

TENDER SPECIFICATION

No: NO.CLW/ES/3/~~0024~~ 0424

ENCLOSURE

LDRG NO.S -----

1) CLW/ES/3/SK-1/~~0024~~ 0424/A/B

TOTAL NO. OF SHEETS **7**

ALT	A	B		
Sheet	7	5		

SPECIFICATION

FOR

SET OF CABLE DISCONNECTION TM-1 TO TM-4

FOR WAP-5 (Bo-Bo), ELECTRIC LOCOMOTIVES

ISSUED BY
 DY.CHIEF ELECTRICAL ENGINEER/CON/TU
 CHITTRANJAN LOCOMOTIVE WORKS
 P.O. CHITTARANJAN, 713331
 DIST. BURDWAN, WEST BENGAL, INDIA.

SPECIFICATION FOR CABLE DISCONNECTION T.M.1 TO T.M. 4	DRN. <i>[Signature]</i>	CHKD/REV <i>[Signature]</i>	D & D CENTRE CHITTRANJAN LOCOMOTIVE WORKS WEST BENGAL, INDIA					
	CDA	SEE/D&D						
APPROVED BY <i>[Signature]</i>			DATE: 25-11-1999 NO: CLW/ES/3/ 0024 0424/A/B					
DY/CEE/CON/TU-I			ALT	A	B			

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SPECIFICATION FOR CABLE DISCONNECTION T.M.1 TO T.M.4	DRN. <i>[Signature]</i> CEA	CHKD/REV <i>[Signature]</i> SEE/D&D	D & D CENTRE CHITTARANJAN LOCOMOTIVE WORKS WEST BENGAL, INDIA			
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	BY CEE/CON/TU-I		ALT	A	B	

SPECIFICATION FOR TRACTION MOTOR CABLE DISCONNECTION

1. SCOPE:-

This specification applies to TRACTION MOTOR CABLE DISCONNECTION TM-1 TO TM-4 for 3- Phase, 5000 HP WAP-5 class locomotive for 25 kV AC 50 Hz system.

2. Climate and Environment conditions:

- * Maximum Atmospheric: Under Sun: 70°C
temperature in shade : 50°C
- * Humidity : 100% saturation during rainy season
- * Reference site conditions:
 - i) Ambient Temp. : Max. 55°C min. 0°C
 - ii) Humidity : 60%
 - iii) Altitude : 160 m above mean sea level
 - iv) Rain fall : Very heavy in certain areas. The locomotive will be designed to permit its running at 10 Km/hr in flood water level of 102mm above rail level.
- * Atmosphere during hot weather: Extremely dusty and desert terrain in certain areas.
- * Coastal area : Locomotive and equipment will be designed to work in coastal areas in humid and salt laden atmosphere
- * Vibration: The equipment, sub-system and their mounting arrangement will be designed to withstand vibrations and shocks encountered in service as specified in corresponding IEC publications unless otherwise prescribed.

4. STANDARD:

The relevant IEC, BS, DIN standard & Indian standard specification shall apply with respect to all materials used in the manufacture of the item.

4.1 All the non-metallic parts should be fire retardant/self extinguishing type as per IS-11731 or any other equivalent DIN, IEC standard.

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		CC ALT	A	B		

3. SCOPE OF SUPPLY & TECHNICAL DATA:

<u>DESCRIPTION OF MATERIALS</u>	<u>IDENT. NO.</u>	<u>DRG. NO.</u>	<u>QTY./ LOCO</u>	<u>MATERIAL</u>
1.T.M. cable disconnection	3EHP230120P0001	CLW/ES/3/SK-1/0024	4	
One T.M. cable disconnection consists of:-				
1.1 Compression plate	HBTB416302P0001	-DO-		Glass reinforced polyester dough 6 moulding compounds GR-D3 as per IS: 13411
1.2 Bracket	3EHP431227P0001	-DO-	2	SST 6xCrNiTi 1810 cold rolled ↳ Alt-'B'
1.3 Insulating plate	3EHP431229P0001	-DO-	4	Polyester resin
1.4 Threaded Rod M12x 190 +3 -0	3EHP230120P0001	-DO-	2	Glass reinforced plastic/Fibre reinfo- reed plastic
1.5 Terminal bar	3EHP431228R0001	-DO-	3	Electrolytic tough pitch copper medium cold rolled as per DIN 1787
1.6 SPACER	HBTB416301P0002	-DO-		Glass reinforced polyester dough moulding compounds GR-D3 as per IS: 13411.
1.7 Washer A 13/ 24	NB335050P0610	-DO-	4	SST ↳ Alt-'B'
1.8 Con. Washer 13/29	3EHW470066P1120	-DO-	8	Sprg. Steel
1.9 Hex nut 0.8D M12	NB332600P0514	-DO-	4	SST

1.10. Standard fasteners of M/s. TVS, M/s. LPS, M/s. UNBREAKO and Spring washers of M/s. FORBES make only to be used.

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3A. NAME PLATE

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The tenderer shall fix Name Plate on the equipment indicating i) Manufacturer's name and monogram. ii) Range of Electrical rating. iii) Month & year of manufacturing, iv) S.L. NO. of the equipment.

4. DOCUMENTS TO BE SUPPLIED BY THE TENDERER:

The tenderer shall interalia furnish the following in 3 copies alongwith the quotation.

- i) Clausewise comments on the specification and te programme.
- ii) Detailed drawings.
- iii) Past experience with supporting papers (if any).
- iv) Past test reports (if any).

5. TECHNICAL DOCUMENTS TO SUPPLIED BY THE SUPPLIER:

The following documents shall be supplied by the supplier as a part of the contract.

- i) Type test reports - 10 copies.
- ii) Routine test reports alongwith each set - 4 copies.
- iii) Maintenance manual - 20 copies.
- iv) Detailed drawings - 6 copies.

6. TESTS:

The following type and routine tests shall be conducted on the ~~equipment~~.

6.1 TYPE TESTS

ROUTINE TESTS

- 6.1.1- Checking dimensional details with respect to approved drg. Same as in type tests.
- 6.1.2-Checking quality of workmanship and their conformity with the standard specification. Same as type tests
- 6.1.3. High voltage test
- 6.1.4. Milli volt drop test

7. QUALITY ASSURANCE: Quality assurance should be as per ISO 9000

NOTE: The tenderer should confirm that the item is similar to the item which has been used for WAP-5 class of electric locomotives manufactured by M/s. ABB for Indian Railways

SPECIFICATION FOR CABLE DISCONNECTION T.M.1 TO T.M.4	DRN.	CHKD/REV	D & D CENTRE CHITTARANJAN LOCOMOTIVE WORKS WEST BENGAL, INDIA			
	<i>Wing</i>	<i>Chk</i>				
	CDA	SEE/D&D				
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	BY: CEE/CON/TU-1		ALT	A	B	