



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/2019-20/1164

RLY	N	F	R	Coach No.	1	9	7	6	8	0	/	C	DATE OF DISPATCH	3	0	-	1	1	-	1	9
DISPATCH TO	Sr.DME/DBRG				Type	L	W	S	C	N	1	Shell No.	9	7	5	2	8	FUR.NO.		LSCN-1362	

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: -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) 1096 (NPPE) 2) 1102 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-NECHD	09/2019
		NPP END M/S-NECHD	10/2019
	Complete	MCF/RBL	97528
2.	Lav. side wall	M/S- RAIL TECH KXH	LAV.1 - LAV.2 -
		M/S- RAIL TECH KXH	LAV.3 - LAV.4 -
3.	Side wall	MCF/RBL(CONTRACTOR V4U)	330/01
		MCF/RBL(CONTRACTOR V4U)	330/02
4.	End wall	PP END M/s-DTL PUNE	---
		NPP END M/s-DTL PUNE	---
5.	Roof	M/s-ECBT	376
6.	Centre Buffer Coupler	M/S- ESCORTS	PP END 1963 NPP END 1938

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 -NEROLAC	(SUPPLY & APPLY)	90/89	09.11.19
2.	Insulation			Satisfactory		

Deema
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडि०का०, रायबरेली (लासगंज)



MODERN COACH FACTORY, RAE BARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	2	8	FUR.NO	LSCN-1362
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191635				191636			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1420				ECBT-1495			
Bolster no.	RBL-28				APEX-29			
Axle No	19 L- 5162 RWF		19 S - 4811 RWF		19 P - 2088 RWF		19 S- 4878 RWF	
Wheel Dia	917.402	917.524	917.426	917.508	917.417	917.482	917.444	917.514
Wheel Disc No	TZ 08-19 75961-9RP2	TZ 08-19 74864-9RR6	TZ 08-19 72473-9RR3	TZ 07-19 68345-9RQ6	TZ 07-19 68344-9RR6	TZ 08-19 74692-9SK1	TZ 08-19 74691-9RR3	TZ 08-19 75882-9RL3
R.B. Nos.	10-19-38837	09-19-38017	09-19-38686	09-19-36914	09-19-37395	09-19-97171	09-19-37164	09-19-37338
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.	CMGBD10-19- F09-750-62	CMFSK10-19-5100- 027-499	CMGBD10-19- F09-750-68	CMFSK10-19- 5100-027-500	CMAFJ06-19- 5101-186	CMFSK05-19- 5100-027-50	CMAFJ06-19-5101- 165	CMFSK05-19-5100- 027-580
Compressed Ht. at Tested Load	516	472	515	472	515	471	515	471
10Alignment deviation (mm)	28	8	28	7	15	8	15	7

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17485,17472	17463,17466
2.	Primary outer Spring	CMFSK	10-19 1100-114 (168,163,169,126)	10-19 1100-114 (146,109,120,154)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (122,115,143,171)	10-19 1101-101 (9,352,374,372)
4.	Primary Damper	KONIC	03-19 (02329,05508,05452,01165)	03-19 (04284,00436,03800,05459)
5.	Secondary Damper	GB	07-19 (01513,01497)	07-19 (01391,01392)
6.	Lateral Damper	IAI	04-19 251403	04-19 250984
7.	Brake Cylinder	ESCORT	(48188,49019,49018,48190)	(49078,48088,48080,49277)
8.	Brake Caliper	ESCORT	(27701,28368,28358,27703)	(28482,27616,27618,28481)
9.	Brake Disc	KBI	24203750 0050-41/19,24203751 0036-41/19 24203753 0019-42/19,24203754 0037-42/19	24203753 0055-42/19,24203753 0054-42/19 24203752 0045-42/19,24203752 0040-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	ARYAN		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	SF/RVE	115,976,288,080	230819-2,290819-3,29807-2,280819-2
22.	Control Arm Lower	SF/RVE	115,SF,SF,SF	230819-3,240819-2,290819-3,280819-2
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC

गुणवत्ता विभाग

रेलवे कारखाना, रायबरेली (लाहमगंज)





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12. TRACEABILITY OF FURNISHING ITEMS:																								
S NO		ITEM																						

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORTS LTD	2018110136
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- ESCORTS LTD	
4.	FIBA	N/A	1811A136
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-SHREE RAM PNL	
8.	PVC	M/S -RESPONSIVE IND	
9.	Lavatory Inlay	M/s- SEEMA IND. 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- MAHAVEER MATEL WORKS, KAPURTHALA	
13.	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
14.	Body Side Window	M/s-EXCEL & FP KOLKATA	
15.	Emergency Window	M/s-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI VADODARA + VEDANSH RBL	
17.	Side panel	M/s-WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDS NEW DELHI	
19.	Door way ceiling	M/s-JAAM TOOLS RBL	
20.	Body Side Door	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank	M/S- JSL LIFE STYLE LTD.	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FAST. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST. MOHALI	
27.	Flexible Faucet	M/s-ACME INDS NEW DELHI	
28.	Lotah Filler Tap	M/s-ACME INDS NEW DELHI	
29.	Controlled Discharge Tap	M/s- HINDWARE HSIL PVT. LTD. GURUGRAM	
30.	Lavatory Doors	M/s-V.R. MANUFACTURE PVT LTD NDLS	
31.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104729,104730

Rama
SSE/QC/MCF/RBL
वरिष्ठ उपायुक्त
गुणवत्ता विभाग
रेडिओका, रायबरेली (बालगंज)



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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	REFERENCE & PERIOD OF TRIAL
			Frequency	

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.

वरिष्ठ SSE/QC/MCF/RBL	SME/QC/MCF/RBL	Dy.CQM/MCF/RBL
गुणवत्ता विभाग	वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता	जोगिन्दर सिंह
रेलवे का 0, रायबरेली (लालगंज)	Senior Mechanical Engineer/Quality	Joginder Singh
	आधुनिक रेल डिब्बा कारखाना, रायबरेली	उप मुख्य गुणवत्ता प्रबन्धक
	Modern Coach Factory Raebareli	Dy. Chief Quality Manager
		आधुनिक रेल डिब्बा कारखाना, रायबरेली
		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/HOG NON AC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197680/C
RAILWAY	NFR	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
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FOR ELECTRICAL ITEMS

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

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H.355.19.G.317 HT Panel Sr no : H.355.19.G.350	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0023 Sr no.1 : 19100004 Sr no.2 : 19100148 Srno.CPA: sr no - 2019/11/079-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: DR AUTO	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: 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 : INTRA	CC76289 & CC76443	09

[Signature]

**Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli**



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FOR ELECTRICAL ITEMS

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11.	Battery fuse box +ve Make : ISGPL	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-19258	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2530	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 : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 180641-60147-0069	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 06/19	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	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आपरेटिंग/लातगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LJ/RBL

मुख्य अभियन्ता
रेल कोच कारखाना, रायबरेली.
Sr. Electrical Engineer / RCF / RBL