



रेल डिब्बा कारखाना, रायबरेली
RAIL COACH FACTORY, RAEBARELI



205

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

ROLLING STOCK CERTIFICATE

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

Date: 09/12/2015

SHELL No.	L	W	A	C	C	N	1	5	R	B	L	/	1	4	-	1	5	DATE OF DISPATCH	0	4	0	9	2	0	1	5
RLY			C	R	Type	L	W	A	C	C	N							Coach No.	1	4	1	1	9	/	C	

- Railway Board's Order No. : 2014/M(C)/142/1 dtd 21.07.2014
- Tare Weight of Coach : 45.6 Tonnes
- 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	1) 1112(NPPE) 2) 1124 (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	3949	NPP END	3960

6. AIRBRAKE TEST REPORT:

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	<ul style="list-style-type: none"> ➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm². ➤ Max. pressure in BC ➤ All Brake are applied 	6 - 10 sec. 3.0 ±0.15 kg/cm ² . OK	10 Sec. 3.0 kg/cm ² OK
2.	Insensitivity	<ul style="list-style-type: none"> ➤ Exhaust BP @ 0.3 kg/cm²/min. 	No brake application	OK
3.	Sensitivity	<ul style="list-style-type: none"> ➤ Exhaust BP @ 0.1 kg/cm²/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.	VIGBYOR	94/92
2.	Insulation	Satisfactory		



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SHELL No.	R	B	L	-	1	5	-	2	0	1	4	-	1	5	DATE OF DISPATCH	0	4	/	0	9	/	1	5
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RLY	C	R	Type	L	W	A	C	C	N	Coach No.	1	4	1	1	9	/	C
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8. DETAIL OF BOGIES :

ITEMS	PP Side				NPP Side			
Bogie No	150031				150032			
Bogie Type	FIAT				FIAT			
Frame no.	EC-09				EC-05			
Bolster no.	RBL-43				RBL-45			
Axle No	8 7252 2 3680 RWF 2014		3 2954 A 3092 RWF 2014		105690 14000626 CHT 14		C 22207 A 2840 RWF 2012	
Wheel Dia	915	915	915	915	916	916	916	916
Wheel Disc No	06145 00064 VR 15	06148 00113 VR 15	06145 00063 VR 15	06145 00050 VR 15	06145 00150 VR 15	06145 00026 VR 15	06145 00167 VR 15	06145 00047 VR 15
R.B. Nos.	04 14 02487	12 14 23388	04 14 03051	04 14 02553	04 14 29420	04 14 32432	04 14 29438	12 14 21290
CT R B Make	SKF		SKF		SKF		SKF	

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.	CMGBD 08 14 83642	DN13 E 1957 V	CMGBD 08 14 83642	DN13 E 1921 V	CMGBD 08 14 83642	DN13 E 2034 V	CMGBD 08 14 83642	DN 13E 2030 V
Compressed Ht. at Tested Load	515	466	515	467	510	462	511	461
Alignment deviation (mm)	07	16	07	17	7	16	8	18

10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	SERIAL NO.		MAKE
		PP SIDE	NPP SIDE	
1.	Primary outer Spring	L&S 03 12 CV(0250),(0314),(0033),(0260)		L&S
2.	Primary Inner Spring	CV 05 15(7143 146 13),CV 01 15 (7143 143 115) CV 05 15(7143 146 34),CV 01 15(7143 143 119)		CVFSK
3.	Primary Damper	20927,21194,21193,20880		KONI
4.	Secondary Damper	301550333 KW 40/2014		GEREP
5.	Lateral Damper	301550332 KW 40/2014		GEREP
6.	Brake Cylinder	266 K 29,11150 K 35, 336 K 29, 14967 K 35		KBI
7.	Brake Caliper	233 29, 13047 29, 332 29, 16117 35		KBI
8.	Brake Disc	24043542 0004 35/14, 24043542 0005 35/14 24042689 0008 36/14,24042681 0003 36/14		KBI
9.	Ball Joint Control Arm			MGN
10.	Lateral Bump Stop			GMT
11.	Traction Centre make			EMSON
12.	Traction lever make			SARITA
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
19.	Fork make			SARITA

