



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/2019-20/921

RLY	N	R	-	Coach No.	1	9	7	1	2	1	/	C	DATE OF DISPATCH	2	0	-	1	0	-	1	9
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DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	4	8	7	FUR.NO.	LSCN-1288
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated: 03-06-2019
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) 1099 (NPPE) 2) 1096 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/s-NAV NIRMAN	23/34
		NPP END M/s-NAV NIRMAN	23/34
	Complete	M/s-NAV NIRMAN	23/34
2.	Lav. side wall	M/S-ATHANACY RBL	LAV.1 - LAV.2 -
		M/S-ATHANACY RBL	LAV.3 - LAV.4 -
3.	Side wall	MCF/RBL(CONTRACTOR V4U)	276/01
		MCF/RBL(CONTRACTOR V4U)	276/02
4.	End wall	PP END M/s-DTL PUNE	---
		NPP END M/s-DTL PUNE	---
5.	Roof	M/s-MCF/CONT	126
6.	Centre Buffer Coupler	M/S-FRONTIER LTD	PP END 99P2 NPP END 09P2

7. AIRBRAKE TEST REPORT:

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full brake application	<ul style="list-style-type: none"> ➤ 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/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 -VIBGYOR	Supply & apply	90/88	04.10.19
2.	Insulation			Satisfactory		

(Signature)
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191293				191294			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-LS5-1225				MCF/RBL-LS5-1182			
Bolster no.	SCI-224				SCI-310			
Axle No	19 S - 0821 RWF		19 S - 1771 RWF		19 S - 0391 RWF		19 S - 0846 RWF	
Wheel Dia	917.441	917.572	917.401	917.586	917.459	917.577	917.538	917.594
Wheel Disc No.	TZ 07-19 63688-9RN7	TZ 07-19 65753-9RL5	TZ 07-19 63687-9RN7	TZ 06-19 54164-9PJ4	TZ 08-19 65027-9RD3	TZ 08-19 67466-9RQ7	TZ 08-19 65771-9RQ0	TZ 08-19 67501-9RL3
R.B. Nos.	08-19-26795	08-19-25982	08-19-26759	06-19-12028	08-19-25916	08-19-24572	08-19-25675	08-19-23888
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 3711	TAYAL & CO. Sr.NO.19-09 3653	TAYAL & CO. Sr.NO.19-08 3068	TAYAL & CO. Sr.NO.19-08 3148

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	18525,18533	18522,18531
2.	Primary outer Spring	CMSTL/CMFSK	07-19 07A(4574,4511,4772,3865)	07-19 07A(3611,1231,3591,3986)
3.	Primary Inner Spring	CMGBD	07-19 F06-911(512,1,703,636)	07-19 F06-911(623,942,698,1084)
4.	Primary Damper	KONI	03-19 (04018,04112,03723,03706)	03-19 (06650,04081,04083,04448)
5.	Secondary Damper	KONI	04-19 (00362,00384)	04-19 (00284,00378)
6.	Lateral Damper	KONI	04-19-00805	04-19-00803
7.	Brake Cylinder	KBI	B(8810,7777,7756,8809)K-29	B(8807,7735,7882,8795)K-29
8.	Brake Caliper	KBI	B(5811,5860,5861,5840)K-29	B(5838,5862,5919,5844)K-29
9.	Brake Disc	FAV	06-19 (6032,6030,5684,5683)D-133561-300	06-19 (5685,6033,5720,6028)D-133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
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/GMT,		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	260719-1,260719-1,260719-2,250719-2	250719-1,250719-2,260719-2,250719-2
22.	Control Arm Lower	RVE	280719-2,300719-2,280719-2,210719-2	280619-2,310719-2,310719-2,210719-1
23.	Phonic Wheel	KNORR	K-08-19	K-08-19

Signature of SSE/Bogie/QC



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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3724 37/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 8897
4.	FIBA	M/S- KBI, FARIDABAD	PP-10480/29
			NPP-10479/29
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- SHRI RAM PANELS,	
8.	PVC	M/S RESPONSIVE IND.	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
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- MACEDON BHOPAL	
15.	Emergency Window	M/s-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI VADODARA+VEDANSH RBL	
17.	Side panel	M/S-WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDIA DELHI	
19.	Door way ceiling	M/S-JAMM TOOLS RBL	
20.	Body Side Door	M/S- JVR INDS ,LDH	
21.	Vestibule Door(PPE)	M/S- HANSPAL, KXH	
22.	Vestibule Door(NPPE)	M/S- HANSPAL, KXH	
23.	Bio Tank with pressurized flushing	M/s- OMAX AUTO LTD. GURGAON	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s- EAU BATHING SOLUTION PVT LTD. GURURAM	
28.	Flexible Faucet	M/s- EAU BATHING SOLUTION PVT LTD. GURURAM	
29.	Lotah Filler Tap	M/s- EAU BATHING SOLUTION PVT LTD. GURURAM	
30.	Lavatory Doors	M/S -KALSI LTD.LDH	
31.	Seat & Berth	M/s- T.W.P.L. INDUS. MUMBAI	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.10035,10036

(Signature)
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडि०का०, रायबरेली (लालगंज)



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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 qualityrcfbl@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 वरिष्ठ सुपरिन्टेण्डेंट गुणवत्ता विभाग रेलवे, रायबरेली (लालगंज)	SME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.COM/MCF/RBL जोगिन्दर सिंह उप मुख्य गुणवत्ता प्रबन्धक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli

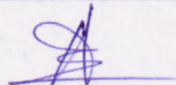
	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
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		DATE: 18.01.2017

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	197121/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



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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 407 HT Panel Sr no : H 355 19 H 416	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0012 Sr no.1 : 19090222 Sr no.2 : 19090242 Srno.CPA: 2019/09/006-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
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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 19483	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2258	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 : 0119071085	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 : 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/लागू/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