



# 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/2019-20/473

RLY	E	C	R	Coach No.	1	9	5	8	5	6	/	C	DATE OF DISPATCH	2	0	-	0	7	-	1	9
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DISPATCH TO	Sr.DME/C&W/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	2	4	FUR.NO.	LSCN-1111
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 03-06-2019
2. **Tare Weight of Coach** : 41.24 Tones
3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. **Special feature:** - 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

**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) 1101 (NPPE) 2) 1105 (PPE)

**6. TRACEABILITY OF SHELL ITEMS:**

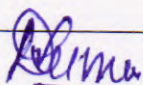
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/s-DTL
		Complete	NPP END M/s-DTL
		Complete	M/s-DTL
2.	Lav. side wall	M/S- COMPETANT ENG. JUC	LAV.1 - LAV.2 -
		M/S- COMPETANT ENG. JUC	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	50/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	50/02
4.	End wall	PP END M/S- RSM MOHALI	---
		NPP END M/S- RSM MOHALI	---
5.	Roof	M/s-ECBT	203
6.	Centre Buffer Coupler	M/S- SANROK ,FARIDABAD	PP END 12978 NPP END 13027

**7. AIRBRAKE TEST REPORT:**

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup> . ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	07 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	M/S-KANSAI NEROLAC	90/88	05.07.19
2.	Insulation			Satisfactory		

  
SSE/QC/MCF/RBL

गुणवत्ता विभाग  
रेल डिब्बा कारखाना, रायबरेली (लालगंज)







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/C&W/DNR			Type	L	W	S	C	N	1	Shell No.	9	7	2	2	4	FUR.NO	LSCN-1111				

**9. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	193003				193004			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-LS5-570				MCF/RBL-LS5-590			
Bolster no.	MCF/RBL-LS5-1083				MCF/RBL-LS5-814			
Axle No	19 P- 2021 RWF		19 P- 1688 RWF		19 P- 2276 RWF		19 P- 2615 RWF	
Wheel Dia	917.613	917.656	917.648	917.649	917.593	917.597	917.615	917.648
Wheel Disc No	TZ 04-19 35343-90H9	TZ 04-19 35342-90H9	TZ 07-18 40351-8RL9	TZ 05-18 25606-8PS4	TZ 05-18 22260-8PR4	TZ 07-18 42393-8RL6	TZ 07-18 38348-8RQ7	TZ 07-18 38243-8RM1
R.B. Nos.	02-19 02478	02-19 02978	02-19 36332	02-19 01640	02-19 03355	02-19 00844	02-19 03390	02-19 01468
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.	TAYAL & CO. Sr.NO.19-06 2083	TAYAL & CO. Sr.NO.19-06 2074	TAYAL & CO. Sr.NO.19-06 1883	TAYAL & CO. Sr.NO.19-06 2071

**11. TRACEABILITY OF BOGIE ITEMS :-**

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	13162,13143	13144,13159
2.	Primary outer Spring	CMSTL	07-19 07A(122,22,09,127)	07-19 07A(54,84,79,110)
3.	Primary Inner Spring	CMGBD	07-19 F06-937(646,265,44,53)	07-19 F06-937(52,642,515,634)
4.	Primary Damper	KONI	03-19 (01487,01279,01409,02633)	03-19 (01167,02673,01133,01116)
5.	Secondary Damper	IAI	06-19 (256953,257039)	06-19 (257210,257166)
6.	Lateral Damper	GABRIEL	11-18 1104	11-18 1102
7.	Brake Cylinder	FAV	C19(651,511,686,596)	C19(760,787,542,648)
8.	Brake Caliper	FAV	D19(395,393,722,724)B	D19(723,722,826,828)B
9.	Brake Disc	FAV	06-19(5522,5743,5506,5504)133561-300-1	06-19(6087,5835,5839,5499)133561-300-1
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	AR/BASANT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	13-19 B 1775,13-19 B 1769	13-19 A 10091,13-19 A 10131
17.	Check Valve	KNORR	03-19 17563	02-19 16513
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	PTC	336,273,304,212	354,290,PTC,346
22.	Control Arm Lower	PTC	29,PTC,PTC,PTC	75,PTC,PTC,27
23.	Phonic Wheel	KNORR	K-03-19	K-03-19

Signature of SSE/Bogie/QC





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REV NO: 01

DATE: 17.04.2018

**ROLLING STOCK CERTIFICATE**

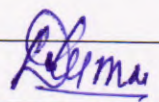
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**12. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	C19094 B
2.	Pull box	M/S FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	
3.	Distribution valve	M/S FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	19035604 B
4.	Fiba	M/S- KBI, FARIDABAD	PP-7416/29 NPP-7443/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER INDS, MUMBAI	
7.	Floor board	M/S-SHREE RAM PNL GOVINDGARH	
8.	PVC	M/S-RESPONSIVE INDS DELHI	
9.	Lavatory Inlay	M/s- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
13.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
14.	Body Side Window	M/S-AGF INDS KOLKATA	
15.	Emergency Window	M/S-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
17.	Side panel	M/S-ACME INDS DELHI	
18.	Roof ceiling	M/S-ACME INDS DELHI	
19.	Door way ceiling	M/S-RAJA INDS KHANNA	
20.	Body Side Door 3	M/s- JVR INDS, LUDHIYANA	
21.	Body Side Doors 1,2,4	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Bio Tank	M/s- FLASH FORGE (P)LTD. VIZAG	
25.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank( 2X685L)	M/S- RAIL FAB KXH	
27.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
28.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. U.K	
29.	Health Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Lavatory Doors	M/S-J.R INDS JALANDHAR	
32.	Seat & Berth	M/S - OVPL MUMBAI SILICON FOAM	
33.	Snack Table	N/A	

  
SSE/QC/MCF/RBL  
वरिष्ठ गुणवत्ता अभियंता  
गुणवत्ता विभाग  
रेडिओवा, रायबरेली (लातगंज)



MCF/RBL





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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

**16. 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 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 वरिष्ठ अभियंता/गुणवत्ता विभाग मोडर्न कोच फैक्ट्री, रायबरेली (लालगंज)	SME/QC/MCF/RBL वरिष्ठ अभियंता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.COM/MCF/RBL जोगिंदर सिंह उप मुख्य गुणवत्ता अभियंता Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli







Modern Coach Factory Raebareilly  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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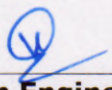
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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	195856/C
RAILWAY	ECR	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 Raebareilly





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

01.	Switch board cabinet Make : <b>MV</b> On Board Sr no : <b>057/L/19-20</b> HT Panel Sr no : <b>056/H/19-20</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>2019/06/0136</b> Sr no.1 : <b>19060760</b> Sr no.2 : <b>19060814</b> Srno.CPA: <b>2019/06/0233-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>DR AUTO</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>SSK/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>IMT CABLES</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>ENSAVE</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>DR AUTO</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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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : <b>AECO</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>PI ENGG.</b> Sr no: <b>PI/19060024</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-1953</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>CHANDA &amp; CHANDA</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>11/18/492</b>	M/s : <b>FAIVELEY</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>HBL</b> Lug date : <b>06/19</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> वरिष्ठ अनुभाग अभियन्ता	<b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b>

गुणवत्ता नियंत्रण  
आ०रे०डि०का० / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./LLJ/RBL

स० कार्य प्रबन्धक / विद्युत  
आ०रे०डि०का० / रायबरेली  
A.W.M./Electrical/MCF/RBL