



# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE: 16.05.2016

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2018-19/699

RLY	E	C	o	Coach No.	1	8	2	1	5	8	/	C	DATE OF DISPATCH	2	7	-	1	0	-	1	8			
DISPATCH TO	Sr.CDO/VSKP			Type	L	W	S	C	N	1	Shell No.	8	7	1	8	4	-	2	0	1	8	-	1	9

1. Railway Board's Order No. : 2018/M(C)/142/2, Dated-27-08-2018
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL

**4. SHELL LEADING DIMENSIONS :**

S NO	DESCRIPTION	DIMENSION (MM)
1.	Maximum length over body	23700
2.	Maximum width over body	3240
3.	Maximum height from Rail Level	4039
4.	CBC height/Buffer height from Rail level 1105 +0/-10	1) 1105 (NPPE) 2) 1104 (PPE)

**5. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part	PP END M/s- DTL 07
			NPP END M/s- DTL 07
		Complete	M/s- DTL 07
2.	Lav.side wall	M/s- JSL LIFE STYLE, HARYANA	LAV.1 --- LAV.2 ---
		M/s- JSL LIFE STYLE, HARYANA	LAV.3 --- LAV.4 ---
3.	Side wall	LH SIDE	M/s- CONTRACTOR V4U, LUCKNOW 140/01
		RH SIDE	M/s- CONTRACTOR V4U, LUCKNOW 140/02
4.	End wall	PP END	M/s- AMIT ENGG., MOHALI ---
		NPP END	M/s- AMIT ENGG., MOHALI 2018
5.	Roof	M/s- TI, THIRUHNRAVUR	150
6.	Centre Buffer Coupler	M/S- SANROK, FARIDABAD	PP END 8474 NPP END 8455

**6. AIRBRAKE TEST REPORT:**

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	<ul style="list-style-type: none"> <li>➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm<sup>2</sup>.</li> <li>➤ Max. pressure in BC</li> <li>➤ All Brake are applied</li> </ul>	6 – 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	08 Sec. 3.0 kg/cm <sup>2</sup> OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, after 06 Sec.	Brake must apply	OK

**7. PAINTING DAETAILS:**

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -BERGER	Supply & apply	90/89
2.	Insulation			Satisfactory	

*Reema*

SSE/QC/MCF/RBL



MODERN COACH FACTORY, RAEBARELI

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RLY	E	Co	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	1	8	4	-	-	-	-	-	-	-	-
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#### 8. DETAIL OF BOGIES :

ITEMS	NPP Side				PP Side			
Bogie No	181632				181631			
Bogie Type	FIAT				FIAT			
Frame no.	SCI/FM-2028				RBL-1136			
Bolster no.	APEX-303				APEX-322			
Axle No	18 E - 8183 RWF		18 E-8291 RWF		18 E- 5772 RWF		18 E-7867 RWF	
Wheel Dia	917.538	917.594	917.53	917.583	917.52	917.588	917.531	917.619
Wheel Disc No	TZ07-18 34464-8QL6	TZ07-18 34463-8QL6	TZ06-18 28618-8QM8	TZ07-18 35676-8QN5	TZ06-18 29732-8QP1	TZ07-18 32677-8RG5	TZ07-18 32797-8QP6	TZ07-18 33584-8RG9
R.B. Nos.	07-18 15563	07-18 14225	07-18 16259	07-18 16051	07-18 15872	07-18 15783	07-18 16298	06-18 11313
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

#### 9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES

DESCRIPTION	Bogie NPP side				Bogie PP side			
	Secondary 1		Secondary 2		Secondary 1		Secondary 2	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMGBD04-18- 5101-60-201	CMGBD03-18- 5100-40-463	CMGBD11-17- 5101-136-146	CMGBD03-18- 5100-34-490	CMGBD10-17- 5101-104-62	CMGBD03-18- 5100-40-153	CMGBD10-17- 5101-104-83	CMGBD03-18- 5100-41-397
Compressed Ht. at Tested Load	513	470	514	468	512	471	512	469
Alignment deviation (mm)	6	11	6	12	6	5	6	6

