



# 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/2019-20/957

RLY	N	R	-	Coach No.	1	9	7	1	5	0	/	C	DATE OF DISPATCH	2	5	-	1	0	-	1	9
DISPATCH TO	Sr.DME(CHG)/FZR				Type	L	W	S	C	N	1	Shell No.	9	7	4	9	3	FUR.NO.	LSCN-1293		

- Railway Board's Order No. : 2019/M(C)/142/2, Dated: 13-06-2019
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL
- Special feature: -1.- Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiveley) letter no. MC/LHB/Brake, Dated 27.09.2018  
2.- RFID(Radio frequency identification) fitted for traceability of coach

#### 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) 1097 (NPPE) 2) 1104 (PPE)

#### 6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S- MTF
		Complete	NPP END M/S- MTF
2.	Lav. side wall	M/S- ATHANACY RBL	224
3.	Side wall	M/S- ATHANACY RBL	224
	LH SIDE	MCF/RBL(CONTRACTOR V4U)	LAV.1 - LAV.2 -
	RH SIDE	MCF/RBL(CONTRACTOR V4U)	LAV.3 - LAV.4 -
4.	End wall	PP END M/S- RSM MOHALI	282/01
		NPP END M/S- RSM MOHALI	282/02
5.	Roof	M/s-ECBT	---
6.	Centre Buffer Coupler	M/s- ESCORT	---
		PP END 1839	NPP END 1851

#### 7. 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 <sup>2</sup> . ➤ Max. pressure in BC	6 - 10 sec. 3.0 ± 0.15 kg/cm <sup>2</sup> .	07 Sec. 3.0 kg/cm <sup>2</sup>
2.	Insensitivity	➤ All Brake are applied	OK	OK
3.	Sensitivity	➤ Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
		➤ Exhaust BP @ 0.1 kg/cm <sup>2</sup> /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	DATE OF COMPLETION
1.	Paint	P.U	M/s -NEROLAC	KANSAI NEROLAC	89/88	06.10.19
2.	Insulation					
Satisfactory						

SS/OC/MCF/RBL  
वारंजु 0 अभियंता  
गुणवत्ता विभाग  
रेडिंक 0, रायबरेली (बालगंज)







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/2019-20/957

RLY	N	R	-	Coach No.	1	9	7	1	5	0	/	C	-	DATE OF DISPATCH	2	5	1	0	2	0	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	Sr.DME/CHG/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	4	9	3	FUR.NO	LSCN-1293
----------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	--------	-----------

## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191566				191565			
Bogie Type	FIAT				FIAT			
Frame no.	RBL/LS5-1167				RBL/LS5-1116			
Bolster no.	SCI-225				SCI-298			
Axle No	19 S - 3432 RWF		19 S - 3293 RWF		19 s - 5196 RWF		19 s - 0526 RWF	
Wheel Dia	917.504	917.542	917.464	917.562	917.553	917.536	917.395	917.425
Wheel Disc No	TZ 06-19 59144-9QI6	TZ 07-19 64671-9RQ2	TZ 07-19 67508-9RL3	TZ 07-19 64674-9RQ1	TZ 07-19 68956-9rm6	TZ 07-19 64424-9RP4	TZ 07-19 69285-9RL6	TZ 07-19 68010-9RS0
R.B. Nos.	08-19 25911	08-19 27251	08-19 27195	08-19 26077	08-19 26000	08-19 26742	08-19 23120	06-19 12029
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.	TAYAL & CO. Sr.NO.19-08 3084	TAYAL & CO. Sr.NO.19-08 3089	TAYAL & CO. Sr.NO.08-19 3161	TAYAL & CO. Sr.NO.08-19 3114

## 11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17298,17284	17279,17270
2.	Primary outer Spring	CMSTL	07-19 07A(1658,2268,2136,1958)	07-19 07A(2127,2093,2507,2049)
3.	Primary Inner Spring	CMFSK	08-19 1101-64 (164,26,58,442)	08-19 1101-64(16,508),07-19 1101- (1109,17)
4.	Primary Damper	KONI	03-19 (05511,06740,06522,06582)	03-19 (06600,07737,06738,06596)
5.	Secondary Damper	KONI	04-19 (00761,00719)	07-19 (00711,00556)
6.	Lateral Damper	KONI	04-19 00652	07-18 00449
7.	Brake Cylinder	KBI	B(8833,7879,7747,8827)K29	B(8780,7846,7748,8781,)K29
8.	Brake Caliper	KBI	B(5860,5845,5843,5841)-29	B(5821,5810,5809,5824)-29
9.	Brake Disc	FAV	06-19(5993,5990,5992,5961)	06-19(5801,5800,6029,6207)
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1904,1904	1904,1904
17.	Check Valve	ESCORT	1905	1905
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT,		
20.	Fork make	EMSON		
21.	Control Arm Upper	FAV	260719-1,250719-2,310719-1,250719-2	300719-2,250719-2,250719-2,250719-2
22.	Control Arm Lower	FAV	240719-1,240719-2,020719-2,240719-2	240719-2,020719-2,240719-2,240719-4
23.	Phonic Wheel	KNOOR	K-08-19	K-08-19

