



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 00
DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2017-18/226

Coach No.		1	7	0	5	5	/	C	-	DATE OF DISPATCH					3	1	-	0	8	-	1	7		
RLY	N	W	R	-	Type	L	W	A	C	C	W	Shell No.	7	2	0	1	2	2	0	1	7	-	1	8

- Railway Board's Order No. : 2017/M(C)/142/2, dated -26.05.2017
- Tare Weight of Coach : 44.5 Tonnes
- Carrying Capacity : (a) Seating: 52 (b) Sleeping: 52 (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)1099 (NPPE) 2)1097 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part M/S Rail tech pvt.ltd. KXH	PP END 87 NPP END 269
		Complete M/s MCF/RBL	
2.	Side wall	M/s MCF/RBL	RH 72012 LH 72012
3.	End wall	PP END M/s Amit Engg, Mohali	PP END 72012 NPP END 72012
		NPP END M/s Amit Engg, mohali	
4.	Roof	M/s MCF/RBL	
5.	Centre Buffer Coupler	M/S Dellnar pvt.ltd	PP END 411 NPP END 412
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/cm². ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm². OK	7 sec. 3.0 kg/cm² OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm²/min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm²/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	M/S-BERGER	90/88
2.	Insulation	Satisfactory		

वरिष्ठ अनु अभियंता
SSE/QC/MCF/RBL
रेडिओका, रायबरेली (लालगंज)





Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 00

DATE-16-05-2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2017-18/226

COACH.NO	1	7	0	5	5	/	C	DATE OF DISPATCH										3	1	-	0	8	-	1	7
RLY	N	W	R	TYPE	L	W	A	C	C	W	SHELL. NO.	7	2	0	1	2	-	2	0	1	7	-	1	8	

8. DETAIL OF BOGIES :

ITEMS	PP Side				NPP Side			
Bogie No	170525				170526			
Bogie Type	FIAT				FIAT			
Frame no.	RBL-496				RBL-422			
Bolster no.	MCF/RBL-SCI-119				SFPL-250			
Axle No	V-1313		V-2349		V-1970		V-2439	
Wheel Dia	917.607	917.604	917.617	916.636	917.582	917.566	917.575	917.551
Wheel Disc No	00089-7321 10-16	00151-7321 10-16	00073-6226 09-16	00105-7257 10-16	00131-6185 09-16	00068-7259 10-16	00075-6226 09-16	00118-7257 10-16
R.B. Nos.	03-16 86629	02-16 80075	03-16 86632	02-16 80034	09-16 78741	03-16 86626	09-16 77443	03-17 86630
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.	CMRSK-05-19F8-222-4702	CMRSK-03-16-F19-1268-19W-555	CMRSK-11-15-F18-R59-678-4702	CMRSK-05-16-F19N91-19W-1018	CMRSK-05-15-R118-429-4702	CMRSK-03-16-F19-R68-19W-794	CMRSK-05-15-R-18-4702	CMRSK-03-16-F19-R68-19W-547
Compressed Ht. at Tested Load	510	465	512	468	511	468	510	467
Alignment deviation (mm)	05	34	09	38	11	40	11	36

10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE	SERIAL NO.	
			PP SIDE	NPP SIDE
1.	Primary outer Spring	RSK	03W	03WA-2049,03WA-2494,03WA-1724,03WA-2636
2.	Primary Inner Spring	RSK	1702(128,2139,282,307)	280-1702,4183-1702,4220-1702,163-1702
3.	Primary Damper	KNORR	05-17(7793,7232,7794,7795)	05-17(7788,7820,7818,7231)
4.	Secondary Damper	KONI	25-2016 (9809,10166)	20-2016(9497,9440)
5.	Lateral Damper	KONI	42-2016 5720	42-2016 5829
6.	Brake Cylinder	KBI	6866-K-29,6720-K-29,6721-K-29,6864-K-29	6817-K-29,6694-K-29,6742-K-29,6818-K-29
7.	Brake Caliper	KBI	6172-29,6200-29,6199-29,6173-29	6110-29,6218-29,6216-29,6111-29
8.	Brake Disc	FAV	D133561-300-02-17-947, D133561-300-02-17-943, D133561-300-04-17-1582, D133561-300-04-17-1587,	D133561-300-04-17-1639, D133561-300-04-17-1638, D133561-300-02-17-463, D133561-300-02-17-464,
9.	Ball Joint Control Arm	GMT		
10.	Lateral Bump Stop	GMT		
11.	Traction Centre make	SARITA		
12.	Traction lever make	SARITA/JI		
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/ GMT		
19.	Fork make	SARITA		

