



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/2019-20/873

RLY	C	R	Coach No.	1	9	7	0	7	1	/	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	0	4	FUR.NO.	LSCN-1250
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 3-06-20192. **Tare Weight of Coach** : 41.24 Tones3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL4. **Special feature:** -1.- 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

2.- 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) 1105 (NPPE) 2) 1103 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

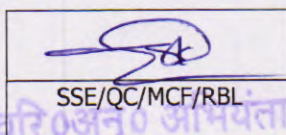
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame Front Part	PP END M/S- TACPL	8/10
		NPP END M/S- TACPL	8/10
		Complete M/S- TACPL	8/10
2.	Lav. side wall	M/S- ATHAHACY RBL	LAV.1 - LAV.2 -
		M/S- ATHAHACY RBL	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	268/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	268/02
4.	End wall	PP END M/S-DTL PUNE	---
		NPP END M/s-P.D.STEEL PANCHKULA	---
5.	Roof	M/s-ECBT	326
6.	Centre Buffer Coupler	M/S- SANROK	PP END 14000 NPP END 14020

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 -GS	Supply & apply	90/89	26.09.19
2.	Insulation			Satisfactory		



वरिष्ठ अनुष्ठानिक अधिकारी
गुणवत्ता विभाग
रेलवे, रायबरेली (राजगंज)





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	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	3	0	4	FUR.NO	LSCN-1250
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	197038				197037			
Bogie Type	FIAT				FIAT			
Frame no.	SCI-2183				SCI-2177			
Bolster no.	MCF/RBL-LS5-819				MCF/RBL-LS5-828			
Axle No	19 R - 6379 RWF		19 R - 3258 RWF		19 R - 1447 RWF		19 R - 2909 RWF	
Wheel Dia	917.605	917.645	917.429	917.491	917.56	917.619	917.612	917.65
Wheel Disc No	TZ 06-19 54974-9QH1	TZ 06-19 53207-9PG0	TZ 05-19 43921-9PG2	TZ 17878-8WR2	TZ 06-19 52299-9QH2	TZ 06-19 54972-9QH1	TZ 06-19 55043-9PD0	TZ 06-19 57821-9QIQ
R.B. Nos.	05-18-40957	05-18-40396	06-18-16244	02-18-12768	02-18-15552	04-18-25256	05-18-36767	05-18-40392
CT R B Make	SKF		SKF		SKF		SKF	

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 3015	TAYAL & CO. Sr.NO.19-08 2850	TAYAL & CO. Sr.NO.19-08 3109	TAYAL & CO. Sr.NO.19-08 2658

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12317,12321	12324,12314
2.	Primary outer Spring	CMFSK	07-19 1100-058(402,318,401,323)	07-19 1100-058(183,147,138,313)
3.	Primary Inner Spring	CMFSK	03-19 1101-064(250,170,244,426)	03-19 1101-064(237,182,118,412)
4.	Primary Damper	KONI	03-19 (04171,01316,03784,01564)	03-19 (01311,01555,01500,01506)
5.	Secondary Damper	IAI	07-19 (263476,263446)	07-19 (263530,263370)
6.	Lateral Damper	GABRIEL	11-18 817	11-18 816
7.	Brake Cylinder	FAV	(B19-491,644,640,A19-490)	(A19-489,B19-641,D19-563,344)
8.	Brake Caliper	FAV	C19(602,604,623,621)B	(C19-622,624,F19-130,E19-132)B
9.	Brake Disc	KBI	24193647 0048-28/19,24193647 0029-25/19 24198411 0029-25/19,24198411 0038-25/19	24193637 0053-27/19,24193637 0054-27/19 24193637 0073-27/19,24193637 0061-27/19
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	BASANT		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	KNORR	16-19-B-5729,16-19-B-5737	16-19-B-5945,16-19-B-5650
17.	Check Valve	KNORR	06-19 19454	06-19 19618
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	113,289,5,122	18,322,232,201
22.	Control Arm Lower	SF	98,SF,52,144	58,324,114,88
23.	Phonic Wheel	KNORR	K-07-19	K-07-19

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	3626 36/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8810
4.	FIBA	M/S- KBI, FARIDABAD	PP-7666/29 NPP-7714/29
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s- SHRI RAM PANELS,	
8.	PVC	M/S -RESPONSIVE IND.DELHI	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.	
12.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/s-MESIDONE KOLKATA	
15.	Emergency Window	M/s-AGF KOLKATA	
16.	Hopper Window	M/S- SHATABDHI VADODARA + VEDANSH RBL	
17.	Side panel	M/s-WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDS NDLS	
19.	Door way ceiling	M/S-JAMM TOOLS RBL	
20.	Body Side Door 1,3	M/s- JVR INDS, LUDHIYANA	
21.	Body Side Door 2,4	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 with pressurized flushing	M/s- OMAX AUTO LTD. GURGAON	
25.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. MOHALI	
27.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
28.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Lavatory Doors D 1,D 3	M/S- JR INDS JALNDHAR	
32.	Lavatory Doors D 2, D 4	M/S- KALSI, LUDHIYANA	
33.	Seat & Berth	M/S- SUKATA INDS, CDG	
34.	Snack Table	N/A	
35.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106611,106612

SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक

गुणवत्ता विभाग
रेडिओका, 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

16WARRANTY:

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:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
6. 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 अभियंता
गुणवत्ता विभाग
रेलवे, रायबरेली (बालगंज)

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

उप मुख्य गुणवत्ता प्रबन्धक/शेल
Dy. Chief Quality Manager/Shell
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



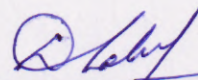
	Modern Coach Factory Raebareli	DOC NO.: MCF/RBL/QEF/8001
	आधुनिक रेल डिब्बा कारखाना, रायबरेली	REV NO: 00
		DATE: 18.01.2017

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	197071/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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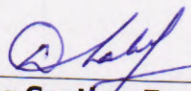
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : AMIT ENGG. On Board Sr no : AE/USBC-1395 HT Panel Sr no : AE/USBC-1384	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0022 Sr no.1 : 4895 Sr no.2 : 4890 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 : DR AUTO	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: 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
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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 19524	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2027	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 : INDORAIL	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 : 0119242211	M/s : KNORR	01 set
19.	110V, 120AH, VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WITH MODIFIED TRAY TOSKED-644 Make : HBL 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 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