



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/2019-20/894

RLY	C	R	-	Coach No.	1	9	7	0	9	5	/	C	DATE OF DISPATCH	1	6	-	1	0	-	1	9
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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	3	4	9	FUR.NO.	LSCNG-330
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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: -

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) 1105 (NPPE) 2) 1099 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S-TACPL
		NPP END	M/S-TACPL
		Complete	M/S-TACPL
2.	Lav. side wall	M/S- R.NARAYANA BARABANKI	LAV.1 - LAV.2 -
		M/S- R.NARAYANA BARABANKI	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE M/S-T.I CHENNAI	04/01
		RH SIDE M/S-T.I CHENNAI	04/02
4.	End wall	PP END M/s- CAPARO ENGG PITHAMPUR	--
		NPP END M/s- CAPARO ENGG PITHAMPUR	--
5.	Roof	MCF/RBL/CON	123
6.	Centre Buffer Coupler	M/s-SANROK ENT	PP END 13998 NPP END 14017

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-NEROLAC	M/s-KANSAL NEROLAC	90/89	30.09.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

वरि०अनु० अभियंता

गुणवत्ता विभाग

रेल डिब्बा कारखाना, रायबरेली (लालगंज)





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/2019-20/894

RLY	C	R	-	Coach No.	1	9	7	0	9	5	/	C	-	DATE OF DISPATCH	1	6	1	0	2	0	1	9
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DISPATCH	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	3	4	9	FUR .NO	LSCN-G-330
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191124				191123			
Bogie Type	FIAT				FIAT			
Frame no.	SCI-2198				SCI-2192			
Bolster no.	MCF/RBL-881				MCF/RBL-LS5-0978			
Axle No	19 R - 2430 RWF		19 R - 6889 RWF		19 R - 2363 RWF		19 R - 3579 RWF	
Wheel Dia	917.41	917.47	917.476	917.434	917.423	917.5	917.394	917.405
Wheel Disc No	TZ 07-19 62080-9RM4	TZ 07-19 62083-9RL0	TZ 06-19 58276-9PI9	TZ 06-19 53940-9QI8	TZ 06-19 58849-9QL7	TZ 06-19 53941-9QI8	TZ 06-19 58846-9QI0	TZ 06-19 53544-9QL8
R.B. Nos.	07-19-17209	07-19-20608	07-19-22203	07-19-16843	07-19-22063	07-19-16392	07-19-19795	07-19-16444
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 2691	TAYAL & CO. Sr.NO.19-08 2801	TAYAL & CO. Sr.NO. 07-19 2683	TAYAL & CO. Sr.NO. 07-19 2576

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18524,16463	16475,16454
2.	Primary outer Spring	CMSTL	07-19 07A(505,1576,1995,1492)	07-19 07A(1498,1421,2279,1580)
3.	Primary Inner Spring	CMGBD	07-19 F06-911(1108,633,991,770)	07-19 F06-911(507,1043,15,686)
4.	Primary Damper	KONI	03-19 (6523,6702,6361,7808)	03-19 (08148,05918,08223,08450)
5.	Secondary Damper	KONI/IAI	04-19 (0493,0492)	04-19 (00486,01202)
6.	Lateral Damper	KONI/GABRIEL	11-18 0983	11-18 00890
7.	Brake Cylinder	KBI	B(8684,7776,7746,8689)K-29	B(8683,7684,7708,3886)K-29
8.	Brake Caliper	KBI	B(5594,5855,5856,5593) -29	B(5701,5792,5787,5700) -29
9.	Brake Disc	KBI	06-19(5867,5880)07-19(6543,6544)D-133561-300	07-19(6538,6545,6380,6381)D-133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	ARYAN/ GMT		
12.	Traction Centre make	SARITA/SF		
13.	Traction lever make	JI/SF		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT/KNORR	1905,16-19-B-5747	16-19 B3674,16-19 B-3998
17.	Check Valve	ESCORT	1904	05-19 18666
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ GMT, SF/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	260719-1,310719-2,310719-2,310719-2	260719-1,310719-1,260719-1,310719-1
22.	Control Arm Lower	RVE	130819-2,130819-2,130819-2,130819-2	240719-2,240719-2,240719-2,240719-2
23.	Phonic Wheel	KNORR	K-07-19 640209	K-07-19 640209

Signature of SSE/Bogie/QC



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ROLLING STOCK CERTIFICATE

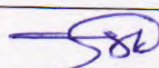
Rolling Stock Certificate No. MCF/RBL/QC/RSC/2019-20/894

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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	3	4	9	FUR.NO.	LSCNG-330
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3662-36/19
2.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8784
3.	Pull box	M/S- KBI, FARIDABAD	
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s-SHREE RAM PNL GOVINDGARH	
7.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
8.	Lavatory Inlay	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
9.	UIC Vestibule (PPE)	M/s-KIRAN RUBBAR PRODUCT PUNE	
10.	UIC Vestibule (NPPE)	M/s-KIRAN RUBBAR PRODUCT PUNE	
11.	Gangway bridge mounting (PPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
12.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
13.	Body Side Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
14.	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15.	Hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16.	Side panel	M/S-HINDUSTAN FIBRE GLASS WORKS,	
17.	Roof ceiling	M/S-HINDUSTAN FIBRE GLASS WORKS,	
18.	Door way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,	
19.	Partition frame	M/S- HINDUSTAN FIBRE GLASS WORKS,	
20.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,	
21.	Body Side Doors 1,3	M/S- SUKATA TRACTOR PARTS PVT.LTD. CDG	
22.	Body Side Doors 2,4	M/s- JVR INDS, LUDHIYANA	
23.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
24.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
25.	Bio Tank (Pressurized flashing)	M/S- JSL LIFE STYLE LTD. ROHTAK	
26.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
27.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG BADDI	
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- AGMECO PVT LTD U.K	
32.	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
33.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
34.	Snack Table	N/A	
35.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106584,106588


SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)





Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH TO	SSE/STOCK/CSTM			Type	L	W	S	C	N	1	Shell No.	9	7	3	4	9	FUR.NO.	LSCNG-330			

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, 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

वरिष्ठ अनु० अभियंता
गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (जालागाँव)

वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

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

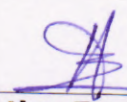


	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 00
		DATE: 18.01.2017

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	197095/C
RAILWAY	CR	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

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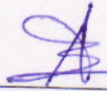
DATE:18.01.2017

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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 : 2019/09/408 HT Panel Sr no : 2019/09/386	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0065 Sr no.1 : 19090170 Sr no.2 : 19090207 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
Modern Coach Factory Raebareli



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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 19531	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2036	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 : AECO	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 : 0119242160	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI 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 : ANANYA	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, लखनऊ Sr. Electrical Engineer / RCF / RBL / Lucknow