Signature of SSE/QC/Bogie



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2017-18/226

Coach No.		1	7	0	5	5	/	C	-	DATE OF DISPATCH					3	1	-	0	8	-	1	7			
RLY	N	W	R	-	Type	L	W	A	C	C	W	Shell No.	7	2	0	1	2		2	0	1	7	-	1	8

11. TRACEABILITY OF FURNISHING ITEMS:

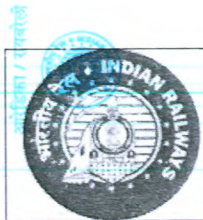
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Palwal Haryana	17E2307
2.	Pull box	M/s KBI ,Palwal Haryana	
3.	DV	M/s KBI ,Palwal Haryana	D3185
4.	PVC	M/s Responsive Industries, Mumbai	
5.	UIC Vestibule (PPE)	M/s Cemcon ind.DLI	
6.	UIC Vestibule (NPPE)	M/s Cemcon ind.DLI	
7.	Foot Step	M/s Super Spark Pvt. Ltd. Faridabad	
8.	Decoupling arrangement	M/s Kohinoor Industries, Jalandhar	
9.	Body Side Window	M/s Birkan engg.pvt.ltd.GAZIABAD	
10.	Emergency Window	M/s Birkan engg.pvt.ltd.GAZIABAD	
11.	Lavatory/hopper Window	M/s Birkan engg.pvt.ltd.GAZIABAD	
12.	Roof Ceiling	M/s Hindustan Fiber Glass Vadodra (Gujarat)	
13.	Non-AC Area Ceiling	M/s Gandhi enterprizes, Jalandhar	
14.	Supply Air Duct	M/s Hanspal coach products KXH	
15.	Body Side Doors	M/s JBM, Faridabad	
16.	Compartment Door (PPE)	M/S Rail tech pvt.ltd. KXH	
17.	Compartment Door (NPPE)	M/S Rail tech pvt.ltd. KXH	
18.	Vestibule Door(PPE)	M/s Kalsi Ludhiana	
19.	Vestibule Door(NPPE)	M/s Kalsi Ludhiana	
20.	Bio Tank	M/s Oriental Aghai	
21.	Auxiliary Water Tank	M/s Manoj Enterprises Mohali Punjab	
22.	Under Slung Water Tank(1x450 L)	M/s Amit Engg. Mohali	
23.	Under Slung Water Tank (2X685L)	M/s Shivalic fastners pvt.ltd. mohali	
24.	Flexible Faucet	M/s Hindustan Fiber Glass Vadodra (Gujarat)	
25.	Lotah Filler Tap	M/s Metco Delhi	
26.	Lavatory Modules	M/s Hindustan Fiber Glass Vadodra (Gujarat)	
27.	Lavatory Doors	M/s Hindustan Fiber Glass Vadodra (Gujarat)	
28.	Waste Bin Arrangement	M/s Hindustan Fiber Glass Vadodra (Gujarat)	
29.	Fire Extinguisher	M/s classic agnee	PP-5506,NPP-5507
30.	Side Wall panel	M/s Hindustan Fiber Glass Vadodra (Gujarat)	
31.	Seat & Berth	M/s Oriental veneer Products Ltd Mumbai	
32.	Light Luggage Rack	M/s Techno Industries Allahabad	
33.	Snack Table	M/s- International tractors ltd. Hoshiarpur	

वरिष्ठ अधिकारी

SSE/QC/MCF/RBL

रेडिओका, रायबरेली (जालगंज)





Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2017-18/226

Coach No.			1	7	0	5	5	/	C	-	DATE OF DISPATCH					3	1	-	0	8	-	1	7		
RLY	N	W	R	-	Type	L	W	A	C	C	W	Shell No.	7	2	0	1	2		2	0	1	7	-	1	8

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 Pad, 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 (लालमज)	AME/QC/MCF/RBL Assistant Mechanical Engineer (Qual) Modern Coach Factory, Raebareli	Dy. COM/MCF/RBL Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

27-203
DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

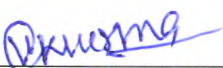
PAGE 1 OF 5

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG 2T AC COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG AC COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG AC COACHES				
TYPE COACH		LWACCW	SHELL/COACH NO	17055/C
RAILWAY		NW	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	29.42 Cub mtr/min		OK
3.2	Return Air	87.43 Cub mtr/min		OK
3.3	Exhaust Air	8.20 Cub mtr/min		OK
3.4	Conditioned Air	187.25 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 :22.2 °C NPP Side :21.1 °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


 Senior Section Engineer
 Quality control / Electrical
 Modern Coach Factory Raebareli





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

PAGE 2 OF 5

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG 2T 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	BERTH READING LIGHTS	OK
11.0	COMPARTMENT LIGHT	OK
12.0	PUBLIC ADDRESSING SYSTEM (PAS)	OK
13.0	WHEEL SLIDE PROTECTION SYSTEM (WSP)	OK
14.0	WORKING OF 60KVA TRANSFORMER	OK
15.0	WORKING OF REGULATED BATTERY CHARGER	OK
16.0	WORKING OF EMERGENCY BATTERY CHARGER	OK
17.0	SAFETIES :	
17.1	THERMOSTAT :	OK
17.2	ROTARY 07 SET POINTS (NORMAL CONDITION)	OK
17.3	MID SET POINTS (SENSORS FAILED CONDITIONS)	OK
17.4	HYGROSTAT	OK
17.5	CONTROL CIRCUIT	OK
17.6	POWER CIRCUIT	OK
18.0	REFRIGERANT USED R 407C	OK

[Signature]
Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001


REV NO: 00

DATE:18.01.2017

PAGE 3 OF 5

ROLLING STOCK CERTIFICATE OF LHB/EOG 2T AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
01.	Roof Mounted AC package unit for LHB AC coaches Make : LEEL Sr no of RMPU 1(NPP side): 17.05.0029 Sr no of RMPU 2 (PP side): 17.05.0041 Sr no of Microprocessor: 17.04.026/A PAUL	As per rdso/pe/spes/ac/0061/rev-1/2005	02
02.	Switch board cabinet Make : ISG Sr no : 17.06.0073	As per spec no .EDTS073,REV-D,AM-6	01
03.	Pump equipment with PLC controller& pump box Make : DR AUTO Sr no PA : 2017/05/071 Sr no.1 : 16060112 Sr no.2 : 16060137 Srno.CPA: 2017/07/066	As per spec EDTS 186,Rev-a, Am- 2	01
04.	Double inlet centrifugal blower 415V/03Ph /50Hz /120W/450 cummtr/hr discharge for exhausting air from lavatory & switch board cabinet Make : INTEG	EDTS331, TYPE-1 CORR.-1&2	02
05.	Vestibule Light Fitting Single w/o diffuser Make: INTEG,KAVERI	LW 76004,Alt-b	06
06.	Ceiling light fitting DOUBLE w/o diffuser. Make : INTEG	LW 76011,Alt-c	09
07.	Ceiling light fitting with NL w/o diffuser w/o item 2&3 Make : DEW	LW 76013,Alt-c	09
08.	Emergency light system for EOG type coaches (AEL) Make : VGS	EDTS 151,Rev -c Am-1 & 2	04
09.	Lavatory light fitting assly Make : NIL	LW 76001,Alt nil	04


