

LSCN-843



# 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/2018-19/998

RLY	E	R	-	Coach No.	1	9	1	0	0	4	/	C	DATE OF DISPATCH	0	7	-	0	1	-	1	9	
DISPATCH TO	CWM/LILUAH	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	1	-	2	0	1	8	-	1	9

1. Railway Board's Order No. : 2018/M(C)/142/2, Dated-17-09-2018
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. SHELL LEADING DIMENSIONS :	DESCRIPTION	DIMENSION (MM)
S NO		
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) 1096 (NPPE) 2) 1095 (PPE)

### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S- SFPL, MOHALI	12/18
	Front Part	NPP END M/S- SFPL, MOHALI	12/18
	Complete	MCF/RBL	87371
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	M/s- ECBT, CDG	43
	LH SIDE	M/s- ECBT, CDG	43
	RH SIDE	M/s- ECBT, CDG	---
4.	End wall	PP END M/s- NECHD, CDG	---
		NPP END MCF/RBL SIS	227
5.	Roof	M/s- PIL	PP END 3055 NPP END 3054
6.	Centre Buffer Coupler	M/S- DELLNER INDIA PVT.LTD.	

### 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	06 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	89/87
2.	Insulation			Satisfactory	

Signature  
SSE/QC/MCF/RBL  
गणवत्ता विभाग  
रेडिओ 40, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/998

Coach No.	1	9	1	0	0	4	/	C	-	DATE OF DISPATCH	0	7	.	0	1	.	1	9
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RLY	E	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	1	-	-	-	-	-	-	-
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**8. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	182341				182342			
Bogie Type	FIAT				FIAT			
Frame no.	VS-1541				VS-1544			
Bolster no.	AMIT-305				AMIT-270			
Axle No	18 G-0866 RWF		18 G-3770 RWF		18 G-2714 RWF		18G- 0978 RWF	
Wheel Dia	917.505	917.654	917.452	917.615	917.479	917.631	917.498	917.647
Wheel Disc No	TZ07-18 41985-8RL8	TZ06-18 27807-8PRO	TZ06-18 29743-8QP1	TZ07-18 38011-8RS3	TZ07-18 34707-8RG2	TZ07-18 34708-8RG2	TZ07-18 33781-8QM2	TZ07-18 33782-8QM2
R.B. Nos.	05-18 29544	05-18 40485	05-18 40596	05-18 39785	05-18 29409	05-18 12740	05-18 29639	05-18 12460
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.	CMFSK12-18F08-110-08Y-16	CMFSK05-18-F08-N73-08Y-1100	CMFSK12-18-5101-512-30	CMFSK05-18-F08-08Y-1100	CMFSK12-18-5101-512-06	CMRSK12-16F08-N13-08Y-1787	CMFSK12-18-5101-512-08	CMRSK09-15F08-R58-08Y-1348
Compressed Ht. at Tested Load	513	472	511.5	472	514	473	515	472
Alignment deviation (mm)	11	11	11	11	10	2	8	2

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

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	923,930	927,928
2.	Primary outer Spring	CMGBD	10-18 1100 (121-335,121-525,122-375,122-34)	10-18 1100 (121-176,121-635,122-599,119-655)
3.	Primary Inner Spring	CMGBD	03-18 1101(31-2299,30-2821,32-290,30-311)	03-18 (1101-32-2587,1037-30-3706,1101-32-2598,1101-32-2598,1101-32-2727)
4.	Primary Damper	GB	08-18(01005,00882,01012,0014)	08-18(01013,00943,00879,01004)
5.	Secondary Damper	GEREP	16-2018 301550739	16-2018 301550739
6.	Lateral Damper	KNORR	03-18 1916	03-18 1918
7.	Brake Cylinder	FAV	L18-(170,524,380,) K18-596	L18- (169,538,515,165)
8.	Brake Caliper	FAV	M18(452,449,325,328)B	M18(444,442,550,451)B
9.	Brake Disc	FAV	10-18(3563,3562,3561),12-18(6840)D133561-300	10-18(3557,3564,3419,3428)D133561-300
10.	Ball Joint Control Arm	BONY /PRAG/AR		
11.	Lateral Bump Stop	BONY		
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	DUREL		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR/PPI/UK		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	031118-2,021118-1,RVE,RVE	31118-2,251018-3,021118-1,041118-4
22.	Control Arm Lower	RVE	021118-1,RSS,KUMAN-200,RVE	271118-2,RMR,RVE,271118-2

Signature of SSE/Bogie/QC







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DISPATCH TO	CWM/LILUAH	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	1	-	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 18067 B
2.	Pull box	M/s- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	
3.	Distribution valve	M/s- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	18105597 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- EG WOOD BOARD, HYDRABAD	
7.	PVC	M/S- RESPONSIVE IND.DELHI	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S- HAREKRISHNA INDS. KXH	
12.	Gangway bridge mounting (NPPE)	M/S- HAREKRISHNA INDS. KXH	
13.	Body Side Window	M/S- AJC, KOLKATA	
14.	Emergency Window	M/S- AGF INDS, KOLKATA	
15.	Hopper Window	M/S- RAIL TECH.	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/S- AB COMPOSIT, KOLKATA	
18.	Door way ceiling	M/s- RAJA IND. KHANNA	
19.	Body Side Door	M/s- JBM, FARIDABAD	
20.	Vestibule Door(PPE)	M/s- KALSI, LDH	
21.	Vestibule Door(NPPE)	M/s- KALSI, LDH	
22.	Bio Tank	M/s- FLASH FORGE (P)LTD. VIZAG	
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.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
27.	Lavatory Doors	M/s- KALSI, LDH	
28.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
30.	Seat & Berth	M/s- SUKATA, CDG	
31.	Snack Table	N/A	

*Deema*  
SSE/QC/MCF/RBL  
वरिष्ठ निरीक्षक

गुणवत्ता विभाग  
रेडिंक ०, रायबरेली (लालगंज)





# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH TO	CWM/LILUAH	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	1	-	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 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 रेडि0का0, रायबरेली (लालगंज)	AME/QC/MCF/RBL Assistant Mechanical Engineer / Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy. COM/MCF/RBL Dy Chief Quality Engineer 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

PAGE 1 OF 3

**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	191004/C
RAILWAY	ER	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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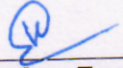
DATE:18.01.2017

PAGE 2 OF 3

**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-829</b> HT Panel Sr no : <b>AE/USBC-839</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>2018/12/162</b> Sr no.1 : <b>18120055</b> Sr no.2 : <b>18120071</b> Sr no.CPA: <b>2018/12/030-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>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>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>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>AGASTYA</b>	CC76289 & CC76443	<b>10</b>

  
Senior Section Engineer  
Quality control / Electrical  
Modern Coach Factory Raebareli





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PAGE 3 OF 3

**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>10-18-0020</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>LHB-806</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>S.INTERNATIONAL</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 INTERPRISES</b>	EDTS101, REV-C, AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>28-18-1164</b>	M/s : <b>FAIVELEY</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>04/17</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>

वरिष्ठ अनुभाग अभियन्ता  
गुणवत्ता नियंत्रण  
आउटरीडिंग / 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