



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/2020-21/724

RLY	WCR	COACH NO	205165/C	DATE OF DISPATCH	10-Nov-20
Type	LWSCN1	Shell No.	20G254	DISPATCH TO	Sr.DME/JBP
				FUR.NO.	LSCN-1737

1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-09.07.2020
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 & 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 1105/1097

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front Part	PP END M/S-NE
		NPP END	M/S-OMAX AUTO
	Complete	MCFRBL V4U-TECHIE	20G254
2	Lav. side wall	M/S-ATHANCY ALD	LAV.1
		M/S-ATHANCY ALD	LAV.4
3	Side wall	LH SIDE	MCFRBL-V4U-CONT. 59
		RH SIDE	MCFRBL-V4U-CONT. 59
4	End wall	PP END	M/S-SIPL
		NPP END	M/S-SIPL
5	Roof	MCFRBL CONT.	108
6	Centre Buffer Coupler	M/S-FRONTIER	PP 102P2 NPP 34P1

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.	8 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	K.NEROLAC	M/S-K.NEROLAC (S&A)	88/88	4-Sep-20
2	Insulation			Satisfactory		

*Rama*  
16/01/2021  
SSE/QC/MCF/RBL

परिष्कारित जर्मनी  
गुणवत्ता दिमाग  
रेलवे के लिए सर्वश्रेष्ठ







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/2020-21/-724

RLY	W	C	R	Coach No.	2	0	5	1	6	5	/	C	-	DATE OF DISPATCH	1	0	1	1	2	0	2	0
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DISPATCH	Sr.DME/JBP	Type	L	W	S	C	N	1	Shell No.	2	0	G	2	5	4	FUR .NO	LSCN - 1737
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**9. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	201311				201312			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL -2192				MCF/RBL -2187			
Bolster no.	MCF/RBL -2449				MCF/RBL -2441			
Axle No	20 W -	1910 RWF	20 Y-	8080 RWF	20 Y -	7722 RWF	20 Y -	8215 RWF
Wheel Dia	917.622	917.514	917.577	917.532	917.516	917.469	917.582	917.523
Wheel Disc No	TZ 03-19 32492-90F1	TZ 04-19 33870-90F4	TZ 12-19 14427-9WR0	TZ -11-19 87596-9VC2	TZ 04-19 34042-90I6	TZ 04-19 34044-90I6	TZ 04-19 34041-90I6	TZ 12-18 18893-9WR3
R.B. Nos.	11-19 42159	12-19 36046	12-19 38060	12-19 46076	12-19 45513	12-19 38680	12-19 38713	11-19 42019
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- 06-20 0590	TAYAL & CO. Sr. NO- 06-20 0575	TAYAL & CO. Sr. NO- 06-20 0637	TAYAL & CO. Sr. NO- 06-20 0515

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

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	304312,304489	303923,304160
2.	Primary outer Spring	CMAFJ	03-20 1100(178,298,406,421)	03-20 1100(312,12,316,426)
3.	Primary Inner Spring	CMAFJ	03-20 1101(191,260,237,185)	03-20 1101(189,337,196,180)
4.	Primary Damper	IAI	06-20 (320081,321586,320408,321408)	06-20 (320988,321367,321625,320788)
5.	Secondary Damper	IAI	01-20 (302162,302078)	01-20 (302160,302207)
6.	Lateral Damper	IAI	11-19 283703	11-19 283607
7.	Brake Cylinder	KBI	C(9605,8039,9908,9606)K29	C(9608,8058,8051,9610)K29
8.	Brake Caliper	KBI	C(5175,5216,5214,5176)-29	C(5177,5212,5211,5178)-29
9.	Brake Disc	FAV	08-20 (3456,4093,3695,3694)-D133561-300	08-20 (3693,4013,4016,4014)-D133561-300
10.	Ball Joint Control Arm	BASANT/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.	Leveling Valve	ESCORT	1912,1912	1912,1912
17.	Check Valve	ESCORT	1912	1912
18.	Anti roll bar Make	SARITA		
19.	Roll Link make	RF/GMT		
20.	Fork make	RF		
21.	Control Arm Upper	SF(SARITA)	192,408,1188,152	119,156,SF,132
22.	Control Arm Lower	SF(SARITA)	171,128,153,157	123,153,158,52
23.	Phonic Wheel	KBI	01-20 640209	05-20

