



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/2019-20/1143

RLY	N	F	R	Coach No.	1	9	7	6	8	5	/	C	DATE OF DISPATCH	2	9	-	1	1	-	1	9
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DISPATCH TO	Sr.DME/GHY	Type	L	W	S	C	N	1	Shell No.	9	7	5	7	9	FUR.NO.	LSCNG-291
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated-21-11-2019
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- HINDUSTAN FIBRE GLASS WORKS,VADODARA
B.	Anti slip friendly Grab Bar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
C.	Provision of Health Faucet in lavatories	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
E.	GFRE ceiling instead of NFTC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
F.	DGFRP panels instead of LP panels	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
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) 1098 (NPPE) 2) 1099 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-M.T.F	258
		NPP END M/S-M.T.F	258
	Complete	M/S-M.T.F	258
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 M/S- ECBT (CDG)	30
		RH SIDE M/S- ECBT (CDG)	30
4.	End wall	PP END M/s-P.D.STEEL PANCHKULA	--
		NPP END M/s-SIPL PALWAL	--
5.	Roof	M/s-MCF/CONT	164
6.	Centre Buffer Coupler	M/s- FRONTIER	PP END 127P1 NPP END 155P2

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-AXALTA	M/S-EMPRISE	95/93	22.11.19
2.	Insulation			Satisfactory		

Rajendra
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)



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.DME/GHY	Type	L	W	S	C	N	1	Shell No.	9	7	5	7	9	FUR .NO	LSCN-G-291
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191981				191982			
Bogie Type	FIAT				FIAT			
Frame no.	RBL-LS5-1193				MCF-764			
Bolster no.	SPECL-285				AMIT-513			
Axle No	19 S- 5138 RWF		19 S- 3577 RWF		19 S- 2857 RWF		19 P- 9966 RWF	
Wheel Dia	917.569	917.557	917.551	917.476	917.524	917.491	917.513	917.56
Wheel Disc No	TZ 08-19 74682-9SK0	TZ 08-19 73604-9SK4	TZ 08-19 74502-9RL2	TZ 08-19 73648-9SL2	TZ 08-19 75748-9SK9	TZ 01-19 71486-9RN6	TZ 08-19 75752-9SK9	TZ 08-19 72781-9SK0
R.B. Nos.	09-18-22764	09-18-22006	09-18-21978	09-18-22039	09-18-22836	09-18-22410	09-18-22391	09-18-21320
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.19-10 4818	TAYAL & CO. Sr.NO.19-10 4764	TAYAL & CO. Sr.NO.19-10 4785	TAYAL & CO. Sr.NO.19-10 4812

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14616,16841	18284,18283
2.	Primary outer Spring	CMFSK	09-19 1100-078 (2001,2026,2058,2312)	09-19 1100-078 (2005,1935,2003,2019)
3.	Primary Inner Spring	CMFSK	08-19 1101-064 (116,17,159,294)	08-19 1101-064 (318,308,353,334)
4.	Primary Damper	KONIC	03-19 (02956,03974,04567,04318)	03-19 (02084,04995,02201,05186)
5.	Secondary Damper	KONI	04-19 (01246,01069)	04-19 (00611,00632)
6.	Lateral Damper	KONI	04-19 01175	04-19 01174
7.	Brake Cylinder	KBI	B(9088,8140,8248,9331)K-29	B(9266,8265,8278,9268)K-29
8.	Brake Caliper	KBI	B(6111,6204,6369,6289) -29	B(6248,6354,6355,6245) -29
9.	Brake Disc	KBI	24200053 0036-36/19,24200052 0039-36/19 24200036 0005-36/19,24200036 0006-36/19	24200051 0046-36/19,24200051 0047-36/19 24200057 0045-36/19,24200036 0070-36/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	16-19 B- 6846,16-19B-6391	16-19 B- 6178,16-19B-4812
17.	Check Valve	KNORR	07-19-19726	07-19-20318
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	SARITA		
21.	Control Arm Upper	RVE	100819-2,270819-2,RVE,190819-2	270819-2,270819-2,300819-1,170819-1
22.	Control Arm Lower	RVE	130819-1,140819-1,160819-9,220819-3	280819-2,280819-1,290819-2,290819-2
23.	Phonic Wheel	KNOOR	K-09-19 640209	K-05-19 640209

Signature of SSE/Bogie/QC





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Coach No.

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DATE OF DISPATCH

2

9

-

1

1

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1

9

DISPATCH TO

Sr.DME/GHY

Type

L

W

S

C

N

1

Shell No.

9

7

5

7

9

FUR.NO.

LSCNG-291

12. TRACEABILITY OF FURNISHING ITEMS:

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3814 38/19
2.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 9011
3.	Pull box	M/S- KBI, FARIDABAD	
4.	FIBA	M/S- KBI, FARIDABAD	PP-10418/29
			NPP-10386/29
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-TWPL MUMBAI	
8.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15.	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16.	Hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
17.	Side panel	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
18.	Roof ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
19.	Door way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
20.	Partition frame	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
21.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
22.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
25.	Warter purifier	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
26.	Bio Tank (Pressurized flushing)	M/S- JSL LIFE STYLE LTD. & IMI	
27.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
28.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. BADDI	
29.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST MOHALI	
30.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
31.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
32.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
33.	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
34.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
35.	Snack Table	N/A	
36.	RFID	M/s-TECH SOLUTION GURGAON	Sr.104692,104693

Deema
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेलडिपॉ, रायबरेली (लाभगंज)



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DISPATCH TO		Sr.DME/GHY		Type	L	W	S	C	N	1	Shell No.	9	7	5	7	9	FUR.NO.		LSCNG-291		

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 qualityrcfrbl@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 रेडिओ, रायबरेली (लालगंज)	SME/QC/MCF/RBL वरिष्ठ धातुक आभियन्ता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.CQM/MCF/RBL जोगिन्दर सिंह Joginder Singh 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

REV NO: 00

DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197685/C
RAILWAY	NFR	DATE OF DISPATCH	
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/HOG NON AC SCN COACHES

01.	Switch board cabinet Make : MREM On Board Sr no : MREM-355059 HT Panel Sr no : MREM-355053	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/006 Sr no.1 : 19100078 Sr no.2 : 19100044 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 : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SALZER/RECORD	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: DR AUTO	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

Senior Section Engineer
Quality control / Electrical
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

11.	Battery fuse box +ve Make : SSK	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5G 19275	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2491	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 : AECO	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119242286	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 : NIL	CC 91205	01

 SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आपरेटिंग/लालगंज/रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL
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