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

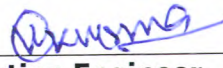
REV NO: 00

DATE:18.01.2017

PAGE 4 OF 5

ROLLING STOCK CERTIFICATE OF LHB/EOG 2T AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
10.	WC gauge signal light Make : DR AUTO	LW 76006,Alt-c	02
11.	Passenger alarm coach indication light Make : KAVERI	LW 76005,Alt-e	02
12.	Reading Light fitting (Upper berth) Make : INTEG	LW 76023,Alt-e	26
13.	Reading light for longitudinal berth LHS Make : INTEG	LW 76022,Alt-e	09
14.	Reading light for transverse Lower Berth -LH Make : INTEG	LW 76020,Alt-e	09
15.	Reading light for transverse Lower berth RH Make : INTEG	LW 76021,Alt-e	08
16.	Fluorescent lamp 18W	RDSO/PE/SPEC/D/TL 0011-2000,Rev I, Sec- I , 07/2001	33
17.	Diffuser complete w/o item 1& 2.	LW 76012,Alt-a	25
18.	Razor socket for WC 110/240V. Make : SSK	EDML 047 ,Rev nil	04
19.	Terminal strip Make : WAGO	EDML 033,Rev-c	01
20.	Terminal connector Make : WAGO	EDML 037,Rev`a`	04
21.	Single switch 06A/250V/AC ONE WAY ,complete with steel plate & cover frame Make : SSK	EDML 047,Rev_C, Item 1.	09
22.	Single switch 06A/250V/AC ONE WAY complete with steel plate & cover frame Make : SSK	EDML 047,Rev_A ,Item 2.	09
23.	Provision of switch socket combined 5PIN (06A, 250V AC) along with 1A glass fuse fitted powder coated steel plate & cover frame Make : SSK	EDML 0,64,Rev-B, Item -16.	09
24.	PA system for LHB coaches Make : AHUJA	EDTS 173 Rev- a Am- 1,2&3	01 set


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

PAGE 5 OF 5

ROLLING STOCK CERTIFICATE OF LHB/EOG 2T AC COACHES

Sr no	Description	Drg/Spec no.	Quantity per Coach
25.	70AH/110V,54 Cells,02V each ,maintenance free pure lead acid tin monoblock ,battery set with 09 modules 12V each. , factory pre charged. Make : A RAJA Lug date : 06/2017	EDTS 129,Rev nil	01 set
26.	Battery box for LHB coaches. Make : MERCURY COMPONENTS	As per drgno 1 10113 0 76 700 005,Alt C	01
27.	Battery fuse box +ve Make : AECO	LW 71001,Alt-F	01
28.	Battery fuse box -ve Make : KONTACT	LW 71002,Alt-F	01
29.	Regulated battery charger Make : AAL Sr no: 061702376	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
30.	Emergency battery charger Make : WAVES Sr no: 172508	EDTS 163,Rev `c' corg.- 2&3	01
31.	Provision of 5KVA TFR Make : AUTOMATIC Elect Ltd. SL.no : T 509081/62	As Per EDTS-366,REV-NIL & CC-71510	01
32.	Provision of capacitor Bank Make : STANDARD CAPACITORS SL.no : 17/A/341	As per EDML-130 Rev- 1,Corr-1	01
33.	60KVA transformer Make : AUTOMATIC Elect Ltd. Sr no : T 116146/21	As per rdso/pe/spec/ac/0080/re v-0 (2007)/Am-1&2/Corr. 1,2&3	01
34.	ZS coupling 400A/750V/03Ph/50hz. Make : S INTERNATIONAL	As per spec No EDTS 105,Rev `e' Am-2	02 sets
35.	Feeder junction boxes. Make : NEC	EDTS-328 REV-C	02
36.	Wheel set earthing equipment. Make : CHANDA&CHANDA	EDTS101,REV-C,AM-1	02
37.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0116512978	M/s : KNORR	01 set
38.	PANTRY EQUIPMENTS : Hot Case, Bottle cooler cum deep freezer Make : ZUMAX	As per spec no EDTS 139, Rev- E ,Sec II.	01

 SSE/EL/QC	 SEE(P)/MCF/RBL
----------------------	---------------------------

वरिष्ठ अनुमान अभियन्ता
गुणवत्ता नियंत्रण
उपनिर्देशिका 0 / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LJ/RBL

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

