



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/2018-19/1420

RLY	E	C	O	Coach No.	1	9	2	2	8	8	/	C	DATE OF DISPATCH	2	9	-	0	3	-	1	9				
DISPATCH TO		Sr.CDO/VSKP			Type	L	W	S	C	N	1	Shell No.	8	7	5	8	9	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2 Dated-26-03-2019
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
- Special features-

- Epoxy flooring in lavatory.
- Anti slip friendly Grab Bar.
- Provision of Health Faucet in lavatories.
- Washbasin counter Top (Corian of Duport or Montelli).
- GFRE ceiling instead of NFTC. (Make- ACME INDIA NDLS)
- DGFRP panels instead of LP panels. (Make- ACME INDIA NDLS)
- Honey Comb partition frame with DGFRP sheet instead of FRP

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) 1104 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-DTL PUNE	86
	Front Part	NPP END M/S-DTL PUNE	86
	Complete	M/S-DTL PUNE	86
2.	Lav. side wall	M/S-MIDAS GUJRET	LAV.1 - LAV.2 -
		M/S-MIDAS GUJRET	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	440/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	440/02
4.	End wall	PP END M/S-RSM MOHALI	--
		NPP END M/S-P.DSTEEL MOHALI	--
5.	Roof	M/S- PIL	357
6.	Centre Buffer Coupler	M/S- ESCORTS LTD RAILWAY EQUIPMENT, FBD.	PP END 8879 NPP END 8909

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	07 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
1.	Paint	P.U	M/s -VIBGYOR	Supply & apply	90/89
2.	Insulation			Satisfactory	

स्वीकृत / प्रमाणित
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओडायो, रायबरेली (लाजगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	183170				183169			
Bogie Type	FIAT				FIAT			
Frame no.	SCI-2197 -(AIR SPIRING)				RBL -LS5-235 (AIR SPIRING)			
Bolster no.	AMIT -143				MCF/RBL -499			
Axle No	19 L - 5395 RWF		18 J - 1909 RWF		19 L- 5256 RWF		19 L- 5244 RWF	
Wheel Dia	917.579	917.605	917.63	917.582	917.568	917.572	917.558	917.573
Wheel Disc No	TZ 10-18 03641-8WJ0	TZ 10-18 03640-8WJ0	TZ 07-17 26468-7RJ9	TZ 07-17 26891-7RJ6	TZ 10-18 03239-8WHO	TZ 10-18 03727-8WH1	TZ 11-18 05304-8WLO	TZ 11-18 06643-8WK3
R.B. Nos.	02-19 25361	02-19 26000	02-19 35813	12-18 27884	12-18 25926	12-18 26408	12-18 25083	12-18 26056
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.	AVADH RAIL INFRA LTD 05-18-1472	AVADH RAIL INFRA LTD 05-18-1394	AVADH RAIL INFRA LTD 05-18-1364	AVADH RAIL INFRA LTD 05-18-1373

11. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	239223,239212	239417,239319
2.	Primary outer Spring	CMFSK	02-19 1100-531(446,214,389,49)	02-19 1100-531(383,199,180,39)
3.	Primary Inner Spring	CMFSK	02-18 1101-395(380,450,374,366)	02-18 1101-395(213,186,432,398)
4.	Primary Damper	IAI	01-19 (237060,236841,236753,236411)	01-19 (236955,236929,236591,236877)
5.	Secondary Damper	GEREP	KW16-2018 301550379	KW16-2018 301550379
6.	Lateral Damper	GEREP	KW16-2018 301550559	KW16-2018 301550559
7.	Brake Cylinder	FAV	A19(028,277,314,131)	B19(132,292,412,262)
8.	Brake Caliper	FAV	B19(966,964,1344,1341)B	B19(1329,1331,1543,1541)B
9.	Brake Disc	KBI	24172293 0037-03/19,24172293 0031-03/19 24173123 0025-07/19,24173122 0011-07/19	24172294 0006-03/19,24172294 0004-03/19 24172293 0038-03/19,24172283 0002-01/19
10.	Ball Joint Control Arm	GMT/AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	MGN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	06-18 A-8059,06-18 A-7935	06-18 A-8012,06-18 A-7942
17.	Check Valve	KNORR	12-18 15379	12-18 15353
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	231018-3,191218-2,231018-1,251218-2	191218-2,241218-4,191018-2,241218-2
22.	Control Arm Lower	RVE	1218-1,061018-,181218-4,RVE	261218-,211018-1,201218-3,RVE
23.	Phonic Wheel	KNORR	K - 02-19	K 02-19

Signature of SSE/Bogie/QC





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DISPATCH TO	Sr.CDO/VSKP	Type	L	W	S	C	N	1	Shell No.	8	7	5	8	9	-	2	0	1	8	-	1	9
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	B19122 B
2.	Pull box	M/S-KBI FARIDABAD	
3.	Distribution valve	M/S- FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	19025619 B
4.	FIBA DEVICE	M/S-KBI FARIDABAD	PP/NPP-4788/4806
5.	Foot Step	M/S- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-KOHNOOR INDIA, JUC.	
7.	Floor board	M/S- SHRIRAM PANAL(PUNJAB)	
8.	PVC	M/S -ACME INDIA, NDLS.	
9.	Lavatory Inlay	M/S- SEEMA INDIA BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- COMPETANT ENG. JALANDHAR	
13.	Gangway bridge mounting (NPPE)	M/S- COMPETANT ENG. JALANDHAR	
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- ACME INDIA NDLS	
22.	Body Side Door	M/S- JVR INDUSTRIES.LDH	
23.	Vestibule Door(PPE)	M/S- KALSI, LDH	
24.	Vestibule Door(NPPE)	M/S- KALIS, LDH	
25.	Bio Tank	M/S- RAIL FAB KXH	
26.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
27.	Under Slung Water Tank(2X685L)	M/S-RAIL FAB KAPURTHALA	
28.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST MOHALI	
29.	Flexible Faucet	M/S- ACME INDIA NDLS	
30.	Lotah Filler Tap	M/S- ACME INDIA NDLS	
31.	Controlled Discharge Tap	M/S- HINDWARE (HSIL LTD.) GURGAON	
32.	Lavatory Doors	M/S- ACME INDIA NDLS	
33.	Seat & Berth	M/S- ACME INDIA NDLS	
34.	Snack Table	N/A	

Herma
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गुणवत्ता विभाग
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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 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 qualitycrfbl@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	AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

रेडि0का0, रायबरेली (लालगंज)

Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, RaebareillyJoginder Singh
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareilly

MCF/RBL



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
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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	192288/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



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : NIL HT Panel Sr no : H 355 19 B 216	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : KALSI Sr no PA: 7690/10/18 Sr no.1 : 298532 Sr no.2 : 298533 Srno.CPA: 7694/10/18-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: KAVERI	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: CROMPTON	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: 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 : AGASTYA	CC76289 & CC76443	09

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11.	Battery fuse box +ve Make : NEC	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : NEC	LW 71002,Alt-F	01
13.	Regulated battery charger Make : IC ELECTRICAL Sr no: 03-19-0041	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : PANTRONICS Sr no : PAN-18018108	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 : ISG	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 : 43-18-1796	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 : 02/19	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



MCF/RBL