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सत्यमेव जयते

## विद्युत उपकरणों के अनुमोदित आपूर्तिकर्ताओं की मूल सूची

MASTER LIST OF APPROVED VENDORS  
FOR MANUFACTURE AND SUPPLY  
OF ELECTRICAL ITEMS

EL-M-7.1-1 (Ver. 6.0)  
(1<sup>st</sup> July 2013 – 31<sup>th</sup> Dec. 2013)

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ELECTRICAL DIRECTORATE RDSO MANAK NAGAR LUCKNOW - 226011

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## PREFACE

1. The Master List of vendors approved by RDSO is updated up to 30 June. 2013 for manufacture and supply of items/equipment of Electric Locomotives, EMU, AC & TL coaches and equipment and conductors for 25 kV A.C Traction Installations. The specification / drawing/STR number of each of the items has been given in column No. 3.
2. New Items as approved sources for repaired / rehabilitation of major equipments of electric Locomotive and EMU has been included at S.N. 34 of section A. There is no Part - I or Part – II category for approved sources for repair of equipments.
3. Vendors approved for manufacture and supply of items/ equipment have been categorized as ‘Part – I’ and ‘Part – II’. These are put in column Nos. 4 & 5 of this List respectively. The definition of Part – I and Part – II vendors is as under:  
**Part –I Category:** This is the regular category of approval. The firms in this category have been assessed to possess requisite infrastructure to produce consistently quality material up to the assessed production capacity with regular monitoring of quality assurance system.  
**Part –II Category:** This is the initial category of approval which has been granted based on assessment of infrastructure facilities available and satisfactory demonstration of production of samples as per specification. The firms possess the requisite infrastructure but their capability to consistently produce the quality material giving satisfactory service life in field is yet to be established. The firm can also be under Part- II category due to down gradation from Part I category owing to specific cause.
4. The Master List is divided in three parts consisting of IX chapters in all. Part A contains items pertaining to Electric Loco items. Part B contains items pertaining to EMU items/equipment, TL & AC items and equipment. Part C contains items pertaining to equipment and conductors for 25 kV AC Traction Installation. Region- wise Vendors name and address in full, their telephone and Fax numbers have been given at the end of each Part in Chapters II, V and VIII respectively. Distribution list is given in Chapter IX.
5. This Master List is valid from 01.07.2013 to 31.12 2013. It will be revised in the last week of December 2013.
6. Sources for EMU, TL & AC coaches are being developed in line with instructions issued by RB vide their letter No. 2001/Elec (G)/165/16 dt. 30.09.2008 & 2010/Elect. (Dev) 225/ 1 dt. 07.06.2010.
7. Sources for Electric Loco Items are being developed in line with instructions issued by Rly. Board’s letter No. 97/Elect (TRS)/113/4 dt. 7.7.1999, 5.1.2000 & 25.7.2001, 98/Elect (Dev)/440/18/16 dt.9.8.1999, 96/Elect (TRS)/441/25Vol.II dt. 16.12.03, 2003/Elect (TRS)/138/1/pt.2 dt. 20.9.04, 2003/Elect (TRS)/138/1 Pt. dt.12.7.04, 99/Elect (TRS)/441/2 dt. 23.6.05, 99/Elect (TRS)/113/20 Pt. dt. 28.10.02 2005/Elect (TRS)/441/11 dated 7/9/2005, 2003/Elect (TRS)/ 138/1/pt.2 dated 27.2.2006, 97/Elect. (TRS)/113/4 Pt. II Dated 11.10.2006 and 2010/Elect. (Dev) 225/ 1 dt. 07.06.2010.
8. The policy to be followed in respect of procurement of OHE and PSI items has been clarified in Rly. Board’s letter No. 2001/RE/161/12 dt. 31.10.2001 and 2010/Elect (Dev) 225/1 dt.07.06.2010.
9. Traction Installation items of 2x25 kV AT system and conventional 25 kV BT system having common specification are given in Chapter VI. However, the items exclusive to 2x25 kV AT systems are given in Chapter – VII.
10. Chapter VI and VII for Traction Installation items does not include the approved suppliers for parts, fittings and accessories for power transformer and interlocks for circuit breaker, interrupters and isolators. These equipments / accessories are normally required by the manufacturers of power transformers, circuit breakers, interrupters and isolators. Suppliers for these equipments/accessories will be recommended by RDSO in the specification of respective equipment
11. To facilitate the procuring agency in nominating the inspecting agency, a region-wise list of vendors is given. The region-wise list is only for guidance of procuring agencies and in no way meant to restrict the choice of vendors during tendering by Railways, on regional basis.

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12. The figures given in brackets against each firm (wherever furnished by firm) are the annual manufacturing capacity/capacity committed to Railways by the firms. The annual production capacities of the vendors have been indicated in the vendor list to the extent available. These figures are dynamic and may change from time to time, as the vendors keep on making adjustments in their product-wise capacity. These capacity figures are based on declarations of the vendors only and, in many cases, yet to be verified by RDSO. The production capacity figures indicated in this vendor list are only indicative and in no way meant to influence the decisions of the Tender committees while deciding tenders.
13. *Vendor's Responsibility:* If due to any oversight/typographical error/any other reason, a vendor has been wrongly placed in Part-I or Part-II for a particular item without actually being issued approval certificate by RDSO, then vendor should immediately: (i) Inform RDSO about the wrong status. (ii) The vendor should not accept any purchase order or P.O. quantity more than that allowed for Part-II (as the case may be) from Railways against the wrong status. In case, it is found that the vendor has taken more order quantity against wrong status without having a valid certificate for that status (Part-I/ Part-II) stringent action of *permanent delisting* shall be taken besides other legal action. (iii) In case of accident etc. on this account i.e. taking orders for an item for which he is not approved or taking more quantity than allowed as per his actual status the firm shall also be taken up against relevant provisions of IPC for causing accidents/injury to passenger etc. (iv) The Indian Firm / Partner / Representative if any should be treated as sales Representative of OEM subject to having valid MOU or Agreement with OEM. The validity of MOU / Agreement should be verified by RDSO from OEM at the time of granting approval. Railways while placing order should re-verify the validity of MOU / Agreement with OEM.
14. *Changes in Vendor Directory:* Approvals granted in the intervening period between the issue of this directory and the next directory to be issued should be considered as valid on the basis of the approval letters issued by competent authority of RDSO. Such changes in the vendor directory, like addition / deletion / upgradation / downgradation would be made available through amendments. vendor directory & its subsequent amendments and changes made after amendment which are available at the RDSO web-portal [www.rdsso.indianrailways.gov.in](http://www.rdsso.indianrailways.gov.in) accessible through Internet
15. Footnotes / Remark, whenever provided, may be referred to, for additional information.
16. *Contact details of Controlling Directors:* Controlling director of the item is the right person to be contacted on matters relating under approval/ technical matters. The contact details of controlling directors are given below:

S.N.	Directorate	Designation	Phone / Cell no.	E-mail Address
1	Electrical Directorate	EDSE	0522 – 2453709	<a href="mailto:edse.rdsso@gmail.com">edse.rdsso@gmail.com</a>
2	PS&EMU directorate	EDPS&EMU	0522-2454070	<a href="mailto:edpsemurdso@gmail.com">edpsemurdso@gmail.com</a>
3	Traction Installation Directorate	Sr. ED / TI	0522-2450709	<a href="mailto:edtiohe@gmail.com">edtiohe@gmail.com</a>

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**PART-A:**

**Chapter I: Electric Loco items**

**SECTION – A (Items dealt by Electrical Directorate)**

S.No.	ITEM	Current Spec. No / Drg No. / STR No.	CATEGORY OF APPROVED VENDORS		REMARKS
			PART-I	PART-II	
1	2	3	4	5	6
<b>1.0</b>	<b>CABLES</b>				
<b>1.1.</b>	<b>a. Thin Walled Cables for Conventional Locomotives &amp; EMUs/ Coaching Stock ( Chemical curing process / Electron Beam Irradiation curing process)**</b>	<b>ELRS/SPEC/ELC/ 0019, Rev '2' of February 2011 *</b>	<b>a.Nicco / Kolkata (77000 kms) (With Electron Beam Irradiation curing process) b. Huber &amp; Suhner AG. (195500km) (With Electron Beam Irradiation curing process ) c. Radiant RSCC Specialty Cable Pvt. Ltd Hyderabad (9800 kms) (With Electron Beam Irradiation curing process) d. M/s Siechem Technologies P. Ltd Chennai for all sizes (With Electron Beam Irradiation curing process)</b>	<b>a. NICCO / Kolkata (37000 km) (with chemical curing Process ) b. UNIVERSAL / Satna (1000 km) with chemical curing Process ) c. Apar Industries Ltd ( Unit:Uniflex cables) Mumbai (950 kms) ( with chemical curing Process ) d. M/s Leoni Studer AG, Herrenmattstr 20, Postfach 63, CH-4658, Daniken Switzerland (With Electron Beam Irradiation Curing process) For 1.5 sqmm &amp; 2.5 sqmm single layer insulation, single core 750 V control cable only.</b>	<b>CLW/ICF/RCF has been advised vide RDSO letter No. EL/8.1.25./1 dt. 2.11.06 to place educational order on M/s Leoni &amp; Studer Transportation system GMBH. *Rev'2' is applicable w.e.f. 24.02.2011 **Please refer RDSO letter no EL/2.2.37 dated 23.03.2009</b>
	<b>b. Thin Walled Cable for 3-phase locomotives</b>	<b>Single Core Cable CLW/ES/3/0458</b>	<b>a. Huber &amp; Suhner AG. b. Nicco/Kolkata (77000 kms) (All sizes except 1.5 mm<sup>2</sup> cable) c. Radiant RSCC Specialty Cable Pvt. Ltd Hyderabad (9800 kms)</b>	<b>a. M/s Nicco / Kolkata For 1.5 mm<sup>2</sup> size cable b. M/s Siechem Technologies P. Ltd Chennai</b>	
		<b>Multi Core Cable CLW/ES/3/0459</b>	<b>a. Huber &amp; Suhner AG (195500 kms) b. Nicco / Kolkata (77000 kms)*(All sizes of multicore cable except 0.5 mm<sup>2</sup> dia.) c. Radiant RSCC Specialty Cable Pvt. Ltd Hyderabad (9800 kms)</b>	<b>a. Nicco / Kolkata (77000 kms) (For multicore cable with 0.5 mm<sup>2</sup> dia) b. M/s Siechem Technologies P. Ltd Chennai</b>	
<b>1.2.</b>	<b>Single Core &amp; Multi Core a) Elastomeric Cables (for loco &amp; EMU)</b>	<b>E-14/01 (Rev.2) 1993 (part I &amp; II) E-14/01 (Rev.2)</b>	<b>a. NICCO / Kolkata (37000 kms) b. @UNIVERSAL / Satna(1000 kms) c. Apar Industries Ltd (Unit-Uniflex cables) / Mumbai (950 kms)</b>	<b>a. @ M/s Nangalwala Impex (P) Ltd. Alwar b. M/s Mansfield Cable Co. Noida</b>	<b>*Only for Elastomeric cables. **All sizes except 270 sq mm.</b>



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	b) HRPVC cables (for EMUs & coaches)	1993t III	d. UNITED/ Noida (2520 kms) e. IMT/New Delhi * (2400 kms) f. SKYTONE/ Faridabad** (5805 kms)		@ only for E-14/01 (Rev.2) 1993 (part I & II)
1.3.	Zero Halogen Low Smoke Cables	E-14/04 (Rev.1) 1998	a. NICCO / Kolkata (77000 km) b. Apar Industries Ltd ( Unit:Uniflex cables) Mumbai (950 kms) c. Universal / Satna (500 kms)	a. Radiant RSCC Specialty Cable Pvt. Ltd Hyderabad	
2.	<b>CARBON BRUSH</b>				
2.1.	TM HS-1050Er & TM HS 15250A	ELRS/SPEC/CB/ 0027 Rev '0' of Sept.-2003	a. ACPL –using EG-105 (S) Imported / Indigenous grade of ACPL(8,09,000) b. *Mersen India-using EG-9049 imported grade of Mersen/France ( 8 Lakhs)	a. Mersen India-using EG-8220 indigenous grade of Mersen India (250000)	The list contains approved sources of carbon brushes for use on Electric Locomotives. For list of grades of carbon blocks for various traction application, refer to RDSO's letter no. EL/2.2.70 dated: 27.06.2012 * These sources should obtain carbon brush blocks for manufacture of brushes from approved manufacturers after inspection by RITES
2.2.	Earth return brush for HS1050Er & HS15250A TM.	-----	a. ACPL– using BM-51 Imported / Indigenous grade of ACPL (8,09,000) b. Mersen India-using BE-14ZI indigenous grade of Mersen India (8 Lakhs)	-----	
2.3.	MCPA Type CRC-150	-----	a. ACPL-using EG-14D(I) Imported / Indigenous grade of ACPL	-----	
3.	<b>ALL TYPES OF ROLLER &amp; BALL BEARINGS</b>				

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3.1.	Bearing for traction motor type HS1050Er /HS15250A	NU-330 & NH-324	<p>a. SKF/Germany/Austria. PE:NU - 330ECMA P64VA301 (Shoulder Guided) CE: NJ324ECMA P64 PVA301 +HJ324EC/VA301 (Shoulder Guided) (5 lakh piece / yr.)</p> <p>b. Schaeffler KG / Germany, Romania, Italy (Brand name- FAG) PE: NU-330EM1A P64F1 (Shoulder Guided)(2000) CE:NJ-324EM1AP6R-155,195 F1+ HJ 324EF1 (Shoulder Guided) (5000)</p>	<p>a. NEI, Jaipur (Brand name- NBC) PE::TS2-NU330EL1BX1CS188P6 (Shoulder Guided) CE:TS2-NH324L1BX1CS175MP6 (Shoulder Guided)</p>	For supply of bearings through agents refer to Railway Board letter No. 99/RS(G)/709/4 dated 3-12-2002
3.2.	Bearings for traction motor TAO-659	NU-328 & NH-318	<p>a. SKF/Germany/Austria PE: NU328 ECM C4 VA 301 CE: NH318 ECM C4 VA 301</p> <p>b. Schaeffler KG / Germany, Romania, Italy (Brand name- FAG) PE: NU328E.M1C4F1 CE: NJ318E.M1.C4.F1+HJ318E.F1</p> <p>c. FAG Bearings India Ltd. For NH 318 only (10,000) \ CE: NJ318E.M1.C4.F1+HJ318E.F1</p>	-----	For supply of bearings through agents refer to Railway Board letter No. 99/RS (G)/709/4 dated 3.12.2002
3.3.	Auxiliary Machine bearings (Including 3 – phase Locomotive & EMUs)		<p>a. SKF/Europe</p> <p>b. Schaeffler KG / Germany, Romania, Italy (FAG)</p> <p>c. SKF (India)</p> <p>d. FAG Bearings India Ltd Vadodara Note : For type RMS 9 Bearing : SKF South Africa &amp; Italy</p>	<p>a. NEI, Jaipur(Brand name-NBC)</p> <p>b. Tata Steel Limited (Bearing Division) Kharagpur</p>	
3.4.	Suspension bearing for Hitachi/TAO-659 Traction Motor		<p>a. Timken, USA (2000 sets / yr.) (PE: M249747/710) (CE: M349547/510)</p> <p>b. Schaeffler KG / Germany, Romania, Italy (Brand name- FAG) (PE: 547733)(10,000) (CE: 547734)(10,000)</p> <p>c. SKF/Germany (PE: M249747/710) (CE: M349547/510)</p>		

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3.5.	3 Phase Locomotive Traction Motor Bearing for TM type 6FRA6068	NU2236 & NJ320	a. SKF/Germany, Austria DE: NU2236ECMRD/C4VA301 NDE:NJ320ECM/P64VA3091+ HJ320EC.VA301 b.Schaeffler KG / Germany, Romania, Italy (Brand name- FAG) (5000 nos.) DE: NU2236E.801488, NDE: NJ320EM1.C4F1.J20A+HJ320EF1		
3.6.	3 Phase Locomotive Traction Motor Bearing of TM type 6FXA7059	NU224 & NH219	a. SKF/Germany, Austria DE: NU224ECP C4.VA301, NDE: NJ219ECP.C4.VA309 +HJ219 EC.VA301 b. Schaeffler KG/ Germany, Romania, Italy (Brand name- FAG) DE: NU224E.M1.C4.F1 NDE:NJ219E.TVP2 C4 F1.J20A+HJ219EF1		
3.7.	Suspension Tube Bearings for WAG9/ WAP7 locomotives	NU 1964 & NH1044	a. Schaeffler KG/ Germany, Romania, Italy (Brand name- FAG) DE: NU1964 M1A.C4 NDE: NJ1044.566185+HJ1044 b. M/s SKF/ Germany DE: NU1964 MA C4 VA327 NDE: NJ1044 MP C4VA 327+HJ1044 VA335	---	
4.	Items common for Traction Motor type HS 15250A & TAO 659.				
4.1.	Glass Banding tape	RDSO Specification No. SPEC/E-7/17-Rev'1' of May 2004	a. INTAF/Kolkata (65 lakh mtrs./yr.) b. Nashik Insulation/Nasik (15 lakh mtrs.)	a. M/s Rotomac Electricals, New Delhi	.
4.2.	Polyamide (Nomex) Insulations.	---	a. DuPont, USA	-----	
4.3.	Polyimide (Kapton) Insulations.	---	a. DuPont, USA,	a. Kaneka Corp,USA	
4.4.	Polyamide (Nomex) & Polyimide (Kapton) composite	---	a. PRS Permacel, Mumbai (712500 m2)		Sources for Polyamide as per clause 4.2. Sources for Polyimide as per clause 4.3

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4.5.	Polyimide covered copper Conductors	CLW Spec. No. 4TMS.095.002 Rev. '0'	a.Venus Electronics, Mumbai(200 T) b. Pearl Insulation, Bangalore(200 MT) c. Nicco, Calcutta(150 MT) d.VimleshInd,Sonepat (200 MT) e. Malwa Strips Pvt Ltd./ Dewas (240 MT)	a. Deep Leela, Bangalore. (8 tons)	
4.6.	Polyimide Adhesive tape	CLW Spec. No. 4TMS.095.038	a .PRS Permacel, Mumbai (712500 m2) b. CG PPI/Goa (6 lakh m2 ) c. Intek Tapes Pvt Ltd Bangalore (22.5 Lakh m2/Yr) d. 3A Associates Incorporated / Mumbai (30 lakh mtrs. )		
4.7.	Tetra Fluoroethylene Tape (4 FT) and Tetra Fluoroethylene Tape Treated with Sodium (4 FTNA)	Hitachi Spec No. A-0124 Alt. 2	a. TFE Coating/Ahmedabad (11 lakh mtrs.) b. Plastic Products/Ahmedabad (40 lakh mtrs. ) c. Plastvolta / Mumbai (2.2 lakh mtrs.)		
4.8.	Tr.Motor stator & BHRR Inter-connecting cable (Fluonlex cable)	Hitachi Specn.No. E-0028	a. Hitachi Cable Ltd Japan . b. Universal Cable/Satna. (2000 Kms.)	a. Radiant RSCC Specialty Cable Pvt. Ltd Hyderabad	
5.0	Items only for TRACTION MOTOR TAO-659				
5.1	Impregnating Varnish for TM Armature TAO-659		a. Elantas Beck India / Pune (50 tons ) (FT-2005/500EK.)	a. Rotomac / New Delhi (RE009) (150 tons )	
5.2	Anti-tracking Varnish TM TAO-659		a. Elantas Beck India/Pune (F-93) (5 tons ) b. Rotomac / New Delhi (RE-118) (80 tons )	-----	
5.3	MicaBonding varnish for GMS/ GMGS tape & GMGS sheets		a. DC-994 of Dow Corning/USA. (300MT)	-----	
5.4	Armature Putty (excluding Hitachi TM)	RDSO Spec No. E-7/19 Rev '1'	a. INTAF/Kolkata ( 90,000 kgs )		
6.0	Items for Hitachi traction motors: Type: HS-15250A				

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6.1	Traction Motor Type: HS-15250A with earth Brush Assly (Without Axle Suspension Unit, Pinion, Gear & Gear Case Assly) 5503 / 000	4T,CLW/TM/ HITACHI-15250A, ALT-6	a. M/s. BHEL/Bhopal b. M/s. CGL/ Bhopal	a. M/s Kirloskar Elect. Co. Bangalore b. M/s. Rotomac Electricals Kolkata.	.
6.2	Armature Assembly for Hitachi HS-15250A Traction Motor	CLW Spec No 4TMS.095.039 with latest alteration	a. M/s. BHEL/Bhopal b. M/s. CGL/ Bhopal	a. M/s Kirloskar Elect. Co. Bangalore b. M/s. Rotomac Electricals Kolkata.	
6.3	Commutator Assembly 5553/000	(i) CLW Spec No 4TMS.095.034 Rev. 4 (ii) Drg. No 2TWD.095-045 Rev. 1 (iii) RDSO STR No - RDSO/2008/EL/STR / 0045 Rev. 1	a. M/s Sahney Commutators P.Ltd/Bangalore b. M/s. CMC Belgaum c. M/s. Power pack Commutator/ Valsad d. M/s. BHEL/ Bhopal	----	
6.4	Hitachi Field Coils (MP & IP ) (Hitachi Drg Nos. 10S808-414, 10S808-415, 10S808-416, 10S808-417, 10S808-418, 10S808-419 with latest alteration)	RDSO's STR No. RDSO/2007/EL/STR/023 Rev '1' CLW's Specification No. 4TMS.095.032 ALT-4 & 033 ALT-4	a. Saini Electrical & Engg. Works, Navi Mumbai.	a. M/s Stesalit Limited, Baddi. b. M/s Cosmic General Industries, Mumbai. c. M/s Rotomac Electricals Pvt Ltd. Kolkata.	
6.5	a) Polyamide Non-Woven Mat GXO 200, 0.9 mm thk. 5575/013 b) Polyamide Non-woven Mat GXO 302, 1.2mm thk. 5588/208	A0298, ALT-A A0298, ALT-A	a. M/s. Sumitomo Corporation/japan		
6.6	Polyamide Woven Tape NWT 5575/ 010	A0248, ALT-A	a.M/s.Sumitomo Corporation/Japan		
6.7	Polyamide Glass sheet GAB 5588/228	A0240, ALT-B	a. Manufactured by M/s Mitsub-ishi Paper Mills Ltd./Japan and Supplied by M/s. Sumitomo Corporation/Japan		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.

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<b>6.8</b>	<b>Impregnating Varnish HEW-290 (4 components) 5588/216,217,218 &amp;219</b>				
6.8, a	Multi (3 & 2) Functional Epoxy Resin (L-2832)	A0272, RDSO/2008/EL/SPEC/0078 (Rev0)	a. M/s. Sumitomo Corporation/Japan b. Manufactured by M/s Fine Finish Organic Pvt.Ltd/ Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (EPOFINE-290 A)		
6.8, b	Di-functional Epoxy Resin (DER-332)	A0273, RDSO/2008/EL/SPEC/0078 ( Rev 0)	a. M/s. Sumitomo Corporation /Japan b. Manufactured by M/s Fine Finish Organic Pvt.Ltd / Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (EPOFINE-290 B)		
6.8, c	Acid Anhydride (MHAC-P)	A0274 Alt. -1, RDSO/2008/EL/SPEC/0078 (Rev 0)	a. M/s. Sumitomo Corporation / Japan b. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (FINE HARD -290 C)		
6.8, d	Catalyst (P-200)	A0271 Alt. -1, RDSO/2008/EL/SPEC/0078 (Rev 0)	a. M/s. Sumitomo Corporation / Japan	Manufactured by M/s Fine Finish Organic Pvt.Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (Accelerator P-200)	
<b>6.9</b>	<b>Epoxy Compound HEW-821 (4 components) 5588/403,404 &amp; 406</b>				
6.9, a	Main resin HEW-821A 5588/403	(A0116,ALT-1) / (RDSO/2008 /EL/SPEC/0079 Rev '0'	a. Manufactured by M/s Hitachi Works of Hitachi Ltd./Japan and Supplied by M/s. Sumitomo Corporation / Japan.	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (EPOFINE-821A)	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.9, b	Main resin HEW- 821B 5588/403	(A0116,ALT-1) / (RDSO/2008 / EL/SPEC/0079 Rev '0'	a. Manufactured by M/s Hitachi Works of Hitachi Ltd./Japan and Supplied by M/s. Sumitomo Corporation / Japan.	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (EPOFINE-821B)	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.9, c	Hardener HEW-821C 5588/404	(A0116,ALT-1) / (RDSO/2008 / EL/SPEC/0079 Rev '0'	a. Manufactured by M/s Hitachi Works of Hitachi Ltd./Japan and Supplied by M/s. Sumitomo Corporation / Japan.	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.

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				& Engineering works / Mumbai (FINEHARD-821C)	
6.9, d	Filler HEW-821D 5588/ 406	(A0116,ALT-1) / (RDSO/2008 / EL/SPEC/0079 Rev '0')	a. Manufactured by M/s Hitachi Works of Hitachi Ltd./Japan and Supplied by M/s. Sumitomo Corporation / Japan.	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (FINEFILL-821D )	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.10	Epoxy Compound HEW-823 (2 Components) 5588 / 237&238	(A0256,ALT-2) / ( RDSO/2008 / EL/ SPEC /0080 Rev '0')	a. Manufactured by M/s Hitachi Works of Hitachi Ltd./Japan and Supplied by M/s. Sumitomo Corporation / Japan.		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.11, a	Finishing Varnish TVA-1410 5588/407	(A0209) / ( RDSO / 2008 /EL / SPEC / 0081 Rev '0')	a. Manufactured by M/s Kyocera Chemical Corp. / Japan Supplied by M/s. Sumitomo Corporation/Japan b. M/s 3A Associates Incorporated, Mumbai (FV 5420)	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai ( FINECOAT-1410 )	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.11, b	Thinner-S-110 5588/409	(A0152) / (RDSO/2008/EL/ SPEC /0082 Rev '0')	a.Manufactured by M/s Hitachi Chemical Works. / Japan Supplied by M/s. Sumitomo Corporation / Japan b. M/s 3A Associates Incorporated, Mumbai (Thinner 3A 110)	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (THINNER-1410 )	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.12	Solvent less Epoxy Resin HEW-502 (2 components) 5575 / 017 & 019				
6.12, a	Main Resin HEW-502 NA+ Hardener HEW- 502- NB, 5575/017	(A0108) / (RDSO/2008/EL/ SPEC / 0083 Rev '0')	a. Manufactured by M/s Hitachi Works of Hitachi Ltd. / Japan Supplied by M/s. Sumitomo Corporation / Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (EPOFINE- 502 NA & NB)	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.12, b	Accelerator HEW-502 NC, 5575 / 019	(A0108) / (RDSO/2008/EL/ SPEC / 0083 Rev '0')	a. Manufactured by M/s Hitachi Works of Hitachi Ltd. / Japan Supplied by M/s. Sumitomo Corporation / Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (ACCELERATOR - 071 )	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.13, a	Synthetic Varnish	(A0205, ALT-1) /	a. Manufactured by M/s Hitachi	a. Manufactured by M/s Fine Finish	While placing Order,

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	WSY-285 5588 / 220	(RDSO/2008/EL/ /0084 Rev '0')	SPEC	Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan	Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (FINECOAT-285 )	Railways should re-verify the validity of MOU / agreement with OEM.
6.13, b	Thinner S-30, 5588 / 234	(A0151) / (RDSO/2008/EL/ /0085 Rev '0')	SPEC	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & Supplied by M/s Saini Electrical & Engineering works / Mumbai (THINNER-285 )	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.14	Alkyd Varnish WI-294 5535 / 005	(A0175, ALT-1) / (RDSO/2008/EL/ /0086 Rev '0')	SPEC	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (INSUFINE-294 )	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.15, a	Finishing Varnish WSY-101 (Core), 5528/025	(A0201, ALT-1) / (RDSO/2008/EL/ /0087 Rev '0')	SPEC	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (FINECOAT-101)	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.15, b	Thinner S-30, 5588/234	(A0151) / (RDSO/2008/EL/ /0085 Rev '0')	SPEC	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (THINNER-101)	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.16	Mold Release Agent 5588 / 246	A0119 Alt-1		a. Manufactured by M/s Shinetsu Chemicals / Japan Supplied by M/s. Sumitomo Corporation / Japan ( KS-707) b. M/s Wacker Chemie / Germany ( Paste P 250 ) c. M/s Dow Corning / USA ( DC-7 )		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.17, a	Finishing Varnish WSY-195R (Commutator), 5565 / 078	(A0204, ALT-2) / (RDSO/2008/EL/ /0088 Rev '0')	SPEC	a. M/s. Sumitomo Corporation/Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & supplied by M/s Saini Electrical &	



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				Engineering works /Mumbai ( FINECOAT-195 )	
6.17, b	Thinner, S-110, 5588 / 409	(A 0152) / (RDSO/2008/ EL/Spec/0082 Rev '0')	a. M/s. Sumitomo Corporation/Japan	a. Manufactured by M/s Fine Finish Organic Pvt. Ltd / Taloja & supplied by M/s Saini Electrical & Engineering works / Mumbai (THINNER-1410)	
6.18	i) Silicon Rubber Tube (ST 110 DG) 5565/819 ii) Silicon Rubber Tube (ST 170 DG) 5580/104	A0251, ALT-B	a. Manufactured by M/s Shinetsu Chemicals / Japan Supplied by M/s. Sumitomo Corporation / Japan		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.19	Wedge 5522/069	10S. 784-757, Alt C F.0006	a. M/s Sumitomo Corporation/Japan b. M/s NRK / Japan c. M/s Permal Wallace/ Bhopal d. M/s Micaply / Bhopal e. M/s Glass Fibre & Allied Ind / Mumbai		
6.20	Flexible Mica Sheet MP-60-FCZ, 5522/005, 008	A0268, ALT-2	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan	a. M/s Lakshmanan Isola Pvt. Ltd. Bangalore	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.21	Glass Mica Sheet GU- FZ 5522/012	A0269, ALT-C	a. M/s. Sumitomo Corporation / Japan		
6.22	Semi cured Ceramic Sheets-SCQ-H 5588/202 & 5586/202	CLW Spec. No A0 235, Rev. 1	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s Permal Wallace/ Bhopal c. M/s PRS Permacel Pvt. Ltd. / Mumbai d-M/s3A Associates Incorporated / Mumbai e. M/s Micaply / Bhopal	a. M/s Isovolta (I) Pvt.Ltd / Mumbai b. M/s Plastvolta / Mumbai	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.23	Glass backed uniform Mica Sheet GUA-CN-3 5588/206	A0270, ALT- 5	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s Isovlta (I) Pvt.Ltd. Mumbai		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.

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			c. M/s PRS Permacel Pvt Ltd Mumbai d. M/s Lakshman Isola Bangalore		
6.24	Glass backed uniform Mica Tape GUAT-CN-3 5588/209, 212	A0270, ALT-5	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s PRS Permacel Pvt Ltd Mumbai c. M/s Isovolta (I) Pvt.Ltd / Mumbai d. M/s Lakshman Isola/ Bangalore	a. M/s Perfect Insulators Kolkata	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.25	Polyimide film backed uniform Mica Tape KUAT-CZ 5524/009	A0266, ALT-4	a. Manufactured by M/s Hitachi Chemical Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s PRS Permacel Pvt.Ltd Mumbai c. M/s Isovolta (I) Pvt.Ltd Mumbai d. M/s Lakshman Isola Bangalore		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.26	Polyamide Adhesive £ Tape (Nomex-N) 5522/009	CLW Spec. No. 4TMS.095.037	a.M/s Dupont/USA or their authouized Agents b. M/s PRS Permacel Pvt Ltd Mumbai c. M/s Sumitomo Corporation Japan	a. M/s CGPPI Adhesive/Goa	£ Only DUPONT material should be processed by M/s, Permacel & CGPPI
6.27	Spiral Tube (Kapton+ Connex: KCTUN- CI), 5524/005	A0267, ALT-H	a. Manufactured by M/s Hitachi Works of Hitachi Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s 3A Associate Incorporated / Mumbai c. M/s Micaply Bhopal d. Union Prestress Pvt. Ltd. Jaipur		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.28	Silicone Rubber Tape HTV-HBT-H5, 5575/008	A0128, ALT-B	a. Manufactured by M/s Fuji Polymer Industries Co. Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s CG PPI Adh/ Goa c. M/s PRS Permacel Pvt Ltd Mumbai d. M/s Bells Organic/Kolkata	a. M/s Plastvolta/ Mumbai	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.29	Tetron Tape ETT 5522/090	JIS: C2205'75	a. Manufactured by M/s Hoshino Industries Co Ltd./ Japan and Supplied by M/s. Sumitomo Corporation / Japan b. M/s Khandelwal Ind/Kolkata		While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
6.30	i) Vee Insulation of	10R.793-522, ALT.I	a. M/s BHEL/ Bhopal	a. M/s Rotomac Elect New DeLhi	

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	Commutator (Core side), 5538 / 001 ii) Vee Insulation of Commutator (Front side), 5538 / 002 iii) Insulating ring of Commutator 5538 / 003	ITEM-1 10R.793-522, ALT.I ITEM-2 10R.793-522, ALT.I ITEM-3	b. M/s Hatim Dielectric Kolkata c. M/s Sahaney Krikwood Pvt. Ltd Mumbai		
6.31	U-shape Insulation (Nomex-410) 5522/070	10S, 784-758, ALT.1	a. M/s Hatim Dielectrics/ Kolkata b. M/s Power Mica Insulators/Kolkata c. M/s Evonne/ Bhopal d. M/s BG Industries/ Hawrah		
6.32	Segment Mica 5535/004	10S.813-324, ALT.F	a. M/s Sahaney Krikwood Pvt. Ltd	a. M/s Rotomac Elect New DeLhi b. M/s Power Mica Insulator / Kolkata	
6.33	Mould Release Sheet (Nomex-R) 5522/001	A0139, ALT.2	a. M/s PRS Permacel Pvt Tld. Mumbai b. M/s Sumitomo/Japan c. M/s 3A Associates Incorporated/ Mumbai d. M/s Micaply/ Bhopal e. M/s Permali Wallace/ Bhopal f. M/s CGPPI Adhesive/ Goa	a. M/s Hatim Dielectric Kolkata	Only Dupont material to be used for processing
6.34	(i) Polyimide Glass laminate Spacer (IGL-10), 1mm Thick: 5575/003 , 2mm thick: 5575 / 024, and 5mm Thick: 5575 / 025, (ii) Polyimide Glass laminate Sheet (TILG-1000), 0.4 mm Thick. 5522/002	10T.831-309, ALT.2 REF-2, REF-3 & REF-4 A0239, ALT.1 A0132, ALT.B	a. M/s Sumitomo/Japan b. M/s Permali Wallace/ Bhopal c. M/s Micaply/ Bhopal		
6.35	Polyimide Sheet (UPILEX) Size:0.05-mm x 508 mm wide in 100 mtrs. Roll length, 5588/207	A0241, ALT.2	a. M/s Sumitomo/Japan b. M/s Dupont/USA		Authorised agent/dealer of Dupont/USA

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6.36	Teflon Ring, 5538/014	10R.812-076,ALT-F	a. M/s TFE Coating/Ahmedabad b. M/s Plastic Products Engg. Co. / Ahmedabad c. M/s Plastvolta/ Mumbai		
6.37	Tetra Fluro Ethylene sheet, Size: 2x 600x5m length 5588/241	4TMS.095.022	a. M/s TFE Coating/Ahmedabad b. M/s Plastic Products Engg. Co./ Ahmedabad c. M/s Plastvolta/ Mumbai d. M/s Hindustan Nylon/Miraj		
7.	Lubricants for 3-phase Locomotive		-----	-----	For application wise details, please refer to RDSO's Technical Circular No. RDSO/2006 /EL/TC/0034 (Rev.' 4') dtd. 21.07.2008
8.	MICROPROCESSOR based Energy cum Speed monitoring unit for Electric Locomotives	ELRS/SPEC/SPM/0002, Rev '2' June-2004 with Amendment No 1,2,3,4, 5 & 6	a. M/s Autometer Alliance Ltd., Noida (1200) b. M/s Medha servo Drive Pvt. Ltd., Hyderabad (1200) c. M/s Laxven Systems, Hyderabad (1200) d. Stesalit Ltd., Kolkata (800)	----	M/s I.C. Electricals Company (P) LTD. Haridwar has been approved as an Educational source vide this office letter No EL/2.2.9/10 (IEC) dated 21.09.2011.
9.	MICROPROCESSOR based control and fault diagnostic system for electric locomotives.	ELRS/SPEC/MPC/FDS/0001/ REV.'3' April 2013.	a. Medha Servo Drives, Hyderabad (600 sets) -	a. Stesalit Ltd. Kolkata (500 Sets) b. M/s I.C. Electrical Co pvt Ltd Haridwar (500 sets) c. Stone India Ltd. Kolkata (200 Sets)	
10.	Vigilance Control Device Tap changer Loco	RDSO/2008/EL//SPEC/0025 ( Rev.5 Mar. 2010) with Amendment No '1'	a. M/s I.C. Electrical Co. Pvt. Ltd. Haridwar - b. Saitronik Electric Equipments, Hyderabad	a. Medha Servo Drives, Hyderabad b. Autometers Alliance Ltd Noida c. M/s Stesalit Ltd. Kolkata d. Stone India Ltd. Kolkata.	
11.	180 KVA Static converter for AC Electric Locomotive	RDSO Specification No. ELRS/ SPEC/ SI/0018 Rev.1 of March 2006 with amendment No 1	a. M/s. Siemens Ltd./ Nasik (240 / yr.) b. M/s. Autometers Alliance Ltd., Noida (200/yr) c. M/s. Medha Servo Drives Pvt. Ltd, Hyderabad (100 /yr.) d. M/s. Hind Rectifiers Ltd, Mumbai	a. M/s. Bombardier Transportation. Vadodara (150/yr. ) c. .M/s ABB Ltd. Bangalore (150/ yr.)	

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			(200/ yr.)		
12.	Axle Box Bearing and Complete Axle Box Assembly with Bearing (i) For WAP5 Locomotives	TBU- 150	M/s SKF/ Italy (1,50,000 nos./yr.) SKF No 1639457A	...	...
	(ii) For WAG9/ WAP7/ Locomotives	CRU 150	a. M/s SKF/ Germany SKF No BC2- 0067A b. M/s SKF Technologies (India) Pvt. Ltd. Ahmedabad SKF No “BC2- 0067D / W33”		In tendering process , at a time offer shall be made either from M/s SKF/ Germany or M/s SKF Technologies (India) Pvt. Ltd. Ahmedabad
		RB 5080	*M/s NEI/ Jaipur (6000 sets/yr)		*25% Maximum Quantities used in WAP7 Locomotives
13	Bearings for Aluminium Gear Case of WAP5				
13.1	Main Gear bearing	L 558548 – L 558510	Timken/USA (OEM)	---	
13.2	Intermediate Gear bearing	M 432148A – M 432111	Timken/USA (OEM)	---	
13.3	Pinion bearing	798-792	Timken/USA (OEM)	---	
14.	TRANSFORMER				
14.1	Transformer Main (TFP) 5400 KVA	CLW/ES/T-22/M	a. BHEL/ Jhansi b. Crompton c. Hind Rectifier d. Stesalit e. High Volt, Mumbai	a. EMCO b. Tribhuwan Enterprises, Faizabad	Sources approved for 5400 KVA transformer are also approved for repair of 3900 KVA transformer in terms of RLY Board's letter No. 93/Elect(TRS) /441/1 Pt dt. 4.3.2003.
14.2	Transformer Tank for 3-phase locomotives	CLW/ES/3/SK-1/0507 CLW/ES/3/SK-2/0507	a. M/s E. Nussbaumber AG / Switzerlandd b. M/s Narmada Switchgear Pvt. Ltd. Bhopal .		
15	TRANSFORMER OIL				
15.1	Inhibited Oil for Conventional Loco	IS: 12463-1988 *	-----	-----	* Part I and Part II supplier are same as at item 1.3.1 of chapter VI.

