



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/2019-20/478

RLY	E	C	R	Coach No.	1	9	5	8	5	4	/	C	DATE OF DISPATCH	2	0	-	0	7	-	1	9
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DISPATCH TO	Sr.DME/C&W/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	2	6	0	FUR.NO.	LSCN-1109
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 03-06-20192. **Tare Weight of Coach** : 41.24 Tones3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL4. **Special feature:** - 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) 1095 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/s-RAIL TECH	13
		NPP END M/s-RAIL TECH	13
	Complete	M/s-RAIL TECH	13
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)	90/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	90/02
4.	End wall	PP END M/S- RSM MOHALI	---
		NPP END M/S- RSM MOHALI	---
5.	Roof	M/s-ECBT	209
6.	Centre Buffer Coupler	M/S- SANROK ,FARIDABAD	PP END 13049 NPP END 12999

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	08 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	89/87	05.07.19
2.	Insulation			Satisfactory		

वरिष्ठ अभियंता
SSE/QC/MCF/RBL
रेडिओ, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	190990				190989			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL -558				MCF/RBL-LS5-1034			
Bolster no.	AMIT-320				AMIT-331			
Axle No	19 P- 1504 RWF		19 P- 2667 RWF		19 P- 1803 RWF		19 P- 1976 RWF	
Wheel Dia	917.599	917.557	917.58	917.573	917.522	917.545	917.617	917.613
Wheel Disc No	TZ 05-18 18223-8MV0	TZ 05-18 18222-8MT9	TZ 04-19 38477-90G0	TZ 05-19 48757-9PF3	TZ 05-18 23644-8PS8	TZ 05-18 23359-8PP8	TZ 05-18 18225-8MT9	TZ 07-17 25492-7RH3
R.B. Nos.	02-19 04143	02-19 03210	03-19 36244	02-19 03001	02-19 02477	03-19 36290	02-19 01458	03-19 36107
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 1895	TAYAL & CO. Sr.NO.19-06 1878	TAYAL & CO. Sr.NO.19-06 1910	TAYAL & CO. Sr.NO.19-06 1903

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13077,13087	14297,14317
2.	Primary outer Spring	CMFSK	05-19 1036-043(57,55,101,51)	05-19 1036-043(60,24,34,61)
3.	Primary Inner Spring	CMRSK	07-17 06X(5377,3420,3148,2485)	07-17 06X(3169,952,3563,2197)
4.	Primary Damper	KONI	03-19 (00723,00208,00720,00259)	03-19 (00768,00810,00311,00466)
5.	Secondary Damper	IAI	06-19 (256948,257054)	06-19 (257167,256860)
6.	Lateral Damper	GABRIEL	11-18 958	11-18 959
7.	Brake Cylinder	KBI	B(5659,4661,4659,5526)K-29	B(3874,3187,3184,3775)K-29
8.	Brake Caliper	KBI	B(3100,3021,3018,2963) -29	B(1492,1614,1616,1491) -29
9.	Brake Disc	FAV	10-18(1363,1413,1415,1416)133561-300-1	10-18(1521,1524,1574,1576)133561-300-1
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	13-19 B 1781,13-19 B 1823	13-19 B 1844,13-19 B 1673
17.	Check Valve	KNORR	03-19 17637	02-19 17626
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT, SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	101218-3,310119-1,101218-1,310119-1	121218-1,290119-2,171218-1,300119-1
22.	Control Arm Lower	RVE	171218-1,080219-3,111218-1,170219-1	RVE,080219-3,111218-1,RVE
23.	Phonic Wheel	FAV	FT/KEP/1548	FT/KEP/1548

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	2990 25/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 F 7993
4.	Fiba	M/S- KBI, FARIDABAD	PP-7056/29 NPP-7239/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER INDS, MUMBAI	
7.	Floor board	M/S-SHREE RAM PNL GOVINDGARH	
8.	PVC	M/S-RESPONSIVE INDS DELHI	
9.	Lavatory Inlay	M/s- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
13.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
14.	Body Side Window	M/S-AGF INDS KOLKATA	
15.	Emergency Window	M/S-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
17.	Side panel	M/S-ACME INDS DELHI	
18.	Roof ceiling	M/S-ACME INDS DELHI	
19.	Door way ceiling	M/S-RAJA INDS KHANNA	
20.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank with pressurized flushing	M/s- FLASH FORGE (P)LTD. VIZAG,	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- RAIL FAB KXH	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. U.K	
28.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
30.	Lavatory Doors	M/S-I.R INDS JALANDHAR	
31.	Seat & Berth	M/S - OVPL MUMBAI	
32.	Snack Table	N/A	

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वरिष्ठ अभियंता
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओ, 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

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.

 वरिष्ठ अभियंता SSE/QC/MCF/RBL मंत्रालय, रायबरेली (लालगंज)	 SME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियंता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	 Dy.CQM/MCF/RBL जोगिन्दर सिंह उप मुख्य गुणवत्ता प्रबन्धक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli
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MCF/RBL



Modern Coach Factory Raebareli
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PAGE 1 OF 3

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	195854/C
RAILWAY	ECR	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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PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/06/089 HT Panel Sr no : 2019/06/056	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/06/0122 Sr no.1 : 19060680 Sr no.2 : 19060673 Srno.CPA: NIL	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: DR AUTO	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: IMT CABLES	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

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Quality control / Electrical
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PAGE 3 OF 3

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 : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : M B & COMPANY Sr no: 201906131	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-1780	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES	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 : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119040959	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL 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 परिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL
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