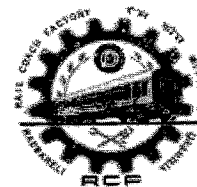


# रेल डिब्बा कारखाना, रायबरेली RAIL COACH FACTORY, RAEBARELI



37-139

FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: RCF/RBL/QC/RSC

Date: 31/12/2014

SHELL No.	L	W	A	C	C	N	R	B	L	0	1	/	1	3	-	1	4	DATE OF DISPATCH	3	0	0	6	2	0	1	4
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RLY	S	W	R	Type	L	W	A	C	C	N	Coach No.	1	4	1	1	3	/	C
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1. Railway Board's Order No : 2013/M(C)/142/3 dated 03.03.2014
2. Tare Weight of Coach : 45.6 Tonnes
3. Carrying Capacity : (a) Seating : 72 (b) Sleeping : 72 (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	4250
4.	CBC height/Buffer height from Rail level 1105 +0/-15	1105(NPPE) 2) 1100(PPE)

**5. TRACEABILITY OF SHELL ITEMS:**

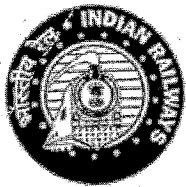
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Buffers	N.A.	
2.	Centre Buffer Coupler	M/s ESCORTS	PP END 2332 NPP END 2331

**6. AIRBRAKE TEST REPORT:**

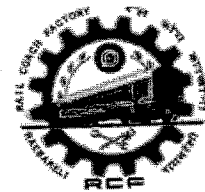
S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	<ul style="list-style-type: none"> <li>&gt; Reduce pressure of BP from 5.0 to 3.4 kg/cm<sup>2</sup>.</li> <li>&gt; Max. pressure in BC</li> <li>&gt; All Brake are applied</li> </ul>	6 – 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	7 sec. 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 02 Sec.	Brake must apply	OK

**7. PAINTING DETAILS:**

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE
1.	Paint	P.U.	AKZONOBEL	92.61/93.7
2.	Insulation	Satisfactory		



# रेल डिब्बा कारखाना, रायबरेली RAIL COACH FACTORY, RAE BARELI



FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

## ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: RCF/RBL/QC/RSC

Date: 31/12/2014

SHELL No.	L	W	A	C	C	N	R	B	L	0	1	/	1	3	-	1	4	DATE OF DISPATCH	3	0	0	6	2	0	1	4
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RLY	S	W	R	Type	L	W	A	C	C	N	Coach No.	1	4	1	1	3	/	C
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### 8. DETAIL OF BOGIES :

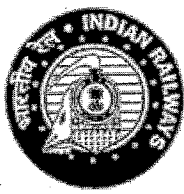
ITEMS	PP SIDE				NPP SIDE			
Bogie No	136831				136830			
Bogie Type	Fiat				Fiat			
Axle No	S-6323		T-2332		T-4514		T-2337	
Wheel Dia	917.00	917.00	915.00	915.00	917.00	917.00	916.50	916.00
Wheel Disc No	094-53102/ZB13	018-53102/ZB13	223-53102/ZB13	213-51919/ZB13	176-51919/ZB13	016-53102/ZB13	332-51919/ZB13	169-50859/ZB13
R.B. Nos.	03154	03243	25184	25086	02975	02922	02882	02766
CT R B Make	TIM		TIM		TIM		TIM	

### 9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES

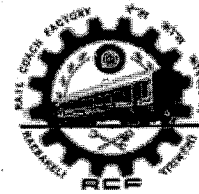
DESCRIPTION	BOGIE PP SIDE				BOGIE NPP SIDE			
	SECONDARY 1		SECONDARY 2		SECONDARY 1		SECONDARY 2	
	OUTER	INNER	OUTER	INNER	OUTER	INNER	OUTER	INNER
Make & Nos.	DN-13-4-1638	G-12-6-2554	DN-13-4-1633	G-12-6-2280	DN-13-4-1580	G-12-6-2327	DN-13-4-1707	G-12-6-2586
Compressed Ht. at Tested Load	509	466	510	466	514	465	514	468
Alignment deviation (mm)	8	23	7	18	7	10	5	12

### 10. TRACEABILITY OF BOGIE ITEMS:

S NO	ITEM	SERIAL NO		MAKE
		PP SIDE	NPP SIDE	
1.	Primary outer Spring	G-12-8	G-12-8	GF
2.	Primary Inner Spring	G-12-5	G-12-5	GF
3.	Primary Damper			SACHS
4.	Secondary Damper			SACHS
5.	Lateral Damper			KONI
6.	Yaw Damper			SHOCHS
7.	Brake Cylinder & Caliper	N13038,N13036 N13036,N13039	A14220 ,A14206 A14216,A14220	FAV
8.	Brake Disc			KBI
9.	Ball Joint Control Arm			GMT
10.	Lateral Bump Stop			GMT
11.	Traction Centre make			EMSON
12.	Traction lever make			SARITA
13.	Ball joint traction lever			SGA
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			GMT
19.	Fork make			EMSON



# रेल डिब्बा कारखाना, रायबरेली RAIL COACH FACTORY, RAEBARELI



FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

## ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: RCF/RBL/QC/RSC

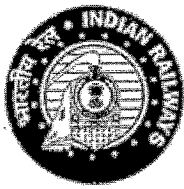
Date: 31/12/2014

SHELL No.	L	W	A	C	C	N	R	B	L	0	1	/	1	3	-	1	4	DATE OF DISPATCH	3	0	0	6	2	0	1	4
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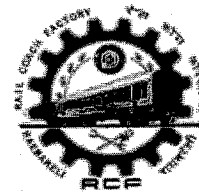
RLY	S	W	R	Type	L	W	A	C	C	N	Coach No.	1	4	1	1	3	/	C
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### 11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s Faiveley Harita Hasur Tamilnadu	B14020B
2.	Pull box	M/s Faiveley Harita Hasur Tamilnadu	
3.	DV	M/s Faiveley Harita Hasur Tamilnadu	14025530B
4.	PVC	M/s Responsive, Colaba, Mumbai	
5.	UIC Vestibule (PPE)	COMCEN	
6.	UIC Vestibule (NPPE)	COMCEN	
7.	Foot Step	---	
8.	Decoupling arrangement	M/s SECO	
9.	Body Side Window	M/s Rail Tech, Kapurthala	
10.	Emergency Window	M/s Rail Tech, Kapurthala	
11.	Lavatory Window	M/s Rail Tech, Kapurthala	
12.	Roof Ceiling	M/s KAE Engg. Pvt. Ltd. Satarganj, U.K.	
13.	Non-AC Area Ceiling	M/s Gandhi Enterprises, Jalandhar	
14.	Supply Air Duct	M/s Amirchand Engg. Works, Jalandhar	
15.	Body Side Doors	M/s Air Flow Chennai	
16.	Compartment Door (PPE)	M/s Rail Tech, Kapurthala	
17.	Compartment Door (NPPE)	M/s Rail Tech, Kapurthala	
18.	Vestibule Door (PPE)	M/s KALSI Ludhiana	
19.	Vestibule Door (NPPE)	M/s KALSI Ludhiana	
20.	CDTS	M/s Vibhu Composite works, Yamuna nagar, Hariyana	
21.	Auxiliary Water Tank	M/s Amit Engineering, Mohali Punjab	
22.	Under Slung Water Tank (450 L)	M/s Amit Engineering, Mohali Punjab	
23.	Under Slung Water Tank (2X685L)	M/s Shivalik Fasteners, Mohali Punjab	
24.	Flexible Faucet	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
25.	Lotah Filler Tap	M/s Metco (New Delhi)	
26.	Lavatory Modoules	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
27.	Lavatory Doors	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
28.	Waste Bin Arrangement	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
29.	Fire Extinguisher	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
30.	Side Wall panel	M/s KAE Engg. Pvt. Ltd. Satarganj, U.K.	
31.	Seat & Berth	M/s Mohan Rail Composite Pvt. Ltd. Kapurthala	
32.	Light Luggage Rack	M/s Virendra Steel Enterprises Chandigarh	
33.	Snack Table	M/s International Tractors Ltd. Hoshiarpur	



# रेल डिब्बा कारखाना, रायबरेली RAIL COACH FACTORY, RAEBARELI



FORM NO: RCF/RBL/QMF 8001  
VERSION: 2012-01-01

## ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: RCF/RBL/QC/RSC

Date: 31/12/2014

SHELL No.	L	W	A	C	C	N	R	B	L	0	1	/	1	3	-	1	4	DATE OF DISPATCH	3	0	0	6	2	0	1	4
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RLY	S	W	R	Type	L	W	A	C	C	N	Coach No.	1	4	1	1	3	/	C
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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 & PERIOD OF TRIAL
			Frequency	

## 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 falls 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 RCF/RBL.
- For any complain/ suggestion please contact at qualityrcfrbl@gmail.com

DY CME  
RCF/RBL

उप मु या अभियंता/उत्पादन  
Dy CME / PRODUCTION  
रे.डि.का. रायबरेली (लालगंज)  
RCF / RBL / LLJ

SSE/QC  
RCF/RBL

सीनियर सेक्शन इंजीनियर (गुणवत्ता कंट्रोल)  
रेल डिब्बा कारखाना, रायबरेली  
Sr. Section Engineer (Quality Control)  
Rail Coach Factory, Raebareli(Lalganj)



# RAIL COACH FACTORY, KAPURTHALA

Form No. : QMF 9454; Version: 03

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Date: 9-9-2013

Shell No.:- RCF/RBL

RLY	Type	LACCN	Coach No.
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## 6.0 Wheel &amp; Axle details:

6.0 Wheel & Axle details:

Items	N PP Side				Non PP Side			
Bogie No.	136830				136831			
Frame No.	ECBT-664				FIAT-2262			
Bolster No.	HEI-10				HEI-06			
Axle No.	T-4514		T-2337		S-6323		T-2332	
Wheel Diameter	917.00	917.00	916.00	916.00	917.00	917.00	915.00	915.00
Wheel Disc No.	176-51919/ ZB13	016-53102/ ZB13	332-51919/ ZB13	169-50859/ ZB13	094-53102/ ZB13	018-53102/ ZB13	223-53102/ ZB13	213-51919/ ZB13
R.B. Nos.	02975	02922	02882	02766	03154	03243	25184	25086
R. B. Make	TIM		TIM		TIM		TIM	
RB Type	CARTRIDGE TAPER ROLLER BEARING							

Load deflection Values:

## 6.1 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-13-4-1580	G-12-6-2327	DN-13-4-1707	G-12-6-2586	DN-13-4-1638	G-12-6-2554	DN-13-4-1633	G-12-6-2280
Compressed ht. at tested load	514	465	514	468	509	466	510	466
Alignment deviation (mm)	7	10	5	12	8	23	7	18

## 6.2 Component traceability:

SNO	ITEM	PP Side Bogie	NPP side Bogie	Make
		Sr. nos	Sr. nos.	
1	Primary Outer Spring batch no.	G-12-8	G-12-8	GF
2	Primary inner Spring batch no	G-12-5	G-12-5	GF
3	Primary Damper			SACHS
4	Secondary damper			SACHS
5	Lateral Damper			KONI
6	Brake cylinder & Caliper			-
7	Brake Disc			KBI
8	Ball joint Control arm			GMT
9	Lateral Bump stop			GMT
10	Traction center make			EMSON
11	Traction lever make			SARITA
12	Ball joint traction lever			SGA
13	Ball joint Traction centre			GMT
14	Secondary rubber pad			TECSPAK
15	Rubber spring			GMT
16	Anti roll bar make			SARITA
17	Roll link make			GMT
18	Fork make			EMSON

18/9/14  
SSE/OC/Bage

**Senior Section Engineer**  
**Quality control / Electrical**  
**RCF, Raebareli**



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(RAIL COACH FACTORY-RAEBARELI)



RCF/RBL/QEF7001

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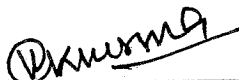
PAGE 2 OF 5

**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB EOG AC COACHES

Sr no	Description of test	Remarks
6.0	HUMIDITY CONTROL	OK
7.0	PUMP EQUIPMENTS	OK
8.0	WORKING OF EXHAUST FANS OVER LAVATORIES	OK
9.0	WORKING OF COMPOSITE PANTRY	OK
10.0	COMPARTMENT LIGHT	OK
11.0	PUBLIC ADDRESSING SYSTEM ( PAS )	OK
12.0	WHEEL SLIDE PROTECTION SYSTEM ( WSP )	OK
13.0	WORKING OF 60KVA TRANSFORMER	OK
14.0	WORKING OF REGULATED BATTERY CHARGER	OK
15.0	WORKING OF EMERGENCY BATTERY CHARGER	OK
16.0	SAFETIES :	OK
16.1	THERMOSTAT :	OK
16.2	ROTARY 07 SET POINTS (NORMAL CONDITION)	OK
16.3	MID SET POINTS (SENSORS FAILED CONDITIONS)	OK
16.4	HYGROSTAT	OK
16.5	CONTROL CIRCUIT	OK
16.6	POWER CIRCUIT	OK
17.0	REFRIGERANT USED R 407C	OK

  
Senior Section Engineer  
Quality control / Electrical  
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ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
01.	Roof mounted AC package unit for LHB AC coaches Make : <b>INTEC</b> Sr no of RMPU (NPP side ) : <b>14-D-114</b> Sr no of RMPU (PP side) : <b>14-D-115</b> Sr no of Microprocessor: <b>AE.14.03.117/AMIT</b>	As per rdso/pe/spes/ac/0061/ rev-1/2005	<b>02</b>
02.	Switch board cabinet Make: <b>ISG</b> Sr no : <b>0069-03/2014</b>	As per spec no EDTS073,REV-D,AM-6	<b>01</b>
03.	Pump equipment with PLC controller & pump box Make: <b>KIND</b> Sr no PA: <b>071005</b> Sr no.1: <b>130705901</b> Sr no.2: <b>130705902</b> Sr no.CPA: <b>1307042</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
04.	Double inlet centrifugal blower 415V/03Ph /50Hz /120W/450 cum mtr/hr discharge for exhausting air from lavatory & switch board cabinet Make : <b>INTEG</b>	EDTS331, TYPE-1 CORR.-1&2	<b>02</b>
05.	Vestibule Light Fitting Single	LW 76004,Alt-b	<b>07</b>
06.	Ceiling light fitting DOUBLE w/o diffuser.	LW 76011,Alt -c	<b>09</b>
07.	Ceiling light fitting with NL w/o diffuser w/o item 2&3	LW 76013,Alt -c	<b>09</b>
08.	Emergency light system for EOG type coaches (AEL)	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
09.	Lavatory light fitting assly	LW 76001,Alt nil	<b>04</b>
10.	WC gauge signal light	LW 76006,Alt-c	<b>02</b>