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15.2	<b>Oil for 3-phase locomotives</b>				
	(a) Transformer Oil	IEC: 60296 / CLW/ES/3/0172 (Latest)	-----	-----	This item have been transferred to TI Dte vide Note no EL/3.2.1/3 Dated 30.8.12. Part I and Part II supplier are same as at item 1.3.2(a) of chapter VI
	(b) Converter Oil	IEC: 60296 / CLW/ES/3/0172 (Latest)	-----	-----	This item have been transferred to TI Dte vide Note no EL/3.2.1/3 Dated 30.8.12. Part I and Part II supplier are same as at item 1.3.2(b) of chapter VI
16	<b>Cable Head Termination Assembly</b>				
16.1	Cable Head termination system Vertical Take-off type	ELRS/SPEC/BL/0003 (Rev.1), and Amend 1 Dec. 08	a. M/sElatstimold India (P) Ltd. Mumbai (600) (With Elastimold make CHT components of M/s Thomas & Betts,USA) b. M/s Safe System, New Delhi. (With Pfisterer, Germany make connector & busing)		
16.2	T-type Cable Head termination system.	Specification No. CLW/ES/3/0251 Alt.- B	a. M/s Elatstimold India (P) Ltd. Mumbai (With Elastimold make CHT components and submitted authorization letter from Thomas & Betts, USA) b. M/s Safe System, New Delhi. With Elastimold make CHT components		<u>Note:</u> M/s Elastimold India Pvt. Ltd., M/s safe System and M/s Tyco should be asked to submit documentary evidence for having purchased material from OEM (Thomas & Betts, USA) against each case of procurement of this item to ZR/Pus.
17	<b>Vacuum Circuit Breaker</b>				
17.1	Vacuum Circuit Breaker	No. CLW/ES/C 47 single bottle	a. BT, Vadodara for type BVAC 25.10 M07 with CGL VST type VL- 35416 -	a. Biecco Lawrie Ltd./Kolkata for type TVCB with Westing House VST	* Name changed from M/s AREVA T&D India

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	(single bottle)		33P , VITZRO VST type VI-430 & ABBVST Type VG 6 Silicon LB (420 nos) b. AAL Noida for type BVAC 25.10 Tr with CGL VST type VL- 35416 -33P & VITZRO VST type VI-430 (500 nos) c.*Schneider Electric Infrastructure Ltd. Vadodara. 22 CB with VST type V 807-4 (600 nos.)	type 35362S (300 nos.)	Ltd.
18	TAP CHANGER	ELRS/SPEC/ GR/ 0039 (Rev.1)	a. Bombardier Transportation b. M/s Autometers Alliance Ltd Noida		
18.1	TAP CHANGER N-32 COMPONENTS	OEM Pt. No. /RDSO Drg.No.	-----	.....	In compliance of Railway Boards directive issued vide their letter No. 2003/Elect (TRS)/138/ 1 dt 15-9-2003
	a. Bevel Gear	A1924/M1924/SKEL-4611	a. BT/ Vadodara (1000 nos) b. AAL, Noida c. Involute/HWH (120 nos)		
	b. Toothed Segment	A4540-2/SKEL-4612	a. BT/ Vadodara (400 nos) b. Involute/HWH (60 nos)	-----	
	c. Cam Shaft Complete	A5150/SKEL-4613	a. BT/ Vadodara (400 nos) b. Involute/HWH (110 nos)	.....	
	d. Spur Gear	A6101/SKEL-4614	a. BT/ Vadodara (400 nos) b. Involute/HWH (100 nos)	-----	
	e. Intermediate Gear	A6103a/SKEL-4615	a. BT/ Vadodara (1000 nos) b. Involute/HWH (200 nos)	-----	
	f. Spur Gear	A6110-1/SKEL-4616	a. BT/ Vadodara (2000 nos) b. Involute/HWH (130 nos)	-----	
	g. Spur Gear	A6313/SKEL-4617	a. BT/ Vadodara (600 nos) b. Involute/HWH (60 nos)	.....	
	h. Pinion	A6401-1/SKEL-4618	a. BT/ Vadodara (700 nos) b. Involute/HWH (100 nos)	-----	
	i. Bevel Gear	S1408//G1408/SKEL-4619	a. BT/ Vadodara (800 nos) b. AAL, Noida c. Involute/HWH (120 nos)		
	j. Bevel Gear	S1449/G1449/SKEL-4620	a. BT/ Vadodara (800 nos) b. AAL, Noida c. Involute/HWH (80 nos)		

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k. Bevel Gear	S1480-3& S1481-7/ G1480-3 & G-1481-7/ SKEL-4621	a. BT/ Vadodara (400 nos) b. AAL, Noida c. Involute/HWH (80 nos)		
l. Bevel Gear	S2109,S2209,S2103 / G2109, G2209 & G2103/ SKEL-4622	a BT/ Vadodara (1000 nos) b. AAL, Noida c. Involute/HWH (120 nos)		
m. Oil Pump complete	S32/G32/SKEL-4623	a. BT/ Vadodara (1000 nos) b. AAL, Noida c. Involute/HWH (45 nos)		
n. Oil Pump Device complete	S3290/G3290/SKEL-4624	a. BT/ Vadodara (1800 nos) b. AAL, Noida c. Involute/HWH (80 nos)		
o. Manual H.D. Assembly	S42/G-42/SKEL-4625	a. BT/ Vadodara (700 nos) b. AAL, Noida c. Involute/HWH (190 nos) d. SP Organisation (360 nos)		
p. 'U' section Ring	SKEL-3463,RDSO SPEC/E-4/01	a. BT/ Vadodara (38000 nos) b. AAL, Noida c. Sujan/Mumbai (100000 nos)		
q. Arc Chute for CGR	S-27G-27/SKEL-4675 Alt-1	a. BT/ Vadodara (1600 nos) b. AAL,Noida c. Arco/Mumbai d. BG industries Howrah (600 nos)	a. M/s Vallabh Industries D. & N. Haveli	
r. Contact Plate	S-1201/G1201/SKEL-4662	a.BT/ Vadodara (900 nos) b. AAL, Noida c.Stesalit/Kolkata (300 nos)		
s. Solenoid Valve	S-3933 /G3933/ SKEL-4664	a. M/s BT/ Vadodara (1000) b. AAL, Noida b. M/s Rotex / Vadodara (5000 nos)		In accordance with Railway board letter no 2003/Elect (TRS)/ 138/1/pt.2 dated 27.2.2006
t. RGR	S-4407(earlier S-38)//G4407 / RDSO MS no RDSO/WAM4/161	a. BT/ Vadodara (400) b. AAL,Noida c.. Lachhman Electronics/ New Delhi (1000 nos) d. M/s Resitech / Kolkata (200 nos)		
u. Complete contact Plate(16 sub-	S-12/G12	a.. BT/ Vadodara b. AAL, Noida		



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components)				
v. Contact Ring Inner	S-1608/G1608 /SKEL-4653	a. BT, Vadodara b. AAL, Noida c. Stesalit, Kolkata d. Involute,/ HWH		
w. Contact Ring Outer	S-1609/G1609/ SKEL-4654	a. BT, Vadodara b. AAL, Noida c. Stesalit, Kolkata d. Involute,/ HWH		
x. Cam Plate Complete(I,II, III)	S2220-1,2& 3/G2220-1,2 & 3 / SKEL-4638, Rev. 1	a. BT, Vadodara b. AAL, Noida c. Stesalit, Kolkata		
y. Insulating Ring(Inner/Outer)	S-1218-1,S-1219-1/G1218-1, G1219-1/SKEL-4661	a. BT, Vadodara b. AAL, Noida c. Stesalit, Kolkata		
z. Insulating Plate Upper	S-2114/G2114/ SKEL-4637	a. BT, Vadodara b. AAL, Noida c. Stesalit, Kolkata		
aa. Insulating Plate Lower	S-2131/G2131/SKEL- 4634	a. BT, Vadodara b. AAL, Noida c. Stesalit, Kolkata		
ab. Bevel gear	S-1490/ G-1490 /SKEL-4640	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ac. Bevel gear	A1925/A1926.3/ M-1926.3 /SKEL-4641	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ad. Planet ring with pinion	A-5209(A5150-19)/ SKEL-4644	a. M/s BT, Vadodara b. M/s Involute, HWH		
ae. Coupling shaft complete	S-2102/G2102/ SKEL-4645	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
af. Contact pin inner	S-1208/ G-1208/ SKEL-4646	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ag. Contact pin outer	S-1209/ G-1209/	a. M/s BT, Vadodara		

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	SKEL-4647	b, M/s AAL, Noida c M/s Involute, HWH		
ah. Contact roller guide	S-1516/ G-1516/ SKEL-4648	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ai. Spring retainer complete	S-2537/G-2537/ SKEL-4649	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
aj. Drive shaft	S-1401/G1401/ SKEL-4650	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ak. Cylinder with cover	A-1201 & A1212 / G-1201 & G-1212/ SKEL-4651	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
al. Air pipe complete	A-3115/ SKEL-4652	a. M/s BT, Vadodara b. M/s Involute, HWH		
am. Load switch shaft complete	S-2220/ SKEL-4655	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
an. Gearing plate complete	S-1477/ G-1477/ SKEL-4656	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ao. Drive wheel complete	S-1457/ G-1457/ SKEL-4657	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
ap. Base plate for SMGR	A-1101/ SKEL-4658	a. M/s BT, Vadodara b. M/s AAL, Noida c. M/s Involute, HWH		
aq. 3 way valve MG 6/6A	A-32/ SKEL-4633	a. M/s BT, Vadodara	a. M/s Involute, HWH	
ar. 3 way valve MG 4/5A	A-4150-30/ SKEL-4639	a. M/s BT, Vadodara	a. M/s Involute, HWH	
as. Contact lever complete	A-2306/ A-2506 / M 2314.3 SKEL-4659	a. M/s BT, Vadodara b. M/s AAL, Noida	a. M/s Involute, HWH	
at. Control cylinder complete	A-4430 / SKEL-4660	a. M/s BT, Vadodara	a. M/s Involute, HWH	
<b>19</b>	<b>Rubber Components for transmission system of 3-phase locomotives</b>			

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19.1	Spheribloc	RDSO/2007/EL/SPEC /0051 Rev.'2'	a.BHC, Germany (Indian representative M/s S.K. sales Kolkata)	---	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
19.2	Elastic Ring	RDSO/2007/EL/SPEC /0053 Rev.'0' with Amendt. No 1, Jul 10	a. Acla Werke, Germany	a. *M/s Avadh Rubber (Prop: Madras Elastomers Ltd.) / Lucknow	* Name of Company changed from M/s Avadh Rubber Limited
20	Rubber Components for Brake system for 3-phase locomotives				
	a. Rubber Components / Kits for E-70-brake system		a. M/s Faiveley Transport Rail Technologies India Ltd. / Hosur (120 loco sets /yr.)		
	b. Rubber Components /Kits for CCB system		a. M/s Knorr-Bremse Ltd. /Faridabad (100 loco sets /yr.)		
21	Brake System for 3- phase locomotives	For WAP-5, CLW / MS /10 / 031 Alt. 4 For WAG-9 Co-Co , CLW / MS /10 / 3/001Alt. ' 11'	a. M/s Faiveley Transport Rail Technologies India Ltd. /Hosur (96 sets / yr.), For E-70 Brake System b. M/s Knorr-Bremse India Pvt. Ltd. / Faridabad (120 sets / yr.) For CC Brake System.		
22	(a) Main Compressor for Conventional Locomotive 1000 LPM	CLW / ES / C-34 Alt. M	a. M/s. ELGI Equipments Ltd. Coimbatore. [Model TRC 1000 MN (UG )] (1000 nos.)	a. M/s. Ingersoll Rand (India) Ltd, Ahmedabad. CP Model No 71T2RL (Marketed by UD Marketing) (480 nos. /yr.) b. M/s Saber Dais Compression Limited, Kaithal. (Haryana). CP Model No REL1000 c. M/s Anest Iwata Motherson Ltd Noida. . CP Model No RR1000	
	(b) Main Compressor for WAG9/WAP5/ WAP7	CLW / ES / 3/0100 Alt.'C'	a. M/s Faiveley Transport Rail Technologies India Ltd./Hosur (Model 2A320D) (240 sets / yr.) b. M/s ELGI Equipments Ltd.Coimbatore (Model RR 20100 CG (M) (350 Nos.	...	

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	(c) Oil Free Main Compressor for 3-Phase Electric Locomotive	RDSO/2008/EL/SPEC/0076 (Rev '1')		a. Knorr Bremse India Pvt Ltd, Faridabad ( Model VV270T)	
23	<b>LEAD ACID BATTERIES FOR ELECTRIC LOCOS</b>				
23.1	Lead acid batteries 75 ah for electric locos				Refer chapter-IV Equipment for Trainlighting & Aircondition at S.N.1.2
23.2	Low maintenance lead acid batteries 75 ah for locomotives				
24.0	<b>Pantographs</b>				
24.1	Pantographs for Freight Locos (AC application)	RDSO/2008/EL/SPEC/0066 Rev.'0' dated 20.6.2008 and Amend 1 Dtd 31.12.08	a. M/s Stone India Ltd. Kolkata (Type AM 12) (360 sets/yrs) b. M/s Contransys Pvt.Ltd , Kolkata (Type IR 01) c. M/s General Stores & Engineering Co, Kolkata (Type PAN 01)	a. M/s Concept Rail Engineers, Pvt. Ltd. Kolkata (Type EL- 01)	Suitable for working speed upto 120 kmph for EMU/MEMU Application. RDSO Letter No EL/ 8.1.10 dt 29.09.2008 refered
24.2	Pantograph for Passenger Locomotives. (AC application)	CLW/ES/P-5 Alt.'F'	a. M/s. Stone India Ltd., Kolkata (type AM-92) (240 sets/yr) b. M/s. Contransys Pvt. Ltd., Kolkata (Ttype IR-03H)	a. M/s.Schunk Metal & Carbon (I) Pvt. Ltd., Bangalore (Type WBL-85)	Suitable for speed above 120 kmph also.
		RDSO/2009/EL/SPEC/009 2 Rev. '0'	--	a. M/s.Schunk Metal & Carbon (I) Pvt. Ltd., Bangalore ( Type WBL-85)	Suitable for speed above 120 kmph also.
24.3	Pantograph for High Reachfreight Locomotives	RDSO/2007/EL/SPEC/ 0054 Rev.'1' of Sept. 2012	-----	a. *M/s Stone India Ltd. Kolkata (Type OMNI VERSAL INTELLI PANTO) - as per spec. Rev. '0' ) b.*M/s Schunk Metal & Carbon (I) Pvt. Ltd., Bangalore ( Type WBL-85 HR - as per spec. Rev. '0' ) c. *M/s. Contransys Pvt. Ltd., Kolkata (for recknellWillisUKMake panto - as per spec. Rev. '0' ) d. *M/s Faively Transport Rail Technologies India Ltd. / Hosur (Type LX 3600 as per spec. Rev. '0' )	*Approved as per RDSO specification no. RDSO /2007/EL/SPEC/ 0054 Rev. '0'. However revalidation of M/s. Stone India Ltd. (Type ABOH), M/s. Schunk (Type WBL-85 HR), M/s. Contransys (for Brecknell Willis), M/s Faiveley Transport Rail Technologies India Ltd. (Type LX 3600) as per revised specification No. RDSO/2007/EL/SPEC/ 0054 Re v. '1' is awaited.

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<b>25.0</b>	<b>Spares for Pantograph</b>				
25.1	Spares for AM 12 or IR 01 or PAN 01 type Pantograph	RDSO/2008/EL/SPEC/0066 Rev.'0' dated 20.6.2008 and Amend 1 Dtd 31.12.08	a) M/s Stone India Ltd, Kolkata. (1200 sets) b) M/s Contransys Pvt. Ltd., Kolkata. c) M/s General Stores & Engineering Co., Kolkata.	a. M/s Concept Rail Engineers Pvt. Ltd., Kolkata (Type EL- 01 only)	
25.2	Spares for AM 92	CLW/ES/P-5/Alt. F	M/s Stone India Ltd, Kolkata.	--	
25.3	Spares for IR 03 H	CLW/ES/P-5/Alt. F	M/s Contransys Pvt. Ltd., Kolkata	--	
25.4	Spares for WBL- 85	CLW/ES/P-5/Alt. F	M/s Schunk Metal & Carbon (I) Pvt. Ltd. Bangalore.	--	
26.	Metalised Carbon Strip for Pantographs	RDSO/2009/EL/SPEC / 0097 Rev. '0' , June 2009	a. M/s Assam Carbon Products Ltd. Grade MY7D (18000/yr.) b. M/s Mersen India Pvt. Ltd. / Bangalore {Grade P5696 (18000/yr.)} c. M/s Schunk Metal & Carbon (India) Pvt. Ltd. Grade BH424C1 (18000/ yr.)	-----	
27.	Crown Gear Coupling for WAP5	AEB 452478 (IA 012-00453, Rev.1) IA 011-00234, Alt. '4' RDSO/2010/EL/SPEC/0107 Rev.'0' June 2010.	a. ZF/Hurth, Germany (OEM) b. M/s. Mackeil, Kolkata (100 Nos.)	a. **M/s Tata Steel Ltd ( Growth Shop) Jamshedpur	** Prototype to be offered by Firm and Type Test is to be carried out .
28.	Aluminium Gear Case for WAP5	ABB drg. No ID-IA011-00222 Rev'5'	(i) BT Germany (ii) M/s Alutec / Germany. (OEM) Supplied by M/s River Enng. Pvt. Ltd. Noida	a. M/s. Mackeil, Kolkata (96 Nos.) b. M/s Henschel Antriebstechnik GmbH Henschelplatz 1, 34127, Kassel, Germany and supplied by M/s Arihant Electricals, New Delhi.)	While placing Order, Railways should re-verify the validity of MOU / agreement with OEM.
29.0	<b>Motor for Oil cooling unit for Three Phase Locomotive</b>				
29.1	25KW Motor for oil cooling unit for Three Phase Locomotive	RDSO Spec No. E-10/3/09 (Motor), with Amendment No 1,2,3 , & 4	Landert Motoren AG/SWZ	a. * Bharat Bijlee Ltd Kolkata b. * ABB Ltd, Faridabad c. * CGL, Ahmadnagar	*Subjected to re-offer of Prototype & its clearance

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29.2	Blower for Oil Cooling Unit with Casing	CLW/ES/3/0647 Alt. E	a. Behr Industriechnik GmbH Co. / Germany (Through PPS International ) (Aluminium Centrifugal)	a.* ORIENT FANS / Kol. ( MS Centrifugal ) b. Stesalit, Kolkata (Aluminium Axial ) c. RP Machine Tools Ghaziabad. ( Aluminium Centrifugal ) d. Air Control & Chem. Engg. Co. Ltd. Ahmedabad (Aluminium Centrifugal ) e. @ M/s Daulat Ram Engineering Services Pvt. Ltd., Raisen (Aluminium Axial)	* Firm has yet to offer the Blower for Oil Cooling Unit with Alluminium Impeller @ RDSO Letter No EL/3.2.176/2 dated 08.6.2012 be followed till further advice.
29.3	30kW Motor for oil cooling unit (Axial Flow Design)for Three Phase Locomotive	RDSO Spec. No. E-10/3/09(Motor) with Amendment slips no. 1 to 5 and mounting arrangement as per drawing no. SKEL/4854.	--	a. # M/s Laxmi Hydraulics Pvt. Ltd; Solapur b. @ M/s Daulat Ram Engineering Services Pvt. Ltd., Raisen	# suitable for axial flow design OCB of M/s Stesalit make. @ Suitable for their own make axial flow design OCB. RDSO Letter No EL/3.2.176/2 dated 08.6.2012 be followed till further advice.
29.4	30KW Motor for oil cooling unit (Centrifugal Design) for Three Phase Locomotive	RDSO Spec No. E-10/3/09 (Motor), with Amendment No 1 to 5.	--	a. M/s Laxmi Hydraulics Pvt. Ltd; Solapur b. M/s Bharat Bijlee Ltd. Airoli Navi Mumbai c. M/s I.C. Electrical Company (P) Ltd. Haridwar d. CGL, Ahmadnagar e. Saini Electrical & Engineering Works, Navi Mumbai.	
30.0	Mechanical Items for Traction Motors				

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30.1	<p>Magnet frame for Hitachi Traction Motor and its assembly Components Magnet Frame (Fabricated ) 10P .702 .107 Outer Bearing Cover (CE) 10Q. 750. 259 Alt-G, Ref-1 Inner Bearing Cover (CE) 10Q. 750. 259 Alt-G, Ref-2 Inner Bearing Stopper (CE) 10T. 806. 919 Outer Bearing Stopper (CE) 10S .778. 663 Bearing Bracket Assly. (CE) 10 Q. 750. 246 Outer Bearing Cover (PE), 10Q .750 .258 Alt-5, Ref-1 Inner Bearing Cover (PE) 10Q. 750. 258 Alt-5, Ref-2, Inner Bearing Stopper (PE) 10 T. 806. 918 Deflector 10R. 823. 234 Bearing Bracket Assly. (PE), 10Q .750. 245 With latest Alteraton</p>	<p>CLW's Specn No. 4TMS.095.036 4TMS.095.008 4TMS.095.003 4TMS.095.001 with latest alteration &amp; RDSO's STR No.0017 Rev. '1'</p>	<p>a. M/s. Simplex Engg. &amp; Foundry Works Pvt. Ltd, Bhilai b. M/s. Kalyani Engg. Works, Ghaziabad c. Special Engg. Services Kolkata</p>	<p>a. M/s. Kay Pee Equipments Pvt. Ltd, Howrah b. Kharagpur Metal &amp; Reforming Ind. P. Ltd. , Howrah c. Damani Engg. Co. Kolkata d. M/s Narmada Equipments Pvt. Ltd, Bhopal.</p>	<p>Following firms are provisionally approved and their names will be included as approved vendors only after six (6) no. of prototype clearance by RDSO</p> <p>i). M/s. BHEL/BPL (ii) M/s Tirupati Engineering Works, Kolkata (iii) M/s Narmada Equipments Pvt. Ltd. , Bhopal</p>
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30.2	<p>Assembly Components(Stator Chamber, End frames &amp; Labyrinths) of Traction Motor type 6FRA 6068 of Electric Locomotives (Stator Chamber/DE 1TWD.096.017 Inner Labyrinth/DE 4TWD.096.043 Outer Bearing Cap (DE) 1TWD.096.006. Inner Labyrinth(DE) 4TWD.096.028. Outer Labyrinth(DE) 4TWD.096.029. End Frame (DE) 1TWD.096.005. Stator chamber (NDE) 1TWD.096.016. Inner Labyrinth(NDE) 4TWD.096.042. Inner Labyrinth(NDE) 4TWD.096.031. Bearing Cap (NDE) 3TWD.096.032 Clamp plate (NDE) 2TWD.096.033 End Frame (NDE) 0TWD.096.003. Speed Probe Housing 1TWD.096.077 ( With latest alterations )</p>	<p>CLW's Specification No. 4TMS.096.059, 4TMS.096.068 with latest alteration. RDSO's STR No. 0021 Rev. '1'.</p>	<p>a. Kharagpur Metal &amp; Reforming Ind. P. Ltd. , Howrah b. M/s. Kay Pee Equipments Pvt. Ltd, Howrah</p>	<p>a. M/s. Kalyani Engg. Works, Ghaziabad</p>	<p>These firms are provisionally approved and their names will be included as approved vendors only after six (6) no. of prototype clearance by RDSO (i). M/s. BHEL/BPL (ii) M/s. Simplex Engg. &amp; Foundry Works Pvt. Ltd., Bhilai (iii) M/s Sonak Engg.Pvt. Ltd. Navi Mumbai.</p>
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30.3	<p>Assembly Components(Stator chamber end frames &amp; labyrinths) of Traction Motor type 6FXA 7059 of Electric Locomotives (Stator Chamber/DE 1TWD.097.010 Inner Labyrinth/DE 4TWD.097.035 Bearing Cover/DE 3TWD.097.036 Inner Labyrinth(DE) 4TWD.097.037 End Frame (DE) 1TWD.097.011 Stator chamber (NDE) 1TWD.097.009 Inner Labyrinth(NDE) 4TWD.097.038 Inner Labyrinth(NDE) 4TWD.097.034 Bearing Cap (NDE) 3TWD.097.039 Clamp plate (NDE) 2TWD.097.040 A End Frame (NDE) 0TWD.097.012 Speed probe housing) 1TWD.096.077 (With latest alterations)</p>	<p>CLW's Specification No. 4TMS.096.059, 4TMS.096.068 with latest alteration RDSO's STR No. 0021 Rev. '1'</p>		<p>i). M/s. Simplex Engg. &amp; Foundry Works Pvt. L:td, Bhilai ii). M/s Kharagpur Metal &amp; Reforming Ind., Howrah</p>	<p>These firms are provisionally approved and their names will be included as approved vendors only after six (6) no. of prototype clearance by RDSO</p> <p>i). M/s. BHEL/BPL ii). M/s. Kalyani Engg. Works, Ghaziabad iii). M/s. Kay Pee Equipments Pvt. Ltd, Howrah</p>
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30.4	<p>Suspension Tube and its assembly components for Hitachi traction motor type HS 15250A</p> <p>Suspension Tube(casted) 10P.701.898</p> <p>Bearing Housing 10Q.745.381</p> <p>End Cover RWE 10Q.745.383</p> <p>End Cover GWE Enclosure 10Q.745.386</p> <p>Adjustment Washer 10Q.745.382</p> <p>Abutement Piece) 10Q.745.384 (With latest alterations)</p>	<p>CLW's Specn No. 4TMS.095.003 with latest alteration</p> <p>RDSO's STR No. 0018</p> <p>Rev. '1'</p>	<p>(i) M/s Kay Pee Equipments Pvt Ltd, Howrah</p> <p>(ii) M/s Kharagpur Metal &amp; Reforming Ind., Howrah</p> <p>(iii) Ms Indore Nitriders Indore</p>	<p>(i). M/s Simplex Engg. &amp; Foundry Works pvt. Ltd., Bhilai</p> <p>( ii).M/s Kalyani Engg. Works, Ghaziabad</p>	<p>These firms are provisionally approved and their names will be included as approved vendors only after six (6) no. of prototype clearance by RDSO</p> <p>(i). M/s. BHEL/BPL</p> <p>(ii) M/s Triupati Engineering Works Kolkata</p>
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30.5	<p>Set of Spares of MSU Tube and its assembly components suited with roller bearing for Traction motor type TAO- 659  Suspension Tube SKEL-4513  Enclosure (GWE) ELW/BSL/2/WAM4/F. 88.155  End Cover (GWE) ELW/BSL/2/WAM4/F. 88.156  Abutment Spacer ELW/BSL/2/WAM4/F. 88.154  End Cover (RWE) 10Q.745.383  Abutment Piece 10Q.745.384  Adjustment Washer 10Q.745.382  Bearing Housing 10Q.745.381  (With latest alterations)</p>	RDSO's STR No. 18 Rev. '1'	<p>a. M/s Kalyani Engg. Works, Ghaziabad  b. M/s Kay Pee Equipments Pvt Ltd, Howrah  c. M/s Kharagpur Metal &amp; Reforming Ind., Howrah</p>		<p>These firms are provisionally approved and their names will be included as approved vendors only after six (6) no. of prototype clearance by RDSO  i). M/s. BHEL/BPL  ii). M/s Simplex Engg. &amp; Foundry Works pvt. Ltd., Bhilai  iii) M/s Triuputi Engineering Works Kolkata</p>
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30.6	<p>Suspension Tube and its assembly components for Three Phase Traction motor type 6FRA 6068 of Electric Locomotives MSU tube  1209-01-011-018  Labyrinth ring NDE  1209-01-0211-028  Labyrinth ring NDE  1209-01-0211-027  Labyrinth ring NDE  1209-01-0211-030  Labyrinth ring NDE  1209-01-0211-029  Labyrinth ring DE  1209-01-0211-031  Labyrinth ring DE  1209-01-0211-032  Labyrinth ring DE  1209-01-0211-033  Labyrinth ring DE  1209-01-0211-034  Labyrinth ring DE  1209-01-0211-035  Labyrinth ring DE  1209-01-0211-036  (With latest alterations)</p>	<p>RDSO's STR No. 0018 Rev. '1'  CLW's Specification No. CLW/MS/3/201 with latest alteration.</p>	<p>(i). M/s Kay Pee Equipments Pvt Ltd, Howrah  (ii). M/s Kharagpur Metal &amp; Reforming Ind., Howrah</p>	<p>(i).M/s Kalyani Engg. Works, Ghaziabad</p>	<p>These firms are provisionally approved and their names will be included as approved vendors only after six (6) no. of prototype clearance by RDSO  i). M/s. BHEL/BPL  ii) M/s Triuputi Engineering Works Kolkata  iii) M/s Simplex Engg. &amp; Foundry Works pvt. Ltd., Bhilai  (iv) M/s Sonak Engg.Pvt. Ltd. Navi Mumbai.</p>
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30.7	<p><b>Mechanical Rehabilitation of Magnet frame &amp; assembly components of TAO-659 traction motor suited with roller bearing arrangement.</b></p> <p><b>Magnet Frame (rehabilitated) SKEL-4596,4597, , &amp; 0TWD.092..007</b></p> <p><b>End Shield CE 1TWD.092.304</b></p> <p><b>Inner Flinger (Deflector) CE 4TWD.092.065</b></p> <p><b>Fixed Inner Flinger(Deflector) CE 4TWD.092.071</b></p> <p><b>Fixed External Flinger CE 4TWD.092.073</b></p> <p><b>External Flinger CE 3TWD.092.060 ALT.1</b></p> <p><b>Bearing Cover CE 2TWD.092.052 ALT.6</b></p> <p><b>Fixed External Flinger PE 4TWD.092.055</b></p> <p><b>External Flinger PE 3TWD.092.059 ALT.1</b></p> <p><b>End Shield PE SKEL-4514</b></p> <p><b>Bearing Cover PE 1TWD.092.302 ALT 3</b></p> <p><b>Fixed Inner Deflector PE 3TWD.092.072 ALT.1</b></p> <p><b>Bearing Retaining Ring 4TWD.092.076</b></p>	RDSO's STR No. 019 Rev '1'		a)M/s Kalyani Engg. Works, Ghaziabad	<p><b>These firms are provisionally approved and their names will be included as approved vendors only after six(6) nos. of prototype clearance by RDSO.</b></p> <p><b>a) M/s Kharagpur Metal &amp; Reforming Ind. Pvt. Ltd., Howrah</b></p> <p><b>b) M/s Kay Pee Equipments Pvt. Ltd., Howrah</b></p> <p><b>c) M/s Simplex Engg. &amp; Foundry Works Pvt. Ltd., Bhilai</b></p> <p><b>d) M/s BHEL, BPL</b></p>
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30.8	Magnet frame (Both Casted and Fabricated ) and assembly components for AC/DC MEMU / EMU Traction Motors	Vide Rly. Board's letter No. 2005/Elect. (G)/181/1 dt.01.10.2007 and subsequent RDSO's letter No.EL/4.3.47 (BHEL) dt. 04. 03.2008 follwing sources have been approved provisionally ( i ). M/s. BHEL/BPL (ii). M/s. Simplex Engg. & Foundry Works Pvt. L:td, Bhilai (iii). M/s. kalyani Engg. Works, Ghaziabad (iv). M/s. Kay Pee Equipments Pvt. Ltd, Howrah (v). Kharagpur Metal & Reforming Ind., Howrah Note. Name of the sources will be included in RDSO's list of approved vendors after prototype clearance of 4 units of each item.		
30.9	MSU/NSU Tube and components for AC/DC MEMU/EMU traction motors	Vide Rly. Board's letter No. 2005/Elect. (G)/181/1 dt.01.10.2007 and subsequent RDSO's letter No.EL/4.3.47 (BHEL) dt. 04.03.2008 follwing sources have been approved provisionally (i). M/s. BHEL/BPL (ii). M/s. Simplex Engg. & Foundry Works Pvt. L:td, Bhilai (iii). M/s. kalyani Engg. Works, Ghaziabad (iv). M/s. Kay Pee Equipments Pvt. Ltd, Howrah (v). Kharagpur Metal & Reforming Ind., Howrah Note. Name of the sources will be included in RDSO's list of approved vendors after prototype clearance of 4 units of each item.		
31	Tri Plate Panel for Conventional Electric Locomotive	ELRS/SPEC/ PBS/ 0034 (Rev.1) April 2005	a. M/s Faiveley Transport Rail Technologies India Ltd. Hosur-635109 b M/s Stone India Ltd, Kolkata. 700088	a. M/s Knorr-Bremse India Pvt. Ltd. 14/6 Mathura Road Faridabad.-121003
32	Stick Type Master Controller	RDSO/2012/EL/SPEC/ 0040 Rev.'1'		a. Inder Engineering Industries, Bhopal b. Saitronik Electric Equipments, Hyderabad

**33.0 NEW ITEMS ASSIGNED TO RDSO:** Following new items have been assigned to RDSO for approvals of vendors vide Railway Board's letter no. 97/Elect. (TRS)/113/4 Pt. II dtd. 11.10.2006. Railways to follow the Zonal Railways' list of approved suppliers till such time RDSO issues/clears approval of sources complying with requirement of Directorate Operating Procedure (DOP) / Work Instruction No. EL-WI-7.1.1 Version 1.0) of RDSO for development of vendors.

S.No.	ITEM	REMARKS
33.1	Spare For Compressors	Railway to follow the Zonal Railway 's list of approved suppliers till such RDSO issue /clear approval of sources complying with requirements of Directorate operating procedure (DOP) / Work intruction no. EL-WI-7.1.1 Version 1.0). 1. RDSO letter no, EL/3.2.15 dated 15-06-2005 may be referred. 2. RDSO's Modification sheet no. ELRS/MS/0343 Rev '0' dated 23.01.06 may be referred.for spares of compressors of M/s Ingersoll Rand India Ltd.

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### 34.0 Sources for repair / rehabilitation of major equipments of electric Locomotives & EMU

(Ref. RDSO letters No. EL/3.6.1/3 dated 03.04.2013)

SI No.	Equipment	Specefication / STR / Drg. No.	Sources for Repair/Rehabilitation	Remarks
<b>I. CONVENTIONAL ELECTRIC LOCOMOTIVES EQUIPMENT</b>				
34.1	Bogie	RDSO/2008/EL/SPEC/0057, Rev.'0'	<p><b>A. Cast steel Co-Co bogies(for WAM4, WAG5) and flexi coil bogie with bolster for WAP4</b></p> <ol style="list-style-type: none"> <li>1. Bhilai Engg. Corporation, Hathkhoj Industrial area, Bhilai, Chattisgarh.</li> <li>2. Simplex Castings Ltd., Urla Industrial estate, PB 128, Raipur, Chattisgarh.</li> <li>3. Titagarh Industries Ltd., 1 A Road, Titagarh, 24- Pgs(N), west Bengal.</li> <li>4. Anup Malleables, G.T.Road, Kandra, PO, Bhitia, Govindpur,Dhanabad, Jharkhand.</li> <li>5. Hindustan Shipyard Ltd., Gandhigram, Viskhapatnam.</li> <li>6. Anil Engineering works, 5-246/9H.P.C. Road, Moosapet, Hyderabad.</li> <li>7. Power Tech. Industrial, Vishal Services, 33-1-7, Devangula Street, Allipuram, VSKP- 530 004</li> <li>8. *Maruti Engg. Works, Plot No.80, Phase-3, IDA, Pashmailaram, Patanchem, Vijaywada- 520007</li> </ol> <p><b>B. Fabricated High Adhesion bogie for WAG7 Co-Co bogie for WAG5 HB locomotives</b></p> <ol style="list-style-type: none"> <li>1. Anup Malleables, G.T.Road, Kandra, PO, Bhitia, Govindpur,Dhanabad, Jharkhand.</li> <li>2. Simplex Engg. &amp; foundary Works, 64 Industrial Estate, Bhilai-490026</li> <li>3. Ved Sassomeccanica (India) Pvt. Ltd., D-18/1 Panki Industrial Area, Site Kanpur.</li> <li>4. The Indian Sugar &amp; General Engg. Corpnn., Radaur Road, Yamuna Nagar, Haryana.</li> <li>5. * Trident Auto Components Pvt. Ltd., B-16, Udhog Kunj, UPSIDC Site V, Kanpur-208 022</li> <li>6. * Ashika Commercial Pvt. Ltd. 103/20, Foreshore Road, Howrah-711102</li> <li>7. * Frontier Alloy Steels Ltd., km-25/5 and 6, Kalpi Road, Rania, Ramabai Nagar, U.P.209304</li> <li>8. * M/s Anil Engg. Works, 5-246/9 H.P.C. Road, Moosapet Hyderabad -500018</li> </ol>	<p>List of sources circulated vide RDSO's letter No. EL/3.2.13/4 dt 05.3.2008&amp; 7.09.2009 &amp; 9.2.2012</p> <p>* Please refer RDSO letters No.EL/3.2.13/4 dt.09.2.2012, 11.4.2012 and 11.9.2012 respectively</p>
34.2	<b>Traction Motors of Electric Locomotives (Electrical repair / Rehabilitation / Overhauling of TAO / Hitachi Traction Motor)</b>			
34.2.1	Traction Motor complete Repair / overhauling	RDSO/2008/EL / STR/0052, Rev '0'	<p><b>A. Hitachi(HS15250A)TM:</b></p> <ol style="list-style-type: none"> <li>1. M/s BHEL, Bhopal</li> <li>2. M/s CGL, Bhopal</li> </ol>	Railway Board's letter no 2005/Elect.(TRS) /440/2 pt ,dt. 18.09.2012

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			<p>3. M/s KEC, Bangalore 4. M/s Rotomac, Kolkata</p> <p><b>B. TAO-659 TM:</b></p> <p>1. M/s BHEL, Bhopal 2. M/s CGL, Bhopal 3. M/s KEC, Bangalore 4. M/s Rotomac, Kolkata</p>	<p>And guidelines circulated vide RDSO's letter No. EL/3.2.172 dt 20.09.2012</p>
34.2.2	Traction Motor Electrical repair/overhauling	RDSO/2008/EL/STR/0052, Rev '0'	<p>Sources for coils for TM type TAO 659</p> <p>1. BHEL, BPL, 2. CGL, BPL, 3. Rotomac, New Delhi 4. Stesalit Baddi 5. Shanker Coils 6. M/s Saini Electrical &amp; Engineering Works, A/751/1, T.T.C. Industrial Area, MIDC, Pawane, Navi Mumbai- 400705 7. Cosmic General, Mumbai 8. KEC, Bangalore</p> <p>Sources for coils for TM type HS 15250A</p> <p>1. M/s Saini Electricals &amp; Engineering Works, Navi Mumbai-400705 2. Cosmic General, Mumbai 3. Rotomac, New Delhi 4. M/s Stesalit, Baddi</p>	<p>Railway Board's letter no.2005/Elect.(TRS)/440/2 pt ,dt. 18.09.2012 &amp; guidelines circulated vide RDSO's letter No. EL/3.2.172 dt 20.09.2012</p>
34.2.3	Mechanical Repair/rehabilitation / Overhauling of Tao/Hitachi Magnet frame and conversion of TAO magnet frame from plane bearing to roller suspension bearing arrangement	RDSO/2007/EL/STR/0019 Rev '0'	<p>1. BHEL, BPL 2. Simplex Engg., Bhilai 3. Kalyani Engg, Ghaziabad 4. Kharagpur Metals, Howrah</p>	<p>Refer RDSO's letter no. EL/3.2.172 dt. 26.06.2007 &amp; 14.08.2007</p>
34.3	Traction Motors For EMU / MEMUs & Kolkata Metro			
34.3.1	Traction Motor complete repair/overhauling for EMUs/MEMUs		<p>i) 253 BX/4601 AZ - 1. M/s BHEL, Bhopal 2. M/s CGL, Mandideep Bhopal 3. M/s KEC, Bangalore 4. M/s Rotomac, Kolkata</p> <p>ii) 133 AY/ 3601 AZ - 1. M/s BHEL, Bhopal</p>	<p>Refer Rly. Bd's letter No.2002/ Elec(G)/181/1 dated 01.10.2007 &amp; Rly. Bd's letter no. 2002/Elec(G)/181/Pt</p>



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			<p>2. M/s Fuji/Japan 3. M/s CGL, Mandideep Bhopal 4. M/s KEC, Bangalore 5. M/s Rotomac, Kolkata</p> <p>iii) GGR 125 ZY/4303 AZ (BHEL)FOSI C 1005(CGL)</p> <p>1. M/s BHEL, Bhopal 2. M/s Fuji/Japan 3. M/s CGL, Mandideep Bhopal 4. M/s KEC, Bangalore 5. M/s Rotomac, Kolkata</p> <p>iv) TDK 5620/ 3701 AZ (BHEL)</p> <p>1. TDK/JAPAN 2. BHEL, Bhopal 3.M/s CGL, Mandideep Bhopal 4. M/s KEC, Bangalore 5. M/s Rotomac, Kolkata</p> <p>v) Alstom TM 4ERA-1858- for 3 phase EMU</p> <p>1. Alstom 2. M/s BHEL, Bhopal 3. M/s Saini Electricals, Navi Mumbai 4. M/s CGL, Mandideep Bhopal 5. M/s KEC, Bangalore 6.M/s ABB Ltd., Mumbai</p> <p>vi) BHEL TM DMKT - 53/42 for 3 phase EMU</p> <p>1. M/s BHEL, Bhopal 2. M/s Saini Electricals, Navi Mumbai 3.M/s CGL, Mandideep Bhopal 4.M/s KEC, Bangalore 5.M/s ABB Ltd., Mumbai</p> <p>vii) Siemens type 1TB2022-0TA03</p> <p>1.M/s Siemens 2. M/s BHEL, Bhopal 3. M/s Saini Electricals Navi Mumbai 4. M/s CGL, Mandideep Bhopal 5. M/s KEC, Bangalore 6. M/s ABB Ltd., Mumbai</p>	dated 12.08.2009	
34.3.2	Traction Motor Complete Repair /	RDSO/2008/E L/STR/0052,	(i) NGEF type US6456R4	<p>1. M/s BHEL, Bhopal 2. M/s CGL, Mandideep Bhopal</p>	Railway Board's letter no. 2002/Elect.(G)/181/1 Pt. dated: 20.10.2010

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	<b>Overhauling for Kolkata Metro</b>	<b>Rev '0'</b>	<p>3. M/s KEC, Bangalore 4. M/s Rotomac, Kolkata</p> <p>(ii) BHEL type TM3603 AZ 1. M/s BHEL, Bhopal 2. M/s CGL, Mandideep Bhopal 3. M/s KEC, Bangalore 4. M/s Rotomac, Kolkata</p> <p>(iii) BHEL type 3701 BY&amp;BX:- 1. M/s TDK, Japan 2. M/s BHEL, Bhopal 3. M/s CGL, Mandideep Bhopal 4. M/s KEC, Bangalore 5. M/s Rotomac, Kolkata</p>	
34.3.3	<b>Mechanical Repair/ Rehabilitation of Magnet Frames of AC/DC EMU/MEMU Traction Motors</b>	<b>RDSO/2007/EL/STR/0026 Rev '0'</b>	<p>1. BHEL, BPL 2. Simplex Engg., Bhilai 3. Kalyani Engg, Ghaziabad 4. Kharagpur Metals, Howrah 5. Kay Pee Equipments Pvt. Ltd., Howrah</p>	<b>Refer Rly. Bd's letter No.2005/Elec(G)/181/1 dated 01.10.2007 circulated vide RDSO's letter No.EL 4.3.47(BHEL) dated 04.03.2008</b>
34.4.1	<b>5400 KVA/ 3900 KVA Transformer for electric locomotives</b>	<b>RDSO/2009/EL/STR/ 0053, Rev '0'</b>	<p>1. BHEL, Jhansi 2. CGL, Mandideep, Bhopal 3. Hind Rectifier, Mumbai 4. Stesalit, Baddi 5. High Volt, Mumbai 6. EMCO, Mumbai 7. Tribhuwan, Faizabad</p>	<b>List of sources circulated vide RDSO's letter No. EL/3.2.1 dt. 16.02.2009.</b>
34.4.2	<b>1050 KVA Transformer for EMU/MEMUs</b>	<b>RDSO/PE/SPEC /EMU/0137, Rev'0'</b>	<p>1. BHEL, Jhansi 2. CGL, Mandideep, Bhopal 3. Hind Rectifier, Mumbai 4. Stesalit, Baddi 5. High Volt, Mumbai 6. EMCO, Mumbai 7. Tribhuwan, Faizabad</p>	
34.5	<b>Smoothing Reactor</b>	<b>ELRS/STR/SL/0</b>	1. BHEL, Jhansi	<b>List of Sources</b>

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	SL-30/SL-42 Including conversion from SL-42 to SL-30	004, Rev'1'	2. Stesalit, Kolkata 3. M/s Saini Electrical & Engineering Works, A/751/1, T.T.C. Industrial Area, MIDC, Pawane, Navi Mumbai- 400705 4. Transtel, Baddi	circulated vide RDSO's letter No. EL/3.2.1 dt. 16.02.2009.
34.6	Auxiliary Machines	ELRS/STR/AUX / 0014	1. Agarwal Engineering Co. Pvt. Ltd., B-70/29, Lawrance Road, Industrial Area, D.S.I.D.C. Complex, Delhi-1100035 2. P.D.Steels, C:146, Phase-VII, Industrial Area, Mohali-160055. 3. Sunbeam Engg. Corprn, B-36, Okhla Industrial Area Phase-I New Delhi- 110020. 4. Daulat Ram Engg. Services(P) Lrd., 7/5 Ankur Complex, Shivaji Nagar, Bhopal. 5. Electromechanicals, 39, Maharani, Luxmibai Market, Jhansi-02 6. *Paramount conductor Ltd., 32, MIDC Industrial Area, Nagpur-440028 7. Datta Electrical Engg. Works, 170 Light Industrial Area, Bhilai-26 8. Saini Electrical & Engg Works, A/751/1 T.T.c Industrial area, MIDC Pawne, Navi Mumbai-400708. 9. Patron Industrial corprn, Baltikuri, Howrah-711113 10. Nawabi Electricals, Godi Road, Dahod-389151 11. Powermould Engineering Co. Pvt. Ltd., C-1-B/199/5, Phase-II, G.I.D.C, Naroda, Ahmedabad-382330 12. General Electrical, plot No. 92, A.I.E, Pedagantyada, Viskakhapatnam-530044 13. Kapsons Industries Ltd., G.T. Road, Suranussi, Jalandar (Punjab)-144027	List of sources circulated vide RDSO's letter No. EL/3.2.70 dt.27.12.12,  *Approval of this firm withdrawn for OCB & SCTM motor of 3-phase locomotives keeping in view poor performance
34.7	Dynamic Braking Resistor (DBR) Unit			
	a) Natural Cooled Roof Mounted DBR		1. M/s DRI, Bhopal 2. M/s Stesalit, Baddi	
	b) Vertical DBR with DC/AC MVRF		1. M/s DRI, Bhopal and 2. M/s Stesalit, Baddi	
34.8	N-32 Tap Changer		1. M/s BTIL, Vadodara 2. M/s AAL, Noida	Refer RDSO's letter No.EL/3.2.30 dt.12.5.10
34.9	a) Single bottle VCBs		Respective OEMs only i.e. M/s BT, Vadodara for model BVAC 25.10 & BVAC 25.10 M07, M/s Areva Ltd. for model 22 CB, M/s AAL, Noida for model BVAC 25.10 & VCBA 25.10 Tr and M/s Biecco Lawrie for model TVCB	
	b) Double bottle VCBs		M/s Areva Ltd., Vadodara for Model No.20 CB	
34.10	Microprocessor based Energy-cum Speed Monitoring Unit		Respective OEMs only i.e. M/s AAL, Noida for models TELPRO-Z& TELPRO-EL, M/s Medha Servo Drives Ltd. for models MRT-921C&MRT-922, M/s Laxven Systems for model Lax 2000 E1&Lax 2000 E2 and M/s Stesalit for models SPEC-RI-CLW&SRSP-RI-MEM.	

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34.11	DI / DU Relays		By respective OEM i.e. M/s AAL, Noida	
34.12	Main Compressors	RDSO/2007/EL/ STR/005, Rev'0'	M/s Elgi Equipment Ltd., Coimbatore & M/s Panesar Engg. Ltd., Kaithal for model TRC 1000 and M/s Ingersoll Rand Ltd. & M/s Panesar Engg. Ltd., Kaithal for model 71T2RL	Refer RDSO's letter No.EL/3.2.15/ Main dt. 08.10.2010 for procurement of spares based on R.B's letter No.97/Elect/TRS/113/4/ Part dt. 12.12.01
34.13	Rectifier Block Unit		By any of the OEMs as per RDSO approved vendor list,EL-M-7.1-1(latest)	
<b>II. 3 PHASE LOCO EQUIPMENT</b>				
34.14	Valve Sets of traction converters		By any of the OEMs/TOT partners,namely – BTIL, BHEL & CGL ( Previously M/s NELCO)	
34.15	WRE & CG Module of Auxiliary Converter		By any of the OEMs/TOT partners namely,BTIL, BHEL & CGL (Previously M/s NELCO)	
34.16	Transformer		1. BTIL, Vadodara 2. BHEL, Jhansi 3. CGL, Mandideep, Bhopal 4. EMCO, Mumbai 5. High Volt Electricals Pvt. Ltd., Mumbai 6. ABB, Vadodara	
34.17	Electronic Cards	STR No. RDSO/2008/ EL/STR/0047 Rev'0' of March' 08& Guidelines No. EL/G/2008/01, Rev'3' of March' 2012, amendment 1 dt.5.9.12	By any of the OEMs/TOT partners namely BTIL, BHEL & CGL (previously M/s NELCO). The approval of M/s Indocen for repair/rehabilitation of 16 (sixteen) types of cards renewed vide RDSO letter No.EL/11.5.5/8 dated 12.8.10 and letter.No.EL/ 11.5.5 /8 dated 10.12.12 upto 09.12.13 and further for 11 (eleven) types of cards vide RDSO letter No.EL/11.5.5/8 dt.5.8.11 upto 4.8.13.	

