



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/2019-20/114

RLY	E	C	o	R	Coach No.	1	9	3	4	8	8	/	C	DATE OF DISPATCH	3	0	-	0	4	-	1	9
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DISPATCH TO	SR.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	0	7	6	FUR.NO.	LSCNG-196
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1. Railway Board's Order No. : 2019/M(C)/142/2 Dated-26-03-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
4. 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 NPTC	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

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) 1098 (NPPE) 2) 1099 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

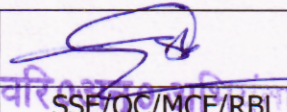
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-SFPL	02/19
		NPP END M/S-SFPL	102/19
	Complete	MCF/RBL(SIS)	44/105
2.	Lav. side wall	M/S- MIDAS, GUJRAT	LAV.1 - LAV.2 -
		M/S- MIDAS, GUJRAT	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL (CONTRACTOR V4U)	455/01
		RH SIDE MCF/RBL (CONTRACTOR V4U)	455/02
4.	End wall	PP END M/s- RAIL TECH, KXH	--
		NPP END M/s- RAIL TECH, KXH	--
5.	Roof	M/S- PENNAR	389
6.	Centre Buffer Coupler	M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.	PP END 9004 NPP END 9027

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	91/89	27.04.19
2.	Insulation			Satisfactory		


SSE/QC/MCF/RBL

गुणवत्ता विभाग

रेडिंक 0, रायबरेली (लाजगाज)



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	Sr.CDO/ VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	0	7	6	FUR .NO	LSCN-G-196
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	190034				190033			
Bogie Type	FIAT				FIAT			
Frame no.	VS-1693				VS-1654			
Bolster no.	AMIT-488				AMIT-484			
Axle No	19 M - 3395 RWF		19 M - 9827 RWF		19 L - 8457 RWF		19 L - 8469 RWF	
Wheel Dia	917.664	917.745	917.677	917.748	917.631	917.719	917.654	917.723
Wheel Disc No	TZ 07-17 24661-7QJ4	TZ 06-17 21976-7ON7	TZ 03-18 08066-8MR7	TZ 05-18 23713-8QG7	TZ 06-18 22987-8PS1	TZ 06-18 27285-8QG5	TZ 06-18 27986-8PS1	TZ 06-18 27985-8RR6
R.B. Nos.	05-18 29384	07-18 41388	05-18 29211	05-18 28744	05-18 40554	05-18 12749	05-18 40549	07-18 41405
CT R B Make	SKF		SKF		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.	CMFSK03-19-5101-551-288	CMRSK03-18-F08-N71-08Y-118	CMFSK03-19-5101-551-322	CMRSK03-18-F08-N71-08Y-276	CMFSK03-19-5101-551-302	CMRSK02-18-F08-N73-08Y-478	CMFSK03-19-5101-551-200	CMRSK03-18-F08-N73-08Y-529
Compressed Ht. at Tested Load	515.5	469	514	471	513	468	513.5	470
Alignment deviation (mm)	9	15	7	15	10	5	7	3

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18379,18382	18394,18397
2.	Primary outer Spring	CMSTL	01-19 07A(1759,1269,639,2279)	01-19 07A(449,2166,2067,2272)
3.	Primary Inner Spring	CMRSK	11-18 06A(3860,3181,3086,2911)	01-18 06A(8245,8089,2760,8289)
4.	Primary Damper	KNORR	02-19 (53313,54908,54927,54935)	02-19 (53321,53318,54500,53575)
5.	Secondary Damper	GB/IAI	10-18 (0055,051)	03-19 (243660,243694)
6.	Lateral Damper	IAI	02-19 241331	02-19 241161
7.	Brake Cylinder	FAV	(B19-203,C19-355,354,B19-204)	C19(389,391,390,392)
8.	Brake Caliper	FAV	D19(180,177,178,179)B	C19(128,126,125,127)B
9.	Brake Disc	FAV	02-19 (1473,1474,2164,2163)D-133561-300-1	02-19 (1479,1480,1478,1477)D-133561-300-1
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA/SF		
13.	Traction lever make	JL		
14.	Ball joint traction lever	MGN		
15.	Ball joint traction centre	PPI		
16.	Secondary Rubber Pad	TECSPAC		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/PPI/SF/PPI		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	300119-3,300119-3,300119-3,300119-3	040219-3,010219-4,300119-3,300119-3
22.	Control Arm Lower	RVE	070219-1,070219-1,070219-1,070219-1	010219-4,010219-4,010219-4,290119-2
23.	Phonic Wheel	FAV	FT/KEP/1548	FT/KEP/2019

Signature of SSE/Bogie/QC



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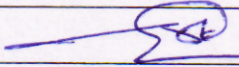
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	C 19114 B
2.	Distribution valve	M/S- FAIVELY TRANSPORT TECH.INDIA LTD BADDI(HP)	19035625 B
3.	Pull box	M/S- KBI LTD	
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S- KOHINOOR INDIA JUC.	
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 MUMBAI	
10.	UIC Vestibule (NPPE)	M/S-KRP MUMBAI	
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- 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- ACME INDIA NDLS	
20.	Partition pillar	M/s- ACME INDIA NDLS	
21.	Body Side Door	M/s- JVR INDS, LUDHIYANA	
22.	Vestibule Door(PPE)	M/S- JBM IND. FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- JBM IND. FARIDABAD	
24.	Bio Tank	M/s- FLASH FORGE (P)LTD. VIZAG	
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.	Flexible 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- ACME INDIA NDLS	
32.	Seat & Berth	M/s- ACME INDIA NDLS	
33.	Snack Table	N/A	


SSE/QC/MCF/RBL

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रेडिओ, रायबरेली (लालगंज)



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DISPATCH TO	SR.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	9	7	0	7	6	FUR.NO.	LSCNG-196
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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 &
			Frequency	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 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 रेडिओका, रायबरेली (लालगंज)	SME/QC/MCF/RBL Senior Manager Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.CQM/MCF/RBL Joginder Singh उप मुख्य गुणवत्ता प्रबंधक Dy. Chief Quality Manager आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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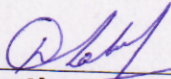
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	193488/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 : SSK On Board Sr no : 2019/03/173 HT Panel Sr no : 2019/03/171	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/02/064 Sr no.1 : 19010835 Sr no.2 : 19010818 Srno.CPA: 7348/08/18-KALSI	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: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SSK	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SSK	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: RT VISION	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 : INTRA ELECT.	CC76289 & CC76443	09

Senior Section Engineer
Quality control / Electrical
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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 : NEC	LW 71002,Alt-F	01
13.	Regulated battery charger Make : BHASIN Sr no: 03190146	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : PAN-18018190	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : SIDWAL	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : DARSHAN INTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : FAIVELEY Sr no : 06/19/178	M/s : FAIVELEY	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 01/19	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	AWM(ELECT.)/MCF/RBL
वरिष्ठ अनुभाग अभियन्ता	SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
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