LYCN:880

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/2018-19/1130

RLY	C	R		Coach No.	1	9	1	2	4	3	/	C	DATE OF DISPATCH	3	0	-	0	1	-	1	9

DISPATCH TO	SSE/STOCK/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	4	6	3	-	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)1096 (PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM		MAKE/SUPPLIER		SERIAL NO			
1.	Under frame	Front Part	PP END	M/S DTL ancillaries ltd pune	65			
			NPP END	M/S DTL ancillaries ltd pune	65			
		Complete	M/S DTL ancillaries ltd pune		65			
2.	Lav. side wall		M/S Rail tech pvt.ltd. KXH		LAV.1	---	LAV.2	---
			M/S Rail tech pvt.ltd. KXH		LAV.3	---	LAV.4	---
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)		301			
		RH SIDE	MCF/RBL(CONTRACTOR V4U)		301			
4.	End wall	PP END	M/s Shivalic fastners pvt.ltd. mohali		---			
		NPP END	M/S Neera chandigarh		---			
5.	Roof		M/S Pennar ind. Ltd. Thiruvallur Cheenai		214			
6.	Centre Buffer Coupler		M/S Sanrok faridabad		PP END	10720	NPP END	10725

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 –VIBGYOR	Supply & apply	91/90
2.	Insulation			Satisfactory	

SSE/QC/MCF/RBL

वरिष्ठ अनुभाग अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

	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/**1130**

Coach No.	1	9	1	2	4	3	/	C	-	DATE OF DISPATCH	3	0	.	0	1	.	1	9

RLY	C	R	-	-	Type	L	W	S	C	N	1	Shell No.	8	7	4	6	3	-	-	-	-	-	-	-	-

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182435				182436			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1452				ECBT-1453			
Bolster no.	AMIT-350				MCF/RBL-2084			
Axle No	18 F – 2786 RWF		18F- 2562 RWF		18 F – 2723 RWF		18- F - 2905 RWF	
Wheel Dia	917.588	917.55	917.563	917.641	917.58	917.533	917.544	917.628
Wheel Disc No	TZ04-18 11679-8MV6	TZ04-18 11681-8MV6	TZ08-18 45205-8RP8	TZ08-18 45216-8RP9	TZ07-18 40988-8RR9	TZ07-18 40987-8RR9	TZ07-18 37695-8RP9	TZ07-18 42716-8RM3
R.B. Nos.	05-18 37129	05-18 14076	04-18 24954	07-18 41433	04-18 24979	07-18 41426	05-18 12981	04-18 24986
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.	CMGBD09-17-5101-87-144	CMGBD05-18-5100-64-584	CMGBD09-17-5101-87-147	CMGBD05-18-5100-64-536	CMFSK12-18-5101-152-91	CMGBD05-18-5100-64-531	CMFSK12-18-5101-512-152	CMGBD05-18-5100-70-544
Compressed Ht. at Tested Load	514	472	516	472	516	472	515	472
Alignment deviation (mm)	6	5	6	5	9	11	12	11

10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13499,13482	13501,13490
2.	Primary outer Spring	CMGBD	10-18 1100-121(142,117,174,15)	10-18 1100 (13,315,133,115)
3.	Primary Inner Spring	CMGBD	03-18 1101-32 (2282,2404,2398,2397)	03-18 1101 (31-2393,31-2384,31-228,29-2391)
4.	Primary Damper	ESCORT	08-18(6645,6667,6712,6649)	12-18(47238,47770,48157,47775)
5.	Secondary Damper	GEREP	KW16-2018 301550739	KW16-2018 301550739
6.	Lateral Damper	IAI	01-19 237374	01-19 237261
7.	Brake Cylinder	KBI	A(9541,8952,8946,9547)K29	A(9552,8941,8915,9524)K29
8.	Brake Caliper	KBI	A(7678,7754,7755,7676)-29	A(7681,7757,7756,7677)-29
9.	Brake Disc	KBI	24167536 0015-44/18,24167537 0016-44/18 24168005 0030-49/18,24168005 0031-49/18	24162516 0037-42/18,24162516 0038-42/18 24162535 0032-44/18,24167536 0005-44/18
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SF		
13.	Traction lever make	JI		
14.	Ball joint traction lever	PPI		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	DUREIL		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SF/AR		
20.	Fork make	ASL		
21.	Control Arm Upper	RVE	051218-1,051218-1,031218-2,RVE	261118-2,301118-1,041218-1,051218-3
22.	Control Arm Lower	RVE	071218-2,011218-2,061218-2,071218-2	071218-1,071218-1,301118-1,301118-2

Signature of SSE/Bogie/QC

MCF/RBL

Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, रायबरेली**	DOC NO.: MCF/RBL/QMF 8002	
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DISPATCH TO	SSE/STOCK/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	4	6	3	-	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. New Delhi	1893 51/18
2.	Pull box	M/s KBI Faridabad. New Delhi	
3.	Distribution valve	M/s KBI Faridabad. New Delhi	2018M6395
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S- ELASTOMER MUMBAI	
6.	Floor board	M/s- EG WOOD BOARD HYDARABAD	
7.	PVC	M/s Responsive ind.mumbai	
8.	Lavatory Inlay	M/s- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S- ELASTOMER MUMBAI	
10.	UIC Vestibule (NPPE)	M/S- KRP PUNE	
11.	Gangway bridge mounting (PPE)	M/s COMPETENT ENGG.	
12.	Gangway bridge mounting (NPPE)	M/s COMPETENT ENGG.	
13.	Body Side Window	M/S- AGF INDS, KOLKATA	
14.	Emergency Window	M/S- AGF INDS, KOLKATA	
15.	Hopper Window	M/S- BEI LTD PUNJAB	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/s SYANTHITIC MODULAR KOLKATA	
18.	Door way ceiling	M/s- RAJA IND. KHANNA	
19.	Body Side Door2,4	M/s- JVR LDH	
20.	Body Side Door1,3	M/s- JBM FARIDABAD	
21.	Vestibule Door(PPE)	M/s- KALSI LDH	
22.	Vestibule Door(NPPE)	M/s- KALSI LDH	
23.	Bio Tank	M/s- RASANDIK IND	
24.	Auxiliary Water Tank	M/s- MANOJ ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/s Shivalic fastners pvt.ltd. mohali	
26.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
27.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
28.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
29.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
30.	Lavatory Doors	M/s- KALSI, LDH	
31.	Seat & Berth	M/S- OVPL MUMBAI	
32.	Snack Table	N/A	

SSE/QC/MCF/RBL

वरिष्ठ अनुभाग अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

Modern Coach Factory Raebareli **आधुनिक रेल डिब्बा कारख़ाना, रायबरेली**	DOC NO.: MCF/RBL/QMF 8002	
	REV NO: 01	
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DISPATCH TO	SSE/STOCK/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	4	6	3	-	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	AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ खण्ड अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

सहायक यांत्रिक अभियन्ता/गुणवत्ता-I
Assistant Mechanical Engineer / Quality-I
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

SCN-880

	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**	**191243/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-18-07-0111** HT Panel Sr no : **SOP-NAC-MCF-18-7-0106**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make :**KALSI** Sr no PA:**7498/9/18** Sr no.1 :**297289** Sr no.2 :**297290** Sr no.CPA:**7438/08/18-KALSI**	As per spec EDTS 186,Rev-a, Am- 2	**01**
03.	Emergency light system for EOG type coaches (AEL), Make : **CONCORD**	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 : **IC ELECTRICAL** Sr no: **10-18-0030**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make : **PANTRONICS** Sr no : **PAN-18018057**	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 :**AECO**	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 :**0118380248**	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 :**12/17**	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 वरिष्ठ अनुभाग अभियन्ता गुणवत्ता निर्यंत्रण आ0रे0डि0का0 / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	**AWM(E)/MCF/RBL** **SEE(P)/MCF/RBL** स. कार्य प्रबन्धक/ विद्युत आधुनिक डिब्बा कारखाना/ रायबरेली A.W.M./ Electrical/ MCF/ RBL.