

SN 596

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सत्यमेव
जयते

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अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226011

Government of India - Ministry of
Railways
Research, Designs & Standards
Organization, Lucknow - 226011

EL/3.2.100

Date: 13.01.2012

Chief Electrical Engineer,

1. Central Railway, Mumbai CST 400001
2. Eastern Railway, Fairlie Place, Kolkata 700 001
3. East Central Railway, Hajipur, Bihar-844 101
4. East Coastal Railway, Chandrashekharapur, Bhubaneswar 751 016.(Orissa)
5. Northern Railway, Baroda House, New Delhi 110 001
6. North Central Railway, Subedarganj, Allahabad-211033
7. Southern Railway, Park Town, Chennai 600 003
8. South Central Railway, Rail Neelayam, Secunderabad 500 371
9. South Eastern Railway, Garden Reach, Kolkata 700 043
10. South Western Railway, Station Road, Hubli-580 020 (Karnataka)
11. Western Railway, Churchgate, Mumbai 400 020
12. West Central Railway, Jabalpur (MP) 482 001
13. South East Central Railway, Bilaspur-495004 (Chhatisgarh).
14. Chittaranjan Locomotives Works, Chittaranjan-713331

Sub: Amendment I to Modification Sheet No. ELRS/MS/0329 (Rev '0') dated 18.04.2004 for replacement of Hitachi Traction Motor Brush Holder Spacer for HS15250A TM made of brass with PTFE and .

Ref: CEE/WCR letter no. WCR/LS/05/402/281 dated 03.10.2011.

Vide letter quoted under ref. WCR reported that problems in testing of parameters mentioned in the RDSO's drawing (no.SKEL-4683, Alt-0) for PTFE spacer. In turn, RDSO has studied the matter and found that the parameters listed in the drawings were for granular powder PTFE, which is the raw material for the spacer instead of finished product. Accordingly, necessary changes have been made in this drawing and RDSO's drawing SKEL-4683, with Alt 1 has been issued.

In order to incorporate the altered drawing, an amendment 1 to RDSO's Modification Sheet ELRS/MS/0329 has also been issued. Amendment Sheet 1 to Modification Sheet ELRS/MS/0329 along with altered drawing no. SKEL-4683, with Alt 1 for PTFE spacer is also enclosed herewith as Annexure I and II, respectively, for your kind information and necessary action, please.

511904


(GANESH)

for Director General/Electrical

Enclo: as above

Annexure I

भारत सरकार - रेल मंत्रालय
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**No.EL/3.2.100****Dated: 13.01.2012****Modification Sheet No. ELRS/MS/0329 (Rev '0')**

Replacement of Hitachi Traction motor Brush holder spacers for HS15250A
Traction Motor made of brass with PTFE.

Amendment-1

Para No.	Existing	Revised
4	SKEL 4683	SKEL 4683 Alt 1
6	SKEL 4683	SKEL 4683 Alt 1
9(i)	SKEL 4683	SKEL 4683 Alt 1

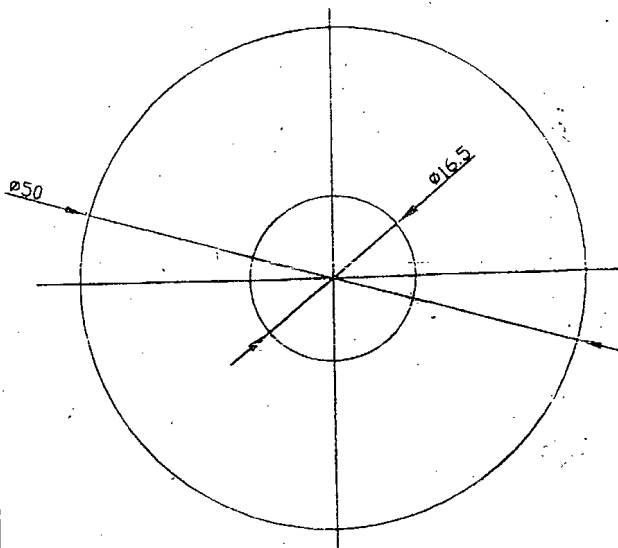
(Signature)
(GANESH)
for Director General/Electrical

511905

ANNEXURE-11

NG -1. Material Granular Powder PTFE Resin
Type-1 Gr.-II as per ASTM D 4894-07

NOTE 2. As per clause 11 of ASTM D 4894-07. Test certificate
GENERAL CHARACTERISTICS
issued by the manufacturer of resin to be
GRANULAR POWDER PTFE
submitted for above material, alternatively the



General Characteristics	Standards	Units	SIA
Powder			
Appearance	—	—	Irregular particles
Bulk density	ASTM-D 1457/87	g/l	700±100
Compression ratio	—	—	25-3
Particle size	ASTM-D 1457/87	μ	-400
Pourability	ASTM-D 1457/87	S	30-50
Moulding pressure	—	Kg/cm sq Psi MPa	250-350 3500-5000 25-35
SINTERED PARTS			
Specific gravity	ASTM-D 1457/87	—	2.12-2.18
Shrinkage	ASTM-D 1457/87	%	-35/-45
Tensile strength	ASTM-D 1457/87	Kg/cm sq Psi MPa	250-310 3500-4000 25-30
Elongation	ASTM-D 1457/87	%	880-380
Thermal stability	ASTM-D 1457/87	—	≤ 10
Dielectric strength	ASTM-D 1457/87 0.1 mm	KV/mm V/mil	-32 -800

material can be tested for the parameter as per
clause 11. of ASTM D 4894 07

NOTE-3. PARAMETER TO BE CHECKED ON FINISH PRODUCT.


GENERAL CHARACTERISTICS	STANDARDS	REQD. VALUE
TENSILE STRENGTH	ASTM D-638	175 Kg/cm ² (Min.)
ELONGATION %	ASTM D-638	200% (Min.)
BREAK DOWN VOLTAGE	ASTM D-149	15KV/mm (Min.)

SPACER			36	PTFE	
REF. No.	PART No.	DESCRIPTION	DETAIL DRG. No.	No./TN	MATL. SPEC.
REF : HITACHI DRG No. 10. T 806971			SCALE : NTS	APPD. BY : <i>[Signature]</i>	(FOR DG)

SPACER FOR HITACHI TM 15250A
BRUSH HOLDER ASSEMBLY

RDSO ELECT.DTE SKEL-4683

Dt.	17-06-04
D	S. SINGH
C	SVRACHVAN

	1		Table deleted, Note 1 to 3 added		13.01.12
STATUS	ALT.	REF. NO.	DESCRIPTION	APPD. BY	DATE

511906