



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2018-19/705

RLY	E	C	o	Coach No.	1	8	2	1	5	9	/	C	DATE OF DISPATCH	2	8	-	1	0	-	1	8		
DISPATCH TO		Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	8	7	1	8	7	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2, Dated-27-08-2018
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL

4. 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) 1095 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part	PP END M/s- RAIL TECH
		NPP END	M/s- RAIL TECH
	Complete	M/s- RAIL TECH	11
2.	Lav.side wall	M/s- JSL LIFE STYLE, HARYANA	LAV.1 --- LAV.2 ---
		M/s- JSL LIFE STYLE, HARYANA	LAV.3 --- LAV.4 ---
3.	Side wall	LH SIDE	M/s- CONTRACTOR V4U, LUCKNOW
		RH SIDE	M/s- CONTRACTOR V4U, LUCKNOW
4.	End wall	PP END	M/s- NECHD, CHANDIGARH
		NPP END	M/s- NECHD, CHANDIGARH
5.	Roof	M/s- TI, THIRUHIRAVUR	142
6.	Centre Buffer Coupler	M/S- SANROK ,FARIDABAD	PP END 8485 NPP END 8427

6. 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

7. PAINTING DAETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -GS	Supply & apply	91/88
2.	Insulation			Satisfactory	

SSE/OC/MCF/RBL



MODERN COACH FACTORY, RAEBARELI

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RLY	E	Co	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	1	8	7	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	180158				180157			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-809				ECBT-816			
Bolster no.	APEX-327				MCF/RBL-1876			
Axle No	18 E - 8718 RWF		18 E-8686 RWF		17 C- 3854 RWF		17 B-9806 RWF	
Wheel Dia	917.482	917.568	917.479	917.544	917.493	917.549	917.509	917.584
Wheel Disc No	TZ06-18 29261-8RH4	TZ06-18 31386-8QM7	TZ06-18 29207-8MQ9	TZ07-18 35426-8QL6	TZ07-18 35427-8QL6	TZ07-18 31619-8QM3	TZ06-18 29260-8RH4	TZ07-18 33587-8RG9
R.B. Nos.	07-18 14498	06-18 11183	07-18 14913	06-18 10592	07-18 16281	05-18 09394	07-18 16261	05-18 10199
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES

DESCRIPTION	Bogie NPP side				Bogie PP side			
	Secondary 1		Secondary 2		Secondary 1		Secondary 2	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMGBD04-18- 5101-60-325	CMGBD03-18- 5100-40-555	CMGBD04-18- 5101-60-301	CMGBD03-18- 5100-40-583	CMFSK01-18- 5101-343-12	CMGBD03-18- 5100-40-576	CMFSK01-18-5101- 343-37-91	CMGBD03-18- 5100-49-597
Compressed Ht. at Tested Load	516	471	516	470	516	471	516	471
Alignment deviation (mm)	9	6	6	5	9	11	10	12

10. TRACEABILITY OF BOGIE ITEMS:

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	421,473	430,307
2.	Primary outer Spring	CMFSK	04-18 1100-402(282,96,417,255)	05-18 1100-402(331,403,491,172)
3.	Primary Inner Spring	CMGBD	05-18-1101-57 (2530,2379,2574,2867),	05-18-1101-57 (1079,937,1071,965),
4.	Primary Damper	KNORR	05-18 (19578,19510,19515),06-18-23855	06-18(23653,23605,23652,23657)
5.	Secondary Damper	GEREP	KW 12-2017 301550739	KW 17-2017 301550739
6.	Lateral Damper	KNORR	06-18 3731	06-18 3730
7.	Brake Cylinder	FAV	H18(184,274,220,200)	H18(351,251,180,354)
8.	Brake Caliper	FAV	K18(184,182,181,183)B	K18(199,197,198,200)B
9.	Brake Disc	KBI	24158708 0039-36/18,24158703 0025-36/18 24158709 0028-36/18,24158708 0028-36/18	24158713 0001-36/18,24158712 0014-36/18 24158709 0023-36/18,24158708 0031-36/18
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	PRAG		
12.	Traction Centre make	SARITA/SF		
13.	Traction lever make	JL		
14.	Ball joint traction lever	S-BLOC		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	TECSPAK/DUREL		
17.	Rubber Spring	AR		
18.	Anti roll bar make	SARITA		
19.	Roll Link make	SARITA/AR,SF/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	PTC	255,284,216,118	249,215,225,213
22.	Control Arm Lower	PTC/RVE	52,070918-1,070918-2,80	55,207,136,22

