



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/2019-20/875

RLY	C	R	-	Coach No.	1	9	7	0	7	4	/	C	DATE OF DISPATCH	1	4	-	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	3	4	FUR.NO.	LSCNG-325
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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	

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) 1102 (NPPE) 2) 1103 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-MTF	502
	Front Part	NPP END M/S-M.TECH	478
	Complete	M/S-V4U	97334
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-T.I.(CHENNAI)	01/T.I.
		RH SIDE M/S-T.I.(CHENNAI)	01/T.I.
4.	End wall	PP END M/s- DTL PUNE	--
		NPP END M/s- DTL PUNE	--
5.	Roof	M/s-ECBT	325
6.	Centre Buffer Coupler	M/s- FRONTIER	PP END 99P2 NPP END 144P2

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	90/88	23.09.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

गुणवत्ता विभाग

रेडि०का०, रायबरेली (लाहगज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/875

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DISPATCH	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	3	3	4	FUR .NO	LSCN-G-325
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191351				191352			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-27				MIPL-30			
Bolster no.	AMIT-670				AMIT-692			
Axle No	19 R - 1033 RWF		19 R - 0751 RWF		19 R - 3007 RWF		19 R - 7091 RWF	
Wheel Dia	917.24	917.352	917.322	917.305	917.325	917.279	917.329	917.298
Wheel Disc No	TZ 06-19 55944-9QJ2	TZ 06-19 54551-9QH9	TZ 06-19 57978-9QK5	TZ 06-19 56973-9QL0	TZ 06-19 55945-9QJ2	TZ 06-19 52452-9PFO	TZ 06-19 58962-9QJ8	TZ 06-19 56330-9PF6
R.B. Nos.	09-18-22469	09-18-23294	09-18-21537	09-18-22053	09-18-22909	09-18-23188	09-18-23208	09-18-22811
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	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMAFJ09-19-5101-71	CMGBD07-17-5100-068-163	CMAFJ09-19-5101-79	CMGBD07-17-5100-068-203	CMAFJ09-19-5101-93	CMGBD07-17-5100-068-164	CMAFJ09-19-5101-45	CMGBD07-17-5100-068-159
Compressed Ht. at Tested Load	516	471	515	468	515	471	516	470
Alignment deviation (mm)	5	12	7	12	5	12	5	9

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12027,12038	12028,12015
2.	Primary outer Spring	CMSTL	07-19 07A(2118,1655,1531,1647)	07-19 07A(2111,1489,1606,1525)
3.	Primary Inner Spring	CMGBD	07-19 F06-119(27,1117,1015,1171)	07-19 F06-937(626,1142,1119,564)
4.	Primary Damper	KONI	03-19 (08592,06120,05999,08569)	03-19 (05118,05107,04817,05997)
5.	Secondary Damper	KONI	04-19 (01165,00313)	04-19 (01187,01268)
6.	Lateral Damper	IAI	05-19 251517	05-19 250782
7.	Brake Cylinder	KBI	B(8698,7779,7830,8719)K-29	B(8710,7850,7833,8729)K-29
8.	Brake Caliper	KBI	B(5703,5864,5902,5714) -29	B(5715,5901,5899,5716) -29
9.	Brake Disc	KBI	24173130 0018-09/19,24173129 0054-09/19 24173130 0047-09/19,24173130 0041-09/19	24172302 0020-04/19,24172300 0045-04/19 24172301 0033-04/19,24172302 0019-04/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	BASANT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	PPI		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	210619-2,280619-2,220619-2,280619-2	290619-2,290619-1,280619-2,280619-2
22.	Control Arm Lower	RVE	270619-2,080619-2,010719-2,010719-2	010619-2,RVE,280619-2,270619-2
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	3616 35/19
2.	Distribution valve	M/S- KBI, FARIDABAD	2019 A 8834
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	
7.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
8.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
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- (DGFRP)HINDUSTAN FIBRE GLASS WORKS,	
17.	Roof ceiling	M/S- (GFRE)HINDUSTAN FIBRE GLASS WORKS,	
18.	Door way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS, VADODARA	
19.	Partition frame	M/S-SARITA HITECH UMB	
20.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
21.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
24.	Bio Tank (Pressurized flashing)	M/S- OMAX AUTO GURGAON	
25.	Auxiliary Water Tank	M/s- RAIL FAB. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG BADDI	
27.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
28.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
30.	Controlled Discharge Tap	M/s- AGMECO PVT LTD U.K	
31.	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
33.	Snack Table	N/A	
34.	RFID	M/s- SOLUTION(P) GURGAON	Sr.105057,105058

वरिष्ठ SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओक्रा, 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:

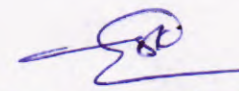
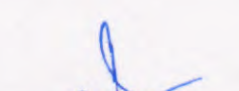
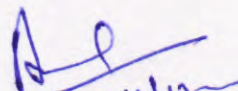
S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30 months from the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

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)

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

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



SCN-G-325



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

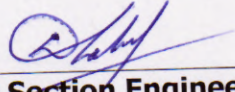
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197074/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
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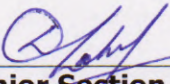
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/08/340 HT Panel Sr no : 2019/09/396	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0005 Sr no.1 : 4828 Sr no.2 : 4818 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 : SSK/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: DR AUTO	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

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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 19507	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2162	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 : 0119091321	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 : TECHNO	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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