



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/2019-20/1026

RLY	C	R	-	Coach No.	1	9	7	2	3	6	/	C	DATE OF DISPATCH	0	8	-	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	2	1	2	FUR.NO.	LSCNG-248
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated-30-10-2019
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	
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) 1104 (NPPE) 2) 1098 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-DTL	16
		NPP END M/S-DTL	16
	Complete	M/S-DTL	16
2.	Lav. side wall	M/S- COMPETENT ENG. JUC	LAV.1 - LAV.2 -
		M/S- COMPETENT 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	M/s-MCF	33
6.	Centre Buffer Coupler	M/s- FRONTIER	PP END 34P1 NPP END 61P1

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	DATE OF COMPLETION
1.	Paint	P.U	M/s-VIBGYOR	(SUPPLY & APPLY)	90/89	02.07.19
2.	Insulation			Satisfactory		

वर्तमान में
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओकार, रायबरेली (लाजगंज)





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	2	1	2	FUR .NO	LSCN-G-248
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191962				191961			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1145				MCF/RBL-1248			
Bolster no.	MCF/RBL-759				AMIT-0923			
Axle No	19 S - 2992 RWF		19 R - 2745 RWF		19 S - 2475 RWF		19 P - 3057 RWF	
Wheel Dia	917.48	917.516	917.472	917.472	917.462	917.528	917.454	917.523
Wheel Disc No	TZ 07-19 64627-9MH4	TZ 07-19 78822-9RK9	TZ 06-19 51494-9PJ5	TZ 08-19 74818-9RK9	TZ 08-19 75163-9SL2	TZ 07-19 67140-9RM8	TZ 07-19 67134-9RM8	TZ 08-19 69482-9RQ2
R.B. Nos.	08-19 26924	08-19 26909	08-19 24305	08-19 26918	08-19 23094	08-19 26073	08-19 27466	08-19 25891
CTRB 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.	TAYAL & CO. Sr.NO.19-10 4597	TAYAL & CO. Sr.NO.19-10 4675	TAYAL & CO. Sr.NO.19-10 4710	TAYAL & CO. Sr.NO.19-10 4706

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18571,18445	18431,18423
2.	Primary outer Spring	CMFSK	09-19 1100-078(2154,2140,2141,2128)	09-19 1100-078(2167,2126,2164,2105)
3.	Primary Inner Spring	CMFSK	10-19 1101-064 (197,132,543,319)	10-19 1101-064 (168,506,156,138)
4.	Primary Damper	KONI	03-19 (04670,06186,01889,04856)	03-19 (01707,01896,01887,04687)
5.	Secondary Damper	GB-SVD	07-19 (01640,01641)	07-19 (01634,01639)
6.	Lateral Damper	KONI	05-19 01441	05-19 01396
7.	Brake Cylinder	KBI	B(9098,8162,8150,9235)K29	B(9233,8134,8144,9095)K29
8.	Brake Caliper	KBI	B(6143,6233,6260,6217)-29	B(6214,6261,6207,6123)-29
9.	Brake Disc	KBI	24200055 0037-37/19,24198278 0080-35/19 24200055 0074-37/19,24200056 0037-37/19	24200061 0057-37/19,24200067 0056-37/19 24200058 0003-37/19,24200058 0002-37/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	16B-4201,16 B 4141	16B-4121,16 A 10191
17.	Check Valve	KNORR	05-19 18883	05-19 18853
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	184,181,146,176	175,210,121,101
22.	Control Arm Lower	SF	184,180,146,176	175,210,4,101
23.	Phonic Wheel	KBI	K-09-19	K-08-19

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.	Distribution valve	M/S- KBI, FARIDABAD	3770 37/19
3.	Pull box	M/S- KBI, FARIDABAD	2019 J 8989
4.	FIBA	M/S- KBI, FARIDABAD	
5.	Foot Step		PP-8036/29
6.	Decoupling arrangement	M/s- SUPER SPARK PVT. LTD. FARIDABAD	NPP-8050/29
7.	Floor board	M/S-ELASTOMER LINING WORKS, MUMBAI	
8.	PVC	M/s-TWPL MUMBAI	
9.	Lavatory Inlay	M/S- ACME INDIA NDLS	
10.	UIC Vestibule (PPE)	M/S- SEEMA INDS. BHOPAL	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S-SUNCREST IND.KOLKATA	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/S- RAKESH IRON STORE, KXH	
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 1,3	M/S- ACME INDIA NDLS	
23.	Body Side Doors 2,4	M/S- SUKATA INDS, CDG	
24.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
25.	Vestibule Door(NPPE)	M/S- HANSPAL COACH PRODUCTS, KXH	
26.	Bio Tank	M/S- HANSPAL COACH PRODUCTS, KXH	
27.	Auxiliary Water Tank	M/S- RAIL FAB TECHNOLOGIES PVT LTD.	
28.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. MOHALI	
29.	Under Slung Water Tank (1X685L)	M/S- RAIL FAB TECHNOLOGIES PVT LTD.	
30.	Health Faucet	M/s- AMIT ENG. MOHALI	
31.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
32.	Controlled Discharge Tap	M/s- KAPCO VALVES JALANDHAR	
33.	Lavatory Doors	M/s- AGMECO (P) LTD. UK	
34.	Seat & Berth	M/S- ACME INDIA NDLS	
35.	Snack Table	M/S- ACME INDIA NDLS (DURABLE IND.LKO)	
36.	RFID	N/A	
		M/s-TECH SOLUTION GURGAON	Sr.105748,105749

वरिष्ठ अधिकारी
SSE/QC/MCF/RBL
मुम्बई विभाग
रेलवे, रायबरेली (जाबगंज)





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DISPATCH TO	SSE/STOCK/CR/BB	Type	L	W	S	C	N	1	Shell No.	9	7	2	1	2	FUR.NO.	LSCNG-248
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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 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.

वरिष्ठ अभियंता SSE/QC/MCF/RBL गुणवत्ता विभाग	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL
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रेडि०का०, रायबरेली (लालगंज)

वरिष्ठ यांत्रिक अभियंता गुणवत्ता
Senior Mechanical Engineer Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

जोगिन्दर सिंह
Dy. Chief Quality Manager
उप मुख्य गुणवत्ता प्रबन्धक
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
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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	197236/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



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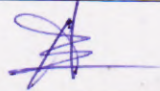
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : PD STEELS On Board Sr no : PDS/1910010 HT Panel Sr no : PDS/1910030	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/10/0027 Sr no.1 : 5675 Sr no.2 : 5596 Srno.CPA: 2019/10/022-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: 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


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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 : RADIANT	LW 71002,Alt-F	01
13.	Regulated battery charger Make : PI ENGG.WORKS Sr no : PI-19080086	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-1749	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 : SIDWAL	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119242169	M/s : KNORR	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 : 09/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : TECHNO	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 निर्देशक SEE(P)/MCF/RBL स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL