LSCNG-109

MCF/RBL

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/2018-19/1088

RLY	C	R	-	Coach No.	1	9	1	3	6	2	/	C	DATE OF DISPATCH	2	5	-	0	1	-	1	9

DISPATCH TO	SSE(STOCK)/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	0	-	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)1105 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM		MAKE/SUPPLIER	SERIAL NO			
1.	Under frame	Front Part	PP END M/S-NE CHD, CDG	11/18			
			NPP END M/S-SFPL,MOHALI	11/18			
		Complete	MCF/RBL	87370			
2.	Lav. side wall		M/S-RAIL TECH KAPURTALA	LAV.1	-	LAV.2	-
			M/S-RAIL TECH KAPURTALA	LAV.3	-	LAV.4	-
3.	Side wall	LH SIDE	MCF/RBL(CONTERACTOR V4U)	281/01			
		RH SIDE	MCF/RBL(CONTERACTOR V4U)	281/02			
4.	End wall	PP END	M/s- SFPL, MOHALI	--			
		NPP END	M/s- NECHD, CHANDIGARH	--			
5.	Roof		MCF/RBL	121			
6.	Centre Buffer Coupler		M/S- SANROK ENG.	PP END	10789	NPP END	10808

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	06 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 –GS	Supply & apply	90/89
2.	Insulation			Satisfactory	

वरि०खं०अभियंता
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

आरडीका / रायबरेली

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/**1088**

Coach No.	1	9	1	3	6	2	/	C	-	DATE OF DISPATCH	2	5	.	0	1	.	1	9

RLY	C	R	-	-	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	0	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182582				182581			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1532				MCF/RBL-1644			
Bolster no.	APEX-102				MCF/RBL-2089			
Axle No	18 F –8874 RWF		18 G - 4564 RWF		18 F – 8599 RWF		18 F - 2530 RWF	
Wheel Dia	917.532	917.641	917.427	917.602	917.557	917.576	917.522	917.645
Wheel Disc No	TZ04-18 11331-8M10	TZ07-18 37357-8RN3	TZ03-18 08497-8MV5	TZ07-18 33888-8RG5	TZ07-18 36035-8RP6	TZ07-18 39723-8RS4	TZ04-18 11715-8MV6	TZ07-18 11716-8MV6
R.B. Nos.	04-18 23427	05-18 36602	05-18 12306	05-18-12338	05-18 27820	05-18 27241	05-18 12730	04-18 26604
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.	CMFSK12-18-5101-512-157	CMGBD05-18-5100-66-365	CMFSK12-18-5101-512-153	CMFSK12-18-5100-66-96	CMFSK12-18 5101-512-122	CMGBD05-18-5100-70-420	CMFSK12-18-5101-512-93	CMGBD05-18-5100-66-379
Compressed Ht. at Tested Load	516	472	514	472	515.5	471	516	471
Alignment deviation (mm)	13	12	16	12	9	12	8	12

10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14718,14721	14716,1402
2.	Primary outer Spring	CMGBD	10-18 1100-121 (216,109,194,592)	10-18 1100(121-238,122-6,121-30,121-589)
3.	Primary Inner Spring	CMGMD	03-18 1101-(121-2696,20-109,31-2685,21-2897)	03-18 1101- (32-2504,30-2707,32-2697,31-5414)
4.	Primary Damper	KNORR	12-18(48564,48626,49104,48582)	12-18(48619,49135,48985,19174)
5.	Secondary Damper	GEREP	KW 16-2018 301550739	KW16-2018 301550739
6.	Lateral Damper	IAI	01-18 237215	01-18 237220
7.	Brake Cylinder	KBI	A(9525,8911,8933,9535)K29	A(9536,8930,8922,9508)K29
8.	Brake Caliper	KBI	A(7654,7731,7732,7655)-29	A(7656,7734,7730,7653)-29
9.	Brake Disc	FAV	11-18 6178,12-18 6745,11-18 (6077,6078) D133561-300	24162604 0038-42/18,24162604 0039-42/18 24167548 0023-47/18,24167548 0024-47/18
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	GMT/AR		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	RKFL/AR,RKFL/GMT		
20.	Fork make	ASL/EMSON		
21.	Control Arm Upper	RVE	291118-1,261118-2,011218-2,361118-4	011218-2,261118-2,011218-2,301118-1
22.	Control Arm Lower	RVE	271118-2,281118-2,281118-3,271118-3	017118-2,011218-3,231118-2,271118-2

