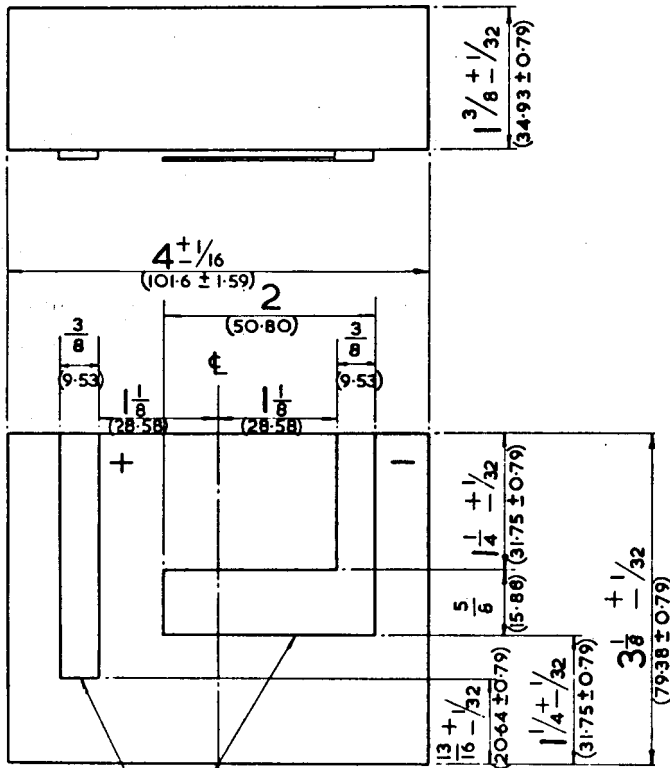
(3) On-load voltage end-point.

2.25 volts.

DETAIL OF MARKING

BATTERY DRY 4½V.NO.5
 6135-99-910-1144
 MANUFACTURER'S INITIALS
 DATE OF MANUFACTURE.

NOTE:- ALL DIMENSIONS ARE
 IN INCHES, WITH mm EQUIVALENTS,
 AND SHALL INCLUDE THICKNESS
 OF MICRO-CRYSTALLINE WAX
 COATING OR OTHER APPROVED
 MATERIAL.



SPRING BRASS STRIP
 MINIMUM THICKNESS 0.018
 (0.46)

THIRD ANGLE PROJECTION



Procurement Executive, Ministry of Defence

Directorate of Standardization

Room 1138, Kentigern House, 65 Brown Street, GLASGOW, G2 8EX

Telephone: 0141-224 2595 (Direct Dialling)
0141-248 7890 (Switchboard)

Fax: 0141-224 2503

Internet e-mail address: t.leaver@dstan.mod.uk

Your Reference :

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.

T R Leaver
Head of Standards Programme Management
Tel: 0141 224 2595 FAX: 0141 224 2503

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.