



# 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/ 323

Coach No.	1	6	2	7	6	/	C	-	DATE OF DISPATCH	2	7	1	2	2	0	1	6
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RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	1	2	0	-	2	0	1	6	-	1	7
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- Railway Board's Order No. : 2016/M(C)/142/1 Dated- 18.05.2016
- 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/-15	1)1097 (NPPE) 2)1098 (PPE)

#### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO				
			PP END	67120	NPP END	67120	
1.	Underframe	Front Part	M/s-MCF/RBL				
		Complete	M/s-MCF/RBL				
2.	Side wall	M/s-MCF/RBL	RH	67120	LH	67120	
3.	End wall	PP- M/s Rubicon Steel Mohali	PP END	67120	NPP END	67120	
		NPP- M/s Rubicon Steel Mohali					
4.	Roof	M/s-Pennar Industries Ltd. Tamilnadu					
5.	Centre Buffer Coupler	M/s ESCORTS	PP END	6458	NPP END	6473	
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> .	6 - 10 sec.	7 sec.
		➤ Max. pressure in BC	3.0 ±0.15 kg/cm <sup>2</sup> .	3.0 kg/cm <sup>2</sup>
		➤ All Brake are applied	OK	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	BERGER	93/89
2.	Insulation		Satisfactory	

वरिष्ठ QC अभियंता  
 SSE/QC/MCF/RBL  
 गुणवत्ता विभाग  
 रेडि०का०, रायबरेली (लालगंज)

	<b>MODERN COACH FACTORY, RAEBARELI</b> आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QMF 8002
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RLY	C	R	Type	L	W	S	C	N	Shell No.	6	7	1	2	0	-	2	0	1	6	-	1	7

#### 8. DETAIL OF BOGIES :

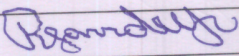
ITEMS	PP Side				NPP Side			
Bogie No	160678				160677			
Bogie Type	FIAT				FIAT			
Frame no.	VS/RBL-264				VS/RBL-263			
Bolster no.	MCF/RBL-828				MCF/RBL-744			
Axle No	S 3035 RWF		S 1569 RWF		S 2978 RWF		S 3622 RWF	
Wheel Dia	917.438	917.398	917.474	917.433	917.453	917.348	917.374	917.373
Wheel Disc No	00071-6066 06-16	00018-6129 07-16	00059-6129 07-16	00188-6066 06-16	00080-6045 06-16	00187-6045 VR 06-16	00195-6137 07-16	00035-6108 07-16
R.B. Nos.	09-16 07885	09-16 07833	02-16 83387	02-16 83323	02-16 83394	02-16 83438	09-16 07625	09-16 07783
CT R B Make	TIMKEN		SKF		SKF		TIMKEN	

#### 9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES

DESCRIPTION	Bogie PP side				Bogie NPP side			
	Secondary 1		Secondary 2		Secondary 1		Secondary 2	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	DN 150-2262	DN 15-6-963	DN 150-1205	DN 15G-1876	DN 13-16-150	DN 15G-965	DN 12-54-150	DN 15G-905
Compressed Ht. at Tested Load	515	472	513	468	515	469	513	469
Alignment deviation (mm)	13	6	13	10	9	9	8	8

#### 10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			PP SIDE	NPP SIDE
1.	Primary outer Spring	CMGBD/G	11-16-1100(114-172,133-145,133-157,133-152)	G 16-5
2.	Primary Inner Spring	G	G 16-06	G 16-6
3.	Primary Damper	KONI	06-2016(34844,34853,34880,34819)	06-2016(34536,34581,33558,34405)
4.	Secondary Damper	KONI	18-2016-9274,24-2016-8355	24-2016(8100,8351)
5.	Lateral Damper	KONI	22-2016-5490	22-2016-5555
6.	Brake Cylinder	KBI	4704K29,4633K29,4634K29,4773K29	4621K29,4669K29,4670K29,4619K29
7.	Brake Caliper	KBI	4328-29,4324-29,4325-29,4329-29	4187-29,4360-29,4361-29,4185-29
8.	Brake Disc	FAV	10-16(4754,4755,4796,4799) D133561-300	10-16(4758,4753,4926,4923) D133561-300
9.	Ball Joint Control Arm	MGN/SGA		
10.	Lateral Bump Stop	GMT		
11.	Traction Centre make	EMSON/SARITA		
12.	Traction lever make	J.I		
13.	Ball joint traction lever	GMT		
14.	Ball joint traction centre	GMT		
15.	Secondary Rubber Pad	TECSPAK		
16.	Rubber Spring	GMT		
17.	Anti roll bar make	SARITA		
18.	Roll Link make	SARITA/MGN		
19.	Fork make	SARITA		

  
 Signature of SSE/Bogie/QC



**Modern Coach Factory Raebareli**  
**आधुनिक रेल डिब्बा कारखाना, रायबरेली**

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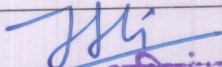
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**11. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Palwal Haryana	16H1766
2.	Pull box	M/s KBI ,Palwal Haryana	
3.	DV	M/s KBI ,Palwal Haryana	2016H2565
4.	PVC	M/s Premier polyfilm, New Delhi	
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	
13.	Non-AC Area Ceiling	M/s Gandhi Safe & Allied, Jalandhar	
14.	Body Side Doors	M/s JBM ,Faridabad/Sukata, CDH	
15.	Vestibule Door(PPE)	M/s Kalsi LDH	
16.	Vestibule Door(NPPE)	M/s Kalsi LDH	
17.	Bio Tank	M/s Rail Tech, KXH	
18.	Auxiliary Water Tank	M/s Manoj Enterprises Mohali Punjab	
19.	Under Slung Water Tank ( 2X685L)	M/s Amit Engg, Baddi	
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 Oriental veneer Products Ltd Mumbai	
24.	Snack Table	M/s Gandhi Enterprises, Jalandhar	

  
वरिष्ठ अधिकारी  
SSE/QC/MCF/RBL  
गुणवत्ता विभाग

रेडिंकॉ, रायबरेली (लालगंज)



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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	REFERENCE &
			Frequency	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:**

- 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

वरिष्ठ अभियंता SSE/QC/MCF/RBL गुणवत्ता विभाग रेडि०का०, रायबरेली (लालगंज)	AME/QC/MCF/RBL 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 उप.मु.या.अभि./फनि. DY CME/FURNISHING रेल कोच फैक्ट्री / रायबरेली / लालगंज RCF / RBL / LLJ



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



SCN-192

MCF/RBL/QEFSCN-8001

VER. 01.06.2016

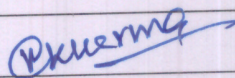
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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	16276/C
RAILWAY	NF	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

SCN - 192



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



MCF/RBL/QEFSCN- 8001

VER. 01.06.2016

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>AMIT</b> On board Sr no : <b>312</b> HT panel Sr no : <b>318</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>5447/07/16</b> Sr no.1: <b>269325/07/2016</b> Sr no.2: <b>269326/07/2016</b> Srno.CPA: <b>5424/07/2016</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 LHBSN(80-BERTHER)Coaches	CC76289 & CC76443	<b>10</b>

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



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



MCF/RBL/QEFSCN- 8001

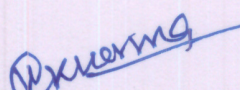
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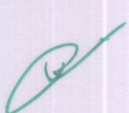
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**FOR ELECTRICAL ITEMS**

**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'.	02
13.	FL Tubes, 02 Feet ,18Watt ,colour temp 6500K	RDSO/PE/SPEC/TL 0011, Sec I, Rev I, 07 2001.	24
14.	Battery fuse box +ve Make : <b>NEC</b>	LW 71001,Alt-F	01
15.	Battery fuse box -ve Make : <b>INTEG</b>	LW 71002,Alt-F	01
16.	Regulated battery charger Make : <b>AAL</b> Sr no: <b>061610247</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
17.	9KVA transformer Make : <b>PANTRONICS</b> Sr no : <b>15015546</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev `0',Ty I.	01
18.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>S INTERNATIONAL</b>	As per spec No EDTS 105,Rev `e' Am-2	02 sets
19.	Feeder junction boxes. Make : <b>NEC</b>	EDTS-328 REV-C	02
20.	Wheel set earthing equipment. Make : <b>DARSHAN,CHANDA&amp;CHANDA</b>	EDTS101,REV-C,AM-1	02
21.	Wheel Slide Protection System (WSP) Make: <b>KNORR</b> Sr no : <b>0116212480</b>	M/s : <b>KNORR</b>	01 set
22.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>HBL</b> Lug date : <b>11/2016</b>	RDSO/pe/spec/ac-0009 rev-1-2008 amdt-1	01 set
23.	Battery box for LHB coaches.	CC 91205	01

  
**SSE/EL/QC**

  
**Dy CEE(P)/MCF/RBL**

वरिष्ठ खण्ड अभियन्ता  
विद्युत उत्पादन-गुणवत्ता  
रेल कोच फैक्टरी / लालगंज / रायबरेली  
Sr. Section Engineer

उप मुख्य विद्युत अभियन्ता (उत्पादन)  
रेल कोच फैक्ट्री-रायबरेली, लालगंज  
DY/CEE/P-RCF/RBL/LJ