



# 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/2018-19/975

RLY	N	C	R	Coach No.	1	8	2	9	8	1	/	C	DATE OF DISPATCH	3	0	-	1	2	-	1	8			
DISPATCH TO	Sr.CDO/ALD			Type	L	W	S	C	N	1	Shell No.	8	7	3	6	2	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2 Dated-17-10-2018
- 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) 1105 (NPPE) 2) 1099 (PPE)

#### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	PP END M/S-KANSAL ENGG.	13
		NPP END M/S-KANSAL ENGG.	13
	Complete	M/S-KANSAL ENGG.	13
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 MCF/RBL (CONTRACTOR V4U)	266/01
		RH SIDE MCF/RBL (CONTRACTOR V4U)	266/02
4.	End wall	PP END M/s- SFPL, MOHALI	--
		NPP END M/s- SFPL, MOHALI	--
5.	Roof	m/s- ECBT, CDG	30
6.	Centre Buffer Coupler	M/S- DELLNER INDIA PVT.LTD.	PP END 2999 NPP END 2984

#### 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	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 -GS	Supply & apply	89/89
2.	Insulation			Satisfactory	

*[Signature]*  
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

## ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/975

Rolling Stock Certificate No. _____																								
Coach No.		1	8	2	9	8	1	/	C	-	DATE OF DISPATCH					3	0	.	1	2	.	1	8	
RLY	N	C	R	-	Type	L	W	S	C	N	1	Shell No.		8	7	3	6	2	-	-	-	-	-	

## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182276				182275			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1459				VS-1390			
Bolster no.	MCF/RBL-2312				RBL-2325			
Axle No	18G-9035 RWF		18H-2998 RWF		18G-9086 RWF		18E-0313 RWF	
Wheel Dia	917.53	917.585	917.506	917.55	917.544	917.59	917.527	917.571
Wheel Disc No	TZ07-17 25588-7QJ8	TZ06-17 20676-7PK8	TZ07-17 25643-7PL1	TZ07-17 25256-7RH3	TZ08-18 45180-8RS8	TZ07-18 37538-8RQ0	TZ07-18 26914-7RH7	TZ07-18 25615-7RH3
R.B. Nos.	05-18 27049	04-18 24914	05-18 36664	05-18 12332	05-18 28031	05-18 26322	05-18 27040	05-18 12342
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.	DN 16S-1548	CMRSK09-15-F08 R58-08Y-1649	DN 16P-1719	CMRSK09-15-F08 R58-08Y-650	DN 16W-2014	CMRSK12-16-F08 N12-08Y-1592	DN 16X-1866	CMRSK09-18-F08 R58-08Y-1795
Compressed Ht. at Tested Load	511	467	511	473	515	472	516	472
Alignment deviation (mm)	6	11	10	11	5	4	6	4

## 10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	1667,1742	1661,1736
2.	Primary outer Spring	CMGBD	10-18 1100-122(379,268,290),121-348	10-18 1100(121-208,122-358,122-363,121-343)
3.	Primary Inner Spring	CMGBD	07-18 1101(80-499,84-521,80-493,80-491)	07-18 1101(81-488,85-512,81-543,80-504)
4.	Primary Damper	KNORR	12-17-14330,13-17-13049,11-17-13055,12-17-14329	12-17(14318,13017,14328),11-17-13053
5.	Secondary Damper	GEREP	KW 16-2018 301550739	KW 16-2018 301550739
6.	Lateral Damper	SV/KNORR	01-18 019949	06-18 3890
7.	Brake Cylinder	FAV	L18(223,203,152,060)	L18-083,K18(602,118,329)
8.	Brake Caliper	FAV	L18(1323,1321,1349,1348)B	L18(1411,1409,1133,1135)B
9.	Brake Disc	FAV	11-18(4964,4963,5067,4987) D133561-300	11-18(5475,5470,5268,5252)D133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	BONY		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA/JI		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	TECSPAK		
17.	Rubber Spring	AR/PPI/UK		
18.	Anti roll bar Make	WOM		
19.	Roll Link make	SARITA/PPI/UK		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	130918-1,RVE,271018-2,221018-1	261018-3,271018-1,280918-2,RVE
22.	Control Arm Lower	RVE	290918-1,270918-1,RVE,140918-1	RVE,111118-1,271018-1,221018-1

Signature of SSE/Bogie/QC





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**ROLLING STOCK CERTIFICATE**

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RLY	N	C	R	Coach No.	1	8	2	9	8	1	/	C	DATE OF DISPATCH	3	0	-	1	2	-	1	8
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DISPATCH TO	Sr.CDO/ALD	Type	L	W	S	C	N	1	Shell No.	8	7	3	6	2	-	2	0	1	8	-	1	9
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12. MODIFICATION (IF ANY) : Partition frame &amp; Partition pillar

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT	REFERENCE &
			Frequency	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.

 S. S. S. S. S. S. S. S. S. S. गुणवत्ता विभाग रेडिओ 0, रायबरेली (लालगंज)	सहायक यांत्रिक अभियन्ता/गुणवत्ता-1 Assistant Mechanical Engineer / Quality-1 आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	 Joginder Singh उप मुख्य प्रबंधक Dy. COM/MCF/RBL आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli
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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	182981/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>AMIT ENGG.</b> On Board Sr no : <b>AE/USBC-792</b> HT Panel Sr no : <b>AE/USBC-791</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>2018/12/010</b> Sr no.1 : <b>18110233</b> Sr no.2 : <b>18110502</b> Sr no.CPA: <b>2018/10/086-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>KAVERI</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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**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>NEC</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>SIGNOTRON</b> Sr no: <b>11180878</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-1578</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>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>35-18-1446</b>	M/s : <b>FAIVELEY</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI 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  
आपरेटिंग/लागू/रायबरेली  
S.S.E./Elect-QC/M.C.F./LJ/RBL

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