



PRODUCT STANDARD ELECTRICAL MACHINES

TG65899

Rev. No.: 03

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COPPER FLEXIBLE CONNECTORS

FORMAT
TD-201
REV-00

Prepared: KVSM

Approved: PGS Kumar

Date: 22.10.1996

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COPPER FLEXIBLE CONNECTORS

1.0 SCOPE:

This product standard specifies material properties, testing requirements and other technical aspects of copper flexible connectors.

2.0 DEFINITION AND APPLICATION:

Flexible connectors shall be made out of bare electrolytic copper sheets. They are used to carry current between connecting rings and rigid "output leads" in electrical machines.

3.0 DIMENSIONS AND TOLERANCES:

As per drawing enclosed with the purchase order.

4.0 MATERIAL

Electrolytic copper sheet shall be as per BHEL specification AA12001. They are fused at the ends by electrical resistance pressure welding technique. The contact surfaces shall be tinned to 20 Microns.

All sharp edges shall be rounded off by R1.

5.0 TESTS:

5.1 FLEXIBILITY TEST:

One end of the connector shall move freely 25 to 35 mm in width wise and 180° movement in thickness wise by holding the other end.

6.0 TEST CERTIFICATES:

3 copies of certificates shall be supplied with the following information.

- Electrical resistivity of the copper used.

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- Dimensional data as per drawing / actual.
- As in clause 5.1
- Material certificate of the copper

7.0 PACKING:

Each flexible connector shall be cleaned and ensured for complete dryness. Each connector shall be packed separately in a polythene cover to avoid moisture ingress and with adequate cushioning to avoid transport damages. Suitable desiccants shall be used for moisture free packing. The following details shall be marked on the packing case.

- Manufacturer's name
- BHEL order number
- BHEL standard number

8.0 INSPECTION AFTER RECEIPT AT BHEL WORKS:

After the receipt of flexible connectors at BHEL works, the same will be inspected for any moisture ingress and rusting/oxidation. If any rusting/oxidation is observed, the flexible connectors are liable for rejection.

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RECORD OF REVISIONS

REV. NO.	DATE	REVISION DETAILS	REVISED	APPROVED
01	09.01.1998	Clause 4.0: Tinning changed to Silver plating	KVSM	PGS Kumar
02	01.03.2016	Clause No. 5.2 i.e. TEMPERATURE RISE TEST REMOVED: When flexible connector is carrying full load current as per the drawing the temperature rise over the ambient should not exceed more than 30 °C.	R Narasing	Upendra Deep
03	25.05.2018	Clause 4.0: Copper specification is changed from IS: 1972 [ETP (O)] to BHEL specification AA12001. Silver plating changed to Tinning. Clause 7.0 removed. Clause 8.0 changed as clause 7.0. Clause 8.0 Inspection at BHEL works added. Format modified.	MNVS Prasad	Upendra Deep

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