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### SECTION – B (Items dealt by Other Directorates)

**Note : Regarding Status of item / vendor after 01.7.2013 refer QA/ Mechanical vender Director QM – M-7.1-1 , Validity 01.07.2013 to 31.12.2013 along with latest amendments issued by QA/ Mechanical Directorate / RDSO .**

S.No.	ITEM	CURRENT SPECN. & DRAWING No.	CATEGORY OF APPROVED VENDORS		REMARKS
			PART-I (REGULAR)	PART-II (DEVELOPMENTAL)	
1	2	3	4	5	6
1.0	<b>Loco Brake Equipments</b>				
	A-9 Auto brake valve	WABCO Test Spec. No. T-2559-0 & Drg. 564140	a. M/s. Stone India Limited, 16, Taratalla Road, Kolkata- 700 088 (12000) b. M/s. Faiveley Transport Rail Technologies India Ltd P.B. No. 39,, Harita, Hosur- 635 109, Tamilnadu. (24240)		Refer QA/Mechanical Vendor Directory – QM-M-7.1-1 SN-238 (A) Validity 01.07.2013 to 31.12.2013
	SA-9 Ind. Brake valve	WABCO Test Spec. No. T-2555-0 & Drg. 564141			
	D-1 pilot air valve (modified)	Drg No. PD-2-20-7698			
	C-2W relay valve with 5 mm choke	WABCO Test Spec. No. T-3439-0 & Drg. 579991			
	C-2W relay valve with 6mm choke	Drg. 579991			
	H-5 relay air valve	WABCO Test Spec. No. T-1462-0 & Drg 528561			
	HB-5 relay air valve	WABCO Test Spec. No T-1976-0 & Drg. 549930			
	F-1 selector valve	WABCO Test Spec. No. T-2428-0 & Drg. 557995			
	A-1 Diff. Pilot air valve	WABCO Test Spec. No. T-2916-0 & Drg. 564940			
	HS-4 control air valve	WABCO Test Spec. No. T-2917-0 & Drg. 561128			
	VA-1B control air valve	WABCO Test Spec. No. T-2918-0 & Drg. 564523			
	VA-1 release valve	WABCO Test Spec. No. T-2968-0 & Drg. 563510			

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MU-2B valve	WABCO Test Spec. No. T-2655-0 & Drg. 564144			
D-1 Emergency brake valve	MP.0.01.00.13 Rev.00, Jan 2004/T-3267-0 Drg. SKDP-3573 / 564786	a. M/s. Stone India Limited, 16, Taratalla Road, Kolkata- 700 088 (12000) b.M/s. Faiveley Transport Rail Technologies India Ltd P.B. No. 39,, Harita, Hosur- 635 109, Tamilnadu. (24240)	a. Recon Engineering Co. (P) Ltd., 6 G, Maruti, 12, Dr. U.N. Brahmachari Street, Kolkata-700 017 (1200)	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1 Validity 01.07.2013 to 31.12.2013 SN-238 (B)
J-1 safety valve	MP.0.01.00.14 Rev.00, Feb 2004 /T-2463-0 Drg. SK.DP-3580/ 558296	Do	a. Recon Engineering Co. (P) Ltd., 6G, Maruti, 12, Dr. U.N. Brahmachari Street, Kolkata-700 017 (1200)	Do
N-1 Reducing valve	MP.0.01.00.15 Rev.00, March 2004 / T-1605-0 & Drg.SK.DP-3582/552238	Do	a. Recon Engineering Co. (P) Ltd., 6G, Maruti, 12, Dr. U.N. Brahmachari Street, Kolkata-700 017 (1200)	Do
28 VB-control valve	WABCO Test Spec. No. T-2630-0 & Drg. 563855	Do	---	Do
C3W Distributor valve with control reservoirs	Drg.No. 1903971308	Do	---	Do
24A-Double check valve	WABCO Test Spec. No. T-2447-0 & Drg. 560504	Do	---	Do
Feed Valve Type *F-2 or **C2N ***FT-1	* F-2 Escort Drg.No. 1 KB-1143 issue 5, or ** C2N -SIL Drg. No29197201, Rev 02 or *** FT 1 - FTIL drg. No. 025071075 & Part No. 507001700	(a)*M/s. ESCORT Ltd. (Railway Equipment Division), Plot No. 115, Sector 24, Faridabad- 121005 for F2 Feed Valve (1200) (b)* *M/s. Stone India Ltd, 16, Taratalla Road, Kolkata- 700 088 For C2N Feed Valve (3600) (c) *** M/s. Faiveley Transport Rail Technologies India Ltd P.B. No. 39, Harita, Hosur- 635 109, Tamilnadu. For FT-1 (900)	Nil	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013 SN-249

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Auto Drain valve	MP01.0026 Rev 00, March 2010	a. Graham White, 1242, Colorado Street, P.O. Box 1099, Salem, Verginia, USA). (Material supplied by Indian agent - Faiveley Transport Rail Technologies India Limited, P.B. No. 39, Harita, Hosur- 635109 (Tamil Nadu) b. M/s Trident Pneumatics Pvt. Ltd. 5/232,K.N.G. Pudur Road Somayampalyam, PO Coimbatore - 641108 (2000)	a.Topgrip Instruments Co., Room No. 62, 2nd floor, 40, Strand Road,Kolkata-700001 (1800) b.Recon Engineering Co. (P) Ltd., 6G, Maruti, 12, Dr. U.N. Brahmachari Street, Kolkata-700 017 (8400) c. Stone India Limited, 16, Taratalla Road, Kolkata-700088 (3600)	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-248.
Air Flow Measuring Valve	Spec No. MP1412/88 and Drg. No. SK-DP-2705	a. M/s. S.D. Technical Services Pvt. Ltd., Plot No. 46, Sec-18, Maruti Indl. Complex, Gurgaon-122 015 (1200) b. M/s. Top grip Instruments Co. Room No. 62, 2 <sup>nd</sup> Floor, 40,Strand Road, Kolkata – 700 001 (1824) c. . M/s Midlands & co., 7, Kalibari Lane, Dhakuria, Kolkata-700031. (720)	a.M/s Faiveley Transport India Ltd., P.B. No39 Harita, Hosur- 635 109 (550)	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-247.
And Air Flow Indicator	Spec No. MP 1412/88 Drg. No. WABCO,C- 76488 Diesel loco SK-DP- 3523&3533 Electric loco SK.DP-3510 & 3518 and Specn. no. MP-1412/88, RDSO Insp. Plan No. MP:TP-14	a. M/s. S.D. Technical Service Pvt Ltd. Plot No. 46, Sec-18, Maruti Indl. Complex, Gurgaon-122 015 (1200) b. M/s. Top grip Instruments Co. Room No. 62, 2 <sup>nd</sup> Floor, 40,Strand Road, Kolkata – 700 001 (1824) c. M/s Midlands & co.,7, Kalibari Lane, Dhakuria, Kolkata-700031. (720)	a. M/s Faiveley Transport Rail Technologies India Ltd P.B. No. 39,. Harita, Hosur- 635 109 (550)	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-247

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2.0	Air dryer for Electric Locomotives and EMU	MP.0.01.00.06 Rev. 05, March, 2011 , STR no. MP.STR.BK.01.06.11 Rev. 00, July'11	<p>a M/s. Faiveley Transport Rail Technologies India Ltd P.B. No. 39., Harita, Hosur- 635 109, Tamilnadu. (1300)</p> <p>b. Stone India Ltd, 16, Taratala Road Kolkata-700088 (500)</p> <p>c. Knorr-Bremse India Pvt. Ltd, 14/6 Mathura Road, Faridabad-121003 (672)</p> <p>d. Prag Polymers, D-6 Govt. Industrial Eastate , Patel Nagar ,Dehradun - 248001 (240)</p> <p>e. M/s Trident Pneumatics Pvt. Ltd. 5/232,K.N.G. Pudur Road Somayampalyam, PO Coimbatore - 641108 (1000)</p>	NIL	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-234.																				
3.0	<p>Air brake rubber components IRS-R48-88 &amp; WABCO Specification for WABCO licensees</p> <table border="1" data-bbox="203 855 461 1457"> <tr> <td>'O' Rings</td> <td>SKDP-3031</td> </tr> <tr> <td>Port gasket (VA-1B control Valve)</td> <td>SKDP-3032</td> </tr> <tr> <td>Port gasket (C2W)</td> <td>SKDP-3033</td> </tr> <tr> <td>Gasket (HS4 control valve)</td> <td>SKDP-3034</td> </tr> <tr> <td>Gasket (28-VB)</td> <td>SKDP-3035</td> </tr> <tr> <td>Gasket (F 1 selector valve)</td> <td>SKDP-3036</td> </tr> <tr> <td>Gasket ring (A-1 differential pilot air valve)</td> <td>SKDP-3037</td> </tr> <tr> <td>Gasket ring (H5 &amp; HB-5 relay air valve)</td> <td>SKDP-3038</td> </tr> <tr> <td>Body port gasket (HB-5)</td> <td>SKDP-3039</td> </tr> <tr> <td>Gasket cover (VA-1 release valve)</td> <td>SKDP-3040</td> </tr> </table>	'O' Rings	SKDP-3031	Port gasket (VA-1B control Valve)	SKDP-3032	Port gasket (C2W)	SKDP-3033	Gasket (HS4 control valve)	SKDP-3034	Gasket (28-VB)	SKDP-3035	Gasket (F 1 selector valve)	SKDP-3036	Gasket ring (A-1 differential pilot air valve)	SKDP-3037	Gasket ring (H5 & HB-5 relay air valve)	SKDP-3038	Body port gasket (HB-5)	SKDP-3039	Gasket cover (VA-1 release valve)	SKDP-3040		<p>a. Swan Rubber Industries, 10 Government place East, Ezra Mansion, Flat No. 31, 3<sup>rd</sup> Floor, Kolkata-700069. (43000 sets)</p> <p>b. Basant Rubber Factory Pvt. Ltd., 103-B, LB Shastri Marg, Vikhroli (W), Mumbai-400083. (50000 sets)</p> <p>c. A.K. Industries, 3A Here Strret 2nd Floor R.No 203 Asoka House , Kolkata-700001. (48000 sets)</p> <p>d. MGM Rubber Company, 86/1, B.T. Road, Tala, Kolkata-700002. (35000 sets)</p> <p>e M/s. Faiveley Transport Rail Technologies India Ltd P.B. No. 39., Harita, Hosur- 635 109, Tamilnadu. (1200 sets)</p>	Nil	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-244
'O' Rings	SKDP-3031																								
Port gasket (VA-1B control Valve)	SKDP-3032																								
Port gasket (C2W)	SKDP-3033																								
Gasket (HS4 control valve)	SKDP-3034																								
Gasket (28-VB)	SKDP-3035																								
Gasket (F 1 selector valve)	SKDP-3036																								
Gasket ring (A-1 differential pilot air valve)	SKDP-3037																								
Gasket ring (H5 & HB-5 relay air valve)	SKDP-3038																								
Body port gasket (HB-5)	SKDP-3039																								
Gasket cover (VA-1 release valve)	SKDP-3040																								



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Check valve (D-1 & 28VB brake valve)	SKDP-3041			
Seal (VA-1 & D-1 emergency)	SKDP-3042			
Port gasket between body & diaphragm cover (H5 & HB-5)	SKDP-3043			
Seal with insert (D1-emergency A9, C2W)	SKDP-3044			
Gasket check valve body cover (H5 & HB-5)	SKDP-3045			
Gasket check valve body (H5 & HB-5)	SKDP-3046			
Pipe bracket gasket for C2W	SKDP-3047			
Diaphragm (A9, SA9, HS4)	SKDP-3052			
Diaphragm (C2W)	SKDP-3053			
Diaphragm (A-1 differential)	SKDP-3054			
Diaphragm (H5 & HB-5)	SKDP-3055			
Pipe bracket gasket (A9 & SA9)	SKDP-3056			
Gasket (F-1 selector valve)	SKDP-3057			
Pipe bracket gasket (MU2B)	SKDP-3058			
Gasket bottom cover (F-1 selector valve)	SKDP-3059			
Gasket (28-VB)	SKDP-3060			

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	Piston head disc (WDM2 loco)	SKDP-3061			
	Piston head disc (YDM4 loco)	SKDP-3062			
	Cover gasket (D-24B Feed valve)	SKDP-3063			
	Pipe bracket gasket (D-24B Feed valve)	SKDP-3064			
	Gasket ring (D-24B Feed valve)	SKDP-3065			
	Gasket ring (D-24B Feed valve)	SKDP-3066			
	Gasket ring (D-24B Feed valve)	SKDP-3067			
	Ring (D-24B Feed valve)	SKDP-3068			
	Small diaphragm (28-VB)	SKDP-3050			
	Large diaphragm (28VB)	SKDP-3051			
3.1	VA 1B Small Diaphragm (VA-1B)	IRS-R48-88 & WABCO Specification for WABCO licensees & Drg. No.SKDP-3048	Nil	a. MGM Rubber Company, 86/1, B.T. Road, Tala, Kolkata-700002 . (35000 sets) b. A.K. Industries, 3A Here Strret 2nd Floor R.No 203 Asoka House , Kolkata-700001 (48000 sets) c. M/s. Faiveley Transport Rail Technologies India Ltd P.B. No. 39,. Harita, Hosur- 635 109, Tamilnadu. (1200 sets)	Refer QA/ Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013 SN-243
	Large Diaphragm (VA-1B)	IRS-R48-88 & WABCO Specification for WABCO licensees & Drg. No.SKDP-3049			
4.0	Suspension Coil Spring for Locomotives	Spec no. MP.0.4900.12 Rev.02 of Nov.'2012	a. Abok Spring Pvt. Ltd. 101/103, Jhotwara Ind Area, Jhotwara, Jaipur-302012 b. *Frontier Springs Ltd. KM 25/4, Kalpi Road Rania Kanpur Dehat (428400) c. G B Spring (P) Ltd. 22/23 Km, Chakrata Road Chhota Rampur, Distt.	Nil	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-13  *Additional work: Village- Kunja. Poanta Sahib, Dist: Sirmaur

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			Dehradun (194400) d. Bhartia Mini Spring & Engg. Co. Pvt. Ltd., Howrah-Amta Road, Baltikuri, Shibatala, Howrah-711113. (200 MT)		H.P. 173025
5.0	Snubber Assembly for Locomotives	Drg. No. SKDL 2089A	a. Bharat Udyog, Lakhy Cold Storage Compound, Sheodaspur, P O Lahartara, Varanasi-221002 (17280) b. Diesel Components Pvt. Ltd., Shed No. 6 Ind. Estate, Jagdishpatti, Jaunpur (UP) (12960) c. M/s G.B.Equipment SystemLtd. Plot No.C-11/2/2 Industrial Area, Selaqui, Dehradun-248197 (36000)	Nil	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1 Validity 01.07.2013 to 31.12.2013 SN-50
6.0	High Tensile transition CBC Coupler & its Components for Locomotives  Components of high tensile CBC coupler (For transition type)  Coupler Body  Shank wear plate  Knuckle  Lock  Knuckle thrower  Knuckle pivot pin  Striker casting with wear plate	Spec. No. 56-BD-07 With Amend. No 1 of Sept 2010 Drg. No. SKDL 3430  For Loco SKDL-3430 for freight SK 62724 Alt. 23  SK62724 Item 18  SK-62724,Item 10  SK-62724,Item2  SK-62724, Item8  SK-62724,Item9  SK-62724, Item 4  SKDL-508 Alt. 4	a. BESCO Ltd., 7B & C Poonam, 5/2 Russel Street, Kolkata-700001 (7290) b. *Frontier Alloy Steels Ltd., KM 25/5 & 6 Kalpi Road, Rania, Kanpur Dehat 209304 <i>Additional Works: Jamni Wala Road, Jamboo Khala, Tehsil Paonta ahib, Distt. Sirmaur (H.P.)-173025 (6000)</i> c. Hindustan Engg. Industries, 27, Sir R N Mukerjee Road, Kolkata-700002 (10750) d. Texmaco Rail Engg. Ltd., (Steel Foundry)Belgharia, 24 Parganas, Kolkata-700056 (7875) e. Titagarh wagons Ltd., (unit Titagarh steel ) 113, Park street, Kolkata-700016 (6000) f. Raneka Industries Ltd., Plot No. 15,16,17, Sector IIIrd, Sagore, Pithampur, Distt. Dhar (MP)[ (6000) <u>Sources for Coupler components</u> a. Siena Engineering Pvt. Ltd., Plot No.18A 22 and S-3/3 , Sector-III Sagor Kutti Road , Pithampur Distt. Dhar. (For coupler body, Clevis with Handle, Clevis pin with washer)	a. Titagarh Wagon Ltd., Heavy Engg. Division PO Hind Motor Dist. Hoogly-712233 (4500) b. Jupiter Alloys & Steel (India) Ltd Shahgunj, Chinsurah, Dist.- Hooghly 712104, West Bengal, (3000) c. Siena Engineering Pvt. Ltd., Plot No.18A 22 and S-3/3 Sector-III, Sagor Kutti Road Pithampur Distt. Dhar.M.P. (3000) d. Orient Steel Industries Ltd., 2, Brabourne Road, Kolkata-700001 (600) <u>Sources for Coupler components</u>  a. A. D. Electro Steel Co. Pvt. Ltd. Baltikuri Kalitala ( surkiill ) Howrah – 711113 ( For Coupler Body )	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-27 *Additional work: Jamni Wala Road JambooKhala Tehcil Poanta Sahib, Dist: Sirmaur H.P. 173025  Note: The vendors who are approved for Coupler body or Striker casting shall also be considered as approved for Coupler body with Shank wear plate or Striker casting with wear plate. Approval category (Part I or Part II) shall remain unchanged. Firms “Titagarh Wagons Ltd. (Unit: Titagarh Steels)” at e. in Part I

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	<p>Top lift hole cap</p> <p>Coupler yoke</p> <p>Yoke pin</p> <p>Yoke pin support plate &amp; yoke pin</p> <p>Clevis with handle</p> <p>Clevis pin with washer</p>	<p>SK-62724, Item 11</p> <p>SK-62724, Item 3</p> <p>SK-62724, Item 12</p> <p>SK.DL-890, Item 1&amp;2</p> <p>SKDL-2496</p> <p>SK-69508 Alt. 4</p>			<p>and “Titagarh Wagons Ltd., Heavy Engineering Division” at a. in Part II are allied / sister concern</p>
7.0	High Capacity Draft Gear	Spec. No. 49-BD-08, and Drg. No. WD-81010-S-03 Alt-10	<p>a. BESCO Ltd., 7 B &amp; C Poonam, 5/2 Russel Street, Kolkata-700 001( Type MK 50 ) (11500)</p> <p>b. Bhilai Engineering Corporation Ltd.,Hathkhaj Industrial area, Bhilai (C.G.)-490026. (type RF-361 (1200)</p> <p>c. Burn Standard Co Ltd, Howrah works 20-22Nityadhan Mukerjee Road, Howrah-711 101 (type RF-361 ) (3050)</p> <p>d. Hindustan Engg. &amp; Industries, 27, Sir R N Mukerjee Road, Kolkata-700 001 (type RF-361) (6600)</p> <p>e. Titagarh wagons Ltd., (unit Titagarh steel ) 113, Park street Kolkata-700016 (type RF-361 ) (4140)</p> <p>f. Texmaco Rail &amp; Engineering Limited (Steel Foundry) Belgharia, 24 Parganas, Kolkata-700 056 (type RF-361 ) (12000)</p> <p>g. Frontier Alloy Steels Std., KM 25/5, 86 Kalpi Road Rania Kanpur Dehat Kanpur(UP) (10800) (type RF-361 )</p>	<p>a. Braithwaite &amp; Co. Ltd., Angus Works, PO Agus Distt. Hooghly-712221 (Type RF-361 ) (3050)</p> <p>b. Jupiter Alloys And Steel ( India ) Ltd. , Shahgunj, Chinsurah, Dist.-Hooghly-712104, West Bengal (11880) (Type RF-361 )</p> <p>c. Raneka Industries Ltd., Plot No.15,16,17, Sector-3 (Sagore), Pithampur, Distt.- Dhar (MP) Pin-454775 (6000) ) (Type RF-361 )</p>	<p>Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013 SN-28</p>
8.0	Screw Coupling (Including Spares, Coaching, freight	For freight stock Spec No R-9-66 Crrigendum No – 3 dt. Dec. 1988 & Drg. No. SK-69503	a. # Lalbaba Industrial Corporation, 78, Lalbabu Shire Road, Belur, Howrah – 711 202 (3120)		<p>Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-46</p>

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	& Locomotive application)	Alt.11 for coaching stock C-9505 Rev of Aug.'2001, & Drg. No. SK-99001 Alt. 3; for locomotives Spec. No. MP0.41.00.01Rev.1ofApr'03 & Drg.No. SKDL-2494)	b. Ramakrishna Forging Ltd., Plot No. M-6, Phase VI, Gamaria, Jamshedpur (24000) c. Vivekananda Forging (India) Pvt. Ltd., Plot No. 63 & 64, Uluberia Industrial Growth Centre, P.O. Birshibpur, Howrah-711316. (5000) d. *Emson Tools Mfg. Corporation Ltd.,D-2, Focal Point, Dhandari Kalan Ludhiana-141010 (7200)		#Approved for Freight and Locomotive application only *Approved for coaching application only.
9.0	Three axle cast steel trimount and Flexi coil bogie frame for BG Locomotives	Spec.No. MP0.4900.04 Rev.1 of October'04 Drg. No. SKDL-3812 & 3813	a. Chittaranjan Locomotive Works, Chittaranjan- 713 331 (W.B.) (180) b. Simplex Castings Ltd., Urla Industrial Estate, PB 128, Raipur ( 120) c. Titagarh Wagons Ltd. (Unit : TitagarhSteel ) 113 Park Street Kolkata-700016 (120) d. Bhilai Engg. Corporation Ltd .Hathkhoj Ind. Area Bhilai (CG) (250)	NIL	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013 , SN-43
10.0	Fabricated Bogie frame & Bolster Assembly for Locomotive	Specn No. VL.Spec 6 (Rev. 02) of April 2011and STR No : MP. STR VL – 02.02.11 (Rev. 00) April 2011	a. Simplex Engineering & Foundry works Ltd., Tedesara, P.O.-Somni, Distt -Rajnandgaon-491443 (C.G.) (450) b. *Ved Sassomeccanica (India) Pvt. Ltd., D-18/1, Panki Industrial Area,Site-1, Kanpur-208222 (120) c. Anup Malleables Ltd., G.T.Road, Kandra, P.O. Bhitia, Govind Pur, Dhanbad-828109 (234)	a. @ E.C. Blades & Tools Pvt. Ltd., Plot no. 55-56, Industrial Estate, Phase-I, Panchkula-134113, Haryana (300) b. @ Frontier Alloy Steels Ltd, KM 25/5 & 6, Kalpi Road, Rania, Ramabai Nager-209304. (350) c. @ Bhilai Engineering Corporation Ltd., Hathkhoj, Industrial Area, Bhilai-490026	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-253 *Additional Works: 34E, 34D & 34C (Part) Scheme-40, KDA Industrial Area, Kanpur-208027 @ (Provisional approval)
11.0	Conical Thrust pad for Journal Axle Box Assembly with normal* and Step Size** Roller Bearing	Spec.No. IRS R-63- 76 Drg. No. Sk.DL-2308 (Alt.- 01), 2309 (Alt.- Nil).	a. FAG Bearing India Ltd., Maneja, Vadodara- 390013* (27,000 all type axle box & bearing assembly ) ** (8000, all type Axlee Box & bearing Assymblies) b. NEI, KhatipuraRoad Jaipur- 302006 (15000, each type Axlee Box & bearing Assymblies )	-----	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-262.

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11.1	Conical Thrust pad for Journal Axle Box Assembly with CRU Bearing	Spec. no. IRS R-63-76). Drg. no. SK.DL-2308 (Alt.01), SK.DL-2309 (Alt. Nil);	a. NEI Ltd., Khatipura Road, Jaipur-302 006 (7,200 Axle Box Assemblies )	a. FAG Bearings India Ltd., Maneja, Vadodara -390 013 (9,000 Axle Box Assemblies ) b. SKF India Ltd., Chinchwad, Pune – 411 033 (6,000 Axle Box Assemblies )	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-261.
12.0	TPU Spring Pads (Happy Pad) for Locomotives	Spec. No. MP.0.40.99.01 (Rev. 02) Oct. 2008)	a. Prag Industries (India) Pvt. Ltd., E-7, Talkatora Industrial Estate, Lucknow - 226011 (180000) b. Basant Rubber Factory limited, 103, L.B.Shastrri Marg, Vikhroli(West) , Mumbai (86400) c. Avadh Rubber (Prop. Madras Elastomers Ltd.),B-12, Industria area, Opp. Amausi aerodrome, Lucknow-226008 (49920) d. Aryan Exporters pvt. Ltd., B-1, Industrial area, Amausi, Lucknow-226012 ( 42000) e. MGM Rubber company, Unit-I: 277, Jessore Road, Kolkata-700 048 Unit-II: 18, Galiff Street, Kolkata-700004. (174000)	--	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-266.
13.0	Hose Coupler Assembly for freight & Coaching stock	(Spec. 02-ABR-02 Appendix-F with Amend. No. 1 of Feb 2007, Drawing no. SK-73547Alt.12 for BP & WD-81027-S-01Alt.10 for FP)	a. Avadh Rubber (Prop. Madras Elastomers Ltd.), Plot No 105, Sector-7, IIE SIDCUL, Haridwar-249403 (Utrakhand) (144000) b. Bony Polymers Pvt. Ltd. Plot No.37-P, Sector-6, Faridabad-121006 (219600) c. Faridabad Bolt-Tight Pvt. Ltd Plot No 77, Sector-6, Faridabad- 121006 (90000) d. Mandeep Industries, 562/22, Ramgarh Colony, Kanpur Road, Lucknow (144000) e. Soni Rubber Products Ltd., Vill. - Banagram, P.O. - Raspunja, P.S. Bishnupura, Distt.-24 Parganas (South) W.B. (8400) f. Sridhar Engineering & Rubber	a. ASP Sealing Products Ltd., A-7, UPSIDC Industrial Area, Gajraula, Distt. J.P. Nagar (U.P.) (14000000 Metre ) b. IMT Cables Pvt. Ltd., 98-A, Sector-5, IMT Manesar, Gurgaon (Haryana) (564000) c. Lakhani Rubber Works, Plot No 262P, Sector-24, Faridabad - 121 005 (Haryana) (28800) d. A. B. Elasto Products Pvt. Ltd., BI-91, Majherpara, Krishnapur, Kolkata-700 (54000)	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-3 (d)

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			<p><b>Products Pvt. Ltd., Plot No. 87, Industrial Estate, Jawahar Autonagar, Vijayawada-520 007 (180000)</b></p> <p><b>g. Super Seal Flexible Hose Ltd., B-7, Kasna-II, Surajpur-V, Greater Noida (UP)-203207 (90000).</b></p> <p><b>h. The General Rubber Co.Pvt.Ltd., 14/6, Mathura Road, Faridabad (Haryana) (30000)</b></p> <p><b>i. Indorub Industries, Village-Bhora Kalan, Binola Industrial Area, 58th Mile Stone, Delhi-Jaipur Highway, Gurgaon-122413 (Haryana) (90000)</b></p>		
14.0	Locomotive side buffer assembly and its spares	(MP.0.41.00.02 Rev.0 April 02, with 2 Amendments- Amend. No. 2 issued on July'05)	<p><b>a. Atul Engineering Udyog, Nunhai, Agra-282 006 (1500)</b></p> <p><b>b.Frontier Alloys Steels Ltd.,25/5 &amp; 6 Kalpi road, Rania, Kanpur Dehat (3900)</b></p> <p><b>c. Raneka Industries Ltd.,Plot No.15,16,17, Sector-3 (Sagore), Pithampur, Distt.- Dhar (MP) Pin-454775 (5500)</b></p>	<p><b>a. A. D. Electro-Steel Co. Pvt. Ltd., Baltikuri (Surkimill), Kalitala, Howrah -711113 ( 3600)</b></p> <p><b>b. Hemco Engineering Pvt. Ltd., 53, Industrial Area, Malanpur, Distt. Bhind (2496)</b></p> <p><b>c. Siena Engineering Pvt Ltd, Plot No. 18A-22 and S-3/3, Sector-III, Pithampur, Distt. Dhar (300)</b></p>	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, Validity 01.07.2013 to 31.12.2013, SN-32
15.0	Phosphoric Iron (Medium Phosphorous) Brake Block	Spec. No. M&C/MTD/101/2007	<p><b>a. Riddhi Siddhi Udyog, -6/2/C, Kumar Para Road,(Liluah), Howrah-711204 (1200000)</b></p>	<p><b>a. NSI (India) Ltd., Beltala,Chamrail, Howrah -711114 (W.B.) (750000 No )</b></p> <p><b>b. Calcutta Export company (CIF), 109,Rabindra Sarani, Bhattanagar, Liluah, Howrah-711204 (3,96,000 )</b></p> <p><b>c. NSS Stores Supply Agency Private Ltd., P-280, Benaras Road, Belgachia, P.O.-Netajigarh, Howrah-711 108 (1,24,800 )</b></p> <p><b>d. Precision Industrial Systems, Goyal Compound, Industrial Estate, Tansen Road, Gwalior-474004. (3,24,600 kg )</b></p>	Refer QA/Mechanical Vendor Directory – QM-M-7.1-1, SN-54.
16.0	Lubricants (For conventional		<p><b>1. IOC</b></p> <p><b>a. SERVO SM 260</b></p>	-----	For application wise detail, please refer to

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Locos)		<p><b>IS: 508-1981</b> Grade II (consistency 260-295) <b>IS: 508-1981</b>Grade II (consistency 260-295)</p> <p><b>IS: 508-1981</b>Grade II (consistency 260-295)</p>	<ul style="list-style-type: none"> <li>b. SERVO SPIN-12</li> <li>c. SERVO SUPER-40</li> <li>a. SERVO SYSTEM 68</li> <li>b. SERVO SYSTEM 81</li> <li>c. SERVO SYSTEM 150</li> <li>d. SERVO COAT 170T</li> <li>e. SERVOGEAR HP-140</li> <li>f. SERVOGEARSM-140</li> <li>g. SERVOGEM RR-3</li> <li>h. SERVOLUBE-100</li> <li>i. SERVOMESH SP-257</li> <li>j. SERVOPRESS-150RR</li> <li>k. SERVOPRIME-76</li> <li>l. SERVOLUBE-25</li> <li>m. SERVOSPIN-6</li> <li>n. SERVOGEM-2</li> <li>o. SERVO SYSTEM-563</li> <li>p. SERVOLUBE-31</li> <li>q. SERVOGEM EP-2</li> <li>r. SERVOGEAR HP-90</li> <li>s. SERVO COAT-120</li> <li>t. SERVOPLEX-LC</li> <li>u. SERVO SYSTEM-176</li> <li>y. Graphite Grease (Pantos)</li> <li>2. <u>HPC</u> <ul style="list-style-type: none"> <li>a. GEARTAK-O</li> <li>b. HP GEAR OIL EP-140</li> <li>c. TURBINOL-77</li> <li>d. Graphite Grease</li> </ul> </li> <li>3. BALMER LAWRIE <ul style="list-style-type: none"> <li>a. BLUE COAT-O</li> <li>b. BLUE COAT-3</li> <li>c. MULTI GREASE-LL-3</li> <li>d. Graphite Grease</li> </ul> </li> <li>4. <u>B PC</u> : <ul style="list-style-type: none"> <li>a. BHARAT ACTUMA SUPEROIL 40</li> <li>b. BHARAT TURBOL-78</li> <li>c. Bharat Compressor Oil – 150</li> </ul> </li> </ul>		<p><b>RDSO Maintenance Instructions No. MPMI-4 of June 1994</b> circulated vide RDSO letter No. SD.Eng.Oil dated 12.7.1994 and RDSO letter No. EL/2.2.5 dated 8.5.1996.</p>
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			<b>d. Bharat Multigrease LL 3</b> <b>5.SHELL :</b> <b>a. BBC -909-LM-2g</b> <b>b. SHELLCORNEA P-1006. MOBIL</b> <b>c. MOBIL OIL SHC-630.</b>		
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**CHAPTER-II**  
**REGION-WISE LIST OF FIRMS AND ADDRESSES FOR ELECTRIC LOCO ITEMS**  
**EASTERN REGION**

S.No.	Office Address	Works Address	Office Phone	Fax No.	E-Mail Address
1.	Air Control & Chem. Engg. Co. Ltd. 'NAM' Building, M- Block, Phase -1, 5 <sup>th</sup> floor, New Alipur Kolkata - 700053.	Same as office address	033-24008331 / 8332	033-24008331	
2.	Alumni Industries Pvt Ltd., 5/B Narendra Chandra Dutta Sarani (Clive Ghat Street, Ground floor), kolkata-700001.	113/G Canal Circular Road, Ultadanga, Kolkata-700067	033-22207374	033-22427021	<a href="mailto:saikatalumni@rediffmail.com">saikatalumni@rediffmail.com</a>
3.	Asian Plastic Co., 8/1, Lakshman Das Lane, Howrah	¾ Lakshman Das Lane, Howrah-711101.	684163/688156	033-6508156	--
4.	Assam Carbon Products Ltd, 407, Meghdoot Building, 94, Nehru Place, New Delhi-110019	Birkuchi, Narangi-chandrapur road, Guwahati-781026. 2, Industrial Development Area, Phase-1, Patancheru-502319 Distt.- Medak	011-26431622, 26469114 08455- 242091/242239	011-26224011  08455-242237	<a href="mailto:acptpat@asdarbon.com">acptpat@asdarbon.com</a>
5.	B.G.Industries, Sadatpur,(Via bargachia), Howrah-711404	Same as official address	03214-255226	03214-255860	<a href="mailto:hgild@sify.com">hgild@sify.com</a>
6.	B.K. Power Sonic Pvt Ltd, 54 Raja Nabo Krishna Street, Kolkata-700055.	- do -	033-551348	033-2413719	-----
7.	Balmer Lowrie & Co Ltd, P-43 Hide Road, Kolkata-700088.	Same as office address	033-439-2222/ 2253, 2725/5978	033-4392277	<a href="mailto:Works.grease.cal@balmerlawrie.com">Works.grease.cal@balmerlawrie.com</a>
8.	M/s Bell Oranics Pvt.Ltd.,Bells House 10A,Ho Chi Minh Sarani , Kolkata -700071	M/s Bell Oranics Pvt.Ltd., Bells Centre 74/ 1, S.S. Road, Kolkata - 700035	033-22826296	033-28823279	
9.	Bharat Battery Manufacturing Company Pvt. Ltd., 11 A & B Jamir Lane , Kolkata – 700019	-----	22470982	22476529	
10.	Bharat Shell Ltd. C/o Coomar Agencies, 112 MS Road, Kolkata-700025	.....	.....	.....	
11.	Bharat Udyog, Lakhy Cold Storage Compound, Sheodaspur, P.O. Lahartara, Varanasi-221002.	Same as office address	0542-2370250, 2372168	0542-2370251	<a href="mailto:Bharatudyog07@rediffmail.com">Bharatudyog07@rediffmail.com</a>
12.	BIECCO Lawrie Limited, P-54 Hide Road Extension, Calcutta-700088.	-----	449-3875/6/7 449-6162	(033)449-9166	-----

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13.	Chandra Udyog, Ichapur Road (Sealdanga), Kalitala, PO: Santragachi, Howrah-711104, West Bengal.	Same as office address	033-26671160, 26673407	033-26678749	chandraudyog@satyam. Net.in
14.	Chittaranjan Locomotive Works, Chittaranjan-713 331, West Bengal(India)	Same as office address	0341-525642	0341-525641	
15.	M/s Concept Rail Engineers Pvt Ltd , C-557, 5 <sup>th</sup> Floor ,71 Canning Street, Kolkata-700001	M/s Concept Rail Engineers Pvt Ltd, Plot No. V-4 & Part of V-3 & T-2, Kalyani Industrial Growth Centre Phase-III, PO-Kalyani, Dist – Nadia - 741235	033-25820031 Mb. 9819002129	033-25820031	conceptengg@hotmail.co
16.	M/s. Contransys Pvt. Ltd., 16 Hare Street Kolkata - 700001	DIC, Industrial Area Plot No – 2 Baddi, Dist – Solan, H.P. 173205	033-22482391	033-22489382	Info@ contransys.com
17.	Dum Dum Valves & Bearing Pvt Ltd., 250 Banik Mansion, 'B' Block, Lake Town, Calcutta-700089	43/1 The Mall, Calcutta-700052.	033-25348041, 25219773	033-25344152	<a href="mailto:dimpyp@cal.vsnl.net.in">dimpyp@cal.vsnl.net.in</a>
18.	Dusada Engineering Co Pvt Ltd Kavi Guru Rabindrapath (Jora Mandir), Kanchrapara, 24-Paraganas (N), Pin -743145, West Bengal.	Same as office address	5859118	-----	-----
19.	M/s Damani Engineering Company, 23 A, Netaji Subhas Road, (8 <sup>th</sup> Floor) Room No. 5, Kolkata-700001	25, Belur Road, Liluah, Howrah-1	033-22302155, 22302733	033-22307455	<a href="mailto:damaniencal3@yahoo.co.in">damaniencal3@yahoo.co.in</a>
20.	East India Engineering Pvt. Ltd., 121/2 Southern Avenue, Calcutta-700029.	38 Netaji Subhas Ch Bose Road, PO: Malancha Mahinagar, Dist: 24-Paraganas (South), Pin-743353 (WB)	033-464-1758/7947	033-4640609	-----
21.	Eversure Eng. Enterprisers, 3A, Kundu Road, Bhowanipur, Calcutta-25	Same as office address	455-1109	-----	<a href="mailto:eversure@rediffmail.com">eversure@rediffmail.com</a>
22.	Exide Industries Ltd., 'Exide House', 59E Chowringhee Road, Calcutta-700020.	91 New Chord Road, PO: Athpur, Shamnagar-743128; Durgachak, Haldia-721602, Dist: Midnapore (WB)	22478326	033-2479819/2407831	.....@cal.exide.co.in
23.	Fort Gloster Industries, 31 Chowranghee Road, P.B. no. 9126, Kolkata-700016	PO: Fort Gloster, Bauria, Dist: Howrah, Pin – 711310.	216-6271-78	033-2495665	<a href="mailto:fgiho@vsnl.net">fgiho@vsnl.net</a>
24.	M/s General Store & Engineering Co. , 10 Lalbazar Street Marcantile Buildings ( !st Floor ) Kolkata - 700001	Same as office address Work Address – Shanpur, Paschim, Dasnagar, Howrah – 711105.	033-22301065, 2210 5146,	033-22301065	gs_ec@yahoo.com
25.	M/s Ganesh Transmission Pvt. Ltd.,4A. Pollock Street, Room No 408,Kolkata- 700001	.....	033 22354178	033-22254171	---
26.	M/s GTR company Pvt.Ltd.,37,Dum Dum Road,Kolkata-700 074	Same as office address	033-25484038	033-2548 2770	<a href="mailto:ranjanfans@vsnl.net">ranjanfans@vsnl.net</a>

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27.	Haradhan & Co, 14/4/2 Natabar Paul Road, Kadamtala, Howrah-711101	64 Natabar Paul Road, Kadamtala, Howrah-711101	033-26438768	033-26438227	<a href="mailto:haradanco@yahoo.co.in">haradanco@yahoo.co.in</a>
28.	Hatim Dilectrics Pvt Ltd., 90 Rippon Street, Kolkata - 700016.	17/11, 17/12 Mall Road, Dum Dum, Calcutta-700028.	229-8360/8369/7648	033-2299982	<a href="mailto:hatim@vsnl.com">hatim@vsnl.com</a>
29.	Incab Industries Ltd., 9, Hare Street, Calcutta-700001	1. Po Gol Mori, Jamshed Pur 831003, Jharkhand 2. Po Box No. 22 Cable House Hadapsar Ind Estate Pune411013	033-2480161 62-64	033-2488722	<a href="mailto:incabcal@cal3.vsnl.net.in">incabcal@cal3.vsnl.net.in</a>
30.	INTAF, 1/1, Vansittart Row, Opp. Telephone Bhawan, 3 <sup>rd</sup> floor, Kolkata-700001.	C-5 Industrial Area, Adityapur, IV Phase, Gamharia, Jamshedpur-832108.	033-2486643/ 2489550	033-2486654	<a href="mailto:intaf@intafindia.com">intaf@intafindia.com</a>
31.	Involute Engineers & Industries, Sadanand Smriti Path, Baltikuri, Howrah-2	Same as office address	033-6530750/ 6531352	033-6533150	<a href="mailto:Involute.eng@yahoo.co.in">Involute.eng@yahoo.co.in</a>
32.	Jaysree Supply Agency (Calcutta) Pvt Ltd, 14/2, Old China Bazar Street, Block No 184, Calcutta – 700 001	118 Garfa Main Road, Calcutta-700075	2422390	033-4724323	<a href="mailto:jssa@cal12.vsnl.net.in">jssa@cal12.vsnl.net.in</a>
33.	Khaitan Winding Wire(P) Ltd, P-38 India Exchange Place (Opp), Ezra Street, Calcutta-700001.	653 Biren Roy Road (W), Mouza: Raipur, 24-Paraganas (South)	033-22254597/ 22253846	033-22254486	<a href="mailto:khaitan@giascl01.vsnl.net.in">khaitan@giascl01.vsnl.net.in</a>
34.	M/s Khandelwal Industries, Mehta Building, 3th floor, 55/B/47, B.R.B. Basu Road, Kolkata – 700001	.	. 033-22355861	033-22355241 033-24552065	<a href="mailto:sailleskhandelwal@yahoo.com">sailleskhandelwal@yahoo.com</a>
35.	M/s. Kharagpur Metal Reforming Industries Pvt. Ltd. Andul Road, Howrah-711 109	Chandmari Road, PO D.S. Lane, Howrah-711 109	033-2688 5084/6283	033 2688 7452	<a href="mailto:kgplmetal@bsnl.com">kgplmetal@bsnl.com</a>
36.	M/s. Kay Pee Equipments Pvt. Ltd., 46/6/2, Chatterjee Para Lane, Kadamtala, Howrah-711 101	P-56/1/10, Benaras Road, Belgachia, Howrah-711 105	033-2643 8997/8293	033-2643 7896/8294	<a href="mailto:kpe@satyam.net.in">kpe@satyam.net.in</a>
37.	Lead Acid Battery Co(P) Ltd, 18/3, Kumud Ghosal Road, Kolkata-700057.	-----	033-5532864/ 5642968	033-5642037	--
38.	Lark wire & Infotech Ltd 19 RN Mukharji Road Eastern Building , Kolkata -01	17,NH Verna Inal Estate A, Salcate GOA , M/s lark wires &infotech Ltd.,1044/45,GIDC, Waghodia,Gujarat-391760, Gujrat	033 -22487255	033 -22480746	<a href="mailto:vlark@cal2.vsnl.net.in">vlark@cal2.vsnl.net.in</a>
39.	M/s. Mackeil & Co., (Pvt.) Ltd., 5A/1A, Lord Sinha Road ( 2 <sup>nd</sup> floor). Howrah-700 071	Howrah Amta Road, Balitikuri, Howrah – 711113	033-22829195/ 22826848	033- 22823834	<a href="mailto:mackeil@cal.vsnl.net.in">mackeil@cal.vsnl.net.in</a>
40.	MGM Rubber Co., 86/1 B. T. Road, Tala, Kolkata-700002.	18 Galiff Street, Kolkata-700048; 227 Jessore Road, Kolkata-700048.	555-6957/9837/ 5545481	033-5559703	<a href="mailto:mgmrc@vsnl.com">mgmrc@vsnl.com</a>

