



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/2019-20/521

RLY	E	Co	R	Coach No.	1	9	5	9	0	1	/	C	DATE OF DISPATCH	2	7	-	0	7	-	1	9
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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	1	2	8	FUR.NO.	LSCNG-247
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- Railway Board's Order No. : 2019/M(C)/142/2, Dated-03-06-2019
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
- Special features :

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	

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) 1095 (NPPE) 2) 1101 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S- RFPL	32
	Front Part	NPP END M/S- RFPL	28
	Complete	MCF/RBL	97128
2.	Lav. side wall	M/S- COMPETANT ENG. JUC	LAV.1 - LAV.2 -
		M/S- COMPETANT ENG. JUC	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL (CONTRACTOR V4U)	55/01
		RH SIDE MCF/RBL (CONTRACTOR V4U)	55/02
4.	End wall	PP END M/s- P.D.STEEL PANCHKULA	--
		NPP END M/s- P.D.STEEL PANCHKULA	--
5.	Roof	MCF/RBL	34
6.	Centre Buffer Coupler	M/S- SANROK ,FARIDABAD	PP END 12991 NPP END 12977

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	08 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 -VIBGYOR	Supply & apply	90/88	02.07.19
2.	Insulation			Satisfactory		

(Signature)
 SSG/OC/MCF/RBL
 वरिष्ठ गुणवत्ता अभियंता
 गुणवत्ता विभाग
 १०डि०का०, 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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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	190581				190582			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-1476				ECBT-1480			
Bolster no.	APEX-51				APEX-132			
Axle No	19 P - 1776 RWF		19 P - 1808 RWF		19 P - 1926 RWF		19 P - 8380 RWF	
Wheel Dia	917.672	917.693	917.677	917.732	917.741	917.633	917.637	917.715
Wheel Disc No	TZ 06-18 26498-8PQ3	TZ 05-19 43693-9PG1	TZ 06-19 27266-8QG5	TZ 06-18 27265-8QG5	TZ 05-18 25602-8MR1	TZ 07-18 40356-8RL9	TZ 05-19 44197-FH2	TZ 05-18 23561-8FR2
R.B. Nos.	02-19 01713	02-19 00813	02-19 01703	02-19 02489	02-19 00809	02-19 04883	02-19 05126	02-19 05189
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	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMAFJ03-19-5101-68	CMRSK05-18-F08-N73-08Y-679	CMAFJ03-19-5101-58	CMRSK05-18-F08-N73-08Y-554	CMAFJ03-19-5101-63	CMRSK05-18-N73-08Y-1047	CMAFJ03-19-5101-55	CMRSK05-18-N73-08Y-894
Compressed Ht. at Tested Load	516	468	516	473	516	471	516	472
Alignment deviation (mm)	15	5	15	5	20	9	20	10

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13686,13598	13584,13587
2.	Primary outer Spring	CMFSK	05-19 1036-555(784,655,721,752)	05-19 1036-555(669,649,683,748)
3.	Primary Inner Spring	CMFSK/CMSTL	05-19 1037-842(26,63,99,79)	05-19 1037-842(116,65,16,93)
4.	Primary Damper	KONI	03-19 (03040,02658,02274,03267)	03-19 (02696,02652,03365,00853)
5.	Secondary Damper	IAI	06-19 (257072,257016)	06-19 (257095,246895)
6.	Lateral Damper	IAI	02-19 241735	02-19 241569
7.	Brake Cylinder	KBI	B(3861,3174,3330,4181)K-29	B(4379,3481,3474,4378)K-29
8.	Brake Caliper	KBI	B(1484,1687,1888,1944) -29	B(1946,1887,1885,1943) -29
9.	Brake Disc	FAV	10-18(1384,1382)09-18(1283)08-18(1281)D-133561-300	10-18 (1428,1425,1383,1381)D-133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/PPI, SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	121218-2,131118-2,101218-3,121218-1	121218-1,121218-2,311118-2,121218-1
22.	Control Arm Lower	RVE	180219-3,010119-2,RVE,260219-3	171218-1,171218-1,161218-2,161218-1
23.	Phonic Wheel	KNORR	K-03-19	K-03-19

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	2613 15/19
2.	Distribution valve	M/S- KBI, FARIDABAD	2019 D 7370
3.	Pull box	M/S- KBI, FARIDABAD	
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/S- SHRI RAM PANEL PUNJAB	
7.	PVC	M/s ACME INDIA, NDLS	
8.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-KRP PUNE	
10.	UIC Vestibule (NPPE)	M/S-KRP PUNE	
11.	Gangway bridge mounting (PPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
12.	Gangway bridge mounting (NPPE)	M/S- HARE KRISHNA COACH PRODUCT KXH	
13.	Body Side Window	M/s- ACME INDIA NDLS	
14.	Emergency Window	M/s- ACME INDIA NDLS	
15.	Hopper Window	M/s- ACME INDIA NDLS	
16.	Side panel	M/s- ACME INDIA NDLS	
17.	Roof ceiling	M/s- ACME INDIA NDLS	
18.	Door way ceiling	M/s- ACME INDIA NDLS	
19.	Partition frame	M/s- SARITA HITECH, UMB	
20.	Partition pillar	M/s- ACME INDIA NDLS	
21.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Bio Tank	M/s- RASANDIK ENG. INDUSTRIES, GURUGRAM	
25.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/s- RAIL FAB KXH	
27.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
28.	Health Faucet	M/s- ACME INDIA NDLS	
29.	Lotah Filler Tap	M/s- ACME INDIA NDLS	
30.	Controlled Discharge Tap	M/s- HINDWARE ,(HSIL LTD) GURGAON	
31.	Lavatory Doors	M/s- KALSI LUDHIYANA	
32.	Seat & Berth	M/s- ACME INDIA NDLS (DURABLE POLYMER)	
33.	Snack Table	N/A	

SSE/QC/MCF/RBL

वरिष्ठ अधिकारी
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



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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	REFERENCE & PERIOD OF TRIAL
			Frequency	

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 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 रेडिओ काठ, रायबरेली (लालगंज)	SME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy. Chief Quality/MCF/RBL/Shell आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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DATE:18.01.2017

9-247

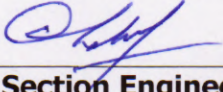
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	195901/C
RAILWAY	ECoR	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 : MV ELECTRO SYSTEMS On Board Sr no : NIL HT Panel Sr no : 063/H/19-20	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/06/0138 Sr no.1 : 19060808 Sr no.2 : 19060722 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 : VGS	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: RT VISION	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: IMT CABLES	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 : AECO	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5F 19069	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-1964	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 : AECO	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119091275	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 : 06/19	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	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / तालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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

