



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/2019-20/969

RLY	N	R	-	Coach No.	1	9	7	1	7	4	/	C	DATE OF DISPATCH	3	0	-	1	0	-	1	9
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DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	3	9	7	FUR.NO.	LSCN-1305
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 03-06-20192. **Tare Weight of Coach** : 41.24 Tones3. **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) 1099 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S-M.TECH
			NPP END M/S-M.TECH
		Complete	M/S-M.TECH
2.	Lav. side wall	M/S- ATHANACY RBL	LAV.1 - LAV.2 -
		M/S- ATHANACY RBL	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)
		RH SIDE	MCF/RBL(CONTRACTOR V4U)
4.	End wall	PP END	M/s-RSM MOHALI
		NPP END	M/s-RSM MOHALI
5.	Roof	M/S-ECBT	345
6.	Centre Buffer Coupler	M/S-SANROK ENT	PP END 14184 NPP END 14153

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-VIBGYAR	(SUPPLY & APPLY)	90/89	11.10.19
2.	Insulation			Satisfactory		

विवरण
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, 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	192101				192102			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS5-1131				MCF/RBL/LS5-1129			
Bolster no.	SCI-303				SCI-314			
Axle No	19 S- 4892 RWF		19 S- 1123 RWF		19 S- 1563 RWF		19 S- 2822 RWF	
Wheel Dia	917.473	917.57	917.489	917.574	917.498	917.584	917.436	917.502
Wheel Disc No	TZ 07-19 68665-9RQ5	TZ 06-19 57193-9QL0	TZ 07-19 67922-9RM2	TZ 07-19 67919-9RM6	TZ 07-19 68668-9RL3	TZ 07-19 62377-9RN0	TZ 07-19 62622-9RL5	TZ 07-19 62406-9RPO
R.B. Nos.	08-19 27442	06-19 23970	08-19 23950	08-19 24660	08-19 27428	08-19 24582	08-19 27155	08-19 24013
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
Make & Nos.	TAYAL & CO. Sr.NO.19-09 3771	TAYAL & CO. Sr.NO.19-09 3652	TAYAL & CO. Sr.NO.19-10 3784	TAYAL & CO. Sr.NO.19-10 3792

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18463,18464	18450,18460
2.	Primary outer Spring	CMFSK	09-19 1100-078 (3132,2251,2231,2025)	09-19 1100-078 (2158,2029,2094,2136)
3.	Primary Inner Spring	CMFSK/CMSTL	08-19 11010-64 (375,589,327,581)	07-19 F04-491-06A (225,247,737,834)
4.	Primary Damper	KONI	03-19 (00842,00264,01453,00854)	03-19 (08589,03567,08596,08528)
5.	Secondary Damper	GB	07-19 (01270,01271)	07-19 (01288,01287)
6.	Lateral Damper	KONI	04-19 02312	04-19 01827
7.	Brake Cylinder	KBI	B(6877,5840,5839,6879)K29	B(6869,5841,5842,6876)K29
8.	Brake Caliper	KBI	B(4055,4078,4077,4056)-29	B(4053,4076,4075,4054)-29
9.	Brake Disc	KBI	24200062 0055-38/19,24200062 0032-38/19 24200069 0043-38/19,24200033 0024-36/19	24198276 0048-34/19,24198276 0049-34/19 24200059 0044-38/19,24200059 0045-38/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF/SARITA		
13.	Traction lever make	SF/SARITA		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	08-19 B 4129,08-19 4134	16B 4197,16-29 B 3771
17.	Check Valve	KNORR	15-19 18798	05-19 18866
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	SF/SARITA		
21.	Control Arm Upper	RVE	310719-2,290719-2,300719-2,250719-5	250719-5,270719-1,290719-2,26019-1
22.	Control Arm Lower	RVE	030819-3,030819-3,240819-2,030819-3	030819-3,030819-3,240719-2,030819-3
23.	Phonic Wheel	KNOOR	K-08-19	K-07-19

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	3707 37/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 8864
4.	FIBA	M/S- KBI, FARIDABAD	PP-10347/29 NPP-10393/29
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/S-SHREE RAM PNL GOVINDGARH	
8.	PVC	M/S RESPONSIVE IND.	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/s-RAKESH IRON KXH	
13.	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON KXH	
14.	Body Side Window	M/S- F.P KOLKATA	
15.	Emergency Window	M/s-AJC KOLKATA	
16.	Hopper Window	M/S- SHATABDHI VADODARA+VEDANSH RBL	
17.	Side panel	M/s- WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDIA NEW DELHI	
19.	Door way ceiling	M/S-JAMM TOOLS RBL	
20.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
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.	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
28.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
29.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
30.	Lavatory Doors 1, 2,3	M/S-JR JALANDHAR	
31.	Lavatory Doors 4	M/S- KALSI, LUDHIYANA	
32.	Seat & Berth	M/S- ORIENTAL VENEER PRODUCTS, MUMBAI	
33.	Snack Table	N/A	
34.	RFID	M/s-TECH SOLUTION GURGAON	Sr.104317,104320

वरिष्ठ निरीक्षक
मुख्य निरीक्षक
SSE/QC/MCF/RBL
रेल डिब्बा कारखाना, 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	REFERENCE & PERIOD OF TRIAL
			Frequency	

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

गुणवत्ता विभाग
रेडिंका 0, रायबरेली (जालगंज)सहायक यंत्रिक अभियन्ता/गुणवत्ता
Assistant Mechanical Engineer / Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareliउप मुख्य गुणवत्ता प्रबन्धक/शेल
Dy. Chief Quality Manager/Shell
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
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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	197174/C
RAILWAY	NR	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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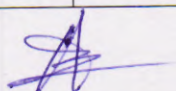
DATE:18.01.2017

PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/08/298 HT Panel Sr no : 2019/08/296	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/0009 Sr no.1 : 6232 Sr no.2 : 6146 Srno.CPA: sr no - 2019/09/032-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: DR AUTO	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: RT VISION	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


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PAGE 3 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : INDORAIL	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: W4K5H 19502	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2025	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 : AECO	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 : 0119040935	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 : 09/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : ANANYA	CC 91205	01

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