



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/2019-20/844

RLY	C	R	-	Coach No.	1	9	6	9	9	3	/	C	DATE OF DISPATCH	1	0	-	1	0	-	1	9
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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	7	1	FUR.NO.	LSCN-1245
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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) 1098 (NPPE) 2) 1102 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/s-DTL
		NPP END	M/s-DTL
		Complete	M/s-DTL
2.	Lav. side wall	M/S- R.NARAYAN BARABAKI	LAV.1 - LAV.2 -
		M/S- R.NARAYAN BARABAKI	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-RSM MOHALI
		NPP END	M/S-RSM MOHALI
5.	Roof	M/s-MCF/CONT.	105
6.	Centre Buffer Coupler	M/s- FRONTIER	PP END 03P1 NPP END 09P2

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 -VIBGYOR	Supply & apply	91/89	23.09.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

मुख्यता विभाग
रेडिओ, रायबरेली (लाभानंज)



संस्थापक / अध्यक्ष



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	197052				197051			
Bogie Type	FIAT				FIAT			
Frame no.	AML-41				AML-35			
Bolster no.	MCF/RBL-LS5-1119				MCF/RBL-LS5-1166			
Axle No	19 P- 6547 RWF		19 R- 3484 RWF		19 N- 0347 RWF		19 R- 1862 RWF	
Wheel Dia	917.643	917.729	917.707	917.734	917.656	917.71	917.656	917.711
Wheel Disc No	TZ 06-19 53451-9QI5	TZ 06-19 56977-9QK4	TZ 06-19 56976-9QJ1	TZ 06-19 56975-9QJ1	TZ 06-19 54365-9QJ2	TZ 06-19 54619-9QH9	TZ 06-19 54622-9QH9	TZ 06-19 57647-9QJ9
R.B. Nos.	04-18-23748	07-18-41277	04-18-23869	06-18-13344	05-18-13301	05-18-27750	06-18-16506	02-18-16484
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.19-08 3072	TAYAL & CO. Sr.NO.19-08 2632	TAYAL & CO. Sr.NO.19-07 2621	TAYAL & CO. Sr.NO.19-07 2524

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12589,12746	12082,13724
2.	Primary outer Spring	CMFSK	07-19 1100-058(379,592,36,254)	07-19 1100-058(19,269,584,588)
3.	Primary Inner Spring	CMGBD	07-19 F06-937(39,710,220,374)	07-19 F06-937(375,696,431,722)
4.	Primary Damper	KONI	03-19 (00742,01700,02815,03278)	03-19 (05576,05751,00767,05968)
5.	Secondary Damper	KONI	04-19 (01057,00920)	04-19 (01874,01871)
6.	Lateral Damper	GABRIEL	11-18 843	11-18 1162
7.	Brake Cylinder	KBI	B(7032,5922,6084,7105)K-19	B(7064,5920,5913,7034)K-19
8.	Brake Caliper	KBI	B(4220,4132,4333,4121)-19	B(4218,4131,4134,4221)-19
9.	Brake Disc	KBI	24193644 0039-28/19,24193647 0031-28/19 24193647 0032-28/19,24193647 0033-28/19	24193639 0052-27/19,24193642 0036-27/19 24193644 0041-28/19,24193647 0042-28/19
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	AR		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	KNORR	16-19-B-5939,16-19-B-5927	16-19-B-47374,16-19-B-5721
17.	Check Valve	KNORR	07-19-19608	07-19-19609
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/BASANT		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	78,169,23,2419	310,189,31,3
22.	Control Arm Lower	SF	173,68,102,135	68,102,137,12
23.	Phonic Wheel	FAV	FT/KEP/2019	FT/KEP/2019

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	3661 36/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8798
4.	FIBA	M/S- KBI, FARIDABAD	PP-7655/29
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	NPP-7647/29
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-GI NATURAL INDS KOLKATA	
8.	PVC	M/s-GI NATURAL INDS KOLKATA	
9.	Lavatory Inlay	M/s- SEEMA IND. 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- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/s-GI NATURAL INDS KOLKATA	
15.	Emergency Window	M/s-GI NATURAL INDS KOLKATA	
16.	Hopper Window	M/s-GI NATURAL INDS KOLKATA	
17.	Side panel	M/s-GI NATURAL INDS KOLKATA	
18.	Roof ceiling	M/s-GI NATURAL INDS KOLKATA	
19.	Door way ceiling	M/s-GI NATURAL INDS KOLKATA	
20.	Body Side Door 1,2	M/S- JVR INDS ,LDH	
21.	Body Side Door 3,4	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- HANSPAL, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL, 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. BADDI	
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	M/s-GI NATURAL INDS KOLKATA	
32.	Seat & Berth	M/s- NARMADA FOREST SERVICE LTD. BHOPAL	
33.	Snack Table	N/A	
34.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106617,106618

SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओ, रायबरेली (जालगंज)





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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:

- 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

गुणवत्ता विभाग
१० डि० का०, रायबरेली (शालगंज)वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareliजोगिन्दर सिंह
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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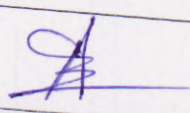
SCN-1245

FOR ELECTRICAL ITEMS

PAGE 1 OF 3

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

TYPE COACH	LWSCN	SHELL/COACH NO	196993/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		
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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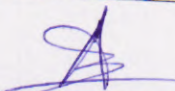
DATE:18.01.2017

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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-1399 HT Panel Sr no : AE/USBC-1403	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0106 Sr no.1 : 19090215 Sr no.2 : 19090134 Srno.CPA: 2019/09/075-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
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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 19514	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2128	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 : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119030842	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 : 07/19	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 आ0रे0डि0का0 / 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