MCF/RBL

	Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, 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/2019-20/902

RLY	C	R	-	Coach No.	1	9	7	1	1	4	/	C	DATE OF DISPATCH	1	7	-	1	0	-	1	9

DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	1	FUR.NO.	LSCN-1263

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) 1105 (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-RAIL TECH	44			
			NPP END	M/s-RAIL TECH	44			
		Complete	M/s-RAIL TECH		44			
2.	Lav. side wall		M/s-MIDAS GUJRAT		LAV.1	-	LAV.2	-
			M/s-MIDAS GUJRAT		LAV.3	-	LAV.4	-
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)		182/01			
		RH SIDE	MCF/RBL(CONTRACTOR V4U)		182/02			
4.	End wall	PP END	M/S-SIPL PALWAL		---			
		NPP END	M/S-SIPL PALWAL		---			
5.	Roof		M/s-ECBT		287			
6.	Centre Buffer Coupler		M/s- FRONTIER		PP END	07P2	NPP END	06P2

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/cm². ➢ Max. pressure in BC ➢ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm². OK	07 Sec. 3.0 kg/cm² OK
2.	Insensitivity	➢ Exhaust BP @ 0.3 kg/cm²/min.	No brake application	OK
3.	Sensitivity	➢ Exhaust BP @ 0.1 kg/cm²/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	89/88	07.09.19
2.	Insulation	Satisfactory				

SSE/QC/MCF/RBL

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

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/902

RLY	C	R	-	Coach No.	1	9	7	1	1	4	/	C	-	DATE OF DISPATCH	1	7	1	0	2	0	1	9

DISPATCH	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	1	FUR .NO	LSCN-1263

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191211				191212			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-LS5-1149				MCF/RBL-LS5-1128			
Bolster no.	AMIT-497				AMIT-469			
Axle No	19 R – 1762 RWF		19 P– 2911 RWF		19 P – 1456 RWF		19 R– 2182 RWF	
Wheel Dia	917.47	917.559	917.702	917.554	917.733	917.576	917.466	917.526
Wheel Disc No	TZ 06-19 57367-9QK6	TZ 06-19 54211-9QI1	TZ 06-19 57250-9PH8	TZ 06-19 58472-9PI6	TZ 06-19 54233-9QI1	TZ 06-19 57251-9PH8	TZ 06-19 57653-9QI9	TZ 06-19 30227-9MK5
R.B. Nos.	07-19-21589	07-19-19731	07-19-20973	07-19-21874	07-19-21078	07-19-19433	07-19-21337	07-19-19466
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.19-07 0347	TAYAL & CO. Sr.NO.19-07 2363	TAYAL & CO. Sr.NO.19-07 2432	TAYAL & CO. Sr.NO.19-07 2364

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16455,16461	16469,16464
2.	Primary outer Spring	CMFSK	07-19 1100-551(533,526,6,448)	07-19 1100-551(531,119,524,226)
3.	Primary Inner Spring	CMGBD	07-19 F06-119(23,774,791,1017)	07-19 F06-119(517,589,40,519)
4.	Primary Damper	KONI	03-19 (04516,04548,02006,01154)	03-19 (04526,06199,04476,05454)
5.	Secondary Damper	KONI	04-19 (00609,01182)	04-19 (00951,01872)
6.	Lateral Damper	GABRIEL	11-18 1311	11-18 1308
7.	Brake Cylinder	KBI	B(6824,5843,5845,6819)K-29	B(6817,5847,5800,6742)K-29
8.	Brake Caliper	KBI	B(4000,4074,4072,3993) -29	B(3991,4077,4039,3971) 29
9.	Brake Disc	KBI	24193649 0021-28/19,24193649 0012-28/19 24195447 0070-30/19,24193659 0066-30/19	24195445 0044-30/19,24193659 0072-30/19 24193649 0042-28/19,24193649 0049-28/19
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR/GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	KNORR	16-19-A-10276,16-19-A-10287	16-19-A-10291,16-19-A-10319
17.	Check Valve	KNORR	02-19-16546	02-19-16307
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR, SARITA/**BASANT**		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	040619-2,220619-2,270619-3,040619-2	220619-2,040619-2,0030,0114
22.	Control Arm Lower	RVE	040619-2,250619-2,250619-2,150619-2	180619-2,030619-2,018,0128
23.	Phonic Wheel	FAV	FT/KEP/1	FT/KEP/1

Signature of SSE/Bogie/QC

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	Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, 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/2019-20/902

RLY	C	R	-	Coach No.	1	9	7	1	1	4	/	C	DATE OF DISPATCH	1	7	-	1	0	-	1	9

DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	1	FUR.NO.	LSCN-1263

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3666 36/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8786
4.	FIBA	M/S- KBI, FARIDABAD	PP-7530/29 NPP-7693/29
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-GI NATURAL INDS KOLKATA	
8.	PVC	M/s-GI NATURAL INDS KOLKATA	
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 STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/s-GI NATURAL INDS KOLKATA	
15.	Emergency Window	M/s-GI NATURAL INDS KOLKATA	
16.	Hopper Window	M/s-GI NATURAL INDS KOLKATA	
17.	Side panel	M/s-GI NATURAL INDS KOLKATA	
18.	Roof ceiling	M/s-GI NATURAL INDS KOLKATA	
19.	Door way ceiling	M/s-GI NATURAL INDS KOLKATA	
20.	Body Side Door 1,3	M/S- SUKATA INDS, CDG	
21.	Body Side Door 2,4	M/S- JVR INDS ,LDH	
22.	Vestibule Door(PPE)	M/S- HANSPAL, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL, KXH	
24.	Bio Tank with pressurized flushing	M/s- FLASH FORGE (P)LTD. VIZAG	
25.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/S- RAIL ENG.MOHALI	
27.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
28.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Lavatory Doors	M/s-GI NATURAL INDS KOLKATA	
32.	Seat & Berth	M/S-TWPL KOLKATA	
33.	RFID	M/s-TECH SOLUTION GURGAON	Sr.104335,104336

SSE/QC/MCF/RBL

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गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

MCF/RBL

	Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, 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/2019-20/902

RLY	C	R	-	Coach No.	1	9	7	1	1	4	/	C	DATE OF DISPATCH	1	7	-	1	0	-	1	9

DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	1	FUR.NO.	LSCN-1263

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:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
6. 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 यांत्रिक अभियन्ता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

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

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

SCN-1263

Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारख़ाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001 REV NO: 00 DATE:18.01.2017

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**	**197114/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

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : **HIND RECTIFIERS** On Board Sr no : **H 355 19 H 406** HT Panel Sr no : **H 355 19 H 418**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make : **DR AUTO** Sr no PA: **2019/09/0109** Sr no.1 : **19090086** Sr no.2 : **19090142** Srno.CPA: **2019/09/049-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 : **SSK/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: **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
Modern Coach Factory Raebareli

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:**W4K5H 19548**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make :**VIMAL** Sr no : **VTC 3089 LHB-2251**	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 earthling equipment. Make : **PRIME ELECT.**	EDTS101,REV-C,AM-1	**02 sets**
18.	Wheel Slide Protection System (WSP) Make : **KNORR** Sr no : **0119242161**	M/s : **KNORR**	**01 set**
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : **AMARA RAJA** Lug date : **01/19**	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 आ0रे0डि0का0 / लालगंज / रायबरेली S.S.E./Elect-QC/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