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41.	Mica-Mold, PO: Sundernagar, Jamshedpur, Jharkand-832107.	Same as office address	0657-2494064/ 2494222	0657-2421291	mica_mold@rediffmail.com
42.	National Oil Company Ltd. PC – 38, India Exchange Place Kolkata – 700001	-----	033-2254511/ 2250325	033-2100466	
43.	New Supreme Plastic Works, 310, Dum Dum Park, Tank No. 4, P.S. Lake Town, Kolkata-700 055.	Same as office address	2550-9180	033-2590-9936	-----
44.	Nicco Corporation Ltd., P.B. No. 594, Nicco house, 2, Hare Street, Kolkata-700001	P.O. Athpur, Shyamnagar, Dist: 24-Paraganas (N), West Bengal-743128.	22485102 (6 Lines)	033-22209443/2248266 0	niccocab@cal2.vsnl.net.in; shycab@cal2.vsnl.net.in
45.	M/s Orient Faus ,17,Taratata Road, Kolkata -700088	Same as office address	033-24014981/ 82/ 85	033-24014375	
46.	M/s Oriental Fibre & Engineering Industries 115, College Street White Tower 5 H Kolkata - 700012	Balitikuri Chakpara Howrah -711113	22374240	033-22379947	Ofei@vsnl.net
47.	M/s. Perfect Insulators, S-29 & 29 A,Kasba Industrial Estate, Phase-I, EM Bye Pass, KOLKATA -700 107	Same as office address	09433152637	033-24439383	
48.	P.K. Engineering & Forging Pvt Ltd., P-36, India Exchange Place (4 <sup>th</sup> floor), kolkata-700001	Vill: Nibra, PO: Unsani, Howrah; 1 Height Road, Liluah, Howrah.	033-2254298/3123	033-2253741	forgingpk@rediffmail.com
49.	Patron Industrial Corporation, Howrah Amta Road, Baltikuri, Howrah-711402	Same as office address	653-3773	033-6671854	-----
50.	Phoenix Rubber Works, Ezra Mansion, 3 <sup>rd</sup> floor, Flat No 31, 10 Govt Place East, Calcutta-700069.	P-83/1 Benaras Road, Belgachia, Howrah-711108.	220-2452	033-2482829	---
51.	Plasto Metal Industries, 27/1/H/1, Canal East Road, Calcutta-700054	- do -	3521411	033-3518117	plastometal@caltiger.com
52.	M/s Power Mica Insulator,36, Chaul Patty Road, Kolkata-700010	Work Unit –I Same as office address Work Unit –II 4 Pagladanga Road Kolkata 15	033-23732729	033- 23710066	
53.	Precision Electro Engineering, 79, Makardha Road, Shanpur, (2 <sup>nd</sup> floor) Howrah-711 101	Bhaskur, P.O. Baluhati, Howrah-711 405	033- 26670071/ 26700564	033- 26670071	engg2@vsnl.net
54.	M/s Ratan Dielectrics,P.O. Box No.-221, Mohanpur , Giridih-815301	Same as office address		033-22474502	-----
55.	R.R.Industries, 101, Brindaban Mullick Lane, Howrah-101	-----	-----	033-6678460	-----

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56.	Recon Engg. Co. Pvt. Ltd. 16G, Maruti, 12 Loudon Street, Kolkata-17 Branch Office: 40, Strand Road, 3 <sup>rd</sup> Floor, R No. 19-B, Kolkata-1	P.O. Baltikuri, Howrah-711104.	247-5553/5971 243-1170 6530359	033-247-5553/5971/287-0549	reconeng@vsnl.com
57.	Resitech Electricals Pvt Ltd., 53/A Elliot Road, Kolkata-700016	Gopalpur House, P.O. Rajarhat-Gopalpur, 24 Perganas (North) Kolkata - 700136	033-2229-0700, 1661,5661, 033-25734774	033-22268412 033-25734775	resitech@mantraonline
58.	M/s Rotomac Electricals Pvt.Ltd, 105,Park Street Kolkata -700016		. 033-22494177	033-22494177	
59.	Rotomac Electricals, I-1624 Chittaranjan Park, NewDelhi-110019	Sahibabad works- B-16, Site IV, UP Side Industrial Area, Sahibabad, Ghaziabad-201010. Paharpur works: 1 No.,Oil Installation Road, Kolkata-700088.	011-26270097, 26271915, 51603425 033-24391643, 24391740	011-26272978	-----
60.	M/s Samal Harand of India Pvt. Ltd.,Chatterjee International Centre 33A,Chowringee Road, 4 <sup>th</sup> Floor, Room No: A-5,Kolkata-700039	218/1, Picnic Garden Road, Kolkata-700 039	033- 2226 5143/ 2226 8840	033- 2226 3190/ 2248 2070	-----
61.	Sanguine Engineering Works, 172/13, MS Palchoudhury Lane, Howarah	Same as office address	033-6438234/ 6433263/ 6530750	033-6439597 28518542	
62.	Shanker Coil Pvt Ltd, 1 <sup>st</sup> floor, 30 Bentinck Street, Calcutta-700001.	1/1 Taratala Road, Kolkata-700088.	033-22483300, 22483229	033-22482205	shanker@cal.vsnl.net.in
63.	Shree Carbonet Industries Ltd,	15/11 Mall Road, Dum Dum, Calcutta-700080.	550-5690	-----	-----
64.	M/s Special Engineering Services Ltd., 16, Cossipore Road, Kolkata-700002	Same as office address	033-25576497,2557323 5,25577275	033-25579728/8434	sescatcn@cal2.vsnl.net.in
65.	S.P Organisation,Howrah,214/1&2 Netaji Subhash Road, Howrah.	Same as office address	033-26679434	033-26530689	-----
66.	Star Battery Ltd, ¼ C, Khagendra Chatterjee Road, Kolkata-700002.	Vill. Chakundi, PO-Dankuni Coal Complex, Distt-Hooghly	033-5570378	033-6590673	-----

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67.	Stesalit Ltd, Park Plaza (N), 71 Park Street, Calcutta-700016	1. 1C, Tangra 2nd Lane, Kolkata-700 046 2. 114, industrial Area, Baddi Dist. Solan HP-173205 3. Stesalit Ltd, 35, industrial Area Baddi Dist. Solan HP-173205 Ph. 1795-656843 / 245295 , Fax: 244236 / 244849	033-22654984-87, 23295612/ 23290061	033-22495305 033-23290058 01795-244489	<a href="mailto:steaslit@vsnl.com">steaslit@vsnl.com</a> <a href="mailto:steaslit@vsnl.net">steaslit@vsnl.net</a>
68.	Stone India Ltd., 16 Taratalla Road, Kolkata-700088.	(i) Stone India Ltd., 16 Taratalla Road, Kolkata-700088. (ii) M/s Stone India Ltd., 182, Gurumajara Baddi, Tehsil Nalagarh, Dist.- Solan - 174101 ( H.P.)	033-24014661 – 68 01795-276262, +91 9318667693	033-24014886 01795 276261	<a href="mailto:stonein@cal.vsnl.net.in">stonein@cal.vsnl.net.in</a> <a href="mailto:centro@stoneindia.co.in">centro@stoneindia.co.in</a> <a href="mailto:works.nalagarh@stoneindia.co.in">works.nalagarh@stoneindia.co.in</a>
69.	Signotron (India) Pvt. Ltd., Plot –J-6,Block EP, Sector-5,Salt lake,Electronic complex, Kolkata-700 091	Same as office address	033-23573489/ 3869/ 7274	033- 23577877	<a href="mailto:signomail@vsnl.net">signomail@vsnl.net</a>
70.	TATA Steel Ltd., (Growth Shop), 3 <sup>rd</sup> floor Commercial centre, Growth Shop, Tata Steel Limited, Jamshedpur – 831001, Jharkhand	Growth Shop, Aditya Pur Complex, P.O. Gamharia, Dist. Saraikela Kharsawan-832001. Jharkhand	0657-2427029 0657-2426720	0657-2431917	<a href="mailto:bd.tgs@tatasteel.com">bd.tgs@tatasteel.com</a>
71.	1. M/s. TATA Steel Limited , Bearing Division, Registered office : Bombay House, 24 Homi Mody Street, Mumbai 2. Marketing office:TATA cebtre, 43, JN Road, Kolkata-700 071	Nimpura Industrial Growth Centre, P.O. Rakhajungle, Dist: West Midnapur, West Bangal	Marketing: 033 22881962 28815588 Works: 0322 233317 233618	Marketing: 033 22881962 Works: 03222 233353	<a href="mailto:Cheifm&amp;s.brgs@tatasteel.com">Cheifm&amp;s.brgs@tatasteel.com</a> <a href="mailto:bearings@tatasteel.com">bearings@tatasteel.com</a>
72.	The Bharat Battery Mfg. Co (P) Ltd, 238 A, Acharya Jagadish Ch Bose Road, Kolkata – 700020	56 Bondel Road, Kolkata-700019.	2470982, 2403467	033-2476529	<a href="mailto:sales@bharatbattery.com">sales@bharatbattery.com</a>
73.	Timken (USA), Indian Agent: Timken India Ltd, Ideal Plaza N-217, 2 <sup>nd</sup> floor, 11/1 Sarat Bose Road, Kol-20	Bara Agrico, Jamshedpur, Jharkhand-831009.	91-33-281-0231	033-2810230	<a href="mailto:kouls@timken.com">kouls@timken.com</a>
74.	Trelleborg Industrial AVS (Metalastik brand), Evington Valley Road, Leicester, LE55LY, England.( Indian Agent: Ashika Commercial Pvt Ltd., , 4C Orbit, 1 Garstin Place, Calcutta-700001.)	-----	033-2107475	033-2107476	-----
75.	Universal Petrochemicals Ltd., P-34, India Exchange Place, Calcutta-700001	-----	30-3807/3808/3809	30-3080	-----

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76.	U.D.Marketing(P) Ltd.,C/o Tyco India Ltd.,6C, Rameshwar Shaw Road, Kolkata-700014.	Same as office address	033-22843368 to 3370	033-24011608	
77.	M/s Wacker Metroark Chemical Pvt.Ltd,D.H.Road Chandi, 24Parganas(S),West Bengal-743503.	.	09830075814 09830059336	033-24072502	
78.	Woama Electronics, TG-2122, Kalupukur, Baguiati, Tegharia P.O. Hatiara, Near Loknath Temple, 24 Parganas, Calcutta-700059	Same as office address	5701911	033-5700215	-----

## CENTRAL REGION

S.No.	Office Address	Works Address	Office Phone	Fax No.	E-Mail Address
1.	BHEL, Traction Sales Division, Piplani, Bhopal- 462022.	Same as office address	50669/0326/6653	0755-50-0237- 6653/201402	-----
2.	Crompton Greaves Ltd, Machine 7 Division, D- 5,Industrial Area, Mandideep, Bhopal-462046	-----	07480-33116/33118	07480-33119	cglmmdp@bom6.vsnl. net.in
3.	M/s Evonne,L.U.N.Complex, H-Sector Industrial Area, Govindpura, Bhopal-462023	Same as office address	09993536371	0755-2583566	
4.	Daulat Ram Industries, 10-E Industrial Area, Gobindpura, Bhopal-462023.	Same as office address	0755-2586927/ 25184507/ 2786369	0755-2783452	<a href="mailto:daulat@mantafreonet.com">daulat@mantafreonet.com</a>
5.	G G Automotive Gears Ltd., @-A, Industrial Area-1, A.B.road, Dewas-455001. M.P.			07272-58729	
6.	M/s Indore Nitriders 15-B Sector A Sanwer Road Industrial Area Indore - 452015	Same as office address	07312723303	07312721778	
7.	Malwa Strips Pvt. Ltd., Plot No. 17-18, Industrial Area II, A B Road, Dewas-455001	Same as Office Address	07272-258633/ 258120	07272/258632	<a href="mailto:malwa@bom4.vsnl.net.in">malwa@bom4.vsnl.net.in</a>
8.	M/s Mica Ply, 23-24,NewSector, Phase-II, Industrial Area, Mandideep,Bhopal-462045	Same as office address		07480- 233831	
9.	Mimani Wires Pvt Ltd, Suraj Sadan, 26/3 New Palasia, Indore-452001	Mhow-Neemuch Road, Near Kinetic Factory, Pithampur, Dist:Dhar (MP)	0731-2434044/ 2532735	0731-2536679	<a href="mailto:mwp@mimani.com">mwp@mimani.com</a>
10.	MP Petrochem Ltd, 408, 3 <sup>rd</sup> floor, Vikram Tower, Sapan Sangeeta Road, Indore-452001	-----	0731-285171/ 294755	0731-285171	--
11.	National Engg. Industries Ltd, Khatipura Road, Jaipur - 302006	-----	0141-223221	0141-2224382/ 221926/ 223213	<a href="mailto:rsaboo@neibearing.com">rsaboo@neibearing.com</a> <a href="mailto:akmittal@neibearing.com">akmittal@neibearing.com</a>
12.	M/s Narmada Equipments Pvt. Ltd, 2/3 Industrial Estate Govindpura Bhopal 462023	M/s Narmada Equipments Pvt. Ltd, 2/3 Industrial Estate Govindpura	07552586660, 2586387	0755-2586961	--



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		<b>Bhopal 462023</b>			
13.	M/s Narmada Switchgear Pvt. Ltd. Plot No 3 Industrial Estate , Govindpura , Bhopal 462023	Same as Office address	0755-2586387 2586660	0755-2506484 2586961	
14.	Omega Industries Pvt Ltd., Anand Nagar, Raisen Road, Bhopal-462021	-----	0755-756909/ 752800	0755-756957	<a href="mailto:omega_industries@vsnl.com">omega_industries@vsnl.com</a>
15.	Paramount Conductors Ltd, 32 MIDC Industrial Area, Nagpur-440028	Same as office address	07104- 237316/237288	07104-235288	<a href="mailto:Parexcel_ngp@sancharnet.in">Parexcel_ngp@sancharnet.in</a>
16.	M/s Permali Wallace Pvt.Ltd., Hoshangabad Road, Bhopal-462001	Same as office address	0755-2550508 0755-2550085	0755- 2550504	
17.	Shreyans Wires Ltd, 57, Garoba Maidan, Bagadganj, Nagpur-440008.	Same as office address	2766088/2762707/27 61927	0712-2760757	<a href="mailto:shreyansjeani@rediffmail.com">shreyansjeani@rediffmail.com</a>
18.	Simplex Engg. & Foundry Works Ltd., 65 Industrial Estate, Bhilai-490026, Chhattisgarh.	11, Industrial Estate, Bhilai-490026, Chhattisgarh.	0788-2381054/55/56	0788-2381058/59	<a href="mailto:simplex@bom5.vsnl.net.in">simplex@bom5.vsnl.net.in</a>
19.	M/s Union Prestress Pvt. Ltd., Plot No. A-128 , Road No. 9D V.K.I Area, Jaipur-302013	Same as office address	. 0141-5729722	0141-2203210	
20.	Universal Cables Ltd., P.O. Box No. 9, Satna (MP) – 485001	Same as office address	257121-257127	0762-257131	<a href="mailto:technical@universalcables.com">technical@universalcables.com</a>

## WESTERN REGION

S.No.	Office Address	Works Address	Office Phone	Fax No.	E-Mail Address
1.	M/s Air Control & Chemical Engineering Co. Ltd. Nandej Barejadi (W. Rly.) Ahmedabad - 382435.	Same as office address	02718-245306 / 245310	02718-245232	
2.	3A Associates Incorporated, 306 Advent Atria, Chincholi Bunder Road, Malad (West) Mumbai-400064	135, Pragati Industrial estate, Amli, Silvassa-396230. Union Territory of Dadra & Nagar Haveli.	022-28896596, 07666897333	022-28896596	<a href="mailto:aassot3@vsnl.com">aassot3@vsnl.com</a>
3.	ABB Ltd., Maneja, Vadodara-390013	Survey no. 88/3, 88/4 Basavanahilla, Kasaba Hoobli, Nelamangala Taluk. Bangalore - 562123	0265-604391	0265-638922	
4.	AMFORG Industries Ltd., P.B. o. 17321, L.B. Shastri Marg, bhandup, Mumbai- 400 078.	Same as office address			
5.	Apar Industries Pvt. Ltd., (Spl. Oil Refinery) Mahul Trombay, Mumbai-400074.	Dharnsinh Desai Marg, Mahul, Trombay, Mumbai-400074	5544005, 5951531-33	022-5541708, 5541471	<a href="mailto:aparsor@bom5.vsnl.net.in">aparsor@bom5.vsnl.net.in</a> ; <a href="mailto:aparsor@bom5.vsnl.net.in">aparsor@bom5.vsnl.net.in</a>
6.	Apar Industries Ltd ( Unit: Uniflex cables) 12/13, Jyoti Wire House , 23 – A Shah Industrial Estate, Off Veera Desai Road, Andheri (W) Mumbai-400053,	Plot No. 158-163 GIDC, Umbergaon-396171, Dist: Valsad, Gujarat.	022-26740001/2/3	022-26740600	<a href="mailto:info.cable@apr.com">info.cable@apr.com</a>

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7.	Apple Insulated Wires Pvt. Ltd S. No. 219/ 2/3, Near Dadra Check Post, Dadra 396230 (U.T. OF D & NH	Same as office address	2668694,2669668	0260-2669665	info@applewires.com
8.	ARCO Industries, Plot No. 123, Street No. 17, M.I.D.C., Marol, Andheri (East). Mumbai-400093.	Nand Deep Industrial Estate, Kondivita Lane, Marol, Mumbai-59	022-28217222	022-28361760	arco.group@gems.vsnl.net.in
9.	Arco Electrotechnologies pvt. Ltd.,Plot No. 123, Sl.No. 17, M.I.D.C(Marol), Andheri(E), Mumbai-400093.	Nand Deep Industrial Estate, Kondivita Lane, Marol, Mumbai-59	022-28217222	022-28361760	arco@vsnl.com
10.	Altos Electronic Plot No.-8, State Bank colony,Shahu college Road, Pune-411 009	Same as office address	020-24449144/ 24445245/ 24440573	020-24449144/ 24445245/ 24440573	anirudh@giaspn01.vsnl.net.in
11.	M/s Ashar & Bhatia Laminates (P) Ltd.,21, Ashirwad NS Road No. 6 , J.V.P.D Scheme,Mumbai-400056		022-6105371	022-28364440	
12.	M/s Bharat Insulation Co (India) Ltd. E-7 Waluj Industrial Area MIDC. Aurangabad 431133	.....	0240-555644	0240-554681	iotiwir@bom4.vsnl.net.in
13.	Baroda Bushings & Insulators, 746/1-2 GIDC Estate, Markarpura, Vadodara.	-----	-----	0265-641060	-----
14.	Basant Rubber Factory Ltd., 103-B L.B. Shastri Marg, Vikroli (W), Mumbai-400083	Same as office address	5780510 578-1275-76	91-22-5783105	rubber@vsnl.com
15.	Beico Industries Ltd, 04-01/02 Kewal Estate, SB Marg, Lower Parel, Mumbai-400013	B-68/2 MIDC Industrial Estate, Ambad, Nashik-422010.	4938675	22-4938685	beico@vsnl.com
16.	Bharat Forge Co Ltd., Mundhwa, Pune-411036.	Same as office address	020-6871666	020-6812189	sales@bflpune.com
17.	Bharat Petroleum Corpn Ltd, Bharat Bhavan, 4&6 Currimbhoy Rd, Ballard Estate, Mumbai-400038.	-----	2618061 2618281	2616793	-----
18.	Bharat Shell Ltd, 1 <sup>st</sup> floor, Plot No 84, Sector 17,Vashi, New Mumbai-400705.	Plot No. T-5, M.I.D.C, Dist: Raigad, Maharashtra-410208.	022-789-3888/3891	022-7893847	-----
19.	Bombardier Transportation, ERDA road, maneja, vadodara-390 013	Same as office address	0265-2637297/8, 2648763	0265-2638955 ,2649669	--
20.	Bombay Leather Industries, Leather Land, Kalakilla, Mumbai-400017.	Same as office address	022-24017346	022-24017346	bombayleather@vsnl.net
21.	BSES Limited, Elastimold Division, E-7 MIDC Area, Marol, Andheir(East), Mumbai.	Plot 6/1 Survey No 206/1 Opp Checkpost, Union Territory of Dadra-396191	022-8327619	022-8363459	-----
22.	CG-PPI Adhesive Products Ltd., 215 GDDIDC Industrial Estate, Kundaim-403115, Goa.	Same as office address	0834-395307, 395209/210	0834-395308	cgppigoa@goatelecom.com
23.	Cosmic General Industries, 77/5 Saisadan, J.B. Nagar, Andheri (East), Mumbai-400059.	N-8 Kasturi Industrial Estate, Goddev Road, Bhayander (E), Dist: Thane - 401105.	022-8195684/ 8194564	022-8195684	cgi13@vsnl.com

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24.	Crompton Greaves Ltd., Transformer Division, Kanjur, Bhandup, Mumbai-400042.	Same as office address	22-5785403/ 5782451	022-5783271 022-5782451	sehgal@tone.cgl.co.in; kccherian@tone.cgl.co.in
25.	M/s Daulat Ram Engineering Services Pvt. Ltd.,10/2,NH-12,Simrai,Post Obedullahganj,Distt. Raisen – 464 993	Same as office address	07480- 231400,231252,2311 53	07480-231250	info@daulatram.org
26.	Deccan Automobile Co, Nagindas Mansion, 61 J Shankarshet Road, Opera House, Mumbai-400004	Same as office address	022-23823024	022-23857939	spm2@ vsnl.com
27.	DU-Pont(USA) : Indian Agent-E.I. Du Pont India Ltd, 709-724 Bonanza, 7 <sup>th</sup> floor, B Wing, Sahar Plaza Complex, Andheri-Kurla Road, Andheri (East), Mumbai-400059	Dupont Teijin Advanced Papers (Asia) Ltd., Arco Tower, 8-1 Shimomeguro, 1-Chome, Meguro-Ku, Tokyo, Japan-153.	22-8390770	022-8393960, 8387463	Alok.Bhatia@ind.dupont.com;Manish.C.Mistry@ind.dupont.com ;Anirudha.Satavlekar@ind.dupont.com
28.	Elanta Beck India Ltd, Beck House, Damle path, Off law college road, Pune-411004	147 Mumbai- Pune Road, Pimpri, Pune-411018	020-30210700/ 800/900	020-30210609/634	Kedar.gokhale@beckindia.com
29.	Elastimold(India) Private Limited,A/303, Neel Kamal Apartment,Shradhanand Road,Vile Parle(East) Mumbai-400 057	Unit 8, Lunavat Industrial Estate, Demani Road,Village Dadra,Union Territory of D.& N.H-396 191	022-26131915/ 09819270381	022-26131915	Rmdesai04@hotmail.com
30.	ELECON Engg Co. Ltd., P.B. No. 6, Vallabh Vidyanagar, Gujrat-388120.	-----	0269-46-496/513 033-476-1861/0875	0269-46527 033-4761813	-----
31.	EMCO Transformers Ltd, Plot No F-5, Road No 28, Wagle Industrial Estate, Thane-400604	- do -	022-5480517	022-5320571	emcomumb@bom2.vsnl.net.in
32.	ESAB India Ltd, 2 <sup>nd</sup> floor,1096 A Appasaheb Marathe Marg, Prabhadevi, LLOYD Centre Point, Mumbai—400025	-----	022-7691094/3704	022-7692933	-----
33.	Esso Petroleum India Pvt Ltd, Mafatlal House, 3 <sup>rd</sup> Floor, Backbay Reclamation, Mumbai-400020	-do-	022-2882618/ 2882619	022- 2882620/2850963	
34.	FAG Bearing India Ltd, Maneja, Vadodara-390013, India	Same as office address	0265-7660200-1-2-3- 4	2638804/ 6602473	manojpurketing@fag.co.in
35.	M/s Glass Fibre & Allied Industries, 95 Sun chamber, 2 <sup>nd</sup> Floor, Near Canara Bank, J P Road-1, Goregeon(E) , Mumbai – 63		. 09324201775	022-26865163	
36.	Gulf Oil Corporation Ltd., Lubricant division In Centre, 49/50 MIDC, 12 <sup>th</sup> Road, Andheri(E), Mumbai – 93	Survey No. 27/1/2, Village Masat,Silvassa Khanvel Road, Silvassa, Dadra & Nagar Haveli-396230	022-8248240/ 8248233	022-8248232/ 8248233	amrish@gulfoil.co.in; kgravi@gulfoil.co.in
37.	High Volt Electricals, 203 Saurabh, Above Andhra	J-46, MIDC, Tarapur Indl. Estate,	8361716, 8392057	22-8375682	ttplint@bom4.vsnl.net

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	Bank, 116 Andheri – Kurla Road, Chakala, Mumbai-93.	Boisar, Dist: Thane-401506.			<a href="#">.in</a>
38.	Hind Rectifier Ltd (Equipment Division), Lake Road, Bhandup(W), Mumbai-400078.	(1) Same as office address (2) M/s Hind Rectifier Ltd, New Khasra No. 64 to 67 & 74, Village- Chharba, Langha Road , Vikas Nagar Dehradun -248197 (Uttarakhand )	022-25968027-31	022-25964114	<a href="mailto:marketing@hirect.com">marketing@hirect.com</a>
39.	Hindustan Petroleum Corpn Ltd, Jamshedji Tata Road, Byculla, Mumbai-400008.	-----	3719461/422	3782496	-----
40.	Indian Oil Corpn Ltd, Indian Oil Bhawan, G-9 Ali Yavar Jung Marg, Bandra (E), Mumbai-400051.	Pir Pau, P.B. No. 8803, Tromba, Mumbai-400074.	3736074 (Delhi office)	022-6427046	<a href="mailto:arunjuoti@indianoil.co.in">arunjuoti@indianoil.co.in</a>
41.	Ingersoll Rand, Plant 1, 22-23 GIDC Industrial Estate, Naroda, Small compressor division, Ahmedabad.	Same as office address		079-22821003	
42.	M/S Isovolta (I) Pvt. Ltd. 27, Kirol, Vidyavihar (W) Mumbai-400086	E-80, MIDC, Ambad, Nasik -422010	022-65751750, 52, 53	022-25106090	
43.	Jayam Metal Pvt Ltd, 4 D Satyam Apartment, Alkapuri Shopping Centre, Vishwas Colony, Baroda-390005.	43/2 Narpura Village, Baska, Dist: Panchmahal	0265-337304	0265-337304	-----
44.	Jhaveri Thanawala Corpn, 114/A Pokharan Road, Khopat, Thane(W)-400601	Same as office address	25474838	022-25475897	<a href="mailto:kinjal@mtnl.net.in">kinjal@mtnl.net.in</a>
45.	Jyoti Ltd, Nanubhai Amin Marg, Industrial Area, PO: Chemical Industries, Vadodara-390003	- do -	280-633/627	0265-281871	<a href="mailto:rnd.jvoti@sm3.sril.in">rnd.jvoti@sm3.sril.in</a>
46.	Kirloskar Pneumatic Co Ltd., Hadapsar Industrial estate, Pune-411013.	- do -	020-26870133, 26870341	020-26870297	
47.	K. Patel Metal Industries Private Ltd., A-101, Alaknanda, Anna Saheb Vartak Marg (TPS III) Borivili(W), Mumbai-400092.	143/K, Dabhel, Amalia, Nani Daman-396210.	022-8994142	022-8986067	
48.	Kran Rader Pvt Ltd	M/s Kran Rader Pvt. Ltd., 29/1, Kharadi Village, Off. Pune-Nagar Road, Pune- 014			.
49.	M/s Laxmi Hydraulics Pvt. Ltd., B-11, MIDC, Chincholi, Solapur 413 255	Same as office address	0217- 2357001	0217- 2357006	<a href="mailto:lhpinidia@lhpmotor.com">lhpinidia@lhpmotor.com</a>
50.	Maxiflow Industries, Plot No G1148, Phase-I, GIDC Metoda, Tauika Lodhika, Kalawad Road, Rajkot-360003.	Same as office address	--	02827-87486	-----
51.	NELCO, Mahakali Caves Road, Chakla, Andheri	MIDC Plot no EL-6, TTC Industrial	832-7511/7513	022-8377366/	<a href="mailto:nelcomum@giashm01">nelcomum@giashm01</a>

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	(East), Mumbai-400093.	Area, Electronic Zone, Navi Mumbai-400709.		8387334	.vsnl.net.in; nelcoma@bol.net.in
52.	Nashik Insulation Pvt. Ltd., E-14 MIDC, Ambad, Nasik – 422 010	Same as office address	0253-2380021/22	0253-2380023	mail@nashikinsulation.com
53.	M/s. Nangalwala Impex (P) Ltd F- 152. M.I.A. Alwar (Raj.) –301030	Same as Office Add	0144-2881375 3095515	0144-2882336 2332608	suncable@datainfosys.net
54.	NSK Japan : Indian AgentM/s Tirupati Agencies Pvt Ltd (Authorised Agent) , 182/184 Nagvedi Street, Mumbai-400003	-----	3420659/ 3445382	022-3401884	taplbom@yahoo.com
55.	Plasto Volta, 121 Shanta Industrial Estate, I.B. Patel Road, Goregaon (E), Mumbai-400063.	Same as office address	022-26959951	022-26855735	plastvolta@mtnl.net.in
56.	M/s PRS Permacel Private Limited, 63, Bombay Samachar Marg, Mumbai	M/s PRS Permacel Private Limited, PL – 11 / 1, MIDC Additional Ambernath Industrial Area, Ambernath (East) – 421506 Dist – Thane	. 09910360808 09833982526	022-6635838 022-66358333	
57.	Plastic Product Engg. Co., Near Dist.Courts Narol Village, PO: Narol, Ahmedabad - 382405	Same as office address	079-25712287/0990/0343	079-25712659	Ppecad1@sancharnet.net.in
58.	M/s Power Oil Petroleum Products, Apar Industries Ltd, Dharam singh Desai Marg, Mahul, Trombay, Mumbai-400074	-----	022-5544005/ 55951531-33	022-5541708/ 5641471	aparsor@bom5.vsnl.net.in
59.	Power Oil Petroleum Products, Apar Industries, Dharani Singh Desai Marg, Mahul Trombay, Mumbai	022-5544005/06	022-5541471/1708		
60.	Power Pack Commutators (India) Pvt Ltd, Plot No. 248/4A, G.I.D.C. Estate, Umbergaon - 396 171, Distt. Valsad, Gujrat.	Same As Office Address	0260-2563632/ 2562353/3091752 MOB-09374957426	0260-2563622	Super726@vsnl.net
61.	Precision Wires India Ltd, Saiman House, J.A. Raul Street,Sayani Road, Prabhadevi, Mumbai-400025	Plot 125, Amlhi Hanuman (66 KVA) Road, Silvassa-396230, U.T. of D.N.H.	022-4362594 4373792	022-4362593	pwil@bom5.vsnl.net.in
62.	PRS Peramacel Pvt Ltd, Hocheest House, 8th floor, 193, Backbey Reclamation, Nariman Point, Mumbai-400021	Mohile Village, Safed Pool, Andheri-Kurla Road, Mumbai-400072.	281-9386/9438, 2824008/2040645	022-2819389	contact@prs-permacel.com
63.	Raj Petroleum Products Ltd., 124 G-D, Ambedkar Marg, Ambawadi Kala Chowky, Cotton Green, Mumbai-33	Plot No. 1811, GIDC Estate, Panoli-394115, Dist: Bharuch, Gujarat.	471-4961-63-64/2474	022-4710898	rrpl@mtnl.net.in
64.	Ram Ratna Wires Ltd, 405 / 406,Kewal Industrial Estate, Senapati bapat Marg,Lower Parel, Mumbai-400013.	Unit-1 Survey # No. 212/2 Near Dadra Checkpost, Willage: Dadra, Silvassa, - 396193. Unit-2, Salasar Copper (Prop. Ram Ratna Wires Ltd) Survey # No.	0265-2321891 to 3	2321897	rrkabel@satyam.net.in

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		142/2 Madhuban Dam Road, Willage: Rakholi Silvassa, -396240 (U.T. of D & N.H.)			
65.	Remko Wire Industries Pvt Ltd., 6A ,First floor, Dharam Thakur Industrial Estate, Near Petrol Pump, Ulhasnagar-421004	B-43 Stals Nasik Sirdhi Road, Sinnar, Nasik.	0251-2583222/ 2582222	0251-2582222	-----
66.	Rina Enterprises, 106 Hemu Arcade, Vallabhai Road, Vile Parle (West), Mumbai-400056	---	022-6122766	022-6152501	--
67.	Rotex Automation Ltd., C-1B/1501,3,4 & 5, GIDC, Vithal Udyog Nagar-388121, Gujrat	Same as office address	02692-36224/ 36292/36399	02692-36442	<a href="mailto:rotexyun@satyam.net.in">rotexyun@satyam.net.in</a>
68.	M/s Sahney Kirkwood Pvt. Ltd.,27,Kirol Vidyavihar(W) Mumbai – 400 086	E-81,MIDC,Ambad, Nasik -422010	022-65751750,52,53	022-25106090	
69.	Saini Electricals & Engineering Works, Plot No. A/751/1, T.T.C. Industrial area, M.I.D.C, Pawna, Navi Mumbai-400708.	14-B Kurla Industrial Estate, NSS Road, Narayan Nagar, Ghatkopar (W), Mumbai-	022-27622986, 27622987, 27633690	022-27622976, 27622985	saini1@vsnl.com
70.	Savita Chemicals Pvt. Ltd., 66-67, Nariman Bhavan, Nariman Point, Mumbai-400021.	17-A Thane Belapur Road, Turbhe, Navi Mumbai - 400709.	288-3061-2-3-4	22-2029364/ 7684004/7672024	savitacorp@vsnl.com; thane@savita.com
71.	M/s Schneider Electric Infrastructure Ltd. Milesone 87, Halol Highway, Kotambi Vadodara - 391510	Same as office address	02668-662000	02668-663260	
72.	Siemens Ltd, Industrial Sector, Mobility Division, Imorsis 5 <sup>th</sup> Floor RLD Divn. Kalwa Mumbai - 400601	---- Plot 2, sector 2, khargar node, Navi Mumbai-410210	022-27568368	0253-27568147	
73.	SKF India Ltd, Mahatma Ghandhi Memorial Building, Netaji Subhash Road, Mumbai 400002.	-----	022-6337777 /663378011	022-22813674 / 22819074	<a href="mailto:Tapash.chaudhury@skf.com">Tapash.chaudhury@skf.com</a>
74.	Sujan Industries Mistry Industrial Complex, MIDC Cross Road 'A' Andheri(E), Mumbai-93	Same as office address	022-6870441/ 6870494	022-6870339	<a href="http://www.sujangroup.com">www.sujangroup.com</a>
75.	Tapac Industries, Mohan Mills Compound, GB Road, Thane-400607	Same as office address	-----	022-5971590	<a href="mailto:kinjalthanawala@hotmail.com">kinjalthanawala@hotmail.com</a>
76.	Tashkent Oil Co (P) Ltd, 84, GIDC Nandesari, Vadodara	- do -	0265-341514	0265-341514 Telex:0265-338083	---
77.	TFE Coating Industries, Near G.D. High School, P.O. Saijpurbogha, Naroda road, Ahmedabad-382345.	Shed No. 89/8 GIDC Estate, Phase I, Vatva, Ahmedabad-382445.	2282-0372/0246	079-22820225	dhall@ dhall Group Com
78.	Tirupati Agencies Pvt Ltd., 182/184 Nagdevi Street, Mumbai-400003.	NSK Ltd, Nisse Bldg, 6-3 Ohsaki 1 - Chome, Shinagawa-KU, Tokyo, Japan	3420659/3445382/34 44218	022-3401884	<a href="mailto:taplbom@yahoo.com">taplbom@yahoo.com</a>
79.	M/s Vallabh Industries Unit No 9&11, Arihant Industrial Estate ,Demni Road Dadra Village Dadra – 396191 Dadra & Nagar Haveli (U.T. )	Same as Office Add.	0260-2668831 0260-2669117	0260-2668831	--

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80.	V.K. Engg. Industries, 10 Avishkar, 3 Mahant Road, Vile Parle (East), Mumbai-400057.	Same as office address	022-26121634	022-26161815	-----
81.	Venus Electronics & Controls Pvt Ltd, 44/45 MIDC Industrial Area, Street No14, Andheri East, Mumbai-400093	169 / 170 / 171 / Dabhel Industrial Co. Op. Soc. Ltd. Dabhel, Daman (U.T.) - 396210	28216930/ 28221782	022- 28364440	<a href="mailto:venus@bom2.vsnl.net">venus@bom2.vsnl.net</a> <a href="http://www.vsnl.net">.in</a>

### NORTHERN REGION

S.No.	Office Address	Works Address	Office Phone	Fax No.	E-Mail Address
1.	A.S.Leather Works 128/636 'K' Block Kidwainagar, Kanpur-208011.	Same as office address	0512-3099612	0512-2617587	<a href="mailto:wahiullas2000@yahoo.co.in">wahiullas2000@yahoo.co.in</a>
2.	Advanced Digital Control, 213 East Amber Talab, Behind Nehru Stadium, Roorkee-247667	- do -	01332-264306	01332-264306	<a href="mailto:nkkulshre@yahoo.com">nkkulshre@yahoo.com</a>
3.	Alstom Limited, Transformer Division, Naini Works, Naini, Allahabad-211008.	Same as office address	0532-69-7422/3/4	0532-69-7307/7604	-----
4.	Autometers Alliance Ltd., C-63, Sector-57, Noida-201301	Same as office address, Adnl Add-AAL Will. Balidev, PO Khera, Teh. Nalagarh, Solan HP -174101	0120- 2583545/46 01795-267020	0120-2583542 01795-2671120	<a href="mailto:automet@vsnl.com">automet@vsnl.com</a>
5.	M/s Avadh Rubber, B-12, Industrial Area , Amausi, Opp. Aerodrome Lucknow – 226008	Same as Office Address	0522-2436219	2438929	
6.	Bharat Bijlee Limited, 4th floor, Millap Niketan, 8-A Bahadur Shah Zafar Marg, New Delhi-110002.	Transformer Division, Motor Division Works: P.B. No. 100, Belapur Road, Kalwe, Thane-400601.	3319694, 3711434	11-3319413	<a href="mailto:transformer@vsnl.net">transformer@vsnl.net</a>
7.	Bharat Heavy Electricals Ltd., P.O. BHEL, Jhansi	-----	440944	0517-443108	-----
8.	Bhartia Cutler Hammer Ltd, 801 Akash Deep Building, 26 A, Barakhaba Road, New Delhi-110001	20/4 Mathura Road, Faridabad-121005. Tel: 0129-5285414-18 Fax: 0129-5285551	011-3313878	011-3739230	<a href="mailto:bchdel_sales@bplnet.com">bchdel_sales@bplnet.com</a>
9.	Concord Automation & Controls, G-43, DLF Industrial Estate-1, Faridabad-121003	Same as office address	0129-5278256	0129-5273850	-----
10.	Dharam Veer & Sons, D-77 Sector-10, Noida-201301(UP)	A-18, Sector-10, Noida (U.P.)-201301	0120-24557140/ 24557899	0120-24550599	<a href="mailto:mad_dharma@rediffmail.com">mad_dharma@rediffmail.com</a>
11.	Field Gun Factory, Kalpi Road, Kanpur-208009	Same as office address	0512-2295100/01- /01-04	0512-2219462	<a href="mailto:fldgunfv@sancharnet.in">fldgunfv@sancharnet.in</a>
12.	G.K. Winding Wires Ltd, B-20 UPSIDC Industrial Area, Site 'C', Surajpur, Dist: Gautam Budha Nagar (UP)	Same as office address	0120- 2560201/214/468	0120-2560223	<a href="mailto:gkwinding@del3.vsnl.net.in">gkwinding@del3.vsnl.net.in</a>
13.	Ghaziabad Ispat Udyog Ltd., C/89, Industrial Area,	Same as office address	0120-2866189,	0120-2866188	<a href="mailto:giupl@cjnet4u.com">giupl@cjnet4u.com</a>

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	Bulandshahar Road, Site No1, P.B. No 68, Ghaziabad-201001.		2866190,2866191		
14.	M/s Huber + Suhner Electronics Pvt. Ltd., Plot – 125, Sector – B, IMT Manesar, Gurgaon – 122051( Haryana )	Huber & Suhner AG, (Ebergly & Signal Transmission), CH-8330, Pfaffiken/ZH, Switzerland	0124 – 4526100, 4526200	0124 –4102708	www.hubersuhner.co.in
15.	I.C. Electrical Co. Pvt. Ltd. 156, 2 <sup>nd</sup> Floor DSIDC, Okhla Industrial Area, Phase I, New Delhi - 110020	I.C. Electrical Co. Pvt. Ltd. E-94,. Bahadradabad Industrial Eastate Haridwar – 249402	01334235428	01334235428	icelectricals@relivmail.com
16.	Indfos Industries Ltd. 706-707, SURYA KIRAN, Kasturba Gandhi Marg, New Delhi-110 001	B-20-21 Industrial Area, Site No. 3, Merrut Road, Ghaziabad (UP)-201003	--	011-3316331	iildelhi@bol.net.in
17.	Industrial Cables (I) ltd., Industrial Area, Rrajpura-1 Distt. Patiala (Punjab)	Same as office address	(01762) 24161/24162	01762-22792	iclcables@glide.net.in ;
18.	IMT Cables Pvt. Ltd., Office: A-96, Mayapuri Ind. Area, Phase-II, New Delhi-110 064.	Works:98-A, Sector-5,IMT Manesar, Gurgaon (Haryana)	25400807, 25138698	011-25136987	Cabless
19.	M/s Kalyani Engineering Works, 109,110, Anand Industrial Estate, Mohan Nagar, Ghaziabad-201007	Same as office address	0120-2657241 2657201	0120- 2kbindia@knorrremse.com657036	kalyanigzb@yahoo.com
20.	Kirloskar Pneumatic Co Ltd., 16 Vidhan Sabha Marg, Lucknow Ph: 224367/227120	Hadapsar Industrial Estate, Pune-411013	020-687- 0133/0130/0341	020-687- 8336/0279/0634	trmmkt@pnq.kpcl.co.in
21.	Knorr Bremse India Pvt Ltd, 14/6 Mathura Road, Faridabad-121003	Same as Office Address	0129-4191420	0129-2275935	kbindia@knorrbrems e.com
22.	Lachhman Electronics, 11-B, Jaipur Estate, Nizamudine East, New Delhi-13	Same as office address	011-4350111/ 6384173	011-4350111	
23.	Mausfield Cable Co. B – 41, Sector 6 Noida – 201301.	C-23, Site C Surajpur Industrial Area Greater Noida - 201306	0120-2422275	0120-2422254	sales@mausfieldcable.com
24.	Mitsui & Co Ltd., "The Metropolitan Centre", Banglasahib Road, New Delhi-110001.	-----	011-3345481-86 (Ext224)	011-3364420/ 3732498	A.Anand@ndl.xm.mit sui.co.jp
25.	MOBIL, Indo Mobil Ltd. ,4A, DLF Corporate Park, Mehrauli, Gurgaon Road, Gurgaon - 122022, Haryana		0124-358512-15 (7 Lines)	0124-358519	
26.	Matasushi Power Technologies (P) Ltd., S 46, Okhla Industrial Area, Phase-II, New Delhi-110 020	Same as office address	011- 26387439/ 51406025	011- 29217523 011-51609796	mptaril@rediffmail.com
27.	Power Link Oil Refinery Ltd., 211-12 Aggarwal Tower, H-6 Netaji Subhash Place, Pitampura District Centre, New Delhi-110034.	18, Modern Industrial Estate, Phase-I, Bahadur Garh (haryana)-124 507	715-7523/7524	011-7157525	porltd@del3.vsnl.net.in; jainycom@vsnl.com
28.	Power Technologies Corporation, Rajgarh Road, Solan-173 212 (HP)	Same as office address	01792- 223439	01792- 226439	ptcsoln@sancharnet.in
29.	Rotomac Electricals, I-1624 Chittaranjan Park,	Sahihbabad works- B-16, Site IV, UP	011-26270097,	011-26272978	-----



