



# 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/2018-19/1154

RLY	N	R	-	Coach No.	1	9	1	8	9	8	/	C	DATE OF DISPATCH	0	5	-	0	2	-	1	9			
DISPATCH TO	Sr.DME/CHG/ DLI			Type	L	W	S	C	N	1	Shell No.	8	7	4	5	4	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2, Dated-28-11-2018
- 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) 1105 (NPPE) 2) 1101 (PPE)

#### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	11/18
		PP END	211
		NPP END	87454
		Complete	
2.	Lav. side wall	M/S-RAIL TECH, KXH	LAV.1 - LAV.2 -
		M/S-RAIL TECH, KXH	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE	64
		RH SIDE	64
4.	End wall	PP END	---
		NPP END	---
5.	Roof	M/s-PIL, THIRUVALLUR	261
6.	Centre Buffer Coupler	M/S- SANROK, FARIDABAD	PP END 10787 NPP END 10645

#### 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/cm <sup>2</sup> . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	07 Sec. 3.0 kg/cm <sup>2</sup> OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm <sup>2</sup> /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	90/89
2.	Insulation			Satisfactory	

*Deema*  
वर्तमान में MCF/RBL

गुणवत्ता विभाग  
रेडिओका, रायबरेली (लालगंज)







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/1154

Coach No.	1	9	1	8	9	8	/	C	-	DATE OF DISPATCH	0	5	.	0	2	.	1	9
RLY	N	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	4	5	4	-	-

## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182667				182668			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1539				MCF/RBL-1556			
Bolster no.	APEX-22				APEX-28			
Axle No	18 G - 4249 RWF		18G- 2875 RWF		18G - 4265 RWF		18 G - 3822 RWF	
Wheel Dia	917.630	917.622	917.623	917.638	917.629	917.665	917.611	917.629
Wheel Disc No	TZ08-18 45119-8RN2	TZ08-18 45115-8RN2	TZ08-18 45683-8RQ5	TZ08-18 45113-8RN2	TZ08-18 45112-8RN2	TZ08-18 45223-8RN4	TZ07-18 37439-8RP9	TZ08-18 45651-8RN9
R.B. Nos.	09-18 23097	09-18 22274	09-18 22945	09-18 22295	09-18 23244	09-18 21580	09-18 22911	09-18 22980
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.	CMFSK10-19- 5101-510-69	CMGBD05-18- 5100-66-479	CMFSK01-19- 5101-510-61	CMGBD05-18- 5100-66-73	CMFSK01-19- 5101-510-54	CMGBD05-18- 5100-70-486	CMFSK01-19- 5101-510-18	CMGBD05-18- 5100-66-482
Compressed Ht. at Tested Load	516	472	516	472	513.5	472	513	472
Alignment deviation (mm)	10	11	9	11	9	16	9	16

## 10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	13301,13303	13288,14164
2.	Primary outer Spring	CMGBD	12-18 1100(142-347,122-303,142-320,133-305)	12-18 1100(133-223,133-265,142-375,133-331)
3.	Primary Inner Spring	CMGBD	03-18 1101 (31-2526,32-7573,32-2516)	03-18 1101 (31-2938,32-2489,30-2934,32-2520)
4.	Primary Damper	KNORR	12-18(49003,48733,48581,48587)	12-18(49001,48603,48727,48731)
5.	Secondary Damper	GEREP	KW16-2018 301550739	KW 16-2018 301550739
6.	Lateral Damper	IAI	01-19 237326	01-18 235359
7.	Brake Cylinder	KBI	N18-127,M18(477,386),N18-151	N18-014,M18(498,337),N18-188
8.	Brake Caliper	KBI	A19(496,493,486,488)B	A19(480,478,494,495)B
9.	Brake Disc	KBI	24162603 0007-42/18,24162517 0059-42/18 24162609 0009-42/18,24162603 0008-42/18	24167530 0034-43/18,24167530 0035-43/18 24167529 0010-43/18,24167529 0024-43/18
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	AR		
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/GMT/AR		
20.	Fork make	ASL		
21.	Control Arm Upper	RVE	081218-1,031218-2,031218-1,131118-2	051218-1,051218-1,071218-1,301218-2
22.	Control Arm Lower	RVE	071218-1,071218-2,071218-1,071218-2,	071218-2,071218-2,061218-2,071218-2

Signature of SSE/Bogie/QC



आधुनिक रेल डिब्बा कारखाना, रायबरेली





# Modern Coach Factory Raebareli

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DOC NO.: MCF/RBL/QMF 8002

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**ROLLING STOCK CERTIFICATE**

