



# 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/2019-20/474

RLY	E	C	R	-	Coach No.	1	9	5	8	5	9	/	C	DATE OF DISPATCH	2	0	-	0	7	-	1	9
-----	---	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	Sr.DME/C&W/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	1	7	FUR.NO.	LSCNG-243
-------------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

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 features :

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S-ACME INDIA NDLS
B.	Anti slip friendly Grab Bar	M/S-ACME INDIA NDLS
C.	Provision of Health Faucet in lavatories	M/S-ACME INDIA NDLS
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S-ACME INDIA NDLS
E.	GFRE ceiling instead of NFTC	M/S-ACME INDIA NDLS
F.	DGFRP panels instead of LP panels	M/S-ACME INDIA NDLS
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S-ACME INDIA NDLS
H.	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) 1097 (NPPE) 2) 1103 (PPE)

**6. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S- PENNAR IND HYD	--
		NPP END M/S- PENNAR IND HYD	--
	Complete	MCF/RBL	97217
2.	Lav. side wall	M/S- MIDAS GUJRAT	LAV.1 - LAV.2 -
		M/S- MIDAS GUJRAT	LAV.3 - LAV.4 -
3.	Side wall	MCF/RBL (CONTRACTOR V4U)	36/01
		MCF/RBL (CONTRACTOR V4U)	36/02
4.	End wall	PP END M/s- NECHD CDG	--
		NPP END M/s- NECHD CDG	--
5.	Roof	MCF/RBL	10
6.	Centre Buffer Coupler	M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.	PP END 9836 NPP END 9847

**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	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	89/87	25.06.19
2.	Insulation			Satisfactory		

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

रायबरेली कारखाना  
महानगर विकास  
महानगर विकास  
महानगर विकास





	MODERN COACH FACTORY, RAEBARELI	DOC NO.: MCF/RBL/QMF 8002
	आधुनिक रेल डिब्बा कारखाना, रायबरेली	REV NO.: 01
		DATE: 16.05.2016

**ROLLING STOCK CERTIFICATE**  
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/474

RLY	E	C	R	Coach No.	1	9	5	8	5	9	/	C	-	DATE OF DISPATCH	2	0	0	7	2	0	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	Sr.DME/C&W/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	1	7	FUR .NO	LSCN-G-243
----------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	------------

**9. DETAIL OF BOGIES:**

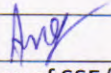
ITEMS	NPP Side				PP Side			
Bogie No	190982				190981			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-LS5-1061				MCF/RBL-LS5-1055			
Bolster no.	AMIT-289				AMIT-285			
Axle No	19 P- 2495 RWF		19 P- 2029 RWF		19 P- 1515 RWF		19 P- 1786 RWF	
Wheel Dia	917.648	917.606	917.628	917.567	917.672	917.618	917.652	917.606
Wheel Disc No	TZ 03-19 30821-9MI0	TZ 05-18 19627-8PN1	TZ 03-19 30024-9ML3	TZ 03-19 30023-9ML3	TZ 03-19 30820-9MK5	TZ 12-18 15469-8XH6	TZ 05-18 24264-8PR8	TZ 05-18 24263-8PP7
R.B. Nos.	02-19 04841	02-19 03685	02-19 04828	03-19 36108	02-19 04309	02-19 00282	02-19 03088	02-19 01251
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.19-06 1854	TAYAL & CO. Sr.NO.19-06 1869	TAYAL & CO. Sr.NO.19-06 1899	TAYAL & CO. Sr.NO.19-06 1904

**11. TRACEABILITY OF BOGIE ITEMS :-**

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17655,17675	17662,17665
2.	Primary outer Spring	CMRSK	06-16 07W(1087,994,468,591)	06-16 07W(278,344,1050,627)
3.	Primary Inner Spring	CMFSK	05-19 1036-559(30,292,29,37)	05-19 1036-559(31,25,52,59)
4.	Primary Damper	KONI	03-19 (00778,00219,02641,00727)	03-19 (00697,01268,01050,00754)
5.	Secondary Damper	IAI	06-19 (256831,256893)	06-19 (256884,256877)
6.	Lateral Damper	GABRIEL	11-18 1005	11-18 1010
7.	Brake Cylinder	KBI	B(3903,3245,3162,3901)K-29	B(3915,3165,3084,3894)K-29
8.	Brake Caliper	KBI	B(1555,1667,1542,1578)K-29	B(1536,1548,1547,1535)K-29
9.	Brake Disc	FAV	06-19 (5625,5618,5528,5478)133561-300-1	06-19 (5477,5122,5623,5624)133561-300-1
10.	Ball Joint Control Arm	BASANT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	06-19 B 1846,06-19 B 1749	13-19 B 1744,13-19 B 1780
17.	Check Valve	KNORR	03-19 17621	03-19 17584
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	300119-1,310119-2,RVE,090219-4	050219-4,290119-2,RVE,020219-3
22.	Control Arm Lower	RVE	RVE,260219-2,RVE,070119-3	RVE,280219-3,RVE,280119-3
23.	Phonic Wheel	KNORR	K-03-19	K-03-19

  
 Signature of SSE/Bogie/QC





# 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/2019-20/474

RLY	E	C	R	-	Coach No.	1	9	5	8	5	9	/	C	DATE OF DISPATCH	2	0	-	0	7	-	1	9
-----	---	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	Sr.DME/C&W/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	1	7	FUR.NO.	LSCNG-243
-------------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

**12. TRACEABILITY OF FURNISHING ITEMS:**

SNO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	F19118 B
2.	Distribution valve	M/S FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	19065642 B
3.	Pull box	M/S- KBI, FARIDABAD	
4.	fiba	M/S- KBI, FARIDABAD	PP-7437/29 NPP-7122/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/S- SHRI RAM PANEL PUNJAB	
8.	PVC	M/s ACME INDIA, NDLS	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
11.	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
12.	Gangway bridge mounting (PPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
13.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
14.	Body Side Window	M/s- ACME INDIA NDLS	
15.	Emergency Window	M/s- ACME INDIA NDLS	
16.	Hopper Window	M/s- ACME INDIA NDLS	
17.	Side panel	M/s- ACME INDIA NDLS	
18.	Roof ceiling	M/s- ACME INDIA NDLS	
19.	Door way ceiling	M/s- ACME INDIA NDLS	
20.	Partition frame	M/s- SARITA HITECH UMB	
21.	Partition pillar	M/s- ACME INDIA NDLS	
22.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
25.	Bio Tank	M/s- FLASH FORGE (P)LTD. VIZAG	
26.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
27.	Under Slung Water Tank( 2X685L)	M/s- RAIL FAB KXH	
28.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
29.	Flexible Faucet	M/s- ACME INDIA NDLS	
30.	Lotah Filler Tap	M/s- ACME INDIA NDLS	
31.	Controlled Discharge Tap	M/s- HINDWARE ,(HSIL LTD) GURGAON	
32.	Lavatory Doors	M/s- KALSI LUDHIYANA	
33.	Seat & Berth	M/s- ACME INDIA NDLS (DURABLE POLYMER)	
34.	Snack Table	N/A	

*Sema*  
SSE/QC/MCF/RBL

गुणवत्ता विभाग  
रेलवे, रायबरेली (लाभगंज)



MCF/RBL





# 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/2019-20/474

RLY	E	C	R	-	Coach No.	1	9	5	8	5	9	/	C	DATE OF DISPATCH	2	0	-	0	7	-	1	9
-----	---	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	Sr.DME/C&W/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	1	7	FUR.NO.	LSCNG-243
-------------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

13. MODIFICATION (IF ANY) : Partition frame &amp; Partition pillar

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	

**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 qualityrcfrbl@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

वरिष्ठ गुणवत्ता विभाग  
गुणवत्ता विभाग  
रेडिओ, रायबरेली (लाइवज)

आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory Raebareli

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







Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

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	195859/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





Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

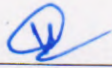
DATE:18.01.2017

PAGE 2 OF 3

**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>SSK</b> On Board Sr no : <b>2019/05/016</b> HT Panel Sr no : <b>2019/05/046</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>2019/06/0188</b> Sr no.1 : <b>19060613</b> Sr no.2 : <b>19060531</b> Srno.CPA: <b>2019/06/160-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>DR AUTO</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>RECORD/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>IMT CABLES</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>RT VISION</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**  
**Modern Coach Factory Raebareli**





Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

PAGE 3 OF 3

**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : <b>AECO</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>ISGPL</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>M.B &amp; COMPANY</b> Sr no: <b>201906125</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-1963</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>MAA LAXMI INDUSTRIES</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 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>FAIVELEY</b> Sr no : <b>10/19/385</b>	M/s : <b>FAIVELEY</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>AMARA RAJA</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> <b>वरिष्ठ अनुभाग अभियन्ता</b>	<b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b>

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