



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/2019-20/1090

RLY	N	F	R	Coach No.	1	9	7	6	4	5	/	C	DATE OF DISPATCH	2	7	-	1	1	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	3	3	FUR.NO.	LSCN-1330
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 21-11-2019
2. **Tare Weight of Coach** : 41.24 Tones
3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. **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) 1103 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S-M.T.F
			233
		NPP END M/S-M.T.F	233
	Complete	M/S-M.T.F	233
2.	Lav. side wall	M/S- RAIL TECH KXH	LAV.1 - LAV.2 -
		M/S- RAIL TECH KXH	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	322/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	322/02
4.	End wall	PP END M/s-DTL PUNE	---
		NPP END M/s-DTL PUNE	---
5.	Roof	M/s-ECBT	368
6.	Centre Buffer Coupler	M/S- ESCORTS	PP END 2044 NPP END 2011

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 -NEROLAC	M/S-KANSALNEROLAC	89/88	29.10.19
2.	Insulation			Satisfactory		

Signature
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	3	3	FUR .NO	LSCN-1330
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192327				192328			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS-5/1299				RBL/LS-5-1206			
Bolster no.	SECPL-429				SECPL-426			
Axle No	18 H - 7174 RWF		19 S - 7283 RWF		19 S- 7873 RWF			
Wheel Dia	917.623	917.566	917.596	917.45	917.406	917.347	917.499	917.544
Wheel Disc No	TZ 06-19 57520-9QK6	TZ 06-19 57535-9QK6	TZ 08-19 74512-9RL2	TZ 08-19 75543-9SK2	TZ 07-19 66496-9RN8	TZ 07-19 70532-9RI8	TZ 07-19 64719-9RKI	TZ 07-19 70901-9RR9
R.B. Nos.	09-18 21362	09-18 22758	09-18 22161	09-18 20439	09-18 22073	07-19 17712	07-19 20714	07-18 21770
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 3137	TAYAL & CO. Sr.NO.19-010 4821	TAYAL & CO. Sr.NO.19-09 3725	TAYAL & CO. Sr.NO.19-09 3102

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16003,16005	16015,16014
2.	Primary outer Spring	CMFSK	1100-078 (176,CMFSK,179,163)	1100-078 (173,178,217,174)
3.	Primary Inner Spring	CMFSK	10-19 (1101-101-281,1100-078-180,1101-101-743,110-101-98)	1100-078 (210,287,201,230)
4.	Primary Damper	KONI	03-19 (06298,03993,03499,03520)	03-19 (03346,03512,03413,04041)
5.	Secondary Damper	KONI	04-19 (00465,00432)	04-19 (00468,00443)
6.	Lateral Damper	KONI	04-19 01899	04-19 02236
7.	Brake Cylinder	KBI	B(9560,8554,8663,9662)K29	B(9603,8659,9538,8758)K29
8.	Brake Caliper	KBI	B(6495,6692,6693,6496)-29	B(6424,6694,6493,6695)-29
9.	Brake Disc	KBI	24203745-0033-41/19,24200061-0058-42/19,24203754-0042-42/19,24203754-0041-42/19	24203757-0019-42/19,24203757-0014-42/19,24203754-8030-42/19,24203754-0029-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	19 B-6489,19B-6623	19 B-6430,19B-6592
17.	Check Valve	KNORR	19633	19816
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	210819 (2,2,2,2)	280819-2,280819-3,290819-3,280819-2
22.	Control Arm Lower	RVE	210819 (2,2,3,3)	210819-2,260819-2,260819-2,210819-2
23.	Phonic Wheel	KBI	K-05-19	K-05-19

Signature of SSE/Bogie/QC



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12. TRACEABILITY OF FURNISHING ITEMS:

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S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3843 38/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	
4.	FIBA	M/S- KBI, FARIDABAD	2019 J 9053
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	PP-9054/29
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	NPP-9294/29
7.	Floor board	M/s-SHREE RAM PNL	
8.	PVC	M/S -RESPONSIVE IND	
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- MAHAVEER MATEL WORKS, KAPURTHALA	
13.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
14.	Body Side Window	M/s-FP+EXCEL IR 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 NEW DELHI	
19.	Door way ceiling	M/s-JAAM TOOLS RBL	
20.	Body Side Door	M/s- JVR INDS, LUDHIYANA	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank (Pressurized flashing)	M/S-RASANDIK ENG.INDS LTD &M/S-IMI	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FAST. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
28.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
29.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
30.	Lavatory Doors	M/s-JR INDS JUC	
31.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.103723,103724

(Signature)
SSE/QC/MCF/RBL

गुणदत्ता 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:

- 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 मुख्य गुणवत्ता विभाग रेडिंक, रायबरेली (लाजपतगंज)	SME/QC/MCF/RBL सहायक यंत्रिक अभियन्ता/गुणवत्ता-1 Assistant Mechanical Engineer / Quality-1 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



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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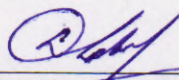
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197355/C
RAILWAY	NR	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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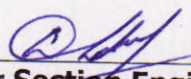
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : TRINITRON On Board Sr no : 19/08/TCS/MCF/3436/355/0125 HT Panel Sr no : 19/08/TCS/MCF/3436/355/0125	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/0077 Sr no.1 : 5816 Sr no.2 : 5813 Srno.CPA: sr no -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: 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 : SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: ORIENT	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: RT VISION	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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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : SSK	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19646	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2492	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 : AUTO	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119242295	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 09/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : ANANYA	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 for SEE(P)/MCF/RBL स० का० प्रबंधक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL