



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, 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/2018-19/1171

														ROLLING STOCK CERTIFICATE													
														Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2018-19/11/1													
RLY	E	R	-	Coach No.	1	9	1	9	2	1	/	C	DATE OF DISPATCH				0	9	-	0	2	-	1	9			
DISPATCH TO				CWM/LLH	Type	L	W	S	C	N	1	Shell No.		8	7	3	9	6	-	2	0	1	8	-	1	9	
														2018/M(C)/142/2, Dated-07-02-2019													

- Railway Board's Order No. : 2018/M(C)/142/2, Dated-07-02-2019
- Tare Weight of Coach : 41.24 Tones
- 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) 1098(NPPE) 2) 1100(PPE)

5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/s Shivalic fastners pvt.ltd. mohali NPP END M/s Shivalic fastners pvt.ltd. mohali	11
	Complete	MCF/RBL	11
2.	Lav. side wall	M/S Rail tech pvt.ltd. KXH	87396
		M/S Rail tech pvt.ltd. KXH	LAV.1 --- LAV.2 --- LAV.3 --- LAV.4 ---
3.	Side wall	MCF/RBL (CONTRACTOR V4U)	305
	LH SIDE	MCF/RBL (CONTRACTOR V4U)	305
	RH SIDE		
4.	End wall	M/S Neera chandigarh	---
	PP END	M/S Neera chandigarh	---
	NPP END		
5.	Roof	M/S Pennar ind. Ltd. Thiruvallur Cheenai	278
6.	Centre Buffer Coupler	M/s FRONTIER LTD	PP END 101 NPP END 27

6. AIRBRAKE TEST REPORT:

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full application brake	➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm ² . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ± 0.15 kg/cm ² . OK	07 Sec. 3.0 kg/cm ² OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm ² /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 -GSI	Supply & apply	91/90
2.	Insulation			Satisfactory	

Adema
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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RLY	E	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	3	9	6	-	-	-	-	-	-	-	-
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8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182633				182634			
Bogie Type	FIAT				FIAT			
Frame no.	VS-1554				VS-1551			
Bolster no.	MCF/RBL-2074				MCF/RBL-2079			
Axle No	18 F-2531 RWF		18 F - 2492 RWF		18 F - 2649 RWF		18-G 2915 RWF	
Wheel Dia	917.637	917.623	917.492	917.625	917.612	917.487	917.593	917.607
Wheel Disc No	TZ 06-18 27645-8QG3	TZ 07-18 37272-8RP9	TZ 07-18 37292-8RP9	TZ 05-18 19942-8RP7	TZ07-18 40436-8RS8	TZ07-18 44478-8RL3	TZ05-18 16348-8MT2	TZ05-18 16349-8MY3
R.B. Nos.	05-18 26821	06-18 16192	06-18 17002	06-18 16205	05-18 14483	06-18 17135	05-18 19497	08-18 19918
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- 5101-512-8	CMGBD05-18- 5100-66-474	CMRSK12-18- 5101-512-4	CMGBD05-18- 5100-66-455	CMFSK12-18- 5101-512-281	CMGBD05-18- 5100-66-587	CMFSK12-18- 5101-512-69	CMGBD05-18- 5100-70-649
Compressed Ht. at Tested Load	515	472	513	469	512	471	511	470
Alignment deviation (mm)	8	6	7	6	9	11	12	12

