



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 01
DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/535

RLY	E	Co	R	Coach No.	1	9	5	9	0	9	/	C	DATE OF DISPATCH	3	0	-	0	7	-	1	9
DISPATCH TO	Sr.CDO/VSKP			Type	L	W	S	C	N	1	Shell No.	9	7	2	8	1	FUR.NO.		LSCN-1124		

1. Railway Board's Order No. : 2019/M(C)/142/2, Dated: 03-06-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature: - Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiveley) letter no. MC/LHB/Brake, Dated 27.09.2018

5. 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/-10	1) 1099 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

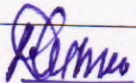
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/s-RFPL	13
	Complete	NPP END M/s-RFPL	23
2.	Lav. side wall	M/S- MIDAS GUJRAT	97281
		M/S- MIDAS GUJRAT	LAV.1 - LAV.2 -
3.	Side wall	MCF/RBL(CONTRACTOR V4U)	LAV.3 - LAV.4 -
	LH SIDE	MCF/RBL(CONTRACTOR V4U)	106/01
	RH SIDE	M/S-RAIL TECH KXH	106/02
4.	End wall	PP END M/S-RAIL TECH KXH	---
		NPP END M/S-RAIL TECH KXH	---
5.	Roof	M/S-ECBT	223
6.	Centre Buffer Coupler	M/s- FRONTIER LTD	PP END 12P2 NPP END 120P2

7. 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 ² . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ± 0.15 kg/cm ² . OK	07 Sec. 3.0 kg/cm ² OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.	Brake must apply	OK

8. PAINTING DETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
1.	Paint	P.U	M/s -VIBGYOR	M/S-VIBGYOR	90/89	16.07.19
2.	Insulation			Satisfactory		


वरिष्ठ अनुसंधान अभियंता
गुणवत्ता विभाग
रेलवे डिब्बा कारखाना, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	190591				190592			
Bogie Type	FIAT				FIAT			
Frame no.	AML-048				VS-1540			
Bolster no.	MCF/RBL-2446				MCF/RBL-2749			
Axle No	19 P - 1662 RWF		19 P - 2651 RWF		19 P - 1778 RWF		19 P - 2196 RWF	
Wheel Dia	917.72	917.71	917.742	917.683	917.68	917.622	917.76	917.687
Wheel Disc No	TZ 05-18 18481-8PN3	TZ 05-18 18480-8PN3	TZ 03-19 30277-9ML1	TZ 05-19 48729-9PF3	TZ 05-18 23562-8PQ5	TZ 05-18 18025-8MT9	TZ 07-18 40917-8RL5	TZ 07-18 40918-8RR3
R.B. Nos.	02-19 04487	02-19 03555	02-19 02976	02-19 05029	02-19 04294	02-19 04787	02-19 03071	02-19 03216
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10. 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.	CMFSK03-19-5101-551-10	CMRSK05-18-F08-N73-08Y-409	CMFSK03-19-5101-551-33	CMRSK05-18-F08-N73-08Y-896	CMFSK03-19-5101-82	CMRSK05-18-F08-N73-08Y-1112	CMFSK03-19-5101-551-20	CMRSK05-18-F08-N73-08Y-1078
Compressed Ht. at Tested Load	516	469	516	468	515.5	471	514	472
Alignment deviation (mm)	12	10	13	10	7	12	8	12

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13217,13228	13220,13222
2.	Primary outer Spring	CMFSK	05-19 1036-555(654,633,657,570)	05-19 1036-555(684,600,618,613)
3.	Primary Inner Spring	CMFSK	05-19 1037-842(12,19,98,55)	05-19 1037-882(68,112,58,41)
4.	Primary Damper	KONI	03-19 (03942,03750,05037,04017)	03-19 (03827,02252,04545,04592)
5.	Secondary Damper	IAI	06-19 (257172,257053)	06-19 (256919,257051)
6.	Lateral Damper	IAI	05-19 241620	05-19 241887
7.	Brake Cylinder	KBI	B(4262,3530,3548,0267)K-29	B(4275,3531,3533,4254)K-29
8.	Brake Caliper	KBI	B(1849,1946,1945,1850)-29	B(1816,1948,1947,1848)-29
9.	Brake Disc	FAV	10-18(1354)09-18(1288,1290,1291)D-133561-300	10-18(1352,1327,1349)09-18(1289)D-133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	AR/SGA		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT,SARITA/PPI		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	111218-1,111218-1,121218-1,121218-2	171218-1,111218-1,121218-2,121218-2
22.	Control Arm Lower	RVE	171218-1,171218-1,280119-2,181218-2	171218-2,171218-2,RVE,061218-2
23.	Phonic Wheel	KNORR	K-04-19	K-04-19

