



# 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/2018-19/1050

RLY	E	C	R	Coach No.	1	9	1	1	8	5	/	C	DATE OF DISPATCH	1	7	-	0	1	-	1	9				
DISPATCH TO				Sr.DME/DNR	Type	L	W	S	C	N	1	Shell No.	8	7	2	3	7	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2 Dated-28-11-2018
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
- 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) 1097 (PPE)

### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part	PP END M/s- TACPL, KANPUR
		NPP END	M/s- TACPL, KANPUR
	Complete	M/s- TACPL, KANPUR	7/10
2.	Lav.side wall	M/s- RAIL FAB, KXH	LAV.1 --- LAV.2 ---
		M/s- RAIL FAB, KXH	LAV.3 --- LAV.4 ---
3.	Side wall	LH SIDE	M/s- MCF/RBL(CONTRACTOR V4U)
		RH SIDE	M/s- MCF/RBL(CONTRACTOR V4U)
4.	End wall	PP END	M/S- SFPL, MOHALI
		NPP END	M/S- SFPL, MOHALI
5.	Roof	M/S- PENNAR	201
6.	Centre Buffer Coupler	M/S- DELLNER INDIA PVT.LTD.	PP END 3499 NPP END 3495

### 6. 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/cm². ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ± 0.15 kg/cm². OK	08 Sec. 3.0 kg/cm² OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm²/min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm²/Sec, after 06 Sec.	Brake must apply	OK

### 7. PAINTING DETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -GS	Supply & apply	88/88
2.	Insulation			Satisfactory	

*Rama*  
SSE/QC/MCF/RBL  
गुणवत्ता विभाग  
रेडि०का०, 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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Coach No.	1	9	1	1	8	5	/	C	-	DATE OF DISPATCH	1	7	.	0	1	.	1	9						
RLY	E	C	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	2	3	7	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182501				182502			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1131				MCF/RBL-1401			
Bolster no.	MCF/RBL-2024				APEX-53			
Axle No	18 G - 2560 RWF		18 G - 2784 RWF		18 F - 1901 RWF		18 G - 2570 RWF	
Wheel Dia	917.506	917.561	917.493	917.529	917.456	917.593	917.502	917.56
Wheel Disc No	TZ08-18 44656-8RN4	TZ08-18 45518-8RR4	TZ04-18 33691-8RG5	TZ04-18 33901-8RG8	TZ07-18 39980-8RL4	TZ06-18 28080-8MR1	TZ07-18 33795-8RG5	TZ07-18 33902-8RG5
R.B. Nos.	05-18 36372	02-18 15322	05-18 40495	05-18 29524	04-18 26619	02-18 15313	05-18 12305	05-18 29056
CT R B Make	SKF		SKF		SKF		SKF	

## 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.	CMGBD08-17- 5101-77-69	CMGBD05-18- 5100-70-524	CMGBD09-17- 5101-77-48	CMGBD05-18- 5100-64-210	CMGBD09-17- 5101-87-70	CMGBD05-18- 5100-70-188	CMGBD09-17- 5101-87-171	CMGBD05-18- 5100-70-167
Compressed Ht. at Tested Load	514	472	514	470	515	472	516	472
Alignment deviation (mm)	9	12	6	12	6	12	6	12

## 10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	1513,1522	1540,1517
2.	Primary outer Spring	CMGBD	10-18 1100-121(20,29,73,22)	10-18 1100(121-47,119-86,119-64,121-55)
3.	Primary Inner Spring	CMGBD	03-18-1101(32-2411,32-2288,31-2423,32-2300)	03-18 1037-(30-2323,30-2395,23-2318,32-3083)
4.	Primary Damper	KNORR	05-18(20232,20229,20235,20233)	05-18(20296,20295,20294,20297)
5.	Secondary Damper	GEREP	16 - 2018 301550739	16-2018 301550739
6.	Lateral Damper	GB	11-18 00072	11-18 00089
7.	Brake Cylinder	KBI/FAV	L18(451,478,514,349)	L18-(544,568,473,587)
8.	Brake Caliper	KBI/FAV	M18(576,574,514,349)B	M18(552,549,573,575)B
9.	Brake Disc	FAV	12-18 (6682,6598,6603,6599)-D133561-300	12-18 (6600,6597,6604,6601)-D133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	PPI/AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/PPI/UK		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	21118-2,211018-5,211118-2,051118-1	211818-2,211118-5,211118-5,231118-3
22.	Control Arm Lower	RVE	201118-1,191118-4,211118-2,271118-2	201118-1,271118-2,211118-3,271118-2

