



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/2019-20/891

RLY	C	R	-	Coach No.	1	9	7	0	8	7	/	C	DATE OF DISPATCH	1	6	-	1	0	-	1	9
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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	2	6	6	FUR.NO.	LSCN-1283
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated: 13-06-2019

2. Tare Weight of Coach : 41.24 Tones

3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature: -1.- 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

2.- RFID(Radio frequency identification) fitted for traceability of coach

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) 1104 (NPPE) 2) 1096 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S- SFPL
		NPP END	M/S- SFPL
	Complete	MCF/RBL/SIS	5/19
2.	Lav. side wall	M/S- ATHANACY RBL	LAV.1 - LAV.2 -
		M/S- ATHANACY RBL	LAV.3 - LAV.4 -
		M/S- RAIL TECH PVT.LTD. KXH	107/01
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)
		RH SIDE	MCF/RBL(CONTRACTOR V4U)
4.	End wall	PP END	M/S- RAIL TECH PVT.LTD. KXH
		NPP END	M/S- RAIL TECH PVT.LTD. KXH
5.	Roof	M/s-ECBT	240
6.	Centre Buffer Coupler	M/s- SANROK	PP END 13073 NPP END 13084

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	08 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 -NEROLAC	KANSAI NEROLAC	90/89	29.09.19
2.	Insulation			Satisfactory		

SSE/OC/MCF/RBL
 गुणवत्ता विभाग
 १०डि०का०, 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	191365				191366			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-38				MIPL-58			
Bolster no.	MCF/RBL-1999				MCF/RBL-2495			
Axle No	19 R - 2665 RWF		19 S - 0794 RWF		19 R - 1036 RWF		19 R - 0975 RWF	
Wheel Dia	917.428	917.476	917.396	917.409	917.392	917.396	917.381	917.42
Wheel Disc No	TZ 06-19 55201-9QJ3	TZ 06-19 57371-9QK6	TZ 06-19 40681-9QJ6	TZ 06-19 58842-9QK9	TZ 06-19 58840-9QK9	TZ 06-19 55301-9PK0	TZ 06-19 54458-9PD8	TZ 06-19 54204-9QJ1
R.B. Nos.	07-19-21949	06-19-14596	09-18-14604	07-19-21181	06-19-14608	07-19-19543	09-18-21958	07-19-20670
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.	CMAFJ09-19-5101-69	CMRSK05-18-F08-573-08Y-2059	CMAFJ09-19-5101-70	CMRSK05-18-F08-573-08Y-243	CMAFJ09-19-5101-91	CMRSK05-18-F08-573-08Y-2112	CMAFJ09-19-5101-50	CMRSK05-18-F08-573-08Y-1980
Compressed Ht. at Tested Load	515	468	515	466	516	471	514	472
Alignment deviation (mm)	10	5	10	5	10	10	11	12

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12078,12085	13733,12066
2.	Primary outer Spring	CMSTL	07-19 07A(1591,423,1785,1589)	07-19 07A(1697,1808,7632,2106)
3.	Primary Inner Spring	CMGBD	07-19 F06-937(987,930,536,936)	07-19 F06-937(610,938,668,914)
4.	Primary Damper	KONI	03-19 (04546,08220,01873,02551)	03-19 (06569,04238,08514,02083)
5.	Secondary Damper	KONI	04-19 (01168,01170)	04-19 (01219,00301)
6.	Lateral Damper	IAI	05-19 251310	05-19 251240
7.	Brake Cylinder	KBI	B(6970,4995,7937,8785)K-29	B(7809,8787,1450,2106)K-29
8.	Brake Caliper	KBI	B(3403,3396,5956,5817) -29	B(5957,5815,0110,0046) -29
9.	Brake Disc	FAV	06-19(6263,6262)07-19(6341,6340)D-133561-300	07-19(6344,6339,6342,6461)D-133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	AR/GMT		
16.	Secondary Rubber Pad	PPI		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	280619-2,280619-2,170619-2,280619-2	280619-2,280619-2,220619-2,220619-1
22.	Control Arm Lower	RVE	100619-2,280619-2,RVE,280619-2	220619-2,100619-2,080619-1,RVE
23.	Phonic Wheel	KNORR	K-08-19	K-08-19

Signature of SSE/Bogie/QC



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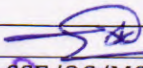
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3765 37/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 8996
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S- ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s- SHRI RAM PANELS, PUNJAB	
7.	PVC	M/S -RESPONSIVE IND.MUMBAI	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
9.	UIC Vestibule (PPE)	M/S- KIRAN RUBBER PRODUCT PUNE	
10.	UIC Vestibule (NPPE)	M/S- KIRAN RUBBER PRODUCT PUNE	
11.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
12.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
13.	Body Side Window	M/s-MEIDON BHOPAL	
14.	Emergency Window	M/S -AGF PVT. LTD, KOLKATA	
15.	Hopper Window	M/S-SHATABDHI VADODARA+VEDANSH RBL	
16.	Side panel	M/s- WONDER LAMINATE KOLKATA	
17.	Roof ceiling	M/s-ACME INDIA NEW DELHI	
18.	Door way ceiling	M/S-JAMM TOOLS RBL	
19.	Body Side Door 1,2	M/S- SUKATA INDS, CDG	
20.	Body Side Door 3,4	M/s- JVR INDS, LUDHIYANA	
21.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
22.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
23.	Bio Tank with pressurized flushing	M/S- JSL LIFE STYLE LTD. ROHTAK	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S RAIL FAB. KAPURTHALA	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
28.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
30.	Lavatory Doors	M/S -KALSI AUTOMATIC DOOR SYSTEM LTD.LDH	
31.	Seat & Berth	M/S- ORIENTAL VENEER PRODUCTS, MUMBAI	
32.	Snack Table	N/A	
33.	RFID	M/s-TECH SOLUTION GURGAON	Sr.105051,105052


 SSE/QC/MCF/RBL
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 रेडिओक्रा 0, 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

16WARRANTY:

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/QC/MCF/RBL	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ गुणवत्ता विभाग
रेडिओ, रायबरेली (लालगंज)

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

जोगिन्दर सिंह
उप मुख्य गुणवत्ता प्रबंधक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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	197087/C
RAILWAY	CR	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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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : AMIT ENGG. On Board Sr no : AE/USBC-1392 HT Panel Sr no : AE/USBC-1395	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0013 Sr no.1 : 19090257 Sr no.2 : 19090129 Srno.CPA: 2019/09/023-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: KAVERI	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : RECORD /SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : RECORD /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: DR AUTO	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: RT VISION	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


Senior Section Engineer
Quality control / Electrical
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : RADIANT	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : RADIANT	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5I 19683	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2241	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : INDORAIL	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119040966	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 08/19	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 वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आपरेटिंग / लालगंज / रायबरेली S.S.E./Elect-OC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, लखनऊ Sr. Electrical Engineer / RCF / RBL / Lucknow