Signature of SSE/Bogie/QC





# 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/2019-20/957

RLY	N	R	-	Coach No.	1	9	7	1	5	0	/	C	DATE OF DISPATCH	2	5	-	1	0	-	1	9
DISPATCH TO	Sr.DME(CHG)/FZR				Type	L	W	S	C	N	1	Shell No.	9	7	4	9	3	FUR.NO.	LSCN-1293		

### 12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	
2.	Pull box	M/S- KBI, FARIDABAD	3655 36/19
3.	Distribution valve	M/S- KBI, FARIDABAD	
4.	FIBA	M/S- KBI, FARIDABAD	2019 H 8791
5.	Foot Step	M/S- SUPER SPARK PVT. LTD. FARIDABAD	PP-10441/29
6.	Decoupling arrangement	M/S- ELASTOMER LINING WORKS, MUMBAI	NPP-10474/29
7.	Floor board	M/s- SHRI RAM PANELS, PUNJAB	
8.	PVC	M/S- RESPONSIVE IND. MUMBAI	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/s-FP INDS KOLKATA	
15.	Emergency Window	M/S -AGF PVT. LTD, KOLKATA	
16.	Hopper Window	M/S-SHATABDHI VADODARA+VEDANSH RBL	
17.	Side panel	M/s- WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDIA NEW DELHI	
19.	Door way ceiling	M/S-JAMM TOOLS RBL	
20.	Body Side Doors	M/s- JVR INDS, LUDHIYANA	
21.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
22.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
23.	Bio Tank with pressurized flushing	M/s-RASANDIK ENGG. INDUSTRIES GURGAON	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
27.	Controlled Discharge Tap	M/s- EAU BATHING SOLUTION PVT LTD. GURURAM	
28.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
30.	Lavatory Doors	M/S -KALSI AUTOMATIC DOOR SYSTEM LTD.LDH	
31.	Seat & Berth	M/s- T.W.P.L. INDUS. MUMBAI	
32.	Snack Table	N/A	
33.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104341-104342

SSE/QC/MCF/RBL  
वरिष्ठ अनुष्ठानिक अभियंता

गुणवत्ता विभाग  
रेडिओका, रायबरेली (लालगंज)







# 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/2019-20/957

RLY	N	R	-	Coach No.	1	9	7	1	5	0	/	C	DATE OF DISPATCH	2	5	-	1	0	-	1	9
DISPATCH TO	Sr.DME(CHG)/FZR				Type	L	W	S	C	N	1	Shell No.	9	7	4	9	3	FUR.NO.	LSCN-1293		

13. MODIFICATION (IF ANY)

: NIL

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:

- 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 qualityrcfrbl@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	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

गुणवत्ता विभाग  
रेडिओका, रायबरेली (लालपंज)

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

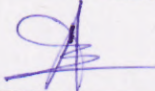
DATE: 18.01.2017

PAGE 1 OF 3

**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	197150/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

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

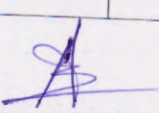
DATE:18.01.2017

PAGE 2 OF 3

**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>HIND</b> On Board Sr no : <b>H 355 19 H 416</b> HT Panel Sr no : <b>H 355 19 H 415</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>2019/09/0032</b> Sr no.1 : <b>19090127</b> Sr no.2 : <b>19090230</b> Srno.CPA: sr no - <b>2019/09/017-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>DR AUTO</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>RECORD /SALZER</b>	EDML 086,Rev-03, ITEM-01	<b>20</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>RECORD /SALZER</b>	EDML 086, Rev 03, ITEM-02	<b>20</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>RT VISION</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>DR AUTO</b>	CC76289 & CC76443	<b>09</b>

  
Senior Section Engineer  
Quality control / Electrical  
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

PAGE 3 OF 3

**FOR ELECTRICAL ITEMS**

**ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES**

11.	Battery fuse box +ve Make : <b>RADIANT</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>RADIANT</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>WAVES</b> Sr no: <b>W4K5H 19485</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>VTC 3089 LHB-2280</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>PRIME ELECT.</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 earthing equipment. Make : <b>DARSHAN INTERPRISES.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119040933</b>	M/s : <b>KNORR</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>AMARA RAJA</b> Lug date : <b>08/19</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>वरिष्ठ अनुभाग अभियन्ता</b> <b>गुणवत्ता नियंत्रण</b> <b>आपरेटिंग/लालगंज/रायबरेली</b> <b>S.S.E/Elect-QC/M.C.F./LLJ/RBL</b>	<b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b> <b>वरिष्ठ विद्युत अभियन्ता</b> <b>रेल कोच फैक्टरी, रायबरेली,</b> <b>Sr. Electrical Engineer / RCF / RBL</b>

