



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/2019-20/1047

RLY	C	R	-	Coach No.	1	9	7	2	3	9	/	C	DATE OF DISPATCH	1	1	-	1	1	-	1	9
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DISPATCH TO	SSE/STOCK/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	0	0	5	FUR.NO.	LSCNG-281
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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: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S- ACME INDIA NDLS
B.	Anti slip friendly Grab Bar	M/S- ACME INDIA NDLS
C.	Provision of Health Faucet in lavatories	M/S- ACME INDIA NDLS
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S- ACME INDIA NDLS
E.	GFRE ceiling instead of NFTC	M/S- ACME INDIA NDLS
F.	DGFRP panels instead of LP panels	M/S- ACME INDIA NDLS
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S- ACME INDIA NDLS
H.	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	M/S- ACME INDIA NDLS
I.	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) 1102 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-CHENNAI RADHA ENG.	59
		NPP END M/S-CHENNAI RADHA ENG.	59
2.	Lav. side wall	M/S-CHENNAI RADHA ENG.	59
		M/S- MIDAS GUJRAT	
3.	Side wall	M/S- MIDAS GUJRAT	LAV.1 - LAV.2 -
	LH SIDE	MCF/RBL(CONTRACTOR V4U)	LAV.3 - LAV.4 -
	RH SIDE	MCF/RBL(CONTRACTOR V4U)	143/01
4.	End wall	PP END M/s-RAIL TECH KXH	143/02
		NPP END M/s-RAIL TECH KXH	--
5.	Roof	M/s-MCF/RBL	--
6.	Centre Buffer Coupler	M/s- FRONTIER	68
		PP END 19P1 NPP END 141P1	

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 ² . ➤ Max. pressure in BC	6 - 10 sec. 3.0 ±0.15 kg/cm ² .	07 Sec. 3.0 kg/cm ²
2.	Insensitivity	➤ All Brake are applied ➤ Exhaust BP @ 0.3 kg/cm ² /min.	OK	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.	No brake application 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	(SUPPLY & APPLY)	90/88	31.07.19
2.	Insulation					

Satisfactory

[Signature]
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिंकडो, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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DISPATCH	SSE/STOCK/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	0	0	5	FUR.NO	LSCN-G -281
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191898				191897			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1513				FIAT			
Bolster no.	AMIT-820				ECBT-1511			
Axle No	19 S - 0953 RWF				AMIT-807			
Wheel Dia	917.599	917.574	917.617	917.6	917.5	917.5	917.563	917.533
Wheel Disc No	TZ 08-19 74506-9RJ2	TZ 07-19 61775-9RM4	TZ 07-19 61773-9RM4	TZ 08-19 73535-9SL0	TZ 08-19 73802-9SL2	TZ 08-19 73821-9SL1	TZ 08-19 73821-9SL1	TZ 08-19 73556-9RP2
R.B. Nos.	09-18 21809	08-18 20504	09-18 21973	09-18 22190	09-18 22859	08-18 20737	09-18 23080	09-18 21102
CT R B Make	TIMKEN				TIMKEN			

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.	CMAFJ09-19-5101-104	CMFSK09-19-5100-0027-397	CMAFJ09-19-5101-141	CMFSK09-19-5100-027-390	CMAFJ09-19-5101-138	CMFSK09-19-5100-027-400	CMAFJ09-19-5101-174	CMFSK09-19-5100-027-338
Compressed Ht. at Tested Load	516	469	515	470	516	471	516	472
10Alignment deviation (mm)	10	11	10	12	15	7	17	7

