



# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE:

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2016-17/ 351

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

1. Railway Board's Order No. : 2016/M(C)/142/1 Dated- 18.05.2016
2. Tare Weight of Coach : 41.24 Tones
3. 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/-15
		1)1100 (NPPE) 2)1101 (PPE)

**5. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part	M/s E.C.Blade & Tool Chandigarh
		Complete	M/s-MCF/RBL
2.	Side wall	M/s-MCF/RBL	RH 67133 LH 67133
3.	End wall	PP- M/s Rubicon Steel Mohali	PP END 67133 NPP END 67133
		NPP- M/s Rubicon Steel Mohali	
4.	Roof	M/s-Pennar Industries Limited, Tamilnadu	
5.	Centre Buffer Coupler	M/s ESCORTS	PP END 6654 NPP END 6596
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	8 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	AVERAGE GLOSS VALUE
1.	Paint	P.U	VIBGYOR	93/89
2.	Insulation		Satisfactory	

रि०अ०० अभियंता  
SSE/QC/MCF/RBL  
गुणवत्ता विभाग

रे०डि०का०, रायबरेली (लालगंज)







# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002  
REV NO.: 00  
DATE: .....

### ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2016-17/351

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

#### 8. DETAIL OF BOGIES :

ITEMS	PP Side				NPP Side			
Bogie No	160904				160903			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/ECBT-120				MCF/RBL/ECBT-119			
Bolster no.	RBL-919				RBL-916			
Axle No	S - 3293 RWF		S - 3553 RWF		S- 3181 RWF		S - 1311 RWF	
Wheel Dia	917.320	917.336	917.293	917.312	917.377	917.383	917.331	917.392
Wheel Disc No	00027-6103 VR 07-16	00066-6103 VR 07-16	00062-6018 VR 06-16	00186-6068 VR 06-16	00052-6070 VR 07-16	00080-6018 VR 07-16	00043-6045 VR 06-16	00059-6070 VR 06-16
R.B. Nos.	09-16 07472	07-16 06071	09-16 07344	07-16 05091	09-16 07359	07-16 05755	09-16 07335	07-16 05714
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.	DN15-0-1253	DN15G-888	DN15-0-1325	DN15G-803	DN15-0-1202	DN15G-846	DN15-0-1258	DN15-G-948
Compressed Ht. at Tested Load	516	469	515	467	514	469	515	470
Alignment deviation (mm)	12	9	12	9	10	13	10	16

#### 10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Primary outer Spring	CMGBD	10-16 1100-112(76,19,85,112)	10-16-1100-112 (39,88,28,40)
2.	Primary Inner Spring	CMGBD/G	10-16 1101-124(135,125,95,191)	G 16-6
3.	Primary Damper	KONI	06-2016(33296,33293,33305,33303)	06-2016(33396,33207,33304,33322)
4.	Secondary Damper	GEREP	18-2016(8927,8982)	18-2016(9056,9106)
5.	Lateral Damper	KONI	22-2016 5315	22-2016 5347
6.	Brake Cylinder	KBI	4606K29,4679K29,4674K29,4608K29	4605-K-29,4673-K-29,4675-K-29,4607-K-29
7.	Brake Caliper	KBI	4173-29,4367-29,4365-29,4175-29	4172-29,4364-29,4366-29,4174-29
8.	Brake Disc	KBI	24085284 0026-38/16,24085284 0030-38/16 24085680 0009-38/16,24085680 0017-38/16	24085680 0019-38/16,24085680 0021-38/16 24085685 0004-39/16,24085685 0003-39/16
9.	Ball Joint Control Arm	SGA		
10.	Lateral Bump Stop	GMT		
11.	Traction Centre make	SARITA		
12.	Traction lever make	SARITA		
13.	Ball joint traction lever	GMT		
14.	Ball joint traction centre	SGA, GMT		
15.	Secondary Rubber Pad	TECSPAK		
16.	Rubber Spring	GMT		
17.	Anti roll bar make	EMSON		
18.	Roll Link make	SARITA/MGN		
19.	Fork make	SARITA		

Signature of SSE/Bogie/QC





# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE:

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2016-17/ 351

Coach No.

1 6 2 9 6 / C -

DATE OF DISPATCH

2 1 0 1 2 0 1 7

RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	1	3	3	-	2	0	1	6	-	1	7
-----	---	---	---	------	---	---	---	---	---	-----------	---	---	---	---	---	---	---	---	---	---	---	---	---

**11. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Palwal Haryana	16J1799
2.	Pull box	M/s KBI ,Palwal Haryana	
3.	DV	M/s KBI ,Palwal Haryana	
4.	PVC	M/s Premier polyfilm, New Delhi	2016H2591
5.	UIC Vestibule (PPE)	M/s Sun crest Industries West Bengal	
6.	UIC Vestibule (NPPE)	M/s Sun crest Industries West Bengal	
7.	Foot Step	M/s Hi-tech Infra RBL	
8.	Lavatory Inlay	M/s Oasis Fabrication Jagdhari	
9.	Decoupling arrangement	M/s Kohinoor Industries, Faridabad	
10.	Body Side Window	M/s AGF Pvt. Ltd. Kolkata	
11.	Emergency Window	M/s AB Composites, Kolkata	
12.	Hopper Window	M/s Aikon Technologies Pvt. Ltd. Solan(H.P.)	
13.	Non-AC Area Ceiling	M/s J.R. Industries, Jalandhar	
14.	Body Side Doors	M/s JBM ,Faridabad/Sukata CDH	
15.	Vestibule Door(PPE)	M/s Hans pal KXH	
16.	Vestibule Door(NPPE)	M/s Hans pal KXH	
17.	Bio Tank	M/s Rail Fab ,KXH	
18.	Auxiliary Water Tank	M/s Shivalik Fasteners, Mohali Punjab	
19.	Under Slung Water Tank ( 2X685L)	M/s Shivalik Fasteners, Mohali Punjab	
20.	Under Slung Water Tank (1X450L)	M/s Shivalik Fasteners, Mohali Punjab	
21.	Bib Cock/Controlled Discharge Tap	M/s KPR Industries, Mohali	
22.	Lavatory Doors	N/A	
23.	Seat & Berth	M/s Savitri Engg. Products Ponta Sahib, HP	
24.	Snack Table	M/s Gandhi Enterprises, Jalandhar	

7/11/2017  
 वरिष्ठ अधिकारी  
 SSE/OL/MCF/RBL  
 गुणवत्ता विभाग  
 रेडिओका, रायबरेली (लालगंज)







# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE:

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2016-17/ 351

Coach No.		1	6	2	9	6	/	C	-	DATE OF DISPATCH					2	1	0	1	2	0	1	7	
RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	1	3	3	-	2	0	1	6	-	1	7
12. MODIFICATION (IF ANY)											:	Nil											

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 blocks, wheels, push gravity cocks, flushing valves, moldings, window glasses, mirrors, roller blinds, curtain & bulbs etc. ( items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months date of dispatch of coach or 30 months from date of supply of material whichever is earlier.

**NOTE:**

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com

SSE/QC/MCF/RBL गुणवत्ता विभाग रेडि0का0, रायबरेली (लालगंज)	AME/QC/MCF/RBL जी.एस. पाण्डेय G.S. Pandey सहायक यांत्रिक अभियंता/गुणवत्ता Assistant Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.CME/FUR/MCF/RBL रूप मु.या.अभि./पनि DY CME/FURNISHING रेल कोच फैक्ट्री / रायबरेली / लालगंज RCF / RBL / LLJ







Govt. of India- Ministry of Railways  
(MODERN COACH FACTORY RAEBARELI)