#### 10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	1502,1507	1501,1516
2.	Primary outer Spring	CMGBD	05-17 1100(42-250,42-240,46-197,46-257)	05-17 1100(46-253,42-249,42-279,39-195)
3.	Primary Inner Spring	CMGBD	05-18-1101(57-993,57-268,56-1136,57-926),	05-18-1101(57-1176,56-1021,56-933,57-930),
4.	Primary Damper	KNORR	07-18 (26484,27550,26500,26503)	07-18 26481,05-18(19566,26765),07-18 26501
5.	Secondary Damper	GEREP	KW 12-2017 301550739	KW 17-2017 301550739
6.	Lateral Damper	KNORR	05-18 3385	05-18 3381
7.	Brake Cylinder	KBI	A(8283,7687,7698,8263)K29	A(8268,7707,7700,8264)K29
8.	Brake Caliper	KBI	A(6571,6506,6590,6558)-29	A(6555,6592,6593,6553)-29
9.	Brake Disc	KBI	24158718 0001-37/18,24158717 0014-37/18 24158717 0012-37/18,24158717 0013-37/18	24158718 0003-37/18,24158718 0002-37/18 24158713 0040-36/18,24158712 0057-36/18
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	PRAG		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	S-BLOC		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	DUREL		
17.	Rubber Spring	AR		
18.	Anti roll bar make	SARITA		
19.	Roll Link make	SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	110918-1,110918-1,100918-1,100918-1	120918-1,100918-1,120918-1,110918-1
22.	Control Arm Lower	RVE	150918-1,060918-4,040918-1,070918-2	040918-1,070918-2,040918-1,040918-1

Signature of SSE/Bogie/QC



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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	8	7	1	8	4	-	2	0	1	8	-	1	9
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**11.TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI FARIDABAD. NEW DELHI	1541 34/18
2.	Pull box	M/S- KBI FARIDABAD. NEW DELHI	
3.	Distribution valve	M/S- KBI FARIDABAD. NEW DELHI	2018 H 5899
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/s- KOHINOOR INDUSTRIES, JALANDHAR	
6.	Floor board	M/s- SHRI RAM GOVINDGERH (PB)	
7.	PVC	M/s- PREMIER POLYFILM, GAZIABAD	
8.	Lavatory Inlay	M/s OASIS IND. JAGADHARI	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
12.	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
13.	Body Side Window	M/S EXCEL INDS, KOLKATA	
14.	Emergency Window	M/S AGF INDS, KOLKATA	
15.	Hopper Window	M/S AIKON IND.SALON H.P	
16.	Side panel	M/S-SUNGLow PUNJAB LAMINATE	
17.	Roof ceiling	M/S- SYNTHETIC MODULAR KOLKATA	
18.	Door way ceiling	M/s RAJA IND. KHANNA	
19.	Body Side Door	M/s JVR INDS, LDH	
20.	Vestibule Door(PPE)	M/s JBM, FARIDABAD	
21.	Vestibule Door(NPPE)	M/s JBM, FARIDABAD	
22.	Bio Tank LAV-4	M/S- AMIT ENGG. BADDI	
23.	Bio Tank LAV-1,2,3	M/S-M.K. METAL PARTS, MUMBAI	
24.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/s- SHIVALIK FAST, MOHALI	
26.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s KALSI PUMPS, JALANDHER	
28.	Lavatory Doors	M/s- KALSI, LUDHINA	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Seat & Berth	M/S- ORIENTAL VENEER PRODUCTS MUMBAI	
32.	Snack Table	N/A	

SSE/QC/MCF/RBL

गुणवत्ता विभाग  
रेडिओ, रायबरेली (नालगंज)



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12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT Frequency	REFERENCE & PERIOD OF TRIAL

**15. WARRANTY:**

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30 months from the date of supply of material whichever is earlier.