Signature of SSE/Bogie/QC





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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3079 25/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	2019 F 8065
5.	Decoupling arrangement	M/S-ELASTOMER INDS, MUMBAI	
6.	Floor board	M/s- SHRI RAM PANELS,	
7.	PVC	M/S RESPONSIVE IND.	
8.	Lavatory Inlay	M/s- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S- MAHAVEER MATEL WORKS,	
12.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS,	
13.	Body Side Window	M/S-EXCEL INDS. KOLKATA	
14.	Emergency Window	M/S-AGF INDS KOLKATA	
15.	Hopper Window	M/S- VEDANSH ENT,RBL	
16.	Side panel	M/S-ACME INDS DELHI	
17.	Roof ceiling	M/S-ACME INDS DELHI	
18.	Door way ceiling	M/S-RAJA INDS KHANNA	
19.	Body Side Doors 1,3	M/S- JBM INDUSTRIES, FARIDABAD	
20.	Body Side Doors 2,4	M/s- JVR INDS, LUDHIYANA	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank with pressurized flushing	M/s- RASANDIK ENG. INDUSTRIES, GURUGRAM, M/s- IMI	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- RAIL FAB KXH	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s- HINDWARE HSIL PVT. LTD. GURUGRAM	
28.	Health Faucet	M/S-ACME INDS DELHI	
29.	Lotah Filler Tap	M/S-ACME INDS DELHI	
30.	Lavatory Doors	M/S-ACME INDS DELHI	
31.	Seat & Berth	M/s-OVPL MUMBAI	
32.	Snack Table	N/A	

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



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13. MODIFICATION (IF ANY) : NIL

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL: NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT Frequency	REFERENCE & PERIOD OF TRIAL

16. WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30 months from the 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 qualityrcfbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from date of Application for any manufacturing /Application as per clause -4,para- V of RDSO specification no .M&C/PCN/100/2013-Given below

S.No	Time period	Gloss Retention (initial gloss >85 unit at 60°)	Colour Retention rating on 0-10 scale (initial rating of painted panels/coach or ISC/RAL shade card shall be taken as 10)	Adherence of paints (with each other and with substrate)Cross-cut tape adhesion test as per ASTM D:3359/97(or latest)
1	After 1 year	80% of initial gloss	7	5B
2	After 2 year	70% of initial gloss	6	5B
3	After 3 year	60% of initial gloss	5	4B

If any imperfection is noticed or any defect arises during the warranty –period due to improper material used or due to bad workmanship, the contractor shall be bounded to set right the defect/ imperfection on free of cost basis at the base depot of the coach.

SSE/OC/MCF/RBL गुणवत्ता विभाग रेडिओका, रायबरेली (लालगंज)	SME/OC/MCF/RBL Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy. Chief Quality Manager/Shell आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
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		DATE:18.01.2017

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	195909/C
RAILWAY	ECOR	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





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PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : TRINITRON On Board Sr no : 19/06/TCS/MCF/3436/355/0044 HT Panel Sr no : 19/06/TCS/MCF/3436/355/0046	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/07/0047 Sr no.1 : 2866 Sr no.2 : 2860 Srno.CPA: 2019/06/059-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : VGS	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SSK/SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side), Make : SSK/SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: CG POWER	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: ENSAVE	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	04
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : DR AUTO	CC76289 & CC76443	09

[Signature]
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PAGE 3 OF 3

FOR ELECTRICAL ITEMS

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11.	Battery fuse box +ve Make : RADIANT	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : PI ENGG. Sr no: PI/19060015	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-1945	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES	As per spec No EDTS 105,Rev`e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : AECO	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119091316	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 05/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : HITECH	CC 91205	01

SSE/EL/QC	AWM(ELECT.)/MCF/RBL
वरिष्ठ अनुभाग अभियन्ता	SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

स० कार्य प्रबन्धक / विद्युत
आ०रे०डि०का० / रायबरेली
A.W.M./Electrical/MCF/RBL

