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/2018-19/1413

RLY	C	R		Coach No.	1	9	2	2	6	5	/	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	6	2	3	-	2	0	1	8	-	1	9

1. **Railway Board's Order No.** : **2018/M(C)/142/2 Dated-17-10-2018**
2. **Tare Weight of Coach** : 41.24 Tones
3. **Carrying Capacity** : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
4. **Special features-**
   - A. Epoxy flooring in lavatory.
   - B. Anti slip friendly Grab Bar.
   - C. Provision of Health Faucet in lavatories.
   - D. Washbasin counter Top (Corian of Duport or Montelli).
   - E. GFRE ceiling instead of NFTC. (Make- ACME INDIA NDLS)
   - F. DGFRP panels instead of LP panels. (Make- ACME INDIA NDLS)
   - G. Honey Comb partition frame with DGFRP sheet instead of FRP
5. **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) 1105 (NPPE) 2)1102 (PPE)

6. **TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM		MAKE/SUPPLIER		SERIAL NO			
1.	Under frame	Front Part	PP END	M/S-TACPL	19/24			
			NPP END	M/S-TACPL	19/24			
		Complete	M/S-TACPL KANPUR		19/24			
2.	Lav. side wall		M/S-MIDAS GUJRET		LAV.1	-	LAV.2	-
			M/S-MIDAS GUJRET		LAV.3	-	LAV.4	-
3.	Side wall	LH SIDE	MCF/RBL(CONTRACTOR V4U)		437/01			
		RH SIDE	MCF/RBL(CONTRACTOR V4U)		437/02			
4.	End wall	PP END	MCF/RBL/SIS		--			
		NPP END	MCF/RBL/SIS		--			
5.	Roof		M/S- ECBT		92			
6.	Centre Buffer Coupler		M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.		PP END	8911	NPP END	8896

7. **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	09 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

8. **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	91/89
2.	Insulation			Satisfactory	

SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (उत्तर प्रदेश)

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-1413*** ***(2018-2019)***

Coach No.	1	9	2	2	6	5	/	C	-	DATE OF DISPATCH	2	8	.	0	3	.	1	9
RLY	C	R	-	-	Type	L	W	S	C	N	1	Shell No.	8	7	6	2	3	-	-	-

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	183172				183171			
Bogie Type	FIAT				FIAT			
Frame no.	SCI/FM-2282				SCI/FM-2281			
Bolster no.	AMIT-294				AMIT-297			
Axle No	18 J – 8763 RWF		18 J - 1248 RWF		18 J – 5547 RWF		18 H- 5298 RWF	
Wheel Dia	917. 555	917.612	917.641	917.603	917.657	917.656	917.629	917.679
Wheel Disc No	TZ 06-18 26638-8PR9	TZ 04-18 10237-8MH6	TZ 04-18 13856-8MT6	TZ 04-18 13855-8MS9	TZ 12-18 16754-8WR0	TZ 05-18 18801-8PQ6	TZ 06-18 27497-8PN8	TZ 04-18 13096-8MN4
R.B. Nos.	08-18 20134	07-18 17928	09-18 20872	08-18 18830	07-18 16102	08-18 19520	08-18 19883	07-18 16767
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10 SECONDARY SUSPENSION LOAD DEFLECTION VALUES : -

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	AVADH RAIL INFRA. LTD 05-18 1586	AVADH RAIL INFRA. LTD 05-18 1435	AVADH RAIL INFRA. LTD 05-18 1511	AVADH RAIL INFRA. LTD 05-18 1601

11. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	239401,239302	239055,239295
2.	Primary outer Spring	CMFSK	02-19 1100-531(384,481,152,363)	02-19 1100-531(496,372,367,488)
3.	Primary Inner Spring	CMFSK	02-18 1101-395(137,105,207,277)	02-18 1101-395(589,472,362,255)
4.	Primary Damper	IAI	01-19(236096,236616,236239,236465)	01-19(236707,237011,236130,236905)
5.	Secondary Damper	GEREP	KW 16-18 301550739	KW16-18 301550739
6.	Lateral Damper	GEREP	KW 16-18 301550559	KW16-18 301550559
7.	Brake Cylinder	FAV	A19 (664,581,592,712)	A19 (754,602,597,751)
8.	Brake Caliper	FAV	B19(869,871,820,817)B	B19(790,792,816,814)B
9.	Brake Disc	KBI	24172301 0100-05/19,24172297 0037-05/19 24173120 0079-07/19,24173122 0009-07/19	24172298 0036-04/18,24172298 0065-04/18 24173118 0002-06/19,24173118 0003-06/19
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	MGN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	06-18 A7952,06-18 A7958	06-18 A 8823,06-18 A7938
17.	Check Valve	KNORR	12-2018 15359	12-2018 15533
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	151218-2,221218-2,211218-3,191218-2	191218-2,191218-3,171018-1,221018-2
22.	Control Arm Lower	RVE	RVE,061218-2,071218-2,071218-1	071218-1,RVE,061218-2,071218-1
23.	Phonic Wheel.	KNORR	K-02-19	K-02-19