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	NewDelhi-110019	Side Industrial Area, Sahibabad, Ghaziabad-201010. <b>Paharpur works: 1 No.,Oil Installation Road, Kolkata-700088.</b>	26271915, 51603425 033-24391643, 24391740		
30.	RP Machine Tools, E-193 KAVINAGAR Industrial Area, Gaziabad-201002.	Same as official address	0120-2703134/35	0120-2703133	<a href="mailto:rpmachinetool@yahoo.com">rpmachinetool@yahoo.com</a>
31.	M/s Saber Dais Compression Limited, 389 / 13 Street No 1, Amargarh colony, Kaithal-136027 (Haryana)	Same as Office Adress	01746-222481 -225196	01746-226468	<a href="mailto:Panesar_kaithal@yahoo.co.in">Panesar_kaithal@yahoo.co.in</a>
32.	M/s Safe System (India) Pvt. Lt. 156,DSIDC,Okhala Industrial Area,Phase-I,New Delhi-110020	Same as official address	011-51613270/71/72	011-51613273	<a href="mailto:Sales@safesystemindia.com">Sales@safesystemindia.com</a>
33.	SHELL, Bharat Shell Ltd., 1001-1009, Ansal Tower, 38 Nehru Place, N Delhi - 110019	011-62166139 - 41, 6483003/4	011- 6472341		
34.	SKF India Ltd.,601/602, Millenium Plaza Tower-B, Sec.-27, Sushant Lok, Gurgaon, Haryana – 122 002		0124 - 3957700	0124- 3957740	
35.	M/s SH Wires, 49/4 KM Mathura Road, Village Prithla ,The Palwal, Distt. Faridabad Haryana 121102	.....	011-26843130	011-26921422	<a href="mailto:shcopper@vsnl.com">shcopper@vsnl.com</a>
36.	Skytone Electricals (India) Ltd, 42-43, Industrial Area, NIT, Faridabad-121001.	Same as office address	523-3394/2395	0129-5232456	<a href="mailto:skytone@vsnl.net">skytone@vsnl.net</a>
37.	SMC Neumatrics(India) Pvt Ltd, 9 Udyog Vihar, Phase I, Gurgaon-122016	-----	(0124)340300	0124-342111	-----
38.	Sumitomo Corpn(Liason Office), 3rd floor, Antriksh Bhawan, 22 Kasturba Gandhi Marg, New Delhi-110001	-----	3314281-84	3310756	-----
39.	M/s Sumitomo Corporation Ind.Pvt.Ltd.,4 <sup>th</sup> floor,DLF Centre Sansad Marg ,New Delhi- 110001	FaX No.	Mr. Takeshi Kato Mob. Ph. 011-237381-85	011 - 23737111	
40.	M/s Trantel Engineering (P) Ltd. Vill. Dakhdu Majra Post Kaduwana (Baddi) Dist Solan (HP)-173205	Same as office address	01795656851	01795-244236	
41.	Tribhuwan Enterprises, Deokali Road, Faizabad, (UP)-224 001	Same as office address	05278-325778/241292	05278-240798	<a href="mailto:contact@tribhuwan.co.in">contact@tribhuwan.co.in</a>
42.	United Cable Industries, A-14, Sector-4, Noida-201301	Same as office address	4522692/4528148/4528203	0120-4558927	<a href="mailto:united_cable@rediffmail.com">united_cable@rediffmail.com</a>
43.	Usha (India) Ltd, 12/1 Mathura Road, Faridabad-121003	- do -	0129-277641	0129-277679	<a href="mailto:interuil@delz.vsnl.net.in">interuil@delz.vsnl.net.in</a>
44.	Vasu Tech Ltd, A-25 New Friends Colony, N/Delhi-110065.	PO: Sangwari, Dist: Rewari, Haryana-123401.	3328489/3326397	11-6823882 1274-54032	<a href="mailto:vticd@vsnl.com">vticd@vsnl.com</a>
45.	Venus Enterprises, 40 B Nehru Cooperative Society,	-----	91-479046 ®	-----	-----

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	Behind Paras Hotel, Ambedkar Road, Ghaziabad		011-3624998		
46.	Victor Cable Corporation, Delhi Iron & Steel Co. Ltd., 4/4 B, Asaf Ali Road, New delhi-110002	Same as office address	3270610/3273252	011-3271881	-----
47.	Vimlesh Industries Pvt Ltd, 7A, Sri Ram Road, Delhi-3966918.	Delhi Road, Bahalgarh-131021, Sonapat, Haryana.	3966918	01264-40045	vil@ndf.vsnl.net.in

### SOUTHERN REGION

S.No.	Office Address	Works Address	Office Phone	Fax No.	E-Mail Address
1.	Alco Wire Products (P) Ltd, F-43-44 Varalaxmi Market Complex, 60 M.G. Road, Secunderabad-500003	111C.I.E. (Expansion), Gandhinagar, Balanagar, Hyderabad-500037.	040-7710461	040-3078791	<a href="mailto:alcowires@satyam.net.in">alcowires@satyam.net.in</a>
2.	Alstom Ltd., Pallavaram, Chennai-600 043 Magnet House, 314/315 Annasalai, Chennai-600018	-----	4323227/451575	044-4347301/4340511	-----
3.	Amar Metering Pumps, 196-B Bharathiar Road, Ganapathy, Coimbatore-641006	Same as office address	0422-535108, 532724	0422-532724	ampcbe@hotmail.com
4.	Bhagyanagar Wire Products Pvt Ltd, Plot No 67, S.V.C.I.E. Balanagar, Hyderabad-500037.	Same as office address	040-377-1231/4431	040-4744861	info@bwpwire.com
5.	Celtek Batteries Pvt. Ltd., 471-B IV Phase, Peenya Industrial Area, Bangalore-560058.	Same as office address	8361089	080-8363355	<a href="mailto:celtek@vsnl.com">celtek@vsnl.com</a>
6.	Classic Wire Insulations, D-4 Industrial Estate, B.H. Road, Tumkur-572103	Same as office address	0816-282771/ 772/773	0816-282774	scrwire@hotmail.com
7.	M/s CMC Commutator Pvt. Ltd., Survey No 609 / 1A, 609 / 2 Machine Industrial Area, Machhe, Belgum – 590014 ( Karnataka)	Same as office address	0831-2443955, 2443866	0831-2411418	
8.	M/s Copral Insulated Conductors Pvt. Ltd. Plot No 12 Sipcot Industrial Estate ,Phase –II, Hosur-635109 (TN)	Same as office address		04344-260396, 260796	
9.	Deep leela Power Industries Ltd., No. 4, 7 <sup>th</sup> Cross Road, Hind Main Road, Amarjyothinagar, Vijaynagar, Bangalore-560 040.	No. 143, Udaipalya Post, Kaggalipura Village, Kanapura Main Road, Bangalore- 560 062	080-8432359	--	--
10.	Designs & Prototypes, II-27, Dr. Vikram Sarabhai Instronic Estate, Thiruvanniyur, Chennai-41	L-24 Dr. V.S.I. Estate, Thiruvanniyur, Chennai-41	492-5244/5162	4928127	kmahadevan@net.in
11.	Dharamdeep Powerdive, Industries Ltd., No 6 Swasti Road, Shanthinagar, Bangalore-560027	27/4 Begapalli Road, Hosur-635126.	080-2239894	080-2240429	<a href="mailto:dharmdeep@bgl.vsnl.net.in">dharmdeep@bgl.vsnl.net.in</a>
12.	Ecolite Wire Pvt Ltd, Shed No. 10, IDA Mallapur, Hyderabad-500076	Same as office address	040-7150401/ 7155635	040-7172813	ecolite@hotmail.com

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13.	Electronics Corporation of India Ltd (ECIL), Govt of India, Deptt of Atomic Energy, PO: ECIL, Hyderabad-500062	Same as office address	040-7120131	040-712696/7, 7123762	-----
14.	Elgi Equipments Ltd., Elgi Industrial Complex, Trichy Road, Singanallur, Coimbtore-641005	-do-	04222589555	0422-2591383, 2573697	<a href="mailto:ravip@elgi.com">ravip@elgi.com</a> <a href="mailto:into@elgi.com">into@elgi.com</a>
15.	Faiveley Transport Rail Technologies India Pvt Ltd, Post Box No. 39 Harita, Hosur-635109, Tamilnadu	Same as office address	04344-276761 to 276765	04344-276035 276786	<a href="mailto:Su.in@faiveleytransport.com">Su.in@faiveleytransport.com</a>
16.	M/s Flowwell pumps and meters,no: 29,KSR Layout,DEvarachikkanahalli Bangalore-560076	BAnnerghatti road IIM poast, Bangalore-560076	080-26482095 080-26484068	080-26483443 080-26544449	<a href="mailto:flowwellpumps@yahoo.co.in">flowwellpumps@yahoo.co.in</a> <a href="mailto:flowwell2@hotmail.com">flowwell2@hotmail.com</a>
17.	M/s Hindustan Nylon, Plot No.C-23/1, MIDC Industrial Area Miraj – 416415		0233264468	0233-2644772	
18.	Intek Tapes Pvt Ltd., No. 13, 9 <sup>th</sup> Main, 3 <sup>rd</sup> Block, Jayanagar, Bangalore-560011.	No. 38, Road No. 5, Bommasandra Industrial Area, Bangalore-562158.	080-26655691/92/94	080- 26656693/6648984	<a href="mailto:intek@vsnl.com">intek@vsnl.com</a>
19.	Iyappan Engineering Industries Pvt Ltd, Developed Plot No 107 A, Sidco Industrial Estate, Ambattur, Chennai-600098.	Same as office address	625-2073/2173	044-6250192	<a href="mailto:iyappan@md2.vsnl.net.in">iyappan@md2.vsnl.net.in</a>
20.	Kirloskar Batteries Ltd., Yeswantpur, Bangalore-560022.	Same as office address	3371112	080-3370408	-----
21.	Kirloskar Electric Co Ltd, PB No 5555, Malleswaram West, Bangalore-560055	Same as office address	080-3322771/ 3322111	91-080-3322469	<a href="mailto:grs@vrkec.com">grs@vrkec.com</a>
22.	Krishna Engg Works, C-12 Electronic Complex, Kushaiguda, Hyderabad-500062.	Same as office address	040- 7127230/7124935	040-7126025	--
23.	M/s Lakshmanan Isola, "Casa Fina", No. 5, Primrose Road, Bangalore-560025.	M/s Lakshmanan Isola, Achula Ramanagaram Bangalore-560025.	Mr. K.V. Girish 09448381695	080-25597778, 25593392	
24.	Laxven Systems, Plot No. 188 / A Lane 1, Phase II Sector III, IDA,Cherlapally , Hyderabad-500051.	Same as Office Address	040-27121041/ 27133532	040-27120533	<a href="mailto:Laxven2000@yahoo.com">Laxven2000@yahoo.com</a>
25.	Madras Petrochemicals Ltd., Manali, Chennai	-----	594-1366/1376/	594-1070	-----
26.	Maruthi Engg Works, Unit D-7, Phase III, Autonagar, Vijayawada-520007. Krishna distt. A.P.	Same as office address	0866-2542943, 2545331	0866-2456305 2545331	<a href="mailto:maruthi2000@hotmail.com">maruthi2000@hotmail.com</a>
27.	Medha Servo Drives Pvt Ltd, P-4/5B I.D.A. Nacharam, Hyderabad-500076.	Jodimetal Cross Road, Korremula Village: 501301, Ghateshwar Mandal, RR Dist.(AP)	040-2717 3990	040-27174908	<a href="mailto:medhas@hd2.vsnl.net.in">medhas@hd2.vsnl.net.in</a>
28.	M/s Mersen India Pvt. Ltd, 98/5 Wheeler Road Extension, Cooke Town, Bangalore-560084	M/s Mersen India Pvt. Ltd.,5, Bommasandra Industrial Area, Bangalore-560099	080-3094 6124/25/45	080-3094 6130/50	
29.	Mysore Thermo Electric (P) Ltd., 36, 4 <sup>th</sup> Main, III	Same as office address	080-839-5525/2593	080-8394417	<a href="mailto:Microtex@vsnl.com">Microtex@vsnl.com</a>

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	<b>Phase, Peenya Industrial Area, Bangalore-560058.</b>				
30.	NGEF Ltd., (Power Electronics Division), P.B. No 3876, Byappanhalli Post Bangalore-560038.	Same as office address	080-5243719	080-5241694	-----
31.	NGEF Ltd., Transformer Division, P.B.3876, Byappanhalli Post Bangalore	-----	524-3719	(080)5241694	-----
32.	Pearl Insulation Ltd, Plot No 505/506, IV Phase, Peenya Industrial Area, II Stage, Bangalore-560058	Unit-I Same as office address Unit-II- E-37 & 38, New Industrial area Sattapur, Mandideep 462046 Bhopal	2836-1154/2321	080-2836-0153/1068	pearl@bgr.vsnl.net.in
33.	M/s Radiant RSCC Specialty Cables Pvt. Ltd, B-1, Industrial Estate, Sanathnagar, Hyderabad-500018	1. Same as office address 2. Add. Work - Plot No – 19/A AP 11 C, Industrial Park Muppireddypally, (Village) Toopran (Mandal), Medak – Dist, A.P. - 502336	040-23704470/71 / 72/ 73	040-23703421	sales@radiant-rsc.com
34.	Raj Lubricants (Madras) Ltd, 12, Kailasam Street, Tondiarpet, Chennai-600081	- do -	595	044-595-5341/2890	<a href="mailto:marketing_rl@rajgrp.com">marketing_rl@rajgrp.com</a>
35.	Sahney Commutators Pvt. Ltd, No 772 2 <sup>nd</sup> Floor , 80 Ft per.phend Road Ath Block Koramangla Bangalore - 560034	Unit I: A3/A4, Jai Bharath Industrial Estate, Yeshwanthpur,, Bangalore-560022. , Unit II: Plot No 21-A, Attible Industrial area Attible Hobli, Bangalore – 562107.	080- 40347555	080- 40347575	nagarajh@sahney.com
36.	Saitronik Electric Equipment, A-11 VallabDas Buildings, Nampally, Hyderabad-500001.	H.N. 8-306/1, GOWTHAM NAGAR, Old Airport Road, Bowenpally (P.O.), Secunderabad-500 011	040-23203534/ 27753547/ 27954370	040-23203980/ 227758027	Seehyd_nrk Rao@hotmail.com
37.	Saitronik Electric Equipments, A-11 Vallabhdas Building Nampally Hyderabad 500001	Plot No 2-10 –168, Beside Ganesh Temple, E.C. Nagar HCL Post, Cherlapally, Hyderabad 500051	040-23203534	040-27261152	saitronik@gmail.com
38.	SAN Engg. & Loco Co.,P.B. No. 4802, Whitefield Road, Bangalore-560048.				
39.	Schunk Metal & Carbon (India) Pvt Ltd, No 54 / 2 Whitefield Road, Mahadevapura P.O. Bangalore-560048.	Same as office address	080-28518506/ 8507/6708/8541	080-28516713 / 8542	schunk@vsnl.com
40.	SCI Carbon Brushes Pvt Ltd, 5A, Bommasandra Industrial Area, Bangalore-560099	Same as office address	080-27836433	080-27832788	-----
41.	Siechem Technology Pvt. Ltd, 26/27, Errabalu Chetty Steet Chennai - 600001	Siechem Technology Pvt. Ltd, RS 104/8, 105/7 Sedarapet Main Road Pondicherry - 605101	2671071 044-25226141/ 0858	044-25220871	<a href="mailto:Siechem@md2.bsnl.net.in">Siechem@md2.bsnl.net.in</a>

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42.	Sharavathy Petrochemicals Pvt. Ltd., 9 <sup>th</sup> Mile, Old Madras Road, Virgonagar, Bangalore-49	Same as office address	5610742	080-5610646	-----
43.	M/s Sirveen Control System A-7/1 Graund & First Flour Electronic Complex , Kushaiguda Hyderabad - 500062				
44.	Swarnagiri Wire Insulations Pvt Ltd, N-10 Industrial Estate, Gokul Road, Hubli-580030	- do -	0836-2332780	0836-2331780	
45.	Switzer Instrument Ltd, H.O. Sales, 9 South Boag Road, Chennai-	127 Sidco Estate, Ambattur, Chennai	434-0999/4321	44-4347887	sales@switzerinstrument.com
46.	Switzer Instrument Ltd.. 14 Thanikachalam Road, PO 1423, Chennai-17	127, Sidco Estate, Ambattur, Chennai-98	0434-0999/4321	044-4347887	sales@switzerinstruments.com
47.	Switzer Instrument Co., 169, Sidco Estates, Chennai-98	-----	4340999	44-4347887	
48.	Steel and Industrial Forging Ltd., Athani Trissure, Kerla- 680771	- do -	0487-2201751/ 52	0487-2201753/ 2201331	
49.	Tata Electronic Development Services 42/43, 'Electronic City', Hosur Road, Bangalore-561229	-----	-----	080-8520417	----
50.	Tyco Electronics Corporation India(P) Ltd., "TE Park" 22B, Doddenakundi 2 <sup>nd</sup> phase, Industrial Area, Whitefield Road Bangalore-560 048	Same as Office Address	080-28540800	080-28540820	www.tycoelectronics.com
51.	Vishnu Forge Industries Ltd., C-01/02, HMT Industrial Estate, HMT Post, Bangalore-560031.	- do -	080-28389195/ 28388410/ 28388409	080-28388947	vishnuforge@vsnl.com

### FIRMS ABROAD

S.No	Office Address	Works Address	Office Phone	Fax No.	E-Mail Address
1.	Acla Worke, Frankfurter STR 142-190 KOLN D-51065, Germany	-do-	0049-221699980	0049-221697121	
2.	BHC - Bruno Husch & Co, KG BUSCHSTR,8,53340, MECKENHEIM, Germany	Same as Office Address	+85 - 6606000	+85 - 2653683	
3.	Bombardier Transportation Germany GMBH, AM Rathenaupark, 16761 Henningsdorf Germany	Same as office address	-	432236 404510	
4.	Bombardier Transportation Switzerland Ltd. PO Box 8384, CH-8050, Zurich, Switzerland	Same as Office Address	0041-318183333	0041-131156159	
5.	Bussmann, 5 LITERRUEN, DK-2740, SKOVLUNDE, COPENHAGEN, DENMARK	-----	0045-44-850930	0045-44-850901	-----
6.	Dow Corning Corporation, Midland, Michigan 48686-0994	-----	-----	-----	-----

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7.	Dow Corning Level 12, Building A 423 Pennant Hills Road Pennant Hills NSW2120	Same as Office Address	+61-2-8474188	+61-2-8474100	
8.	E. Nussbaumer AG, 5620, Bremgarten, Switzerland	-----	41(0)56/6334586	+41(0)56/6337852	
9.	Schaeffler KG, PO Box No. 1260,97419 Schweinfurt, Germany	. Schaeffler KG	0049-9721913998	0049-9721913788	
10.	Ferraz Shawmut, 1 Rue Jean Novel, 69100 Villeurbanne, France.	Same as office address	0033-47-2226611	0033-47-2226713	annie.pagneux@fr.fer razshawmut.com
11.	GE/USA381 Upper Broadway Forted Ward, Newyork NY-12828-1021, US Agent Agro Industrial 140 Franklin Street, Newyork, NY 10013	-----	010-2124321700	010-2122269072	-----
12.	Hitachi Ltd, Hitachi Works, 1-1Shirogane-ChoI-Chome,Hitachi-Shi, Ibaraki-Ken, 317JAPAN	-----	-----	-----	-----
13.	M/s Hitachi Cable Ltd.,Akihabara UDX,4-14-1,Sotokanada,Chiyodaku, Tokyo 101-8971, JAPAN (Contact person-Hiroshi UBARA)	-Do-	+ 81-3-6381-1147	nil	ubara.hiroshi@hitach i-cable.co.jp
14.	Hubber & Shuner AG,(Eberg & Signal Transmission), CH-8330, Pfaffiken/ZH, Switzerland	-do-	19522211	19522323	
15.	ICAR Spa Via ISONZO 10, 20052, MONZA (MI) Italy.	- do -	0039-39-839251	0039-39-833227	sales@icar.com
16.	Kluber Lubrication Munchen KG Geisenhausenerstr 7, D 81379 Munchen	Same as Office Address	+49-89-7876564	+49-89-7876333	
17.	M/s Leoni Studer AG, Same as work address. In India- M/s Leoni Cable Solutions (India) Pvt Ltd. A-405,Galleria, Hiranandani Garden, Powai, Mumbai-400076	M/s Leoni Studer AG, Herrenmattstr 20, Postfach 63, CH-4658, Daniken Switzerland	+41(0) 622888282, 022-40056644	+41(0) 622888283022- 40056646	
18.	Magnatek PEI, 800 Martha Street, Munhall,PA 15120, USA	-----	-----	412-462-8994	-----
19.	MAPPL Singapore, 18 Pioneer Road, Singapore, 628498	-do-	+85-6606000	+85-2653683	
20.	Optilube Australasia, 2 Marco Court, Rowville, Vc 3178	Same as Office Address	(03)97642187	(03)97642162	
21.	Shell Aesol AG, Abteilung CT, Steigerhabelstrasse 8, CH-3000 Bern S	-do-	41-31-3817844	+41-31-3822460	
22.	SKF GmbH Gunner Wester Strases-12, D-97421 Schweinfurt/Germany		0049(9721) 562118	0049-(9721) 562653	
23.	The Shell Company of Australia, 1 Spring Street, Melbourne, Vic 3000	Same as Office Address	(03)96672001	(03)98872255	
24.	Von Roll Isola, (The Swiss Insulating Works Ltd)CH-4226 Breitenbach, Switzerland.	-----	(++)41-061-7855352	(++4)0617812155 (++)41-061-	-----

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				7855188	
25.	Leoni & Studer Transportation System GmbH, Industrie Strasse 27, D-91187 Rottenbach	Studer Draht-Und Kabelwerk AG Herrenmattstrasse 20, CH-4658 Daneken Switzerland	+49(0) 9172-6844-0	+49(0) 9172-6844- 29	Contact @ls-ts.com
26.	ZF Bhantechnic GmbH Adelheidstrabe 40, D-88046, Friedrich shafen, Germany	Same as office address	0049-7541306-01	0049-7541306- 100	

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## CHAPTER-III EMU ITEMS

### PART-B

S.No.	ITEM	CURRENT SPECN.	CATEGORY OF APPROVED VENDORS		REMARKS
			PART-I	PART-II	
1	2	3	4	5	6
<b>1.</b>	<b>EMU TRANSFORMER</b>				
1.1	Power Transformer for EMU 1000 KVA	RDSO/PE/SPEC/EMU/0 137 (Rev. '0') - 2009	BHEL	CGL	
<b>2.</b>	<b>TRACTION MOTOR</b>				
2.1	4601BX/BW		BHEL, Bhopal	-----	
2.2	133 AY / 3601 AZ		-do-	-----	
2.3	High Horse Power Traction Motor (207 kW) for 25 kV AC BG EMUs & MEMUs	RDSO/PE/SPEC/D/EMU/0047-2003	-----	(i) BHEL Bhopal (4303 BY) (ii) M/s CGL (C 1005)	
2.4	TDK 5620A/ 3701 AZ (BHEL)	E-19/02	(i) TDK / Japan (ii) BHEL / Bhopal	-----	
<b>3.</b>	<b>BEARINGS</b>				
<b>3.1</b>	<b>TM Armature Bearing</b>				
3.1.1	TM type 4601 BX/BW	NU 326 NUP 318	(i) Schaeffler KG/Germany (Brand name – FAG)* (ii) SKF, Germany, Austria (iii) NTN, Japan (iv) M/s FAG Bearings India Ltd., Maneja, Vadodara – 13*	-----	* In tendering process at a time offer shall be made either from Schaeffler KG, Germany or M/s FAG Bearings India Ltd. Maneja, Vadodara.
3.1.2	TM type 133AY / 3601 AZ	NU 322 NH 315	(i) Schaeffler KG/Germany (Brand name – FAG) (ii) SKF, Germany, Austria (iii) NTN, Japan	-----	
3.1.3	TM type 5620A / BHEL 3701 AZ	NU 324 NH 318	(i) Schaeffler KG/Germany (Brand name – FAG) (ii) SKF, Germany, Austria (iii) NTN, Japan	FAG Bearings India Ltd. for NH 318	



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3.1.4	High Horse Power Traction Motor (207 kW) for 25 kV AC BG EMUs & MEMUs	NU 328 NH 320	(i) Koyo / Japan	-----	
3.2	Plain Sleeve Bearing for 253 BX/ 4601 BX/BW	DRG. No. RDSO/PE/SK/EMU/0052-2003 STR No. RDSO/PE/STR/EMU/0006 (Rev. '1')	(i) BHEL, Bhopal (ii) Chandra Udyog, Howrah.* (iii) Krishna Engg., Hyderabad (iv) Sriguru Melters & Engineers, Kolkata (v) Chandra Brothers, Howrah* (vi) Rama Engineering Works, Hyderabad	(i) Maruthi Engg. Pvt. Ltd., Vijayawada	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
4.	ENERGY –CUM--SPEED MONITORING UNIT For 1500V DC EMU & 25 kV AC EMU & MEMU	RDSO/PE/SPEC/EMU/0032-2002(Rev. '0') Amendment No. 1, 2 & 3	(i) Medha (MRT921) (600)	(i) Laxven (LAX2000E-EMU) (300) (ii) Stesalit (SESP-EMU2002) (800) (iii) Autometer (TELPRO-AMU) (500)	
5.	<b>LUBRICANTS</b>				
5.1	<b>ARMATURE BEARING GREASE</b>		-----	-----	
5.1.1	Traction Motor 4601 BX/BW of BHEL		(i) Andok Br, (ESSO) (ii) Servogem, RR3 (IOC) (iii) Lithon – 3, (HPC)	---	
5.1.2	Fuji TM GGR 125ZY		(i) Alvania – 2 (SHELL) (ii) Servogem RR3, (IOC)	----	
5.1.3	TDK 5620 A / BHEL3701 AZ and 133 AY / 3601 AZ		(i) Servogem RR3, (IOC) (ii) Lithon –3 (HPC)	----	
5.2	<b>AXLE SUSPENSION BEARING OIL</b>				
5.2.1	TDK 5620 A / BHEL 3701 AZ		(i) Talpa – 40 (Shell) (ii) Servo System 57 & 317	---	
5.2.2	4601 BX/BW		(i) Talpa –30 (SHELL) (ii) Servo System – 57 (IOC)/68(IOC)	---	
5.2.3	Fuji TM GGR 125ZY		Vitrea 220 (SHELL)	---	
5.3	<b>GEAR CASE OIL</b>				
5.3.1	133 AY / 3601 AZ		(i) Cardium Compound – H (SHELL) (ii) Camax Compound – H (BPC)	---	

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5.3.2	TDK 5620 / BHEL 3701 AZ		(i) Crater – 2 (CALTEX) (ii) Geartak – 2 (HPC) (iii) Cardium Compound F (SHELL) (iv) Camax Compound – E (BPC)	---	
5.3.3	4601 BX/BW		(i) Crater – 2 (CALTEX) (ii) Geartak – 2 (HPC) (iii) Cardium Compound - F (SHELL) (iv) Camax Compound -F (BPC)	---	
5.3.4	Fuji TM GGR 125ZY		(i) Cardium Compound – F (SHELL)	---	
6.0	LED BASED TAIL LIGHT	RDSO/PE/SPEC/EMU/0063 (Rev. '1') – 2004	---	(i) M/sMatsushi Power Technologies , New Delhi (ii)M/s Altos Electronics, Pune (iii) M/s Signotron (I) Pvt. Ltd, Kolkata*	*Renewal under process
7.0	<b>Set of Rubber and Metal bonded Rubber Components for the valves of EP brake systems</b>				
7.1	For M/s WSF make Brake Equipments	STR No. RDSO/PE/STR/EMU/0021-2008 (Rev '1')	(i) M/s WSF/ Kolkata (As per the OEMs Part no. / Drawing) (ii) M/s Sujan Industries/Mumbai * (As per Western Railway drawing) (iii) M/s Veekay Rubber Products/Mumbai * (As per Western Railway drawing)	(i) M/s Manish Rubber Industries / Mumbai (As per Western Rly. Drg.)	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
7.2	For M/s ESCORTS make Brake Equipments	----	(i) M/s ESCORTS Ltd./Faridabad (As per the OEMs Part no. / Drawing)	---	
8.0	LED based head code, GPS based passenger information and public address system for EMUs/MEMUs	RDSO/PE/SPEC/EMU/0065 (Rev. '3') with Amendment No. 1	---	(i) A Paul Instruments, New Delhi (ii) Areca Embedded Systems Pvt. Ltd., Hyderabad (iii) M/s. Medha Servo Drives Pvt. Ltd., Hyderabad (iv) M/s Saranya Electronics Pvt. Ltd., Hyderabad	

Note : 1. Refer TI directorate Vendor List for Transformer Oil.

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2. Refer Loco Directorate Vendor List for Cables, Vacuum circuit Breaker Assembly, insulation for TM and Aux. Motor bearings.  
3. Refer RDSO letter No. EL/2.2.70 dt. 27.06.2012 or, its latest issue for carbon brushes/blocks.

**CHAPTER-IV  
EQUIPMENT FOR TRAINLIGHTING & AIRCONDITIONING**

S.No	ITEM	CURRENT SPECN.	CATEGORY OF APPROVED VENDORS		REMARKS
			PART-I	PART-II	
1	2	3	4	5	6
<b>1.0</b>	<b>Batteries</b>				
<b>1.1</b>	<b>Battery for Loco &amp; EMUs</b>				
(a)	Low Maintenance Lead Acid Battery 75 Ah for locomotives (PPCP Container)	RDSO/PE/EMU/SPEC/0 014-2000 (Rev. '0') with Amendment No. 1&2	(i) Mysore Thermo (Type Mi 1075 LM) (33072) (ii) Exide (5EMU 75TP-LM) (8000) (iii) Bharat Battery (Type 5 TP 75 LM) (iv) Star Plus (75TPPLM)	(i) United Lead Oxide (5UT75P) (50000) (ii) Southern – (5 SB75R ) (iii) Labco – (5T75PEL)	
(b)	Battery for EMUs 90 Ah (LM) (PPCP Container)	RDSO/PE/EMU/SPEC/0 014-2000 (Rev. '0') with Amendment No. 1&2		(i) United Lead Oxide (5UT90P) (50000) (ii) Celtek (C10VT 90MP-LM)* (57000) (iii) Bharat 5TP90LM (57000) (iv) Southern (5SB90R) (1.2 lakh) (v) Mysore Thermo (Mi10 90 LM)* (33072) (vi) Star Plus (90TPPLM) (121992) (vii) M/s Exide (5 EMU 90 TP-LM) (9000)	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
<b>1.2</b>	<b>Battery for train lighting</b>				
(a)	210 Ah	IS:6848-1979 With Amndt. No. 1, 2 & 3 and Annexure H with correction slip of RDSO.	(i) Exide (VFA 210) (12000) (ii) Bharat Battery (TL2v210) (37500) (iii) Southern (SB210R) (72864) (iv) Mysorethermo (T 210 MH)* (71136) (v) United Lead (TL210) (172000) (vi) Celtek (T-210H)* (9690)	(i) Labco (T 210 HTL) (45000)	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.

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			<b>(vii) BKP Sonic (TL 210) (31000)</b>		
(b)	120 AH (110V) in PP-CP Container	RDSO/PE/SPEC/AC/0058-2005 (Rev. '0')	(i) Exide (3LMX120P) (100000) (ii) Mysore Thermo (6VT120PP)*(99840) (iii) Bharat (TL120P) (36000) (iv) Southern (3SB 120R2) (103000) (v) HBL (RP6-120) (225000) (vi) United lead oxide (3UT120P) (80000) (vii) Star Plus (6T120PP) (183885)	(i) Labco (3T120PTL) (36000) (ii) Celtek (C6VT120MP)* (38400) (iii) M/s Luminous Power (LUM6V120) (iv) B. K. Powersonic (3HEP TL 120)	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
(c)	120 Ah (VRLA)	RDSO/PE/SPEC/AC/0009 – 2008 (Rev. '1') with Amndt 1	(i) Amara Raja (6TL120) (ii) HBL (6VF120PPTLB)	(i) M/s Exide (MET 120 AH) (ii) Microtex Energy (6VF120PP) (iii) M/s Energy Leader (EL 120)	
<b>1.3</b>	<b>Battery for Air-conditioning</b>				
(a)	525 Ah	RDSO/PE/SPEC/AC/0058-2005 (Rev. '0')	(i) Bharat Battery (2P525 LM) (37500) (ii) Exide (LMX 525) (6000)	(i) Mysore Thermo (Mi 525 )* (ii) Celtek (T525H)* (iii) Southern (SB525R) (iv) United Lead Oxide (T525P)	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
(b)	800 Ah	RDSO/PE/SPEC/AC/ 0058 – 2005 (Rev. '0')	(i) Mysore Thermo (Mi 8) * (28080) (ii) Bharat (2P 800 LM) (37500) (iii) Southern Batteries (SB800R) (iv) Exide (LMX800)(12000) (v) Star Plus (2T800HR) (121992) (vi) HBL (T800P)	(i) United Lead Oxide (T800P) (34800) (ii) Labco (T800HAC) (iii) Celtek (2GT800PP) *(16320)	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
(c)	450 Ah (MG AC Coaches)	RDSO/PE/SPEC/AC/0058-2005 (Rev. '0')	(i) Bharat (4AC450) (1200)	(i) Mysore Thermo (Mi 8450 TL)*	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006.
(d)	1100Ah VRLA	RDSO/PE/SPEC/AC/0009 – 2008 (Rev. '1') with Amndt 1	(i) Amara Raja (9025 TL-2V) (183600) (ii) Exide (MET1100) (iii) HBL (F1100P) (185000)	(i) Microtex Energy (2VF1100PP) (ii) Energy Leader (EL-1100)	
(e)	650 Ah VRLA cell	RDSO/PE/SPEC/AC/0009 – 2008 (Rev. '1') with Amndt 1	-----	(i) Amara Raja (R2650) (ii) HBL (F 650 PP) (iii) Exide (MET 650 Ah) (iv) Microtex (2VF 650 PP) (v) M/s Energy Leader (EL 650)	
(f)	12 V, 70 Ah VRLA	RDSO/PE/SPEC/AC/0009 –	-----	(i) Amara Raja (R12070)	

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		<b>2008 (Rev. '1') with Amndt 1</b>		(ii) <b>HBL (LR 12V 70)</b>	
<b>1.4</b>	<b>Battery for TR-D Application</b>				
(a)	Lead Acid 40Ah -LM	RDSO/PE/SPEC/TL/0040-2003 (Rev-0)	-----	(i) M/s Mysore Thermo T40H (257400) (ii) M/s Bharat T40 H LM (57000) (iii) M/s Celtek T40 H LM (iv) M/s Labco T40 H TLM (50000)) (v) M/s United Leadoxide T40H	
(b)	Lead Acid 40Ah -LM	RDSO/PE/SPEC/TL/0040-2003 (Rev-0) with Amendment No.1	-----	(i) M/s Mysore Thermo T40H (257400) (ii) M/s Celtek T40 H LM (iii) M/s Labco T 40 HTLM (iv) M/s Baharat T40HLM	
(c)	Lead Acid 200Ah -LM	RDSO/PE/SPEC/TL/0040-2003 (Rev-0)	-----	(i) M/s Celtek T200 H LM (9690) (ii) M/s Mysore Thermo T200H (68640) (iii) M/s Labco T200 H TLM (48000) (iv) Bharat T200H LM (37500) (v) United Lead Oxide T200 H	
(d)	Lead Acid 200Ah -LM	RDSO/PE/SPEC/TL/0040-2003 (Rev-0) with Amendment No.1	-----	(i) M/s Mysore Thermo T200H (68640) (ii) M/s Celtek T200 H LM (iii) M/s Labco T 200 HTLM(48000) (iv) M/s Baharat T200H LM (37500)	
<b>2.0</b>	<b>ERRU</b>				
(a)	ERRU for 4.5 kW alternator	RDSO/PE/SPEC/ AC/0013-2011 (Rev. '2')	(i) M/s Stesalit (ii) M/s IC Electricals (iii) PRESSTECH	(i) KEL(Kundara)* (ii) Stone India (240)	Approved vendors shall be considered for educational order only till revalidation is cleared by RDSO (RB letter 98/Elect(G)/165/1 dt. 09.01.2009 Cl. iii (c). * Revalidation as per Rev. '2' awaited.
(b)	ERRU for 25 kW alternator	RDSO/PE/SPEC/ AC/0013-2011 (Rev. '2')	(i) M/s IC Electricals (ii) M/s Stesalit	(i) KEL(Kundara)* (ii) M/s Stone India Ltd.	
<b>3.0</b>	<b>Dry Type Air Filter</b>				
3.1	Dry type air filter for air conditioned coaches Underslung & conventional RMPU	RDSO/PE/SPEC/AC/0055-2003 (Rev-1) – Jan.2004	(i) Usha Filter, Meerut (24000) (ii) Filtech India, Kolkata (30000) (iii) Industrial Filter, Bharuch (20000)	(i) Shree Shyam Filters, Noida (10000) (ii) Puromatic Filters Pvt. Ltd., New Delhi	
3.2	Dry Type air filter for	RDSO/PESPEC/AC/0055 -		(i) M/s Usha Filter, Meerut	

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	LHB RMPU	2003 (Rev. '1') with drg. No. RDSO/PE/SK/AC/0073 – 2004 (Rev. '0') & RDSO/PE/SK/AC/0074 – 2004 (Rev. '0')		(ii) M/s Industrial Filter, Bharuch (iii) M/s Filtech India, Kolkata (iv) Puromatic Filters Pvt. Ltd., New Delhi	
4.0	<b>Micro Processor Controller</b>				
4.1	Microprocessor controller for roof mounted AC package unit for LHB coaches and double decker coaches	RDSO/PE/SPEC/AC/0139 - 2009 (Rev. '1')		(i) Sidwal Refrigeration, Faridabad* (ii) System Aids, Bangalore* (iii) A. Paul, New Delhi* (iv) Amit Engg., Baddi*	*Revalidation as per revised specification No. RDSO/PE/SPEC/AC/0139 - 2009 (Rev. '1') is awaited.
5.0	<b>BLDC fan</b>				
5.1	BLDC fan	RDSO Spec. No. RDSO/PE/SPEC/TL/0021/2005 - (Rev. 2)	(i) CGL (60000) (ii) R. Kanwar Electrical*(21600) (iii) Light Engg. Corp. Parwanoo, solan*	(i) KEL, Quilon (100000) * (ii) Raman Sinha Electricals, Chennai* (iii) SVI Brush Gear, Bangalore* (iv) Kapsons Industries Ltd., Jalandhar* (v) GAEC	*Revalidation as per revised specification (Rev. 2) awaited.
6.0	Endless `V' Belt for Railway Coaches Size C 122 & C 81	RDSO/PE/SPEC/AC/0059-2004 (Rev. '0') with Amendment No. 1	(i) Fenner (898000) (ii) Vinko Auto (412500) (iii) PIX (300000)	(i) OMFA (480000) (ii) Jyoti (624000) (iii) Navyug	
7.0	<b>Brush Less Alternator with Rectifier Regulator along with Belt Tensioning Device</b>				
7.1	4.5 kW 110/120 V DC	RDSO/PE/SPEC/TL/ 0054-2003 ((Rev.'0') with Amndt. No. 1 & 2.	(i) KEL, Kundra (1560 nos.) (ii) SIL (1440) (iii) PRESSTECH (600 sets) (iv) Best & Crompton (900 sets) (v) Stesalit (432 sets) (vi) IC Electrical (600 sets)	(i) PD Steels (ii) Kapsosns	
7.2	12 KW 110/ 130 V DC	EL/TL-41/A	(i) KEL, Kundra (ii) Presstech	-----	
7.3	25 kW 110/130VDC Alternator	RDSO/PE/SPEC/AC/0056-2004 (Rev.'0') with Amendment no. '1'	(i) BHEL Electrical Machines Ltd., Kasaragod (675 nos.) (ii) SIL (180 nos.) (iii) KEL, Kundra (300 nos.) (iv) PRESSTECH (180 nos.)	(i) Best & Crompton(360 sets) (ii) PD Steel	# Not for RRU

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			(v) Stesalit (360 sets) (vi) IC Electrical#		
8.0	Axle / Alternator Pulleys for TL and AC Coaches	ELPS/SPEC/TL/13 March 1998	-----	(i) SIL (4.5 kW & 25 kW) (ii) Best & Crompton (iii) KEL , Kundara (iv) HMTD, Taloja (v) Presstech (vi) PD Steel	
9.0	Roof Mounted AC Package Units				
9.1	Roof Mounted AC Package Units	ELPS/SPEC/AC/ 03 (Rev.2) with Amendment no. 1 & 2	(i) Sidwal, Faridabad (720) (ii) Fedders Lloyd, Kalamb (600) (iii) Intec, Selaqi (600) (iv) Lloyd Electric & Engg., Bhiwadi (600) (v) Amit Engineers , Baddi (300) (vi) Amber Enterprises, Rajpura* (vii) Daulat Ram Industries, Haridwar *(500)	(i) Stesalit Ltd., Baddi (300)* (ii) DRESPL, Simrai, Raisen (MP) (600) *	(i) M/s DRI, Haridwar & DRESPL, Simrai are sister/allied concerns (Ref: RB letter no. 2005/Elect (TRS)/441/10 Pt. dt. 02.05.2006. *Revalidation as per revised specification (Type-II) awaited.
9.2	AC Control panel for roof mounted AC package units	ELPS/SPEC/AC/ 04 (Rev.3) with Amendment no. 1	(i) Sidwal, Faridabad (720) (ii) Fedders Lloyd, Kalamb (600) (iii) Intec, Selaqi (600) (iv) Lloyd Electric & Engg., Bhiwadi (600) (v) Amit Engineers, Baddi (300) (vi) Amber Enterprises, Rajpura (400) (vii) Daulat Ram Industries, Haridwar* (500)	(i) Stesalit Ltd., Baddi (300) (ii) DRESPL, Simrai, Raisen (MP)	
9.3	Roof mounted AC package unit for LHB variant AC coaches.	RDSO/PE/SPEC/AC/0061 – 2005 (Rev.'1')	(i) Sidwal, Kalamb*(720) (ii) Lloyd Electric & Engineering Ltd., Bhiwadi *(600) (iii) Intec. Corp., Selaqi* (iv) Amit Engineers, Baddi *	(i) Fedders Lloyd, Kalamb *(600) (ii) Ess Ess Kay Engg. Co. (P) Ltd., Kapurthala* (iii) Daulat Ram Industries, Haridwar *(500) (iv) Stesalit Ltd., Baddi*	*Revalidation as per revised specification awaited.
9.4	Roof mounted AC	RDSO/PE/SPEC/AC/0134 –		(i) Sidwal Refrigeration, Faridabad	

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	package unit for Double Decker EOG AC coaches.	2009 (Rev.'0')		(ii) Intec Corporation, Selaqui (iii) Lloyd Electric, Bhiwadi	
9.5	415 V, 3-phase induction motor for roof mounted AC package units.	RDSO/PE/SPEC/AC/0089 (Rev. '0') with Amendment 1 & 2		(i) CGL, Ahmednagar (ii) Daulat Ram Engg. Services (P) Ltd., Raisen (iii) Laxmi Hydraulics(P) Ltd., Solapur (iv) Standard Electrical Industries, Coimbatore (v) Kapsons Industries, Jalandhar.	
10.0	25 kVA under slung inverter	RDSO/PE/SPEC/AC/0024 (Rev-0) – 2001 with Amendment No. 2.	(i) Autometer , Noida(1200)* (ii) Hind Rectifiers, Mumbai (1000) # (iii) Siemens India Ltd., Mumbai (900)* (iv) Medha Servo Drive, Hyderabad (600)* (v) Electrowaves, Parwanoo (1800)	(i) Hitachi HI-REL Power Electronics Pvt. Ltd., Gandhi Nagar (1000)* (ii) Bombardier, Vadodara (540)* (iii) M/s Signotron (India) Pvt. Ltd. Kolkata	*Revalidation as per amended specification (Amendment No. 2) awaited. # Revalidation as per Amendment No. 2 is completed only for Dehradun Unit
11.0	Electronic Time Delay Relay for AC coaches	RDSO/PE/SPEC/0060 Rev. "0" – 2004	(i) A Paul, New Delhi (ii) Selec Controls, Mumbai	(i) Amit Engineers, Baddi	
12.0	Static battery Charger for AC & TL coaches (Type-1 for 155V/25A, Type-2 for 155V/220A, Type-3 for 310V/25A, Type-4 for 310V/220A)	RDSO/PE/SPEC/AC/ 0008 (Rev. '2')	-----	1. M/s Signotron (India) Pvt. Ltd., Kolkata	
13.0	Energy efficient LED based luminaire unit for AC coaches	RDSO/PE/SPEC/TL/D/0091 (Rev. '0')-2008 with Amendment No. 2	-----	1. MIC Electronics Ltd., Hyderabad*	*Except light fitting for SLR (Type L)
14.0	Flexible Polyamide conduits with its end fittings and accessories	RDSO/PE/SPEC/AC/0138 – 2009 (Rev. '1')	-----	1. MV Electrosystems Pvt. Ltd., Faridabad (sizes: NW17, NW 23, NW 29, NW 36, NW 48) 2. Tirupati Plasto matics (P) Ltd., Jaipur (Sizes: NW 17, NW 23, NW	



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				29, NW 36, NW 48)	
15.0	LED based tail lamp in SLR & power car Rolling stock application	RDSO/PE/SPEC/TL/0119 - 2008 (Rev. '0')	-----	1. Altos Electronics, Pune 2. Electronics Equipment Co. Pvt. Ltd. 3. RT Vision Technologies (P) Ltd.	
Following new items have been assigned to RDSO for approval of vendors vide RB letter No. 2001/Elec (G)/165/16 dt. 30.09.2008					
16.0	Battery Charger				
a.	Ragulated Battery Charger	RDSO/PE/SPEC/AC/0129-2009 (Rev. 0)	1. Hitach Hi-Rel Power Electronic Pvt. Ltd, Ghandhinagar 2. Steaslit Ltd, Baddi (Solan) 3. Autometer Alliance Ltd., Noida	1. IC Electrical Co. Pvt. Ltd., New Delhi 2. Signotorn India Pvt. Ltd., Kolkata	
b.	Constant voltage and constant current pre-cooling unit and battery charger for SG AC coaches	RDSO Spec No. RDSO/PE/SPEC/AC/TL/0053 (Rev. 0) Aug-2007 with Amndt. 1 dt. 08.01.2010	1. Signotron India Pvt. Ltd., Kolkata	1. Electrowaves Electronics, Parwanoo (Solan)*	* Restrictive quantity orders in terms of RB letter no. 2002/Elect.(G)/114/3 Pt dt. 08.02.2010.
c.	Battery charger for 110 V, 40 Ah battery	RDSO Spec. No. ETI/PSI/1 (6/81)	----	1. Universal Industrial Products, Mumbai 2. Concord Control System Pvt. Ltd., Lucknow	
d.	Battery charger for 110 V, 200 Ah battery	RDSO Spec. No. ETI/PSI/24 (6/81)	----	1. Universal Industrial Products, Mumbai 2. Concord Control System Pvt. Ltd., Lucknow	
17.0	DA Set for 500KVA 750V				
	Diesel Alternator set 500 kVA	RDSO/PE/SPEC/AC/0084 – 2008 (Rev. '1')	1. M/s Kirloskar Electric Co. Ltd, Bangalore * 2. M/s BHEL Electric Machines Ltd., Kasargod # 3. M/s Deev Genset, Silvasa @	----	* Approved for Kirloskar alternator model no. 4AB355 / 7 with M/s Cummins Engine Model No. KTA19G5L. # Approved for M/s BHEL-EML Alternator Model no. TA-3560L7-SP with M/s Cummins Engine Model No.

