



# 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/2018-19/1149

Rolling Stock Certificate No.: MCI/RDL/QX/1001																								
RLY	N	R	-	Coach No.	1	9	1	8	9	7	/	C	DATE OF DISPATCH	0	5	-	0	2	-	1	9			
DISPATCH TO	Sr.DME/CHG/DLI			Type	L	W	S	C	N	1	Shell No.	8	7	4	0	0	-	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

#### 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) 1103 (NPPE) 2) 1096 (PPE)

#### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/s- DTL, PUNE	03
	Front Part	NPP END M/s- DTL, PUNE	03
	Complete	M/s- DTL, PUNE	03
2.	Lav. side wall	M/S-RAIL TECH, KXH	LAV.1 - LAV.2 -
		M/S-RAIL TECH, KXH	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE M/S-ECBT, CHANDIGARH	63
		RH SIDE M/S-ECBT, CHANDIGARH	63
4.	End wall	PP END M/S-RAIL TECH, KXH	---
		NPP END M/S-RAIL TECH, KXH	---
5.	Roof	M/s-PIL	255
6.	Centre Buffer Coupler	M/S FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	PP END E 18050 B NPP END E 18058 B

#### 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	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

#### 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 -VIBGYOR	Supply & apply	90/88
2.	Insulation			Satisfactory	

*Deema*  
SSE/QC/MCF/RBL

रेडि0का0, रायबरेली (लाहगंज)







MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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RLY	N	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	4	0	0	-	-

## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182606				182605			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1384				MCF/RBL-1531			
Bolster no.	AMIT-351				AMIT-355			
Axle No	18 F - 2651 RWF		18F- 8980 RWF		18 F - 2611 RWF		18 B - 2547 RWF	
Wheel Dia	917.577	917.621	917.56	917.576	917.483	917.623	917.591	917.555
Wheel Disc No	TZ04-18 11243-8MT0	TZ03-18 09883-8MS6	TZ08-18 45046-8RS2	TZ08-18 45472-8RP5	TZ07-18 24797-7RJ3	TZ08-18 45429-8RR9	TZ04-18 11288-8MN3	TZ07-18 43299-8RM3
R.B. Nos.	05-18 40472	05-18 28822	05-18 13125	05-18 38705	05-18 39548	05-18 39189	07-18 41956	08-18 21418
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.	CMFSK12-18- 5101-512-162	CMGBD07-18- 5100-64-378	CMFSK12-18- 5101-512-85	CMGBD07-18- 5100-66-77	CMGBD09-17- 5101-87-71-	CMGBD05-18- 5100-66-356	CMGBD09-17- 5101-514	CMGBD05-18- 5100-66-640
Compressed Ht. at Tested Load	514	472	512	472	515	472	514	472
Alignment deviation (mm)	9	6	9	6	9	5	9	5

## 10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14280,14297	14276,14282
2.	Primary outer Spring	CMGBD	10-18 1100(121-4,121-41,121-175,122-98)	10-18 1100 (122-733,190-730,122-712,121-718)
3.	Primary Inner Spring	CMGBD	03-18 (1101-31-2308,1101-31-586,1037-35-2362,1101-31-2313)	03-18 1101- (31-2627,31-2304,32-2631)03-18 1034-30-2725
4.	Primary Damper	KNORR	12-18(47808,47812,47685,47732)	12-18(49114,19160,19112,19163)
5.	Secondary Damper	IAI/GEREP	12-18(235520,235462)	16-2018 301550739
6.	Lateral Damper	IAI	12-18 235408	12-18 235383
7.	Brake Cylinder	FAV	L18(609,293),K18(261,138)	M18(402,360,442,412)
8.	Brake Caliper	FAV	N18(315,313,422,424)B	N18(543,541,542,544)B
9.	Brake Disc	KBI	24167539 0039-45/18,24167539 0048-45/18 24167533 0020-44/18,24167535 0040-44/18	24162327 0054-41/18,24162322 0053-41/18 24167537 0015-41/18,24167535 0036-44/18
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	AR		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	DUREL/PARG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	RKFL/AR,SARITA/AR		
20.	Fork make	ASL		
21.	Control Arm Upper	RVE	031218-2,061218-1,021218-1,041218-1	261118-2,071218-2,RVE,261118-2
22.	Control Arm Lower	RVE	061218,RVE,011218-1,071218-2	051218-2,281118-2,371118-2,281118-2

Signature of SSE/Bogie/QC







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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	0	0	-	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 BADDI	M18051 B
2.	Pull box	M/S- FAIVELY BADDI	
3.	Distribution valve	M/S- FAIVELY BADDI	18115586 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 INDS.DELHI	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-KRP, PUNE	
10.	UIC Vestibule (NPPE)	M/S-KRP, PUNE	
11.	Gangway bridge mounting (PPE)	M/S- COMPETANT ENG. JUC	
12.	Gangway bridge mounting (NPPE)	M/S- COMPETANT ENG. JUC	
13.	Body Side Window	M/S- AGF INDS, KOLKATA	
14.	Emergency Window	M/S- AGF INDS, KOLKATA	
15.	Hopper Window	M/S- BEI PVT. LTD. PUNJAB	
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- SUKATA INDS. CDG	
20.	Vestibule Door(PPE)	M/S- KALSI INDS, LDH	
21.	Vestibule Door(NPPE)	M/S- KALSI INDS, LDH	
22.	Bio Tank LAV-1,3,4	M/s- SVARN INFRATEL PVT. LTD.	
23.	Bio Tank LAV-2	M/s- FLASH FORGE (P)LTD. VIZAG	
24.	Auxiliary Water Tank	M/S MANOJ ENT. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/S SHIVALIC FASTNERS PVT.LTD. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. BADDI	
27.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
28.	Lavatory Doors	M/S- KALSI INDS, LDH	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Seat & Berth	M/S- SUKATA INDS. CDG	
32.	Snack Table	N/A	

*Derma*  
SSE/QC/MCF/RBL

गुणवत्ता विभाग  
रेलवे कारखाना, रायबरेली (लालाजी)



MCF/RBL





# Modern Coach Factory Raebareli

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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 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 गुणवत्ता विभाग रेडिंकड, रायबरेली (लालगंज)	सहायक अभियंता/गुणवत्ता-II Assistant Mechanical Engineer / Quality-II आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.CQM/MCF/RBL 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

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	191897/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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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>HIND RECTIFIERS</b> On Board Sr no : <b>H 355.18.M 0202</b> HT Panel Sr no : <b>H 355.18.M 0207</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>2018/12/50</b> Sr no.1 : <b>18110191</b> Sr no.2 : <b>18110455</b> Sr no.CPA: <b>2018/12/048-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>CONCORD</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>SSK/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>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>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 LHBCN(80-BERTHER)Coaches Make : <b>AGASTYA</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>INTEG</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>12-18-0053</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-1615</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>AECO</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthing equipment. Make : <b>CHANDA &amp; CHANDA ENGG.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>41-18-1706</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>SOUTHERN</b> Lug date : <b>12/17</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(E)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b>
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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

