



# 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/2018-19/156

Coach No.		1	8	3	0	0	/	C	Date of dispatch				0	7	-	0	6	-	1	8				
Rly	N	C	R	Type	L	W	S	C	N	1	Shell No.	8	7	0	1	4	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2 Dated-16-04-2018
- 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) 1103 (NPPE) 2) 1100(PPE)

**5. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part M/S Neera chandigarh	PP END 16 NPP END 23
	Complete	M/S MCF/RBL	
2.	Side wall	M/S V4U(CONTRACTOR)	RH 87014 LH 87014
3.	End wall	PP END M/S Rail tech pvt.ltd. KXH	PP END 87014 NPP END 87014
		NPP END M/S Rail tech pvt.ltd. KXH	
4.	Roof	M/S Pennar ind. Ltd patancheru telangana	
5.	Centre Buffer Coupler	M/S Escorts ltd railway equipment FBD	PP END 3955 NPP END 3882
6.	Buffers	N.A.	

**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/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	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	88/88
2.	Insulation			Satisfactory	

वरिष्ठ अधिकारी  
 SSE/QC/MCF/RBL  
 रेल डिब्बा कारखाना, रायबरेली (ता. रायबरेली)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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

**8. DETAIL OF BOGIES :**

ITEMS	NPP Side				PP Side			
Bogie No	180275				180276			
Bogie Type	FIAT				FIAT			
Frame no.	VS/RBL-931				VS/RBL-933			
Bolster no.	SFPL-122				SFPL-111			
Axle No	17 B - 9645 RWF		17 B - 999 0 RWF		17 B- 8284 RWF		17 B - 8175 RWF	
Wheel Dia	917.571	917.532	917.589	917.520	917.439	917.493	917.438	917.479
Wheel Disc No	TZ05-17 11721-0Q1	TZ05-17 11720-7QM2	TZ05-17 11548-70L8	TZ05-17 11547-70L8	TZ05-17 11536-70L8	TZ05-17 11518-70L8	TZ05-17 11525-70L8	TZ05-17 11524-70L8
R.B. Nos.	01-18 01807	01-18 01486	01-18 01927	02-18 02951	01-18 01709	01-18 01818	01-18 01769	01-18 01459
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.	CMGBD03-17- 5101-26-244	CMFSK09-17F08- 222-283	CMGBD04-17- 5101-32-225	CMFSK09-17F09- 22-319	CMFSK04- 17F09-169-51	CMGBD03-17- 5100-27-136	CMFSK04-17F09- 169-71	CMGBD03-17- 5100-23-190
Compressed Ht. at Tested Load	516	471.5	516	468	511.5	471	511.5	472
Alignment deviation (mm)	9	5	9	6	11	9	8	9

**10. TRACEABILITY OF BOGIE ITEMS:**

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	SV	246,120	095,056
2.	Primary outer Spring	CMFSK	01-18 1036-376(1268,1373,1220,1910)	01-18 1100-376(1251,1427,1145,1023)
3.	Primary Inner Spring	CMFSK	02-18 1101-395(69,252,50,399,)	02-18 1101- 395(327,43,369,342)
4.	Primary Damper	KNORR	01-18 15977,02-18(15905,16200),01-18 15888	01-18 (15925,16030,15928,15980)
5.	Secondary Damper	GEREP	17-2017 301550739	17-2017 301550739
6.	Lateral Damper	KNORR	03-18 1913	03-17 2070
7.	Brake Cylinder	FAV	B18(470,493,387,409)	B18(414,383,382,434)
8.	Brake Caliper	FAV	C18(015,019,025,027)B	C18(028,026,029,031)B
9.	Brake Disc	KBI	24130426 0012-09/18,24130427 0005-11/18 24101651 0028-18/17,24101652 0037-19/17	24127466 0034-10/18,24127467 0018-10/18 24127469 0006-10/18,24127468 0010-10/18
10.	Ball Joint Control Arm	MB/BONY		
11.	Lateral Bump Stop	PRAG		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SF		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	MTC		
16.	Secondary Rubber Pad	TECSPAK		
17.	Rubber Spring	BONY		
18.	Anti roll bar make	SARITA		
19.	Roll Link make	SARITA /S-BLOC		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE/PTC	210318-2,230316-2,(PTC-1695,16911)	580,1691,554,448
22.	Control Arm Lower	RVE/SAF	020817-1,260315-1,( SAF-5176-441,6657-559)	6657-552,6319-581,16151,6657-550