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					<b>KTA19G5I.</b> @ Approved for M/s Crompton Greaves Ltd. Alteranor Model No. G2R355MA with M/s Greaves Cotton Engine Model No. TBD4IV12P
<b>18.0</b>	<b>Step down transformer for EOG Coaches</b>				
a.	50 kVA Transformer for AC coaches	RDSO Spec. EL/EOG/6/93(Rev A)-97 for 50 kVA	1. Design & Prototypes, Chennai	1. Pantronics, Mumbai 2. Bhasin Packard, Mohali 3. Vimal Transformer, Sitarganj	
b.	60 kVA Transformer for AC coaches	RDSO/PE/SPEC/AC/0080)(Rev-0)-2007 with Amendment-1 & 2 for 60 kVA	1. Vimal Transformer, Sitarganj 2. Pantronics, Mumbai	Lambda Elcot Ltd., Chennai	
c.	9 KVA Transformer for non-AC coaches	RDSO specification No. RDSO/PE/SPEC/ TL/0158-2010 (Rev.0)		1. M/s Pantronics, Mumbai 2. M/s Vimal Transformer Corporation, Moradabad	
d.	15 KVA Transformer for non-AC coaches	RDSO specification No. RDSO/PE/SPEC/ TL/0158-2010 (Rev.0)		1. M/s Pantronics, Mumbai 2. M/s Vimal Transformer Corporation, Moradabad	
<b>19.0</b>	<b>Inter Vehicle Coupler</b>				
	ZS Coupling 400 A 750 V	EDTS 105 Rev-E, Amend 1 & 2	1. Stesalit, Baddi 2. S. International, Mumbai 3. MAA Laxmi Ind, Howrah	---	
<b>20.0</b>	LED type emergency light unit	ICF/Elec/917 Rev. '1'	1. IC Electricals, Haridwar 2. Maave Electronics, Secundrabad 3. DR Auto, Delhi	1. Intra Electronics, Pune 2. A Paul Instruments, New Delh 3. Insta Power Ltd., Roorkee 4. General Auto electric Corporation, Mumbai 5. Stesalit, Baddi 6. Concord Control System Pvt. Ltd., Lucknow 7. DAN Electronics System Pvt. Ltd., New Delhi 8. Areca Embedded Systems Pvt. Ltd., Hyderabad, 9. Associated Lighting System Pvt.	

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				<b>Ltd., Rehmapur, Uttarakhand</b> <b>10. M/s Saranya Elctroncs Pvt. Ltd.</b> <b>Hyderabad.</b> <b>11. M/s V.G.S. Technologies</b> <b>Hyderabad</b>	
<b>21.0</b>	<b>Switch Board Cabinet</b>				
(a)	Switch Board Cabinet for LHB EOG AC coaches.	EDTS 073 Rev 'D', Amendment '6'		1. Instrumentation Ltd., Kota 2. Amit Engineers, Baddi 3. Transtel Engineering (P) Ltd., Baddi 4. Trinitron, New Delhi 5. Ess Ess Kay, Kapurthala 6. Stesalit, Baddi 7. International Switchgears, Chandigarh 8. Abrol Engg, Kapurthala	
(b)	Switch Board Cabinet for LHB AC power car	EDTS 104 Rev. 'D', Amendment '5'	1. Ess Ess Kay, Kapurthala 2. Stesalit, Baddi 3. International Switchgear, Chandigarh 4. Abrol Engg., Kapurthala	1. Amit Engineers, Baddi 2. Trinitron, New Delhi	
(c)	Switch Board Cabinet for LHB AC power car for 2x500 kVA DA set	EDTS 103 Rev. 'D', Amendment '7'	1. Ess Ess Kay, Kapurthala 2. International Switchgear, Chandigarh 3. Trinitron, Noida	-----	
(d)	Switch Board Cabinet for LHB SG AC coaches	EDTS 144	1. Ess Ess Kay, Kapurthala	(i) Abrol Engg., Kapurthala (ii) International Switchgear, Chandigarh (iii) Stesalit, Baddi (iv) Instrumentation Ltd. Kota	
(e)	Switch Board Cabinet for LHB AC Hot Buffet Coach	EDTS 134 Rev. 'D' Amendment '5'	1. Ess Ess Kay, Kapurthala 2. Stesalit, Baddi 3. International Switchgear, Chandigarh	(i) Abrol Engg., Kapurthala (ii) Instrumentation Ltd. Kota	
<b>22.0</b>	<b>Emergency Lighting System for LHB EOG Coaches</b>	Spec. EDTS151, Rev. C, Amndt – 1 & 2	1. M/s DR Auto Industries, Delhi*	1. M/s Precision Safety Equipment Ltd., Delhi 2. M/s Dhingra Engg. Works, New	*Sister/Allied concern (Ref: RB letter no. 2005/Elect (TRS)/441/10

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				<b>Delhi*</b> <b>3. M/s Integ Electronics, New Delhi</b> <b>4. Concord Control System Pvt. Ltd., Lucknow</b> <b>5. M/s DAN electronics System Pvt. Ltd., New Delhi</b> <b>6. M/s A. Paul Instruments New, Delhi.</b> <b>7. M/s. VGS Technology Hyderabad</b>	<b>Pt. dt. 02.05.2006.</b>
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**Note:**

1. Refer Loco directorate Vendor List for Ball Bearing, Roller Bearing for alternator and carbon brushes.
2. Refer Railway Board letter no. 2001/Elect (G)/165/1 dt. 08.11.2007 for directives on underslung refrigerant compressor and spares.

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**CHAPTER-V**  
**REGION-WISE LIST OF FIRMS AND ADDRESSES FOR**  
**EMU, TL AND AC ITEMS**

**a. EASTERN REGION**

S.NO	CODE	FAX / Ph No	Office / Work Address	ITEM	REMARKS
1	2	3	4	5	6
1.	ASSAM CARBON	Fax 0361-640368	M/S Assam Carbon Product Ltd., 78, Victoria Road, Birkuchi, Chandrapur Road, Guwahati –781026	Carbon Block	
2.	BHARAT	91-033-2460-6734	M/S The Bharat Batteries Manufacturing Co.Pvt.Ltd., 11 A & B, Jamir Lane, Kolkata – 700019.	TL & AC, Loco Batteries	
3.	BKPS	Fax : 033-2430-1140	M/s B.K.Power Sonic Pvt. Ltd. ,54 A ,Raja Nabo Krishna Street , Kolkata –700 005	TL Battery	
4.	EXIDE	91-033-2286-6186	M/S Exide Industries Ltd., 59E, Chowringhee Road, Kolkata-700020	TL & AC, Loco, VRLA Batteries	
5.	FILTECH	Ph 033-2352-6371 033-2351-4466 Fax 033-2360-4640 Mob. 9830051262	M/s Filtech (India), 46, Muraripukur road, Kolkata – 700 054.	Dry type air filter	
6.	LABCO	033-2564-2037	M/s Lead Acid Battery Co. (P) Ltd., 18/3 Kumud Ghosal Road, Kolkata – 700057	TL & Loco batteries	
7.	MAA LAXMI	26668253 26441267	Maa Laxmi Industry, No. 117,Bellious Road, Howrah 711 001.	Wheel Set Earthing Equipment, Inter vehicle coupler	
8.	NATIONAL OIL	Ph. 033- 2254511/ 2250325 Fax:033- 2100466	National Oil Co. LTd., PC 38, India Exchange Place, Kolkata – 700 001.		
9.	SAKD ENGINEERS	9830033762 22611017	Sakd Engineers (P) Ltd., 324, Sahitya Parishad St., Kolkata 700 006.		
10.	SIL	Fax 91(033) 2401-4886 Ph. 2401-4661-4668	M/S Stone India Ltd., 16, Taratola Road, Kolkata-700088.	Referigerant Compressor T.L.Alternator A/C Coaches Alt., Wearing strip for AM 12 Pantograph	
11.	SIGNOTRON	9831290695 23577877, 23573481	Signotron (India) Ltd., Plot No.J1-6, Block Eb, Sector5, Salt Lake Electronic Complex, Kolkata – 700 077	Inverter	

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12.	STAR PLUS	033-26590673	M/s. Star Battery Ltd., Vill- Chakundi, P.O- Dankuni Coal Complex Township, Distt-Hoogly, 712310 (W.B)	TL, AC & Loco battery	
13.	STESALIT	Fax :033-2495305 Ph. 033-2467984 Mob. 9836065234	Office: M/s Stesalit Ltd., Park Plaza, (N) 71, Park Street, Kolkata – 700016	Brush Less Alternator with rectifier regulator, Micro processor control panel for AC coach	
14.	SRIGURU	Off: Ph 033-2479-6762 Factory: Ph 033- 2452-1485 email: <a href="mailto:melters@indiatimes.com">melters@indiatimes.com</a>	M/s Sriguru Melters & Engineers, Kolkata Office: 20A, Mahesh Dutta Lane (Chetla) Kolkata-700027, Factory: 156/143, Ho-Chi-Minh Sarani, Kolkata – 70006,	Plain sleeve bearing for TM 253 BX/4601 AZ.	
15.	EEC	Fax 033-22133279 Ph 033-22434744	M/s Electronics Equipment Co. Pvt. Ltd., 146/2, Old China Bazar Street, 1 <sup>st</sup> Floor, Kolkata – 700001	LED based tail lamp.	

## B. NORTHERN REGION

S.NO	CODE	FAX / Ph No	Office / Work Address	ITEM	REMARKS
1	2	3	4	5	6
16.	AUTOMETER	Ph. 012-2583545-46 Fax 012-2583542	M/s AUTOMETER Alliances Ltd, C-63, Sector-57, NOIDA-201301(UP)	Under slung Inverter	
17.	AMBER	01762-232646, 232126, 230570 Fax: 01762-232127	M/s Amber Enterprises, C-I, Phase – II, Focal point, Rajpura, Punjab – 140 401	RMPU and its control panel	
18.	AMIT	Ph. 0172-5044640, 41, 44 Fax: 0172-2236916 Mob. 9814012801	M/s Amit Engineers, E-181, Industrail Ara, Phase – VII, Mohali (Punjab) – 160055.	RMPU and its control panel and solid state temperature controller & Microprocessor Controller for LHB Design RMPU.	
19.	ALSTOM	Ph. 011-26382044 Fax011-26382045	M/s Alstom, Chandniwala Estate, Maa Anand Mai Marg, Kalkaji, New Delhi – 110 019.		
20.	A. PAUL	Ph. 011 26039839/40 Fax: 011 41603578	A Paul Instruments Company, 1, First Floor, Aravali shopping complex, Alaknanda, New Delhi – 110019	Solid State Temperature Controller & Microprocessor	

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		Mob. 9810025331 Email: pawanbahl@apaulinstruments.in	Works: M/s A. Paul Instruments Company, 6/3, Block "D", Okhala Industrial Area, Phase 1, New Delhi 110020.	Controller for LHB Design RMPU & LED based head code, GPS based passenger information system and public address system for EMUs/MEMUs	
21.	ASSOCIATED	Fax 011-41672742 Mob 9871122515 (Mr. Dinesh Sinha)	M/s Associated Lighting System Pvt. Ltd., Khasra No. 184/3, Village: Rehmapur, PO Jaspur, Distt. Udham Singh Nagar (Uttara Khand) – 244712, Off.-17. Community Centre, New Friends Colony New Delhi -65	LED type emergency light unit.	
22.	CGL	FAX-011-23324360	M/S Crompton Greaves Ltd., Vandhna, 11 Tolstoy Marg, New Delhi-110001	BLDC fan	
23.	CGL	CROMGRE	M/S Crompton Greaves Ltd., A-6/2, MIDC, Ahmednagar-414111 (INDIA).		
24.	CROMPTON	Ph. 011 –3730445/ 3317075 Fax 011-3324360/ 3317075	M/s Crompton Greaves Limited , Rail Transportation System Division Vandhana Building, 11 Tolstoy Marg New Delhi – 110001		
25.	CONCORD	Fax 0522-3012877 Mob 9936539555 (Mr. Nitin Jain)	M/s Concord Control system Pvt. Ltd., 202, Garden View Apartment, 8, Rana Pratap Marg, Lucknow – 226001 Works: G-8, UPSIDC, Industrial Area, Dewa Road, Lucknow – 226019 Email: concord.nitin@gmail.com	LED type emergency light unit & Battery Charger	
26.	DAN	Ph 011-32517935 Fax 011-32517935 Mob 9810272866 (Mr. Dharendra Singh)	M/s DAN electronics system Pvt. Ltd., 49/4, Rama road Industrial Area, Shivaji Marg, New Delhi – 110015. Email: dhiren@dandisplayboard.com	LED type emergency light unit.	
27.	DHINGRA ENGG.	9444162580	Dhingra Engg. Works, B-11, Rajkamal Sadan, Preet Vihar Community Centre, Vikas Marg, Delhi - 110092		
28.	D.R. AUTO	Fax No. 0120-2424607	D.R. Auto Industries, E-43, Sector-B, Noida, Gautam Buddha Nagar, (UP)		
29.	ELECTROWAVES	9216534486 01792-234410, 234411	Electrowaves, Plot No 37, Sector-5, Parwanoo, District, Solan (H.P) India		
30.	FEDDERS LLOYD	FEDDLLOY Tele Fax: 011-6933362 Ph. 0120-2563032/33 Fax: 0120-2562632	Regd Office : M/S Fedders Lloyd Corpn.Ltd., C4, Phase-II, Noida, Gautam Buddha Nagar (UP). Works :	Roof mounted AC Package units and its control panels Roof mounted AC Package units for LHB variant AC	

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			M/S Fedders Lloyd Corpn.Ltd., Saketi Road , Kala-Amb, Distt. Sirmour, Himachal Pradesh.	coaches	
31.	HAVELL's	Ph. 0120-2587815-26 Fax: 0120-2583904 Ph.01795-246114&246115 (w)	M/S HAVELL'S India Ltd., 1, Raj Narain Marg, Civil Lines, Delhi-110054. Works: Village Dharampur, Sai Rd., Baddi, Solan –173205(HP)	MCBs	
32.	HIND		M/s Hind Rectifier Ltd., New Khasra No. 64-67, Langa Road, Vikas Nagar, Dehradun - 24819	Under Slung Inverter	
33.	INTEC	Pho. 01702-38505 Fax: 011-6072549 Mob. 09810040890, 09418038505	M/s. Intec Corpn., Factory: F-89, Industrial Area, Selaqui, Dehradun (Uttarakhand) – 248197 Office: Khasra No. 850/2, Mandi, New Delhi - 110030	Roof mounted AC Package units and its control panels Roof mounted AC Package units for LHB variant AC coaches	
34.	ICECPL	Ph. 011-41613270,71,72,73 9319071511 Fax: 011-41613273	Office: M/s IC Electricls Co. PVT. Ltd., 156, DSIDC, Okhla Industrial Area, Phase –1, New Delhi – 110020 Works: M/s IC Electricls Co. PVT. Ltd., E-94, Industrial Estate, Bahdarabad, Haridwar, Uttranchal – 249402.	Alternator with RRU/ERRU	
35.	INDO ASIAN	Ph 0120-2563445 Fax 0120-2563442	Off: M/s Indo Asian Fuse gear Ltd., Noida. Factory: M/s Indo Asian Fuse gear Ltd., 51, KMG T Road, Murthal Disst, Sonipat, Haryana - 131039	DC MCBs	
36.	JYOTI	Ph. 011-23233257 to 59, 32600634 Fax 011-23237376, 0120-2866310, 3290861	M/s Jyoti Rubbers (P) Ltd., 509, 1 <sup>st</sup> floor, Kucha Pati Ram, Bazar sita Ram, Delhi – 110 006 Works: Khasra No. 38, North of GT Road, Village and PO Chapraula, Distt GB Nagar (UP).	“V” belts	
37.	KAPSONS	Ph. 0181-2670900, 2670901, 2670902, 2670903 Fax 0181-2671901	M/s Kapsons Industries Ltd., GT Road, Saranussi, Jalandhar-144027	Alternator with RRU	
38.	LIGHT ENGINEERING CORPORATION	Ph. 0181-235155, 5080422, 2235155 Fax 0181-5080243 01792-235256 Mob. 9814655790	Office: M/s. Light Engineering Corporation, 3 <sup>rd</sup> Floor, Centre Square, SCO 85, Urban State Phase II Market, Jalandhar – 144022 (Punjab) Works : M/s Light Engineering Corporation, Village : Kamli,Khadheen Road, Parwanoo, Distt.- Solan (H.P.)	BLDC fan	
39.	LEEL	011-6384182, 84,85,86 Fax: 011-632 1183 Fax: 01493-20543,	Regd Office : M/S Lloyd Electric & Engg. Ltd. , B-10/1, Okhla Industrial Area , Phase-II, New Delhi-110020. Works : M/s. Lloyd Electric	Roof mounted AC Package units and its control panels Roof mounted AC Package	



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		Ph. 01493-20724, 21348. Mob. 09983337803	Engg. Ltd., A-146, (B&C), RIICO Indl. Area, Bhiwadi Distt, Alwar (Rajasthan) –301 019.	units for LHB variant AC coaches	
40.	LUMINOUS	011-25558912 / 011- 25558913 011-40778221-22	M/s. Luminous Power Technologies (P) Ltd. C-8 & C-9, Community Centre, Jankipuri, New Delhi-110058	LMLA Battery	
41.	MATSUSHI	9810978220 26385274, 26387439	Matsushi Power Technologies, S-46, Okhla Indl. Area, Phase II, New Delhi - 110 020.		
42.	NAVYUG	Ph 0181-2420551/2 Fax 0181-2420553	M/S Navyug (India) ltd., G.T. Road Bye-Pass, Jalandhar – 144 009.	Endless V-belts	
43.	OMFA		M/s OMFA Rubbera Pvt. Ltd., B-20-21, Sector-V, Noida, Gautam Budh Nagar (U.P.)-201 301	C-122 v-belts	
44.	ORIENTAL INSULATORS	9811150336 28395525, 28392593	Oriental Insulators, 7, Neelam Chowk, 1st Floor, Faridabad- 121 001.		
45.	P.D.STEELS	Fax 0172-5097942	M/s P.D.Steels, C146, Phase VII, Industrial Estate, Mohali, Chandigarh	4.5 Kw Brushless Alternator	
46.	PUROMATIC	Ph. 011-26388014, 26388014, 26389158 Mob. 09811824138 Email: filters@ndb.bsnl.net.in	M/s Puromatic Filters Pvt. Ltd., 12 DSIDC, Scheme-2, Okhla Industrial Area, Phase-II, New Delhi – 110020.	Dry Type Filter	
47.	R. KANWAR ELECTRICAL	Ph. 0120-3292220, 240225 Mob. 9810348686 Fax 0120-4355700	M/s R.Kanwar Electrical, C-199, Sector-63, Noida-201 301	BLDC fan	
48.	SIDWAL	Ph: 011- 26057222, 41649700, 0129-2241240, 2242060 Fax: 011- 26036433, 41649706, 0129-2240078 Mob. 9810184569 9818898151 (w)	Regd Office: M/S Sidwal Refrigeration Industries Ltd., 108-A, Madangir, New Delhi-110062 Works: M/S Sidwal Refrigeration Industries Ltd., Plot No. 23, Sector – 6, Faridabad, Haryana – 121006.	Roof mounted AC Package units, its control panels and Solid State Temperature Controller & Microprocessor Controller for LHB Design RMPU.	
49.	SAFE SYSTEMS	9311598221 011-41613270, 41613273	Safe Systems, 156, Dsidc, Okhla Inds. Estate, New Delhi 110020		
50.	STESALIT	Ph 01795-246906	M/s Stesalit Ltd., 42, 43 – Industrial Area, Baddi, Distt. Solan	Roof mounted AC Package Unit	

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		Fax 01795-244236 Mob.9836065234	(HP) – 173 205	with control panel and solid state temperature controller, microprocessor controller for LHB design RMPU.	
51.	USHA FILTER	Ph No. 0121- 2442930, Fax: 0121-2441931 Mob. 9917179100	Office & Works : M./s Usha Filter Pvt. Ltd., 52-Mohkampur, Phase-II, Delhi Road, Meerut – 250103 (U.P)	Dry Type Air Filter for AC coaches	
52.	VINKO	Ph. 0181-2455096, 97 Fax: 0181-2235288	Vinko Auto Industries Ltd., Village: Raowali, Dhogri Road, PO Nurpur, Jalandhar, Punjab - 144008	‘V’ Belt	
53.	ELECTROWAVES	Ph. 01792-234410/11 Fax: 01792-233412	M/S M/s Electrowaves Electronics (P) Ltd., Plot No. 37, Sec. 5, Parwanoo, Solan – 173220 (HP)	25 kVA natural cooled underslung inverter	
54.	SSK	Gram: ESSKAY Fax. 01822-232668 Ph: 01822-232587, 232956 Mob. 9814088632	M/s Ess Ess Kay Engg. Co. (P) Ltd., Factory Area, PO Box – 8, Kapurthala – 144601 (Pb) India.	Roof Mounted AC Package Unit for LHB variant AC coaches.	
55.	KAPSON	Ph. 0181-2670900, 2671902, 2670902, 2671430, 2671903 Fax: 0181-2671901	M/s Kapson Industries Ltd., GT road, Suranussi, Jalandhar - 144027	BLDC fan	
56.	MATSUSHI	011-29217523	M/s Matsushi Power Technologies, S-46 , Okhla Industrial Area, Phase-II, New Delhi-110 020	LED Based Tail Light	-
57.	DAULAT	Ph. 01334-324666 Fax 01334-239193 Mob. 9893029412	M/s Daulat Ram Industries, 141,1.1 DC Integrated Industrial Estate, , Haridwar – 249403. email: daulat@mantrafreenet.com; Website: www.daulatram.com	Roof Mounted Package Unit with control panel	
58.	SYSTEM AIDS	Ph. 0802545295 Fax 08025459910	M/s System Aids, 9 <sup>th</sup> Mainroad, 1 <sup>st</sup> stage, Hennur, Banaswadi Layout, Kalyan Nagar, Bangalore – 560043	Microprocessor Controller for LHB Design RMPU.	
59.	VIMAL	0591-2451220/ 04948-256006	M/s. Vimal Transformer Corporation : Office: Gokul Vihar – II Near Miglani Celebration, Kanth Road,Moradabad – 244 001(U.P.) Work: B-210, Phase-1, ELDICO-SIDCUL Industrial Park, Sitarganj-262405, Distt.-Udham Singh Nagar (Uttarakhand) for 50KVA & 60KVA Transformer Work: Prem Nagar, Export Zone, Kanth Road, Moradabad – 244001 (U.P) for 15 KVA & 9 KVA Transformers.	50KVA, 60KVA, 15 KVA & 9 KVA Transformers	

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### C: SOUTHERN REGION

S.NO	CODE	FAX / Ph No	Office / Work Address	ITEM	REMARKS
61.	AMARA RAJA	0877-2285600	M/S AMARA RAJA Batteries Ltd., Renigunta, Cuddapah Road, Karkambadi-517520, Tirupati (A.P.).	Batteries (VRLA)	
62.	ARECA	Ph: 040-65744131, 27263366,67, 68 Fax 040-27131444, 27263369, 27144460 Mob 9346627142 (Mrs. GV Kumari)	Off: M/s Areca Embedded System Pvt. Ltd., Plot No. 54/S, Anupuram Colony, ECIL, Hyderabad - 500051 Works: M/s Areca Embedded System Pvt. Ltd., Plot 5B, Survey No. 184 & 185, Phase -V, IDA, Cheralapally Ranga Raja district, Hyderabad (AP) - 500051	LED type emergency light unit for coaches. LED based head code, GPS based PI and PA systems for EMUs/MEMUs	
63.	BHEL(Bang.)	Fax 080-6610137	M/S BHEL Electronics Division, P.B.2606, Mysore Road , Bangalore—560026.	Power thyristor DBR,VCB, Relays, 25 kVA On Board Inverter	
64.	BHEL (Kasargod)	Fax 04994-232320, 232316/7/9	M/s BHEL Eelctrical Machines Ltd. (A Central PSU and subsidiary of BHEL), Bedradka, Post – Kasargod, Pin- 671124, Kerala.	Alternator	
65.	BEST & CROMPTON	Ph. 044-26255391 Fax 044-26257059	Best & Crompton, 28 C, Industrial Estate(N), Ambattur, Chennai – 600098.	¾.5/25 kW Alt. with RRU	
66.	BLUE STAR	Ph. 27662689 27692949 Mob. 9380576545	Blue Star Exports, 3, Elect. Indu. Estate, Kakaloor, Tiruvalur Dt. Chennai 602 003	Distribution transformer	
67.	BHEL	Fax. 0499-2430320	M/s BHEL Electric Machines Ltd. (A Central PSU and subsidiary of BHEL) Bedradka, P.O. Kasargod-671124	AC Alterantor/RRU	
68.	CELTEK BATTERIES	FAX.91-080-28363355	M/S Celtek Batteries Pvt.Ltd. 471-B IV Phase Peenya Industrial Area, Bangalore-560058.		
69.	CARBON LORRAINE	Ph. 080-27835285 Fax 080-27831746	M/S Carbon Lorraine Pvt. Ltd., 98/5, Wheeler Road, Cooke Town, Banagalore – 560084.	Carbon Block	
70.	CURRENT	24481305, 24481305	Current Electricals Ltd., 4/293, Old Mahabalipuram Road, Perungudi, Chennai – 600 096		
71.	CYCLAC	9444229392 24345694, 22251753	Cyclac Engineering Industries, 15 Np, Developed Plot, Guindy Indus.Estate, Chennai-600 097		
72.	DAULAT	Ph. 07480-231252, 231253 Fax 07480- 231250	M/s Daulat Ram Engg. Services (P) Ltd., 10/2, NH-12, Simarai, Raisen (MP).	3-phase induction mtor for RMPU	
73.	DEVI POLYMERS	22341509	Devi Polymers Pvt Ltd, No.48,Tnh House, Anna Salai, Chennai-		

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			<b>600002, No.B-6&amp;7, Incl. Estate, Guindy, Chennai – 600 032</b>		
74.	<b>DESIGN &amp; PROTOTYPES</b>	9841028859 24545162, 24541126	Design & Prototypes, 11-27, Dr.Vsi Estate, Thiruvanmiyur Chennai – 600041.		
75.	<b>DUBAS</b>	9841017151 26445261, 26453865	Dubas Engg. Pvt. Ltd., 78, I Floor, Shroff Ochards, New Avadi Road, Kilpauk, Chennai – 600 010.		
76.	<b>ENERGY LEADER</b>	Ph. 040-67046701 Fax 040-67046700	Energy Leader Batteries India Pvt. Ltd., Plot No. 1057M, 1 <sup>st</sup> Floor, Road No. 45, Jubilee Hills, Hyderabad – 500033 Work: Narasimha Rao Palem (V) Veerullapadu (M) Krishna (A.P)-521181.	TL & AC Batteries	VRLA
77.	<b>FENNER</b>	044-24312450 044-24349016	M/S Fenner India Ltd., Khivraj Complex-II, 5 <sup>th</sup> Floor, 480, Anna Sali, Nandanam, Chennai-600035	`V' Belt	
78.	<b>GLOBAL</b>	9444939335 64555088, 64555089	Global Enterprises, Tg – 64, Anna Fruit Market, Koyambedu, Chennai – 600 107.		
79.	<b>GE POWER</b>	24329179 24353769, 24354805	GE Power Controls, 476, Anna Salai, Temple Towers, 6 <sup>th</sup> Floor, Nandanam, Chennai – 600035		
80.	<b>GENERAL ELECTRICALS</b>	9216534486 01792-234410, 234411	General Electricals (Cpl, Krypton) 3, Ii Nd Street, Arunachalapuram, Opp To Malar Hospital, Adyar, Chennai – 600020		
81.	<b>GUNAM</b>	9940066673 28473967, 28446021	Gunam Engg. Enterprises, 21 E, Depot St., Dr. Natesan Road, Chennai – 600 005.		
82.	<b>HBL</b>	Ph. 08922-2258159, 179, 171-175 Fax 0892-2258156/161 Head Office Ph. 040-2335575, 23355085 Ph. 08542-205213/215 Fax 08542-236204 HO Ph. 040-23355048 Fax 040-23355575, 23355085	M/s HBL Power System Ltd., Survey No. 123 to 126 & 138(P) to 144(P),, Village: Kandivalsa, Pusapatirega (Mondal), Kani Metta, Vizianagaram – 535204 (Andhra Pradesh).  M/s HBL Power System Ltd., Survey No. 155/2&156, Village: Sheripally(B), Bhoothpur (Mandal), Distt: Mehaboob Nagar – 509382 (Andhra Pradesh)	TL & AC battery  TL & AC battery	VRLA  LMLA
83.	<b>HYTECH POWER</b>	9849835662 27953496, 27756788	Hytech Power Systems, Plot No. 8 / 1, Anand Nagar Colony, Bowenpally, Secunderabad – 500011.		
84.	<b>KEL</b>	0474-2522514	M/S Kerala Electrical & Allied Engg.Co. Ltd., Kundara-691501.	T.L & AC.Alternator with RRU/ERRRU	
85.	<b>KEL</b>	Ph 0474-2522215 Fax 474-2522214	M/s Kerala Electrical & Allied Engg. Co. Ltd., Quilon	BLDC fan	

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86.	KIRLOSKAR	9444085216 26614785, 26615861	Kirloskar Electrics Co. Corner House, Kilpauk, Chennai – 600 010		
87.	KERALA ELECTRICALS	9495681118 2522346	Kerala Electricals & Allied Engg. Co. Ltd., P.B. No. 8, Kundara, Quilon – 691 501.		
88.	LAXVEN	Ph. 040-7121041 Fax 040-7120533	M/S Laxven Systems, Plot No. 7 & 8, EC Ext., Kushaiguda, Hyderabad – 500 062.	ENERGY –CUM—SPEED MONITORING UNIT	
89.	KONTACT TRADING	9444397891 26171773, 26173011	Contact Trading Company, 5/7f, Siidco Nagar, Chennai – 600 049		
90.	KRISHNA	9444016045 23740251, 62186733	Krishna Mettallurgicalworks, 127, Poonamallee High Road, Chennai – 602 102.		
91.	LAMBDA ELECTRIC	9444088158 24546926	Lambda Electric Pvt.Ltd., Ii-29,Vsi Estate, Chennai – 600 041		
92.	MAM TOOLS	22342748 22341562	Mam Tools, A – 9, Iii Phase, Industrial Estate, Guindy, Chennai – 600 032.		
93.	MAAVE	040-27133333, 09849997431	Maave Electronics Pvt. Ltd. Plot No. 192/B IIIrd Floor, Phase – II, IDA, Cheriapally, Hyderabad-500051.	LED type emergency light unit	
94.	MARUTI	Ph 0866-2542943 Fax 0866-2540855,2545331	Maruti Engineering Works Pvt. LTD., Plot no. 49 & 50, 100 Feet Road, auto Nagar, Vijayawada – 520007 AP.	Plain Sleeve Bearing	
95.	MEDHA	Ph. 040-27173990 9885903421 27171101 FAX: 040-2717908	M/s. Medha Servo Drives Pvt. Ltd., P-4/5-B, IDA, Necharam, Hyderabad-500 076.	25 kVA underslung Inverter	
96.	MIC	Fax: 040-27133333	M/s MIC Electronics Ltd., A-4/11, Electronic complex, Kushaiguda, Hyderabad – 500062	Energy Efficient LED based luminaire unit for AC coaches.	
97.	MICROTEX	Ph. 080-28397243, 080-28394417	M/s Microtex Energy Pvt. Ltd. No. 42 & 43, II Main, II Phase, Peenya Industrial Area, Bangalore-560058	VRLA Battery	
98.	MYSORE THERMO	Ph. 080-28395525 Fax 080-28394417	M/S Mysore Thermo Electric (P) Ltd., 62 & 36, 4 <sup>th</sup> Main, III Phase, Peenya Industrial Area, Bangalore-560058.	Batteries	
99.	MAYNARD	Ph. 040-23554836 Fax: 040-23544276 Mob. 944005632, 9830115996	M/s Maynard Instrument & Controls Pvt. Ltd., Plot No. 46, Navanirman Nagar, Road No. 76, Jubilee Hills, Hyderabad-500 003.	Solid State Temperature Controller	
100.	MARUTHI	Ph 0866-2542943 Fax 0866-2540855	M/s Maruthi Engineering Works Pvt. Ltd., Plot No. 49 & 50, 100 Feet Road, Auto Nagar, Vijayawada – 520007 Email:info@mewpl.com	Plain Sleeve Suspension Bearing	
101.	PLASTIC &	9840185566	Plastic & Fibres Inc., Old No. 141/4-A, New No. 53, Poonamalle	Plain Sleeve Bearing	

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	<b>FIBRES</b>	<b>24798705</b>	<b>Road, Koyambedu, Chennai 600 107.</b>		
<b>102.</b>	<b>RAMA ENGG.</b>		<b>Office &amp; Factory: M/s Rama engineering Works, Plot no. 768, Phase-I, IDA, Subash Nagar, Jeedimetla, Hyderabad – 500055.</b>		
<b>103.</b>	<b>RAMAN SINHA</b>	<b>Ph. 4865195, 4865570 Fax 044-4863002 Mob. 9840090711</b>	<b>M/s Raman Sinha Electricals, P. Box 6979Plot No.137, Kaikean, Kuppan, (Main Road, Alwarthirunagar Chennai –600087.</b>	<b>BLDC fan</b>	
<b>104.</b>	<b>RICHMOND ENTERPRISES</b>	<b>9894055188 91-422-2627240</b>	<b>Richmond Enterprises, Plot No. 5, Civil Aerodrome Post, Coimbatore – 641 014</b>		
<b>105.</b>	<b>RAIL TECH</b>	<b>9810978220 011-26385274, 26387439</b>	<b>Rail Tech Engineers, No.561, Mth Road, Chennai-600 098</b>		
<b>106.</b>	<b>RAMYAA</b>	<b>9840324298 22500945</b>	<b>Ramyaa Electrogear Industries, Block No. Ii, Shed No. 3, Sidco Electronic Complex, Guindy, Chennai – 600 032.</b>		
<b>107.</b>	<b>SARANYA ELECTRICALS</b>	<b>9246820992 040-27131409, 27131407</b>	<b>SARANYA ELECTRICALS Plot No 35, 5<sup>th</sup> Cross ,Threemoorthy Colony,Mahendra Hills,Secunderabad-500026.A.P. India.</b>		
<b>108.</b>	<b>SARANYA</b>	<b>040-7569079279 / 9885567810 Saranya electronics@rediffma il.com</b>	<b>M/s. Saranya Electronics Pvt. Ltd., Plot NO.7, CF Area, Phase-2, IDA, Cherlapally, Hyderabad-500051</b>	<b>LED type emergency light unit - LED Based Head Code, GPS based Passenger Information and Public Address System of EMUs/MEMUs.</b>	
<b>109.</b>	<b>SOUTHERN</b>	<b>91-080-78-34446</b>	<b>M/S Southern Batteries Pvt. Ltd., No. 328, BOMMASANDRA, Jigani Link road Industrial Area, Jigani Anekal Taluk Bangalore – 560099.</b>	<b>TL, AC &amp; Loco Batteries</b>	
<b>110.</b>	<b>SIEMENS</b>	<b>4428834438 2227568147, 2224987373</b>	<b>(I) Ltd., Jothi Mahal, P.B.No.5212, 3<sup>rd</sup> Floor, 49, St.Marks Road, Bangalore-560 001.</b>		
<b>111.</b>	<b>S.S. ENGINEERING</b>	<b>22342748 22341562</b>	<b>S.S. Engineerring, 14, S.P. Developed Plot, Industrial Estate, Guindy, Chennai –600 032.</b>		
<b>112.</b>	<b>SVI</b>	<b>PH. 080-41154410 Fax: 080-28510346</b>	<b>M/SVI Brush Gears, Regd. Office No. 853, 10<sup>th</sup> Main 4<sup>th</sup> Cross, Indiranagar, 2<sup>nd</sup> Stage, Bangalore – 560038. Factory: 59/1, Krishna Reddy Industrial area, FCI Godown Road, Dooravaninagar KR Puram, Bangalore – 560016.</b>	<b>BLDC Fans</b>	
<b>113.</b>	<b>STANDARD ELECTRICAL</b>		<b>M/s Standards Electrical Industries, 10, Jayshree Nagar Housing Unit, Singanallur, Coimbatore – 641005 (Tamilnadu)</b>	<b>3-phase induction motor for RMPU</b>	
<b>114.</b>	<b>SYSTEM AIDS</b>	<b>Ph. 0802545295 Fax 08025459910</b>	<b>M/s System Aids, 9<sup>th</sup> Main Road, 1<sup>st</sup> Stage, Hennur, Baraswadi Layout, Kalyan Nagar, Bangalore.</b>	<b>Microprocessor controller for LHB Design RMPU</b>	

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115.	UNIVERSAL	9844051902 28396584, 28394307	Universal Instruments Mfg. Co. Pvt. Ltd., 26 – A, li Phase, Peenya Indl. Area, Bangalore – 560 058.		
116.	USHA FRP	9840469321 26257392	Usha Frp Fab, 267 / 5, 117 <sup>th</sup> Street, Muthamizh Nagar, Kodungaiyur, Chennai – 600 118.		
117.	V.G.S.	040-27126025 / 9550402020 Vgs123@gmail.com	M/s. V.G.S. Technologies, 31A & B, 2 <sup>nd</sup> Floor, Electronic Complex, Kushaiguda, Hyderabad-500062	LED type emergency light unit	

#### D. WESTERN REGION

S.NO	CODE	FAX / Ph No	Office / Work Address	ITEM	REMARKS
118.	ALTOS	020-24449144 020-24445245 020-24440573	M/s. Altos Electronics, Plot No.8, State Bank Colony, Shahu College Road, Pune-411 009	LED Based Tail Light	
119.	BHEL(J)	BHELVAHAN 0517-443108 & 440944	M/S Bharat Heavy Electricals Ltd., Transformers Division, Jhansi.		
120.	BHEL(B)	BHARATELEC	M/S Bharat Heavy Electricals Ltd. Bhopal.		
121.	CGL	Ph. 0241-2776160/62 Fax: 0241-2777508	M/s Crompton Greaves Ltd., A-6/2, Ahmednagar, Maharashtra – 414111.	3-phase induction motor for RMPU.	
122.	CROMPTON	Ph. 55558867	Crompton Greeves Ltd No.1 Dr.V.B. Gandhi Marg, Mumbai		
123.	CUMMINS	30233730, 25381591, 9822394389	Cummins India Limited, Kothrud, Pune – 411 029.		
124.	HITACHI Hi-REL	Ph. 079-23222531, 23221636 Fax 079-23226498	M/s Hitachi Hi-REL Power Electronics Pvt. Ltd., B-117, 118, GIDC Electronics Zone, Sector-25, Gandhi Nagar - 382044 B-117, 118, GIDC Electronics Zone Sector 25, Gandhi Nagar – 382044.	25 kVA underslung Inverter, Regulated Battery Charger	
125.	HIND RECTIFIER	Ph. 022-25968027 Fax 022-25964114	M/s Hind Rectifier, P.B.No. 17303, Lake Road, Bhandup(W), Mumbai- 400078	Under Slung Inverter	
126.	HPCL (ESSO) (CALTEX)	Ph. 3719461/422 Fax 3782496	M/S Hindustan Petroleum Co.Ltd., Jamshedji Tata Road, Byculla, Mumbai-400008.	Lubricant	
127.	INTRA	9850257727 2025467792	Intra Electronics, Plot No.6, Swastishree Society, Near Alankar Police Station, Ganeshnagar, Pune – 411 052		
128.	IOC	-----	M/S Indian Oil Corporation, BB.	Panto graphite Grease	
129.	INDUSTRIAL	Ph. No. 02646- 272635	M/s Industrial Filter Corporation, J/405/1&2,Road No. 4,	Dry Type Air Filter for AC	

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	<b>FILTER</b>	<b>Fax: 02646-272855 Mob: 9824110029</b>	<b>GIDC,Panoli-394116 Distt-Baruch, Gujrat.</b>	<b>coaches</b>	
130.	<b>JANGDA ELECTRIC</b>	<b>28365577</b>	<b>Jangda Electric Industries, No.11,Sainath Ind .Estate, Mahakali Caves Rd., Andheri (East) , Mumbai 93</b>		
131.	<b>LLOYD ELECTRIC</b>	<b>Ph. 011-41609457, 58, 59 Factory: Ph. 01493-220724, 221348, Fax 01493-220543 Mob. 09983337803</b>	<b>M/s Lloyd Electric &amp; Engineering Ltd., Off: 159, Okhla Industrial Estate Phase – III, New Delhi – 110020 Factory: A-146 (B&amp;C), RIICO Industrial Area, Bhiwadi, Distt. Alwar, Rajasthan – 301019</b>	<b>RMPU and Control Panel</b>	
132.	<b>KAYCEE</b>	<b>9324803902 022-22613521, 22613522</b>	<b>Kaycee Industries Ltd., 32, Ramjibhai Khamni Road, Ballard Estate, Mumbai – 400 031.</b>		
133.	<b>MDS</b>	<b>Ph. 022-4938416 &amp; 4951735 Fax: 022-4933158</b>	<b>M/s legrend (India) Pvt. Ltd., 803/804, Nicholas Piramal Tower, Peninsula Corporate Park, Ganpatrao Kadam Marg, Lower Parel, Mumbai. Works: M/s legrend (India) Pvt. Ltd., Sinnaur (Nasik).</b>	<b>MCBs</b>	<b>Approval of change of name from MDS to Legrend is under process.</b>
134.	<b>MANISH</b>	<b>Ph. 022-28754082 Fax- 022-65294083</b>	<b>M/s Manish Rubber Industries A-10 Piramal Industrial Estate , Piramal Nagar ,S.V. Road Goregaon , N Mumbai</b>		
135.	<b>PANTRONICS</b>	<b>022-24081693</b>	<b>M/s Pantronics: Office: 24, Jogani Industrial Estate 541, Senapati Bapat Marg, Dadar, Mumbai -400 028 Work: 8/401 Jogani Industrial Estate, V.N.Purav Marg, Chunabhatti, Mumbai -400 022</b>	<b>50KVA, 60KVA, 9KVA &amp; 15KVA Transformer</b>	
136.	<b>PIX</b>	<b>FAX-(07104) 236506 Ph. 07104-237729, 236501, 237051.</b>	<b>M/s. Pix Transmission Ltd., J-7, MIDC, Hingna, Nagpur-440 016.</b>	<b>V-Belt.</b>	
137.	<b>S. INTERNATIONAL</b>	<b>9820072167 23090113, 23090611</b>	<b>S. International, B / 14, Creative Indl. Estate, 72, N.N. Joshi Marg, Lower Parel, Mumbai - 400 011.</b>		
138.	<b>SWITCHON</b>	<b>9323655112 401108401, 40110841</b>	<b>Switchon Industries, C-126-226,Ghatkopar Industrial Estate, Ghatkopar West, Mumbai – 400 086</b>		
139.	<b>PRESSTECH</b>	<b>FAX-022-28656758 Ph. 022-65103625/3626 022-28056848</b>	<b>M/s. Presstech India Pvt. Ltd., 7, Parekh Nagar Industrial Estate, S.V. Road, Kandivli (W), Mumbai-400 067.</b>	<b>4.5/25 KW Alternator with RRU and 4.5 kW with ERRU..</b>	