**NOTE:**

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- This doesn't cover any consequential liabilities or damages/loss incurred by anybody; furthermore, it shall in no case extend to repayment, return of the coach or replacement of complete coach.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from date of Application for any manufacturing /Application as per clause -4,para- V of RDSO specification no .M&C/PCN/100/2013-Given below -

S.No	Time period	Gloss Retention (initial gloss >85 unit at 60°)	Colour Retention rating on 0-10 scale (initial rating of painted panels/coach or ISC/RAL shade card shall be taken as 10)	Adherence of paints (with each other and with substrate )Cross-cut tape adhesion test as per ASTM D:3359/97(or latest)
1	After 1 year	80% of initial gloss	7	5B
2	After 2 year	70% of initial gloss	6	5B
3	After 3 year	60% of initial gloss	5	4B

If any imperfection is noticed or any defect arises during the warranty -period due to improper material used or due to bad workmanship, the contractor shall be bounded to set right the defect/ imperfection on free of cost basis at the base depot of the coach.

SSE/QC/MCF/RBL वारंजनी अभियंता गुणवत्ता विभाग २०डि०का०, रायबरेली (लालगंज)	AME/QC/MCF/RBL सहायक यांत्रिक अभियंता/गुणवत्ता-1 Assistant Mechanical Engineer / Quality-1 आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy. Chief Quality Manager Joginder Singh उप मुख्य गुणवत्ता प्रबन्धक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	182158/C
RAILWAY	ECOR	DATE OF DESPATCH	
Sr no	Description of test	Remarks	
1.	PUMP EQUIPMENTS	OK	
2.	LIGHTS, NL,LAP CHARGING SOCKETS	OK	
3.	RAILWAY CARRIAGE FAN	OK	
4.	WHEEL SLIDE PROTECTION SYSTEM ( WSP )	OK	
5.	WORKING OF 9 KVA TRANSFORMER	OK	
6.	WORKING OF REGULATED BATTERY CHARGER	OK	
7.	SAFETIES :		
7.1.	FUSES AND THEIR RATING	OK	
7.2	CONTROL CIRCUIT	OK	
7.3	POWER CIRCUIT	OK	

  
Senior Section Engineer  
Quality control / Electrical  
Modern Coach Factory Raebareli



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
DATE:18.01.2017

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>SSK</b> On Board Sr no : <b>2017-08-197</b> HT Panel Sr no : <b>2017-10-305</b>	EDTS 333, Rev`01'Am-1	<b>01</b>
02.	Pump equipment with PLC controller & pump box Make : <b>DR AUTO</b> Sr no PA: <b>2018/09/026</b> Sr no.1 : <b>18060202</b> Sr no.2 : <b>18020086</b> Srno.CPA: <b>2018/09/127-DR AUTO</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL), Make : <b>VGS</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Passenger Alarm Cum Indication Light (PACIL) Make: <b>KAVERI</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	<b>02</b>
05.	Fitment of Switch Plate Assly(Cabin Side) Make : <b>SSK</b>	EDML 086,Rev-03, ITEM-01	<b>10</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>SSK</b>	EDML 086, Rev 03, ITEM-02	<b>10</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: <b>C G POWER.</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
08.	Cabin,Corridor,doorway and Gangway Lights. Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>RT VISION</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	<b>04</b>
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : <b>INTRA ELECT.</b>	CC76289 & CC76443	<b>10</b>

  
**Senior Section Engineer**  
**Quality control / Electrical**  
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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : <b>NEC</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>SSK</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>BHASIN</b> Sr no: <b>09181385</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>PANTRONICS</b> Sr no : <b>PAN-18017757</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	<b>01</b>
15.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>MAA LAXMI INDUSTRIES.</b>	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	<b>01 set</b>
16.	Feeder junction boxes. Make : <b>MAA LAXMI INDUSTRIES.</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthling equipment. Make : <b>DARSHAN INTERPRISES.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0118125153</b>	M/s : <b>KNORR</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>AMARA RAJA</b> Lug date : <b>08/17</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
20.	Battery box for LHB coaches. Make : <b>ANANYA</b>	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>SEE(P)/MCF/RBL/ DYCEE/P&amp;P/MCF/RBL</b>

वरिष्ठ अनुभाग अभियन्ता  
गुणवत्ता नियंत्रण  
आपरेटिंगका/लालगंज/रायबरेली  
S.S.E./Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता  
रेल कोच फैक्टरी, रायबरेली, लखनऊ  
Sr. Electrical Engineer / RCF / RBL / Lucknow