



# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 01

DATE: 17.04.2018

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/939

RLY	N	R	-	Coach No.	1	9	7	1	4	8	/	C	DATE OF DISPATCH	2	3	-	1	0	-	1	9
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DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	3	6	0	FUR.NO.	LSCN-1291
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 13-06-2019
2. **Tare Weight of Coach** : 41.24 Tones
3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL
4. **Special feature:** -1.- Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiveley) letter no. MC/LHB/Brake, Dated 27.09.2018

2.- RFID(Radio frequency identification) fitted for traceability of coach

**5. 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) 1102 (NPPE) 2) 1105 (PPE)

**6. TRACEABILITY OF SHELL ITEMS:**

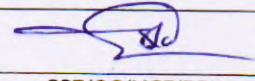
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-SICO	208
		NPP END M/S-SICO	208
	Complete	M/S-SICO	208
2.	Lav. side wall	M/S- ATHANACY RBL	LAV.1 - LAV.2 -
		M/S- ATHANACY RBL	LAV.3 - LAV.4 -
3.	Side wall	MCF/RBL(CONTRACTOR V4U)	278/01
		MCF/RBL(CONTRACTOR V4U)	278/02
4.	End wall	PP END M/s-DTL PUNE	---
		NPP END M/s-DTL PUNE	---
5.	Roof	M/s-ECBT	338
6.	Centre Buffer Coupler	M/S -ESCORT LTD	PP END 1795 NPP END 1811

**7. 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

**8. PAINTING DETAILS:**

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
1.	Paint	P.U	M/s -NEROLAC	KANSAI NEROLAC	90/88	05.10.19
2.	Insulation			Satisfactory		

  
SSE/QC/MCF/RBL

वरिष्ठ अधिकारी

गुणवत्ता विभाग

रेडिंकॉ, रायबरेली (उत्तर प्रदेश)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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DISPATCH	Sr.DME/CHG/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	3	6	0	FUR.NO	LSCN-1291
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## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191575				191576			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL- 760				MCF/RBL- 631			
Bolster no.	SECPL-237				SECPL- 245			
Axle No	19 S-0841 RWF		19 S- 0488 RWF		19 S- 4048 RWF		19 S- 4091 RWF	
Wheel Dia	917.446	917.435	917.446	917.435	917.532	917.546	917.52	917.545
Wheel Disc No	TZ 07-19 64485-9MH5	TZ 07-19 65010-9RP3	TZ 06-19 53541-9PG3	TZ 06-19 53542-9PG8	TZ 07-19 69397-9RQ9	TZ 07-19 54166-9PJ4	TZ 06-19 57721-9QJ0	TZ 06-19 70510-9RN6
R.B. Nos.	08-19 23555	08-19 24332	08-19 23147	08-19 24195	08-19 24534	08-19 26733	08-19 24337	08-19 70510
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

## 10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	AVADH RAIL INFRA LTD. Sr.NO.19-07 4368	AVADH RAIL INFRA LTD. Sr.NO.19-07 4351	TAYAL&CO. Sr.NO.19-08 2352	TAYAL&CO. Sr.NO.19-08 2807

## 11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17007,18495	18510,18507
2.	Primary outer Spring	CMSTL	07-19 F07-N87-07A(2107,1318,1983,1860)	07-19 F07-N87-07A(1628,1594,1506,1488)
3.	Primary Inner Spring	CMFSK	08-19 11010-64 (439,449,575,482)	08-19 11010-64 (530,682,794,410)
4.	Primary Damper	KONI	03-19 (01818,01844,02068,02456)	03-19 (02600,02504,06201,02865)
5.	Secondary Damper	KONI	04-19 (00659,00661)	04-19 (00874,01128)
6.	Lateral Damper	KONI	04-19 02581	04-19 02230
7.	Brake Cylinder	KBI	B(8598,7839,7855,8599)K29	B(08784,7247,7246,8301)K29
8.	Brake Caliper	KBI	B(5754,5811,5812,5755)-29	B(6356,5329,5330,5358)-29
9.	Brake Disc	FAV	06-19(5722,5728,5665,5663)	06-19(5832,5831,4901,5659)
10.	Ball Joint Control Arm	GMT/ARYAN/AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA/SF		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR/ESCORT	19 B-4181,1905	1904,1905
17.	Check Valve	ESCORT	1904	KNORR -18812
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/SF,		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE/SF	300719-1,260719-2,300719-2,310719-2	260719-1,SF-181,66,113
22.	Control Arm Lower	RVE/SF	030819-3,24079-2,240719-4,240719-2	SF(SARITA)
23.	Phonic Wheel	KNOOR	K-08-19	K-08-19