Signature of SSE/Bogie/QC

आधुनिक रायबरेली

MCF/RBL

	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/2018-19/1088

RLY	C	R	-	Coach No.	1	9	1	3	6	2	/	C	DATE OF DISPATCH	2	5	-	0	1	-	1	9

DISPATCH TO	SSE(STOCK)/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	0	-	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	1909 52/18
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S-KBI FARIDABAD	2018M6456
4.	Foot Step	M/S- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-KOHNOOR INDIA, JUC.	
6.	Floor board	M/S- TWPL, MUMBAI.	
7.	PVC	M/S -ACME INDIA, NDLS.	
8.	Lavatory Inlay	M/S- SEEMA INDIA BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST, KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST, KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S- COMPETANT ENG. JALANDHAR	
12.	Gangway bridge mounting (NPPE)	M/S- COMPETANT ENG. JALANDHAR	
13.	Body Side Window	M/S- ACME INDIA NDLS	
14.	Emergency Window	M/S- ACME INDIA NDLS	
15.	Hopper Window	M/S- ACME INDIA NDLS	
16.	Side panel	M/S- DGFRP ACME INDIA NDLS	
17.	Roof ceiling	M/S-DGFRE ACME INDIA NDLS	
18.	Door way ceiling	M/S-GFRE ACME INDIA NDLS	
19.	Partition frame	M/S- ACME INDIA NDLS	
20.	Partition pillar	M/S- ACME INDIA NDLS	
21.	Body Side Door	M/S- JVR INDUSTRIES.LDH	
22.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Bio Tank	M/S- RASANDIK ENG INDUSTRIES. GURGARAM	
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. BADDI	
28.	Flexible Faucet	M/S- ACME INDIA NDLS	
29.	Lotah Filler Tap	M/S- ACME INDIA NDLS	
30.	Controlled Discharge Tap	M/S- HINDWARE ,(HSIL LTD) GURGAON	
31.	Lavatory Doors	M/S- ACME INDIA NDLS	
32.	Seat & Berth	M/S- ACME INDIA NDLS	
33.	Snack Table	N/A	

SSE/QC/MCF/RBL

वरि0अनु0 अभियंता
गुणवत्ता विभाग
रे0डि0का0, रायबरेली (लालगंज)

MCF/RBL

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/2018-19/1088

RLY	C	R	-	Coach No.	1	9	1	3	6	2	/	C	DATE OF DISPATCH	2	5	-	0	1	-	1	9

DISPATCH TO	SSE(STOCK)/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	3	7	0	-	2	0	1	8	-	1	9

12. MODIFICATION (IF ANY) : Partition frame & Partition pillar

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.

SSE/QC/MCF/RBL	AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरि०उप्र० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality-II
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

G7-109

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**	**191362/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 : **ISG** On Board Sr no : **SOP-NAC-MCF-18-07-0130** HT Panel Sr no : **SOP-NAC-MCF-17-10-0013**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make :**DR AUTO** Sr no PA:**2018/12/137** Sr no.1 :**18120021** Sr no.2 :**18120023** Sr no.CPA: **2018/12/152-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 : **RECORD/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: **RT VISION**	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
Modern Coach Factory Raebareli

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: **01191193**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make : **VIMAL** Sr no : **VTC-3089-LHB-1007**	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 :**0118340207**	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 :**02/18**	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	**SEE(P)/MCF/RBL/ DYCEE/P&P/MCF/RBL**

वरिष्ठ अनुभाग अभियन्ता
गुणवत्ता नियंत्रण
आरडीएसओ / 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