

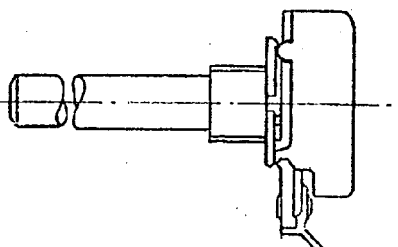
BRITISH STANDARDS INSTITUTION 2, PARK STREET, LONDON, W1A 2BS	BS CECC 41302 001 ISSUE B. JULY, 1980. ISSUE C. NOVEMBER, 1980.
Specification available from:- EGEN ELECTRIC LIMITED, CANVEY ROAD, CANVEY ISLAND, ESSEX.	ISSUE 1. MARCH, 1981. 
ELECTRONIC COMPONENTS OF ASSESSED QUALITY DETAIL SPECIFICATION IN ACCORDANCE WITH BS CECC 41000 1977 BS CECC 41300 1979 BS CECC 41302 1979.	MANUFACTURER'S TYPE NUMBER SEE TABLE 1 & PD9002 CECC C0200 FOR PATTERNS AVAILABLE IN THIS STYLE SEE TABLE IV
 MOUNTING VARIANTS :- SEE APPENDIX - A. OUTLINE DIMENSIONS :- SEE APPENDIX - A. SPINDLE & BUSH DIMENSIONS :- SEE TABLE IV & APPENDIX B & C. Marking information :- SEE CLAUSE 2.	For ordering information see CLAUSE 4. SINGLE GANG LOW POWER SINGLE TURN ROTARY POTENTIOMETER. NON-WIREWOUND. WITHOUT SWITCH. SPINDLE INSULATED FROM RESISTANCE ELEMENT. NON SEALED. ASSESSMENT LEVEL M.

TABLE 1.

STYLE	RATED DISSIPATION (W AT 70°C)		LIMITING ELEMENT VOLTAGE (V.D.C. OR A.C. R. M.S.)	ISOLATION VOLTAGE. (V.D.C. OR AC-PEAK)	
	RESISTANCE LAW A.	RESISTANCE LAWS B & C		NORMAL AIR PRESSURE.	LOW AIR PRESSURE.
EA	0.125	0.0625	500	1000	N/A.

1. RATINGS & CHARACTERISTICS.

RESISTANCE LAWS :)
 " RANGE :) SEE TABLE III

A.B.C.

The range of values available in each law is given in the qualified products list.

STANDARD SELECTION TOLERANCE :-

± 20%

TEMPERATURE CHARACTERISTIC :-

$\Delta R/R : \leq \pm 0.1\%$

of RESISTANCE (20°C to 70°C) :-

$\Delta R/R/T : \leq \pm 1000 \text{ ppm/}^\circ\text{C}$

CLIMATIC CATEGORY

10/070/21

The preferred values are those of E 3 series of IEC 63. Where the use of intermediate values is essential, they should, wherever possible, be chosen from a series in that document.

Refer to Qualified Products List PD 9002 and/or CECC 00200 for details of manufacturers approved to this specification.



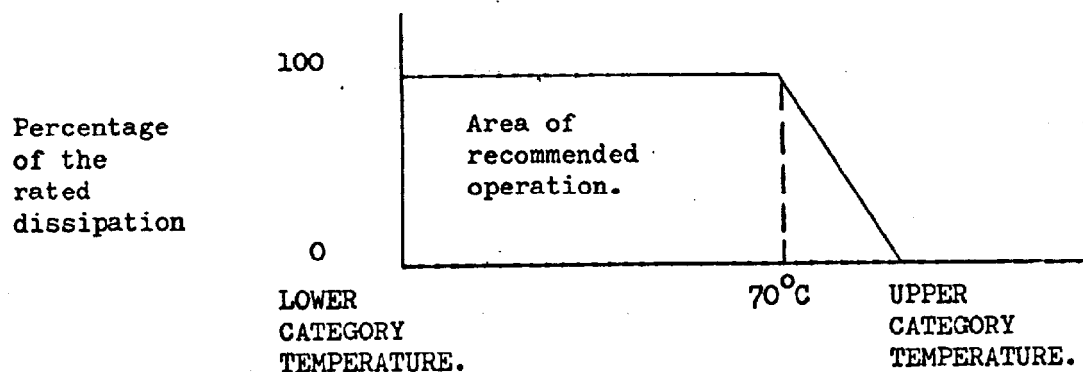
Documents

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Vibration Severity.	10 Hz to 55 Hz; 0.75 m.m. or 98 m/s ² (whichever is the less).
Limits of resistance change (a to c) (after 1000 h electrical endurance test)	± (15%R + 0 ohms).
Starting Torque	3 mNm to 20 mNm.
Limiting slider current	) SEE TABLE III.
Terminal resistance	

1.1 Derating.

Potentiometers covered by this specification are derated according to the following curve.



2. MARKING.

2.1 The following marking information, in the order of importance given below, is required :-

1. Rated Resistance.
2. Tolerance on rated resistance.
3. Resistance Law (if other than linear).
4. Detail specification and style.
5. Date of acceptance. A nationally approved code may be used.
6. Details of spindle and bush (if not implicit in (4) above).
7. Manufacturer's name and trade-mark.
- Additional marking.
8. Pattern.