Signature of SSE/Bogie/QC





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Type	LWSCN1	Shell No.	20G254	DISPATCH TO	Sr.DME/JBP
				FUR.NO.	LSCN-1737

## 12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	6037 33/20
2	Distribution valve	M/s-KBI	2020H12221
3	Pull box	M/s-KBI	
4	FIBA	M/s-FAIVELEY	H20046/H20152
5	Foot Step	M/S- FABRICON KOLKATA	
6	Decoupling arrangement	M/S-PULSAR KOLKATA	
7	Floor board	M/S-SHREE RAM PNL	
8	PVC	M/S-RESPONSIVE INDS DELHI	
9	Lavatory inlay	M/S-SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S-ELASTOMER MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER MUMBAI	
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-SHATABDI SAFTEY GLASS VADODARA	
15	Emergency Window	M/S-SHATABDI SAFTEY GLASS VADODARA	
16	Lavatory/hopper Window	M/S-SHATABDI SAFTEY GLASS VADODARA	
17	Side panel	M/S-HFGW VADODARA	
18	Roof Ceiling	M/S-A.B COMPOSITE	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors 2,4	M/s-JVR LDH	
	Body Side Doors 1,3	M/s-JBM FARIDABAD	
21	Vestibule Door(PPE)	M/s-KALSI LDH	
22	Vestibule Door(NPPE)	M/s-KALSI LDH	
23	Bio Tank	M/s-JSL LIFE STYLE	
24	Presurized Flushing(Elect.pneumatic)	M/S-IMI	
25	Auxiliary Water Tank	M/s-SHIVALIK FAST. MOHALI	
26	Under Slung Water Tank ( 2X685L)	M/s-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-AGMECO LTD	
31	Lavatory Doors	M/S-JR JUC(1,3)+EEPL LDH(2,4)	
32	Seat & Berth	M/S-OVPL SILICON MUMBAI	
33	Ventury grill	NIL	
34	RFID	NIL	

*Reema*  
46/01/2021  
SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठान अभियंता  
मुख्यता विभाग  
रेलवे कारखाना, रायबरेली (लालमंजरी)





# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

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Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/724

RLY	WCR	COACH NO	205165/C	DATE OF DISPATCH	10-Nov-20
Type	LWSCN1	Shell No.	20G254	DISPATCH TO	Sr.DME/JBP
				FUR.NO.	LSCN-1737

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
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### 16. WARRANTY:

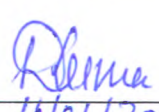
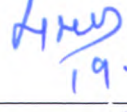
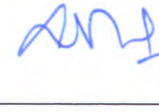
S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. ( items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months from the date of supply of material whichever is earlier.

### NOTE:

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 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.

 16/01/2020 SSE/QC/MCF/RBL	 19.01.2021 SME/AME/QC/MCF/RBL सहायक यांत्रिक इंजीनियर Asst. Mechanical Engineer आ. रे. डि. का. रायबरेली MCF, RBL	 19/1/2021 Dy. CQM/MCF/RBL उप मुख्य गुणवत्ता प्रबन्धक Dy. Chief Quality Manager
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वरिष्ठ अनु० अभियंता  
गुणवत्ता विभाग  
रेल डिब्बा कारखाना, रायबरेली (लालगंज)

आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory, Raebareli





Modern Coach Factory Raebareli  
आधुनिकरेलडिब्बाकारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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DATE: 29.06.2020


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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.						
TYPE COACH		LWSCN		SHELL/COACH NO		205165/C
RAILWAY		WCR	ELECT. FIT DATE	07-11-2020	MCF EUR. NO.	LSCN-1737
Sr. no.	Description of tests					Remarks
1.	PUMP EQUIPMENTS					OK
2.	LIGHTS, NL,LAP CHARGING SOCKETS					OK
3.	WORKING OF ACCIDENTAL,EMERGENCY LIGHTS.					OK
4.	RAILWAY CARRIAGE FAN					OK
5.	WHEEL SLIDE PROTECTION SYSTEM ( WSP )					OK
6.	WORKING OF 9 KVA TRANSFORMER					OK
7.	WORKING OF REGULATED BATTERY CHARGER/EMERGENCY BATTERY CHARGER.					OK
8.	SAFETY :					----
8.1.	FUSES AND THEIR RATING					OK
8.2.	CONTROL CIRCUIT					OK
8.3.	POWER CIRCUIT					OK

