LSCN-972

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/2018-19/1404

RLY	C	R	-	Coach No.	1	9	2	2	6	3	/	C	DATE OF DISPATCH	2	8	-	0	3	-	1	9

DISPATCH TO	SSE(STOCK)/ CR/CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	5	9	7	-	2	0	1	8	-	1	9

1. **Railway Board's Order No.** : **2018/M(C)/142/2, Dated-17-10-2019**
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) 1104 (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-SFPL	02/19				
			NPP END	M/S-M.TECH	356				
		Complete	MCF/RBL		87597				
2.	Lav. side wall		M/S- MIDAS METCONS GUJRET		LAV.1	-	LAV.2	-	
			M/S- MIDAS METCONS GUJRET		LAV.3	-	LAV.4	-	
3.	Side wall	LH SIDE	M/S- ECBT CDG		99/01				
		RH SIDE	M/S- ECBT CDG		99/02				
4.	End wall	PP END	M/s-P.DSTEEL PANCHULA		---				
		NPP END	M/s-P.DSTEEL PANCHULA		---				
5.	Roof		M/s- PIL		352				
6.	Centre Buffer Coupler		M/s-SANROK ENT.		PP END	11874	NPP END	11919	

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	08 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	90/88
2.	Insulation			Satisfactory	

SSE/QC/MCF/RBL

वरि. खण्ड अभियंता
गुणवत्ता विभाग
रेलडिब्बा का., रायबरेली (लालगंज)

MCF/RBL

	MODERN COACH FACTORY, RAEBARELI आधुनिक रेल डिब्बा कारखाना, 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-1404*** ***(2018-2019)***

Coach No.	1	9	2	2	6	3	/	C	-	DATE OF DISPATCH	2	8	.	0	3	.	1	9

RLY	C	R	-	-	Type	L	W	S	C	N	1	Shell No.	8	7	5	9	7	-	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	183118				183117			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1606				ECBT-1618			
Bolster no.	RBL-2522				VS-418			
Axle No	18 J – 1411 RWF		18 J - 1315 RWF		18 J – 9395 RWF		18 J- 9365 RWF	
Wheel Dia	917. 642	917.656	917.621	917.631	917.629	917.602	917.605	917.615
Wheel Disc No	TZ 05-18 22137-8PS9	TZ 06-18 27199-8PS5	TZ 05-18 25875-8QG3	TZ 05-18 22136-8PN6	TZ 10-18 00727-8WI1	TZ 10-18 00726-5WI1	TZ 10-18 01112-8KI7	TZ 11-18 06205-8WR1
R.B. Nos.	07-18 17685	08-18 19980	07-18 17593	08-18 19945	12-18 27651	12-18 27416	02-18 35125	12-18 27733
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.	CMGBD02-19-5101-05-134	CMAFJ06-18-5100-46	CMGBD02-19-5101-05-123	CMAFJ06-18-5100-30	CMGBD02-19-5101-05-121	CMAFJ06-18-5100-106	CMGBD02-19-5101-06-127	CMAFJ06-18-5100-29
Compressed Ht. at Tested Load	515	472	516	470	516	469	516	470
Alignment deviation (mm)	18	5	18	6	17	10	16	6

10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	838666,238647	239379,238582
2.	Primary outer Spring	CMSTL	01-19 07A(1980,1753,2070,1174)	01-19 07A(1755,1609,2000,2855)
3.	Primary Inner Spring	CMFSK	02-18 06Y(2850,2916,2851,284)	02-18 1037-395(368,481,345,111)
4.	Primary Damper	IAI/KNORR	01-19(236926,236300,236103,236407)	12-18(48389,48457,48836,48831)
5.	Secondary Damper	IAI	01-19 (238421,238413)	01-19 (238350,238424)
6.	Lateral Damper	IAI	02-19 141375	02-19 241402
7.	Brake Cylinder	FAV	A19 (435,212,233,703)	A19 (107,424,478,191)
8.	Brake Caliper	FAV	B19(1018,1019,1020,1021)B	B19(594,596,595,593)B
9.	Brake Disc	KBI	24172303 0001-05/19,24172302 0085-05/19 24172303 0035-05/19,24172303 0036-05/19	24173123 0047-07/19,24173123 0046-07/19 24173123 0042-07/19,24173123 0050-07/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	MGN		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	**SARITA/ GMT SF/GMT**		
20.	Fork make	EMSON/ASL		
21.	Control Arm Upper	RVE	231018-3,151218-5,191218-2,221018-2	241218-2,RVE,241218-2,191218-2
22.	Control Arm Lower	RVE	271218-1,271218-1,141218-1,141218-1	201218-2,201218-2,201218-2,201218-2
23.	Phonic Wheel.	FAV	FT/KEP-1548	FT/KEP-1548