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140.	SIEMENS	Ph. 022-27568000 Fax 022-27568147	Office: M/s Siemens Ltd., 130 –Pandurang Budhkar Marg, Mumbai – 400018. Works: M/s Siemens Ltd., NASHIK WORKS, Plot No. C-1, Add. Industrial Area, Ambad, Nashik – 422010.	25 kVA Under Slung Inverter	
141.	SELEC	Mob. 9336485120	M/s Selec Controls Pvt. Ltd., E-121, Ansa Industrial Estate, Sakivihar Road, Andheri (East), Mumbai.	Electronic Time Delay Relay	
142.	SUJAN	Ph. 02502456741/42/43/44 Fax 0250-2456746	M/s Sujan Industries, Bldg no. 1, Plot no. 1& 2, Behind blue chip industrial estate, village waliv, sativali udyog nagar, Vasai € Distt Thane-401208	Rubber and Metal bonded Rubber Components for EP brake systems	
143.	TIRUPATI	Ph. 0141-2331030, Fax 0140-2331808, 2260073 Email: kapil.g@kiraninfra.com	M/s Tirupat Plastomatics Pvt. Ltd., F-543, (Unit-II), Road No. 6D, Vishvarma Industrial Area, Jaipur-302013, Rajasthan.		
144.	UNITED LEAD	Ph. 0832-2395534	M/s United Lead Oxide Product Pvt. Ltd., Plot No. 216, Kundaim Industrail Estate, Kundaim, Goa-403 110	TL Battery	
145.	UNIVERSAL	Fax 022-25007504	M/s Universal Industrial Products, 27-27A, Block B, Ghatkopar (West), Mumbai - 400086		
146.	VEEKAY RUBBER	Ph. 022-26870441/0494 FAX. 022- 26870339	M/s Veekay Rubber Products, 3, Mistry Indl. Complex, MIDC cross Road, 'A', Andheri (E), Mumbai-400093	Rubber and Metal bonded Rubber Components for EP brake systems	
147.	GAEC	Off.- 022-66923196 / 66923194 Works – 0250-2453056 / 6457333	Office – M/s. General Auto Electric Corporation D/207, Ansa Industrial Estate, Saki Vihar Road, Sakinaka, Andheri (East), Mumbai. Works – Plot No. 30, Sector-I, Vasai Taluka Industrial Co op Estate, Billalpada, Vasai Road (East), Thane-401208	BLDC Fan	

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## PART - C:

### CHAPTER-VI: EQUIPMENT AND CONDUCTORS FOR 25 kV AC TRACTION INSTALLATION

**(Note: Status of approval of individual items may not be coterminous with the Vendor Directory's validity. Consignee/Inspecting Authority to verify the current status of approval from the letter issued by RDSO)**

S. No.	Equipment	Current Specification / Drawing No.	(Part-I)	(Part-II)	Remarks
<b>1.0</b>	<b>TRANSFORMERS AND OTHER TSS EQUIPMENT</b>				
<b>1.1</b>	<b>TRACTION POWER TRANSFORMER</b>				
1.1.0 a	21.6/30.24 MVA, 50 Hz, Single Phase, ONAN/ONAF, Traction Power Transformer 220/27 kV. *	ETI/PSI/118 (10/93) With A/C Slip No. 1 (May 94), Slip No. 2 (Jan 96), Slip No. 3 (Oct.97), Slip No 4 (Jan2000), Slip No 5 (April 2000), Slip No 6 and 7 (June 01) , Slip No 8 (Jul. 03) , Slip No. 9 ( Jan. 2008) and slip no. 10 ( august 2012).	1. ABB (Vadodra) ## 2 CGL (Mumbai), # 3. EMCO (Thane) ##  #Approved for A&C slip no. 1 to 8.  ## Approved for A&C slip no. 1 to 9.	BHEL(Jhansi), #  # Approved for A & C slip no. 1 to 8.	Following Sources are found fit to take orders, however, their prototype testing is yet to be done. Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II: <ul style="list-style-type: none"> <li>• APEX( Vadodara)</li> <li>• ALSTOM (N)</li> <li>• ALSTOM (Vadodara)</li> <li>• AVAL (Unit 1&amp;2) ( Thane)</li> <li>• BBL (Thane)</li> <li>• HI-VOLT(Thane)</li> <li>• IMP (Silvasa)</li> <li>• KANOHAR( Meeruit)</li> <li>• Technical Associates (Udham Singh Nagar)</li> <li>• TELK ( Kerla)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• Skipper (Alwar)</li> <li>• VEL (Chennai)</li> <li>• VEL (H)</li> <li>• VISVAS (Nagpur)</li> </ul>

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NOTE: * All vendors are eligible for taking orders due to them in accordance to their mentioned category Viz of Part-I / Part-II. If a vendor not approved for a particular A & C Slip is and given an order, the vendor shall get the first prototype implementing such A & C Slip, for which the vendor was hitherto not approved, duly approved by RDSO.					
1.1.0 b	21.6 /30.24 MVA, 50 Hz, Single Phase, ONAN /ONAF, Traction Power Transformer 132/27 kV*	ETI/PSI/118 (10/93) With A/C Slip No. 1 (May 94), Slip No. 2 (Jan 96), Slip No. 3 (Oct.97) , Slip No 4 (Jan2000), Slip No 5 (April 2000), Slip No 6 and 7 (June 01) , Slip No 8 (Jul. 03) , Slip No. 9 ( Jan. 2008) and slip no. 10 ( august 2012).	ABB (Vadodara)## ALSTOM (N)## ALSTOM (Vadodara)## \$ BHEL (Jhansi) # CGL (Mumbai) , # EMCO (Thane) ### TELK( Kerla)##  # Approved for A&C slip no. 1 to 8. ## Approved for A&C slip no. 1 to 9. ### Approved for A&C slip no. 1 to 10. \$ Prototype manufactured from this Works is yet to be cleared by RDSO	KANO HAR (Meerut) #  AVAL (( Thane) ##  # Approved for A&C slip no. 1 to 8.  ## Approved for A&C slip no. 1 to 9.	Following Sources are found fit to take orders, however, their prototype testing is yet to be done. Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II: <ul style="list-style-type: none"> <li>• APEX( Vadodara)</li> <li>• BBL (Thane)</li> <li>• HI-VOLT( Thane)</li> <li>• IMP ( Silvasa)</li> <li>• Technical Associates (Udham Singh Nagar)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• Skipper (Alwar)</li> <li>• VEL (Chennai)</li> <li>• VEL (Hyderabad)</li> <li>• VISVAS (Nagpur)</li> </ul>
NOTE: * All vendors are eligible for taking orders due to them in accordance to their mentioned category Viz of Part-I / Part-II. If a vendor not approved for a particular A & C Slip is and given an order, the vendor shall get the first prototype implementing such A & C Slip, for which the vendor was hitherto not approved, duly approved by RDSO.					
1.1.0 c	21.6/30.24 MVA, 50 Hz, Single Phase, ONAN/ONAF, Traction Power Transformer 110/27 kV*	ETI/PSI/118 (10/93) With A/C Slip No. 1 (May 94), Slip No. 2 (Jan 96), Slip No. 3 (Oct.97) , Slip No 4 (Jan2000), Slip No 5 (April 2000), Slip No 6 and 7 (June 01) , Slip No 8 (Jul. 03) , Slip No. 9 ( Jan. 2008) and slip no. 10 ( august 2012).	ABB (Vadodara)# BHEL (Jhansi)# CGL(Mumbai)## TELK( Kerla)##  # Approved for A&C slip no. 1 to 8. ## Approved for A&C slip no. 1 to 9.	NIL	Following Sources are found fit to take orders, however, their prototype testing is yet to be done. Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II: <ul style="list-style-type: none"> <li>• APEX( Vadodara)</li> <li>• ALSTOM(N)</li> <li>• ALSTOM(Vadodara)</li> <li>• AVAL ( Unit 1 &amp; 2)( Thane)</li> <li>• BBL( Thane)</li> <li>• EMCO (Thane)</li> </ul>

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					<ul style="list-style-type: none"> <li>• HI-VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• KANO HAR( Meeruit)</li> <li>• Technical Associates (Udham Singh Nagar)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• Skipper (Alwar)</li> <li>• VEL (Chennai)</li> <li>• VEL (Hyderabad)</li> <li>• VISVAS (Nagpur)</li> </ul>
<p><b>NOTE: * All vendors are eligible for taking orders due to them in accordance to their mentioned category Viz of Part-I / Part-II. If a vendor not approved for a particular A &amp; C Slip is and given an order, the vendor shall get the first prototype implementing such A &amp; C Slip, for which the vendor was hitherto not approved, duly approved by RDSO.</b></p>					
1.1.0 d	21.6/30.24 MVA, 50 Hz, Single Phase, ONAN/ONAF, Traction Power Transformer 66/27 kV*	ETI/PSI/118 (10/93) With A/C Slip No. 1 (May 94), Slip No. 2 (Jan 96), Slip No. 3 (Oct.97) , Slip No 4 (Jan2000), Slip No 5 (April 2000), Slip No 6 and 7 (June 01) , Slip No 8 (Jul. 03) , Slip No. 9 ( Jan. 2008) and slip no. 10 ( august 2012).	NIL	<ul style="list-style-type: none"> <li>• CGL (Mumbai)##</li> <li>• EMCO (Thane) #</li> </ul> <p># Approved for A&amp;C slip no. 1 to 8.</p> <p>## Approved for A&amp;C slip no. 1 to 9.</p>	<p>Following Sources are found fit to take orders, however, their prototype testing is yet to be done.</p> <p>Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II:</p> <ul style="list-style-type: none"> <li>• ABB (Vadodara).</li> <li>• APEX( Vadodara)</li> <li>• ALSTOM(N)</li> <li>• ALSTOM (Vadodara)</li> <li>• AVAL ( Unit 1 &amp; 2)( Thane)</li> <li>• BBL( Thane)</li> <li>• BHEL(Jhansi)</li> <li>• HI-VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• KANO HAR( Meeruit)</li> <li>• TELK( Kerla), *</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• VEL (Chennai)</li> <li>• VEL(Hyderabad)</li> <li>• VISVAS (Nagpur)</li> <li>• Technical Associates (Udham Singh</li> </ul>

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					Nagar)
<p><b>NOTE: * All vendors are eligible for taking orders due to them in accordance to their mentioned category Viz of Part-I/ Part-II. If a vendor not approved for a particular A &amp; C Slip is and given an order, the vendor shall get the first prototype implementing such A &amp; C Slip, for which the vendor was hitherto not approved, duly approved by RDSO.</b></p>					
1.1.1 a	100/27 kV	ETI/PSI/163 (04/97) with A & C slip No. 1 (Nov 98) & slip No. 2 (Jan 2000).	NIL	EMCO (Thane)	<p>Following Sources are found fit to take orders, however, their prototype testing is yet to be done.</p> <p>Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II:</p> <ul style="list-style-type: none"> <li>• ALSTOM(N)</li> <li>• ALSTOM (VADODARA)</li> <li>• ABB (Vadodara)</li> <li>• BHEL (Jhansi),</li> <li>• CGL (Mumbai),</li> <li>• TELK( Kerla),</li> </ul>
1.1.1 b	22/27 kV	-----do-----	NIL	EMCO (Thane)	<p>Following Sources are found fit to take orders, however, their prototype testing is yet to be done.</p> <p>Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II:</p> <ul style="list-style-type: none"> <li>• ALSTOM(N)</li> <li>• ALSTOM(VADODARA)</li> <li>• ABB (Vadodara)</li> <li>• BHEL (Jhansi),</li> <li>• CGL (Mumbai),</li> <li>• TELK( Kerla),</li> </ul>
1.1.2	30 MVA, 50 Hz, Single Phase, ONAN traction power transformer with on load tap changer. 110/27kV	TI/SPC/PSI/30TRN/1050	NIL	<ul style="list-style-type: none"> <li>• EMCO(Thane)</li> <li>• ALSTOM(N)</li> <li>• ALSTOM (VADODARA) \$</li> </ul> <p>\$ Prototype</p>	<p>Following Sources are found fit to take orders, however, their prototype testing is yet to be done.</p> <p>Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall</p>

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				manufactured from this Works is yet to be cleared by RDSO	be placed in Part-II: <ul style="list-style-type: none"> <li>• BBL( Thane)</li> <li>• HI- VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• VEL ( Chennai )</li> <li>• VEL (Hyderabad )</li> <li>• VISVAS (Nagpur)</li> </ul>
1.1.3 a.	30 / 42 MVA, 50 Hz, Single Phase, ONAN/ ONAF traction power transformer with 220/27 KV	TI/SPC/PSI/30TRN/2070	NIL	NIL	Following Sources are found fit to take orders, however, their prototype testing is yet to be done. Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II: <ul style="list-style-type: none"> <li>• ABB ( Vadodara)</li> <li>• ALSTOM (Naini)</li> <li>• ALSTOM(Vadodara)</li> <li>• AVAL ( Unit 1 &amp; 2)( Thane)</li> <li>• BBL (Thane)</li> <li>• EMCO ( Thane)</li> <li>• HI-VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• Technical Associates (Udham Singh Nagar)</li> <li>• TELK( Kerla)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• VEL (Chennai)</li> <li>• VEL (Hyderabad)</li> <li>• VISVAS (Nagpur)</li> </ul>
1.1.3 b.	30 / 42 MVA, 50 Hz, Single Phase, ONAN/ ONAF traction power transformer with 30 / 42 MVA, 50 Hz, Single Phase, ONAN/	TI/SPC/PSI/30TRN/2070	NIL	<ul style="list-style-type: none"> <li>• ABB (Vadodara)</li> <li>• ALSTOM (Naini)</li> <li>• ALSTOM (Vadodara) \$</li> <li>EMCO(Thane)</li> <li>AVAL(Thane)</li> </ul>	Following Sources are found fit to take orders, however, their prototype testing is yet to be done. Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall

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	ONAF traction power transformer with 132/27 KV			\$ Prototype manufactured from this Works is yet to be cleared by RDSO	be placed in Part-II: <ul style="list-style-type: none"> <li>• AVAL ( Unit 1 &amp; 2)( Thane)</li> <li>• BBL (Thane)</li> <li>• HI-VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• Technical Associates (Udham Singh Nagar)</li> <li>• TELK( Kerla)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• VEL (Chennai)</li> <li>• VEL (Hyderabad)</li> <li>• VISVAS (Nagpur)</li> </ul>
1.1.3 c.	30 / 42 MVA, 50 Hz, Single Phase, ONAN/ ONAF traction power transformer with 110/27 KV	TI/SPC/PSI/30TRN/2070	NIL	NIL	Following Sources are found fit to take orders, however, their prototype testing is yet to be done. Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II: <ul style="list-style-type: none"> <li>• ABB ( Vadodara)</li> <li>• ALSTOM (Naini)</li> <li>• ALSTOM( Vadodara)</li> <li>• AVAL ( Unit 1 &amp; 2)( Thane)</li> <li>• BBL (Thane)</li> <li>• EMCO(Thane)</li> <li>• HI-VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• Technical Associates (Udham Singh Nagar)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• TELK( Kerla)</li> <li>• VEL (Chennai)</li> <li>• VEL (Hyderabad)</li> <li>• VISVAS (Nagpur)</li> </ul>
1.1.3 d.	30 / 42 MVA, 50 Hz, Single Phase, ONAN/	TI/SPC/PSI/30TRN/2070	NIL	NIL	Following Sources are found fit to take orders, however, their prototype testing is

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	ONAF traction power transformer with 66/27 KV				<p>yet to be done.          Prototype testing shall be done on the first unit manufactured after taking order. Upon successful prototype testing, the firm shall be placed in Part-II:</p> <ul style="list-style-type: none"> <li>• ABB ( Vadodara)</li> <li>• ALSTOM (Naini)</li> <li>• ALSTOM (Vadodara)</li> <li>• AVAL ( Unit 1 &amp; 2)( Thane)</li> <li>• BBL (Thane )</li> <li>• EMCO(Thane)</li> <li>• HI-VOLT( Thane)</li> <li>• IMP (Silvasa)</li> <li>• TELK( Kerla)</li> <li>• TRL ( Unit 1&amp;2) ( Ahmadabad)</li> <li>• VEL (Chennai)</li> <li>• VEL (Hyderabad)</li> <li>• VISVAS (Nagpur)</li> <li>• Technical Associates (Udham Singh Nagar)</li> </ul>
<p><i>Capacity of vendors (minimum) for traction transformers are-</i>  <i>(BHEL - 25), (CGL - 20), (ABB - 15), (AREVA - 10), (EMCO - 10), (TELK - 10)</i></p>					
1.3.	<b>INSULATING OIL</b>				
1.3.1	Inhibited Mineral Insulating Oil	IS:12463 (1988) & Railways Requirements as per RDSO letter No. TI / PSI / INSOIL/ POLICY / 07 Dt. 27.02.07 & TI / PSI / INSOIL/ POLICY / 08 Dt. 06.02.08.	<ul style="list-style-type: none"> <li>• APAR (Silvasa and Rabale Works) Capacity = (10000 KL),</li> <li>• SAVITA(New Bombay &amp;Silvasa Works) Capacity = (10000 KL),</li> <li>• RAJ PETROSPECIALITIES (Chennai) Capacity = (5000 KL)</li> <li>• TASHKENT( Vadodara) Capacity = (1000 Kl)</li> <li>• GANDHAR ( raigad) capacity=( 24000 Kl)</li> <li>• RAJ PETROSPECIALITIES (Silvasa Works) Capacity = (3000 KL)</li> </ul>	<ul style="list-style-type: none"> <li>• COLUMBIA (Silvasa Works) Capacity = (1000 KL)</li> <li>• PANAMA(Ankleshwar) Capacity=(3000KL)</li> <li>• IOC (Kolkata) Capacity =(7229KL)</li> </ul>	



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1.3.2	Inhibited Mineral Insulating Oil , Oil for 3 Phase Locomotives			-	
a.	Transformer Oil (Inhibited Mineral insulating Oil)	IEC: 60296-2003 and CLW Spec. No. CLW/ES/3/0172(Latest and RDSO requirement)	<ul style="list-style-type: none"> <li>M/s Shell for Shell Diala S3ZX-i, New Delhi</li> <li>M/s APAR, Rable for Power Oil TO-10X-</li> </ul>		
b.	Converter Oil	IEC: 60296-2003 and CLW Spec. No. CLW/ES/3/0172(Latest and RDSO requirement)	M/s Shell for Shell Diala S3ZX-i, New Delhi		
2.0	<b>SWITCH GEAR</b>				
2.1	High Voltage Circuit Breaker				
a.	220 kV SF6 Circuit Breaker *	TI/SPC/PSI/CB/0000 with A&C slip no. 1 to 5	ABB(Vadodara) (Type LTB245E1 with BLK 222 spring-spring operating mechanism)		*Double Pole & Triple Pole
b.	132kV SF6 Circuit Breaker*	TI/SPC/PSI/CB/0000 with A&C Slip no. 1 to 5.	<ul style="list-style-type: none"> <li>ABB(Vadodara) (Type LTB245E1 with BLK 222 spring-spring operating mechanism)</li> <li>CGL (Nasik), (Type 120 – SFM-32 B Spring-Spring)</li> </ul>	-	* Double Pole & Triple Pole
2.2	25kV Circuit Breaker				
a.	Single Pole Vacuum Circuit Breaker	TI/SPC/PSI/CB/0000 with A&C Slip no. 1 to 5.	<ul style="list-style-type: none"> <li>ALIND, Mannar (Type VSE 5/20 Spring-Spring operating Mechanism – with Meidensha or BEL make Vacuum Bottle)</li> </ul>	<ul style="list-style-type: none"> <li>BHEL, Bhopal. (Type PVTB Spring-Spring operating mechanism),</li> <li>ABB, Nasik (magnetic actuator operating mechanism)</li> <li>ALIND, Mannar (magnetic actuator operating mechanism)</li> <li>MEGAWIN, Salam (Magnetic actuator operating mechanism)</li> </ul>	

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<b>2.3</b>	<b>25 KV INTERRUPTER</b>				
<b>a.</b>	<b>25 kV Single Pole Vacuum Interrupter</b>	<b>ETI/PSI/167 (9/97) with A&amp;C Slip 1-2</b>	<ul style="list-style-type: none"> <li>ALIND ,Mannar ( Spring – Spring operating mechanism) (Type VS E 5/8 with Meidensha or BEL make Vacuum Bottle)</li> <li>BHEL,Bhopal. (Spring – Spring operating mechanism) (Type PVTI – with Cuttler Hammer, USA or BEL make vacuum bottle)</li> </ul>	<ul style="list-style-type: none"> <li>ABB,Nasik(with BEL make Vacuum Bottle &amp;magnetic actuator operating mechanism)</li> <li>ALIND,Mannar(with BEL make Vacuum Bottle &amp; with magnetic actuator operating mechanism)</li> <li>MEGAWIN , Salam( Magnetic actuator operating mechanism)</li> </ul>	
<b>Capacity of vendors (minimum) for circuit breakers and interrupters are-(CGL- 200), (ABB - 200 ), (ALIND - 200), (BHEL- 200), (MEGAWIN - 200)</b>					
<b>3.0</b>	<b>HDCG COPPER CONTACT WIRE</b>				
<b>3.1</b>	<b>Joint less Grooved Copper Contact Wire 107 mm<sup>2</sup> made out of Continuous Cast Copper Wire Rods.</b>	<b>ETI/OHE/76 (6/97) with A&amp;C Slip No. 1, 3, 4, 5 &amp; 6.</b>	<b>VEEKAY (2500 Ton) CHANDRA (1400 Ton) *SACHDEVA (2400 Ton) JK CABLE (3600 Ton) HYVOLT (2500MT)</b>	<b>CPL (5000 Ton) *NICCO (2400 Ton) AIREN (12000 MT)( with Indigenous GCC Wire Rod only) GCC (6000MT) SCIPL ( 6000MT) ( with Indigenous GCC Wire Rod only) SCPL (with Indigenous GCC Wire Rod only) (3000MT)</b>	<b>* Extension not taken since 5 years.</b>
<b>3.2</b>	<b>Joint less Grooved Copper Contact Wire 150 mm<sup>2</sup> made out of Continuous Cast Copper Wire Rods.</b>	<b>ETI/OHE/76 (6/97) With A&amp;C Slip No. 1, 3, 4, 5 &amp; 6.</b>	<b>VEEKAY (2500 Ton)</b>	<b>CHANDRA (1400 Ton) HYVOLT (2500 Ton) GCC ( 6000 MT )</b>	
<b>3.3</b>	<b>Joint less Grooved Copper Contact Wire 193 mm<sup>2</sup> made out of Continuous Cast Copper Wire Rods.</b>	<b>ETI/OHE/76 (6/97) With A&amp;C Slip No. 1, 3, 4, 5 &amp; 6.</b>	<b>VEEKAY (2500 Ton) CHANDRA (1400 Ton)</b>	<b>CPL (5000 Ton) HYVOLT (2500 Ton) GCC ( 6000 MT)</b>	

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3.4	19.6±0.5 mm diameter CONTINUOUS CAST COPPER (CCC) WIRE ROD (Manufactured by South wire Process)	ETI/OHE/65(8/97) with A&C Slip No. 1 to 3. ETI/OHE/76 (6/97) with A&C Slip No. 1,3,4,5 & 6	--	--	“Approved Sources “ For indigenous “CCC” Wire Rod” 1. M/s Hindustan Copper Limited, Taloja 2. Hindalco Industries Ltd., Dahej
4.0	CATENARY WIRE				
4.1	Uninsulated Cadmium Copper Catenary Wire 65 mm <sup>2</sup> (19/2. 10 mm)	ETI/OHE/50(6/97) with A&C Slip No. 1 to 3	VEEKAY (1653 Ton) HYVOLT (1200 Ton) CHANDRA (1236 Ton) SACHDEVA (1800 Ton)* JK CABLE (1200 Ton) GCC(1800MT)	SP(1000MT) CPL (1500 MT) SCPL(3000MT) SSEPL(2500MT) SCIPL(1100 MT) SAWPL(2000 MT)	*Extension not taken since last 5 years
4.2	Insulated Cadmium Copper Catenary Wire 65 mm <sup>2</sup> (19/2.10 mm)	TI/OHE/INSCAT/0000 with A&C Slip No. 1	NICCO (180 Km) UNICAB (2400 Km)		
5.0	PANEL & RELAY				
5.1	Control & relay panel				
(a)	Control & relay panel incorporating numerical type protective relays for 25kV ac traction.	TI/SPC/PSI/PROTCT/ 6070(9/08)	ALIND(T) ASHIDA		
(b)	Control and relay panel incorporating numerical type protective relays for Mumbai Suburban area.	TI/SPC/PSI/PROTCT/ 4050( 10/05)	ASHIDA	ALIND(T)	
5.2	Relays for 25KV AC traction				
5.2.1	Numerical type traction transformer protection relays				
(a)	Integrated transformer protection relays (OC+REF)	TI/SPC/PSI/PROTCT/ 6070(9/08) with A&C Slip No.1	ALIND(T), type:ATP214 HV/LV (AN SERIES) ASHIDA, type:ADR221B		

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(b)	Transformer differential protection relay	TI/SPC/PSI/PROTCT/ 6070(9/08) with A&C Slip No.1	ALIND(T), type:ATD12 (AN SERIES) ASHIDA, type:ADR213B		
5.2.2	Numerical type Relays for 25KV Feeder Protection				
(a)	Microprocessor based feeder protection module comprising Distance, wrong phase, Inst. Over current protection, PT fuse failure & auto reclosure	TI/SPC/PSI/PROTCT/ 5070(5/2007)	ALIND (T), type:AZM1114+ (AN SERIES) ASHIDA type:ADR219A		
(b)	Delta-I relay	TI/SPC/PSI/PROTCT/ 1982	ALIND (T) type:AVDI-11C (AN SERIES), ASHIDA type:AIDI/1C		
(c)	Panto flash over protection relay	TI/SPC/PSI/PROTCT/ 2983	ALIND (T), type:APF401 (AN SERIES)	ASHIDA type:APFO/1 (Logic 1)	
5.2.3	Other relays				
(a)	Master trip relay	TI/SPC/PSI/PROTCT/ 6070(9/08) with A&C Slip No. 1	ALIND(T), type:AEMS32 ASHIDA, type:AVAJS13		
(b)	Inter trip relay	TI/SPC/PSI/PROTCT/ 6070(9/08) with A&C Slip No. 1	ALIND(T), type:AEIH32 ASHIDA, type:AVAJH13		
(d)	DC monitoring / supervision relay	TI/SPC/PSI/PROTCT/ 6070(9/08) with A & C Slip No. 1	ALIND(T), type:APSM ASHIDA, type:ADR202B		
5.3	Numerical type relays for Mumbai suburban area				
(a)	Integrated feeder protection relay	TI/SPC/PSI/PROTCT/ 4050(10/05)	ASHIDA, type:ADR219B	ALIND (T), type:AZM1114+ (AN SERIES)	
(b)	Vectorial Delta-I relay	TI/SPC/PSI/PROTCT/ 4050(10/05)	ASHIDA, type:ADR219C	ALIND (T), type:AVDI-11C (AN SERIES)	

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(c)	Panto Flashover protection relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:APFO/2	ALIND (T), type:APF401M (AN SERIES)	
(d)	OC+REF Transformer protection relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR221B	ALIND(T), type:ATP214 HV/LV(AN SERIES)	
(e)	Transformer differential protection relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR213B	ALIND(T), type:ATD12 (AN SERIES)	
(f)	Low impedance bus-bar differential protection relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR213D	ALIND(T), type:ABD301 (AN SERIES)	
(g)	High impedance bus-bar differential protection relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR211E	ALIND(T), type:ABD101 (AN SERIES)	
(h)	Definite time over current relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR211B	ALIND(T), type:ADC101 (AN SERIES)	
(i)	Reverse power protection relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR216B	ALIND(T), type:ARP101 (AN SERIES)	
(j)	Sync check relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR217B	ALIND(T), type:ASC202 (AN SERIES)	
(k)	DC monitoring / supervision relay	TI/SPC/PSI/PROTCT/4050(10/05)	ASHIDA, type:ADR202B	ALIND(T), type:APSM	
5.4	Numerical type relays for OHE Protection with Parallel operation of traction transformers				
(a)	Integrated feeder protection relay	TI/IN/0017 & TI/SPC/PSI/PROTCT/4050(10/05)	ALIND (T), type: AZM1114+ (AN SERIES)	ASHIDA, type:ADR219B	
(b)	OC+REF Transformer protection relay	TI/IN/0017 & TI/SPC/PSI/PROTCT/4050(10/05)	-	ALIND(T), type:ATP214 HV/LV (AN SERIES) ASHIDA, type:ADR221B	
Vendor Capacity (minimum for panels) (Alind - 50 sets), (Electrocare - 50 sets), (AREVA) - 40 sets), (ABB - 50 sets), (Venson - 30 sets), (popular - 30 sets), (ShreemEngg.- 20 sets) (Ashida - 30 sets)			Vendor Capacity (minimum for relays) (Alind - 1000), (Ashida - 1000), (JVS - 500), (Alstom - 1000)		
6.0.	SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM (SCADA)				

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6.1	Standard SCADA system complete.	TI/SPC/RCC/SCADA/0990 (5/07) Vol I & II with Amendment No.1 (8/2008)	SYNERGY	CGL CMC ASHIDA ITI (B)	
6.2	SCADA system complete for Mumbai area	TI/SPC/RCC/SCADA/1080(9/08) with Amendment No.1	ASHIDA		---
7.0	<b>SHUNT CAPACITOR</b>				
7.1	Capacitor (Conventional Type)	TI/SPC/PSI/FC&SR/0100	ABB (B) (30 sets), BHEL (B) (25 sets), UNISTAR (25 sets), SHREEM (25 sets)	Energi capacitors Pvt. Ltd.( Energi) EPCOS(N)	
7.2	Series reactor for capacitor bank Low loss	TI/SPC/PSI/FC&SR/0100	SHE (25), PSE (25) QPE (25)	-	
7.3	Control and relay panel for capacitor bank	TI/SPC/PSI/PROTCT/6070(9/08)with A & C Slip No. 1	ALIND (T) ASHIDA	-	
7.4	Numerical type relays for 25KV Shunt capacitor bank				
(a)	under / over voltage protection relays	TI/SPC/PSI/PROTCT/6070(9/08) with A & C Slip No. 1	M/s ASHIDA type:ADR212B M/s ALIND(T)* TYPE: AFC 204 (AN SERIES)		*Under/ Over voltage and Over current/ unbalance current protection covered in single relay.
(b)	over current + unbalance current relay	TI/SPC/PSI/PROTCT/6070(9/08) with A & C Slip No. 1	M/s ASHIDA type:ADR221C M/s ALIND(T)* TYPE: AFC 204 (AN SERIES)		
7.5	Dynamic Reactive Power Compensation Equipment	TI/SPC/PSI/DRPC/0050	--	ABB (B) SHREEM DUBAS	Following Sources found to fit to take order *Following firm Prototype shall be done after taking order • VERAL • CUMMINS • BHEL (B) • NEPTUNE • PTPL • Growcontrols

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<i>Vendor capacities for items 7.3 and 7.4 are as per capacities given in item 5.0.(For Dynamic Reactive Power Compensation Equipment, required quantity insignificant in comparison to capacities of firms, so capacities are not applicable)</i>					
<b>8.0</b>	<b>BUSHINGS, POST &amp; OPERATING ROD INSULATORS</b>				
<b>8.1</b>	<b>BUSHINGS</b>				
<b>a</b>	245 kV OIP condenser bushing for main transformer	IS:2099-86 IS:12676-89 IEC 137 -1995	CGL (N), (Drg.No.3ABD 056/RO)	---	---
<b>b</b>	145 kV OIP condenser bushing for main transformer	IS:2099-86 IS:12676-89 IEC 137 -1995	ALSTOM (H), (Drg. No.100-3A-801 Rev 03) CGL (N), (Drg.No.3ABD 055/Rev.0) *BHEL (B),Drg. No.BCE -3-1129, R.2) TELK, Drg. No. TK 212178 R 1	---	* Prototype tests yet to be repeated
<b>c</b>	52 kV 2000A OIP condenser bushing for main transformer	IS:2099-86 IS:12676-89 IEC 137 -1995	*BHEL (B), Drg.TRE-JS-E-2626 Mod.5) TELK, Drg.No. TK 212179 R 1 ALSTOM (H). (Drg. No.100-3A-802 Rev(.04)	---	* Prototype tests yet to be repeated
<b>d</b>	52 kV 3150A OIP condenser bushing for main transformer	IS:2099-86 IS:12676-89 IEC 137 -1995	CGL (A) (Drg. No.3ABD 053/R0)	ALSTOM (H) Drg.No.100-3A-800 Rev.04)	---
<b>8.2</b>	<b>POST INSULATORS</b> <i>Vendor Capacity (minimum for post insulators) included with OHE insulators</i>				
<b>a</b>	245kV solid core post insulator assembly for 220kV isolators & bus bars.	TI/SPC/ OHE/POST/0100(01/2010)	ABI MIL IEC	*SGEL	* Prototype tests yet to be repeated
<b>b</b>	132kV solid core post insulator assembly for 132kV isolators & bus bars	-do-	#ABI MIL IEC	*SGEL	* Prototype tests yet to be repeated # Under prototype testing.
<b>c</b>	110kV solid core post insulator assembly for 110kV isolators & bus bars	-do-		ABI *SGEL MIL	* Prototype tests yet to be repeated.
<b>d</b>	66kV solid core post insulator assembly for 66kV isolators and bus bars	-do-	#MIL	ABI *SGEL	* Prototype tests yet to be repeated. # Under Prototype testing.
<b>e</b>	Post insulator cap & pin	IS:2544-1973	*BHEL	-----	* Prototype tests yet

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	stack for 132kV isolator		*ABI ----		to be repeated.
f	Post insulator for 25 kV isolator and bus bars (RI 6090)	TI/SPC/OHE/INS/0070(4/07)	MIL ABI IEC	SGEL	
g	11 kV post insulator	IS:2544 -1973	*ABI	-----	* Prototype tests yet to be repeated.
8.3	<b>OPERATING ROD INSULATOR</b>				
	Operating rod insulator for 25 kV isolator (RI 6260)	TI/SPC/OHE/INS/0070(4/07)	MIL *ABI IEC	SGEL	* Prototype tests yet to be repeated.
9.0	<b>INSULATORS FOR OHE AND ASSOCIATED FITTINGS</b>				
9.1	<b>STAY ARM INSULATOR</b>				
a	Porcelain Stay arm insulator ( RI 6000-2) (1050mm CD)	TI/SPC/OHE/INS/0070(4/07)	MIL *ABI #IEC	SGEL	#Under prototype testing as per new specification. *Prototype tests yet to be repeated.
b	Composite Stay arm insulator (1050mm CD)	TI/SPC/OHE/INSCOM/1070 (1/07)	GIL DECCAN	BHEL Asiatic YPIL TG ABI LAMCO	
c	Composite stay arm insulator (1600mm CD)	-do-		DECCAN GIL	
9.2	<b>BRACKET INSULATORS</b>				
a	Porcelain Bracket insulator (RI 6030-1) (1050mm CD)	TI/SPC/OHE/INS/0070(4/07)	MIL *ABI #IEC	SGEL	* Prototype tests yet to be repeated # Under prototype testing.
b	Composite Bracket insulator (1050 mm CD)	TI/SPC/OHE/INSCOM/1070 (1/07)	GIL DECCAN	BHEL Asiatic YPIL TG ABI LAMCO	



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c	Composite Bracket Insulator (1600mm CD)	TI/SPC/OHE/INSCOM/1070 (1/07)	-----	DECCAN GIL	
9.3	<b>9-TONNE INSULATORS</b>				
a	Porcelain 9-tonne insulators (RI 6020-1) (1050 mm CD)	TI/SPC/OHE/INS/0070(4/07)	#IEC MIL	SGEL	# Under prototype testing
b	Composite 9 Tonne Insulator (Polluted zone)(1050mm CD)	TI/SPC/OHE/ INSCOM/1070 (1/07)	GIL DECCAN BHEL Asiatic	YPIL TG ABI LAMCO	
c	Composite 9 Tonne Insulator (veryheavypolluted) (1600mm CD)	TI/SPC/OHE/ INSCOM/1070(1/07)	-----	DECCAN GIL	
9.4	<b>SECTIONING INSULATORS</b>				
a	Sectioning insulator (RI 6110) (850mm CD)	TI/SPC/OHE/INS/0070(4/07)	MIL ABI	SGEL #IEC	#Under prototype testing as per new specification.
b	Light weight section insulators assembly	TI/SPC/OHE/LWTSI/0060	Nil	GALLAND	---
c	Section Insulator Assembly( Without Section insulator)	ETI/OHE/27(8/84) with A&C Slip No. 1	Nil	Economics Electricals KEW KHATRI	
9.5	<b>DISC INSULATORS</b> <i>(Required quantity insignificant in comparison to capacities of firms, so capacities are not applicable)</i>				
a	11kV, 70 kN, (Ball & socket type) Disc insulator – 280mm dia ,CD-430mm(min.)	IS:731-1971	*ABI(JS-D103/Z)	IEC(CQD0702A06) *BHEL ( 4- 980-17-03400)	* Prototype tests yet to be repeated.
b	11kV, 120kN (Ball & socket) disc insulator with 280mm dia CD 430mm(min.)	IS:731-1971	*ABI(JS-D101/Z)	IEC(CQD1204A03) *BHEL(4-980-17-01700)	* Prototype tests yet to be repeated.
10.0	<b>REGULATING EQUIPMENT (ATD) -THREE PULLEY TYPE AND STAINLESS STEEL WIRE ROPE</b>				
10.1	<i>Regulating Equipment (ATD) -Three Pulley Type with modified pulley groove (3:1 Ratio) (with use of NBC ball bearing 6305 LLU(Part – I) or SKF ball bearing 6305-2RSI (Part- I) or FAG ball bearing 6305-2RSR(Part-II)in Regulating equipment)</i>	TI/SPC/OHE/ATD/0 060(8/06) with A&C Slip No. 1 to 3.	KEW KHATRI SHREE	Economics Electricals	

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10.2	Stainless Steel Wire Rope for Regulating Equipment.	TI/SPC/OHE/WR/1 060(6/06) with A & C No. 1 & 2	BWR SHREE UML	MAHADEV DWPPL		
11.0	<b>SHORT NEUTRAL SECTION ASSEMBLY (PHASE BREAK)</b> <i>(Required quantity insignificant in comparison to capacities of firms, so capacities are not applicable)</i>					
	Short neutral section assembly (Phase Break)	TI/SPC/OHE /SNS/ 0000	AF	GALLAND		
12.0	FITTINGS FOR OHE ( FORGED)	ETI/OHE/49 (9/95) with A & C Slip No. 1 to 5.	NIL	CEC( RI – 2391-1, 2403-2,2422- 2,5021,5022,5023,5024,5025 ,5041-1& 5322-1. KHATRI ( RI- 2151-2, 2152-2,2161-2, 2162-2, 2361- 2, 2391-1, 2403-2,2422-2,3021- 1,5021,5022,5023,5024,5025,5041-1 & 5322-1) KF ( RI-2151-2,2152-2,2161-2,2162-2,2361-1,2391- 1,2403-2,2422-2,2491-2/2492-2,3031-1, 5021,5022,5023,5024,5025,5041-1&5322-1) TLP (RI-2391-1, 2402-2,2422-2,3021- 1,5021,5022,5023,5024,5025,5041-1 & 5322-1)		
13.0	<b>T&amp;P ITEMS</b> <i>(Required quantity insignificant in comparison to capacities of firms, so capacities are not applicable)</i>					
13.1	Gearless hand operated pulling end of lifting M/c (0.8t, 1.6 t, 3.2t)	TI/SPC/OHE/TOOLPL/0990 with A&C slip no.1	TTI OCC CMI	NIL	.....	
13.2	Ratchet Lever hoist (pull lift) (0.8 t, 1.6 t, 3.2 t)	TI/SPC/OHE/ TOOLPL/1990	OCC GDS CMI	NIL	.....	
14.0	<b>GALVANISED STRANDED STEEL WIRE</b>					
14.1	Galvanisedstrandedsteel traction bond	TI/SPC/GALSTB/0040 with A&C slip No.1	NIL	BWR SSWR	---	
14.2	GalvanisedSteel Standard Wire for anchoring of traction mast for theftprone areas	TI/SPC/OHE/GSSW/0090	NIL	BWR SHREE	---	

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## CHAPTER – VII

### (EQUIPMENT FOR 2X25 kV AT SYSTEM)

*(Required quantity insignificant in comparison to capacities of firms, so capacities are not applicable)*

**Note: 1.** Status of approval of individual items may not be coterminous with the Vendor Directory's validity. Consignee/Inspecting Authority to verify the current status of approval from the letter issued by RDSO

**2.** Educational sources can take one time order. The type tests and prototype clearance shall be done by RDSO.

S. No.	Equipment	Technical Specification/ Drawing No.	Name of Regular Source (Part-I)	Name of Developmental Source (Part-II)	Remarks
<b>1.0</b>	<b>TRANSFORMERS</b>				
a	54 MVA, 220/2x27 kV, 50 Hz, ONAN Scott connected traction power transformer	ETI/PSI/124 (7/95).	-----	KONCAR, ALSTOM(F), ALSTOM (N).	
b	21.6 MVA, 132/2x27 kV 50 Hz, ONAN Single Phase traction power transformer	ETI/PSI/123 (9/93) with A/C Slip No. 1 (1/94)	-----	TELK	
c	8 MVA, 54/27 kV, 50 Hz Auto Transformer	ETI/PSI/125 (7/97).	-----	XIAN, ELECTRO –PUTERE, ALSTOM (N), ETE.	
<b>2.0</b>	<b>SWITCH GEAR</b>				
a	25 kV Double Pole Vacuum Circuit Breaker	TI/SPC/PSI/CB/0000 with A&C slip no. 1 to 5.	ALIND, Mannar	-----	
b	25 kV Double Pole SF6 Interrupter	ETI/PSI/139 (12/89) with A/C Slip No. 1 to 4 of Jan 90, Aug 91, Jul. 92 and Nov. 92.	-----	-----	
c	25 kV Double Pole Vacuum Interrupters	ETI/PSI/132 (8/89) with A/C Slip No. 1 to 4 of Jan 90, Aug 91, Jul 92 and Nov 92.	ALIND, Mannar	-----	
<b>3.0</b>	<b>RELAYS</b>				
a	Delta-I type fault selective relay.	ETI/PSI/130(8/89) with Amendment 1 of Jan.'90.	-----	MARUBENI (TSUDA)	
b	Parallelogram type static distance protection relay.	ETI/PSI/124(8/89) with Amendment 1 of Jan.'90.	-----	MARUBENI HITACHI	
c	Series capacitor.	ETI/PSI/127(8/89) A/C Slip No. 1 & 2	-----	MARUBENI(NISSEN)	
d	Shunt capacitor	ETI/PSI/126(8/89) A/C Slip No.1 & 2	-----	MARUBENI (NISSEN)	
e	Control and Relay panel.	ETI/PSI/138(8/89 with amendment 1 & 2 of Oct.'91 & Oct.'93.	-----	B&C, ALIND.	

