



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/2019-20/520

RLY	E	Co	R	Coach No.	1	9	5	9	0	2	/	C	DATE OF DISPATCH	2	7	-	0	7	-	1	9
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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	1	8	7	FUR.NO.	LSCNG-251
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- Railway Board's Order No. : 2019/M(C)/142/2, Dated-03-06-2019
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
- Special features :

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	

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) 1098 (NPPE) 2) 1097 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S- ROURKELA
			NPP END M/S- M. TECH
		Complete	MCF/RBL
2.	Lav. side wall	M/S- MIDAS GUJRAT	LAV.1 - LAV.2 -
		M/S- MIDAS GUJRAT	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE	MCF/RBL (CONTRACTOR V4U)
		RH SIDE	MCF/RBL (CONTRACTOR V4U)
4.	End wall	PP END	M/s- OMAX REWARI
		NPP END	M/s- OMAX REWARI
5.	Roof	M/S- ECBT	180
6.	Centre Buffer Coupler	M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.	PP END 8890 NPP END 8913

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	90/88	04.07.19
2.	Insulation			Satisfactory		

[Signature]
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओ, रायबरेली (नालगंज)





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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DISPATCH	SR.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	1	8	7	FUR.NO	LSCN-G-251
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191018				191017			
Bogie Type	FIAT				FIAT			
Frame no.	AML-04				AML-153			
Bolster no.	SCI-67				AMIT-282			
Axle No	19 P - 6241 RWF		19 P - 7411 RWF		19 P - 6709 RWF		19 P - 6786 RWF	
Wheel Dia	917.611	917.614	917.628	917.609	917.629	917.639	917.626	917.604
Wheel Disc No	TZ 05-19 20528-8MX5	TZ 02-19 25849-9MIO	TZ 05-18 20529-8MX5	TZ 05-18 20526-8MX5	TZ 05-19 48465-9PE9	TZ 05-18 20530-8MX5	TZ 05-19 48477-9PD7	TZ 05-18 20527-8MX5
R.B. Nos.	02-19 03363	02-19 05110	02-19 00866	02-19 04060	02-19 03956	02-19 02304	03-19 36081	02-19 03275
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.19-06 0914	TAYAL & CO. Sr.NO.19-06 1912	TAYAL & CO. Sr.NO.19-06 1851	TAYAL & CO. Sr.NO.19-06 1884

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13141,13131	13125,13132
2.	Primary outer Spring	CMSTL/CMFSK	07-19 07A(610,951,863,564)	06-19 1035-049(13,778,49,15)
3.	Primary Inner Spring	CMGBD	09-17 F06-937(239,122,237,157)	06-19 F06-911(379,667,672,715)
4.	Primary Damper	KNORR/KONI	03-19 (2846,2473,2639,2609)	03-19 (00873,00809,03025,02742)
5.	Secondary Damper	KONI	03-19 (1054,1053)	03-19 (01052,01474)
6.	Lateral Damper	GABRIEL	11-18 596	11-18 507
7.	Brake Cylinder	KBI	B(4388,3517,3515,4359)K-29	B(3320,2531,2526,3333)K-29
8.	Brake Caliper	KBI	B(1952,1908,1909,1954)-29	B(1772,0904,0903,1773)K-29
9.	Brake Disc	KBI	24173127 0063-08/19,24173127 0064-08/19 24173127 0060-08/19,24173127 0061-08/19	24185211 0056-14/19,24185210 0066-14/19 24173128 0023-08/19,24173127 0059-08/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT/AR		
12.	Traction Centre make	SARITA/SF		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	SGA/ARYAN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	06-19 A 10107,06-19 A 10135	16-19 A 10218,16-19 A 10143
17.	Check Valve	KNORR	03-19 16376	03-19 16324
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	251218-5,251218-5,201218-2,201218-2	261218-2,121218-1,121218-1,261218-2
22.	Control Arm Lower	RVE	060119-2,060219-2,070119-2,070119-2	RVE,211218-3,010119-1,RVE
23.	Phonic Wheel	KNORR	K-04-19 640209	K-03-19 640209

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	2968 25/19
2.	Distribution valve	M/S- KBI, FARIDABAD	2019 F 8006
3.	Pull box	M/S- KBI, FARIDABAD	
4.	Fiba	M/S- KBI, FARIDABAD	PP-7260/29 NPP-7106/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/S- SHRI RAM PANEL PUNJAB	
8.	PVC	M/s ACME INDIA, NDLS	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
11.	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT, PUNE	
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 1,3	M/s- JVR INDS, LUDHIYANA	
23.	Body Side Doors 2,4	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
25.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
26.	Bio Tank	M/s- RASANDIK ENG. INDUSTRIES, GURUGRAM	
27.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
28.	Under Slung Water Tank(2X685L)	M/s- RAIL FAB KXH	
29.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
30.	Health Faucet	M/s- ACME INDIA NDLS	
31.	Lotah Filler Tap	M/s- ACME INDIA NDLS	
32.	Controlled Discharge Tap	M/s- HINDWARE ,(HSIL LTD) GURGAON	
33.	Lavatory Doors	M/s- KALSI LUDHINA	
34.	Seat & Berth	M/s- ACME INDIA NDLS (DURABLE POLYMER)	
35.	Snack Table	N/A	

SSE/QC/MCF/RBL

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रेल डिब्बा कारखाना, रायबरेली (लातारंज)



MCF/RBL



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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	1	8	7	FUR.NO.	LSCNG-251
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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 qualityrcfrbl@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	Senior QC/MCF/RBL	Dy.QM/MCF/RBL

गुणवत्ता विभाग
रेडिंकॉ, रायबरेली (लालगंज)

Modern Coach Factory Raebareli

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



MCF/RBL



Modern Coach Factory Raebareli
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DOC NO.: MCF/RBL/QEF/8001

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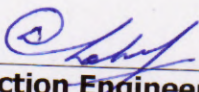
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FOR ELECTRICAL ITEMS

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

TYPE COACH	LWSCN	SHELL/COACH NO	195902/C
RAILWAY	ECoR	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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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : MV ELECTRO SYSTEMS On Board Sr no : 074/L/19-20 HT Panel Sr no : 072/H/19-20	EDTS 333, Rev`01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/06/114 Sr no.1 : 19060751 Sr no.2 : 19060794 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 : CONCORD	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: RT VISION	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 : SSK/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: ENSAVE	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: DR AUTO	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

(Signature)
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 : AECO	LW 71001, Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002, Alt-F	01
13.	Regulated battery charger Make : PI ENGG. Sr no: PI/19060009	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-1974	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 : ACEO	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : CHANDA & CHANDA	EDTS101, REV-C, AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119091277	M/s : KNORR	01 set
19.	110V, 120AH, VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WITH MODIFIED TRAY TOSKED-644 Make : HBLL Lug date : 06/19	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

आ०रे०डि०का० / लालगंज / रायबरेली

S.S.E./Elect-QC/M.C.F./LLJ/RBL

AWM(ELECT.)/MCF/RBL
SEE(P)/MCF/RBLस० कार्य प्रबन्धक / विद्युत
आ०रे०डि०का० / रायबरेली
A.W.M./Electrical/MCF/RBL