



Modern Coach Factory Raebareilly

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8062

REV NO: 01

DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/935

RLY	N	R	-	Coach No.	1	9	7	1	4	9	/	C	DATE OF DISPATCH	2	3	-	1	0	-	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	2	4	7	FUR.NO.	LSCN-1266
-------------	-----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

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) 1100 (NPPE) 2) 1097 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

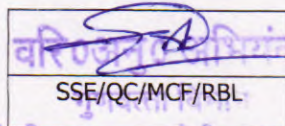
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S- RAIL TECH PVT.LTD. KXH	40
		NPP END M/S- RAIL TECH PVT.LTD. KXH	40
	Complete	M/S- RAIL TECH PVT.LTD. KXH	40
2.	Lav. side wall	M/s-MIDAS GUJRAT	LAV.1 - LAV.2 -
		M/s-MIDAS GUJRAT	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	145/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	145/02
4.	End wall	PP END M/S- RAIL TECH PVT.LTD. KXH	---
		NPP END M/S- RAIL TECH PVT.LTD. KXH	---
5.	Roof	M/S-KANSAL	21
6.	Centre Buffer Coupler	M/S- FRONTIER	PP END 03P2 NPP END 82P2

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 ² . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ±0.15 kg/cm ² . OK	07 Sec. 3.0 kg/cm ² OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm ² /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-GS	G.S.I.	90/87	21.09.19
2.	Insulation			Satisfactory		



SSE/QC/MCF/RBL

70डि०का०, रायबरेली (उ०प्र०)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, 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/2019-20/935

RLY	N	R		Coach No.	1	9	7	1	4	9	/	C	-	DATE OF DISPATCH	2	3	1	0	2	0	1	9
-----	---	---	--	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	Sr.DME/CHG/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	2	4	7	FUR .NO	LSCN-1266
----------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191561				191562			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS5-1224				MCF/RBL/LS5-779			
Bolster no.	SCI-281				SCI-270			
Axle No	19S - 5058 RWF		19S - 3539 RWF		19S - 4958 RWF		19S - 1281 RWF	
Wheel Dia	917.455	917.582	917.498	917.516	917.532	917.469	917.474	917.578
Wheel Disc No	TZ 06-19 57659-9QJ9	TZ 07-19 65776-9RQ0	TZ 06-19 57701-9QJ0	TZ 06-19 52597-9QH4	TZ 07-19 67468-9RQ7	TZ 07-19 64477-9RP4	TZ 06-19 54160-9QJ2	TZ 07-19 65774-9RQ0
R.B. Nos.	08-19 25761	08-19 24492	08-19 27280	08-19 23810	08-19 23833	08-19 24394	08-19 23448	08-19 27451
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 3741	TAYAL & CO. Sr.NO.19-08 3764	TAYAL & CO. Sr.NO.08-19 3745	TAYAL & CO. Sr.NO.08-19 3765

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17046,17047	17037,17041
2.	Primary outer Spring	CMSTL	07-19 07A (3517,3516,2817,1916)	07-19 07A (1881,1863,2132,1930)
3.	Primary Inner Spring	CMFSK	08-19 11010-64 (196,1026,450,594)	08-19 11010-64 (316,451,159,24)
4.	Primary Damper	KONI	03-19 (6518,6813,07873,06727)	03-19 (07935,02033,07838,06794)
5.	Secondary Damper	KONI	04-19 (00591,00789)	04-19 (00787,00542)
6.	Lateral Damper	KONI	04-19 00789	04-19 00789
7.	Brake Cylinder	KBI	B(8709,7875,7874,8712)K29	B(8706,7876,7819,8763)K29
8.	Brake Caliper	KBI	B(5712,5967,5966,5713)-29	B(5710,5969,5940,5791)-29
9.	Brake Disc	FAV	06-19(6199,6200,6121,6120)D 133561-300	06-19(6114,6115,6201,6198)D 133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JL		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1904,1904	1904,1904
17.	Check Valve	ESCORT	1904	1904
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/sf		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	300719-1,300719-1,290719-1,290719-1	300719-1,290719-1,290719-1,290719-1
22.	Control Arm Lower	RVE	240719-2,030819-3,030819-3,030819-3	030819-1,020819-3,240719-2,030719-4
23.	Phonic Wheel	KBI	K-08-19	K-09-19

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

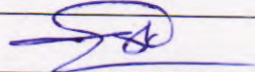
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/935

RLY	N	R	-	Coach No.	1	9	7	1	4	9	/	C	DATE OF DISPATCH	2	3	-	1	0	-	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	2	4	7	FUR.NO.	LSCN-1266
-------------	-----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3723 37/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	
4.	FIBA	M/S- KBI, FARIDABAD	2019 J 8898
			PP-7645/29
			NPP-7529/29
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-G.I. NATURAL KOLKATA	
8.	PVC	M/s-G.I. NATURAL KOLKATA	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/s-KIRAN RUBBAR PRODUCT PUNE	
11.	UIC Vestibule (NPPE)	M/s-KIRAN RUBBAR PRODUCT PUNE	
12.	Gangway bridge mounting (PPE)	M/s-RAKESH IRON KXH	
13.	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON KXH	
14.	Body Side Window	M/s-G.I. NATURAL KOLKATA	
15.	Emergency Window	M/s-G.I. NATURAL KOLKATA	
16.	Hopper Window	M/s-G.I. NATURAL KOLKATA	
17.	Side panel	M/s-G.I. NATURAL KOLKATA	
18.	Roof ceiling	M/s-G.I. NATURAL KOLKATA	
19.	Door way ceiling	M/s-G.I. NATURAL KOLKATA	
20.	Body Side Doors	M/s- JVR INDS, LUDHIYANA	
21.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
22.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
23.	Bio Tank with pressurized flushing	M/S- JSL LIFE STYLE LTD. BAHADURGARH	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S RAIL FAB. KAPURTHALA	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s-PEARL PVT. LTD.	
28.	Flexible Faucet	M/s-PEARL PVT. LTD.	
29.	Lotah Filler Tap	M/s-PEARL PVT. LTD.	
30.	Lavatory Doors	M/s-G.I. NATURAL KOLKATA	
31.	Seat & Berth	M/S- TWPL INDS MUMBAI	
32.	Snack Table	N/A	
33.	RFID	M/s-TECH SOLUTION GURGAON	Sr.104349,104350


SSE/QC/MCF/RBL
वरिष्ठ अनुसंधान अधिकारी

गुणवत्ता विभाग
रेडिओकार, रायबरेली (लालगंज)





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/2019-20/935

RLY	N	R	-	Coach No.	1	9	7	1	4	9	/	C	DATE OF DISPATCH	2	3	-	1	0	-	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	2	4	7	FUR.NO.	LSCN-1266
-------------	-----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

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:

- 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


गुणवत्ता विभाग
रेडिओका, रायबरेली (लालनग)

यंत्रिक 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



MCF/RBL

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

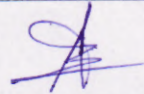
PAGE 1 OF 3

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	197149/C
RAILWAY	NR	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

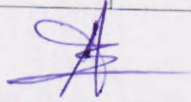
DATE:18.01.2017

PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/09/386 HT Panel Sr no : 2019/09/388	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/0052 Sr no.1 : 5897 Sr no.2 : 5877 Srno.CPA: sr no - 2019/09/030-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : VGS	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 : RECORD /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



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 : INDORAIL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19493	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2281	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 : SYSTEMS	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : DARSHAN ENTERPRISES.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0118380274	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 08/19	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 आपरेटिंग/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