



# 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/2019-20/518

RLY	E	Co	R	Coach No.	1	9	5	8	9	8	/	C	DATE OF DISPATCH	2	7	-	0	7	-	1	9
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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	2	7	5	FUR.NO.	LSCN-1122
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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: NIL4. **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) 1103 (NPPE) 2) 1104 (PPE)

**6. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/s-JBM
		Complete	NPP END M/s-JBM
			MCF/RBL
2.	Lav. side wall	M/S- COMPETANT ENG. JUC	LAV.1 - LAV.2 -
		M/S- COMPETANT ENG. JUC	LAV.3 - LAV.4 -
			97275
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)
		RH SIDE	MCF/RBL(CONTRACTOR V4U)
4.	End wall	PP END	M/S-P.D.STEEL PANCHKULA
		NPP END	M/s-NECHD CDG
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5.	Roof	MCF/RBL	46
6.	Centre Buffer Coupler	M/S- SANROK ,FARIDABAD	PP END 13098 NPP END 13077

**7. AIRBRAKE TEST REPORT:**

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full application brake	➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup> . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	08 Sec. 3.0 kg/cm <sup>2</sup> OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm <sup>2</sup> /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	SUPPLY&APPLY	90/88	14.07.19
2.	Insulation			Satisfactory		

*[Signature]*  
SSE/QC/MCF/RBL

वरिष्ठ अनु 0 अभियंता  
गुणवत्ता विभाग  
रेल डिब्बा कारखाना, रायबरेली (लालपुंज)







MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191013				191014			
Bogie Type	FIAT				FIAT			
Frame no.	RAIL TECH-27				ECBT-1228			
Bolster no.	VS-640				APEX-127			
Axle No	19 P - 2853 RWF		19 P - 1570 RWF		19 P - 2493 RWF		19 P - 9070 RWF	
Wheel Dia	917.57	917.53	917.647	917.604	917.631	917.69	917.637	917.706
Wheel Disc No	TZ 12-18 15097-8WJ3	TZ 12-18 13685-8WQ9	TZ 05-18 25180-8PR5	TZ 05-18 25181-8PR5	TZ 04-19 35309-90I6	TZ 04-19 55344-90H9	TZ 05-18 22477-8QG2	TZ 05-18 25605-8PS4
R.B. Nos.	03-19 36229	03-19 36091	02-19 02957	03-19 36175	02-19 01213	03-19 36349	02-19 04441	02-19 00965
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.	CMAFJ06-19-5101-15	CMGBD08-17-5100-85-78	CMAFJ06-19-5101-47	CMGBD01-17-5100-136-107	CMAFJ06-19-5101-32	CMRSK12-16-F08-N12-08Y-701	CMAFJ06-19-5101-51	CMRSK12-18-F08-M18-08Y-624
Compressed Ht. at Tested Load	515	471	514	469	516	470	516	471
Alignment deviation (mm)	10	6	10	7	14	4	15	3

## 11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12379,14153	12377,14154
2.	Primary outer Spring	CMFSK	05-18 1038-538(664,580,718,594)	06-19 1036-049(42,59,21,2)
3.	Primary Inner Spring	CMRSK	07-17 06X(4001,3550,3852,3746)	05-19 1035-553(17,53,18,12)
4.	Primary Damper	KONI	03-19 (00770,00706,00514,00238)	03-19 (02645,01927,00814,00215)
5.	Secondary Damper	IAI	06-19 (256840,257111)	06-19 (256896,256997)
6.	Lateral Damper	IAI	05-19 251555	02-19 251539
7.	Brake Cylinder	FAV	D19(747,857,880,560)	D19(714,887,890,740)
8.	Brake Caliper	FAV	E19(700,698,697,699)B	E19(832,830,831,829)B
9.	Brake Disc	FAV	09-18(645,642)06-19(5476,5527)D-133561-300	06-19 (5524,5523,5526,5525)D-133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	GMT/AR		
12.	Traction Centre make	SF/SARITA		
13.	Traction lever make	JL		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG/PPI		
17.	Rubber Spring	GMT		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SF/GMT, SARITA/PPI		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	111218-1,311118-2,111218-1,111218-1	281218-2,121218-2,140319-3,140319-3
22.	Control Arm Lower	RVE	RVE,RVE,101218-4,161218-2	291218-3,190319-4,260219-3,250219-3
23.	Phonic Wheel	FAV	FT/KEP/01	FT/KEP/2019

