



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/2019-20/934

RLY	N	R	-	Coach No.	1	9	7	1	1	9	/	C	DATE OF DISPATCH	2	3	-	1	0	-	1	9
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DISPATCH TO	Sr.DME(CHG)/FZR	Type	L	W	S	C	N	1	Shell No.	9	7	3	4	1	FUR.NO.	LSCN-1265
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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: -1.- 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

2.- 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) 1105 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

TRACEABILITY OF SHELL ITEMS:								
S NO	ITEM		MAKE/SUPPLIER		SERIAL NO			
1.	Under frame	Front Part	PP END	M/S-M.TECH	494			
			NPP END	M/S-M.TECH	494			
		Complete	MCF/RBL			97341		
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)		176/01			
		RH SIDE	MCF/RBL(CONTRACTOR V4U)		176/02			
4.	End wall	PP END	M/s-DTL PUNE		---			
		NPP END	M/s-DTL PUNE		---			
5.	Roof		M/s-KANSAL		32			
6.	Centre Buffer Coupler		M/S- SANROK		PP END	13671	NPP END	13619

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	89/87	30.08.19
2.	Insulation			Satisfactory		

वरिष्ठ अनुसंधान विभाग
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



MCF/RBL



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191380				191379			
Bogie Type	FIAT				FIAT			
Frame no.	RAIL TECH-69				RAIL TECH-75			
Bolster no.	AMIT-752				AMIT-578			
Axle No	19 R - 2202 RWF		19 R - 6871 RWF		19 R - 7246 RWF		19 R - 3014 RWF	
Wheel Dia	917.395	917.46	917.378	917.459	917.442	917.375	917.43	917.403
Wheel Disc No	TZ 06-19 55095-9PDO	TZ 07-19 55671-9QK1	TZ 06-19 60952-9QJ9	TZ 07-19 62043-9RLO	TZ 06-19 53937-9QJ8	TZ 06-19 62041-9RLO	TZ 07-19 56072-9QK3	TZ 03-19 33310-9OF5
R.B. Nos.	07-19-16887	07-19-22222	07-19-16789	07-19-20577	07-19-22079	07-19-20967	07-19-21998	07-19-20820
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.	CMAFJ09-19-5101-184	CMFSK01-19-5100-027-84	CMAFJ09-19-5101-177	CMFSK01-19-5100-027-104	CMAFJ09-19-5101-182	CMFSK01-19-5100-027-115	CMAFJ09-19-5101-175	CMFSK01-19-5100-027-38
Compressed Ht. at Tested Load	512	472	514	470.5	516	467	516	470
Alignment deviation (mm)	15	11	15	8	10	11	10	12

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16831,16830	16817,16832
2.	Primary outer Spring	CMSTL	07-19 07A(2043,2125,2509,1962)	07-19 07A(525,1501,2047,2153)
3.	Primary Inner Spring	CMSTL	07-19 06A(525,218,819,781)	07-19 06A(685,95,397,181)
4.	Primary Damper	KONI	03-19 (04878,06997,08212,08178)	03-19 (07009,08214,04848,08123)
5.	Secondary Damper	KONI	04-19 (01174,00310)	04-19 (00584,01192)
6.	Lateral Damper	KNORR	07-19 9629	07-19 9539
7.	Brake Cylinder	KBI	B(8714,7906,7711,8241)K-29	B(8742,7713,8740,7692)K-29
8.	Brake Caliper	KBI	B(5801,5995,5786,5776) -29	B(5774,5784,5785,5775) -29
9.	Brake Disc	FAV	06-19(6455,6456,6454,6453)D-133561-300	06-19(6233,6227,6229,6231)D-133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	GMT/AR		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PPI		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	RVE,200619-2,080619-1,280619-1	250719-2,310719-1,280619-1,310719-1
22.	Control Arm Lower	RVE	220619-2,280619-2,RVE,100619-2	280619-2,310719-1,100619-2,080619-2
23.	Phonic Wheel	KNORR	K-07-19	K-07-19

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	3486 33/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8566
4.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s-SHREE RAM PNL	
7.	PVC	M/S -RESPONSIVE IND.	
8.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
12.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
13.	Body Side Window	M/s-FP INDS KOLKATA	
14.	Emergency Window	M/s-AGF INDS KOLKATA	
15.	Hopper Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
16.	Side panel	M/s-WONDER LAMINATE KOLKATA	
17.	Roof ceiling	M/s-ACME INDS DELHI	
18.	Door way ceiling	M/S-JAMM TOOLS RBL	
19.	Body Side Door	M/S- JVR INDS ,LDH	
20.	Vestibule Door(PPE)	M/S- HANSPAL, KXH	
21.	Vestibule Door(NPPE)	M/S- HANSPAL, KXH	
22.	Bio Tank with pressurized flushing	M/S- OMAX AUTO GURGAON	
23.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
24.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FAST. MOHALI	
25.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
26.	Controlled Discharge Tap	M/s-KAPCO VALES JALANDHAR	
27.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
28.	Lotah Filler Tap	M/s- EAUSET PVT. LTD. GURGAON	
29.	Lavatory Doors 1,3	M/s-KALSI LDH	
30.	Lavatory Doors 2,4	M/S- JR INDUSTRIES JALANDHAR	
31.	Seat & Berth	M/s- T.W.P.L. INDUS. MUMBAI	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.106669,106670

SSE/QC/MCF/RBL

वार ०५/०४/२०१९

गुणवत्ता विभाग

रे ० डि ० का ०, रायबरेली (लालगंज)



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13. MODIFICATION (IF ANY) : NIL

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

16WARRANTY:

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:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfbl@gmail.com
6. 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	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ सहायक गुणवत्ता विभाग

रेडि०का०, रायबरेली (लाहगंज)

सहायक "मैनिंग" अभियन्ता/गुणवत्ता
Assistant Mechanical Engineer / Quality-1
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

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



MCF/RBL



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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	197119/C
RAILWAY	NR	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 : SSK On Board Sr no : 2019/08/343 HT Panel Sr no : 2019/08/321	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0067 Sr no.1 : 19080624 Sr no.2 : 19090642 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: KAVERI	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : RECORD /SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : RECORD /SALZER	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: CG POWER	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 : 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 : INDORAIL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19480	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2248	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 earthling equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119040972	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 : 08/19	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
आपरेटिंग/लागू/रायबरेली
S.S.E /Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली, लखनऊ
Sr. Electrical Engineer / RCF / RBL / Lucknow