Handwritten signature and initials
SSE/BCL/Bogie



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11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Faridabad ,New Delhi	
2.	Pull box	M/s KBI ,Faridabad ,New Delhi	14G0739
3.	DV	M/s KBI ,Faridabad ,New Delhi	
4.	PVC	M/s Responsive Industries, Mumbai	2014G1257
5.	UIC Vestibule (PPE)	M/s Ameenji Pvt. Ltd. Hyderabad	
6.	UIC Vestibule (NPPE)	M/s Ameenji Pvt. Ltd. Hyderabad	
7.	Foot Step	M/s Super Spark Pvt. Ltd. Faridabad	
8.	Decoupling arrangement	M/s SECO Industries, Mumbai	
9.	Body Side Window	M/s Aikon Technology Pvt. Ltd. Solan H.P	
10.	Emergency Window	M/s Aikon Technology Pvt. Ltd. Solan H.P	
11.	Lavatory Window	M/s Aikon Technology Pvt. Ltd. Solan H.P	
12.	Roof Ceiling	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
13.	Non-AC Area Ceiling	M/s Amirchand Engg.works, jalandhar	
14.	Supply Air Duct	M/s Amirchand Engg.works, jalandhar	
15.	Body Side Doors	M/s JBM Faridabad	
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 Amit Engineers, Baddi (HP)	
21.	Auxiliary Water Tank	M/s Manoj Enterprises , Mohali Punjab	
22.	Under Slung Water Tank(450 L)	M/s Shivalik Fastener Mohali PB	
23.	Under Slung Water Tank(2X685L)	M/s Shivalik Fastener Mohali PB	
24.	Flexible Faucet	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
25.	Lotah Filler Tap	M/s Metco 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 seemex (PP) Fire end (NPP)	2126,2121
30.	Side Wall panel	M/s Hindustan Fibre Ltd. Vadodra (Gujrat)	
31.	Seat & Berth	M/s Savitry Engg.Products Pontasahib	
32.	Light Luggage Rack	M/s Virendra Steel Enterprises Chandigarh	
33.	Snack Table	M/s Anjani Technology Noida	
34.	Yaw Damper	M/s GEREP Sup.- M/s SFT Engineering KOLKATA	



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RLY		C	R	Type	L	W	A	C	C	N		Coach No.	1	4	1	1	9	/	C							

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:

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 RCF/RBL.
5. For any complain/ suggestion please mail at qualityrcfbl@gmail.com

DY CME
RCF/RBL

उप मु.यां.अभि./फर्नि.
DY CME/FURNISHING
रेल कोच फैक्ट्री / रायबरेली / लालगंज
RCF / RBL / LLJ

SSE/QC
RCF/RBL अभियंता
गुणवत्ता विभाग
रेल कोच फैक्ट्री, रायबरेली (लालगंज)



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



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG AC COACHES

TYPE COACH	LWACCN	SHELL/COACH NO	14119/C
RAILWAY	CR	DATE OF DESPATCH	
Sr no	Description of tests		Remarks
1.0	REFERENCE SPECIFICATION : L 446		
1.1	AIR CONDITIONING TEST : ELPS/TP/AC 01.		
1.2	CODE OF PRACTICE OF WIRING : ELPS/SPEC/EOG/AC-01		
2.0	INSULATION RESISTANCE : Setting of insulation monitoring relay at 30K ohms as per TD 111 of M/s LHB.		
	Observed status : HEALTHY		
3.0	AIR DELIVERY MEASUREMENT	OBSERVED VALUE	OK
3.1	Fresh Air	29.01 Cub mtr/min	OK
3.2	Return Air	91.92 Cub mtr/min	OK
3.3	Exhaust Air	6.05 Cub mtr/min	OK
3.4	Conditioned Air	194.82 Cub mtr/min	OK
4.0	PRE COOLING TEST: Max 01 hr. Time taken to pre cool from 45 deg centigrade to 24/22 deg C during OFF LOAD condition PP Side :21.1°C NPP Side :22.9°C		OK
5.0	PULL DOWN TEST: Max 02 hrs. Time taken to pull down from 45 deg C to 24/22 deg C during FULL LOAD condition. Not done		OK

(Signature)
Senior Section Engineer
Quality control / Electrical
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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 :	
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	OK

(Signature)

