



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/2019-20/581

RLY	E	C	R	Coach No.	1	9	5	8	5	5	/	C	DATE OF DISPATCH	1	4	-	0	8	-	1	9
DISPATCH TO	Sr.DME/DNR			Type	L	W	S	C	N	1	Shell No.	9	7	3	1	5	FUR.NO.			LSCN-1146	

1. Railway Board's Order No. : 2019/M(C)/142/2, Dated: 03-06-2019

2. Tare Weight of Coach : 41.24 Tones

3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature: - 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

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) 1100 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/s-SFPL
		NPP END	M/s-SFPL
	Complete	MCF/RBL	5/19
2.	Lav. side wall	M/S- MIDAS, GUJRAT	5/19
		M/S- MIDAS, GUJRAT	97315
3.	Side wall	LH SIDE	LAV.1 - LAV.2 -
		RH SIDE	LAV.3 - LAV.4 -
4.	End wall	M/s- KANSAL MOHALI	13/KANSAL
		M/S- RAIL TECH KAPURTHALA	13/KANSAL
		NPP END	---
5.	Roof	MCF/RBL	---
6.	Centre Buffer Coupler	M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.	59
		PP END	1104 NPP END 1014

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/cm ² . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ±0.15 kg/cm ² . OK	09 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

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	M/s- KANSAL NEROLAC	90/87	28.07.19
2.	Insulation			Satisfactory		

वरिष्ठ अभियंता
SSE/QC/MCF/RBL

रेडिओ, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH	Sr.DME/DNR	Type	L	W	S	C	N	1	Shell No.	9	7	3	1	5	FUR.NO	LSCN-1146
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192044				192043			
Bogie Type	FIAT				FIAT			
Frame no.	VS-1890				VS-1891			
Bolster no.	APEX-154				APEX-152			
Axle No	19 P - 7010 RWF				19 P - 6412 RWF			
Wheel Dia	917.5	917.63	917.634	917.667	917.509	917.649	917.491	917.627
Wheel Disc No	TZ 02-19 26590-9MJ2	TZ 02-19 27249-9MJ6	TZ 02-19 26538-9MJ6	TZ 04-19 39313-9OG4	TZ 02-19 27251-9MJ6	TZ 02-19 26560-9MK0	TZ 02-19 27250-9MJ6	TZ 02-19 26598-9MJ2
R.B. Nos.	05-18 29413	05-18 39321	05-18 28788	05-18 40075	05-18 12225	05-18 11495	05-18 29038	05-18 29221
CT R B Make	SKF				SKF			

10. 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.	CMAFJ06-19-5101-49	CMFSK06-17-5100-235-186	CMAFJ06-19-5101-50	CMFSK06-17-5100-229	CMAFJ06-19-5101-16	CMFSK06-17-5100-235-187	CMAFJ06-19-5101-4	CMFSK06-17-5100-235-233
Compressed Ht. at Tested Load	516	470	515	469	515	471.5	516	467.5
Alignment deviation (mm)	15	10	15	9	5	13	5	13

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	12469,12446	12459,12449
2.	Primary outer Spring	CMSTL	07-19 07A(473,971,719,346)	07-19 07A(681,213,770,659)
3.	Primary Inner Spring	CMGBD	07-19 F06-937(617,5,146,196)	07-19 F06-937(148,662,96,650)
4.	Primary Damper	KONI	03-19 (04275,03732,03861,03718)	03-19 (03104,03285,04157,03735)
5.	Secondary Damper	KONI	03-19 (00242,00290)	03-19 (00224,00288)
6.	Lateral Damper	IAI	02-19 241514	02-19 241787
7.	Brake Cylinder	KBI	B(6029,5144,5141,6023)K-29	B(6011,3634,5147,6026)K-29
8.	Brake Caliper	KBI	B(3461,3537,3535,3462) -29	B(3460,5148,3536,3454) -29
9.	Brake Disc	KBI	24185217 0068-16/19,24185218 0021-16/19 24178943 0053-14/19,24185208 0037-14/19	24173128 0034-08/19,24173128 0035-08/19 24185214 0057-16/19,24185218 0030-16/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PPI		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR, SARITA/PPI		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	115,178,81,SF	48,85,254,303
22.	Control Arm Lower	SF	179,13,45,90	SF,40,28,102
23.	Phonic Wheel	KNORR	K-05-19	K-05-19

Signature of SSE/Bogie/QC



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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	3241 29/19
3.	Distribution valve	M/S- KBI, FARIDABAD	
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	2019 G 8264
5.	Decoupling arrangement	M/S-ELASTOMER INDS, MUMBAI	
6.	Floor board	M/s- SHRI RAM PANELS, GOVINDGARH	
7.	PVC	M/S RESPONSIVE IND.DELHI	
8.	Lavatory Inlay	M/s- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S- MAHAVEER MATEL WORKS KXH	
12.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS KXH	
13.	Body Side Window	M/S-F.P. KOLKATA	
14.	Emergency Window	M/S-AJC INDS KOLKATA	
15.	Hopper Window	M/S- VEDANSH ENTERPRISES RBL	
16.	Side panel	M/s- ACME INDIA NEW DELHI	
17.	Roof ceiling	M/s- MICA PLY BHOPAL	
18.	Door way ceiling	M/s- RAJA INDS. KHANNA	
19.	Body Side Doors 1,3	M/S- SUKATA INDS. CDG	
20.	Body Side Doors 2,4	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank with pressurized flushing	M/s- FLASH FORGE (P)LTD. VIZAG, M/S-IMI	
24.	Auxiliary Water Tank	M/S- MANOJ ENT. 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- AGMECO PVT LTD U.K	
28.	Health Faucet	M/S-KAPCO VALVES JALANDHAR	
29.	Lotah Filler Tap	M/S-KAPCO VALVES JALANDHAR	
30.	Lavatory Doors D1,D2,D3	M/s- J.R. INDS. JALANDHAR	
31.	Lavatory Doors D4	M/S- KALSI, LUDHIYANA	
32.	Seat & Berth	M/S- OVPL MUMBAI	
33.	Snack Table	N/A	

[Signature]
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडि0का0, रायबरेली (लालगंज)





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13. MODIFICATION (IF ANY)

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

वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
#0डिब्बा0, रायबरेली (लाभगंज)वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareliउप मुख्य गुणवत्ता प्रबंधक/रेल
Dy. Chief Quality Manager/Shop
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

MCF/RBL



Modern Coach Factory Raebareli
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DOC NO.: MCF/RBL/QEF/8001

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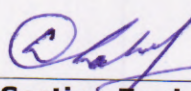
SCN-1146

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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	195855/C
RAILWAY	ECR	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
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : AMIT ENGG. On Board Sr no : AE/USBC-1193 HT Panel Sr no : AE/USBC-1178	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/07/0034 Sr no.1 : 2860 Sr no.2 : 2866 Srno.CPA: 2019/06/128-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : A PAUL	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: VENTURLL CORPORATION	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: ENSAVE	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: DR AUTO	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 : DR AUTO	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 : RADIANT	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : RADIANT	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5G 19157	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2044	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0`,Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	As per spec No EDTS 105,Rev`e` Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : NEC	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 : 0119101386	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 07/19	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 DYCEE/PLG/MCF/RBL स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL