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/2019-20/1128

RLY	N	F	R	Coach No.	1	9	7	6	6	1	/	C	DATE OF DISPATCH	2	7	-	1	1	-	1	9

DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	0	FUR.NO.	LSCNG-294

1. Railway Board's Order No. : 2019/M(C)/142/2, Dated-21-11-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL

4. Special feature: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/s-ACME INDS NEW DELHI
B.	Anti slip friendly Grab Bar	M/s-ACME INDS NEW DELHI
C.	Provision of Health Faucet in lavatories	M/s-ACME INDS NEW DELHI
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/s-ACME INDS NEW DELHI
E.	GFRE ceiling instead of NFTC	M/s-ACME INDS NEW DELHI
F.	DGFRP panels instead of LP panels	M/s-ACME INDS NEW DELHI
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/s-ACME INDS NEW DELHI
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	
I	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) 1097 (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	211			
			NPP END	M/S-M.TECH	211			
		Complete	M/S-M.TECH		211			
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)		175/01			
		RH SIDE	MCF/RBL(CONTRACTOR V4U)		175/02			
4.	End wall	PP END	M/s-DTL PUNE		--			
		NPP END	M/s-DTL PUNE		--			
5.	Roof		M/s-ECBT		272			
6.	Centre Buffer Coupler		M/S- SANROK		PP END	13428	NPP END	13473

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	08 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-VIBGYAR	(SUPPLY & APPLY)	90/89	20.08.19
2.	Insulation	Satisfactory				

SSE/QC/MCF/RBL

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रे०डि०का०, रायबरेली (लालगंज)

	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/**2019-20/1128**

RLY	N	F	R	Coach No.	1	9	7	6	6	1	/	C	-	DATE OF DISPATCH	2	7	1	1	2	0	1	9

DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	0	FUR .NO	LSCN-G-294

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192331				192332			
Bogie Type	FIAT				FIAT			
Frame no.	SCI-2794				SCI-2799			
Bolster no.	SECPL-438				SECPL-431			
Axle No	19 S– 7630 RWF		19 S – 7617 RWF		19 S – 4555 RWF		19 S– 8007 RWF	
Wheel Dia	917.308	917.572	917.293	917.491	917.311	917.565	917.472	917.418
Wheel Disc No	TZ 07-19 68385-9RQ6	TZ 07-19 62630-9RL5	TZ 07-19 68242-9RQ6	TZ 07-19 72250-9RR2	TZ 07-19 68429-9RN2	TZ 07-19 67876-9RM6	TZ 07-19 68407-9RN2	TZ 07-19 67210-9RP1
R.B. Nos.	09-18 22879	09-18 21883	09-18 22212	09-18 21183	09-18 22335	09-18 21285	07-18 18152	09-18 21153
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 3836	TAYAL & CO. Sr.NO.19-09 3724	TAYAL & CO. Sr.NO.19-09 3737	TAYAL & CO. Sr.NO.19-09 3829

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17992,17994	18013,18004
2.	Primary outer Spring	CMFSK	10-19 1100-078 (56,61,52,43)	10-19 1100-078 (69,115,59,206)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (8,91,19,239)	10-19 1101-101 (213,232,233,79)
4.	Primary Damper	KONIC	03-19 (03664,03537,03817,04942)	03-19 (01292,03811,03414,03553)
5.	Secondary Damper	KONIC	04-19 (00375,00428)	04-19 (00469,00392)
6.	Lateral Damper	KONIC	04-19 03260	04-19 01807
7.	Brake Cylinder	KBI	B (6954,8559,8539,9652)K29	B (9647,8683,8586,9610)K29
8.	Brake Caliper	KBI	B (6570,6633,6632,6569)-29	B (6571,6634,6635,6527)-29
9.	Brake Disc	KBI	24203756 0016-42/19,24203753 0069-42/19 24203756 0059-42/19,24203756 0034-42/19	24203750 0050-41/19,24203757 0075-42/19 24203757 0021-42/19,24203757 0017-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	06-19 B - 6595,06-19 B -6148	06-19 B -7600,06-19 B -7586
17.	Check Valve	KNORR	19693	20216
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/**GMT**		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	280819-2,280819-3,280819-3,280819-2	280819-2,280819-3,280819-5,280819-2
22.	Control Arm Lower	RVE	280819-2,	280819-3, 280819-2, 280819-3, 280819-2,
23.	Phonic Wheel	KBI	K-05-19	K-05-19

