



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/2019-20/912

RLY	N	R	-	Coach No.	1	9	7	1	1	8	/	C	DATE OF DISPATCH	1	9	-	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	2	8	6	FUR.NO.	LSCN-1287
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1. **Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 03-06-20192. **Tare Weight of Coach** : 41.24 Tones3. **Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL4. **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

3.- Venturi arrangement in lavatory

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) 1103 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

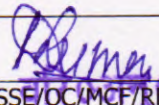
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame Front Part	PP END M/S-M.TECH	01
		NPP END M/S-M.TECH	01
		Complete M/S-M.TECH	01
2.	Lav. side wall	M/S- ATHANACY RBL	LAV.1 - LAV.2 -
		M/S- ATHANACY RBL	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	266/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	266/02
4.	End wall	PP END M/s-DTL PUNE	---
		NPP END M/s-SIPL PALWAL	---
5.	Roof	M/S-ECBT	321
6.	Centre Buffer Coupler	M/S FAIVELEY TRANS. TECH.INDIA LTD BADDI(HP)	PP END 19003 NPP END 19002

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-G.S INDUS	(SUPPLY & APPLY)	90/88	03.10.19
2.	Insulation			Satisfactory		


 SSE/QC/MCF/RBL अभियंता
 गुणवत्ता विभाग
 १०डि०का०, रायबरेली (लालगंज)



MODERN COACH FACTORY, RAE BARELI

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	191095				191096			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-LS5-619				MCF/RBL-LS5-620			
Bolster no.	SCI-178				SCI-208			
Axle No	19 R- 2562 RWF		19 R- 3257 RWF		19 R- 1246 RWF		19 R- 2305 RWF	
Wheel Dia	917.61	917.532	917.548	917.621	917.711	917.654	917.631	917.679
Wheel Disc No	TZ 03-19 30581-9MH9	TZ 05-19 51042-9PH4	TZ 03-19 32959-9MJ2	TZ 05-19 48199-9PC8	TZ 06-19 52937-9QH3	TZ 06-19 58285-9PI9	TZ 06-19 52936-9OH3	TZ 06-19 58281-9PI9
R.B. Nos.	07-19-18603	07-19-19574	07-19-17987	07-19-19031	07-19-21242	07-19-19097	07-19-21470	07-19-19092
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.	TAYAL & CO. Sr.NO.08-19 3093	TAYAL & CO. Sr.NO.08-19 3092	TAYAL & CO. Sr.NO.08-19 3005	TAYAL & CO. Sr.NO.08-19 3158

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	16169,17276	17287,17291
2.	Primary outer Spring	CMFSK	07-19 1100-058(600,594,677,589)	07-19 1100-058(31,580,17,561)
3.	Primary Inner Spring	CMFSK/CMGBD	08-19 1101-937(865,827,453,553)	08-19 1101-937(849,766,589,558)
4.	Primary Damper	KONI	03-19 (0792,1403,5633,0789)	03-19 (325,0234,5461,5841)
5.	Secondary Damper	KONI/IAI	04-19 (2570,1000)	04-19 (997,985)
6.	Lateral Damper	GABRIEL	11-18 1175	11-18 1176
7.	Brake Cylinder	KBI	B(8161,7255,7352,8094)K-29	B(7114,6116,6121,7113)K-29
8.	Brake Caliper	KBI	B(5180,5423,5422,5179)K-29	B(4252,4317,4318,4251)K-29
9.	Brake Disc	KBI	24193647 0029-28/19,24193652 0044-29/19 24193654 0056-29/19,24193654 0057-29/19	24190407 0065-24/19,24190407 0066-24/19 24190408 0013-24/19 24190408 0013-24/19
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	taj		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	KNORR	16-19-B-6018,16-19-B-6038	16-19-B-5962,16-19-B-5973
17.	Check Valve	KNORR	07-19 19579	06-19 19432
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	NIPHA	136,149,005,394	234,350,135,330
22.	Control Arm Lower	NIPHA	043,155,133,404	390,090,10,155
23.	Phonic Wheel	KBI	K-07-19-640209	K-07-19-640209

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	3717 37/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 8906
4.	FIBA	M/S- KBI, FARIDABAD	7538/29 7694/29
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-G.I. NATURAL KOLKATA	
8.	PVC	M/s-G.I. NATURAL KOLKATA	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT PUNE	
11.	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT PUNE	
12.	Gangway bridge mounting (PPE)	M/s-RAKESH IRON KXH	
13.	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON KXH	
14.	Body Side Window	M/s-G.I. NATURAL KOLKATA	
15.	Emergency Window	M/s-G.I. NATURAL KOLKATA	
16.	Hopper Window	M/s-G.I. NATURAL KOLKATA	
17.	Side panel	M/s-G.I. NATURAL KOLKATA	
18.	Roof ceiling	M/s-G.I. NATURAL KOLKATA	
19.	Door way ceiling	M/s-G.I. NATURAL KOLKATA	
20.	Body Side Door 1,2,3	M/s- JVR INDS, LUDHIYANA	
21.	Body Side Door 4	M/S- SUKATA TRACTOR PARTS PVT.LTD. CDG	
22.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
24.	Bio Tank with pressurized flushing	M/s- OMAX AUTO LTD. GURGAON	
25.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/S RAIL FAB. KAPURTHALA	
27.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
28.	Controlled Discharge Tap	M/s- AGMECO (P) LTD. UK	
29.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
30.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
31.	Lavatory Doors	M/s-G.I. NATURAL KOLKATA	
32.	Seat & Berth	M/s-TWPL MUMBAI	
33.	Snack Table	N/A	
34.	RFID	M/s-TECH SOLUTION GURGAON	Sr.104339,104340

[Signature]
SSE/QC/MCF/RBL
गुणवत्ता विभाग

३० डि० का०, 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:

- 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	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (लाहगंज)

Senior Mechanical Engineer/Quality
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

	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
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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	197118/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



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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 : H 355 19 H 414 HT Panel Sr no : H 355 19 H 421	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0077 Sr no.1 : 5629 Sr no.2 : 5608 Srno.CPA: 2019/09/069-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

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 : RADIANT	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : RADIANT	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19532	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2243	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 : 0119040971	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
आ0रे0डि0का0 / लालगंज / 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