



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/2019-20/1678

RLY	SWR	COACH NO	201631/C	DATE OF DISPATCH	20-Feb-20
Type	LWSCN1	Shell No.	97823	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	LSCN-1463

1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-03-06-2019
2. Tare Weight of Coach : 41.24 Tonnes
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

## 4. Special feature:

A Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI &amp; Faiv.) letter no. MC/LHB/Brake, DT. 27.09.18

## 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	NPP / PP 1095/1095

## 6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-PIL	128
	Front Part	NPP END M/S-AMIT ENGG.	66
	Complete	MCF/RBL-AIRCON	97823
2	Lav. side wall	M/S-DTL PUNE	LAV.1
		M/S-DTL PUNE	LAV.4
3	Side wall	LH SIDE MCF/RBL(CONT. V4U)	439
	RH SIDE	MCF/RBL(CONT. V4U)	439
4	End wall	PP END M/S-RAIL TECH KXH	
	NPP END	M/S-RAIL TECH KXH	
5	Roof	M/S-DTL PUNE	47
6	Centre Buffer Coupler	M/s-SANROK	PP 15217 NPP 15187

## 7. AIR BRAKE 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> .	6 - 10 sec.	7 sec
		Max. pressure in BC	3.0 ± 0.15 kg/cm <sup>2</sup> .	3.0 kg/cm <sup>2</sup>
		All Brake are applied	OK	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	GSI	M/S-GSI	76/95	20-Feb-20
2	Insulation			Satisfactory		

*(Signature)*  
SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता  
गुणवत्ता विभाग  
रेलवे डिपार्टमेंट, रायबरेली (लालगंज)







MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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## ROLLING STOCK CERTIFICATE

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RLY	S	W	R	Coach No.	2	0	1	6	3	1	/	C	-	DATE OF DISPATCH	2	0	0	2	2	0	2	0
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DISPATCH	Sr.DME/MYS	Type	L	W	S	C	N	1	Shell No.	9	7	8	2	3	FUR.NO	LSCN-1463
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## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193480				193479			
Bogie Type	FIAT				193479			
Frame no.	MCF/RBL-2278				FIAT			
Bolster no.	V.S-565				MCF/RBL-2289			
Axle No	20 T - 8699 RWF				MCF/RBL-2011			
Wheel Dia	917.446	917.459	917.335	917.516	917.462	917.509	917.422	917.475
Wheel Disc No	TZ 11-19 78627-9WG1	TZ 06 -19 53234-9QI5	TZ 04-19 34152-9MI3	TZ 04 -19 34158-9MJ3	TZ 11-19 84644-9VD3	TZ 11-19 78626-9WG1	TZ 11-19 53232-9QI5	TZ 11-19 51322-9PI9
R.B. Nos.	12-19 44386	12-19 43492	12-19 33836	12-19 44279	11-19 44532	11-19 43423	11-19 44332	11-19 33370
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

## 9. 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.	CMFSK 12-19 F09-151-558	CMAFJ 12-19 5100-151	CMFSK 12-19 F09-152-611	CMAFJ 12-19 5100-225	CMFSK 12-19 F09-152-673	CMFSK 12-19 5100-202	CMFSK 12-19 F09-152-546	CMFSK 12-19 5100-132
Compressed Ht. at Tested Load	513	472	514.5	472	515.5	472	516	471
Alignment deviation (mm)	9	5	9	5	13	5	11	5

## 10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	273400,266944	266923,266919
2.	Primary outer Spring	CMGBD	10-19 F07-894-(495,558,500,498)	10-19 F07-873(529,496,788,708)
3.	Primary Inner Spring	CMGBD	10-19 F06-872(298,201,241,274)	10-19 F02-842(255,580,876,493)
4.	Primary Damper	IAI	12-19 (288158,288523,288193,287212)	12-19 (288021,286278,287008,267718)
5.	Secondary Damper	KONI	04-19 (00708,00754)	04-19 (01177,00363)
6.	Lateral Damper	IAI	11-19 280601	11-19 280535
7.	Brake Cylinder	KBI	C (3456,2391,2390,3454)-K-29	C(3604,2236,2244,3602)-K-29
8.	Brake Caliper	KBI	B 9832,9834)-29, C(0072,0079)-29	B (9906,9907)-29, C(0011,0016)-29
9.	Brake Disc	FAV	01-20 (141,139,142,140)D133561-300	01-20 (968,965,966,967)D133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RNG		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	GMT		
18.	Anti roll bar Make	SARITA		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RV	151119-2,161119-3,221119-3,171119-3	231119-2,211119-1,241119-3,231119-2
22.	Control Arm Lower	RV	2610119-2,231119-2,251119-3,221119-4	221119-1,231119-5,231119-5,221119-2
23.	Phonic Wheel	--	K-10-19, K-10-19	K-01-20, K-01-20