MCF/RBL/QEFSCN-8001

VER. 01.06.2016

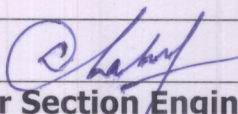
PAGE 1 OF 3

**FOR ELECTRICAL ITEMS**

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

**ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES**

TYPE COACH	LWSCN	SHELL/COACH NO	16296/C
RAILWAY	CR	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**





**Govt. of India- Ministry of Railways**  
**(MODERN COACH FACTORY RAEBARELI)**



MCF/RBL/QEFSCN- 8001

VER. 01.06.2016

PAGE 2 OF 3

**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>3551116005</b> HT panel Sr no : <b>3551116002</b>	EDTS 333, Rev`01`Am-1	<b>01</b>
02.	Pump equipment with PLC controller& pump box Make: <b>KALSI</b> Sr no PA: <b>5421/07/16</b> Sr no.1: <b>268440/07/16</b> Sr no.2: <b>268441/07/16</b> Srno.CPA: <b>5518/07/16</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL)	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Lavatory light fitting assly	LW 76001,Alt nil	<b>04</b>
05.	Fitment of Passenger Alarm cum indication light (PACIL).	As per drg no. LW 76005,Alt -e 02 nos	
06.	Fitment of Switch Plate Assly(Cabin Side)	EDML 086, Rev-03.	<b>10</b>
07.	Fitment of Switch Plate Assly Corridor Side)	EDML 086, Rev 03.	<b>10</b>
08.	Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : <b>R KANWAR</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
09.	Fitment of Fluorescent light fitting for LHB type coaches.	LW 76033,Alt`c,	<b>04</b>
10.	Fitment of Fluorescent light fitting, SINGLE with 110V AC/DC ballast.	CC 76213,Alt`d'.	<b>24</b>
11.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches	CC76289 & CC76443	<b>10</b>

*Chakraborty*

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





**Govt. of India- Ministry of Railways  
(MODERN COACH FACTORY RAEBARELI)**



MCF/RBL/QEFSCN- 8001

VER. 01.06.2016

PAGE 3 OF 3

**FOR ELECTRICAL ITEMS**

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

12.	Fitment of Compact Fluorescent Light fitting DOUBLE with 110V AC/DC ballast.	CC 76216, Alt `c'.	<b>02</b>
13.	FL Tubes, 02 Feet ,18Watt ,colour temp 6500K	RDSO/PE/SPEC/TL 0011, Sec I, Rev I, 07 2001.	<b>24</b>
14.	Battery fuse box +ve Make : <b>NEC</b>	LW 71001,Alt-F	<b>01</b>
15.	Battery fuse box -ve Make : <b>INTEG</b>	LW 71002,Alt-F	<b>01</b>
16.	Regulated battery charger Make : <b>HI REL</b> Sr no: <b>16110258</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
17.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>523</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev `0',Ty I.	<b>01</b>
18.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>S INTERNATIONAL</b>	As per spec No EDTS 105,Rev`e' Am-2	<b>02 sets</b>
19.	Feeder junction boxes. Make : <b>NEC</b>	EDTS-328 REV-C	<b>02</b>
20.	Wheel set earthing equipment. Make : <b>DARSHAN ENTERPRISES</b>	EDTS101,REV-C,AM-1	<b>02</b>
21.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0116152375</b>	M/s : <b>KNORR</b>	<b>01 set</b>
22.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : <b>AMARARAJA</b> Lug date : <b>12/2016</b>	RDSO/pe/spec/ac-0009 rev-1-2008 amdt-1	<b>01 set</b>
23.	Battery box for LHB coaches.	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>Dy CEE(P)/MCF/RBL</b>

वरिष्ठ खण्ड अभियन्ता  
विद्युत उत्पादन-गुणवत्ता  
रेल कोच फैक्टरी / लालगंज / रायबरेली  
Sr. Section Engineer  
Electric Production - Quality  
RCF / RBL / LLJ

उप मुख्य विद्युत अभियन्ता (उत्पादन)  
रेल कोच फैक्टरी-रायबरेली, लालगंज  
DY.CEE/P-RCF/RBL/LLJ