Signature of SSE/Bogie/QC



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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	8	7	1	8	7	-	2	0	1	8	-	1	9
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11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	H 8155 B
2.	Pull box	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	
3.	Distribution valve	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	18085611 B
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/s- KOHINOOR INDUSTRIES, JALANDHAR	
6.	Floor board	M/s- SHRI RAM GOVINDGERH (PB)	
7.	PVC	M/s- PREMIER POLYFILM, GAZIABAD	
8.	Lavatory Inlay	M/s OASIS IND. JAGADHARI	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
12.	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
13.	Body Side Window	M/S EXCEL INDS, KOLKATA	
14.	Emergency Window	M/S AGF INDS, KOLKATA	
15.	Hopper Window	M/S AIKON IND.SALON H.P	
16.	Side panel	M/S-SUNGLow PUNJAB LAMINATE	
17.	Roof ceiling	M/S- SYNTHETIC MODULAR KOLKATA	
18.	Door way ceiling	M/s RAJA IND. KHANNA	
19.	Body Side Door	M/s JVR INDS, LDH	
20.	Vestibule Door(PPE)	M/s JBM, FARIDABAD	
21.	Vestibule Door(NPPE)	M/s JBM, FARIDABAD	
22.	Bio Tank LAV-1,3	M/s- FLASH FORGE (P)LTD. VIZAG	
23.	Bio Tank LAV-2,4	M/S-M.K. METAL PARTS, MUMBAI	
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.	Controlled Discharge Tap	M/s KALSI PUMPS, JALANDHER	
28.	Lavatory Doors	M/s- KALSI, LUDHINA	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Seat & Berth	M/S- ORIENTAL VENEER PRODUCTS MUMBAI	
32.	Snack Table	N/A	

SSE/QC/MCF/RBL

गुणवत्ता विभाग

रेडिओका, रायबरेली (लालगंज)



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12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT	REFERENCE & PERIOD OF TRIAL
			Frequency	

15. 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.

SSE/QC/MCF/RBL गुणवत्ता विभाग रेडि0का0, रायबरेली (लालगंज)	AME/QC/MCF/RBL सहायक यंत्रिक अभियन्ता/गुणवत्ता-1 Assistant Mechanical Engineer / Quality-1 आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.COM/MCF/RBL जोगिंदर सिंह उप मुख्य गुणवत्ता प्रबंधक Dy. Chief Quality Manager 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
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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	182159/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



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
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2017-08-207 HT Panel Sr no : 2017-10-307	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : KALSI Sr no PA: 7475/09/18 Sr no.1 : 297243 Sr no.2 : 297244 Srno.CPA: 2018/09/124 -DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : CONCORD CONTROL SYSTEM.	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 : SSK	EDML 086,Rev-03, ITEM-01	10
06.	Fitment of Switch Plate Assly Corridor Side),Make : SSK	EDML 086, Rev 03, ITEM-02	10
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: ELECTROWAVES LTD .	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 : INTRA ELECT.	CC76289 & CC76443	10


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11.	Battery fuse box +ve Make : NEC	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : SIGNOTRON Sr no: 09180606	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : PAN-18017739	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 : ISG	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : DARSHAN INTERPRISES.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : FAIVELEY Sr no : 25/18/1041	M/s : FAIVELEY	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 : 08/17	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	SEE(P)/MCF/RBL/ DYCEE/P&P/MCF/RBL

वरिष्ठ अनुभाग अभियन्ता
गुणवत्ता नियंत्रण
अपरेटिंग/लालगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली, लखनऊ
Sr. Electrical Engineer / RCF / RBL / Lucknow