Signature of SSE/Bogie/QC



MCF/RBL





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Rly	N	C	R	Type	L	W	S	C	N	1	Shell No.	8	7	0	1	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 Faively transport tech.india ltd baddi(HP)	C18091B
2.	Pull box	M/s Faively transport tech.india ltd baddi(HP)	
3.	Distribution valve	M/s Faively transport tech.india ltd baddi(HP)	18035581B
4.	Foot Step	M/s Super spark pvt. ltd. faridabad	
5.	Decoupling arrangement	M/s KOHINOOR IND. JAGADARI	
6.	Floor board	M/S Shri ram govindgerh (PB)	
7.	PVC	M/s Responsive ind.mumbai	
8.	Lavatory Inlay	M/s OASIS IND. . JAGADARI	
9.	UIC Vestibule (PPE)	M/s-Elastomer ind. MUMBAI	
10.	UIC Vestibule (NPPE)	M/s-Elastomer ind. MUMBAI	
11.	Gangway bridge mounting (PPE)	M/s Mahaveer matel works Kapurthala	
12.	Gangway bridge mounting (NPPE)	M/s Mahaveer matel works Kapurthala	
13.	Body Side Window	M/s EXCEL india Pvt. Ltd, Kolkata	
14.	Emergency Window	M/s EXCEL india Pvt. Ltd, Kolkata	
15.	Hopper Window	M/s BEI PVT.LTD	
16.	Side panel	M/S-.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 LDH	
20.	Vestibule Door(PPE)	M/s JBM Faridabad	
21.	Vestibule Door(NPPE)	M/s JBM Faridabad	
22.	Bio Tank	M/s RASANDIK IND.	
23.	Auxiliary Water Tank	M/s AMIT eng.. BADDI	
24.	Under Slung Water Tank( 2X685L)	M/s AMIT eng.. mohali	
25.	Under Slung Water Tank (1X685L)	M/s AMIT eng.. mohali	
26.	Controlled Discharge Tap	M/s Kalsi Pumps JALANDHER	
27.	Lavatory Doors	M/s JR Industries Jalandhar	
28.	Seat & Berth	M/s SUKATA CDG	
29.	Snack Table	N/A	

*Signature*  
SSE/QC/MCF/RBL

मुख्यता विभाग  
रेडिंकॉ, रायबरेली (लातगंज)



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Rly	N	C	R	Type	L	W	S	C	N	1	Shell No.	8	7	0	1	4	-	2	0	1	8	-	1	9

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	REFERENCE & PERIOD OF TRIAL
			Frequency	

### 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	AME/QC/MCF/RBL	Dy. Chief Quality Manager
रेल डिब्बा कारखाना, रायबरेली	आधुनिक रेल डिब्बा कारखाना, रायबरेली	आधुनिक रेल डिब्बा कारखाना, रायबरेली





Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना,  
रायबरेली

DOC NO.: MQF/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	18300/C
RAILWAY	NCR	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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**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>2017-04-112</b> HT Panel Sr no : <b>2017-04-123</b>	EDTS 333, Rev` 01`Am-1	<b>01</b>
02.	Pump equipment with PLC controller & pump box Make : <b>KIND</b> Sr no PA: <b>0006-2018</b> Sr no.1 : <b>18040277</b> Sr no.2 : <b>18040278</b> Sr no.CPA: <b>18040017</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL), Make : <b>MAAVE ELECT.</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</b>	EDML 086,Rev-03, ITEM-01	<b>10</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>RECORD</b>	EDML 086, Rev 03, ITEM-02	<b>10</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : <b>ELECTROWAVES LTD</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>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>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>INTEG</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>ISG</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>IC ELECT.</b> Sr no: <b>1702029</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-17016948</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>MAA LAXMI INDUSTRIES</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>07/18/368</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>02/2018</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>
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वरिष्ठ अनुभाग अभियन्ता  
गुणवत्ता नियंत्रण  
आउटरीडिंका/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