2.2 The potentiometer shall be clearly marked with 1, 2, 3, 5, 7 & 8 above, using, where applicable, one of the coding methods specified in IEC 62.

2.3 The package containing the potentiometer shall be clearly marked with (1) to (7) as clause 2.3 of BS CECC 41302.

2.4 Any additional marking shall be so applied that no confusion can arise.

3. Related documents.

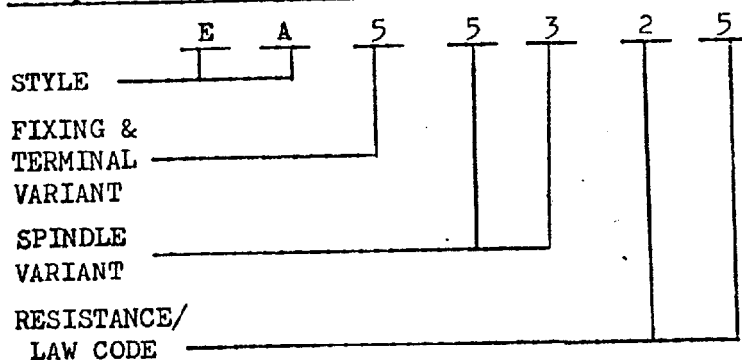
National Authorised Institution will complete this section, making reference to any documents, recommendations or specifications directly referred to in their national equivalent of this document.

4. Ordering Information.

Orders for potentiometers covered by this specification shall contain the following information :-

- Quantity, value and tolerance.
- Resistance Law. (If other than Linear).
- BS CECC Specification Number Issue Number and Assessment Level.
- Style and Pattern reference. (See Table IV).

Example Ordering Code.



The example code describes a SINGLE GANG SINGLE TURN ROTARY POTENTIOMETER.
TWIST TAB BEARING, DIP SOLDERING TERMINALS, LONG PRINTED WIRING PINS,
PLAIN 6 mm SHAFT 30 mm LONG, LOG LAW 2.2 K ohms.

5. Certified Test Records.

National Authorised Institutions shall indicate in this paragraph whether Certified Test Records shall be prepared in accordance with 3.5 of CECC 41 000.

6. Delayed Delivery.

The provisions of 3.6 of CECC 41 000 shall apply except that the Inspection Level shall be reduced to S-2 and (except for carbon composition types) the period shall be extended to two years. The period for carbon composition types shall remain at one year.

7. Additional Information (Not for inspection purposes).

The detail specification may include information (which is not required to be verified by the inspection procedure) such as circuit diagrams, etc., needed for the clarification of the detail specification.

8. Inspection Requirements (See table 2).

8.1 When drying is called for, Procedure 1 of 4.2 of CECC 41 000 shall be used.

8.2 When it is desired to obtain qualification approval by adopting the fixed sample size procedure, use shall be made of the test schedule given for that purpose in CECC 41 300.

The conditions of test and the performance requirements shall be identical to those prescribed for quality conformance inspection in the detail specification.

8.3 In the quality conformance inspection the values representative of the whole approved range shall be tested within one year. (Groups A, B, and C only).

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Test	D or ND	Conditions of Test	Sample size & criteria of acceptability (see note 3)			Performance Requirements (see note 1)
			P	n	c	
GROUP C INSPECTION.						
To be conducted on a sampling basis, at the periodicity given in column "P"						
<u>Sub-Group C1</u>	D		3	5	1	AS IN APPENDIX "A"
4.3.3 Dimensions Detail.						
4.21 Robustness of terminations						
4.21.2		Test U a				
4.21.4		Test Ub tag termination.				
21.5		Test Ub Printed Wire Termination.				
		Visual Examination.				As in 4.21.8 (1)
		Element resistance				$\Delta R: \pm (1\%R + 0 \text{ ohm})$
<u>Sub-Group C2</u>	ND		3	5	1	
4.16 Starting torque		Room temperature				3 mNm to 20 mNm
<u>Sub-Group C3</u>	D		6	8	1	
4.30 Mechanical endurance (Potentiometer)		(See Note 4)				
		Number of cycles : 10,000				
		Rate: 10 to 17 CYCLES. per min.				
		Visual examination				As in 4.30.6
		Element resistance				$\Delta R: \pm (15\%R + 0 \text{ ohm})$
		Starting torque				3 mNm to 20 mNm
		Rotational Noise.				
		Method A (non-wirewound types)				$\leq 47 \text{ mV}$
<u>Sub-Group C4</u>	D		6	8	1	
4.32.2 Electrical endurance at 70°C		Duration : 1,000 h examination at 168,500 and 1,000 h				
		Visual examination				As in 4.32.2.6
		Element Resistance				$\Delta R: \pm (15\%R + 0 \text{ ohm})$
		Examination at 1000 hrs.				$\geq 1 \text{ G ohms}$
		Insulation Resistance.				$\leq 47 \text{ mV}$
		Rotational noise Method A (Non-wirewound types)				