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16546, 17361	16527, 15840
2.	Primary outer Spring	CMFSK/CMSTL	09-19-1100-078 (2335, 2079, 2050, 2331)	07-19 07A (5381, 5322, 5438, 5380)
3.	Primary Inner Spring	CMFSK	10-19-1101-101 (274, 188, 225, 249)	10-19-1101-101 (135, 115, 170, 163)
4.	Primary Damper	KONIC	03-19 (07023, 07058, 07028, 05057)	03-19 (06969, 04298, 06530, 06362)
5.	Secondary Damper	KONIC	04-19 (00653, 00657)	04-19 (00660, 00663)
6.	Lateral Damper	IAI	05-19 251474	05-19 251329
7.	Brake Cylinder	KBI	B(9734, 8623, 8618, 9732)K29	B(9730, 8788, 8558, 9700)K29
8.	Brake Caliper	KBI	B(6611, 6759, 6757, 6613)-29	B(6614, 6756, 5857, 6662)-29
9.	Brake Disc	KBI	24200059 0021-38/19, 24200055 0068-37/19 24200059 0042-38/19, 24200053 0071-37/19	24200058 0027-37/19, 24200059 0024-38/19 24200058 0031-37/19, 24200059 027-38/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	DURIEL		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT SARITA/AR		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	190819-3, 190819-3, 110819-2, 190819-2	190819-2, 190819-3, 190819-3, 190819-2
22.	Control Arm Lower	RVE	100819-2, 120819-1, 190819-2, 170819-2	170819-2, 170819-2, 190819-2, 160819-2
23.	Phonic Wheel	KBI	K-05-19	K-05-19

by





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DISPATCH TO				SSE/STOCK/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	0	0	5	FUR.NO.	LSCNG-281		

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	
2.	Distribution valve	M/S- KBI, FARIDABAD	3853 38/19
3.	Pull box	M/S- KBI, FARIDABAD	2019 J 9051
4.	FIBA	N/A	
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-TWPL MUMBAI	
8.	PVC	M/S- ACME INDIA NDLS	
9.	Lavatory Inlay	M/S- SEEMA INDS. 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- 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-SARITA HITECH	
22.	Body Side Doors	M/S- ACME INDIA NDLS	
23.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Vestibule Door(NPPE)	M/S- HANSPAL COACH PRODUCTS, KXH	
25.	Bio Tank	M/S- HANSPAL COACH PRODUCTS, KXH	
26.	Auxiliary Water Tank	M/S- FLASH FORGE (P) LTD VIZAG	
27.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. MOHALI	
28.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST. MOHALI	
29.	Health Faucet	M/s- AMIT ENG. MOHALI	
30.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
31.	Controlled Discharge Tap	M/s- KAPCO VALVES JALANDHAR	
32.	Lavatory Doors	M/s- AGMECO (P) LTD. UK	
33.	Seat & Berth	M/S- ACME INDIA NDLS	
34.	Snack Table	M/S- ACME INDIA NDLS	
35.	RFID	N/A	
		M/s-TECH SOLUTION GURGAON	Sr.106749,106750

[Signature]
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडि0का0, रायबरेली (लालगंज)





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DISPATCH TO		SSE/STOCK/CR/BB		Type		L	W	S	C	N	1	Shell No.		9	7	0	0	5	FUR.NO.		LSCNG-281				

13. MODIFICATION (IF ANY)

Partition frame & Partition wall

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:

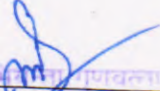
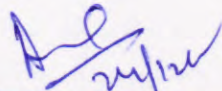
S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30 months from the date of supply of material whichever is earlier.

NOTE:

- 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 मुख्यता विभाग रेडिओ, रायबरेली (लालगंज)	 SME/QC/MCF/RBL आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	 Dy. COM/MCF/RBL जोगिन्दर सिंह उप मुख्य मुखयता प्रबन्धक आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli
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MCF/RBL



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
रायबरेली

9-281
DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE:18.01.2017

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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	197239/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



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

01.	Switch board cabinet Make : MREM On Board Sr no : MREM-355013 HT Panel Sr no : MREM-355009	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/0071 Sr no.1 : 4815 Sr no.2 : 4819 Srno.CPA: NIL-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	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 : SALZER/SSK	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: ORIENT	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: RT VISION	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

(Signature)

**Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli**



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : INDORAIL	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: W4K5H 19567	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-1751	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 : INDORAIL	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 : 0119201908	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 08/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : ANANYA	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 बि० SEE(P)/MCF/RBL

आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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