  
Senior Section Engineer  
Quality control / Electrical  
Modern Coach Factory Raebareli







Modern Coach Factory Raebareli  
आधुनिकरेलडिब्बाकारखाना, रायबरेली

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: <b>HIND</b> On Board: <b>H355.20F.0853</b> HT Panel: <b>H355.20E.0748</b>	EDTS 355, Rev`01'.Am-3	<b>01 SET</b>
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: <b>VIMAL</b> Sr no.: <b>VTC 3089 LHB 2752</b>	RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	<b>01</b>
03.	Mounting of 09KVA TFR.	As per drg no 1.10113.0.76.300.001,Alt -B.	<b>OK</b>
04.	Provision of Pump equipment with pump box. Make: <b>DR AUTO</b> Sr no : <b>20/08/0194</b> Pump 1: <b>4036</b> Pump 2: <b>3014</b>	As per spec no. EDTS186,REV-A,AM-2	<b>01 SET</b>
05.	Provision & Mounting of Pump controller. Make: <b>DR AUTO</b> SL.no.: <b>20/08/0118</b>	As per Spec. EDTS186 Rev-a Am-2, &drg no. CC71328 & LW70020	<b>01</b>
06.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: <b>AUTOMETERS</b> Sr. no.: <b>A/03/20/113/RBC+EBC/0296</b>	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	<b>01</b>
07.	Provision of Feeder Junction Box Make : <b>AECO</b>	EDTS-328 REV-C,AM-4,Type- II,COR-2	<b>01 SET</b>
08.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	<b>01 SET</b>
09.	Battery fuse box +ve Make : <b>INDORAIL</b>	As per LW 71001,Alt- H	<b>01</b>
10.	Battery fuse box -ve Make : <b>RICHMOND</b>	As per LW 71002,Alt-I	<b>01</b>
11.	Provision of Battery boxes/ Cradles. Make: <b>MEENAKSHI</b>	As per Drg. No. 110113:0.76.700.005 W/O item 5,22,23,26 & 27,Alt-C or Latest.	<b>01</b>
12.	Provision of batteries Type:110 V, 120 AH VRLA SMF Battery Set. Make: <b>AMARA RAJA</b> Lug Date:11/19	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	<b>01 SET</b>

Senior Section Engineer  
Quality control / Electrical  
Modern Coach Factory Raebareli





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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm Sweep, 110V AC with crash worthy features. Make: <b>VIDISHA ELECT.</b>	As per Drg. No. ICF/SK-7-6-158,alt-g. RDSO/PE/SPEC/TL/0021-2005 (Rev-3) with RCF annex-1,am-1.	<b>30</b>
14.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make <b>RT VISION</b>	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1 .Type- B1.Drg. No. CC76453.	<b>26</b>
15.	Fitment of LED Light fittings for Night Light with berth indication Type-E (1 watt). Make: <b>AGASTYA</b>	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1, ICF/STB-7-6-053.Type- E. Drg. No. CC76461	<b>10</b>
16.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	<b>04</b>
17.	Fitment of LED Light fittings for PACIL. Make: <b>AGASTYA</b>	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	<b>02</b>
18.	Fitment of Accidental Emergency Light (AEL) Make: <b>INTEG</b>	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	<b>04</b>
19.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	<b>OK</b>
20.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	<b>OK</b>

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
21.	Provision of Switch plate assembly along with mobile charging sockets. Make:SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10
22.	Provision of Switch plate assembly along with mobile charging sockets. Make:SALZER	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
23.	Provision of Switch plate assembly along with mobile charging sockets. Make:SALZER	EDML-086, Rev-5, Am-1, Table-1, Item-3.	20
24.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3ph, 50 Hz). Make:- 1.(NPP):MAA LAXMI INDUSTRIES 2.(PP): MAA LAXMI INDUSTRIES	As per Spec. no. RDSO/PE/SPEC/AC/0177(Rev.-0)-2013 with annexure-A, B.	01 SET
25.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
26.	Provision of Wheel Set Earthing equipment. Make:- NPP: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : KNORR Sr no : 0120144952	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS" or "JWL-DAKO-CZ"	01 SET

	
SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL