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/2019-20/1128

RLY	N	F	R	Coach No.	1	9	7	6	6	1	/	C	DATE OF DISPATCH	2	7	-	1	1	-	1	9

DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	4	0	0	FUR.NO.	LSCNG-294

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S -FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	F19033B
2.	Distribution valve	M/S -FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	19055537B
3.	Pull box	M/S- KBI, FARIDABAD	
4.	FIBA	M/S- KBI, FARIDABAD	PP-9339/29 NPP-9273/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-TWPL MUMBAI	
8.	PVC	M/s-ACME INDS NEW DELHI	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KRP PUNE	
11.	UIC Vestibule (NPPE)	M/S-KRP PUNE	
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-ACME INDS NEW DELHI	
15.	Emergency Window	M/s-ACME INDS NEW DELHI	
16.	Hopper Window	M/s-ACME INDS NEW DELHI	
17.	Side panel	M/s-ACME INDS NEW DELHI	
18.	Roof ceiling	M/s-ACME INDS NEW DELHI	
19.	Door way ceiling	M/s-ACME INDS NEW DELHI	
20.	Partition frame	M/s-ACME INDS NEW DELHI	
21.	Partition pillar	M/s-ACME INDS NEW DELHI	
22.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
24.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
25.	Bio Tank	M/S- JSL LIFE STYLE LTD.	
26.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
27.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FAST MOHALI	
28.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
29.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
31.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
32.	Lavatory Doors	M/s-ACME INDS NEW DELHI	
33.	Seat & Berth	M/s-ACME INDS NEW DELHI (DUREABLE IND.LKO)	
34.	Snack Table	N/A	
35.	RFID	M/s-TECH SOLUTION GURGAON	Sr.104675,104680

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: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No. MCF/RBL/QC/RSC/2019-20/1128

RLY	N F R	Coach No.	19761 / C	DATE OF DISPATCH	27-11-19
DISPATCH TO	Sr.DME/DBRG	Type	LWSCN1	Shell No.	97400
FUR.NO.	LSCNG-294				

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

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:

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

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality-1
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

CJ-294

	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/HOG NON AC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	**LWSCN**	**SHELL/COACH NO**	**197661/C**
RAILWAY	**NFR**	**DATE OF DISPATCH**	

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/HOG NON AC SCN COACHES

01.	Switch board cabinet Make : **HIND RECTIFIERS** On Board Sr no : **H.355.19.H.363** HT Panel Sr no : **H.355.19.G.336**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make : **DR AUTO** Sr no PA: **2019/10/0111** Sr no.1 : **5894** Sr no.2 : **5876** Srno.CPA: **NIL-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 : **SALZER/SSK**	EDML 086,Rev-03, ITEM-01	**20**
06.	Fitment of Switch Plate Assly Corridor Side),Make : **SALZER**	EDML 086, Rev 03, ITEM-02	**20**
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: **ORIENT**	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 : **INTRA**	CC76289 & CC76443	**09**

Senior Section Engineer
Quality control / Electrical
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

11.	Battery fuse box +ve Make : **INDORAIL**	LW 71001,Alt-F	**01**
12.	Battery fuse box –ve Make : **ISGPL**	LW 71002,Alt-F	**01**
13.	Regulated battery charger Make : **PI ENGG.WORKS** Sr no: **PI-19080080**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make :**VIMAL** Sr no :**VTC 3089 LHB-2496**	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	**01**
15.	ZS coupling 400A/750V/03Ph/50hz. Make : **MAA LAXMI INDUSTRIES**	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 : **FAIVELEY** Sr no : **10686**	M/s : **FAIVELEY**	**01 set**
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : **HBL** Lug date : **06/19**	RDSO/pe/spec/ac-0009 rev-1-2008 amdt-1	**01 set**
20.	Battery box for LHB coaches. Make : **TECHNO**	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, Sr. Electrical Engineer / RCF / RBL