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

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DISPATCH TO	SSE(STOCK)CR/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	6	2	3	-	2	0	1	8	-	1	9

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	A 19195 B
2.	Pull box	M/S-KBI FARIDABAD	
3.	Distribution valve	M/S- FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	19015630 B
4.	FIBA DEVICE	M/S-KBI FARIDABAD	PP/NPP-4920/4921
5.	Foot Step	M/S- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-KOHNOOR INDIA, JUC.	
7.	Floor board	M/S- SHRIRAM PANAL(PUNJAB)	
8.	PVC	M/S -ACME INDIA, NDLS.	
9.	Lavatory Inlay	M/S- SEEMA INDIA BHOPAL	
10.	UIC Vestibule (PPE)	M/S-ELARTOMER.MUMBAI	
11.	UIC Vestibule (NPPE)	M/S-ELARTOMER.MUMBAI	
12.	Gangway bridge mounting (PPE)	M/S- COMPETANT ENG. JALANDHAR	
13.	Gangway bridge mounting (NPPE)	M/S- COMPETANT ENG. JALANDHAR	
14.	Body Side Window	M/S- ACME INDIA NDLS	
15.	Emergency Window	M/S- ACME INDIA NDLS	
16.	Hopper Window	M/S- ACME INDIA NDLS	
17.	Side panel	M/S- ACME INDIA NDLS	
18.	Roof ceiling	M/S- ACME INDIA NDLS	
19.	Door way ceiling	M/S- ACME INDIA NDLS	
20.	Partition frame	M/S- ACME INDIA NDLS	
21.	Partition pillar	M/S- ACME INDIA NDLS	
22.	Body Side Door	M/S- JVR INDUSTRIES.LDH	
23.	Vestibule Door(PPE)	M/S- KALSI, LDH	
24.	Vestibule Door(NPPE)	M/S- KALIS, LDH	
25.	Bio Tank	M/S- RAIL FAB KXH	
26.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
27.	Under Slung Water Tank(2X685L)	M/S-RAIL FAB KAPURTHALA	
28.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST MOHALI	
29.	Flexible Faucet	M/S- ACME INDIA NDLS	
30.	Lotah Filler Tap	M/S- ACME INDIA NDLS	
31.	Controlled Discharge Tap	M/S- HINDWARE HSIL LTD. GURGAON	
32.	Lavatory Doors	M/S- ACME INDIA NDLS	
33.	Seat & Berth	M/S- ACME INDIA NDLS	
34.	Snack Table	N/A	

SSE/QC/MCP/RBL

वरिष्ठ खण्ड नियंत्रक
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: 17.04.2018

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DISPATCH TO	SSE(STOCK)CR/ CSTM	Type	L	W	S	C	N	1	Shell No.	8	7	6	2	3	-	2	0	1	8	-	1	9

13 MODIFICATION (IF ANY) : Partition frame & Partition pillar

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL : NIL

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

16. 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

वरि०खण्ड० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

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	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**	**192265/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 :**2018/12/088** HT Panel Sr no :**2018/12/090**	EDTS 333, Rev`01'Am-1	**01**
02.	Pump equipment with PLC controller & pump box Make :**KALSI** Sr no PA:**7769/10/18** Sr no.1 :**298977** Sr no.2 :**298978** Srno.CPA:**7728/10/18-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:**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	**09**

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 :**NEC**	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:**03-19-0039**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
14.	9KVA transformer Make :**VIMAL** Sr no :**VTC 3089 LHB-1638**	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	**01**
15.	ZS coupling 400A/750V/03Ph/50hz. Make :**S.INTERNATIONALS**	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 :**40-18-1682**	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 :**11/18**	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