  
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Quality control / Electrical  
RCF, Raebareli





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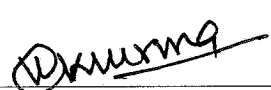
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ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
11.	Passenger alarm coach indication light	LW 76005,Alt-e	<b>02</b>
12.	Fluorescent lamp 18W	RDSO/PE/SPEC/ D/TL 0011- 2000,Rev I, Sec- I , 07/2001	<b>34</b>
13.	Diffuser complete w/o item 1& 2.	LW 76012,Alt-a	<b>25</b>
14.	Razor socket for WC 110/240V.	EDML 047 ,Rev nil	<b>04</b>
15.	Terminal strip	EDML 034,Rev-a	<b>01</b>
16.	Terminal connector	EDML 037,Rev`a`	<b>04</b>
17.	Single switch 06A/250V/AC ONE WAY ,complete with steel plate & cover frame	EDML 047,Rev nil, Item 1.	<b>09</b>
18.	Single switch 16A/250V/AC ONE WAY complete with steel plate & cover frame	EDML 045,Rev nil ,Item 2.	<b>09</b>
19.	PA system for LHB coaches Make :AHUJA	EDTS 173,Rev- a Am-1,2&3	<b>01 set</b>
20.	70AH/110V, 54 Cells, 02V each, maintenance free pure lead acid tin monoblock, battery set with 09 modules 12V each. , factory pre charged. Make :HBL Lug date :05/2013	EDTS 129,Rev nil	<b>01 set</b>
21.	Battery box for LHB coaches.	1 10113 0 76 700 005 w/o item 5,22 ,23 ,26 & 27.	<b>01</b>

  
Senior Section Engineer  
Quality control / Electrical  
RCF, Raebareli



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



RCF/RBL/QEF7001  
VER.2014:00  
PAGE 5 OF 5

**ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES**

Sr no	Description	Drg/Spec no.	Quantity per Coach
22.	Battery fuse box +ve Make : <b>INTEG</b>	As per LW 71001,Alt-F	<b>01</b>
23.	Battery fuse box -ve Make : <b>INTEG</b>	As per LW 71002,Alt-F	<b>01</b>
24.	Regulated battery charger Make : <b>STESALITE</b> Sr no: <b>0214392</b>	As per RDSO/pe/spec/ac/01 29, Rev.-1 (2009)	<b>01</b>
25.	Emergency battery charger Make : <b>BHASIN</b> Sr no: <b>04140475</b>	EDTS 163,Rev `c` corg.-2&3	<b>01</b>
26.	60KVA transformer Make : <b>PANTRONICS</b> Sr no : <b>13121815</b>	As per rdso/pe/spec/ac/008 0/rev-0 (2007)/Am- 1&2/Corr. 1,2&3	<b>01</b>
27.	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>
28.	Feeder junction boxes. Make : <b>NEC</b>	EDML 020,Rev-I	<b>02</b>
29.	Wheel set earthling equipment. Make : <b>CHANDA &amp; CHANDA</b>	EDTS101,REV- C,AM-1	<b>02</b>
30.	Wheel Slide Protection System (WSP) Make: <b>FAIVELEY</b> Sr no : <b>40/13/220</b>	M/s : <b>FAIVELEY</b>	<b>01 set</b>
31.	PANTRY EQUIPMENTS : Hot Case & Bottle cooler cum deep freezer Make : <b>VISHAL GAS SERVICES</b>	As per spec no EDTS 139, Rev- E ,Sec II.	<b>01</b>

 <b>वसिष्ठ-विद्युत अभियन्ता</b> <b>Approved by</b> , लखनऊ <b>Sr. Electrical Engineer / RCF / RBL / Lucknow</b>	 <b>SSE/EL/QC</b> <b>विद्युत उत्पादन-गुणवत्ता</b> <b>रेल कोच फैक्टरी / लालगंज / रायबरेली</b> <b>Sr. Section Engineer</b> <b>Electric Production - Quality</b> <b>RCF / RBL / LLJ</b>
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