Signature of SSE/Bogie/QC





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**12. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3726 - 3719
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 8887
4.	FIBA	M/S- KBI, FARIDABAD	PP-7681/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	NPP-7709/29
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-GI NATURAL INDS KOLKATA	
8.	PVC	M/s-GI NATURAL INDS KOLKATA	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
11.	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
12.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/s-GI NATURAL INDS KOLKATA	
15.	Emergency Window	M/s-GI NATURAL INDS KOLKATA	
16.	Hopper Window	M/s-GI NATURAL INDS KOLKATA	
17.	Side panel	M/s-GI NATURAL INDS KOLKATA	
18.	Roof ceiling	M/s-GI NATURAL INDS KOLKATA	
19.	Door way ceiling	M/s-GI NATURAL INDS KOLKATA	
20.	Body Side Door 3	M/S- JVR INDS, LDH	
21.	Body Side Door 1,2,4	M/S- SUKATA INDS, CDG	
22.	Vestibule Door(PPE)	M/S- HANSPAL, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL, KXH	
24.	Bio Tank with pressurized flushing	M/s- RASANDIK ENG. INDUSTRIES, GURUGRAM	
25.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank( 2X685L)	M/S- SHIVALIK FASTNERS PVT.LTD. MOHALI	
27.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
28.	Controlled Discharge Tap	M/s-KAPCO VALES JALANDHAR	
29.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
30.	Lotah Filler Tap	M/s- AGMECO LTD. UK	
31.	Lavatory Doors	M/s-GI NATURAL INDS KOLKATA	
32.	Seat & Berth	M/s- T.W.P.L. INDUS. MUMBAI	
33.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104323,104324

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SSE/QC/MCF/RBL

गुणवत्ता विभाग  
रेडि0का0, रायबरेली (लाजगज)





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DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	3	6	0	FUR.NO.	LSCN-1291
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13. MODIFICATION (IF ANY) : NIL

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL : NIL

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

### 16WARRANTY:

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 qualityrcfbl@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	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ गुणवत्ता विभाग  
70डि0का0, रायबरेली (लालनग)

सहायक यंत्रिक अभियन्ता/गुणवत्ता-1  
Assistant Mechanical Engineer / Quality-1  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory, Raebareli

जोगिन्दर सिंह  
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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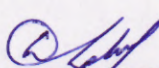
DATE: 18.01.2017

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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	197148/C
RAILWAY	NR	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







Modern Coach Factory Raebareli  
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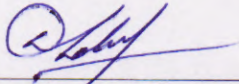
DATE:18.01.2017

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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>2019-08-343</b> HT Panel Sr no : <b>2019-08-314</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>2019/09/0104</b> Sr no.1 : <b>5683</b> Sr no.2 : <b>5647</b> Srno.CPA: sr no NIL- <b>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>RECORD /SALZER</b>	EDML 086,Rev-03, ITEM-01	<b>20</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>RECORD /SALZER</b>	EDML 086, Rev 03, ITEM-02	<b>20</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: <b>CG 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>RT VISION</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>DR AUTO</b>	CC76289 & CC76443	<b>09</b>

  
**Senior Section Engineer**  
**Quality control / Electrical**  
**Modern Coach Factory Raebareli**







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आधुनिक रेल डिब्बा कारखाना, रायबरेली

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**FOR ELECTRICAL ITEMS**

**ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES**

11.	Battery fuse box +ve Make : <b>INDORAIL</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>WAVES</b> Sr no: <b>W4K5H 19489</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>VTC 3089 LHB-2256</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>PRIME ELECT.</b>	As per spec No EDTS 105, Rev` e' Am-3, TYPE-2	<b>01 set</b>
16.	Feeder junction boxes. Make : <b>AECO</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthing equipment. Make : <b>DARSHAN ENTERPRISES</b>	EDTS101, REV-C, AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119242179</b>	M/s : <b>KNORR</b>	<b>01 set</b>
19.	110V, 120AH, VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WITH MODIFIED TRAY TOSKED-644 Make : <b>AMARA RAJA</b> Lug date : <b>08/19</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
20.	Battery box for LHB coaches. Make : <b>HITECH</b>	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>AWM(ELECT.)/MCF/RBL</b>
<b>वरिष्ठ अनुभाग अभियन्ता</b>	<b>SEE(P)/MCF/RBL</b>

गुणवत्ता नियंत्रण  
आपरेटिंग / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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

