



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/2019-20/932

RLY	N	R	-	Coach No.	1	9	7	1	2	7	/	C	DATE OF DISPATCH	2	1	-	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	3	2	7	FUR.NO.	LSCNG-333
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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: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S-ACME INDIA NDLS
B.	Anti slip friendly Grab Bar	M/S-ACME INDIA NDLS
C.	Provision of Health Faucet in lavatories	M/S-ACME INDIA NDLS
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S-ACME INDIA NDLS
E.	GFRE ceiling instead of NFTC	M/S-ACME INDIA NDLS
F.	DGFRP panels instead of LP panels	M/S-ACME INDIA NDLS
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S-ACME INDIA NDLS
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	
J.	Venturi arrangement in lavatory	

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) 1103 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-NAVNIRMAN	14/34
		NPP END M/S-NAVNIRMAN	14/34
	Complete	M/S-NAVNIRMAN	14/34
2.	Lav. side wall	M/S-ATHANACY RBL	LAV.1 - LAV.2 -
		M/S-ATHANACY RBL	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE M/S-KANSAL (MOHALI)	07/ KANSAL
		RH SIDE M/S-KANSAL (MOHALI)	07/ KANSAL
4.	End wall	PP END M/s- AMIT ENG MOHALI	--
		NPP END M/s- AMIT ENG MOHALI	--
5.	Roof	M/s-ECBT	343
6.	Centre Buffer Coupler	M/S- ESCORTS LTD	PP END 1799 NPP END 1781

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	06 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)	91/90	03.10.19
2.	Insulation			Satisfactory		

वरिष्ठ अधिकारी
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (लागूगज)



MCF/RBL



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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DISPATCH	Sr.DME/CHG/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	3	2	7	FUR .NO	LSCN-G-333
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191904				191903			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-782				MCF/RBL-1201			
Bolster no.	MCF/RBL-1151				MCF/RBL-541			
Axle No	19 S - 1595 RWF		19 S - 6861 RWF		19 S - 2654 RWF		19 S - 2040 RWF	
Wheel Dia	917.557	917.535	917.448	917.519	917.498	917.536	917.552	917.59
Wheel Disc No	TZ 07-19 64300-7RY7	TZ 07-19 64670-9RD1	TZ 07-19 68949-9QM5	TZ 07-19 64705-9RQ1	TZ 06-19 52598-9QH4	TZ 07-19 65629-9RP3	TZ 06-19 56078-9QY3	TZ 07-19 64704-9RQ1
R.B. Nos.	08-19 23205	08-19 27491	06-19 12429	08-19 27205	08-19 24234	08-19 26801	06-19 12277	08-19 27490
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.19-08 3099	TAYAL & CO. Sr.NO.19-08 3112	TAYAL & CO. Sr.NO.08-19 3133	TAYAL & CO. Sr.NO.08-19 3042

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17724,16458	16452,16451
2.	Primary outer Spring	CMSTL	07-19 07A(4575,3538,4547,3877)	07-19 07A(4370,4656,4213,4081)
3.	Primary Inner Spring	CMGBD	07-19 F06-911(498,898,952,34)	07-19 F06-911(584,1100,616,833)
4.	Primary Damper	KONI	03-19 (00356,00634,006769,00686)	03-19 (01392,00651,01378,00633)
5.	Secondary Damper	KONI	04-19 (00637,01130)	07-19 (00854,00646)
6.	Lateral Damper	KONI	04-19 00279	04-19 02073
7.	Brake Cylinder	KBI	B(8250,7155,7151,8217)K29	B(8155,739,7377,8159)K29
8.	Brake Caliper	KBI	B(5296,5238,5237,5299)-29	B(5182,5259,5427,5184)-29
9.	Brake Disc	FAV	06-19(6068,6070,5117,5716)D133561-300	06-19(6150,6152,5795,5794)D133561-300
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	KNORR	16-19 B 4089,16-B 4104	16-19 B 4105,16-19 B 4148
17.	Check Valve	KNORR	05-19 18678	05-19 18858
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN, SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	250719-2,250719-2,250719-2,250719-2	260719-1,250719-2,310719-1,250719-9
22.	Control Arm Lower	RVE	250719-2,230719-2,210719-2,210719-2	250719-2,250719-2,250719-2,250719-9
23.	Phonic Wheel	KNOOR	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	3673 36/19
2.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8817
3.	Pull box	M/S- KBI, FARIDABAD	
4.	FIBA	M/S- KBI, FARIDABAD	PP-10488/29
			NPP-10482/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-TWPL MUMBAI	
8.	PVC	M/S- ACME INDIA NDLS	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT MUMBAI	
11.	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT MUMBAI	
12.	Gangway bridge mounting (PPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
13.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
14.	Body Side Window	M/S- ACME INDIA NDLS	
15.	Emergency Window	M/S- ACME INDIA NDLS	
16.	Hopper Window	M/S- ACME INDIA NDLS	
17.	Side panel	M/S- ACME INDIA NDLS	
18.	Roof ceiling	M/S- ACME INDIA NDLS	
19.	Door way ceiling	M/S- ACME INDIA NDLS	
20.	Partition frame	M/S-SARITA HITECH UMB	
21.	Partition pillar	M/S- ACME INDIA NDLS	
22.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(PPE)	M/s- HANSPAL COACH PRODUCT, KXH	
24.	Vestibule Door(NPPE)	M/s- HANSPAL COACH PRODUCT, KXH	
25.	Bio Tank (Pressurized flashing)	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- HINDWARE HSIL PVT. LTD. GURUGRAM	
32.	Lavatory Doors	M/S- ACME INDIA NDLS	
33.	Seat & Berth	M/S- DURABLE POLY LKO (ACME INDIA NDLS)	
34.	Snack Table	N/A	
35.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106157,106155

वरिष्ठ अभियंता
SSE/QC/MCF/RBL

रेडिंकॉ, रायबरेली (लालगंज)





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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:

- 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	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality-1
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

जोगिन्दर सिंह
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



MCF/RBL



Modern Coach Factory Raebareli
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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	197127/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 : SSK On Board Sr no : 2019-08-338 HT Panel Sr no : 2019-08-NIL	EDTS 333, Rev`01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0076 Sr no.1 : 19090156 Sr no.2 : 19080661 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 : 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 19509	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2032	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 : ESBEE	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : DARSHAN ENTERPRISES	EDTS101, REV-C, AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119242221	M/s : KNORR	01 set
19.	110V, 120AH, VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WITH 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	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आपरेटिंग/कां / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL

