



# 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/2019-20/567

RLY	E	C	R	Coach No.	1	9	5	8	5	2	/	C	DATE OF DISPATCH	0	8	-	0	8	-	1	9
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DISPATCH TO	Sr.DME/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	6	4	FUR.NO.	LSCN-1145
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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) 1102 (NPPE) 2) 1102 (PPE)

#### 6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S Pennar ind. Ltd. Cheenai
		NPP END	M/S Pennar ind. Ltd. Cheenai
	Complete	MCF/RBL( SIS )	97264
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	M/S-DTL PUNE
		RH SIDE	M/S-DTL PUNE
4.	End wall	PP END	M/S-RSM MOHALI
		NPP END	M/S-RSM MOHALI
5.	Roof	MCF/RBL	56
6.	Centre Buffer Coupler	M/S Sanrok faridabad	PP END 13063 NPP END 13056

#### 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 <sup>2</sup> . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ± 0.15 kg/cm <sup>2</sup> OK	07 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 -NEROLAC	KANSAI NEROLAC	90/88	27.07.19
2.	Insulation			Satisfactory		

*Ramesh*  
वरिष्ठ अनुसंधान अधिकारी  
गुणवत्ता विभाग  
रेडिओ, रायबरेली (लातगंज)







MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192030				192029			
Bogie Type	FIAT				FIAT			
Frame no.	VS-1883				VS-1881			
Bolster no.	AMIT-624				AMIT-629			
Axle No	19 P - 3096 RWF		19 P - 1510 RWF		19 P - 7137 RWF		18 J - 1420 RWF	
Wheel Dia	917.59	917.649	917.587	917.644	917.642	917.504	917.57	917.502
Wheel Disc No	TZ 05-19 42639-9PI0	TZ 04-19 38182-9OD4	TZ 04-19 34172-9MJ3	TZ 05-19 42044-9PH9	TZ 05-19 47893-9PF5	TZ 05-19 42640-9PI0	TZ 05-19 44498-9PC9	TZ 05-19 42041-9PH1
R.B. Nos.	02-19 00962	02-19 00553	02-19 01915	02-19 02776	02-19 01805	02-19 00715	02-19 01976	02-19 00597
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.	CMFSK08-18-5101-031-105	CMFSK05-19-5100-391-250	CMFSK08-19-5101-031-94	CMFSK05-19-5100-183	CMFSK08-19-5101-031-164	CMFSK05-19-5100-335-156	CMFSK08-18-5101-031-114	CMFSK05-19-5100-335-242
Compressed Ht. at Tested Load	511.5	468.5	511.5	467.5	516	469	516	469.5
Alignment deviation (mm)	9	7	12	7	13	10	13	10

## 11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13835,13822	14458,14454
2.	Primary outer Spring	CMSTL	07-19 07A(410,394,740,843)	07-19 07A(988,422,612,398)
3.	Primary Inner Spring	CMGBD	07-19 F06-937(718,448,401,336)	07-19 F06-937(354,421,339,351)
4.	Primary Damper	KONI	03-19 (00222,00347,00221,01360)	03-19 (01835,01556,00683,00741)
5.	Secondary Damper	KONI	03-19 (00206,00245)	03-19 (00210,00217)
6.	Lateral Damper	IAI	02-19 241757	02-19 241841
7.	Brake Cylinder	KBI	B(0608,0051,0076,0609)K-29	B(6080,5150,0064,0627)K-29
8.	Brake Caliper	KBI	B(8703,8814,8815,8701) -29	B(3505,3502,8791,8704) -29
9.	Brake Disc	KBI	24173481 0036-10/19,24178942 0032-13/19 24173461 0046-10/19,24178941 0046-13/19	24178942 0078-13/19,24178941 0017-13/19 24178942 0077-13/19,24178942 0004-13/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PPI		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/PPI		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	250,3,6,33	253,73,245,382
22.	Control Arm Lower	SF	156,3,7,344	87,32,256,16
23.	Phonic Wheel	KNORR	K-03-19	K-05-19

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	3247 29/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 G 8292
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
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-FP INDS. KOLKATA	
14.	Emergency Window	M/S-AGC 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 IND, KHANNA	
19.	Body Side Doors 1,2,3	M/S SUKATA CDG	
20.	Body Side Doors 4	M/S- JBM INDUSTRIES, FARIDABAD	
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- FLASH FORGE VIZAG	
24.	Auxiliary Water Tank	M/S- MANOJ ENG. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/S- RAIL FAB KXH	
26.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST MOHALI	
27.	Controlled Discharge Tap	M/s- AGMECO PVT LTD U.K	
28.	Health Faucet	M/S-KAPCO VALVES JALANDHER	
29.	Lotah Filler Tap	M/S-KAPCO VALVES JALANDHER	
30.	Lavatory Doors 1,3	M/S-J.R.IND JUC	
31.	Lavatory Doors 2,4	M/S KALSI LDH	
32.	Seat & Berth	M/s- OVPL MUMBAI	
33.	Snack Table	N/A	

SSE/QC/MCF/RBL

मुख्यता विभाग

रेल डिब्बा कारखाना, रायबरेली







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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/QC/MCF/RBL	SME/QC/MCF/RBL	Dy. COM/MCF/RBL

70डिब्बा0, रायबरेली (लालगंज)

Senior Mechanical Engineer/Quality  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory RaebareliDy. Chief Quality  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory, Raebareli

MCF/RBL





Modern Coach Factory Raebareli  
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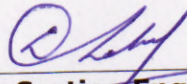
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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	195852/C
RAILWAY	ECR	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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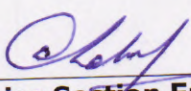
DATE:18.01.2017

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>AMIT ENGG.</b> On Board Sr no : <b>AE/USBC-1183</b> HT Panel Sr no : <b>AE/USBC-1171</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>2019/07/0010</b> Sr no.1 : <b>2722</b> Sr no.2 : <b>2708</b> Srno.CPA: <b>2019/06/213-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>KAVERI</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>VENTURLL CORPORATION</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>

  
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 : <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>WAVES</b> Sr no: <b>W4K5G 19164</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-2066</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>NEC</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthling 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>0119091329</b>	M/s : <b>KNORR</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : <b>HBL</b> Lug date : <b>07/19</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> <b>वरिष्ठ अनुभाग अभियन्ता</b>	<b>AWM(ELECT.)/MCF/RBL</b> <b>DYCEE/PLG/MCF/RBL</b>

गुणवत्ता नियंत्रण  
आपरेडिंका० / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./LLJ/RBL

स० कार्य प्रबन्धक / विद्युत  
आपरेडिंका० / रायबरेली  
A.W.M./Electrical/MCF/RBL