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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	5	4	-	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- FAIVELY BADDI	M 18038 B
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- FAIVELY BADDI	18115540 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 INDS.DELHI	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-KRP, PUNE	
10.	UIC Vestibule (NPPE)	M/S-KRP, PUNE	
11.	Gangway bridge mounting (PPE)	M/S- COMPETANT ENG. JUC	
12.	Gangway bridge mounting (NPPE)	M/S- COMPETANT ENG. JUC	
13.	Body Side Window	M/S- AGF INDS, KOLKATA	
14.	Emergency Window	M/S- AGF INDS, KOLKATA	
15.	Hopper Window	M/S- BEI PVT. LTD. PUNJAB	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/S- SYNTHETIC MODULAR, KOLKATA	
18.	Door way ceiling	M/s- RAJA IND. KHANNA	
19.	Body Side Door	M/S- SUKATA INDS. CDG	
20.	Vestibule Door(PPE)	M/S- KALSI INDS, LDH	
21.	Vestibule Door(NPPE)	M/S- KALSI INDS, LDH	
22.	Bio Tank LAV-1,3,4	M/s- SVARN INFRATEL PVT. LTD.	
23.	Bio Tank LAV-2	M/s- FLASH FORGE (P)LTD. VIZAG	
24.	Auxiliary Water Tank	M/S- MANOJ ENT. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/S SHIVALIC FASTNERS PVT.LTD. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. BADDI	
27.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
28.	Lavatory Doors	M/S- KALSI INDS, LDH	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Seat & Berth	M/S- SUKATA INDS. CDG	
32.	Snack Table	N/A	

*Deema*SSE/QC/MCF/RBL  
वरिष्ठ निरीक्षक अभियंता

गुणवत्ता विभाग

रेडि०का०, रायबरेली (लालगंज)







# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	5	4	-	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 qualityrcfbl@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 गुणवत्ता विभाग रेडि०का०, रायबरेली (लालगंज)	सहायक मैनिकल अभियंता/गुणवत्ता-II AME/QC/MCF/RBL Assistant Mechanical Engineer (Quality-II) आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.CQM/MCF/RBL जोगिन्दर सिंह उप मुख्य गुणवत्ता प्रबन्धक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli







Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

SCN-887


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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	191898/C
RAILWAY	NR	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







Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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
DATE:18.01.2017

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>ISG</b> On Board Sr no : <b>18.07.0128</b> HT Panel Sr no : <b>17.10.0045</b>	EDTS 333, Rev`01`Am-1	<b>01</b>
02.	Pump equipment with PLC controller & pump box Make : <b>DR AUTO</b> Sr no PA: <b>2018/12/47</b> Sr no.1 : <b>18100674</b> Sr no.2 : <b>18100603</b> Sr no.CPA: <b>2018/12/028-DR AUTO</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL), Make : <b>CONCORD</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Passenger Alarm Cum Indication Light (PACIL) Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	<b>02</b>
05.	Fitment of Switch Plate Assly(Cabin Side) Make : <b>SSK/SALZER</b>	EDML 086,Rev-03, ITEM-01	<b>10</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>SSK/SALZER</b>	EDML 086, Rev 03, ITEM-02	<b>10</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : <b>CG POWER</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
08.	Cabin, Corridor, doorway and Gangway Lights. Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>RT VISION</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	<b>04</b>
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : <b>AGASTYA</b>	CC76289 & CC76443	<b>10</b>

  
**Senior Section Engineer**  
**Quality control / Electrical**  
**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 NONAC SCN COACHES

11.	Battery fuse box +ve Make : <b>INTEG</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>NEC</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>IC ELECTRICAL</b> Sr no: <b>12-18-0057</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>PANTRONICS</b> Sr no : <b>PAN-18018026</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	<b>01</b>
15.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>MAA LAXMI INDUSTRIES.</b>	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	<b>01 set</b>
16.	Feeder junction boxes. Make : <b>AECO</b>	EDTS-328 REV-C	<b>01 set</b>
17.	Wheel set earthling equipment. Make : <b>DARSHAN INTERPRISES.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>33/18/1310</b>	M/s : <b>FAIVELEY</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>SOUTHERN</b> Lug date : <b>12/17</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
20.	Battery box for LHB coaches. Make : <b>HITECH</b>	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>AWM(E)/MCF/RBL</b>
<b>वरिष्ठ अनुभाग अभियन्ता</b>	<b>SEE(P)/MCF/RBL</b>

गुणवत्ता नियंत्रण  
आ०रे०डि०का० / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./LJ/RBL

स० कार्य प्रबन्धक / विद्युत  
आ०रे०डि०का० / रायबरेली  
A.W.M./Electrical/MCF/RBL