Signature of SSE/Bogie/QC







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Type	LWSCN1	Shell No.	97823	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	LSCN-1463

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	4332 48/19
2	Distribution valve	M/s-KBI	2019L9551
3	Pull box	M/s-KBI	
4	FIBA	NA	
5	Foot Step	M/S- SUPER SPARK PVT.LTD.FARIDABAD	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-A.B.COMPOSITE KOLKATA	
8	PVC	M/S-A.B.COMPOSITE KOLKATA	
9	Lavatory inlay	M/S-SEEMA INDS BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
12	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
13	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
14	Body Side Window	M/S-A.B.COMPOSITE KOLKATA	
15	Emergency Window	M/S-A.B.COMPOSITE KOLKATA	
16	Lavatory/hopper Window	M/S-A.B.COMPOSITE KOLKATA	
17	Side panel	M/S-A.B.COMPOSITE KOLKATA	
18	Roof Ceiling	M/S-A.B.COMPOSITE KOLKATA	
19	Door way Ceiling	M/S-A.B.COMPOSITE KOLKATA	
20	Body Side Doors	M/S-JVR LDH	
21	Vestibule Door(PPE)	M/s- JBM FARIDABAD	
22	Vestibule Door(NPPE)	M/s- JBM FARIDABAD	
23	Bio Tank	M/s-JSL LIFE STYLE	
24	Presurized Flushing(Elect.pneumatic)	M/s-IMI	
25	Auxiliary Water Tank	M/s-OASIS	
26	Under Slung Water Tank ( 2X685L)	M/s-RAIL TECH KXH+SHIVALIK FAST MOHALI	
27	Under Slung Water Tank (1x685 L)	M/s-SHIVALIK FAST MOHALI	
28	Health Faucet	M/S-KAPCO VALVES JUC	
29	Lotah Filler Tap	M/S-KAPCO VALVES JUC	
30	Controlled discharge tap	M/s-EAUSER PVT LTD	
31	Lavatory Doors	M/S-A.B.COMPOSITE KOLKATA	
32	Seat & Berth	M/S-HINDUSTAN FIBRE VADODARA	
33	RFID	NA	

*[Signature]*

SSE/QC/MCF/RBL

परिपत्रक ०० अभियंता

गुणवत्ता विभाग

रेडिंका ०, रायबरेली (नालगंज)







Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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ROLLING STOCK CERTIFICATE

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RLY	SWR	COACH NO	201631/C	DATE OF DISPATCH	20-Feb-20
Type	LWSCN1	Shell No.	97823	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	LSCN-1463

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, curtain 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 30months 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

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.

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SSE/QC/MCF/RBL  
वरिष्ठ अभियन्ता/गुणवत्ता  
गुणवत्ता विभाग  
रेल डिब्बा कारखाना, रायबरेली (नालगंज)

SME/AME/QC/MCF/RBL  
वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता  
Senior Mechanical Engineer/Quality  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory Raebareli

Dy.COM/MCF/RBL  
उप मुख्य गुणवत्ता प्रबन्धक  
Dy. Chief Quality Manager  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory Raebareli







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**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		201631/C	
RAILWAY		SWR	ELECT.FIT DATE		19-02-2020	FUR.NO	SCN-1463
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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**FOR ELECTRICAL ITEMS**

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

01.	Switch board cabinet Make : <b>ABROL</b> On Board Sr no : <b>2019/11/447 B</b> HT Panel Sr no : <b>2019/11/444 A</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>20/01/0023</b> Sr no.1 : <b>19110302</b> Sr no.2 : <b>19110366</b> Srno.CPA: sr no: <b>2019/10/0019-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>DR AUTO</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Passenger Alarm Cum Indication Light (PACIL) Make: <b>ELECTROWAVES</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>LIGHT ENGG.</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>DR AUTO</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>ENSAVE</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>RT VISION</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/HOG NON AC SCN COACHES**

11.	Battery fuse box +ve Make : <b>RICHMOND</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>RICHMOND</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>ELECTRONIC EQUIPMENT COMPANY</b> Sr no: <b>12190072</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-2920</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>MV ELECTRO</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthling equipment. Make : <b>PRIME ELECT.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119362727</b>	M/s : <b>KNORR</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make: <b>HBL</b> Lug date: <b>11/19</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> परिसर अनुमता अभियन्ता गुणवत्ता नियंत्रण	 <b>AWM(ELECT.)/MCF/RBL</b> <b>SSE(P)/MCF/RBL</b> परिसर विद्युत अभियन्ता
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