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<b>f</b>	<b>Micro computer SCADA system</b>	<b>ETI/PSI/144(12/91)</b>	<b>SIEMENS,NELCO.</b>	<b>-----</b>	
<b>4.0</b>	<b>CONDENSER BUSHING</b>				
	<b>52 kV 800 OIP condenser bushing for 8 MVA autotransformer</b>	<b>IS: 2099 (1986)</b>	<b>ALSTOM (H)</b>	<b>-----</b>	

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**CHAPTER-VIII**  
**REGION-WISE LIST OF FIRMS AND ADDRESSES FOR**  
**TRACTION INSTALLATION ITEMS**

**A-Eastern Region**

S.No	Abbreviation	Name and address of the firm (with Tel & Fax number)	Items
1.	ABI	M/s Aditya Birla Insulators(A unit of Aditya Birla Nuvo Ltd.) P O Prabhas Nagar,712249Rishra, Disst. Hooghly, West Bengal Fax No. 033 – 26722705	11kV 70kN & 120kN disc insulators.11kV and 132 kV Pedestal Post insulators.
2.	CMI	M/s CrushmoreMaxban India, P-271, Benaras Road, Howrah – 711 108 FAX No. 033-26517287	Gearless hand operated pulling and lifting machine Ratchet Lever hoist (pull lift)
3.	IOC	M/s Indian Oil Corporation Lube Blending Plant P-68, Karli Marx Sarani, Paharpur, Kolkatta – 700043. Phone No. 0522-2305710 , Fax no. 0522 - 2305711	Inhibited Mineral insulating Oil
4.	METROARK	M/s METROARC Pvt Ltd. Chatterjee International Centre 20 <sup>th</sup> Floor, 33-A, J.L. Nehru Road, Kolkata – 700 071	Silicon grease
5.	NICCO	M/s NICCO Corporation Ltd., NICCO House, 2 Hare Street, Kolkata – 700 001 Tel. -033- 22485102/7, 22103528 Fax. -033-22209443	107 mm <sup>2</sup> HDGC Contact Wire, 65 mm <sup>2</sup> (19/ 2.10 mm) Insulated Cadmium Copper Catenary.
6.	UML	Usha Martin Limited (Wire & Wire Ropes Division) Works: Tatisilwai – 835 103, Ranchi,Jharkhand Office Address: Usha Martin Ltd., 2A, ShakerpereSarani, Kolkataa-700071, Ph. No. 033- 39800300, Fax No. : 033- 39800500/400, 22829029.Ph.: 0651-305140 Fax: 0651-3051409	8.65 mm Stainless Steel Wire Rope for 3:1, 3-Pulley type regulating equipment and Winch type regulating equipment.
7.	CEC	M/s. Chatterjee Engineering Co.,Sree Ganesh Business centre,216, AcharyaJagdish Chandra Bose RoadFlat 2A, Kolkataa-700017.Fax No . 033 – 22876305	FORGED STEEL FITTINGS FOR OHE
8.	TLP	M/s. Transmission Line Products,201, Central plaza,2/6, Sarat Bose road, Kolkataa-700020 FAX No. 033 - 24858819	FORGED STEELFITTINGS FOR OHE
9.	ECONOMIC	M/s. Economic Electricals,125,S.N.Roy Road,Kolkataa-700038. Fax No. 033 - 24687621	Regulating equipment (ATD) & Section Insulator assembly (Without Section Insulator)

**B- Central Region**

1.	BBL	M/s Bharat Bijili Limited , MilapNiketan 4 <sup>th</sup> floor , 8 A Bahadur Shah ZafarMarg , , New Delhi – 110002 phone No. 011 – 23319694 Fax No. 011 – 2256034/ 23319413	Traction Power transformers
2.	BHEL (J)	M/s Bharat Heavy Electricals Ltd., P.O. BHEL, Jhansi – 284 129 Tel: 0517-2440944 Fax: 0517-2443108 E-Mail: tre3@jhs.bhel.co.in	Power transformers.
3.	BHEL (B)	M/s Bharat Heavy Electricals Ltd., Bhopal – 462 021 (MP)Tel: 0755-2506801/ 2500681/2502526 Fax: 0755-2500681 E-Mail: ipal@bhelbpl.co.in	25 kV Shunt Capacitor equipment, 52 kV and 142 kV OIP condenser Bushings.,25kV single pole vacuum interrupters & CB

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4.	IEC	M/s Insulators and Electrical Co., 1-8, New Industrial Area, PB No. 1, MANDIDEEP-462 046 Dist.Raisen(M.P.) Tel: 07480-507900-04, 507911 Fax: 07480-233329, 507908	Solid core Porcelain Insulators
5.	VISVAS	M/s VishvasPoweEngg. Services Pvt.Ltd., K-5, MIDC, Butibori, Nagpur, 441108 Phone No. 07104-323005 Fax 07104- 265969	Traction Power Transformer
6.	UNISTAR	M/s Universal Cable Ltd., Post Box No. 9, Satna (MP)– 485005 Tel. 07672- 223561- 65 Fax. 07672- 225344	25 kV Shunt Capacitor, Insulated Cadmium- Copper Catenary.
7.	UNICAB	M/s Universal Cables Ltd., Post Box No. 9,Satna( MP)-485005. Tele No. 07672223561-65 FAX No. 07672-225344	65 mm <sup>2</sup> (19/ 2.10 mm) Insulated Cadmium Copper Catenary Wire
8.	EPCOS	M/s EPCOS India Pvt. Ltd, E-22-25, MIDC Area, Satpur, Nashik - 422007,Maharastra Fax No. 0253-2353761	25 kV Shunt Capacitor equipment,

### C- Western Region

1.	ABB (N)	M/s Asea Brown Boveri Ltd., Street No. 17, MIDC Estate, Satpur Industrial Area, Nashik – 422007 Tel. No. 0253-2351095 – 97, FAX No. 0253-2350644 E-Mail: <a href="mailto:subbiahthever.dukkaiappan@in.abb.com">subbiahthever.dukkaiappan@in.abb.com</a>	25 kV Vacuum Circuit Breaker and Interrupter
2.	ABB(V)	M/s Asea Brown Boveri Ltd., Maneja, Vadodara – 390 013 Tel: 0265 –2641669 Fax: 0265 –2643658 , E-Mail: <a href="mailto:pitamber.shivnani@in.abb.com">pitamber.shivnani@in.abb.com</a>	220 kV ,25kV CB , 25kV SF6 Interrupter and Power transformer.
3.	AVAL	M/s AdityaVidyut Appliances Limited, 17 , M.I.D.C. , SarawaliKalyan – Bhiwandi road , Distt ., Thane -421311 Phone No. 02522-280176, 281383	Traction Power Transformer
4.	APAR	M/s APAR Industries Limited,18,TTC,MIDC Industrial Area,NearRabale Telephone Exchange,Thane – 400 701.Tel:022-27694756/57,Fax:022 – 27602692	Inhibited Mineral insulating oil.
5.	APEX	M/s Apex Electricals Limited, Padra Road, Samiala, Dist. Vadodara-391 410. Tel: 02662-221457 Fax:02662-221448	Traction Power Transformers.
6.	ALSTOM (V)	M/s ALSTOM T&D India Ltd., LTI Division, Milestone 87, Vadodara Halol Highway, Kotambly, Vadodara -10. Phone No. 02688-661-12, FAX No. 02688-661201	Traction power Transformer.
7.	ASHIDA	M/s Ashida Electronics Pvt. Ltd., Plot No. A-308, Road No. 21 Wagle Industrial Estate, Thane-400 604 Tel: 022-25827525,25827524 Fax: 022-25804262	Static Relay for 132/25kV TSS , 25kV shunt capacitor and SCADA equipment. Time graded feeder protection module
8.	ABI	M/s Aditya Birla Insulators, Halolworks : P.O. Meghasar , The. Halol , Dist. Panchmahal , ( Gujarat) PIN – 389330 Fax No. 91 -2676-223375 Phone no. 91 -2676-221002	Solid core porcelain& 25 KV composite insulator .

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9.	BWR	M/s Bharat Wire Ropes Ltd., Works: Plot No. 1 & 4, At gaon Industrial Complex, Mumbai, Nasik Highway Atgaon( East), Shahapur, Thane- 42601, Tele. 02527 240123/ 240026/240027 Fax: 02527 – 240196/240544, Office : 524/525, The Corporate Centre, Nirmal Centre, Nirmal Life style, LBS Marg, Mulund ( West) Mumbai – 400080, Ph, 022-25619960/61/62, Fax No. 02561 – 9964	SS Wire Rope, Traction Bond ( Stranded type & Galvanised Stranded Steel Wire for Traction Mast.
10.	CALICO	M/s CALICO Chemical Plastic and Fibres Division, ANIK, Chembur, Mumbai – 400 074	Heat shrinkable tube for structure and cross bonds.
11.	CGL(M)	M/s Crompton Greaves Ltd.,Transformer Division, Kanjur,(E) Bhandup, Mumbai – 400042Tel:022-25782451 Fax:022-25783271 E-Mail: Harsh.Dhingra@cgl.co.in	Traction Power Transformers.
12.	CGL(N)	M/s Crompton Greaves Ltd, Switchgear complex A-3, MIDC, AMBAD, NASIK- 422 010 (Maharashtra) Tel: 0253-2382271 to 75 Fax:0253-2381247 E-Mail: shreedhaval.sapre@cgl.co.in	132 kV, 25 kV, SF6 Circuit Breakers, 25 kV SF6 Interrupters, 52 kV 145 kV and 245 kV OIP condenser bushings.
13.	CGL (A)	M/s Crompton Greaves Ltd., D-2 MIDC, Waluj, Aurangabad.431136 Ph. No. 0240-2558000, 0240-2554697	52 kV OIP Condenser Bushings.
14.	DWPPL	M/s Desh Wire Products Pvt., Ltd., 34, Kemtrols Industrial Estae , BhandupSonapur Road, Opp L.B.S. MargBhchandup ( west ) , Mumbai – 078 Ph. 022 – 25667607 , 25661471 , Fax No. 022- 25664317, Email : deshwireproducts@ rediffmail.com , www. Deshrope.com	Stainless Steel Wire rope for Regulating Equipment.
15.	HCL	M/s Hindustan copper limited , E-33 –E-66 M.I.D.C P.O. Taloja Dist. Raigad – 410208 Mahrastra phone No. 022-27411912 fax No. 022-27412468	19.6± 0.5 mm diameter Indigenous Continuous Cast Copper (CCC) Wire Rod.
16.	HINDALCO	M/s Hindalco Industries Limited (Unit of Birla Copper) Ahura Centre , Ist Floor , Mahakali Caves , road , Andheri (E) Mumbai – 400093 Phone No. 022-6917113 Fax No. 022-6917102	19.6± 0.5 mm diameter Indigenous Continuous Cast Copper (CCC) Wire Rod.
17.	Columbia	M/s Columbia Petro Chem Pvt Ltd., 1 <sup>st</sup> floor Triveni, 32 <sup>nd</sup> road, D-101, Bandra ( West) Mumbai PIN - 4000500Tel: 0260-2632793, Fax 0260-2632792	Inhibited Mineral insulated oil
18.	CPL	M/s Chandra Proteco Ltd, Survey No. 139/2, Village-Athola, Silvasa-396230, D & Nagar Haveli	107 mm <sup>2</sup> , 193 mm <sup>2</sup> HDGC Contact Wire &65 mm <sup>2</sup> (19/ 2.10 mm) uninsulatedCd-Cu Catenary Wire.
19.	DOWELS	M/s Dowells Electro Works, Statguru Estate, Off Acarey Road, Goregaon East, Mumbai – 400 063	Corrosion inhabiting compound.
20.	EMCO (T)	M/s EMCO Transformers Limited, Plot No. F-5, Road No. 28, Wagle Industrial Estate, Thane - 400604 Tel: 022-26852239, 25830517 Fax: 022-26963574 E-Mail: pypatki@emcoindia.com	Traction Power Transformers.
21.	FAG	M/s FAG Bearing India Limited, Maneja , vadodara – 390013,. Fax No. 0265- 2638804 Phone No. 0265-6602000,6602496,6602498	Bearing
22.	GANDHAR	Gandhar Oil Refinery India Limited T-10 MIDC, Taloja, Main Road, Talu, Panvel district Raigad Maharashtra Phone No. 022- 24113667	Inhibited Mineral insulated oil
23.	HI- VOLT	M/s Hi- Volt Electricals Pvt. Ltd., J-46, MIDC, Tarapur Industrial Area, Baiser, District Thane 401506,Phone No. 952525- 272556/272776,	Traction Power Transformers.

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		Fax No. 952525-272776	
24.	IMP	M/s IMP Power Ltd., , 35/C , Popular Press Building , 2 <sup>nd</sup> Floor PT M.M. Malviya Road, Tardeo, Mumbai-34 phose no. 022- 23539180-85 Fax No. 022- 23539186-87	Traction Power Transformers.
25.	KEW	Kamgar Engineering Works (I) Private Limited 9, Anupam Industrial Estate, No.2 Opp. Mulund Telephone Exchange, Mulund (West) Mumbai-400 080 Tele: 022-25908078/79/82, FAX No. 022- 25918074	Regulating Equipment-3Pulley Type , Section Insulator Assembly ( Without Section Insulator)
26.	KHATRI	Works: Khatri Castings (P) Ltd. Village: Valwada (Near Karambele Railway Station) NH-8 Taluka- Umargaon Opp. Maruti Depot, Dist. Valsad ( SG) Tele fax: 0260-2707286 Office: 144, Naman Plaza, Shoppers Stop Bldg., SV Road Kandivali( West), Mumbai - 400067 Tele. 022-28658106, Fax No. 022-28658107	Regulating Equipment-3Pulley Type Forged Steel Fittings& Section Insulator Assembly (Without Section Insulator)
27.	MIL	M/s Modern Insulators Ltd., Post Box No. 23, Abu Road – 307 026 Tel: 02974 - 228044/45,46,48 Fax: 02974 – 228043, 221098	Solid core porcelain insulator Insulators
28.	OCC	M/s Overseas Commercial Corporation, S.No. 3, Hissa No. 1/2A, Yewalewadi, Kondhwa(B) PUNE- 411 048 FAX: 020-6931651	Gearless Hand Operated Pulling and Lifting Machine & Ratchet Lever Hoist ( Pul-lift)
29.	APAR (Power oil petroleum Product Division)	M/s Apar Industries Limited,(Power Oil Petroleum Product Division)Works Address: , Survey No. 148/3/1, Kudacha Village, Silvasa – 396230 (Dadar Nagar Haveli) Registrered office : Power Oil Petroleum Products Apar Industries, Dharani Singh Desai Marg, MahulTrombay, Mumbai Tel: 022-25544005/06 FAX:022-5541471/1708	Inhibited Mineral insulating oil
30.	QPE	M/s Quality Power Electrical EquipmentsPvt. Ltd., L-61 & Plot No. 17/3 MIDC, Kupwad-416 436, Sangli (Maharashtra).Tel:0233-2645432, 26445582 Fax.: 0233-2645433 E-mail: <a href="mailto:sanqpower@sancharnet.in">sanqpower@sancharnet.in</a>	Series reactor for capacitor bank low loss
31.	SAVITA	M/s Savita Oil Technologies Ltd.,66/67, NarimanBhavan, 6 <sup>th</sup> Floor, Nariman Point, Mumbai – 400 021 Tel: 022-22883061 Fax: 022-22029364	Inhibited Mineral insulating oil
32.	PANAMA	M/s Panama Petro Chem. Ltd,Plot no.3303,GIDC Estate,Ankleshwar, Bharuch, Gujrat393002 Ph.No.02646-250281,Fax no.02646-225907	Inhibited Mineral insulating oil
33.	Raj Petrospecialities	Works Address:M/s Raj PetrospecialitiesPvt. Ltd Survey No. 146/2/3, Madhuban Dam Road, Village Karad, Silvasa – D&N.H. (UT)- 396230 Phone No. 0260 – 3091881 F. No 0260 -2644396	Inhibited mineral insulating oil
34.	SHE	M/s Shrihans Electrical Pvt Ltd.21-20 Maruti Arcade JN Road Mulund west Mumbai.-400080 Tel No. 022-25683949 / 25684836 FAX No. 022-25674981,	Series Reactor.
35.	SHREE	Works: 183-184-185, KIDC, Village- Dheku, Khopoli, Taluka-Khalapur, Dist. Raigad (Mah.)PhoneNo.02192-263547, Fax No. 02192-266479Registrered office : M/s Shree Steel Wire Ropes Ltd. 2 <sup>nd</sup> floor, Shiv Ashish Commercial ComplexPlot No. 10, 19 <sup>th</sup> Road Chembur, Mumbai - 400071Phone No. 022-25274142, 25240917 FAX No. 022-25270999	S.S Wire Rope , Auto Tensioning Device, Traction Bond ( Stranded type ) & Galvanised Steel Stranded wire for Traction Mast.



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36.	SHREEM (C)	M/s SHREEM ELECTRIC LTD., Industrial Estate, Post box no. 43 Jaisinghpur – 416 144 Maharashtra Fax: 02322 – 221023	Capacitors.
37.	SHREEM	M/s SHREEM ELECTRIC LTD., plot No. 03 , Gate No. 418/2, L.K.Akawate , Industrial estate , jaisinghpur – 416144	DRPC
38.	SIEMENS	M/s Siemens Ltd, DIV - RTS III floor ,Sector II, Plot no 2, Kharghar Node, Navi Mumbai - 410 208 Fax : 022- 27562855/ 27577005	Micro computer SCADA system.
39.	SP	M/s Sarunda Polymers ,Bikaner Road, Nokha – 334 803 (Rajasthan) Tel:01531-222301,220301Fax: 01531-220301	65mm <sup>2</sup> (19/2.10mm)uninsulatedCadmimumCopper Catenary Wire
40.	TASHKENT	M/s Tashkent Oil Company (P) Ltd. 84, GIDC, NandesariDistt. Vadodara Tel: 0265-2341514 Telex: 0265-2338083E-Mail: tashoil@usa.com	Inhibited Mineral insulating oil
41.	TRL	M/s Transformers & Rectifier (India ) Ltd., Survey No. 344-350, Sarkhej- Bawaza Highway, NH 8 A, Village- ChangodarTalukaSanad, Distt- Ahmedabad- 380213 ( Unit First- Changodar) & Unit 2 MORAIYA- Ph. No. 2717-6616661 FAX No. 02717- 661716	Traction Power Transformers
42.	WHE	M/s Western Hivolt Equipment Pvt. Ltd., Plot No. 39 – 40, Industrial Estate, Jaysingpur – 416 144Kolhapur, Maharashtra Fax: 02322 – 221030	Series Reactor.
43.	AIREN	M/s Airen Metal Pvt. Ltd., A – 405 ( 7) , Road No. 14 , V.K.I. area, Jaipur (Raj.) pin – 320012 Fax No. 0141 - 2460815	107 mm <sup>2</sup> HDGC Contact Wire, HDGC Contact Wire
44.	ECPL	M/s Energy Capacitor, P Ltd., 316, Shree Krishna Commercial Centre, 6 Udyog Nagar, Goregaon, Mumbai.Works: 1/10, Shenbagathoppy Road Rajapalayam- 626117	HT capacitors
45.	PTPL	M/s POWERFIELD Techonologies ( India) Pvt., Ltd., B – 81 , MIDC , Ambad , Nasik - 422010	DRPC

#### D- Northern Region

1.	ALSTOM(N)	M/s ALSTOM T&D INDIA LTD Naini Works Allahabad.- 211008 Tel: 0532-2697422 Fax: 0532-2696782 E-Mail: sanjeev.khetrapal@areva-td.com	Traction Power Transformers and Pole mounted Interrupter and SCADA equipment.
2.	ASIATIC	M/s Asiatic Electrical & Switchgear (P) Ltd., A-58,Naraina Industrial Area Phase I,New DelhiTel:011-25796330,25796617Fax: 011-25799816	25kV composite insulators
3.	CHANDRA	M/s Chandra Metals .Ltd., 1 & 2, Monereco Industrial Estate (TeliarGunj) Allahabad – 211 004 Tel. 0532 – 2545681 Fax. 0532 -2545510	65mm <sup>2</sup> (19/2.10mm)uninsulatedCadmium Copper CatenaryWire,107mm <sup>2</sup> HDGC,150 mm <sup>2</sup> HDGC and 193mm <sup>2</sup> HDGC Contact Wire
4.	GD SIEGELL	M/s G.D Seigell & Co. Pvt. Ltd., 1/ 1560, Church Road, Kashmiri Gate, Post Box No. 1365, Delhi 1100 06, Phjone No: 0120- 2570348. FAX Nos. 011-25868946,	Ratchet Lever hoist (pull lift)
5.	HYVOLT	M/s HYVOLT Electricals, B-36, ZhilmilTahirpur Industrial Area, G.T. Road, Shahdra, Delhi – 110 095 Tel. 011- 22289652 Fax. 011- 22289727	65mm <sup>2</sup> (19/2.10mm)uninsulatedCadmium Copper CatenaryWire, 107 mm <sup>2</sup> HDGC,

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			150mm <sup>2</sup> HDGC & 193mm <sup>2</sup> HDGC Contact Wire.
6.	JK CABLE	M/s JK Cable Limited, C-25, Sector 57, Noida, Gautam Budh Nagar (UP). Tel: 0120-2581022, 4327375 Fax: 0120-2581022	65mm <sup>2</sup> (19/2.10mm) un-insulated Cadmium Copper Catenary Wire, 107 mm <sup>2</sup> HDGC Contact Wire
7.	KANO HAR	M/s Kanohar Electricals Ltd., Rithani, Delhi Road, Meerut, UP Tel: 0121-511010, 512020, 513030 Fax: 0121-2512763, 2524244. Mob. 9837093902	Traction Power Transformers
9.	MAHADEV	M/s Mahadev Industries, 95, First Floor, Tagore Park, Model Town - I, Delhi - 110009 Works: C-10/A-2, UPSIDC, Tronica City, Loni, Distt., Ghaziabad (U.P.) - 201102 fax No. 0120-2696081, phone No. 0120-2696200	Stainless Steel Wire Rope for Regulating Equipment.
10.	NEPTUNE	M/s Neptune System Pvt. Ltd., Neptune House, A-11, Sector - 59, Noida - 201 301	DRPC
11.	SACHDEVA	M/s Sachdeva Industries, 401- Arunachal, 19- Barakhamba Road, New Delhi - 110 001, Tel. 011- 23714953, 23723060, 23321852 Fax. 011- 23711245	65mm <sup>2</sup> (19/2.10mm) un-insulated Cadmium Copper Catenary Wire, 107 mm <sup>2</sup> HDGC Contact Wire.
12.	Synergy	M/s. Synergy System & Solutions, A-1526 Green Fields Colony, Faridabad-121 001 Phone: 0129-2510501 FAX: 0129-2510399	SCADA Equipment
13	TA	M/s Technical Associates Ltd., Plot No. B-7, industrial Park, Eldeco Sidcul, Udham Singh Nagar, Uttarchanchal - 262405	Traction Power Transformer
14.	TTI	M/s Tractel Tirfor India Pvt. Ltd, 14/6, Mile Stone, Mathura Road, Faridabad - 121 003, Tele No. 0129-2275284 - 5336 Fax 0129-2278610	Gearless hand operated pulling and lifting Machines.
15.	TG	M/s Tools & Gauge Company, A-6, Talkatora Industrial Area, Lucknow-226 011 Tel/Fax: 0522 - 2661769	25kV Composite Insulators
16.	VEEKAY	M/s Veekay General Industries, B-46, Jhil Mil Tahirpur Industrial Area Shahadra Delhi - 110095. Tel. 011- 22283005, 22282087 Fax. 011-22289459	107 mm <sup>2</sup> , 93 mm <sup>2</sup> & 150 mm <sup>2</sup> HDGC contact wire, 65mm <sup>2</sup> (19/2.10mm) un-insulated cadmium copper catenary wire
17.	YPIL	M/s Ysamuna Power & Infrastructure Ltd., Sardana Nagar, Ambala Road, Jagadhri (Yamuna Nagar), Haryana Tel: 01732-242098, 242881 Fax: 01732-242539	25kV Composite Insulators
18.	SCPL	M/s Sriram Cables Pvt., Ltd., A - 524, RIICO Indl. Area Chopanki, Bhaiwadi, Distt., Alwar (Raj.) Tel. : 08875028951 Fax: 01493-517636	107 mm <sup>2</sup> HDGC Contact Wire & 65mm <sup>2</sup> (19/2.10mm) un-insulated Cadmium Copper Catenary Wire
19.	SEIL	M/s Skipper Electricals India Ltd., F-667-668, RIICO Industrial Area, Phase - II, Bhiwadi, Alwar- 301019, Rajasthan	Traction Power Transformer
20.	GCC	M/s GEE CEE Corporation Pvt., Ltd., Plot No. 15, Sector - 9, IIE, SIDCUL, Pantnagar (Radrapur) Distt., Udham Singh Nagar (Uttarakhand) Fax No. 011 - 42421464	107 mm <sup>2</sup> HDGC Contact Wire, 150 mm <sup>2</sup> & 193 mm <sup>2</sup> HDGC Contact Wire. & 65 mm <sup>2</sup> (19/2.10mm, ) un-insulated Cadmium Copper

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			Catenary Wire
21.	SAWPL	M/s. Sequel Alloys & Wires Private Limited 143, 154A to 154E, NSEZ, NOIDA (UP). Telephone: 0120-4259119 Fax No. 0120-4259192	65mm <sup>2</sup> (19/2.10mm) Un-insulated Cadmium Copper Catenary Wire
22.	SHELL,	SHEEL Bharat Shell Limited,1001 – 1009 , Anshal tower , 38 ,Nehru place < New delhi – 110019,Ph. No. 011-62166139-41,6483003/4. Fax no. 011-6472341	Inhibited Insulating Oil
23.	SSEPL	M/s Sight Sound Electronics ( India) Pvt. Ltd., A- 128, Wazirpur Industrial Area , Delhi – 110052 Fax No. 011 – 27371662	65mm <sup>2</sup> (19/2.10mm)Un-insulatedCadmium Copper Catenary Wire
24.	KF	M/s. Kumar Fasteners,S-15 Building Material Complex,Site-A, Industrial Area, Mathura(UP)-281004 Phone No. 0565 - 2460178 Fax No. 0565 -2460178	FORGED STEEL FITTINGS FOR OHE
25.	SCIPL	M/s Stellar Cables Infrastructure Pvt., Ltd., A-5 UPSIDCL Industrial Area , Sarojininagar, Kanpur Road , Lucknow -226008 Email: info@stellarcables.net	107 mm <sup>2</sup> HDGC Contact Wire & 65 mm <sup>2</sup> (19/2.10mm) Cadmium Copper Catenary Wire

### E- Southern Region

1.	ABB (B)	M/s Asea Brown Boveri Ltd., Plot No. 5 & 6, II Phase, Peenya Industrial Area, Bangalore – 560 058 Tel: 080-28392813 Fax: 080-28392384	25 kV Shunt Capacitor equipment, Dynamic Reactive Power Compensation Equipment.
2.	ALIND (T)	M/s Aluminium Industries Ltd., Relay Division, Kavinpuram Vilappilsala, Trivedrum -695673. Tel: 0471-2379704,2379503 Fax: 0471-2378760	Static Relay and control relay panel incorporating static relays for 132/25kV TSS and 25kV shunt capacitor bank. Microprocessor based C&R panel, Feeder protection module
3.	ALIND (M)	M/s Aluminium Industries Ltd., Switchgear Division, Mannar, P.O. Distt. Alleppey, Kerala State Tel: 0479-2312269 Fax: 0479-2312358 E-Mail: <a href="mailto:rameshpillaimr@yahoo.co.in">rameshpillaimr@yahoo.co.in</a>	25 kV Vacuum CB, Interruptor.
4.	ALSTOM(H)	M/s ALSTOM T & D India Limited , # 46 , Sipcot Industrial Complex, Zuzuwadi Village – Hosur- 635126 , Phone No. 04344408128.	52 kV, 145 kV, O.I.P. condenser bushings for Traction Power Transformer.
5.	BHEL (H)	M/s Bharat Heavy Electricals, Ramachandrapuram, Hyderabad – 500 032 Tel: 040-2241011 Fax: 040-2233844 E-Mail: <a href="mailto:hskalsi@satyam.net.in">hskalsi@satyam.net.in</a>	132 kV SF6 CB.
6.	BHEL (B'LORE)	M/s Bharat Heavy Electricals Ltd., Electro – Porcelain Division , Science Institute, Post Box No. 1245, Bangalore – 560 012 Tel: 080-23343308, 23348841, 233433309 Fax: 080-23344231	25 KV composite insulators.
7.	CMC	M/s CMC Ltd., CMC Centre, Gachibowli, Hyderabad-500 019. Tel: 040 – 23000401/ 501 Fax: 040-23000167	SCADA Equipment.
8.	DECCAN	M/s Deccan Enterprises Pvt. Ltd, B/58,59 and 60, Asstd. Pvt. Industrial Estate, Balanagar,	25 kV composite Insulators

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		<b>Hyderabad - 500 037FAX No. 040-23778699</b>	
9.	ETE	M/s Thane Electric Supply Co. Ltd., Rahmat Building, 66-A, RP Road, PB. 42, Secunderabad Tel: 040-272756 Fax: 040-274605	Auto transformer and 280 kVA BT
10.	GIL	M/s Goldstone Infratech Ltd., Plot No. 129, phase-2, IDA, CherapallyHyderabad -51	25 KV Composite Insulators.
11.	Growcontrols	M/s Growcontrols , P-5/1/A, Road No. 13, IDA, Nacharam, Hyderabad-500 076 Phone: 040-27175591, 9177107878, Fax: 040-27175386, growcontrols@gmail.com	Dynamic Reactive Power Compensation Equipment
12.	ITI	ITI Ltd., Bangalore complex , ITI Ltd., Dooravani Nagar Bangalore – 2260016 Tel – 080 – 28503671 Fax No. 080 – 25650971 Email : iti.bgp@itilttd.co.in	SCADA Equipment
13.	LAMCO	M/s Lamco Lightning Arrestor Mfg. Company (P) Ltd.,B-38-39,Industrial Estate,Sanath Nagar, Hyderabad - 500 018 Tel. No. 040-23704293/2089/3486, 23715036FAX No. 040-23703535	25 KV Composite insulators.
14.	MEGAWIN	M/s Megawin Switchgear – P- Ltd., P.O.Box no. 434 ,Alagapuram Post.,PerumalMalaiadivaram , Salem – 636004 phone No. 0427- 2430571, 2430572 , 2447099 Fax No. 0427- 2430570 Email Id: sales@ megawinswitchgear.com	25 KV , SP vacuum Circuit Breaker & Interrupter (with Magnetic actuator mechanism
15.	PSE	M/s P.S. Electricals (P) Ltd., 53 (MP) Developed plots, Ekkathuthangal, Chennai – 600 097Tel No. 044-2342384 / 2344036 FAX No. 044-2350229 E-Mail: psgroup@giasmd01.vsnl.net.in	Series Reactor for capacitor bank.
16.	RAJPETROSPE CIALITIE(C)	M/s Raj PetrospecialitiesPvt. Ltd., Chennai. S. No. 73/1B, Vaikkadu Village, Manali, Chennai-600103.Tel. No.-04425930065, 02224714961Fax-04425931371, 02224710898	Inhibited Mineral insulating oil.
17.	SGEL	M/s Sarvana Global Energy Limited,CuddaloreRoad,P.N.Kuppam,Kurinjipadi Post, Cuddalore – 607 302 .	Solid core Porcelain Insulators.
18.	TCPCC	M/s The Concrete Products and Construction Co. 766, Poonamallee High Road, Chennai – 600 010 Tel: 044-26411889 Fax: 044-2642685	Spun PSC OHE mast
19.	TELK	M/s Transformers and Electricals Kerala Ltd., Post Angamally Dist- Ernakulam, Kerala-683 573Tel: 0484-2452251,Fax: 0484-2452873 E-Mail: telk@vsnl.com ; telk_materials@netcracker.com	Power Transformers, 52 kV and 145 kV OIP condenser bushings.
20.	VEL ( H)	M/s Vijay Electricals Limited, 6 – 3- 648 / 1 & 2 , off Raj Bhawan Road , Somajiguda, Hyderabad – 500082 Phone No. 040 – 30712200/ 7371 Fax No. 040 - 30717370	Traction Power transformers.
21.	VEL ( C )	M/s Victory Electricals Ltd., Plot no. 15, Phase IV Ext. IDA Jeedimetla , Hyderabad – 500055 Phone No. 040 – 44546200 Fax No. 040 – 44546201	Traction Power transformers.

### F- Firms abroad

1.	AF	M/s Arthur Flurry, CH-4543, Deitingen , Switzerland. Tel: 0326133366 Fax: 011-23736996	Short Neutral Section Assembly (Phase Break) and Automatic switched neutral section assembly
2.	ALSTOM (F)	M/s ALSTOM , Transformateurs of Moyenne Puissance, Direlltion, Commerciale, 4bd	54 MVA, Scott connected power transformer.

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		<b>Juies-Durand-7009X, 76086 HAVRECEDEX, FRANCE.</b>	
3.	ELBI	Serbia& Montenegro, Valjevo 14000, 48, Sindeliceva Street	Composite Insulator (Stay arm, Bracket tube, 9-Tonne and Sectioning)
4.	KONCAR	M/s KONCAR Power Transformer Ltd., Yuzagreb, Samoborska bb, CROATIA	54 MVA Scott-connected power transformer.
5.	MARUBENI (NISSIN)	M/s Marubeni Corporation, 4-2, Ohtemachi, 1-Chome, Chiyoda – Ku, Tokyo, Japan M/s NISSIN Electric Co. Ltd. Kyoto, Japan	Shunt Capacitor equipment, Series Capacitor equipment, Resonance suppressing C-R device. C-R Device
6.	MARUBENI TSUDA	M/s Marubeni Corporation, 4-2,Ohtemachi, 1-Chome, Chiyoda – Ku, Tokyo, Japan.Tel: 011-23326866 Fax: 011-3325385, M/s TSUDA Electric Meters Co. Ltd., 6-8, NISHITENMA 2-Chome, Kita-Ku OSAKA, 530, Japan	Delta-I Fault selective relay distance protection relay parallelogram
7.	XIAN	M/s XIAN Electric Machinery Import & Export Co., MidSection of FengHao Xi Lu, XIAN, P.R. CHINA. Tel:0517-2481052	Auto transformer
8.	GALLAND	The Director Commercial , M/s Galland , 255 ZI de 1'11 liot,332 La Landa de Fransec, France, Fax No. ( 33(0) 557940711)Through SHREEM International ( P) Ltd., D-94 Himalaya House ,23 KG Marg , New Delhi – 110001 Fax No. 011-23736996	Light weight sectional insulator assembly and Short Neutral section Insulator Assembly.

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## CHAPTER – IX

### DISTRIBUTION LIST

S.No.	COPY HOLDER	Copy No.
1.	The Secretary (Elec.), Railway Board, New Delhi-110 001.	1.
2.	Secretary (Electric Traction), Railway Board, Rail Bhavan, New Delhi-110 001	2.
3.	The Secretary (RE) Railway Board, New Delhi-110 001.	3.
4.	The Secretary (Electric Development) Railway Board, New Delhi-110 001.	4.
5.	The Secretary (Stores) Railway Board, New Delhi-110 001.	5.
6.	General Manager, Integral Coach Factory, Perambur, Chennai-600 038.	6.
7.	General Manager, Rail Coach Factory, PO Hussainpur, Kapurthala-144 602.	7.
8.	General Manager, Diesel Locomotive Works, Varanasi – 221 004.	8.
9.	General Manager, CLW, Chittaranjan, Distt. Bardwan.	9.
10.	CAO, Diesel Component Works, Patiala-147001.	10.
11.	General Manager (Electrical), Central Railway, Mumbai CST-400 001.	11.
12.	General Manager (Electrical), Western Railway , Churchgate, Mumbai-400 020.	12.
13.	General Manager (Electrical), Eastern Railway, Fairlie Place, Kolkata-700 001.	13.
14.	General Manager (Electrical), Northern Railway, Baroda House, New Delhi-110 001.	14.
15.	General Manager (Electrical), Northeast Frontier Railway, Maligaon, Guwahati-781 011.	15.
16.	General Manager (Electrical), North Eastern Railway, Gorakhpur-273 001	16.
17.	General Manager (Electrical), South Central Railway, Secundrabad-500 371.	17.
18.	General Manager (Electrical), Southern Railway, Park Town, Chennai-600 003.	18.
19.	General Manager (Electrical), South Eastern Railway, Garden Reach , Kolkata-700 043.	19.
20.	General Manager (Electrical), North Central Railway, Subedar Ganj, Allahabad. 211033	20.
21.	General Manager (Electrical), North Western Railway, Jaipur.	21.
22.	General Manager (Electrical), WCR, West Central Railway, Jabalpur.	22.
23.	General Manager (Electrical), East Coast/Rail, East Coast Railway, Bhubaneswar	23.
24.	General Manager (Electrical), ECR, East Central Railway, Hajipur.	24.
25.	General Manager (Electrical), South East Central Railway, Bilaspur.	25.
26.	General Manager (Electrical), CORE, Central Organization, Railway Electrification, Allahabad- 211001	26.
27.	General Manager (Electrical), South Western Railway Hubli-	27.

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28.	General Manager (Stores), Central Railway, Mumbai CST-400 001.	28.
29.	General Manager (Stores), Western Railway , Churchgate, Mumbai-400 020	29.
30.	General Manager (Stores), Eastern Railway, Fairlie Place, Kolkata-700 001.	30.
31.	General Manager (Stores), Northern Railway, Baroda House, New Delhi-110 001.	31.
32.	General Manager (Stores), Northeast Frontier Railway, Maligaon, Guwahati-781 011.	32.
33.	General Manager (Stores), North Eastern Railway, Gorakhpur-273 001.	33.
34.	General Manager (Stores), South Central Railway, Secundrabad-500 371.	34.
35.	General Manager (Stores), Southern Railway, Park Town, Chennai-600 003.	35.
36.	General Manager (Stores), South Eastern Railway, Garden Reach , Kolkata-700 043.	36.
37.	General Manager (Stores), North Central Railway, Subedar Ganj, Allahabad. 211033	37.
38.	General Manager (Stores), North Western Railway, Jaipur.	38.
39.	General Manager (Stores), WCR, West Central Railway, Jabalpur.	39.
40.	General Manager (Stores), East Coast/Rail, East Coast Railway, Bhubaneswar	40.
41.	General Manager (Stores), East Central Railway, Hajipur –844 101	41.
42.	General Manager (Stores), South East Central Railway, Bilaspur	42.
43.	General Manager (Stores), CORE, Central Organization, Railway Electrification, Allahabad- 211001	43.
44.	General Manager (Stores), CLW, Chittaranjan, Distt. Bardwan.	44.
45.	General Manager (Stores), South Western Railway Hubli	45.
46.	CEDE, Central Railway, Mumbai CST-400 001.	46.
47.	CEDE, Western Railway , Churchgate, Mumbai-400 020.	47.
48.	CEDE, Eastern Railway, Fairlie Place, Kolkata-700 001.	48.
49.	CEDE, Northern Railway, Baroda House, New Delhi-110 001.	49.
50.	CEDE, South Central Railway, Secundrabad-500 371.	50.
51.	CEDE, Southern Railway, Park Town, Chennai-600 003.	51.
52.	CEDE, South Eastern Railway, Garden Reach , Kolkata-700 043.	52.
53.	CESE, Central Railway, Mumbai CST-400 001.	53.
54.	CESE, Western Railway , Churchgate, Mumbai-400 020.	54.
55.	CESE, Eastern Railway, Fairlie Place, Kolkata-700 001.	55.
56.	CESE, Northern Railway, Baroda House, New Delhi-110 001.	56.

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57.	CESE, Northeast Frontier Railway, Maligaon, Guwahati-781 011.	57.
58.	CESE, North Eastern Railway, Gorakhpur-273 001.	58.
59.	CESE, South Central Railway, Secundrabad-500 371.	59.
60.	CESE, Southern Railway, Park Town, Chennai-600 003.	60.
61.	CESE, South Eastern Railway, Garden Reach , Kolkata-700 043.	61.
62.	CELE, Central Railway, Mumbai CST- 400 001.	62.
63.	CELE, Eastern Railway, Fairlie Place, , Kolkata ;- 700 001	63.
64.	CELE, Northern Railway, Baroda House, New Delhi-110 001	64.
65.	CELE, Southern Railway, Park Town, Chennai-600 003	65.
66.	CELE, South Central Railway, Rail Nilayam, Secunderabad -500 371	66.
67.	CELE, South Eastern Railway,Garden Reach, Kolkata -700 043	67.
68.	CELE, Western Railway, Churchgate, Mumbai -400 020	68.
69.	CEE, Chittaranjan Locomotive Works, Chittaranjan- 713 331	69.
70.	CPM/RE, Sealdah, Eastern Railway, DRM Office, Sealdah, Kolkata	70.
71.	CPM/RE, Ambala, Northern Railway, Opposite to C.S.D. Ambala Cant,-133001	71.
72.	CPM/RE, Eastern Coast Railway, Bhubaneshwar.	72.
73.	CPM/RE, Southern Railway, Chennai.	73.
74.	CEE (Cons), Central Railway, 3 <sup>rd</sup> ,VT Traction SubStn. Building, D.N. Road, Mumbai CST-400001	74.
75.	CEE (Cons), Western Railway, Churchgate, Mumbai-400020	75.
76.	CEE (Const), Eastern Railway, Fairlie Place, , Kolkata -700001	76.
77.	CEE (Const), Northern Railway, Baroda House, New Delhi-110001	77.
78.	CEE (Const), Southern Railway, Park Town Chennai-600003	78.
79.	CEE (Const), South Eastern Railway, Garden Reach, , Kolkata -700043	79.
80.	CEE (Const), South Central Railway, Rail Nilayam , Secunderabad-500371	80.
81.	CEE (Conv.) DC-AC, 2 <sup>nd</sup> floor, parcel office building, Mumbai CST-400 001	81.
82.	CPM (Conv.)DC-AC, 3 <sup>rd</sup> floor ,New Annexe bldg. ,New Administration Office, Opp: Times of India Bldg. Mumbai CST- 400 001.	82.
83.	CETE/CR, Central Railway, 3 <sup>rd</sup> ,VT Traction Sub station, Building, D.N. Road, Mumbai CST-400001	83.
84.	CPM/CR(DC/AC, Conv.) Central Railway, 3 <sup>rd</sup> , VT Traction Sub station, Building, D.N. Road, Mumbai CST-400001	84.
85.	MD/RITES, New Delhi House, 27, Barakhamba Road, New Delhi	85.
86.	Principal CE/ TI, Thakurli, Distt. Thane, Maharastra	86.
87.	Director, IRIEEN, Nasik PO Box No.233, Nasik Road, Nasik.	87.
88.	Director, IRCAMTECH, Maharajganj, Gwalior (M.P).	88.



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89.	Chief Electrical Traction Engineer,Central Railway, Mumbai CST- 400 001	89.
90.	Chief Works Manager, Electric Loco Workshop, Eastern Railway, Kancharapara, 24 Pargana (N) -743145 (W.B.)	90.
91.	Chief Works Manager, Electric Loco Workshop, Central Railway, Bhusaval- 425 201.	91.
92.	Chief Works Manager, Traction Motor Workshop, Central Railway, Nasik-422 101.	92.
93.	Chief Works Manager, Loco, Carriage & Wagon Works,Western Railway, Dahod, P.O. Freeland Ganj – 389160 ( Gujrat )	93.
94.	Chief Works Manager, Kharag Pur South Eastern Railway Kharagpur.	94.
95.	Sr.Divl.Elect.Engineer, Traction Motor Shop, Northern Railway, Fazalganj, Kanpur. -208003	95.
96.	Divisional Electrical Engineer, Electrical Repair Shop, Tatanagar- 831 002.	96.
97.	Dy. Chief Electrical Engineer, POH Shop/Loco Works, Charbagh Workshop, Northern Railway, Lucknow- 260 005.	97.
98.	Dy. Chief Electrical Engineer, POH Shop, South Eastern Railway, Kharagpur (W.B.)	98.
99.	Dy. Chief Electrical Engineer, POH Shop, Southern Railway, Perambur, Chennai	99.
100.	M/s Bharat Earth Movers Ltd., Bangalore Complex Thippasandra, P.B. No. 7501 Bangalore 560 757	100
101.	Chief Electrical Traction Engineer South Eastern Railway Garden Reach Kolkata –700043	101
102.	Controller of Store, Conkan Railway Corporation Ltd. Belapur Bhavan Sector 11 CBD Belapur Navi Mumbai – 400614	102
103.	Controller of Stores Metro Railway (5 <sup>Th</sup> floor ) Metro Rail Bhasvan 33/1 Jawaharlal Nehru Road kolkata -700071	103
104.	Chief Electrical Engineer Metro Railway (6 <sup>Th</sup> floor ) Metro Rail Bhasvan 33/1 Jawaharlal Nehru Road kolkata -700071	104
105.	DG / RDSO	105
106.	ED / QA-Mech.	106
107.	Sr. ED / Electrical	107
108.	ED/ Traction Installation	108
109.	ED / PS&EMU	109
110.	ED / Motive Power	110
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112.	Dy CVO/ RDSO	112
113.	DDSE / DOC (Elect)	113
114.	SE/DOC CELL/ TI	114