LSCN. 874

	Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, 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/2018-19/1104

RLY	C	R	-	Coach No.	1	9	1	2	3	7	/	C	DATE OF DISPATCH	2	7	-	0	1	-	1	9

DISPATCH TO	SSE(STOCK) CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	7	-	2	0	1	8	-	1	9

1. **Railway Board's Order No.** : **2018/M(C)/142/2, Dated-07-12-2018**
2. **Tare Weight of Coach** : 41.24 Tones
3. **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) 1102 (NPPE) 2)1100 (PPE)

5. **TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM		MAKE/SUPPLIER		SERIAL NO			
1.	Under frame	Front Part	PP END	M/s- M.TECH	204			
			NPP END	M/s- M.TECH	200			
		Complete	MCF/RBL		87447			
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	M/S-ECBT, CDG		62/ECBT			
		RH SIDE	M/S-ECBT, CDG		62/ECBT			
4.	End wall	PP END	M/s- NECHD, CHD		---			
		NPP END	M/s- NECHD, CHD		---			
5.	Roof		M/s- PIL , THIRUVALLUR		247			
6.	Centre Buffer Coupler		M/S- SANROK ,ENG		PP END	10667	NPP END	10638

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/cm². ➢ Max. pressure in BC ➢ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm². OK	07 Sec. 3.0 kg/cm² OK
2.	Insensitivity	➢ Exhaust BP @ 0.3 kg/cm²/min.	No brake application	OK
3.	Sensitivity	➢ Exhaust BP @ 0.1 kg/cm²/Sec, after 06 Sec.	Brake must apply	OK

7. **PAINTING DETAILS:**

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -VIBGYOR	Supply & apply	91/89
2.	Insulation			Satisfactory	

SSE/QC/MCF/RBL

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गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

MCF/RBL

MODERN COACH FACTORY, RAEBARELI आधुनिक रेल डिब्बा कारख़ाना, रायबरेली	DOC NO.: MCF/RBL/QMF 8002 REV NO.: 01 DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/**1104**

Coach No.	1	9	1	2	3	7	/	C	-	DATE OF DISPATCH	2	7	.	0	1	.	1	9
RLY	C	R	-	-	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	7	-	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182583				182584			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1465				MCF/RBL-1624			
Bolster no.	VS-343				VS-352			
Axle No	18 F – 8581 RWF		17 D - 2470 RWF		18 F – 8309 RWF		17 D - 1331 RWF	
Wheel Dia	917.585	917.565	917.518	917.565	917.557	917.593	917.529	917.569
Wheel Disc No	TZ07-18 36036-8RP6	TZ07-18 38367-8RM1	TZ07-18 33801-8RG5	TZ04-18 10114-8NG4	TZ07-18 39764-8RR5	TZ07-18 39763-8RS5	TZ07-18 33786-8QN1	TZ08-18 45137-8RS5
R.B. Nos.	05-18 28158	05-18 39807	05-18 29063	05-18 11906	05-18 1189	05-18 29152	05-18 39799	05-18 26976
CT R B Make	SKF		SKF		SKF		SKF	

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.	CMRSK12-18-5101-512-17	CMGBD05-18-5100-66-121	CMFSK12-18-5101-512-116	XCMGBD05-18-5100-70-87	CMFSK12-18-5101-512-26	CMGBD05-18-5100-66-428	CMFSK12-18-5101-512-141	CMGBBD05-18-5100-64-371
Compressed Ht. at Tested Load	516	472	515	472	515.5	472	511	472
Alignment deviation (mm)	10	6	10	6	10	11	11	11

10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14053,14095,	14094,14041
2.	Primary outer Spring	CMGBD	10-18 1100(119-367,119-4,121-778,122-71)	10-18 1100-122(61,768,748,9)
3.	Primary Inner Spring	CMGBD	03-18 1100-- (32-2628,31-3612,30-278,30-2712)	03-18 1100-31- (2576,0,2579,2604)
4.	Primary Damper	KNORR	12-18(47944,48627,48627,48967)	12-18(48250,48254,48251,48253)
5.	Secondary Damper	GEREP	KW 16-2018 301550739	KW16-2018 301550739
6.	Lateral Damper	GB	11-18 00057	11-18 00086
7.	Brake Cylinder	KBI	A(8769,8231,8354,8874)K29	A(9562,8928,8219,8775)K29
8.	Brake Caliper	KBI	A(7065,7153,7226,7121)-29	A(7715,7716,7154,7068)-29
9.	Brake Disc	KBI	24125117 0006-42/18,24162517 0005-42/18 24162603 0016-42/18,24162604 0010-42/18	24168689 0003-43/18,24164609 0001-42/18 24162604 0015-42/18,24162604 0016-42/18
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	PPI/UK		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	RKFL/AR ,RKFL/GMT		
20.	Fork make	EMSON/ASL		
21.	Control Arm Upper	RVE	011218-2,301118-1,RVE,291118-2	001218-2,011218-1,301118-1,301118-4
22.	Control Arm Lower	RVE	051218-3,211118-2,281118-3,271118-3	271118-3,281118-3,281118-3,271118-3

Signature of SSE/Bogie/QC

अधीक्षक / Supdt.

	Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, 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/2018-19/1104

RLY	C	R	-	Coach No.	1	9	1	2	3	7	/	C	DATE OF DISPATCH	2	7	-	0	1	-	1	9

DISPATCH TO	SSE(STOCK) CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	7	-	2	0	1	8	-	1	9

11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	1914-52/18
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2018 M 6455
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s- E.G. WOOD BOARD, HYDRABAD	
7.	PVC	M/S- RESPONSIVE IND.DELHI	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
9.	UIC Vestibule (PPE)	M/S- ELASTOMER LINING WORKS, MUMBAI	
10.	UIC Vestibule (NPPE)	M/S- SUNCREST IND KALKATA	
11.	Gangway bridge mounting (PPE)	M/S- COMPETANT ENG. JUC	
12.	Gangway bridge mounting (NPPE)	M/S- COMPETANT ENG. JUC	
13.	Body Side Window	M/S- AGF , KOLKATA	
14.	Emergency Window	M/S- AGF, KOLKATA	
15.	Hopper Window	M/S- BEI PVT. LTD. PUNJAB	
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 INDUSTRIES ,LDH	
20.	Vestibule Door(PPE)	M/S- KALSI FAB PVT. LTD. LDH	
21.	Vestibule Door(NPPE)	M/S- KALSI FAB PVT. LTD. LDH	
22.	Bio Tank	M/s- RAIL FAB KXH	
23.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
24.	Under Slung Water Tank(2X685L)	M/s- SHIVALIK FAST MOHALI	
25.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
26.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
27.	Lavatory Doors	M/s- KALSI, LDH	
28.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
30.	Seat & Berth	M/s- TWPL MUMBAI	
31.	Snack Table	N/A	

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Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, 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/2018-19/1104

RLY	C	R	-	Coach No.	1	9	1	2	3	7	/	C	DATE OF DISPATCH	2	7	-	0	1	-	1	9

DISPATCH TO	SSE(STOCK) CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	7	-	2	0	1	8	-	1	9

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 Frequency	REFERENCE & PERIOD OF TRIAL

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:

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.

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SCN-874

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

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES			
TYPE COACH	**LWSCN**	**SHELL/COACH NO**	**191237/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

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : **SSK** On Board Sr no :**2017/04/071** HT Panel Sr no : **2017/08/212**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make :**DR AUTO** Sr no PA:**2018/12/029** Sr no.1 :**18090014** Sr no.2 :**18090007** Sr no.CPA:**2018/12/122-DR AUTO**	As per spec EDTS 186,Rev-a, Am- 2	**01**
03.	Emergency light system for EOG type coaches (AEL), Make : **VGS**	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	**10**
06.	Fitment of Switch Plate Assly Corridor Side),Make : **SSK/SALZER**	EDML 086, Rev 03, ITEM-02	**10**
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 : **AGASTYA**	CC76289 & CC76443	**10**

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 :**INTEG**	LW 71001,Alt-F	**01**
12.	Battery fuse box –ve Make :**NEC**	LW 71002,Alt-F	**01**
13.	Regulated battery charger Make : **SIGNOTRON** Sr no: **01191190**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make : **PANTRONICS** Sr no : **PAN-18018003**	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 :**SIDWAL**	EDTS-328 REV-C	**01 set**
17.	Wheel set earthling equipment. Make : **CHANDA & CHANDA**	EDTS101,REV-C,AM-1	**02 sets**
18.	Wheel Slide Protection System (WSP) Make :**KNORR** Sr no :**0118380302**	M/s : **KNORR**	**01 set**
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make :**SOUTHERN** Lug date :**05/17**	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	**AWM(E)/MCF/RBL** **SEE(P)/MCF/RBL**
वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ0रे0डि0का0 / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	स. कार्य प्रबन्धक/ विद्युत आधुनिक डिब्बा कारखाना/ रायबरेली A.W.M./ Electrical/ MCF/ RBL.