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	2070 25/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 F 8007
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER INDS, MUMBAI	
6.	Floor board	M/S-AB COMPOSITE KOLKATA	
7.	PVC	M/S-AB COMPOSITE KOLKATA	
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, KAPURTHALA	
12.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
13.	Body Side Window	M/S-AJC INDS KOLKATA	
14.	Emergency Window	M/S-AJC INDS KOLKATA	
15.	Hopper Window	M/S- AXSYS SALUTION SIMNOOR	
16.	Side panel	M/S-AB COMPOSITE KOLKATA	
17.	Roof ceiling	M/S-AB COMPOSITE KOLKATA	
18.	Door way ceiling	M/S-AB COMPOSITE KOLKATA	
19.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
20.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Bio Tank with pressurized flushing	M/s- RASANDIK ENG. INDUSTRIES, GURUGRAM, M/s- IMI	
23.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
24.	Under Slung Water Tank( 2X685L)	M/S- RAIL FAB KXH	
25.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
26.	Controlled Discharge Tap	M/s- AGMECO PVT LTD U.K	
27.	Health Faucet	M/S-KAPCO VALVES JALANDHAR	
28.	Lotah Filler Tap	M/S-KAPCO VALVES JALANDHAR	
29.	Lavatory Doors	M/S-AB COMPOSITE KOLKATA	
30.	Seat & Berth	M/s- NARBADA FOREST. BHOPAL	
31.	Snack Table	N/A	

SSE/QC/MCF/RBL

मुख्य निदेशक

रायबरेली, रायबरेली (लासगंज)



MCF/RBL





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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.

SSK/QC/MCF/RBL गुणवत्ता विभाग रेल डिब्बा कारखाना, रायबरेली	SME/QC/MCF/RBL Senior Mechanical Engineer/Quality गुणवत्ता विभाग, रायबरेली Modern Coach Factory Raebareli	Dy. CQM/MCF/RBL Joginder उप मुख्य गुणवत्ता अधिकारी Dy. Chief Quality Engineer आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli



MCF/RBL





Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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LSCN-1122

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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	195898/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	

*[Signature]*  
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 : <b>TRINITRON</b> On Board Sr no : <b>19/06/TCS/MCF/3436/355/0046</b> HT Panel Sr no : <b>19/06/TCS/MCF/3436/355/0044</b>	EDTS 333, Rev` 01`Am-1	<b>01</b>
02.	Pump equipment with PLC controller & pump box Make : <b>DR AUTO</b> Sr no PA: <b>2019/06/0169</b> Sr no.1 : <b>19060773</b> Sr no.2 : <b>19060746</b> Srno.CPA: <b>2019/06/093-DR AUTO</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL), Make : <b>VGS</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Passenger Alarm Cum Indication Light (PACIL) Make: <b>RT VISION</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	<b>02</b>
05.	Fitment of Switch Plate Assly(Cabin Side) Make : <b>SSK/SALZER</b>	EDML 086,Rev-03, ITEM-01	<b>20</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>SSK/SALZER</b>	EDML 086, Rev 03, ITEM-02	<b>20</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: <b>CG POWER</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
08.	Cabin,Corridor,doorway and Gangway Lights. Make: <b>ENSAVE</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	<b>04</b>
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : <b>DR AUTO</b>	CC76289 & CC76443	<b>09</b>

*[Signature]*  
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

11.	Battery fuse box +ve Make : <b>RADIANT</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>SSK</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>PI ENGG.</b> Sr no: <b>PI/19060013</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>VTC 3089 LHB-1968</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	<b>01</b>
15.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>PRIME ELECT.</b>	As per spec No EDTS 105,Rev`e' Am-3, TYPE-2	<b>01 set</b>
16.	Feeder junction boxes. Make : <b>AECO</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthing equipment. Make : <b>CHANDA &amp; CHANDA</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119071118</b>	M/s : <b>KNORR</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>HBL</b> Lug date : <b>06/19</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
20.	Battery box for LHB coaches. Make : <b>HITECH</b>	CC 91205	<b>01</b>

 <b>SSE/EL/QC</b> वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 <b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b> स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL
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