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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 : AMIT Sr no of RMPU (NPP side) : 1142-I Sr no of RMPU (PP side) : 1136-I Sr no of Microprocessor: AE.14.08.0286/AMIT	As per rdso/pe/spes/ac/0061/ rev-1/2005	02
02.	Switch board cabinet Make : ABROL Sr no : 177	As per spec no . EDTS073,REV-D,AM- 6	01
03.	Pump equipment with PLC controller & pump box Make: KALSI Sr no PA: 4170/10/2014 Sr no.1: 251479/10/2014 Sr no.2: 251480/10/2014 Sr no.CPA: 4195/10/2014	As per spec EDTS 186,Rev-a, Am- 2	01
04.	Double inlet centrifugal blower 415V/03Ph /50Hz /120W/450 cum mtr/hr discharge for exhausting air from lavatory & switch board cabinet Make : INTEG	EDTS331, TYPE-1 CORR.-1&2	02
05.	Vestibule Light Fitting Single	LW 76004,Alt-b	07
06.	Ceiling light fitting DOUBLE w/o diffuser.	LW 76011,Alt -c	09
07.	Ceiling light fitting with NL w/o diffuser w/o item 2&3	LW 76013,Alt -c	09
08.	Emergency light system for EOG type coaches (AEL)	EDTS 151,Rev -c Am- 1 & 2	04
09.	Lavatory light fitting assly	LW 76001,Alt nil	04
10.	WC gauge signal light	LW 76006,Alt-c	02

(Signature)

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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	02
12.	Fluorescent lamp 18W	RDSO/PE/SPEC/ D/TL 0011- 2000,Rev I, Sec- I , 07/2001	34
13.	Diffuser complete w/o item 1& 2.	LW 76012,Alt-a	25
14.	Razor socket for WC 110/240V.	EDML 047 ,Rev nil	04
15.	Terminal strip	EDML 034,Rev-a	01
16.	Terminal connector	EDML 037,Rev` a`	04
17.	Single switch 06A/250V/AC ONE WAY ,complete with steel plate & cover frame	EDML 047,Rev nil, Item 1.	09
18.	Single switch 06A/250V/AC ONE WAY complete with steel plate & cover frame	EDML 047,Rev nil ,Item 2.	09
19.	PA system for LHB coaches Make : AHUJA	EDTS 173,Rev-a Am-1,2&3	01 set
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 : AMARA RAJA Lug date : 02/2015	EDTS 129,Rev nil	01 set
21.	Battery box for LHB coaches.	1 10113 0 76 700 005 w/o item 5,22 ,23 ,26 & 27.	01

(Signature)

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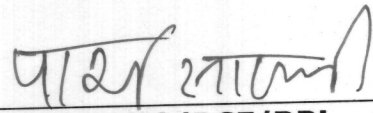
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ROLLING STOCK CERTIFICATE OF LHB/EOG AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
22.	Battery fuse box +ve Make : ISG	As per LW 71001,Alt-F	01
23.	Battery fuse box -ve Make : INTEG	As per LW 71002,Alt-F	01
24.	Regulated battery charger Make : HIREL Sr no: 14100110	As per RDSO/pe/spec/ac/01 29, Rev.-1 (2009)	01
25.	Emergency battery charger Make : WAVES Sr no: WEBCH-14633	EDTS 163,Rev `c` corg.-2&3	01
26.	60KVA transformer Make : VIMAL Sr no : 2350	As per rdso/pe/spec/ac/008 0/rev-0 (2007)/Am- 1&2/Corr. 1,2&3	01
27.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES	As per spec No EDTS 105,Rev `e` Am-2	02 sets
28.	Feeder junction boxes. Make : NEC	EDML 020,Rev-I	02
29.	Wheel set earthling equipment. Make : CHANDA & CHANDA	EDTS101,REV- C,AM-1	02
30.	Wheel Slide Protection System (WSP) Make: KNORR Sr no : 0114241280	M/s : KNORR	01 set
31.	PANTRY EQUIPMENTS : Hot Case & Bottle cooler cum deep freezer Make : SD ENGINEERS	As per spec no EDTS 139, Rev- E ,Sec II.	01

 SSE/EL/QC विद्युत उत्पादन-गुणवत्ता रेल कोच फॅक्टरी / लालगंज / रायबरेली Sr. Section Engineer Electric Production - Quality RCF / RBL / LLJ	 DYCEE(P)/RCF/RBL उप मुख्य विद्युत अभियंता (उत्पादन) रेल कोच फॅक्टरी-रायबरेली, लालगंज DY.CEE/P-RCF/RBL/LLJ
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