Signature of SSE/Bogie/QC





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DISPATCH TO	Sr.DME/DNR	Type	L	W	S	C	N	1	Shell No.	8	7	2	3	7	-	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- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	L 18128 B
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/s- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	18105688 B
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/S- E.G. WOOD BOARD, HYDRABAD	
7.	PVC	M/S- RESPONSIVE IND. DELHI	
8.	Lavatory Inlay	N/A	
9.	UIC Vestibule (PPE)	M/s- SUNCREST IND. KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-ELASTOMER LINING WORKS, MUMBAI	
11.	Gangway bridge mounting (PPE)	M/S- HARE KRISHNA COMPONENT, KXH	
12.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COMPONENT, KXH	
13.	Body Side Window	M/S- MECEDOWN IND. KOLKATA	
14.	Emergency Window	M/S- AGF, KOLKATA	
15.	Hopper Window	M/s- TECH FAB INDS, KXH	
16.	Side panel	M/s- ACME INDIA NDLS	
17.	Roof ceiling	M/s- ACME INDIA NDLS	
18.	Door way ceiling	M/s- ACME INDIA NDLS	
19.	Body Side Door	M/s-JVR, LDH	
20.	Vestibule Door(PPE)	M/s-JBM FARIDABAD	
21.	Vestibule Door(NPPE)	M/s-JBM FARIDABAD	
22.	Bio Tank	M/s- RAIL FAB, KXH	
23.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
24.	Under Slung Water Tank( 2X685L)	M/s- AMIT ENG. BADDI	
25.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. BADDI	
26.	Flexible Faucet	M/s- ACME INDIA, NDLS	
27.	Lotah Filler Tap	M/s- ACME INDIA, NDLS	
28.	Controlled Discharge Tap	M/s- HINDWARE, (HSIL LTD) GURGAON	
29.	Lavatory Doors	M/s- ACME INDIA, NDLS	
30.	Seat & Berth	M/s- T.W.P.L. INDUS. MUMBAI	
31.	Snack Table	N/A	

SSB/QC/MCF/RBL

गुणवत्ता विभाग

रेडिओका, रायबरेली (लालयंत्र)





# Modern Coach Factory Raebareli

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DISPATCH TO		Sr.DME/DNR		Type	L	W	S	C	N	1	Shell No.		8	7	2	3	7	-	2	0	1	8	-	1	9

12. MODIFICATION (IF ANY)

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 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 गुणवत्ता विभाग	AME/QC/MCF/RBL Assistant Mechanical Engineer (Quality) आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy. COM/MCF/RBL ज्येष्ठ गुणवत्ता विभाग उप मुख्य गुणवत्ता विभाग Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli

गुणवत्ता विभाग  
रेडि०का०, रायबरेली (लालगंज)





Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00


DATE: 18.01.2017

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC SCN COACHES  
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	191185/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 Raebareli





Modern Coach Factory Raebareli  
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**FOR ELECTRICAL ITEMS**

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

01.	Switch board cabinet Make : <b>AMIT ENGG.</b> On Board Sr no : <b>AE/USBC-832</b> HT Panel Sr no : <b>AE/USBC-821</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>2018/12/180</b> Sr no.1 : <b>18120087</b> Sr no.2 : <b>18120014</b> Sr no.CPA: <b>2018/12/187-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>10</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>SSK/SALZER</b>	EDML 086, Rev 03, ITEM-02	<b>10</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>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>AGASTYA</b>	CC76289 & CC76443	<b>10</b>

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





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>NEC</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>NEC</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>IC ELECTRICAL</b> Sr no: <b>11-18-0091</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-17017306</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>NEC</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthling equipment. Make : <b>MAA LAXMI INDUSTRIES</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>33/18/1284</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>HLB</b> Lug date : <b>02/18</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>SEE(P)/MCF/RBL/ DYCEE/P&amp;P/MCF/RBL</b>

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

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