10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	12404,12407	12408,12409
2.	Primary outer Spring	CMGBD	10-18 1100-122 (155,122,475,144)	10-18 1100 (119-193,121-109,122-138,169)
3.	Primary Inner Spring	CMGBD	03-18 1101 (32-2447,31-2452,32-2525,32-2937)	03-18 1101 (32-2441,32-2448,32-2928,30-2939)
4.	Primary Damper	IAI	12-18 (234585,234498,234298,234755)	12-18(234509,234221,234628,234142)
5.	Secondary Damper	GEREP	KW16-2018 301550739	KW 16-2018 301550739
6.	Lateral Damper	IAI	12-18 235333	12-18 235230
7.	Brake Cylinder	KBI	A19(9598,9015,9024,9601,-)29	A19(9592,9020,8909,9600)-29
8.	Brake Caliper	KBI	A19(7787,7817,7854,7743)-29	A19(7785,7814,7816,7786)-29
9.	Brake Disc	KBI	24162322 0028-41/18 24162515 0045-41/18 24162227 0005-39/18 24162275 0021-39/18	24162275 0019-39/18 24162274 0014-39/18 24162604 0012-42/18 24162603 0018-42/18
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	DUREL		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	01218-3,081218-1,051218-3,051218-1	011218-2,031218-2,011218-1,051218-1
22.	Control Arm Lower	RVE	061218-3,071218-1,051218-4,061218-1	071218-4,051218-5,061218-2,RVE

Signature of SSE/Bogie/QC





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DISPATCH TO	CWM/LLH	Type	L	W	S	C	N	1	Shell No.	8	7	3	9	6	-	2	0	1	8	-	1	9
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11. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI Faridabad. New Delhi	1954 02/19
2.	Pull box	M/s KBI Faridabad. New Delhi	
3.	Distribution valve	M/s KBI Faridabad. New Delhi	2019A6493
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- ELASTOMER MUMBAI	
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- S.S PUNJAB	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/s EXCEL IND KOLKATA	
18.	Door way ceiling	M/s- RAJA IND. KHANNA	
19.	Body Side Door	M/S- JVR LDH	
20.	Vestibule Door(PPE)	M/s- KALSI LDH	
21.	Vestibule Door(NPPE)	M/s- KALSI LDH	
22.	Bio Tank	M/s- VEEPEE ENG.	
23.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
24.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. MOHALI	
25.	Under Slung Water Tank (1X685L)	M/s Shivalic fastners pvt.ltd. mohali	
26.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
27.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
28.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
29.	Lavatory Doors	M/s- KALSI, LDH	
30.	Seat & Berth	M/S- SUKATA CDG	
31.	Snack Table	N/A	

Deema
SSE/QC/MCF/RBL

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रे0डि0का0, रायबरेली (लालगंज)



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DISPATCH TO	CWM/LLH	Type	L	W	S	C	N	1	Shell No.	8	7	3	9	6	-	2	0	1	8	-	1	9
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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	REFERENCE & PERIOD OF TRIAL
			Frequency	

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:

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- 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.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/ suggestion please Mail at qualitycfrbl@gmail.com
- 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 मुख्यता विभाग रेडिओका, रायबरेली (लालगंज)	AME/QC/MCF/RBL Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy. CQM/MCF/RBL Joginder Singh उप मुख्य मुख्यालय प्रबन्धक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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	191921/C
RAILWAY	ER	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



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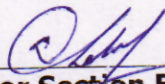
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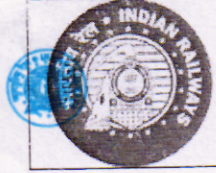
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : NEC On Board Sr no : 2018/16/25 HT Panel Sr no : 2018/16/14	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2018/12/013 Sr no.1 : 18100670 Sr no.2 : 18100661 Sr no.CPA: 2018/12/068-DR AUTO	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: KAVERI	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	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SSK/SALZER	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: INTRA ELECT.	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 LHBSN(80-BERTHER)Coaches Make : AGASTYA	CC76289 & CC76443	09


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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: 11-18-0096	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : PAN-18018048	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 : MAA LAXMI INDUSTRIES.	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0118340201	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 : 07/18	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : TECHNO	CC 91205	01

 SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	 AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL
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गुणवत्ता निबन्धन
आरंभिका / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

सं कार्य प्रबन्धक / विद्युत
आरंभिका / रायबरेली
A.W.M./Electrical/MCF/RBL