Signature of SSE/Bogie/QC

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/2018-19/1404

RLY	C	R	-	Coach No.	1	9	2	2	6	3	/	C	DATE OF DISPATCH	2	8	-	0	3	-	1	9

DISPATCH TO	SSE(STOCK)/ CR/CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	5	9	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- FAIVELY TRANS. TECH.INDIA LTD	A19158 B
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- FAIVELY TRANS. TECH.INDIA LTD	19015640 B
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- 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- AGF INDS, KOLKATA	
14.	Emergency Window	M/S- AJC INDS, KOLKATA	
15.	Hopper Window	M/S- SHATABDHI SAFETY VADODARA	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/S-SYNTHETIC MODULER KOLKATA	
18.	Door way ceiling	M/s- RAJA IND. KHANNA	
19.	Body Side Door 1 ,3	M/S- JVR INDUSTRIES ,LDH	
20.	Body Side Door 2,4	M/S-SVARN INFRATEL PALWAL	
21.	Vestibule Door(PPE)	M/S- KALSI INDS LDH	
22.	Vestibule Door(NPPE)	M/S- KALSI INDS LDH	
23.	Bio Tank 1,3	M/S-RAIL FAB KXH	
24.	Bio Tank 2 ,4	M/S-FLASH FORGE	
25.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/s-RAIL FAB KXH	
27.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST. MOHALI	
28.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
29.	Lavatory Doors	M/s- KALSI, LDH	
30.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
31.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
32.	Seat & Berth	M/s- SUKATA INDS CDG.	
33.	Snack Table	N/A	

SSE/QC/MCF/RBL

कार्यपालक अभियंता
गुणवत्ता विभाग
रेल डिब्बा कारखाना 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/2018-19/1404

RLY	C	R	-	Coach No.	1	9	2	2	6	3	/	C	DATE OF DISPATCH	2	8	-	0	3	-	1	9

DISPATCH TO	SSE(STOCK)/ CR/CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	5	9	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.

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

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ESCN - 972

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 NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES			
TYPE COACH	**LWSCN**	**SHELL/COACH NO**	**192263/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

MCF/RBL

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make :**HIND RECTIFIERS** On Board Sr no :**H 355 19 B 219** HT Panel Sr no :**H 355 19 B 221**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make :**KALSI** Sr no PA:**7757/10/18** Sr no.1 :**298953** Sr no.2 :**298954** Srno.CPA:**7700/10/18-KALSI**	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:**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	**20**
06.	Fitment of Switch Plate Assly Corridor Side),Make :**SSK**	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:**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	**09**

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 :**AECO**	LW 71001,Alt-F	**01**
12.	Battery fuse box –ve Make :**NEC**	LW 71002,Alt-F	**01**
13.	Regulated battery charger Make : **IC ELECTRICAL** Sr no:**03-19-0040**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make :**PANTRONICS** Sr no :**PAN-18018133**	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 : **ISG**	EDTS-328 REV-C	**01 set**
17.	Wheel set earthling equipment. Make :**DARSHAN INTERPRISES**	EDTS101,REV-C,AM-1	**02 sets**
18.	Wheel Slide Protection System (WSP) Make :**FAIVELEY**Sr no :**43/18/1803**	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 :**12/18**	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 वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	**AWM(ELECT.)/MCF/RBL** **SEE(P)/MCF/RBL** स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL